REGISTRATION DOCUMENT

The date of this Registration Document is 7 February 2023.

This Registration Document is valid for a period of twelve months from its date of approval (until 6 February 2024), provided that it is completed by any supplement required pursuant to article 23 of the Prospectus Regulation 2017/1129. The obligation to supplement this Registration Document in the event of significant new factors, material mistakes or material inaccuracies does not apply when this Registration Document is no longer valid.

This Registration Document has been approved as a registration document by the Belgian Financial Services and Markets Authority (the "**FSMA**"), as competent authority under Regulation (EU) 2017/1129 (the "**Prospectus Regulation**"). The FSMA only approves this Registration Document as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation and such approval by the FSMA should not be considered as an endorsement of the issuer.

In the context of a concrete transaction requiring a prospectus, this Registration Document should be read in conjunction together with the relevant securities note (the "**Securities Note**") and summary (the "**Summary**"). The Securities Note and the Summary, together with this Registration Document, are available on BioSenic's website (https://biosenic.com/investors).

The Board of Directors of BioSenic SA assumes responsibility for the content of the Registration Document. The Board of Directors declares that the information contained in this Registration Document, is to the best of its knowledge, in accordance with the facts and makes no omission likely to affect its import.

On behalf of the Board of Directors

Prof. François Rieger
President of the Board

Véronique Pomi-Schneiter
Director

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1 RISK FACTORS

The risks and uncertainties that BioSenic believes to be material are described below. The occurrence of one or more of these risks may have a material adverse effect on BioSenic's cash flows, results of operations, financial condition and/or prospects and may even endanger BioSenic's ability to continue as a going concern. Moreover, BioSenic's share price could fall significantly if any of these risks were to materialise. However, these risks and uncertainties may not be the only ones faced by BioSenic. Additional risks, including those currently unknown or deemed immaterial, may also impair BioSenic's business operations.

The risk factors are presented in eight categories, depending on their nature. In each category, the risk factors which in the assessment of BioSenic are the most material, considering the negative impact on BioSenic (including any relevant mitigation measures) and the probability of its occurrence, is mentioned first. The remaining risk factors within each category are not ranked in order to their materiality.

1.1 Risk factors related to BioSenic Group's financial position and capital requirement

a. *BioSenic and its subsidiary Medsenic are clinical-stage biotechnology companies and have not yet commercialised any of their products. They have therefore incurred net losses since their inception and expect to continue to incur net losses in the foreseeable future. As a result, BioSenic Group might never achieve sustained profitability.*

BioSenic is a biotechnology company developing cell therapy products for orthopaedics and bone diseases, and – following the Contribution of 51% of the shares of Medsenic to BioSenic – also exploiting the possibilities offered by the therapeutic use of arsenic salts for patients with autoimmune diseases. Currently, BioSenic Group is concentrating specifically on the development of its most advanced clinical assets, targeting markets with large unmet medical needs and limited innovation. BioSenic Group is currently involved in a Phase IIb clinical trial using its allogeneic cell therapy platform, ALLOB, and setting up a Phase III study for the treatment of Chronic Graft versus Host Disease (cGvHD) with a patented oral formulation of arsenic trioxide, ArsciCor, while preparing two Phase IIb studies for the treatment of moderate to severe Systemic Lupus erythematosus (SLE) and Systemic Sclerosis (SSc). As BioSenic Group is still developing its product candidates in clinical settings and has not completed the full development of any product, it does not anticipate generating revenue from sales for the foreseeable future and has incurred significant losses since the incorporation of BioSenic and Medsenic. Under IFRS, BioSenic's negative retained earnings on 30 June 2022 were € 84.72 million. The unaudited pro forma consolidated statement of financial position for the financial year ended 31 December 2021 of the BioSenic Group shows negative retained earnings of € 4.35 million. These losses resulted principally from costs incurred in research and development, preclinical testing, clinical development of its product candidates as well as costs incurred for research programmes and from general and administrative expenses. In the future, BioSenic Group intends to continue its efforts to conduct preclinical testing, product development, clinical trials and regulatory compliance activities and improve product formulations and clinical delivery techniques. These activities together with anticipated general and administrative expenses will result in incurring further significant losses for several years. For next several years, BioSenic Group anticipates that its expenses and accumulated consolidated losses will increase substantially mainly due to:

1) Conducting the Phase IIb clinical trial with its allogeneic bone cell therapy product, ALLOB, in patients with difficult-to-heal tibial fractures, using its optimized cell production process;

2) Conducting the Phase III clinical trial with arsenic trioxide in the first-line treatment of cGvHD;

3) Preparing and partnering/conducting the Phase IIb clinical trials for SLE and SSc;

4) Expanding its pre-clinical and clinical pipeline with new indications through new technologies (definition of the molecular targets of the arsenic active ingredient (API), combination of matter formulations, nanoparticles for delivery, development of exosomes from bone marrow mesenchymal

cells (ALLOB cells), in the context of new autoimmune/inflammatory pathologies or organ repair clinical opportunities).

The size of BioSenic Group's future net losses will depend, in part, on the rate of future growth of its expenses and its ability to generate revenue, mainly through out-licencing. Given that the Phase III clinical trial with arsenic trioxide in the first-line treatment of cGvHD, the Group's most advanced clinical asset, still has to start, BioSenic Group expects that it will take at least five years before market authorisation could potentially be obtained for this asset and commercialisation could start. BioSenic Group may encounter unforeseen expenses, difficulties, complications, delays and other presently unknown factors that may have a material adverse effect on its business and financial situation. BioSenic Group does not have a commercial organisation in place to launch its product candidates on its own. BioSenic Group does currently not intend to develop itself a sales and distribution organisation anywhere in the world and will rely for the distribution of its products on license and supply deals with commercial partners. Such arrangements may require BioSenic Group to incur additional expenses, increase its capital expenditures, issue securities that dilute its shareholders or disrupt its management and business. Furthermore, BioSenic Group cannot assure that it will generate positive clinical data, find licensees, receive regulatory approval, get into commercialization and earn revenues or achieve profitability, which could impair its ability to sustain operations, obtain any required additional funding or continue as a going concern. Even if BioSenic Group achieves profitability in the future, it may not be able to sustain profitability in subsequent periods.

b. *As BioSenic Group does not have cash flow generating commercial activities, it is largely dependent on external funding which may not be available on acceptable terms when needed, if at all.*

On 30 November 2022, BioSenic's cash position amounted to € 1.65 million. The cash position of Medsenic amounted to € 335,216 on 30 November 2022. The BioSenic Group does currently not have sufficient working capital to meet its present requirements and cover the working capital needs for a period of at least 12 months as of the date of this Prospectus. For more information about current cash situation of BioSenic and Medsenic, please see Section 3 of this Registration Document and the Securities Note. BioSenic Group will require additional funding in the future to sufficiently finance its core operations and to take advantage of new business opportunities.

The BioSenic Group's future financing needs will depend on many factors, including the progress, costs and timing of its research and development activities, the sustained performance (recruiting patients and generating positive results) of its clinical trials, the costs and timing of obtaining regulatory approval, the costs of obtaining, maintaining and enforcing its patents and other intellectual property rights, the costs and timing of maintaining or obtaining manufacturing for its products and product candidates, the costs and timing of establishing sales and marketing capabilities and the terms and timing of establishing additional collaborations, license agreements and other partnerships. The existing capital resources of BioSenic Group are not sufficient to fund the completion of all its current clinical trials, also because BioSenic is currently no longer entitled to any royalties or licensing milestones following the termination of its licensing deal with Shenzhen Pregene Biopharma Co., Ltd. Accordingly, BioSenic will need to raise significant additional funds. Currently, BioSenic Group mainly relies on equity and bond financing and intends to pursue additional funding opportunities in the future, including potentially the issuance of convertible bonds.

BioSenic also receives non-dilutive financing and grants from the Walloon Region (the "**Region**") and intends to seek other non-dilutive financing from European funding bodies in the Health Sector. More information about BioSenic's non-dilutive financing and grants, please refer to Section 4.16 of this Registration Document. Medsenic has obtained non-dilutive debts in France in the amount of € 2,990,000. A total of 4 loans of €1.30 million was received from from the *Banque Publique d'Investissement*. The Banque Publique d'Investissement also provided recoverable cash advances for a total amount of € 1.39 million and Banque CIC has provided a loan of € 0.30 million. However, changes in regional financing and grant policies, a shift in regional investment priorities or challenges by the European instances may reduce or jeopardise the Group's ability to obtain or retain non-dilutive financing, grants and/or other benefits. In addition, future growth of the BioSenic Group,

whether or not including geographical expansion, could limit the Group's eligibility to obtain similar non-dilutive financing or grants.

Furthermore, BioSenic Group's ability to raise additional funds will depend on financial, economic and market conditions and other factors, over which it may have no or limited control, additional funds may not be available to it, when necessary, on commercially acceptable terms, if at all. If the necessary funds are not available, BioSenic Group may need to seek funds through forced collaborations and licensing arrangements, which may require it to reduce or relinquish significant rights to its research programmes and product candidates, to grant licenses on its technologies to partners or third parties or enter into new collaboration agreements, the terms could be less favourable to BioSenic Group than those it might have obtained in a different context. If adequate funds are not available on commercially acceptable terms when needed, this could have a material adverse effect on BioSenic Group as it may be forced to delay, reduce or terminate the development or commercialisation of all or part of its product candidates or it may be unable to take advantage of future business opportunities. For more information on BioSenic Group's working capital, please see the Securities Note.

BioSenic has a considerable position of outstanding debts that needs to be paid back or refinanced starting from mid-2023. As of 30 November 2022, total financial liabilities amounted to € 20.62 million of which € 5.50 million (relating to the (non-convertible) bonds (€ 3.5 million) issued in June 2019 and the (remaining convertible) bonds (€ 2 million) issued in May 2020) will need to be repaid in June 2023 (see Section 4.15 (*Financing Agreements*) for more information). As of 30 November 2022, Medsenic has total financial liabilities of € 3.48 million of which € 2.21 million of financial debts outstanding vis-à-vis the *Banque Publique d'Investissement*, which need to be paid back over a period until 30 September 2029 (see Section 4.15 for the repayment details of each loan). Medsenic has started to pay back these debts in 2022 following a repayment break period resulting from general measures in France to help industry during the recent COVID-19 pandemic.

The volatility on the financial markets caused by the increased global geopolitical tension may hinder raising necessary funding on the financial markets. As the BioSenic Group does currently not have sufficient working capital to meet its present requirements and cover the working capital needs for a period of at least 12 months, it depends on the financial markets to organise its future funding operations (in the form of placements of shares or (convertible) bonds). Volatile financial markets might make such funding operations more difficult or impossible, or might force BioSenic Group to complete the operations on less advantageous terms (for instance triggering additional dilution for the shareholders).

1.2 Risk factors related to BioSenic Group's business activities and industry

a. *The absence of similar cell therapy products on the market generates a number of unknown factors which may have an adverse effect on the business, the results, the financial situation and the development of BioSenic Group.*

The existing treatments for difficult union-delayed fractures (for which BioSenic aims to develop an alternative through cell technology-based product(s) candidates) are often old techniques, which are painful and invasive. Cell therapy however, is an emerging medical technology, in which some products have been proven beneficial, safe and efficient with very few marketing authorisation (one example is the TiGenix approved product, acquired by Takeda, MSC based for Crohn's Disease fistulas). In general, the early stage of the technology, and consequently the lack of established practices and benchmarks, create uncertainty about prospects and come with inherent risk of unanticipated problems in every stage of the product life, including development, regulations, approvals, reimbursement, market acceptance and operations.

Especially in the orthopaedic field, BioSenic's innovative cell product, ALLOB, would, if and when authorised for marketing, constitute a novel treatment paradigm. To its knowledge, BioSenic is the only clinical stage company that develops cell products using differentiated bone-forming cells derived from human bone marrow for the treatment of orthopaedic conditions. However, other companies are developing similar cell therapy innovative solutions with the use of mesenchymal stem cells often in combination with supportive matrices composed of human cadaver bone or other materials. To date, there are no similar products for bone

regeneration authorised for commercialisation. The lack of similar products causes uncertainty about the registration, the reimbursement and revenues of the product candidates related to the ALLOB platform and its variable acceptance by national regulators, third party payers, doctors and patients. If BioSenic is unable to deal with these unknown factors, this may have an adverse effect on the business, the results, the financial situation and the development of BioSenic.

The number of unknown factors can however be considered to be less in relation to the use of arsenic salts - and specifically arsenic trioxide, which has benefited from reports over centuries of its beneficial effects in a number of conditions, among which its use as an active antimicrobial (such as in syphilis) before the advent of antibiotics. More recently, the discovery in the late decade of 1990 of its successful use to decisively treat a deadly cancer - acute promyelocytic leukaemia - has generated a wealth of scientific and medical observations on the conditions of its safe use and safety data all applicable to the pathologies of the immune system, for which Medsenic possesses both applications and formulations patents. These available data have the benefit of allowing Medsenic to enter into clinical trials at the level of Phase II for all autoimmune and inflammatory indications it wishes to further develop using the IV or oral formulations of arsenic trioxide, since all preclinical and safety data publicly are available from the initial human cancer patients studies, gathered over two decades, in all main hospital settings dealing with leukemic patients. Main regulatory bodies such as the FDA and EMA have now recognised the favourable safety profile of arsenic trioxide for the treatment of acute promyelocytic leukaemia, with good pharmacovigilance since its market authorizations in the year 2002, rendering it much easier to satisfy regulatory requirements dealing with new formulations including the basic API, arsenic trioxide. However, any formulation of arsenic trioxide involving a combination of matter (such as with copper for Arscicop – see Section 4.18.2), will in principle require a Phase I clinical trial to establish the safety and bioavalability and bioequivalence. Notwithstanding the documented positive safety profile of arsenic trioxide, unanticipated safety issues due to the reaction of arsenic trioxide with biological materials cannot be fully excluded and if such issues would arise these might have a material impact on the success of the clinical trial or on the development of the relevant clinical asset or BioSenic Group in general as it future success largely depends on the successful outcome of its ongoing and planned clinical trials with arsenic trioxide.

Further information about the principal markets and competitors is set out in Sections 4.7 and 4.8 of this Registration Document.

b. *BioSenic Group's business environment is characterised by rapid technological change and complexity which could limit or eliminate the market opportunity for its product candidates.*

The changing competitive landscape is a main issue facing the healthcare industry. BioSenic Group competes with other companies based on technology, product offering, therapeutic area, intellectual property, geographic area and time to market or other factors. The success of BioSenic Group depends on, *inter alia*, the ability to establish a competitive position with respect to all these factors. For more information about the principal markets for BioSenic Group, please see Sections 4.7 and 4.8 of this Registration Document.

BioSenic Group believes that its main competitive advantages in the orthopaedic field are its expertise and know-how in cell biology and physiology, in cell therapy in general and in cell therapy for bone diseases in particular, the quality (*i.e.*, efficacy and safety) of its product candidates, its know-how in respect to efficient and robust manufacturing processes, the minimal invasive technique through which its products are administrated and the choice of the indications (*i.e.*, unmet medical needs in the fields of bone diseases and orthopaedics). Through its subsidiary Medsenic, BioSenic Group believes that it also benefits from its expertise and international recognition in the application of the beneficial effects of arsenic trioxide in the field of innate immunity and auto-immune diseases, which was built on the basis of original results and patents granted to the *Centre National de la Recherche Scientifique* (CNRS) in France. Medsenic has been granted all worldwide rights from the French FIST / CNRS Innovation to develop the use of arsenic trioxide for all autoimmune diseases and cGvHD, in Europe and Canada and is limited to Lupus and cGvHD in the USA. The patents from CNRS cover the use of arsenic trioxide, whichever the formulations, but they end April 2023 in Europe and Canada and in 2029 in the US. However, BioSenic Group does not believe that this will have a material impact as the Group is developing its pipeline of indications in such a way that they are covered by new formulation patents, as is provided by the exclusive licence for oral ATO obtained from Phebra in 2021 (on the basis of patents that are valid up until 2036).

However, the competitors of BioSenic Group may have greater financial, human and other resources than BioSenic Group does.

Medical markets for treatments are in general highly competitive and the fields in which BioSenic Group operates are characterised by a sharp increase in innovation. If competitors of BioSenic Group are currently developing, or would in the future, develop technologies and products that are equally or more effective, safe and/or economical as the current or future offering of BioSenic Group, this may have a negative impact on the success of the Group in the fields in which it operates.

c. *The spread of COVID-19 and the resulting government-imposed containment measures have impacted the global economy and BioSenic's business activities and financial condition, resulting in potential delays in its clinical trial activities.*

Given the ongoing uncertainty around the development of the COVID-19 pandemic, BioSenic Group believes that there is a risk that its business operations and financial condition may be significantly adversely affected.

Some factors from the COVID-19 outbreak that have adversely affected and may continue to affect the timely enrolment and continuation of BioSenic Group's clinical trials, at least on a temporary basis during peaks in the spread of the coronavirus, include:

1) The diversion of healthcare and emergency resources away from the conduct of clinical trial matters to focus on immediate pandemic concerns, including the attention of physicians serving as Group's clinical trial investigators, hospitals serving as its clinical trial sites and hospital staff supporting the conduct of its clinical trials;

2) Unwillingness of patients to enrol in our trials or inability to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services;

3) New limitations on travels that interrupt key trial activities, such as clinical trial site initiations and monitoring;

4) Reduced or interrupted activities at local regulators and other important agencies, contractors and third-party organizations that the Group relies upon to carry out its clinical trials;

5) Interruption in operations at its third-party suppliers or global shipping, which could result in delays or disruptions in the supply of clinical trial materials, such as investigational drug; and

6) Implementation of staggered laboratory shifts and work-from-home policies for non-essential staff members which may lead to potential delays.

In addition, when advised or imposed by health authorities in the recurring waves of the COVID-19 pandemic, BioSenic Group would need to reinstate temporary precautionary measures intended to help minimize the risk of the virus to its employees, including temporarily requiring all employees to work remotely, suspending all non-essential travel worldwide for its employees and discouraging employee attendance at industry events and in-person work-related meetings, which could negatively affect the Group's business.

The extent to which COVID-19 will affect the Group's business, activities and financial condition in the longer term will ultimately depend on future developments, which are highly uncertain and cannot be predicted at present, including the duration of the pandemic, additional information that may emerge concerning the severity of new variants of SARS CoV 2 and ongoing actions to contain new forms of the disease. As a matter of fact, potential prolonged closures or other business disruptions may negatively affect its operations and the operations of its agents, contractors, consultants or collaborators, which could have a material adverse impact its business activities and financial condition.

1.3 Risk factors related to clinical development

a. ***Biosenic Group's research programmes and product candidates, ALLOB cells and its therapies for cGvHD, SLE and SSc based on arsenic trioxide, must undergo rigorous pre-clinical tests and regulatory reviews before, during and after each phase of the clinical trials, of which the start, timing of completion, number and results are uncertain and could substantially delay or prevent the products from reaching the market. As most autoimmune diseases are rare diseases, a smaller patient population is available which needs to be recruited over multiple clinical sites. Moreover, many factors other than patient population size affect patient enrolment and could lead to a slower than expected patient recruitment rate. If BioSenic Group experiences significant delays or is unable to obtain marketing authorisation, this would prevent the product candidates from reaching the market and could have adverse effects on BioSenic Group's activities, costs and valuation, as well as on the shareholders' investment.***

The research programmes and product candidates of BioSenic Group must undergo rigorous pre-clinical and clinical trials, of which the start, the timing of completion, the number and the results are uncertain. The conditions or results of such trials could delay or prevent the product candidates from reaching the market. The clinical trials with ALLOB cells to treat difficult union-delayed fractures and with arsenic trioxide to treat cGvHD, severe Systemic Lupus erythematosus (SLE) or Systemic Sclerosis (SSc) may be delayed for a variety of reasons, including, but not limited to, delays in obtaining regulatory approval from Competent Authorities to commence a trial, in reaching agreement on acceptable terms with prospective research organisations, manufacturing organisations and clinical trial sites, in recruiting sufficient number of suitable patients to participate in a trial, in having patients complete a trial or return for follow-up, in obtaining sufficient supplies of clinical trial materials, clinical sites dropping out of a trial and in the availability to BioSenic Group of appropriate clinical trial insurances. In particular, the clinical trials related to chronic diseases such as autoimmune pathologies and orthopaedics recovery require long follow-up periods of up to 12 if not 24 months. Delays in clinical trials due to the above-mentioned reasons may be expected, but if it becomes significant, this would be likely to have a material adverse impact on BioSenic's activities, costs, and ultimately on its valuation, which would adversely impact shareholders, and eventually could threaten BioSenic's ability to raise future funding and continue as a going concern, which could lead to its liquidation or bankruptcy and which could result in shareholders losing the total value of their investment.

Although some of the products that the BioSenic Group is developing are for conditions with rather large patient populations, many factors other than patient population size affect patient enrolment and could lead to a slower than expected patient recruitment rate. Factors that could affect patient enrolment include, but are not limited to, the proximity of patients to clinical sites, the eligibility criteria for the trial, other competing clinical trials on the same pathology, clinicians' and patients' perceptions as to the potential advantages of the product being studied in relation to other available therapies, including any new products that may be approved for the indications that BioSenic Group is investigating and whether the clinical trial design involves comparison to placebo or standard of care. Most of the autoimmune diseases that BioSenic Group is targeting for its treatment with ATO are rare diseases that affect a smaller patient population. This makes patient recruitment for clinical trials more challenging and competitive and requires more participating clinical centres, which may not be willing to participate if they are not convinced by the preclinical studies, animal models or early clinical proof of concept.

If BioSenic Group experiences lower than expected enrolment in the trials, the trials may not be completed as envisaged or may become more expensive to complete, which may have an adverse effect on BioSenic Group's business, prospects, financial condition and results of operations.

b. ***Results of preclinical studies and early-stage clinical trials of BioSenic Group's product candidates may not be directly predictive of the results of later-stage clinical trials.***

BioSenic Group's cell products are highly innovative and are based on the *ex vivo* differentiation of human bone marrow cells with a view to producing bone-forming cells, and which have a favourable immune status that reduces cell rejection. Although the Phase II clinical results for the use of these differentiated cells in the treatment of delayed-union fractures and in lumbar spinal procedures showed statistically and clinically relevant benefits and demonstrated satisfying safety and efficacy, success in subsequent studies cannot be guaranteed as demonstrated by the osteonecrosis Phase III study with BioSenic's first generation of autologous cell therapy product, PREOB, in which superiority over standard of care could not statistically be demonstrated and may not lead to successful therapy products. A similar statement can be made for the off-the-shelf protein solution in development, JTA-004, as the promising results of the Phase IIb study for knee osteoarthritis did not result in a statistically positive outcome for the follow up Phase III study.

BioSenic Group's small molecule products based on the arsenic trioxide active ingredient developed by Medsenic benefit from a more favourable status in terms of established safety of use in humans, since they are of a privileged class of repositioned molecules that are already used in a different field of pathologies (cancer). Although the possible long-term adverse effects of arsenic trioxide, and the way to protect patients from such adverse effects, are reasonably well documented, unexpected new safety issues might still arise and the successful outcome of the Group's ongoing and planned clinical trials with arsenic trioxide cannot be guaranteed.

c. *BioSenic Group's product candidates may have serious adverse, undesirable or unacceptable side effects which may delay or prevent marketing approval. The risk also exists that the side effects appear after the commercialisation and would require to take a product off the market or limit its sales.*

If any new or additional serious adverse side effects are identified for any product candidate, BioSenic Group may need to abandon or limit its development of that product candidate, which may delay, limit or prevent marketing approval, or, if approval is received for the product candidate, require it to be taken off the market, require it to include safety warnings or otherwise limit its sales.

Although the safety of BioSenic Group's product candidates has already been evaluated in clinical programmes, not all adverse side effects of the product candidates are known or can be foreseen, especially for cell therapy products which involve living cells. Important unpredicted side effects from any of BioSenic Group's product candidates could arise either during further clinical development or, if approved by the Competent Authorities, after the approved product has been commercialised. While the Group's clinical studies for its product candidates to date have demonstrated an acceptable safety profile, the results from future trials may not support this conclusion. Adverse side effects could prevent BioSenic Group or any potential future partner from achieving or maintaining market access and market acceptance of the affected product or could justify further studies for adequate conditioning or formulations of the products, which would substantially increase development and commercialisation costs and expenses, which would have an adverse effect on BioSenic Group's business, prospects, financial condition and results of operations.

d. *Failure to successfully identify, develop and commercialise competitive additional products or product candidates could impair BioSenic Group's ability to grow in the immediate and longer term.*

The main focus of BioSenic Group is to continue its clinical trials and ultimately to obtain approval of its product candidates for the treatment of – mainly – delayed-union fractures, possibly lumbar fusion for degenerative disease of the spine (ALLOB) and for the treatment of autoimmune diseases such as cGvHD, SLE and SLE, subject in each case to BioSenic being able to raise sufficient additional funding for the necessary clinical trials. For more information about BioSenic Group's current clinical pipeline, please see Section 4.6 of this Registration Document.

BioSenic Group also runs preclinical research programmes and aims at developing new product candidates, although such efforts are currently being reduced given the focus on the ongoing and envisaged clinical trials

with existing product candidates. BioSenic Group intends to leverage its preclinical research, clinical expertise and new formulations for the set-up of manufacturing processes, to expand its pipeline to indications for which it believes its products have therapeutic potential. The accumulated preclinical data are expected to reduce the time and costs associated with early-stage clinical trials for additional diseases and disorders. However, the identification, selection and development of additional promising products or product candidates require additional resources, whether or not any product or product candidate is ultimately identified and duly protected by international patent submissions. Furthermore, the lack of existing benchmarks in the field of regenerative medicine in general and cellular therapy in particular prevents BioSenic Group from relying on existing precedents with respect to such identification, selection and development. However, the BioSenic Group intends to devote a specific effort to expand its line of products in three directions: products derived directly from the MSCs (ALLOB), including exosomes; new formulations for new ways to administer the arsenic salts; and a combination of MSCs/exosomes produced from MSCs with arsenic, through cell/nanoparticle efficient loading. The success of BioSenic Group's strategy depends partly on its ability to identify, select and develop such products.

1.4 Risk factors related to post-authorization risks

a. *Failure to obtain marketing authorisation, additional post-authorisation studies, restricted use, withdrawal or limited market acceptance of BioSenic's products among third party payers, doctors, patients and the medical community in general would affect BioSenic's ability to generate revenues from such products or become profitable.*

To date, BioSenic Group has no product authorised for commercialisation, and has not undertaken any steps for registration and/or authorisation for Market Access (MA). BioSenic Group's current product candidates are in different phases of preclinical and particularly clinical trials and it may never have a product that is commercially successful. Even the product candidates in Phase III clinical programmes may require further clinical trials, accompanied by regulatory reviews, specific marketing authorisations, very significant marketing efforts and substantial investments before they may provide revenue to BioSenic Group.

Clinical data are often susceptible to varying interpretations and analyses when submitted for patient care or therapies, so that a product that performed to statistical satisfaction during clinical trials may nonetheless fail to obtain regulatory approval for marketing. Due to the inherent risk in the development of biopharmaceutical products, there is a risk that not all or none of the product candidates of BioSenic Group will be successfully developed and commercialised.

Once commercialised, products may be subject to post-authorisation, like safety studies or other pharmacovigilance or biovigilance activities, may be subject to limitations on their uses or may be withdrawn from the market for various reasons, including if they are shown to be unsafe or ineffective, or when used in a larger population that may be different from the trial population studied prior to introducing the product on the market. Regulatory approval guidelines may change during the course of the product development and review process, making the chosen development strategy suboptimal. This is even more the case in view of the early stage nature and the absence of benchmarks in the cell therapy area, in which BioSenic Group conducts part of its activities, which may still undergo important regulatory changes for this specific field of activities. Altogether, these factors may result in significant delays, increased trial costs, significant changes to commercial assumptions or failure of the products to obtain marketing authorisation. In addition, the Competent Authority may impose ongoing requirements for potentially costly post-approval studies or post-market surveillance.

In addition, once introduced to the market, BioSenic Group's products may not achieve the desired level of acceptance of the products and perception of the advantages of the products by third-party payers, doctors and patients and the medical community in general.

The limited number of scientific publications regarding cell-based technology used to develop ALLOB could adversely affect the benefits, efficacy or safety perception of this particular product. Efforts to educate the

medical community and third-party payers on the benefits of BioSenic Group's products may require significant resources and may never be successful, which would prevent BioSenic Group from generating significant revenues, or becoming profitable in this area of development. In particular with respect to allogeneic cells, the safety concerns associated with human materials may affect the ability to generate revenues from the products of BioSenic Group. Future medical events or studies that would raise or substantiate concerns about the safety of the raw materials used by BioSenic Group or other similar raw materials could negatively impact public perception of all human products and of their procurement process. Further, any failure in screening, whether by BioSenic Group or by other manufacturers of these human materials, could adversely affect its reputation, the support it receives from the medical community and overall demand for BioSenic Group's products.

b. *The price setting, the availability and level of adequate reimbursement by third parties, such as insurance companies, governmental and other healthcare payers is uncertain and may impede BioSenic Group's ability to generate sufficient operating margins to offset operating expenses.*

The commercial success of BioSenic Group's products depends in part on the conditions for setting the sales price of its products and the conditions of their reimbursement by the health agencies, insurance companies or other healthcare payers in the countries where BioSenic Group intends to commercialise its products. Considering the innovative nature of BioSenic Group's product candidates and – for ALLOB – the lack of similar products, the possible reimbursement levels are difficult to predict, especially for ALLOB. BioSenic Group's ability to adapt an adequate pricing strategy is uncertain. Moreover, there is pressure on healthcare spending, on reimbursement and price levels in most countries, due to *inter alia* the current context of healthcare cost control, the economic and financial crisis and the increase in healthcare budgets caused by an aging population.

Moreover, part or all of BioSenic Group's products may be found to not have a sufficient benefit/risk profile within the existing health technology assessment and reimbursement processes applied throughout the different jurisdictions in which BioSenic Group envisages to operate, and may be subject to different reimbursement facilities depending on the jurisdiction in which its products are being offered.

Failure to obtain favourable price settings and/or adequate reimbursement by third parties, such as insurance companies, governmental and other healthcare payers may impede BioSenic Group's ability to generate sufficient operating margins to offset operating expenses.

c. *BioSenic Group has no experience in sales, marketing and distribution, which may have an adverse effect on its ability to successfully manage its sales, marketing and distribution when its products come on the market.*

BioSenic Group will have to hire, train, incentivise and retain a techno-commercial sales force or enter into a partnership with an industrial partner, gain the support of key opinion leaders, establish referral networks and potentially introduce new standards of care in inflammatory/autoimmune diseases, orthopaedic or other indications , to successfully commercialise its products once they have been approved for commercialisation. BioSenic Group has no experience in sales, marketing and distribution. There is a risk that BioSenic Group will not be able to successfully manage its sales, marketing and distribution when its products come on the market, which will have an adverse effect on its business, prospects, financial condition and results of operations.

Furthermore, market conditions may change resulting in the emergence of new competitors or new treatment guidelines, which may require alterations in the marketing and sales strategy or even of its development strategy.

1.5 Risk factors related to legal and regulatory risks

a. *Nearly all aspects of BioSenic Group's activities are subject to substantial regulation and if BioSenic Group does not comply with one or more of the standards of the Competent Authorities, it could experience significant delays in development or commercialisation, additional costs, refusals, suspension, withdrawals of approvals.*

The international biopharmaceutical industry is highly regulated by governmental bodies ("**Competent Authorities**") imposing substantial requirements on almost all aspects of BioSenic Group's activities, notably on research and development, manufacturing, preclinical trials, clinical trials, labelling, marketing, sales, handling, transport and storage of human material, record keeping, promotion and pricing of its research programmes and product candidates. In each country where BioSenic Group, or any of its partners or licensees, operates, it has to comply with the standards and regulations imposed by the local Competent Authorities.

BioSenic Group has to constantly comply with the standards imposed by the Competent Authorities, which are subject to regular reviews and may possibly impose new changes in the applicable regulations. The standards imposed by a Competent Authority and the approval procedure for clinical trials and/or marketing authorisation may vary from country to country (except for the approval procedure of BioSenic Group's cell therapy and ATO-based products in Europe where the marketing authorisation is mandatory through a centralized procedure, whereas for its noncellular off-the-shelf protein solution, JTA-004, a decentralised procedure could be followed), *inter alia* in timing, detailed costs and efforts necessary to complete those procedures e.g., different reporting procedures. The list of countries (Concerned Member States) to include in the MAA is also defined by the sponsor depending on market objectives. An identical application for marketing authorisation is submitted simultaneously to the competent authorities of the Reference Member State and of the Concerned Member States. Moreover, the various reasons for which the Competent Authority's approval of clinical trials may be refused, delayed, suspended or withdrawn are not predictable by BioSenic Group. If BioSenic Group does not comply with one or more of the standards of the Competent Authorities, in a timely manner or at all, it could experience significant delays in development or commercialisation, additional costs, refusals, suspension, withdrawals of approvals resulting in a significant adverse effect on BioSenic Group's business, prospects, financial condition and results of operations. Please also see Section 4.11 of this Registration Document for more information of the regulatory framework that applies to BioSenic Group.

b. *If any product liability claims are successfully brought against BioSenic Group or its collaborators, BioSenic Group may incur substantial liabilities and may be required to limit the commercialisation of its product candidates.*

Product liability claims due to (unpredicted) adverse side effects of the product candidates (particularly the cell therapy products) may be brought against BioSenic Group or its collaborators by participants enrolled in clinical trials (particularly the cell therapy clinical trials), practitioners, researchers, other health/research professionals or others using, administering or selling any of BioSenic Group's future approved products. BioSenic Group is currently insured for risks related to clinical studies. BioSenic Group may incur substantial liabilities if it cannot successfully defend itself against such claims. From the adverse events reported with BioSenic Group's products in clinical trials to date, none have been qualified as severe. To date, no such claims or legal actions have been filed against BioSenic Group.

c. *Failure to comply with Good Manufacturing Practices and other manufacturing regulations may impede BioSenic Group's ability to develop and commercialise its product and scale-up of manufacturing.*

Until November 2020, BioSenic had its own Good Manufacturing Practices license, for its facility located at the BioPark of Gosselies (south of Brussels) and owned by its affiliate Skeletal Cell Therapy Support SA (SCTS). In addition, BioSenic had obtained three manufacturing and intra-EU distribution authorisations from the

Competent Authorities in Belgium. All the material (IMP) required for the ongoing clinical trials have been produced and released on the behalf of these authorisations.

In November 2020, BioSenic sold to Catalent its affiliate SCTS including its facilities located at the BioPark of Gosselies (south of Brussels). BioSenic entered then into a Master Service Agreement with Catalent to ensure its production capability of its cellular product ALLOB in the future.

For arsenic trioxide, BioSenic's subsidiary Medsenic has had a manufacturing contract with Pierre Fabre CDMO in Pau (France) for its IV (intravenous) formulation of arsenic trioxide (called Arscimed). This formulation has been accepted for clinical use in Medsenic's Phase II trial in cGvHD. The oral formulation of arsenic trioxide is under the control of Medsenic's partner and shareholder Phebra, a biopharma with manufacturing facilities in Australia and UK. Medsenic has entered into a marketing and supply agreement with Phebra for the supply the necessary capsules for oral administration in Medsenic's indications for inflammatory/autoimmune diseases clinical trials. Please revert to Section 7.4.4.2 for more information.

However, BioSenic Group is not relieved from continuously complying with the relevant standards. BioSenic Group, and key third party subcontractors and suppliers on which it relies currently or in the future, must continuously comply with Good Manufacturing Practices on its own or partner sites and the corresponding manufacturing regulations of the Competent Authorities. In complying with these regulations, BioSenic Group and its third-party subcontractors and suppliers must expend significant time, money and effort in the areas of design and development, testing, production, record-keeping and quality control to assure that the products meet applicable specifications and other regulatory requirements. The failure to comply with these requirements could have significant adverse results for BioSenic Group such as an enforcement action against BioSenic Group, including the seizure of products and shutting down of production. Any of the third-party subcontractors and suppliers and BioSenic Group also may be subject to inspections by the Competent Authorities. If any of BioSenic Group's third-party suppliers or BioSenic Group itself fails to comply with Good Manufacturing Practices or other applicable manufacturing regulations, the Group's ability to develop and commercialise the products could suffer significant interruptions.

BioSenic Group's manufacturing process involves the handling, transport and storage of cytotoxic and human materials and, for cell therapy, the transformation of human body tissue into a treatment product. BioSenic Group has obtained a license as a tissue bank for handling autologous human biological materials and a license as a tissue bank for handling allogeneic human biological materials in collaboration with hospital tissue banks. In order to maintain such license, BioSenic Group needs to comply with applicable regulations in this respect. Furthermore, the applicable legislation with respect to the handling and transport of human body tissue varies amongst the different jurisdictions in which BioSenic Group could envisage operations, potentially impairing relocation and export opportunities. This human biological license has not been impacted by the sale of its former affiliate SCTS.

Given that BioSenic Group relies on external Contract Manufacturing Organizations for the materials required for its ongoing and envisaged clinical trials, a third-party manufacturer may not comply with the required quality standards or devote sufficient resources to the manufacturing of the products or may otherwise fail in the manufacturing of such compound, in which event the development and commercialization of BioSenic Group's product candidates could be delayed (for example because of product reruns) or even terminated. Were concerns to arise with the manufacturing of its product, BioSenic Group’s business could be substantially harmed. These uncertainties and risks relating to the development, manufacturing, handling, quality assurance may have a materially adverse effect on the business and financial position of BioSenic Group.

1.6 Risk factors linked to intellectual property

a. *BioSenic Group's patents and other intellectual property rights portfolio may not adequately protect its research programmes and other product candidates, or BioSenic Group may not be able to protect and/or enforce its intellectual property rights in all key countries or territories, which may impede BioSenic Group's ability to compete effectively.*

BioSenic Group's success will depend in part on its ability to obtain, maintain and enforce its patents and other intellectual property rights. BioSenic Group's research programmes and product candidates are covered by several patent application families, which are either licensed to BioSenic Group or owned by the Group. For more information about BioSenic Group's patents and patent applications, please see Section 4.17 of this Registration Document. Currently, BioSenic Group manages 9 patent families related to the ALLOB technology (including one patent family owned by the ULB), 4 patent families related to the JTA technology, one patent family related to the use of arsenic salts in autoimmune diseases and GvHD, one patent family licensed to BioSenic Group by Phebra related to the protection of an oral formulation of arsenic trioxide and its licensed use in various immunopathologies and specified territories for commercialisation and one other patent family related to combination of matter including arsenic trioxide (ArsciCop) and to further indications related to infectious diseases. The main patents for the ALLOB technology expire in 2038 (BONE-017), 2039 (BONE-001) and 2040 (Bone-001-US Div2); for the JTA technology in 2029 (BPBone-001) and in 2033 (BONE-011); and for ATO in 2036 (use of arsenic salts in autoimmune diseases and GvHD in OATO (licensed from Phebra)), in 2040 (ArsciCop) and in 2023 and 2029 (respectively, in Europe and the US, for treating indications in autoimmune and inflammatory diseases using the IV formulation of ATO (licensed from CNRS)). Although BioSenic Group can still benefit from its developed know how, once patent protection is lost this could force BioSenic Group to license or develop new formulations of ATO. The advantage of BioSenic Group's changed focus on OATO (instead of IV formulation) – in additional to the treatment advantages of OATO as further described in this Registration Document – allows it to benefit from the additional patent protection on OATO and to minimise the impact of the upcoming expiry in 2023 of CNRS' European patent relating to the IV formulation. In addition, the loss of patent protection could negatively affect the revenues of BioSenic Group from the relevant products as competitors might want to take advantage of the expiration of patent protection.

BioSenic Group may not be able to obtain or maintain these patent rights against patent offices and other third-party challenges to their validity, scope and or enforceability. BioSenic Group may not be (or have been) the first to conceive an invention and to file a patent or a patent application. Because patent law in the biopharmaceutical industry is highly uncertain, there can be no assurance that the technologies used in BioSenic Group's research programmes and product candidates are patentable, that patents will be granted to BioSenic Group or its licensors under pending or future applications, or that patents will be of sufficient breadth to provide adequate and commercially meaningful protection against competitors with similar technologies or products, or that patents granted to BioSenic Group or its licensors will not be successfully challenged, circumvented, invalidated or rendered unenforceable by third parties, hence enabling competitors to circumvent or use them and depriving BioSenic Group of the protection it may expect against competitors. Moreover, it cannot be excluded for the ALLOB product that the debate on the patentability of elements of the human body could lead to a situation whereby the technology developed by or licensed to BioSenic Group can no longer be protected by patents or that such patents cannot be enforced against third parties. A third party's ability to use unpatented technologies is enhanced by the fact that the published patent application contains a detailed description of the relevant technology. Third parties might claim ownership rights over the patents or other intellectual property rights owned or held by BioSenic Group. To date, no invalidation or opposition process has been made against the patent portfolio of BioSenic Group.

Several of BioSenic Group's patents are already granted in Europe, US, Japan, Australia, Canada, China, Hong Kong, Israel, India, South Korea and Singapore, depending on the patent family considered. The current prosecution of its or its licensors' patent applications may not result in granted patents in each of the territories. Filing, prosecuting and defending their patents throughout the world would be prohibitively expensive for BioSenic Group and its licensors. Competitors may use BioSenic Group's technologies in jurisdictions where BioSenic Group or its licensors have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where BioSenic Group has patent protection but where enforcement is not as well developed as in the United States or the European Union. These products may compete with BioSenic Group's products in jurisdictions where BioSenic Group or its licensors do not have any issued patents and BioSenic Group's patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing. Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign

jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favour the enforcement of patents and other intellectual property rights, particularly those relating to biopharmaceuticals, which could make it difficult for BioSenic Group to stop the infringement of its patents or marketing of competing products in contravention of its proprietary rights generally. The inability of BioSenic Group to protect and/or enforce some of its intellectual property rights in the selected territories in which it seeks IP protection could have a material adverse effect on the Group's ability to maximise the market potential of its product candidates, which would result in severe adverse effect on its business, prospects, financial condition and results of operations.

Moreover, periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid by BioSenic Group and/or its licensors to the relevant patent agencies in several stages over the lifetime of the licensed patents and/or applications. The relevant patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In many cases, an inadvertent lapse may be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance may result in abandonment or lapse of the patent or patent application, resulting in a partial or complete loss of patent rights in the relevant jurisdiction. In such an event, BioSenic Group 's competitors might be able to use its technologies and those technologies licensed to BioSenic Group and this circumstance would have an adverse effect on its business, prospects, financial condition and results of operations.

b. ***Should BioSenic Group be unable to obtain new license rights on reasonable terms, or if it would lose any of its licenses or otherwise experiences disruptions to its business relationship with its licensors, BioSenic Group might be unable to develop, manufacture or sell its products***

BioSenic Group's activities are dependent – at least in part – on the use of intellectual property rights which are for some projects not owned by it, but have been granted to it pursuant to license agreements and which are important to the business.

BioSenic Group is currently renegotiating the scope and commercial terms of (i) the license agreement and (ii) the marketing and supply agreement entered into between Medsenic and Phebra respectively on 21 and 31 May 2021. Under these agreements, Phebra has granted an exclusive license to Medsenic to use the oral formulation of arsenic trioxide for its research and clinical development in various immunopathologies and to market and distribute the product in such field in the European Union and in French speaking territories ("**Medsenic Territories**"). Phebra agreed to provide a free clinical supply (either directly or via a contract manufacturer) of up to an equivalent of EUR 200,000 of the oral formulation of arsenic trioxide for Medsenic's indication at the start of the Phase III clinical trial, which should allow BioSenic Group to cover approximately the first 12 months of the trial. In consideration for the license granted for the Medsenic Territories, Phebra received 3,151 shares (4.3% of the shares currently outstanding) in Medsenic. Phebra retains the right to commercialise the product in all countries outside the Medsenic Territories against payment to Medsenic of a royalty of 55% of the net sales profits. BioSenic Group and Phebra are now currently analysing the possibility to extend the Medsenic Territories and the commercial terms thereof, which is expected to require lengthy and complex discussions and agreements based on partially unknown commercial and competitive factors. A letter of intent and non-binding term sheet are being prepared. As a result, there is a clear risk that BioSenic Group might not obtain the right to commercialise the oral formulation of arsenic trioxide in key jurisdictions (including the USA, Japan and UK) or acquire such rights on commercially unfavourable terms, specifically in relation to the definition of milestones and corresponding payments to be made by BioSenic Group to Phebra. This could substantially impair BioSenic Group's ability to generate sufficient future revenues from its existing clinical programmes, which would have an adverse impact on its valuation and possibility its ability to raise additional funding thereby threatening BioSenic Group's ability to continue as a going concern.

Under the license agreement with Phebra, Medsenic agreed to commence a clinical study using Phebra OATO before 31 May 2023. If such study would not start before 31 May 2023, for instance because BioSenic Group

would be unable to raise sufficient additional funding (see also the Securities Note for a description of BioSenic Group's working capital requirements), Phebra could terminate the license agreement unless the parties agree to postpone such date. This would make it impossible for BioSenic Group to carry out its envisaged clinical programmes with OATO, which would have an adverse impact on its valuation and possibility its ability to raise additional funding thereby threatening BioSenic Group's ability to continue as a going concern.

BioSenic Group has also a dependence on the license agreement entered into by Medsenic with CNRS regarding the arsenic salts for autoimmune indications 2002 patent family which is owned by the CNRS. We refer to Section 4.12.2.1 (License agreement with the Centre national de la recherche scientifique (CNRS) in France) for further information in that regard. The patents licensed from the CNRS relate to the use of arsenic salts generally to treat autoimmune diseases. As the patents of the CNRS covering the European Union and the U.S. expire, respectively, in 2023 and 2029, BioSenic Group is dependent on the development of new formulations of ATO (such OATA licensed from Phebra or a combination of matter such as ArsciCop) to be able to obtain additional patent protection for its clinical assets. As BioSenic Group is indeed focussing its clinical development on the oral formulation of ATO (for which patent protection is available until 2036) and given that it has received orphan drug designation for the treatment of GvHD with ATO from EMA and FDA (which gives market exclusivity of, respectively, 7 and 10 years in the US and Europe once the medicine is approved for commercialisation), the risk related to the expiry of the aforementioned CNRS patent in the European Union is considered to be low.

For its clinical programmes BioSenic Group has also entered into license agreements with third parties regarding the ULB-028 patent family. Also, BioSenic Group has been granted exclusive worldwide rights from Glob-Co SRL to develop, manufacture, sublicense and sell any products of the JTA technology for human application.

The conditions under which BioSenic Group may acquire future rights or maintain the rights granted to it include, but are not limited to, the payment of (i) fees upon achievement of certain milestones, (ii) royalties on the (net) sales of relevant licensed products, (iii) a percentage of revenues incurred from sub-licensees, as well as the performance of other obligations, such as compliance with research and development obligations and with marketing and distribution arrangements. Furthermore, delays or interruptions in the development or exploitation of the relevant technology may be sanctioned under the terms and conditions of the license agreements. If BioSenic Group fails to comply with its obligations under the respective license agreements, licensors may reduce the scope of the license or terminate the license, resulting in the loss of the use of the related intellectual property rights. Should BioSenic Group be unable to obtain new rights on reasonable terms similar to those which it holds under such license, or if it would lose any of its licenses, BioSenic Group might be unable to develop, manufacture or sell its products or should be obliged to develop new innovative products, with important delayed access to the desired market. This could have adverse effects on BioSenic Group's business, prospects, financial condition and operational results for a longer period.

c. *If BioSenic Group is not able to prevent disclosure of its trade secrets, know-how, or other proprietary information, the value of its technology and product candidates could be significantly diminished.*

BioSenic Group relies on trade secret protection to protect its interests in its know-how or other proprietary information and processes for which patents are difficult to obtain or enforce, all of which constitute confidential information. BioSenic Group may not be able to protect its confidential information adequately. BioSenic Group has a policy of requiring its consultants, contract personnel, advisers and third-party partners to enter into confidentiality agreements. However, there is no assurance that such agreements will provide for the meaningful protection of confidential information in the event of any unauthorised use or disclosure of information and that any of BioSenic Group employees, consultants, contract personnel or third-party partners, either accidentally or through wilful misconduct, will not cause serious damage to its programmes and/or its strategy, by, for example, disclosing confidential information to its competitors. It is also possible that confidential information could be obtained by third parties as a result of breaches of physical or electronic security systems of BioSenic Group, its consultants, advisers, third-party partners or other parties that have

had access to its confidential information. Any disclosure of confidential data into the public domain or to third parties could allow BioSenic Group's competitors to learn confidential information and use it in competition against BioSenic Group. In addition, others may independently discover BioSenic Group's confidential information. Any action to enforce BioSenic Group's rights against any misappropriation or unauthorised use and/or disclosure of confidential information is likely to be time-consuming and expensive, and may ultimately be unsuccessful, or may result in a remedy that is not commercially valuable.

d. *BioSenic Group may infringe on the patents or intellectual property rights of others and may face patent litigation, which may be costly and time consuming and could result in BioSenic Group having to pay substantial damages or limit BioSenic Group's ability to commercialise its product candidates.*

BioSenic Group's success will depend in part on its ability to operate without infringing on or misappropriating the intellectual property rights of others. BioSenic Group's activities, or those of its licensors, might infringe on the patents or other intellectual property rights owned by others. BioSenic Group may expend significant time and efforts and may incur substantial costs in litigation if it is required to defend patent or other intellectual property right claims brought against BioSenic Group or its licensors regardless of whether the claims have any merit. Additionally, BioSenic Group cannot predict whether it or its licensors will be successful in any litigation. If BioSenic Group or its licensors are found to have infringed the patents or other intellectual property rights of others, it may be subject to substantial claims for damages, which could materially impact BioSenic Group 's cash flow and financial position. BioSenic Group may also be required to cease development, use or sale of the relevant research programme, product candidate or process or it may be required to obtain a license for the disputed rights, which may not be available on commercially reasonable terms, if at all. BioSenic Group may be unable to develop or commercialise a product, product candidate or research programme, or may cease some of its operations, which may have an adverse effect on BioSenic's business, prospects, financial condition and results of operations. To date, no patent infringement claim has been made against the BioSenic Group.

1.7 Risk factors linked to the BioSenic Group's dependence on third parties and on key personnel

a. *Manufacturing of BioSenic Group's products requires chemicals, human or derived raw materials to be obtained from third parties and may be more costly than expected.*

For the development of its research and the conduct of some of its pre-clinical and clinical trials, especially in orthopaedics, BioSenic Group needs, in particular, human biological materials from diseased or healthy donors. The sourcing of these materials is regulated extensively by the Competent Authorities. The failure to comply with these regulations could cause BioSenic Group to be liable or could adversely affect its ability to source these materials. The public perception about the safety of human-derived materials, including bone cells, could adversely affect the market. Such change in perception around the safety of human-derived materials coming from other regions outside of China was for instance invoked by the former partner Pregene to terminate its license agreement with BioSenic Group in 2022 (see Section 4.13.1 for more information). The inability of BioSenic Group to ensure adequate supply and quality of human or derived raw materials may have a materially adverse effect on the business, the results, the financial situation and the development of BioSenic Group.

BioSenic Group will have to establish a scalable process platform with third parties in the relevant regions to manufacture its products. BioSenic Group has a particular dependence on Phebra for providing the oral formulation of ATO. Phebra will supply OATO through a contract manufacturer based in the United Kingdom, which is chosen and selected by Phebra. Phebra itself purchases the active pharmaceutical ingredient arsenic trioxide from the Umicore group. Given that arsenic trioxide is currently manufactured by a number of suppliers, BioSenic Group does not expect any supply problems of arsenic trioxide.

BioSenic Group is currently preparing the regulatory file, which includes guarantees on clinical batches supplies, to submit an IND application for the use of OATO in Medsenic's indications with the FDA by early 2023. BioSenic Group expects to receive a positive answer from the FDA in an IND meeting late Q1/early Q2 2023. The failure to manufacture oral ATO in compliance with the regulatory framework of the FDA and other Competent Authorities could adversely affect BioSenic Group's ability to start its Phase III cGvHD clinical trial, which might lead to delays in the development of its drug candidates and higher than anticipated development costs.

To be able to supply the products at acceptable prices, BioSenic Group will have to control the costs and work continuously on the optimization of the manufacturing processes to prolong shelf-life, increase product stability and reduce processing time. The inability of BioSenic Group to purchase or produce the products at reasonable costs could prevent it from achieving its overall objectives and could thus have an adverse effect on its business, prospects, financial condition and results of operations.

b. ***BioSenic Group relies, and expects to continue to rely, on third parties, including independent clinical investigators, and CROs, and CDMOs to conduct its preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, BioSenic Group may not be able to obtain regulatory approval for or commercialize its product candidates and its business could be substantially harmed.***

BioSenic Group has relied upon and plans to continue to rely upon third parties, including independent clinical investigators and third-party CROs, to conduct its preclinical studies and clinical trials and to monitor and manage data for its ongoing preclinical and clinical programs. BioSenic Group relies on these parties for execution of its preclinical studies and clinical trials, and controls only certain aspects of their activities. Nevertheless, its reliance on these third parties does not relieve BioSenic Group of its regulatory responsibilities and it is responsible for ensuring that each of its studies and trials is conducted in accordance with the applicable protocol, scientific standards and legal and regulatory requirements such as Good Clinical Practice (GCP) and GMP regulations. If BioSenic Group, the participating investigators or any of its CROs fail to comply with applicable GCPs or the tested products do not meet GMP regulations, the clinical data generated in its clinical trials may be deemed unreliable and the regulatory authorities may require BioSenic Group to perform additional clinical trials before approving the marketing applications of its product candidates.

Further, the investigators and CROs are not employees of BioSenic Group and BioSenic Group will not be able to control, other than by contract, the amount of resources, including time, which they devote to its product candidates and clinical trials. If independent investigators or CROs fail to devote sufficient resources to the development of its product candidates, if they do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to BioSenic Group’s clinical protocols, regulatory requirements or for other reasons, clinical trials may be extended, delayed or terminated and BioSenic Group may not be able to obtain regulatory approval for or successfully commercialize its product candidates. As a result, results of operations and the commercial prospects for BioSenic Group’s product candidates would be harmed, BioSenic Group’s costs could increase and its ability to generate revenues could be delayed.

Since the sale of BioSenic's former subsidiary SCTS and the associated GMP accredited cell production facility and the subsequent signing of supply agreement for the further development of ALLOB, BioSenic Group has a strong collaborative relationship with Catalent. Catalent is a leading global service provider for cell product manufacturing, and who will collaborate with BioSenic Group on production, quality control and assurance and storage and distribution of cell products. Although BioSenic Group has already produced all required clinical and quality control batches for the ongoing Phase Iib clinical trial with ALLOB, BioSenic Group relies on Catalent’s services, in particular for the manufacturing of its cell therapy products for future clinical trials and potential commercialisation. Failure in timely production and delivery of ALLOB can substantially delay the clinical development of ALLOB, its marketing approval and potential commercialisation.

There is a limited number of third-party service providers that specialize or have the expertise required to achieve BioSenic Group's business objectives. If any of the relationships with these third-party CROs, CDMOs or clinical investigators terminate, BioSenic Group may not be able to enter into arrangements with alternative CROs, CDMOs or investigators or to do so on commercially reasonable terms. Switching or adding additional CROs, CDMOs (or investigators) involves additional cost and requires management time and focus. In addition, the use of third-party service providers requires BioSenic Group to disclose its proprietary information to these parties, which could increase the risk that this information could be misappropriated.

c. ***BioSenic Group is subject to competition for its skilled personnel and challenges in identifying and retaining key personnel could impair BioSenic Group's ability to conduct and grow its operations effectively.***

The services of the BioSenic's Executive Committee are critical to the successful implementation of its business, research, product development and regulatory strategies. Members of the Executive Committee may terminate their employment or services with BioSenic at any time with relatively short notice. In general, conflicts between key managers may result in BioSenic losing the services of a manager or otherwise affect the cohesion within the Executive Committee. Upon the departure of certain clinical and scientific personnel or members of its Executive Committee, BioSenic's research and development efforts may be seriously and adversely affected.

BioSenic Group heavily depends on the skills, experience and relationships of its major shareholder and CEO and director, Dr François Rieger for the clinical development of it product candidates based on ATO. Although the appointment of the new CSO, Dr Carole Nicco, and the continued support of Medsenic's scientific committee (chaired by Prof. Jules Hoffmann and consisting of specialists in the field of immunology) intends to mitigates the risk, the departure of Dr François Rieger could have a material adverse effect on BioSenic Group's clinical and research and development efforts (including the ongoing preparations of the Phase III clinical trial in cGvHD) and its ability to obtain future funding.

BioSenic Group's ability to compete in the highly competitive health care sector depends on its ability to attract and retain highly qualified management, scientific and medical personnel. Many of the other biotechnology and pharmaceutical companies and academic institutions that it competes against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than BioSenic Group does. Therefore, BioSenic Group might not be able to attract or retain these key persons on conditions that are economically acceptable. Furthermore, BioSenic Group will need to recruit new managers and qualified scientific personnel to develop its business if BioSenic Group expands into fields that will require additional skills. Although the number of employees of BioSenic Group has significantly reduced (see Section 8.1 for more information) over recent years, BioSenic Group currently has sufficient specialists in cell manufacturing and orthopaedics to achieve its clinical objectives. However, the inability of BioSenic Group to retain these key persons or attract new specialists could prevent it from achieving its overall objectives and could thus have an adverse effect on its business, prospects, financial condition and results of operations.

d. ***BioSenic Group has obtained significant grants and subsidies. The terms of certain of these agreements may significantly hamper the Group in its flexibility to choose a convenient location for its activities.***

BioSenic, has entered into several funding agreements with the Region and to a lesser extent with the European Commission, to partially finance its research and development programmes (the "**Research Grants**" and "**Research Subsidies**") and its patent applications (the "**Patent Subsidies**"). Please refer to Section 4.16 of this Registration Document for an overview of the grants and subsidies.

Most of the Patent Subsidies provide that BioSenic must ensure a valorisation of the relevant patent or patent application in a certain area (in most cases in the Region), unless the prior written consent of the Region is obtained. Although the Region may not refuse such consent if BioSenic proves that its valorising activities outside of the Region's territory are carried out in the framework of a cooperation with an overall positive

effect (in terms of technological or economic development) on the Region's territory, this provision restricts BioSenic in its choice of geographical location to carry out or further develop its activities. Also, if the Region would refuse to provide its consent, BioSenic may only valorise the relevant patent (application) outside the Region's territory provided that it informs the Region thereof in writing and refunds the entire subsidy related to the relevant patent (application) to the Region.

In addition, the Research Grants provide that BioSenic must carry out its exploitation activities (the production and commercialisation of products and the realisation of certain services) in relation to the research domain funded in accordance with the relevant Research Grants on the Member States' territory until the end of the exploitation phase as defined in the respective Research Grants. Some of the Research Subsidies also provide that the experimental development activities carried out by BioSenic in the framework of the exploitation of the research results obtained in the framework of the relevant Research Subsidy must be carried out on the Member States' territory. These provisions affect BioSenic's ability to relocate its activities. Furthermore, BioSenic's ability to relocate its activities is limited by the provisions of the SME Agreement, pursuant to which BioSenic, in order to keep the funding granted to it, must employ a specific number of employees at its site in Wallonia.

e. *BioSenic Group might not find suitable industrial partners to pursue the development, the commercialisation or the distribution of its products candidates.*

Depending on the region and depending on the product candidate, BioSenic Group's strategy may include out-licensing and co-developing its products candidates or partnering for the distribution of products developed and/or commercialised on a stand-alone basis. However, in order to conduct this strategy, BioSenic Group may need to find a partner, which has sufficient capacity for conducting research, on an international level or which is capable of distributing and commercialising the products. BioSenic Group currently expects that proceeds of future fundraisings over the next 12 months will in priority be used to finance the ongoing Phase IIB clinical trial with ALLOB and the start of the Phase III clinical trial with cGvHD, as well as for general working capital requirements. The start of the Phase II clinical trials in SLE and SSc will therefore only be possible as projected in 2024] if the BioSenic Group can conclude a strong partnership with an established biopharmaceutical company for such clinical trials or if it manages to successfully out-licence some of its technology. Therefore, the future international success of BioSenic Group may depend on its ability to conclude partnerships and on the ability of its partner(s) to meet the aforementioned characteristics. The risk furthermore exists that any such partnerships are terminated early as was recently the case for the partnership agreement between BioSenic and Pregene.

1.8 Risks relating to the Contribution

a. *BioSenic Group inability to successfully integrate Medsenic or any other companies acquired in the future and to retain its current and prospective employees, could have a material adverse effect on its business*

BioSenic has recently acquired 51% of the shares of Medsenic SAS, and is expected to acquire the remaining 49% as described hereinafter. BioSenic Group may in the future acquire other businesses, companies with complementary technologies or products to expand its activities. As a consequence, intangible assets, including goodwill, may account for a larger part of the balance sheet total than is currently the case. The business combination brings opportunities for renewed financing, but also for the future to offer new ways to correct the cell or organ damages observed in autoimmune diseases with active inflammation and immune damage. Despite the fact that BioSenic will carefully investigate every acquisition, the risk remains, amongst others, that corporate cultures may not match, expected synergies may not be fully realized, restructurings may prove to be more costly than initially anticipated and that acquired companies may prove to be more difficult to integrate than foreseen. BioSenic may therefore not be able to successfully integrate Medsenic or any other acquired companies on the long term.

BioSenic Group 's ability to manage its growth effectively will require BioSenic Group to continue to improve its operations, financial and management controls, reporting systems and procedures, and to train, motivate and manage its employees and, as required, to install new management information and control systems. BioSenic Group may not be able to implement improvements to its management information and control systems in an efficient and timely manner or such improvements, if implemented, may not be adequate to support its operations.

The acquisition (via the Contribution) of 51% of the shares of Medsenic (and the contractual commitment to acquire the remaining 49%) is the largest acquisition that BioSenic has ever undertaken. BioSenic has made certain assumptions relating to the forecast level of future earnings, cost savings, synergies and associated costs of the Medsenic acquisition (such total aggregate transaction-related fees and expenses estimated at approximately EUR 781,000 for BioSenic and Medsenic). The acquisition also represents the entry by BioSenic Group into a new area of therapy based on the use of arsenic trioxide, although the safety risks related to the development of a small active molecule, with safety data already available in human subjects, are more limited as compared to those of a therapy using live cells, with unknown factors of expansion, proliferation or dedifferentiation in live subjects. BioSenic Group 's assumptions relating to the forecast level of future earnings, cost savings, synergies and associated costs of the acquisition may be inaccurate, including as a result of the failure to realize the expected benefits of the acquisition, higher than expected transaction and integration costs and unknown liabilities as well as general economic and business conditions that adversely affect the combined company following the completion of the acquisition.

The Contribution could cause disruptions in BioSenic's business or the business of Medsenic. Specifically, some current and prospective employees may experience uncertainty about their future roles within the combined company, which may adversely affect its ability to retain or recruit key employees following the acquisition. The diversion of its management's attention away from BioSenic Group's core business and any difficulties encountered in the integration process could adversely affect its results of operations. BioSenic Group may experience disruptions in relationships with current and new employees, customers and suppliers. If it fails to manage these risks effectively, this may have a material adverse impact on the effective management of BioSenic Group and on the anticipated speed of development of its product candidates, which could adversely affect the business and financial results of the combined company generally. Moreover, In case of bankruptcy, shareholders may not be able to recover their investment in whole or in part, given that BioSenic's goodwill and intangible assets represent a material part of its assets and that BioSenic has a significant debt.

BioSenic intends, to the extent possible, to integrate its operations with those of Medsenic, into the BioSenic Group. BioSenic's goal in integrating these operations is to increase future revenues by expanding its pipeline into the treatment of diseases (such as cGvHD, SLE or SSc) with arsenic trioxide and achieve cost savings by taking advantage of the significant anticipated synergies of consolidation. To achieve this goal, BioSenic Group has incurred significant legal, accounting and transaction fees and other costs related to the Medsenic Contribution. In addition, BioSenic Group expects to incur a number of non-recurring costs associated with combining the operations of the two companies. Some of these may be higher than anticipated.

b. ***The contribution of the remaining 49% of the shares of Medsenic will result in additional dilution for existing shareholders of BioSenic***

Pursuant to a shareholders' agreement dated 24 October 2022 between BioSenic and the shareholders of Medsenic holding the remaining 49% of the shares of Medsenic (the "**Minority Shareholders**"), the Minority Shareholders agreed to contribute all of their remaining Medsenic shares into BioSenic in two instalments, each time for half of their remaining shareholding. For more information, please revert to Sections 4.12.1.5 and 7.4.4.1.

Based on the valuations and price per share used for the Contribution, the contribution of the additional 49% of shares of Medsenic will result in a dilution of BioSenic's existing shareholders of around 43,46%[1]. The actual

[1] Situation as of the date of completion of the Contribution and without taking into account any additional shares issuances thereafter.

dilution for BioSenic's shareholders might be higher or lower depending on the price per share used for the equity raises and on the aforementioned potential revaluation of Medsenic (see Section 4.12.1.5b for more information) and, eventually, of BioSenic in the case of a material change in the BioSenic's assets, liabilities or clinical trials.

The table below provides an overview of the maximum dilution for the existing shareholders, based on all existing warrants and convertible bonds at 31 January 2023 and taking into account the contribution of the remaining 49% of Medsenic shares.

	Full exercise of the outstanding warrants (a)	Full conversion of the Convertible Bonds (b)[1]	Full exercise of the New Subscription Rights (c)	Full contribution of the remaining 49% shares of Medsenic (d)	Combined operations of (a), (b), (c) and (d) = (e)
Current total number of shares (31/01/2023)	124,008,857	124,008,857	124,008,857	124,008,857	124,008,857
Number of New Shares after respectively (a), (b), (c), (d) or (e)	1,197,554	30,102,746	24,463,421	87,109,184	142,872,905
Total number of shares after (a), (b), (c), (d) or (e)	125,206,411	154,111,603	148,472,278	211,118,041	266,881,762
Dilution	0.96%	19.53%	16.48%	41.26%	53.53%

Note 1: 285,714 shares could be issued in case all 800 convertible bonds outstanding, issued in the private placement on 6 May 2020, were converted into shares based on the predetermined conversion price of EUR 7.00. 29,817,031 shares could be issued in case all 50 Convertible Bonds potentially to be issued and all 16 Convertible Bonds outstanding of the Convertible Bond program signed on 30 May 2022 were exercised and converted into shares based on the conversion price of EUR 0.1107 (95% of the Volume-Weighted-Averaged-Price of BioSenic's shares on 26 January 2023).

c. ***The Contribution will result in a material amount of goodwill to be included in the total assets of BioSenic and in case of bankruptcy, shareholders may not be able to recover their investment in whole or in part, given that BioSenic's goodwill and intangible assets represent a material part of its assets and that BioSenic has a significant debt.***

As set out in the pro forma financial information set out in Section 3.3 of this Registration Document, the goodwill arising of the Contribution has been calculated in the amount of € 9.77 million. As of 30 November 2022, total financial liabilities of BioSenic and Medsenic amounted to, respectively, € 20.62 million and € 3.48

million. In the event of bankruptcy or insolvency, creditors, whether or not secured, shall rank prior to the shareholders with respect to the liquidation of the assets and investors may not be able to recover, in whole or in part, their investment in the New Shares, given the type and nature of BioSenic's assets and which could have a material adverse impact for the shareholders resulting in the loss of the total value of their investment.

2 GENERAL INFORMATION

This document is a registration document within the meaning of the Articles 6 (paragraph 3) and 10 of the Prospectus Regulation 2017/1129. Alongside this Registration Document, BioSenic prepared a securities note and a summary. The Registration Document contains the information relating to BioSenic, while the securities note shall contain the information concerning the securities offered to the public or to be admitted to trading on Euronext Brussels and Euronext Paris.

On 7 February 2023, the Financial Services and Markets Authority approved the English version of this Registration Document as competent authority in accordance with Article 20 of the Prospectus Regulation 2017/1129. The approval of the registration document by the FSMA doesn't constitute an appreciation of the situation of BioSenic. The FSMA only approves this Registration Document as meeting the standards of completeness, comprehensibility and consistency imposed by Regulation (EU) 2017/1129 and such approval shall not be considered as an endorsement of the issuer that is the subject of this Registration Document.

2.1 Legal Information

The legal and commercial name of BioSenic is BioSenic SA. BioSenic is registered with the legal entities register (Charleroi) under number 0882.015.654 and was incorporated in Belgium on 16 June 2006 (under the name Bone Therapeutics), for an indefinite period of time. BioSenic is a limited liability company incorporated in the form of a "*société anonyme*" under the laws of Belgium. BioSenic's registered office is currently located at Granbonpré 11, Building H, 1435 Mont-Saint-Guibert (Belgium) (phone: +32 71 12 10 00 and fax: +32 71 12 10 01). The Legal Entity Identifier (LEI) code of BioSenic is 549300HFIIMTOP1DFR76.

2.2 Language of this Registration Document

BioSenic published its Registration Document in English. BioSenic has also prepared a French translation of this Registration Document and is responsible for the consistency between the French and English version of this Registration Document.

2.3 Persons responsible for the contents of the Registration Document

The Board of Directors assumes responsibility for the content of this Registration Document. The Board of Directors declares that the information contained in this Registration Document is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its content.

We undersigned, Prof. François Rieger, CEO / President of the Board and Véronique Pomi-Schneiter COO, Member of the Board, on behalf of the Board of Directors of the BioSenic, having its registered office at Granbonpré 11, Building H, 1435 Mont-Saint-Guibert (Belgium), declare that to the best of our knowledge:

- the annual accounts, are established in accordance with the applicable standards for the preparation of the financial accounts, and do represent a fair and true view of the assets, the financial position and the results of the issuer and the entities which were included in the consolidation;

- the Registration Document provides a fair and true view of the developments and the results of BioSenic and of the position of the issuer and of the entities included in the consolidation, as well as a description of the most important risks and uncertainties faced by them.

Prospective investors should carefully read the detailed information set out in this Registration Document (including any documents incorporated in it by reference) and reach their own view prior to making any investment decision.

2.4 Statutory auditor

BioSenic's statutory auditor is BDO Bedrijfsrevisoren – Réviseurs d'entreprises BV/SRL, a company having the form of a private limited liability company organised and existing under the laws of Belgium, with registered office at Elsinore Building - Corporate Village, Da Vincilaan 9/E6, 1930 Zaventem, Belgium, represented by Mr Rodrigo Abels, member of the Belgian *Institut des Réviseurs d'Entreprises/Instituut voor Bedrijfsrevisoren*, for a term of three years ending immediately following the adjournment of the annual general shareholders' meeting of BioSenic to be held in 2025, resolving upon the financial statements for the fiscal year ended on 31 December 2024. BDO Bedrijfsrevisoren – Réviseurs d'entreprises BV/SRL reviewed BioSenic's consolidated interim financial information for the period ended 30 June 2022. BioSenic's financial statements for the fiscal years ended on 31 December 2019, 2020 and 2021 were audited by Deloitte Réviseurs d'Entreprises SRL, a limited liability company organised and existing under the laws of Belgium, with registered office at Gateway building, Luchthaven Nationaal 1, boite J, 1930 Zaventem, Belgium, represented by Mr Pieter-Jan Van Durme (member of the Belgian *Institut des Réviseurs d'Entreprises/Instituut voor Bedrijfsrevisoren*).

The statutory auditor of Medsenic is MVN Commissariat Aux Comptes SAS, a company having the form of a simplified joint stock company organised and existing under the laws of France, with registered office at Avenue Kleber 42, 75116 Paris, France, represented by Mr Nicolas Metge, was appointed statutory auditor of Medsenic, for a term of six years ending immediately following the adjournment of the annual general shareholders' meeting of Medsenic to be held in 2027, resolving upon the financial statements for the fiscal year ended on 31 December 2026. MVN Commissariat Aux Comptes SAS has been appointed as statutory auditor of Medsenic by decision of the shareholders' general meeting of Medsenic on 4 November 2015. All financial statements have since been audited.

2.5 Forward-looking statements

Certain statements in this Registration Document are not historical facts and are forward-looking statements. Forward-looking statements include statements concerning BioSenic's plans, objectives, goals, strategies, future events, future revenues or performance, capital expenditure, research and development, financing needs, plans or intentions relating to partnership or acquisitions, competitive strengths and weaknesses, business strategy and the trends which BioSenic anticipates in the industries and the political, economic, financial, social and legal environment in which it operates and other information that is not historical information.

Words such as "believe", "anticipate", "estimate", "expect", "intend", "predict", "project", "could", "may", "will", "plan" and similar expressions are intended to identify forward-looking statements, but are not the exclusive means of identifying such statements.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that the predictions, forecasts, projections and other forward-looking statements will not be achieved. These risks, uncertainties and other factors include, amongst other things, those listed in the Section "Risk Factors".

2.6 Market and industry information

Information relating to markets and other industry data pertaining to BioSenic's business included in this Registration Document has been obtained from internal surveys, scientific publications, section association studies and government statistics. Where information has been sourced from third parties, this information has been accurately reproduced. As far as BioSenic is aware and is able to ascertain from information published by those third parties, no facts have been omitted which would render the reproduced information inaccurate or misleading. The market, economic and industry data have primarily been derived and extrapolated from reports, datasets and articles provided by third parties such as GlobalData, IQVIA, BiotechFinances, Les Echos and The Lancet.

The third-party sources BioSenic has used generally state that the information they contain has been obtained from sources believed to be reliable. Some of these third-party sources also state, however, that the accuracy and completeness of such information is not guaranteed and that the projections they contain are based on significant assumptions. As BioSenic does not have access to the facts and assumptions underlying such market data, or statistical information and economic indicators contained in these third party sources, BioSenic is unable to verify such information. Hence, while the information has been accurately reproduced, and as far as BioSenic is aware and is able to ascertain from information published by that third party, no facts have been omitted which would render the reproduced information inaccurate or misleading, and BioSenic believes it to be reliable, BioSenic cannot guarantee its accuracy or completeness. The inclusion of this third party industry, market and other information should not be considered as the opinion of such third parties as to the value of the BioSenic shares or the advisability of investing in the shares of BioSenic.

In addition, certain information in this Prospectus is not based on published data obtained from independent third parties or extrapolations therefrom, but rather is based upon BioSenic's best estimates, which are in turn based upon information obtained from trade and business organizations and associations, consultants and other contacts within the industries in which BioSenic operates, information published by BioSenic's competitors and BioSenic's own experience and knowledge of conditions and trends in the markets in which it operates.

BioSenic cannot assure that any of the assumptions it has made while compiling this data from third party sources are accurate or correctly reflect BioSenic's position in the industry and none of BioSenic's internal estimates have been verified by any independent sources. BioSenic does not make any representation or warranty as to the accuracy or completeness of this information. BioSenic has not independently verified this information and, while BioSenic believes it to be reliable, BioSenic cannot guarantee its accuracy

2.7 Other available information

BioSenic has filed its deed of incorporation and must file its restated articles of association and all other deeds and resolutions that are to be published in the Belgian Official Gazette (*Moniteur belge*) with the clerk's office of the enterprise court of the Walloon Brabant (Belgium), where such documents are available to the public. BioSenic is registered with the register of legal entities of Walloon Brabant (Belgium) under company number 0882.015.654. A copy of the most recent restated articles of association, the reports of the Board of Directors and the minutes of the shareholders' meeting, as well as other documents, valuations and statements prepared by any expert at BioSenic's request any part of which is included or referred to in the Registration Document, are also available on BioSenic's website (https://biosenic.com/investors) or can be provided upon request to BioSenic SA, Investor Relations, rue Granbonpré 11, Building H, 1435 Mont-Saint-Guibert, Belgium (Tel: +32 71 12 10 00, Fax: +32 71 12 10 01 and e-mail: investorrelations@biosenic.com).

BioSenic prepares annual audited and consolidated financial statements. All financial statements, together with the reports of the Board of Directors and the statutory auditor are filed with the National Bank of Belgium, where they are available to the public. Furthermore, as a company with shares listed and admitted to trading on Euronext Brussels and Paris, BioSenic publishes an annual financial report (included its financial statements and the reports of the Board of Directors and the statutory auditor) and an annual announcement prior to the publication of the annual financial report, as well as a half-yearly financial report on the first six months of its financial year. Copies of these documents will be made available on BioSenic's website (https://biosenic.com/investors) and STORI, the Belgian central storage platform which is operated by the FSMA and can be accessed via its website (www.fsma.be).

BioSenic must also disclose price sensitive information and certain other information relating to the public. In accordance with the Belgian Royal Decree of 14 November 2007 relating to the obligations of issuers of financial instruments admitted to trading on a Belgian regulated market (*Arrêté royal relative aux obligations des émetteurs d'instruments financiers admis à la négociation sur un marché reglementé*), such information and documentation will be made available through BioSenic's website (https://biosenic.com/investors), press releases and the communication channels of Euronext Brussels.

2.8 Availability of the Registration Document

The Registration Document is available in English and in French. The Registration Document will be made available, free of charge, for the public upon request to:

BioSenic SA
To the attention of Investor Relations
Rue Granbonpré 11, Building H
1435 Mont-Saint-Guibert
Belgium
Tel: +32 71 12 10 00
Fax: +32 71 12 10 01
E-mail: investorrelations@biosenic.com

An electronic version of the Registration Document is also available on BioSenic's website (https://biosenic.com/investors). The posting of this Registration Document on the internet does not constitute an offer to sell or a solicitation of an offer to buy any of the shares to any person in any jurisdiction in which it is unlawful to make such offer or solicitation to such person. The electronic version may not be copied, made available or printed for distribution. The information on the website does not form part of the Prospectus unless that information is incorporated by reference into the Prospectus.

3 FINANCIAL INFORMATION CONCERNING BIOSENIC'S ASSETS AND LIABILITIES, FINANCIAL POSITION AND PROFITS AND LOSSES

3.1 Information incorporated by reference

This Registration Document shall be read and construed in conjunction with the following documents:

(i) the annual report and audited consolidated financial statements of BioSenic prepared in accordance with IFRS for the financial year ended 31 December 2019 (in English and French), together with the related audit report thereon (available via the following hyperlinks: https://biosenic.com/sites/default/files/2020-06/AR_2019_Full_EN_v11_Complete.pdf; https://www.biosenic.com/sites/default/files/2020-06/AR_2019_Full_FR_v05_Complete.pdf);

(ii) the annual report and audited consolidated financial statements of BioSenic prepared in accordance with IFRS for the financial year ended 31 December 2020 (in English and French), together with the related audit report thereon (available via the following hyperlinks https://biosenic.com/sites/default/files/2022-09/AR_2020_Full_EN_final.pdf; https://www.biosenic.com/sites/default/files/2022-09/AR_2020_Full_FR_final.pdf);

(iii) the annual report and audited consolidated financial statements of BioSenic prepared in accordance with IFRS for the financial year ended 31 December 2021 (in English and French), together with the related audit report thereon (available via the following hyperlink https://biosenic.com/sites/default/files/2022-09/BOTHE_AR2021_EN_vFinal.pdf); https://www.biosenic.com/sites/default/files/2022-09/BOTHE_AR2021_FR_vFinal.pdf; and

(iv) the condensed consolidated unaudited interim financial statements of BioSenic prepared in accordance with IFRS for the financial period ended 30 June 2022 (in English and French), together with the related review report of the auditor thereon (available via the following hyperlinks https://biosenic.com/sites/default/files/2022-09/20220630_Bone%20Therapeutics_Interim%20Financial%20Report%20H1%202022_EN_final_0.pdf; https://www.biosenic.com/sites/default/files/2022-09/20220630_Bone%20Therapeutics_Interim%20Financial%20Report%20H1%202022_FR_final.pdf).

Copies of documents incorporated by reference in this Registration Document may be obtained (without charge) from the registered offices of BioSenic and the website of BioSenic (https://biosenic.com/investors). BioSenic confirms that it has obtained the approval from its auditors to incorporate in this Registration Document the audited consolidated financial statements and the auditors' reports thereon for the financial years ended 31 December 2019, 31 December 2020, 31 December 2021, as well as the unaudited condensed consolidated interim financial statements for the financial period ended 30 June 2022 and the review report of the auditor thereon.

The tables below include references to the relevant pages of the audited consolidated financial statements of BioSenic for the financial years ended 31 December 2019, 31 December 2020, 31 December 2021 and 30 June 2022, as set out in the annual reports of BioSenic (in English and French). Information contained in the documents incorporated by reference other than information listed in the tables below is either not relevant for the investor or covered elsewhere in the Registration Document.

Audited consolidated financial statements of BioSenic prepared in accordance with IFRS for the financial period ended 31 December 2019, as set out in the annual report (in English and French).	
Detailed Clinical and Operational review 2019	p. 10
Financial review of the year ending 31 December 2019	p. 11-15
Consolidated statement of financial position	p. 65

Consolidated statement of comprehensive income	p. 66
Consolidated statement of cash flows	p. 67
Consolidated statement of changes in equity	p. 68
Notes to the consolidated financial statements	p. 69-107
Auditor' s report	p. 58-64

Audited consolidated financial statements of BioSenic prepared in accordance with IFRS for the financial period ended 31 December 2020, as set out in the annual report (in English and French).	
Business overview	p. 12-17
Financial review of the year ending 31 December 2020	p. 20-24
Consolidated statement of financial position	p. 80
Consolidated statement of comprehensive income	p. 81
Consolidated statement of cash flows	p. 82
Consolidated statement of changes in equity	p. 83
Notes to the consolidated financial statements	p. 84-123
Auditor' s report	p. 73-79

Audited consolidated financial statements of BioSenic prepared in accordance with IFRS for the financial period ended 31 December 2021, as set out in the annual report (in English and French).	
Clinical and Operational review 2021	p. 14
Financial review of the year ending 31 December 2021	p. 16-22
Consolidated statement of financial position	p. 79
Consolidated statement of comprehensive income	p. 80
Consolidated statement of cash flows	p. 81
Consolidated statement of changes in equity	p. 82
Notes to the consolidated financial statements	p. 83-122
Auditor' s report	p. 72-78

Condensed consolidated unaudited interim financial statements of BioSenic prepared in accordance with IFRS for the financial period ended 30 June 2022, as set out in the interim report (in English and French).	
Operational and Corporate Highlights	p. 2
Financial review of income statement, balance sheet, cash flow statement	p. 3-5
Condensed consolidated statement of financial position	p. 6
Condensed consolidated statement of comprehensive income	p. 7
Condensed consolidated statement of changes in equity	p. 8
Condensed consolidated statement of cash flows	p. 9
Notes to the interim condensed consolidated financial statements	p. 10-23
Review report of the auditor	p. 25-26

3.2 Selected Historical Financial Information of Medsenic

The tables below present the summary historical financial data of Medsenic. The summary historical financial data as of 31 December 2021 and 2020 has been derived from the financial statements of Medsenic. The audited financial statements in IFRS of Medsenic comprise the statements of financial position as of 31 December 2021 and 2020, and 1 January 2020, and the related statements of income, other comprehensive income, total changes in equity and cash flows for the years ended 31 December 2021 and 31 December 2020

and the related notes to the financial statements and are included in Annex 1. In BioSenic's view, these financial statements, together with the other information provided in the Prospectus, enable investors to make a reasonable and informed assessment of the assets and liabilities, financial position, profits and losses and future prospect of BioSenic's business (including Medsenic).

1) Statement of Financial Position:

Assets:

Assets IFRS per: *(in thousands of euros)*	**31/12/2021**	**31/12/2020**	**01/01/2020**
Long-term assets	**38**	**49**	**61**
Intangible assets	(0)	0	(0)
Property, plant and equipment	13	24	36
Financial assets	25	25	25
Current assets	**1,124**	**997**	**1,245**
Trade and other receivables	361	337	573
Other current assets	4	4	4
Cash and cash equivalents	759	656	668
TOTAL ASSETS	**1,162**	**1,046**	**1,306**

Equity & Liabilities:

Equity & Liabilities IFRS per: *(in thousands of euros)*	**31/12/2021**	**31/12/2020**	**01/01/2020**
Equity attributable to company owners	**(2,670)**	**(1,681)**	**(776)**
Share capital	664	664	664
Share premium	3,969	3,969	3,969
Cumulative losses	(7,219)	(6,236)	(5,330)
Other reserves	(83)	(78)	(78)
Non-current liabilities	**2,338**	**2,115**	**1,704**
Interest bearing borrowings	1,364	1,046	509
Other long term liabilities	974	1,070	1,195
Current liabilities	**1,494**	**611**	**378**
Interest bearing borrowings	1,102	64	7
Trade and other payables	208	392	341
Other current liabilities	184	155	30
TOTAL EQUITY & LIABILITIES	**1,162**	**1,046**	**1,306**

Comparison of the financial years ended on 31 December 2021 and 31 December 2020

Total assets at the end of December 2021 amounted to €1.16 million compared to €1.05 million at the end of December 2020, mainly impacted by the current assets.

Current assets increased by €0.13 million, from €1.00 million at the end of December 2020 compared to €1.12 million at the end of December 2021, mainly driven by an increase in cash position of €0.10 million compared

to the prior year. The trade receivables are mainly composed of research tax credits receivables for an amount of €0.31 million.

The non-current assets decreased from €0.05 million to €0.04 million at the end of December 2021 mainly driven by the depreciation of the Property, plant and equipment.

The negative equity of the company decreased from €1.68 million at the end of December 2020 to €2.67 million at the end of December 2021 due to current year incurred losses for a total amount of €0.98 million.

Liabilities amounted to €3.83 million in 2021 compared to €2.73 million at the end of December 2020, representing an increase of €1.10 million. The total non-current liabilities have increased from €2.12 million at the end of December 2020 to €2.34 million at the end of December 2021, mainly driven by the Innovation R&D borrowing received for an amount of €0.50 million from BPI France on 6 August 2021 for a period of 30 quarters.

Current financial liabilities increased by €0.88 million mainly driven by the recognition of a bond issue of € 891,000 occurred on May 21, 2021. 4,104 bonds convertible into P preference shares of €217 were issued. Each convertible bond bears interest at 5% per annum (increased by 5% in the event of non-conversion) and the interest will be compounded.

Trade and other payables decreased by €0.18 million, from €0.39 million at the end of December 2020 compared to €0.21 million at the end of December 2021.

Other current liabilities amounted to €0.18 million and consist mainly of the short-term repayment of the interest-free conditional advances from BPI France.

2) Statement of Comprehensive Income

(in thousands of euros)	For the twelve-months period ended	
	31-12-21	31-12-20
Other operating income	312	278
Total revenues and operating income	**312**	**278**
Research and development expenses	(619)	(645)
Administrative expenses	(570)	(523)
Operating profit/(loss)	**(877)**	**(890)**
Financial expenses	(107)	(15)
Profit/ (loss) before taxes	**(984)**	**(905)**
Income taxes	0	0
Net income/ (loss) for the period	**(984)**	**(905)**
Other comprehensive income		
Remeasurements of post-employment benefit obligations	(5)	0
Other comprehensive income	(5)	0
Net income/ (loss) for the period	**(989)**	**(906)**
Basic/diluted loss per share (in euros)	(14.89)	(13.64)

Comparison of the financial years ended on 31 December 2021 and 31 December 2020

The total revenues and operating income for 2021 amounted to €0.31 million compared to €0.28 million in 2020. Other operating income consists mainly of income received from the French State in respect of the research tax credit received by the company in the context of its research and development activities relating to 5 ongoing research programs on 31/12/2021 and 31/12/2020.

R&D expenses in 2021 amounted to €0.62 million compared to €0.65 million in 2020. Research and development costs are related to 5 ongoing research programs: (i) cGvHD Phase II (statistical exploitation of clinical results); (ii) preclinical study of Lupus nephritis and establishment of the Phase II/III Lupus protocol; (iii) FRA2 model of systemic sclerosis, (iv) galenics and formulation testing of arsenic combined with Cu chloride and (v) study of transgenic triplet mice from the University of Louvain, animal model of SLE (Systemic Lupus Erythematosus)[2].

General and administrative expenses for the full year 2021 amounted to €0.57 million compared to €0.53 million over the same period last year, largely in line with the previous year.

The operating loss in 2021 was at €0.88 million versus an operating loss of €0.89 million in the prior year.

In 2021, the company presented a net financial loss of €0.11 million compared to a net financial loss of €0.02 million in 2020. The net financial loss is mainly impacted by the change in profit or loss of the repayable advances.

The reported net loss in 2021 amounted to €0.98 million or €14.89 loss per share compared to €0.91 million or €13.64 loss per share in the prior year.

3) Statements of Cash Flow Data — Summary

Consolidated Statements of Cash Flows (in thousands of euros)	For the 12-months period ended 31 December 2021	2020
Net cash used in operating activities	**(1.067)**	**(581)**
Net cash used in investing activities	**0**	**0**
Net cash generated from financing activities	**1.169**	**569**
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	**102**	**(12)**
CASH AND CASH EQUIVALENTS at beginning of the period	**656**	**668**
CASH AND CASH EQUIVALENTS at end of the period	**759**	**656**

Comparison of the financial years ended on 31 December 2021 and 31 December 2020

Cash used for operating activities amounted to €1.07 million for the full year 2021 compared to €0.58 million for the full year 2020.

Total operating loss for the period amounted to a loss of €0.88 million compared to a loss of €0.89 million over the same period in 2020.

Working capital was negatively impacted for the full year 2021 for an amount of €0.18 million mainly explained by a decrease of trade and other payables and liabilities in the current year compared to the prior year. Actual cash received in 2021 for the grants and tax credit amounted to a negative amount of €0.03 million compared to a positive amount of €0.21 million in 2020.

There is no cash flow from investing activities in 2021 neither in 2020.

Cash flow from financing activities amounted to €1.17 million for 2021 compared with €0.57 million in 2020.

[2] For more information on the research programs of the BioSenic Group, please refer to Section 4 of this Registration Document.

Financial cash inflows during 2021 are as follows:

- Net cash in of €0.89 million related to the recognition of a bond issue occurred on May 21, 2021
- Innovation R&D borrowing received for an amount of €0.50 million from BPI France on 6 August 2021.

Financial cash outflows during 2021 are as follows:

- reimbursements of borrowings for €0.06 million;
- reimbursements of other financial liabilities for €0.13 million.

3.3 Unaudited pro forma condensed combined financial information

The unaudited pro forma financial information comprising the unaudited pro forma consolidated statement of comprehensive income for the financial year ended 31 December 2021 and the unaudited pro forma consolidated statement of financial position as of 31 December 2021 of Bone Therapeutics SA ("Bone Therapeutics") has been prepared on the basis of the notes (together "Pro Forma Financial Information") set out below to illustrate the effects of the acquisition of Medsenic, a simplified joint-stock company (*société par actions simplifiée*), completed on 24 October 2022 (the "Transaction"), as if it had taken place on 1 January 2021 (for the pro forma statement of comprehensive income) and 31 December 2021 (for the pro forma statement of financial position). Following the completion of the Transaction, Bone Therapeutics changed its name to BioSenic SA ("BioSenic"), however, for the purpose of this pro forma financial information reference is continued to be made to Bone Therapeutics, as the pro forma financial information relates to the historical financial information of Bone Therapeutics and Medsenic.

The unaudited pro forma financial information is for illustrative purpose only and is presented solely to show the impact of the Transaction. The unaudited pro forma financial information is based on available information and certain assumptions that management believes are reasonable and give effect to events that are directly attributable to the Transaction, and which are factually supportable. By its nature, the unaudited pro forma financial information addresses a hypothetical situation and does not, therefore, represent Bone Therapeutics' actual or future financial position or result of operations. The actual results and any future results may differ significantly from those reflected in the unaudited pro forma financial information for a number of reasons, including, but not limited to, differences in assumptions used to prepare the unaudited pro forma financial information.

The unaudited pro forma financial information has been prepared for inclusion in this Registration Document to comply with the Prospectus Regulation (EU) 2017/1129 and the Commission Delegated Regulation (EU) 2019/980 and for no other purposes. The unaudited pro forma financial information has been prepared in accordance with the principles described in the Commission Delegated Regulation (EU) 2019/980 and the related ESMA guidance. The unaudited pro forma financial information presented in this Registration Document has not been prepared in accordance with the requirements of Regulation S-X issued by the U.S. Securities and Exchange Commission or practices generally accepted in the United States.

Neither the assumptions underlying the preparation of the unaudited pro forma financial information nor the resulting unaudited pro forma financial information have been audited or reviewed in accordance with any generally accepted auditing standards; however, the unaudited pro forma financial information has been reported on in accordance with ISAE 3420 (Assurance Engagements to Report on the compilation of Pro Forma Financial Information included in a Prospectus) by BDO, as indicated in its report included herein.

Rounding adjustments to the nearest one decimal place have been made, therefore, figures shown as total may not be the exact arithmetic aggregation of the figures that preceded them.

Investors should read the Registration Document as whole and not rely solely on the financial information contained in this Unaudited Pro Forma Financial Information section.

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INDEPENDENT PRACTITIONER'S ASSURANCE REPORT ON THE COMPILATION OF PRO FORMA FINANCIAL INFORMATION INCLUDED IN A PROSPECTUS

To the Board of Directors of
BIOSENIC GROUP SA

REPORT ON THE COMPILATION OF PRO FORMA FINANCIAL INFORMATION INCLUDED IN A PROSPECTUS

We have completed our assurance engagement to report on the compilation of pro forma financial information of BIOSENIC SA by Board of directors. The pro forma financial information consists of the pro forma consolidated statement of comprehensive income for the financial year ended 31 December 2021 and the unaudited pro forma consolidated statement of financial position as of and related notes as set out in section 3.3 of the Prospectus issued by the company. The applicable criteria on the basis of which Board of directors has compiled the pro forma financial information are specified in Annex 20 of the Commission Delegated Regulation 2019/980 and described in section 3.3 Unaudited pro forma condensed combined financial information of the Prospectus.

The pro forma financial information has been compiled by Board of directors to illustrate the impact of the MedSenic Acquisition and financing thereof, set out in section 3.3 Unaudited pro forma condensed combined financial information of the Prospectus as if the Medsenic acquisition and financing thereof had taken place at 1 January 2021. As part of this process, information about the company's financial performance has been extracted by Board of directors from the company's consolidated financial statements for the year ended 31 December 2021, on which an audit report has been published.

Board of director's Responsibility for the Pro Forma Financial Information

Board of directors is responsible for compiling the pro forma financial information on the basis of the applicable criteria as specified in Annex 20 of the Commission Delegated Regulation 2019/980.

Practitioner's Responsibilities

Our responsibility is to express an opinion, as required by the Commission Delegated Regulation 2019/980, about whether the pro forma financial information has been compiled, in all material respects, by Board of directors on the basis of the applicable criteria and whether that basis is consistent with the accounting policies applied by the issuer.

We conducted our engagement in accordance with International Standard on Assurance Engagements (ISAE) 3420, *Assurance Engagements to Report on the Compilation of Pro Forma Financial Information Included in a Prospectus*, issued by the International Auditing and Assurance Standards Board. This standard requires that the practitioner comply with ethical requirements and plan and perform procedures to obtain reasonable assurance about whether Board of directors has compiled, in all material respects, the pro forma financial information on the basis of the applicable criteria.

For purposes of this engagement, we are not responsible for updating or reissuing any reports or opinions on any historical financial information used in compiling the pro forma financial information, nor have we, in the course of this engagement, performed an audit or review of the financial information used in compiling the pro forma financial information.

The purpose of pro forma financial information included in a prospectus is solely to illustrate the impact of a significant event or transaction on unadjusted financial information of the entity as if the event had occurred or the transaction had been undertaken at an earlier date selected for purposes of the illustration. Accordingly, we do not provide any assurance that the actual outcome of the event or transaction at 1 January 2021 would have been as presented.

A reasonable assurance engagement to report on whether the pro forma financial information has been compiled, in all material respects, on the basis of the applicable criteria involves performing procedures to assess whether the applicable criteria used by Board of directors in the compilation of the pro forma financial information provide a reasonable basis for presenting the significant effects directly attributable to the event or transaction, and to obtain sufficient appropriate evidence about whether:

- The related pro forma adjustments give appropriate effect to those criteria; and
- The pro forma financial information reflects the proper application of those adjustments to the unadjusted financial information.

The procedures selected depend on the practitioner's judgment, having regard to the practitioner's understanding of the nature of the company, the event or transaction in respect of which the pro forma financial information has been compiled, and other relevant engagement circumstances.

The engagement also involves evaluating the overall presentation of the pro forma financial information.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the pro forma financial information has been properly compiled on the basis as stated in Section 3.3 Unaudited pro forma condensed combined financial information of the Prospectus and the basis stated is consistent with the accounting policies applied by Biosenic SA.

Restriction to the distribution of the report

This report has been issued solely for the purposes of including in the Prospectus.

Zaventem, 3rd February 2023

Rodrigo Abels (Signature)

Digitally signed by Rodrigo Abels (Signature)
DN: cn=Rodrigo Abels (Signature), c=BE

BDO Bedrijfsrevisoren CVBA
Represented by Rodrigo Abels
Partner

3.3.1 *Description of the Pro Forma Financial Information*

3.3.1.1 Introduction

On 12 May 2022, Bone Therapeutics SA announced it had entered into a non-binding term sheet and binding exclusive discussions for a period of three months with the shareholders of Medsenic, a privately held, clinical stage biopharmaceutical company incorporated in France and specialized in the development of optimized formulations of arsenic salts and their application in inflammatory conditions and other potential new indications ("Medsenic").

In August 2022, Bone Therapeutics and Medsenic signed a Subscription Agreement based on which Bone Therapeutics will acquire 51% of shares in Medsenic from the shareholders of Medsenic, in exchange of 90,668,594 new shares, issued by Bone Therapeutics. The acquisition was completed on 24 October 2022. In addition, the Subscription Agreement also stipulated that Bone Therapeutics shall benefit from a call option right over the remaining 49% of the shares in Medsenic (i.e. the non-controlling interest), which may be exercised within a period of 3 years as from the completion of the Transaction. The call option exercise price will be redetermined in case of a material adverse change in the assets, liabilities or clinical trial of Medsenic, or if Medsenic obtains extended development and commercialisation rights for e.g. US, UK, Japan from Phebra under economically favourable terms for Medsenic before the execution of the call option.

The Transaction qualifies as a reverse acquisition under IFRS (IFRS3.B19), as by issuing 90,668,594 new shares in exchange for 51% of the shares in Medsenic, the original shareholders of Bone Therapeutics no longer control the combined entity as their shares represent only 19% of the total number of shares in the combined entity and 51% of the shareholders of Medsenic hold 81% of the shares of the combined entity. Therefore, under IFRS, the legal acquirer (Bone Therapeutics) should be considered as the accounting acquiree and the legal acquiree (Medsenic) should be considered the accounting acquirer. Therefore, the consolidated financial statements will represent the continuation of the financial statements of the legal acquiree, and, except for its capital structure, the consolidated financial statements will reflect:

- The assets and liabilities of the legal subsidiary/accounting acquirer (Medsenic) recognised and measured at their pre-combination carrying amounts;

- The assets and liabilities of the legal acquirer/accounting acquiree (Bone Therapeutics) recognised and measured in accordance with IFRS 3 (generally at their fair value). Goodwill will be recognised in accordance with IFRS 3, with the consideration for the business combination measured in accordance with IFRS 3.33;

- The retained earnings and other equity balances of the legal subsidiary/accounting acquirer (Medsenic) before the business combination;

- Issued equity instruments in the consolidated financial statements determined by adding the issued equity instruments of the legal subsidiary/accounting acquirer (Medsenic) outstanding immediately before the business combination to the fair value of the legal parent/accounting acquiree (Bone Therapeutics);

- The non-controlling interest of the non-controlling shareholders' proportionate interest in the pre-combination carrying amounts of the legal acquiree's net assets, in accordance with IFRS 3.B24, as the call option right does not give present access to the returns associated with the remaining 49% of the Medsenic shares. The call option right will be accounted for as a financial asset at its fair value, with any subsequent changes in fair value recognized in profit or loss. However, as the call option is providing Bone Therapeutics SA the opportunity to acquire Medsenic shares at market conditions, the value of the call option is considered to be zero.

The Pro Forma Financial Information should be read in conjunction with the audited (consolidated) financial statements of Bone Therapeutics and Medsenic for the financial year ended 31 December 2021, which have been prepared in accordance with the International Financial Reporting Standards as adopted by the European Union (IFRS).

3.3.1.2 Historical Financial Information

The Pro Forma Financial Information was prepared, based on the following historical financial information:

- Audited Financial Statements as of and for the year ended 31 December 2021 of Medsenic, prepared in accordance with IFRS, included elsewhere in this Registration Document;

- Audited Consolidated Financial Statements as of and for the year ended 31 December 2021 of Bone Therapeutics, prepared in accordance with IFRS, incorporated by reference in this Registration Document.

The pro forma financial information has not been adjusted for possible effects of fair value adjustments resulting from applying IFRS 3 "Business combinations". These potential adjustments will be reflected, once all information is available, over the measurement period that cannot exceed the one-year term as of acquisition date. The potential fair value adjustments will affect the amount of goodwill recognised in the Transaction and post combination results in the income statement and statement of comprehensive income.

Potential fair value adjustments are expected in the areas of intangible assets and borrowings.

3.3.1.3 Accounting policies

As the acquisition of Medsenic by Bone Therapeutics qualifies as a reverse acquisition, with Medsenic being the accounting acquirer, the consolidated financial statements as of and for the year ending 31 December 2022 will be prepared by using the accounting policies of Medsenic. Therefore, the accounting policies described in the Audited Financial Statements as of and for the year ended 31 December 2021 of Medsenic were applied to the Pro Forma Financial Information.

Historically, Medsenic has not prepared any IFRS financial information, therefore, Medsenic applied IFRS for the first time for purposes of this Transaction. In connection with the transition of Medsenic to IFRS, the accounting policies of Bone Therapeutics SA were used as a basis to determine Medsenic's accounting policies. The accounting policies are described in detail in the audited IFRS consolidated financial statements as of and for the financial year ended 31 December 2021 of both Medsenic and Bone Therapeutics.

Consequently, no presentation or measurement adjustments were made. The Pro Forma Financial Information should be read in conjunction with these accounting policies and the audited (consolidated) financial statements as of and for the financial year ended 31 December 2021 of both Medsenic and Bone Therapeutics.

Unaudited Pro Forma Consolidated Statements of Comprehensive Income for the year ended 31 December 2021

Unaudited Pro Forma Consolidated Statement of Comprehensive Income for the year ended 31 December 2021

in thousands of €	Historical financial information of Medsenic	Historical financial information of Bone Therapeutics	Pro Forma Adjustments	Pro Forma Consolidated Statement of Comprehensive Income FY 2021
	Note 1	Note 2	Note 3	
Revenue	-	1.000	-	1.000
Other operating income	312	1.745	-	2.057
Total revenues and operating income	**312**	**2.745**	**-**	**3.057**
Research and development expenses	(619)	(11.684)	-	(12.303)
General and administrative expenses	(570)	(3.087)	(781)	(4.438)
Operating profit/ (loss)	**(877)**	**(12.026)**	**(781)**	**(13.684)**
Financial income	-	333	-	333
Interest income	-	25	-	25
Financial expenses	(107)	(1.147)	-	(1.254)
Exchange gains/ (losses)	-	(20)	-	(20)
Result Profit/ (loss) before taxes	**(984)**	**(12.836)**	**(781)**	**(14.601)**
Income taxes	-	(89)	-	(89)
Result Profit/ (loss) for the Period	**(984)**	**(12.925)**	**(781)**	**(14.690)**
thereof attributable to:				
Owners of the Company	*(984)*	*(12.925)*	*(110)*	*(14.019)*
Non-controlling interests	-	-	*(671)*	*(671)*
Other comprehensive income				
Remeasurements of post-employment benefit obligations	(5)	-	-	(5)
TOTAL COMPREHENSIVE INCOME/ (LOSS) OF THE PERIOD	**(989)**	**(12.925)**	**(781)**	**(14.695)**
thereof attributable to:				
Owners of the Company	*(989)*	*(12.925)*	*(107)*	*(14.021)*
Non-controlling interests	-	-	*(674)*	*(674)*
Basic and diluted loss per share (in euros)	**(14,90)**	**(0,77)**	**15,54**	**(0,13)**
Profit/ (loss) for the period attributable to the owners of the Company	**(984)**	**(12.925)**	**(110)**	**(14.019)**
Total comprehensive income/ (loss) for the period attributable to the owners of the Company	**(989)**	**(12.925)**	**(107)**	**(14.021)**

Unaudited Pro forma Consolidated Statement of Financial Position as of 31 December 2021

in thousands of €	Historical financial information of Medsenic	Historical financial information of Bone Therapeutics	Pro Forma Adjustments	Pro Forma Condensed Consolidated Statement of Financial Position 31 December 2021
	Note 1	Note 2	Note 3	
Non- current assets	**38**	**5.481**	**9.774**	**15.293**
Goodwill	-	-	9.774	9.774
Intangible assets	-	24	-	24
Property, plant and equipment	13	863	-	876
Investments in associates	-	12	-	12
Other non-current assets	25	96	-	121
R&D Tax Credits	-	4.486	-	4.486
Current assets	**1.124**	**14.291**	**-**	**15.415**
Trade and other receivables	361	2.581	-	2.942
Other current assets	4	1.000	-	1.004
Financial assets	-	1.200	-	1.200
Cash and cash equivalents	759	9.510	-	10.269
TOTAL ASSETS	**1.162**	**19.772**	**9.774**	**30.708**
				-
Share capital	664	4.924	(2.240)	3.348
Share premium	3.969	69.499	(71.444)	2.024
Accumulated losses	(7.219)	(81.488)	84.352	(4.355)
Other reserves	(83)	301	(260)	(42)
Equity attributable to owners of the parent	**(2.670)**	**(6.765)**	**10.409**	**974**
Non-controlling interests	-	-	(1.497)	(1.497)
Total Equity	**(2.670)**	**(6.765)**	**8.912**	**(523)**
Non- current liabilities	**2.338**	**19.864**	**-**	**22.202**
Interest bearing borrowings	1.364	19.752	-	21.116
Other non-current liabilities	974	112	-	1.086
Current liabilities	**1.494**	**6.673**	**862**	**9.029**
Interest bearing borrowings	1.102	1.046	-	2.148
Trade and other payables	208	4.822	862	5.892
Other current liabilities	184	804	-	988
Total liabilities	**3.832**	**26.537**	**862**	**31.231**
TOTAL EQUITY AND LIABILITIES	**1.162**	**19.772**	**9.774**	**30.708**

Notes to the Unaudited Pro Forma Consolidated Statement of Comprehensive Income for the year ended 31 December 2021 and the Unaudited Pro Forma Consolidated Statement of Financial Position as of 31 December 2021

Note 1 – Historical Financial Information of Medsenic

This information has been extracted directly from the Audited Financial statements of Medsenic as of and for the year ended 31 December 2021.

Note 2 – Historical Financial Information of Bone Therapeutics

This information has been extracted directly from the Audited Consolidated Financial statements of Bone Therapeutics as of and for the year ended 31 December 2021.

Note 3 – Pro forma adjustments

Pro forma adjustments are based upon available information and certain preliminary estimates and assumptions, as well as certain pro forma assumptions, which management of Bone Therapeutics believes are reasonable. In particular, it is assumed that the Transaction took place on 1 January 2021 with respect to the unaudited pro forma consolidated statements of comprehensive result and on 31 December 2021 with respect to the unaudited pro forma consolidated statement of financial position.

Actual amounts related to the Transaction may vary from the estimated amounts in the unaudited pro forma consolidated financial information due to, among other factors, (i) any variance in fair value of the consideration transferred, (ii) any variance in final transaction fees and expenses, and (iii) any difference in the fair values of the identified assets and liabilities of Bone Therapeutics that will result from the completion of the purchase price allocation in the measurement period.

A detailed overview of the pro forma adjustments, reflected in the unaudited pro forma consolidated statement of comprehensive result for the year ended 31 December 2021, is provided below:

in thousands of €	Transaction costs of Medsenic	Transaction costs of Bone Therapeutics	Non-controlling interest	**Pro Forma Adjustments**
	Note 3.2	**Note 3.2**	**Note 3.3**	**Note 3**
Revenue				-
Other operating income				-
Total revenues and operating income				**-**
Research and development expenses				-
General and administrative expenses	(386)	(395)		(781)
Operating profit/ (loss)	**(386)**	**(395)**	**-**	**(781)**
Financial income				-
Interest income				-
Financial expenses				-
Exchange gains/ (losses)				-
Result Profit/ (loss) before taxes	**(386)**	**(395)**	**-**	**(781)**
Income taxes				-
Result Profit/ (loss) for the Period	**(386)**	**(395)**	**-**	**(781)**
thereof attributable to:				
Owners of the Company	*(197)*	*(395)*	*482*	*(110)*
Non-controlling interests	*(189)*	*-*	*(482)*	*(671)*
Other comprehensive income				
Remeasurements of post-employment benefit obligations	-	-	-	-
TOTAL COMPREHENSIVE INCOME/ (LOSS) OF THE PERIOD	**(386)**	**(395)**	**-**	**(781)**
thereof attributable to:				
Owners of the Company	*(197)*	*(395)*	*485*	*(107)*
Non-controlling interests	*(189)*	*-*	*(485)*	*(674)*
Basic and diluted loss per share (in euros)				**15,54**
Profit/ (loss) for the period attributable to the owners of the Company	**(197)**	**(395)**	**482**	**(110)**
Total comprehensive income/ (loss) for the period attributable to the owners of the Company	**(197)**	**(395)**	**485**	**(107)**

A detailed overview of the pro forma adjustments, reflected in the unaudited pro forma consolidated statement of financial position as of 31 December 2021, is provided below:

in thousands of €	Reverse acquisition accounting - reversal historical equity Bone Therapeutics	Reverse acquistion accounting - issuance of the new shares	Transaction costs of Medsenic	Transaction costs of Bone Therapeutics	Transaction costs booked against equity	Non-controlling interest	Pro Forma Adjustments
	Note 3.1	Note 3.1	Note 3.2	Note 3.2	Note 3.2	Note 3.3	Note 3
Non- current assets	**-**	**9.774**	**-**	**-**	**-**	**-**	**9.774**
Goodwill		9.774					9.774
Intangible assets							-
Property, plant and equipment							-
Investments in associates							-
Other non-current assets							-
R&D Tax Credits							-
Current assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Trade and other receivables							-
Other current assets							-
Financial assets							-
Cash and cash equivalents							-
TOTAL ASSETS	**-**	**9.774**	**-**	**-**	**-**	**-**	**9.774**
Share capital	(4.924)	3.009				(325)	(2.240)
Share premium	(69.499)					(1.945)	(71.444)
Accumulated losses	81.488		(197)	(395)	(81)	3.537	84.352
Other reserves	(301)					41	(260)
Equity attributable to owners of the parent	**6.765**	**3.009**	**(197)**	**(395)**	**(81)**	**1.308**	**10.409**
Non-controlling interests	-		(189)			(1.308)	(1.497)
Total Equity	**6.765**	**3.009**	**(386)**	**(395)**	**(81)**	**-**	**8.912**
Non- current liabilities	**-**	**-**			**-**	**-**	**-**
Interest bearing borrowings							-
Other non-current liabilities							-
Current liabilities	**-**	**-**	**386**	**395**	**81**	**-**	**862**
Interest bearing borrowings							-
Trade and other payables			386	395	81		862
Other current liabilities							-
Total liabilities	**-**	**-**	**386**	**395**	**81**	**-**	**862**
TOTAL EQUITY AND LIABILITIES	**6.765**	**3.009**	**-**	**-**	**-**	**-**	**9.774**

Note 3.1 – *Pro forma adjustments related to Reverse acquisition accounting*

In accordance with IFRS 3.37 the consideration transferred in a business combination shall be measured at fair value at the acquisition date. On the basis of IFRS 3.33, the fair value of the consideration transferred will be determined based on fair value of the equity interests of Bone Therapeutics. As the acquisition date was 24 October 2022, the fair value of the consideration transferred will be based on the share price of Bone Therapeutics at that date. In order to prepare the pro forma financial information and determine the pro forma goodwill, the share price of Bone Therapeutics on 24 October 2022 was used (being €0.14), which results in a fair value of the consideration transferred of € €3,009 thousand. As already referred to above, Bone Therapeutics did not include any possible effect of fair value adjustments resulting from applying IFRS 3 in the pro forma financial information.

The goodwill arising as a result of the Transaction has been calculated as follows:

• Number of shares Bone Therapeutics at the date of the Transaction:	21,495,705 shares
• Share price Bone Therapeutics (24 October 2022):	€ 0.14 per share
• Consideration paid:	€ 3,009 thousand
• Net assets of Bone Therapeutics:	€ (6,765) thousand
• **Pro forma goodwill:**	**€ 9,774 thousand**

Net assets Bone Therapeutics as of 31 December 2021, has been calculated as follows:

• Total assets:	€ 19,772 thousand
• Total liabilities:	€ 26,537 thousand
• Net assets:	€ (6,765) thousand

However, the final goodwill will be calculated based on the (fair value of) net assets at the date of the Transaction. As of 30 June 2022, the net assets of the Bone Therapeutics amounted to - € 9,972 thousand, as compared to - € 6,765 thousand as of 31 December 2021.

As the Transaction qualifies as a reverse acquisition under IFRS 3, the equity in the pro forma statement of financial position should reflect:

- The retained earnings and other equity balances of Medsenic (the legal subsidiary/accounting acquirer) before the business combination; and
- The amount recognised as issued equity instruments in the consolidated financial statements determined by adding the issued equity instruments of Medsenic (the legal subsidiary/accounting acquirer) outstanding immediately before the business combination to the fair value of the Bone Therapeutics (the legal parent/accounting acquiree).

The table below lays out the movements in equity:

• Historical Equity Medsenic, as reported	€ (2,670) thousand
• Historical Equity Bone Therapeutics, as reported	€ (6,765) thousand
• Elimination Historical Equity Bone Therapeutics	€ 6,765 thousand
• Fair value Bone Therapeutics	€3,009 thousand
• Transaction fees and expenses	€ (862) thousand
• **Pro Forma equity):**	**€ (523) thousand**

Note 3.2 – *Pro forma adjustments related to transaction fees and expenses*

Bone Therapeutics and Medsenic expect additional transaction-related fees and expenses (mainly concerning legal and financial due diligence, legal advice and valuation advice) in the amount of €781 to be recognized in general and administrative expenses in the consolidated statement of comprehensive income for the years ended 31 December 2022 and 31 December 2023. Under the assumption that the transaction took place on 1 January 2021, these expenses have been reflected in the pro forma consolidated statement of comprehensive income for the year ended 31 December 2021.

By their nature, these expenses are not expected to have a recurring impact on the financial performance going forward.

According to IAS 32.35 transaction costs that are related to an equity issuance shall be accounted for as a deduction from equity. As Bone Therapeutics issued shares in exchange for the contribution in kind of Medsenic, all expenses relating to this issuance of new shares will be deducted from the equity. These transaction costs (mainly concerning the costs for the drafting of the prospectus), amounting to €81 thousand are recognized and deducted from equity in the unaudited pro forma consolidated statement of financial position as of 31 December 2021.

Note 3.3. – *Pro forma adjustments related to Non-controlling interest*

In accordance with IFRS 3.B23 owners of the legal acquiree (the accounting acquirer) that do not exchange their equity interest for the equity interests of the legal parent (the accounting acquiree) are treated as a non-controlling interest in the consolidated financial statements after the reverse acquisition. In the Transaction the shareholders of the legal acquiree/accounting acquirer (Medsenic) will exchange 51% of their Medsenic shares in exchange for the new shares to be issued by Bone Therapeutics (the legal acquirer/accounting acquiree). Therefore, the Pro Forma Financial Information reflects the non-controlling interest's proportionate share of Medsenic's (the legal acquiree/accounting acquirer) pre-combination carrying amounts of net assets (€ 2,670 thousand), related to the remaining 49% (i.e. € 1,308 thousand (calculated as 49% of € 2,670 thousand)) which is not subject to the Transaction. The remaining amount of € 189 thousand reflected in non-controlling interest in the pro forma statement of financial position relates to non-controlling interest's share in the Medsenic transaction related fees and expenses (calculated as 49% of € 386 thousand).

Similarly, 49% of the historical loss of Medsenic (€ 482 thousand) and the total comprehensive loss (€ 485 thousand) have been reclassified to non-controlling interest in the statement of comprehensive income.

Note 3.4 – *Pro forma adjustments related to Earnings per share*

in thousands of €	Pro Forma Consolidated Statement of Comprehensive Income for the year ended 31 December 2021

Profit/(loss) for the period attributable to ordinary equity holders of the company	(14,019)
Weighted average number of ordinary shares for basic/diluted loss per share (in number of shares)*	107,530,702
Basic/diluted profit/(loss) per share (in euros)	(0.13)

*Weighted average number of shares has been determined, taking into account the assumption that the transaction took place on 1 January 2021, by adding:

(1) the weighted average number of shares of Bone Therapeutics for the financial year ended 31 December 2021 (i.e. 16,862,108); and

(2) the number of Bone Therapeutics shares issued following the Transaction (90,668,594 shares for both periods).

3.4 Securities issued by BioSenic and Medsenic

As per 31 January 2023, BioSenic's capital amounts to € 33,800,668.71, represented by 124,008,857 ordinary shares without nominal value.

The total of exercisable warrants within BioSenic is 197,554 warrants for the (former) Executive committee members, consultants and Board members, 800,000 warrants for EIB and 200,000 warrants for Patronale Life, which give right to subscribe to an equal number of shares. This represents a total of 1,197,554 warrants. Moreover, The extraordinary shareholders' meeting of 24 October 2022 approved, among others, the issue of 24.463.421 warrants allowing holders to subscribe for a new share of BioSenic if the ALLOB interim Phase IIB results are positive.

At the date of this document, Medsenic's capital amounts to € 738,200, represented by 73,820 ordinary shares with a nominal value of € 10.00 each. On 8 September 2022, Medsenic has also issued convertible bonds in a total amount of EUR 1 million which have been subscribed for by BioSenic.

The total of exercisable warrants within Medsenic is 3,460 warrants for the Executive committee members, which give right to subscribe to an equal number of shares.

3.5 Overview of funding

Up to the date of this document, BioSenic has been able to fund its operations with a long-term perspective through the following funding instruments:

- € 104.95 million in net proceeds from private equity placements in BioSenic;
    - These proceeds include amongst other convertible bonds issued in 2018, 2019, 2020 and converted into shares;
    - These proceeds include amongst other € 1,50 million from 30 convertible bonds converted into shares by ABO in 2022;
- € 2.51 million in invested cash through the non-controlling interest held by third parties in its affiliate SCTS SA;
- € 35.81 million of non-dilutive funding, mainly through recoverable cash advances, subsidies and patents provided by the Region and to lesser extent through regular grants.
- € 3.25 million as a long-term investment credit provided by BNP Paribas Fortis SA/NV and ING Belgique SA/NV (each for half of the amount) for the construction of the SCTS building at the Biopark of Gosselies (South of Brussels);
- €8 million under a loan agreement of up to €16 million with the European Investment Bank (EIB);

- € 7.50 million via the issuance of bonds towards Patronale Life and Integrale (now Monument Assurance Belgium Services);
- € 1.50 million via the issuance of convertible bonds towards ABO;
- € 0,60 million via the issuance of 12 convertible bonds which have not been converted into shares;
- € 3.97 million in loans, provided by related parties (regional investment vehicles) which have been recorded as current and non-current financial liabilities; and
- € 2.53 million through an investment grant provided by the Region on the SCTS building.

Between its incorporation in 2010 and 2016, Medsenic has finance its operations mainly via equity funding. Since 2016, Medsenic has been able to fund its operations through the following instruments:

- Increase of the share capital by a total amount of € 1,128,006 (including issue premium) by the issuance of 6,963 new preference shares called "P" preference shares (the "**P Shares**") to each of which is attached two warrants to subscribe for Preference Shares (the "**BSA Tranche 2**", the "**BSA Ratchet 2016**", and hereinafter together with the new shares to which they are attached the "**ABSA-2016**"), decided by the general meeting of shareholders on 14 March 2016;
- Increase of the share capital by a total amount of € 1,128,006 (including issue premium) by the issuance of 6,963 new P Shares upon exercise of the 6,963 BSA Tranche 2, recorded by the President on 23 February 2017;
- Increase of the share capital by a total amount of € 1,713,866 (including issue premium) by the issuance of 7,898 new P Shares decided by the general meeting of shareholders on 20 December 2017;
- Increase of the share capital by a total amount of € 227,416 (including issue premium) by the issuance of 1,048 new ordinary shares decided by the general meeting of shareholders on 20 December 2017;
- Issuance of a bond loan in the amount of € 890,568 in the form of 4,104 bonds convertible into P Shares (the "**OC-2021**"), decided by the general meeting of shareholders on 21 May 2021;
- Increase of the share capital by a nominal amount of € 31,510 by the issuance of 3,151 ordinary shares in consideration for the contribution in kind of a patent license held by Phebra valued at € 2,980,846, decided by the General Meeting of shareholders on 25 February 2022;
- Increase of the share capital by a total amount of € 929,628 (including issue premium) by the issuance of 4,284 new P Shares on conversion of all of the 4,104 outstanding OC-2021 recorded by the President on 15 April 2022.

Since 24 October 2022, all P shares have been converted into ordinary shares according to the decision of BioSenic's general meeting of shareholders on this date.

Medsenic has also obtained loans and repayable advances as further set out in Section 4.15. Since 24 October, Medsenic has furthermore issued bonds to BioSenic for an aggregate amount of EUR 1 million.

3.6 Legal proceedings

There are no governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which the BioSenic Group is aware), during the previous 12 months which may have,

or have had in the recent past, significant effects on the BioSenic Group and/or its financial position or profitability.

3.7 Significant change in the financial position of the BioSenic Group since 31 December 2021

On 30 May 2022, BioSenic executed a subscription agreement for a maximum € 5 million convertible bonds ("Convertible Bonds") facility arranged by ABO Securities, through its affiliated entity Global Tech Opportunities 15. The proceeds of the financing will be used to advance the clinical development of BioSenic's asset, the allogeneic bone cell therapy, ALLOB. Global Tech Opportunities 15 commits to subscribe for up to € 5 million in Convertible Bonds. The Convertible Bonds will be issued and subscribed for in ten tranches of 10 Convertible Bonds. A first tranche of 10 Convertible Bonds with an aggregate principal amount of € 0.5 million was subscribed for on 9 June 2022. The second and third tranche of 20 Convertible Bonds in the aggregate were issued on 2 September 2022, while the fourth tranche was subscribed on 23 September 2022. A fifth tranche was subscribed on 8 December 2022. The issue and subscription of the remaining five tranches with a principal amount of € 500,000 each can be requested at BioSenic's sole discretion over an eighteen-month period beginning on the execution date of the subscription agreement, subject to customary conditions to be met.

As per 31 January 2023, out of the 50 Convertible Bonds that have been issued so far by BioSenic, Global Tech Opportunities converted 34 Convertible Bonds, resulting in the issuance of new shares. 16 issued Convertible Bonds are therefore still outstanding (including all 6 Convertible Bonds of the fourth tranche and all 10 Convertible Bonds of the fifth tranche).

As far as Medsenic is concerned there has been no significant change in the general financial position of BioSenic since its last audited financial statements for financial year 2021, except for (i) the issuance of 4,284 new P Shares on conversion of all of the 4,104 outstanding OC-2021 on 15 April 2022 (see Section 3.4 for more information) and (ii) the two tranches convertible bonds issued to BioSenic following the Contribution for an aggregate amount of EUR 1 million. Given that all clinical activities within Medsenic have been put on hold following the negotiations with BioSenic, which started during the first half of 2022, the financial performance and position of Medsenic at the end of June 2022 are not materially different from the situation as per 31 December 2021. Other than set out in this paragraph, no significant transactions were undertaken during the first half of 2022. Please also refer to the Securities Note for a recent overview of the capitalisation and indebtedness of Medsenic.

3.8 Current cash situation

- BioSenic's net cash at the end of June 2022 amounted to € 3,96 million and € 0.37 million for Medsenic.
- BioSenic reiterates its previous guidance of a net cash use of €8-9 million for the full year 2022. Medsenic's net cash use for the full year 2022 is expected to amount to € 1,7 million.
- With the funds available under the € 5 million convertible bonds facility with ABO, the BioSenic Group anticipates having sufficient cash to carry out its business objectives into Q1 2023, assuming amongst other full issuance of the new convertible bond facility.
- In its anticipation of having sufficient cash to carry out its business into Q1 2023, BioSenic takes into account, as an assumption, the payment of a final settlement and termination amount of EUR 1 million (minus tax) by Shenzhen Pregene BioPharma Co., Ltd ("Pregene") following the termination by Pregene of the license agreement entered into with BioSenic on 5 October 2020.

The assumptions made above comprise various risks and uncertainties, mainly but not limited to the timing of collection of certain funds, the uncertainty about the negotiations with Pregene and the uncertainty related to the equity.

3.9 Dividends and dividend policy

3.9.1 *Entitlement to dividends*

Dividends can only be distributed if, following the declaration and payment of the dividends, the amount of BioSenic's net assets on the date of the closing of the last financial year as follows from the statutory financial statements prepared in accordance with Belgian GAAP (*i.e.*, the amount of the assets as shown in the balance sheet, decreased with provisions and liabilities), decreased with the non-amortised activated costs of incorporation and extension and the non-amortised activated costs for research and development, does not fall below the amount of the paid-up capital (or, if higher, the called capital), increased with the amount of non-distributable reserves. In addition, pursuant to the Belgian Code on Companies and Associations and the articles of association, BioSenic must allocate at least 5% of its annual net profits under its statutory non-consolidated accounts to a legal reserve until the reserve equals 10% of BioSenic's share capital.

In accordance with Belgian law, the right to collect dividends declared on ordinary shares expires five years after the date the Board of Directors has declared the dividend payable, whereupon BioSenic is no longer under an obligation to pay such dividends.

3.9.2 *Dividend policy*

BioSenic has never declared or paid any dividends on its shares.

BioSenic's dividend policy will be determined by, and may change from time to time by determination of, BioSenic's Board of Directors. Any declaration of dividends will be based upon BioSenic's earnings, financial condition, capital requirements and other factors considered important by the Board of Directors. The calculation of amounts available to be distributed as dividends or otherwise distributed to shareholders must be made on the basis of the Belgian statutory financial statements, taking into account the limits set out in the Belgian Code on Companies and Associations.

Belgian law and BioSenic's articles of association do not require BioSenic to declare dividends. The Board of Directors expects to retain all earnings, if any, generated by BioSenic's operations for the development and growth of its business. Also following the Contribution, the Board of Directors does not anticipate paying any dividends to the shareholders in the near future.

4 BUSINESS OVERVIEW

4.1 Important recent events in the development of BioSenic Group's business

Year	Key Milestones of BioSenic		
Year	**Corporate**	**ALLOB**	**JTA**
2021	• BioSenic and Rigenerand sign partnership for cell therapy process development • Appointment of Anthony Ting, PhD as Chief Scientific Officer • Appointment of Anne Leselbaum, MD as Chief Medical Officer • BioSenic secures up to €16M loan financing from the EIB to accelerate clinical and commercial development of innovative orthopaedic treatments • BioSenic agrees final settlement with the FSMA regarding clinical studies communication issues in 2016 and 2017	• Treatment of the first patient in ALLOB Phase IIb tibial fracture study • BioSenic publishes results of ALLOB Phase I/IIa study for the treatment of delayed-union fractures in Stem Cell Research & Therapy	• Strong clinical progress in JTA-004 Phase III study thanks to high patient compliance and retention • Topline results from Phase III knee osteoarthritis study with its enhanced viscosupplement JTA-004
2022	• BioSenic secures a € 5 million convertible bonds facility with ABO • Contribution of 51% of the shares of Medsenic in exchange for the issuance of 90,668,594 new shares of BioSenic • BioSenic regains worldwide rights to its allogeneic, off-the-shelf, bone cell therapy platform ALLOB further to the unilateral termination notice received from Shenzhen Pregene Biopharma Co., Ltd.	• BioSenic announced an optimized statistical analysis and the implementation of an interim analysis for the ongoing Phase IIb clinical trial with its allogeneic bone cell therapy product, ALLOB.	• BioSenic redefines its strategic priorities to concentrate specifically on the development of its most advanced clinical asset, the allogeneic cell therapy platform, ALLOB.

	Key Milestones of Medsenic		
Year	**Corporate**	**cGvHD**	**Lupus**
2021	• Medsenic partnered with Phebra for the clinical development of the oral form of Arsenic trioxide-	• Positive Results of Phase II Clinical Study with Arscimed for the Treatment of Chronic	• International publication of safety and efficacy positive results for Phase IIa study (Lupsenic) in

	ArsiCor for the treatment of autoimmune diseases. • Medsenic received notice of approval for a new US patent broadening the use of arsenic trioxide to treat the relapsing-remitting form of multiple sclerosis.	Graft Versus Host Disease.	the international journal Arthritis Research and Therapy (March 2021)[3].
2022	• Medsenic reverse merger with BioSenic to access public investment and market capitalization, and BioSenic to broaden therapeutic portfolio, by acquiring majority participation in Medsenic.	• Medsenic Receives Positive Pre-IND Response from FDA to Initiate a Phase III Clinical Study in cGvHD. • Medsenic publishes its positive Phase II results in an international journal, Transplantation and Cellular Therapy, May 2022[4].	

4.2 Investments

In October 2020, BioSenic signed a manufacturing collaboration with Catalent, Inc. to streamline the production of ALLOB. Under the terms of the share purchase agreement, Catalent acquired BioSenic's cell therapy manufacturing subsidiary, Skeletal Cell Therapy Support SA (SCTS), for gross proceeds of €12 million. The equity purchase price, net of SCTS's debt (€3 million), cash adjustments, and taking into account the restructuring of some BioSenic's existing liabilities (€3 million), generated net proceeds of approximately €6 million.

From this date, BioSenic is renting the offices and labs to Catalent SA at the Biopark of Gosselies (rue Auguste Piccard 37, 6041 Gosselies) and is no longer the owner of the building constructed by SCTS SA.

4.3 Activities of the BioSenic Group

The BioSenic Group is a biotech company with operations in Belgium and in France focused on, on the one hand, the development of innovative products to address high unmet medical needs in orthopaedics and the wider field of immunopathology and cell tissue repair through its most advance clinical asset, the allogeneic cell therapy platform ALLOB, and, on the other hand, the development of new treatments for autoimmune diseases using arsenic trioxide (As(2)O(3)).

In the field of orthopaedics, BioSenic's core technology is based on its cutting-edge allogeneic cell and gene therapy platform with differentiated bone marrow sourced Mesenchymal Stromal Cells (MSCs) which can be stored at the point of use in the hospital. Its leading investigational medicinal product, ALLOB, represents a unique, proprietary approach to bone regeneration, which turns undifferentiated stromal cells from healthy donors into bone-forming cells *in situ* after a single local injection after complex injury. These cells are

[3] Mohamed Hamidou, Antoine Néel, Joel Poupon, Zahir Amoura, Mikael Ebbo, Jean Sibilia, Jean-Francois Viallard, Benjamin Gaborit, Christelle Volteau, Jean Benoit Hardouin, Eric Hachulla, François Rieger. Safety and efficacy of low-dose intravenous arsenic trioxide in systemic lupus erythematosus: an open-label phase IIa trial (Lupsenic). Arthritis Res Ther 23, 70 (2021). Link: https://arthritis-research.biomedcentral.com/articles/10.1186/s13075-021-02454-6.

[4] Dominique Rongvaux-Gaïda, Maëva Dupuis, Joël Poupon, Nouzha Djebrani-Oussedik, Catherine Lemonnier, François Rieger. High Response Rate and Corticosteroid Sparing with Arsenic Trioxide-Based First-Line Therapy in Chronic Graft-versus-Host Disease after Allogeneic Hematopoietic Stem Cell Transplantation, in Transplantation and Cellular Therapy, Volume 28, Issue 10, October 2022, Pages 679.e1-679.e11. Abstract.

produced via BioSenic's scalable manufacturing process. ALLOB is currently being evaluated in a randomized, double-blind, placebo-controlled Phase IIb study in patients with high-risk tibial fractures, using its optimized production process. ALLOB has been initially evaluated for other orthopaedic indications including spinal fusion and the first (encouraging but not definitively convincing) results are checked, reproduced and published. BioSenic has acquired extensive knowledge of bone physiology and pathophysiology and collaborates closely with prestigious academic and medical institutions. BioSenic has built a strong IP protected by worldwide rights for a series of patents and technologies related to its products, their production methods and their applications.

Through its subsidiary Medsenic, the BioSenic Group also focuses on clinical trials in two selected autoimmune diseases and Medsenic continues to gather scientific and medical data to enable the future launching of a new Phase II clinical trial on Systemic sclerosis on the basis of the latest research data and scientific findings for this indication. The two successful clinical trials were Phase II trials, which provided encouraging results for both safety of use and efficacy in moderate to severe SLE, first, and chronic GvHD second. These trials were allowed by the regulatory body in France (the *Agence Nationale de Sécurité du Médical et des produits de santé*) in multiple clinical sites, specialized in each given disease.

Medsenic did not need to invest in lengthy preclinical and clinical (Phase I) studies since the arsenic trioxide used as the investigational drug was an intravenous formulation already used in cancer treatment (acute promyelocytic leukaemia (APL)) and was accepted by FDA and EMA not only for research purposes but also for human use in this particular oncologic indication, with good pharmacovigilance since its market authorizations in the year 2002. BioSenic Group foresees that the clinical data this has created during the last two decades will be acceptable for its trial submissions of new indications in the field of autoimmunity and inflammatory diseases and of new formulations of ATO, including OATO (with proven bioavalability and bioequivalence with IV formulation). However, any formulation of arsenic trioxide involving a combination of matter with another element (such as with copper for Arscicop – see Section 4.18.2), will in principle require a Phase I clinical trial to establish the safety and bioavalability and bioequivalence.

Medsenic devoted its efforts to preclinical studies on cells in vitro and animal models of diseases of the immune system, targets of its clinical development, with the particular objective to understand its mode of action, in order to better define the dosage necessary for positive therapeutic action and the best route of administration given the sites of the lesions of each disease considered. Over ten years, the clinical development has been accompanied by the successive completion of animal studies on SLE (with three different animal models, including studies developed with the University of Louvain. Profs Houssiau and Lauwerys; internal Medicine), Crohn's disease, Multiple sclerosis with a recognized Experimental Allergic Encephalomyelitis, chronic GvHD, an animal model quasi identical to the human disease, and a model for Systemic Sclerosis (Fra 2 mice In Hospital Cochin; Prof Y. Allanore, manuscript in preparation). All these studies provide encouraging results regarding the treatment of these autoimmune diseases by arsenic trioxide and justify Medsenic's efforts to set up the conditions for using oral arsenic trioxide for patients' and clinicians' benefit (easier administration and decrease of reversible adverse effects, at our chosen levels of medication as observed in the bioequivalence study in Australia as submitted to the FDA (confidential information)).

4.4 BioSenic Group's mission and strategy

BioSenic Group's mission is twofold.

On the one hand, BioSenic Group aims to be a leading regenerative company providing innovative cell therapy products for high unmet medical needs (defined as a medical need that is not addressed adequately by an existing therapy[5]) in the fields of immunopathology and cell tissue repair. To achieve this objective, BioSenic is pursuing the following strategies:

[5] FDA Guidance for Industry – Available Therapy, July 2004.

- Enhance an innovative development (both in terms of modified cells and new indications) of its commercially oriented, off-the-shelf, allogeneic platform, to maximize benefits for patients and value creation for investors.

- In a first immediate step, progress and complete the ALLOB Phase IIb controlled trial for difficult-to-heal tibial fractures, building on previous encouraging Phase IIa clinical data.

- Advance and expand the (pre)clinical pipeline with additional indications by enhancing and specializing the therapeutic capacity of its cell and gene therapy platform.

- Build development on modified cells and exosomal particles (produced directly from the cells themselves) and business partnerships.

On the other hand, BioSenic Group (through its subsidiary Medsenic) aims to exploit the new possibilities offered by the therapeutic use of arsenic trioxide (As(2)O(3)) and thereby provide treatment for patients with autoimmune diseases. To achieve this objective, Medsenic is pursuing the following strategies:

- Find funding in order to recruit patients and perform the Phase III randomized, on top of standard care, against placebo clinical trial for the use of oral arsenic trioxide for cGvHD, its lead project, over the next four years.

- Search for solid partnerships with interested biopharmaceutical companies for performing the clinical trials ready to start for two Phase II randomized, on top of standard care, against placebo for SLE and SSc.

- Get deeper into the mechanisms of action of arsenic trioxide to prove to the medical community at large (KOLs and leading clinicians in the field of inflammation/autoimmunity) its quality of first-in-class medication of a series of closely related autoimmune diseases.

- Focus on the US market as BioSenic Group believes that US patients and clinicians will more readily accept the premises of arsenic trioxide in its applicability to cGvHD. Moreover, BioSenic believes that the FDA is quick to appreciate new ways to treat a disease with unmet medical needs in the field of immuno-oncology. Finally, approval of a new drug application by the FDA will ensure central market access throughout the U.S.

4.5 Technology

BioSenic's cell repair technology is based on its cutting-edge allogeneic cell and gene therapy platform with differentiated bone marrow sourced Mesenchymal Stromal Cells (MSCs) which can be stored at the point of use in the hospital. Its leading investigational medicinal product, ALLOB, represents a unique, proprietary approach to bone regeneration, which turns undifferentiated stromal cells from healthy donors into bone-forming cells. These cells are produced via BioSenic's scalable manufacturing process and should lead to interesting development, allowed by both genetic engineering to confer them with new therapeutic properties and the development of new techniques to obtain nucleus free nanoparticles, carrying analogous properties than the intact cells, which could additionally loaded with small molecules with therapeutic properties, like arsenic salts. ALLOB is right now currently being evaluated in a randomized, double-blind, placebo-controlled Phase IIb study in patients with high-risk tibial fractures, using its optimized production process. ALLOB has been evaluated for other orthopaedic indications including spinal fusion, with interesting potentialities to be further developed.

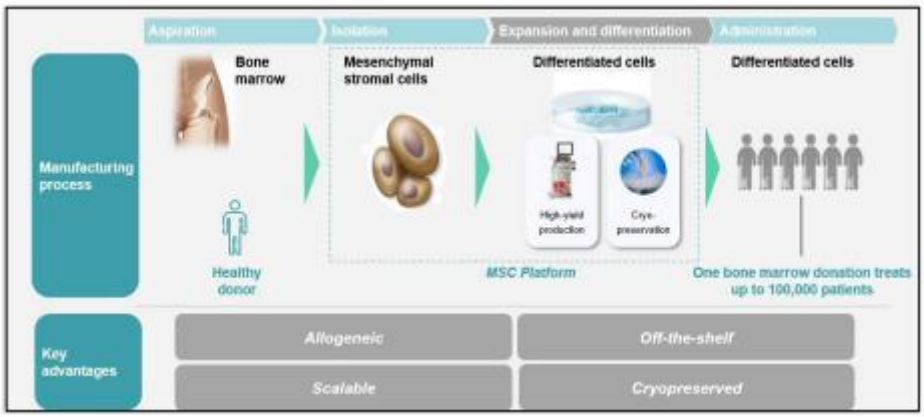
The inflammation/immunopathology technology brought by BioSenic's subsidiary Medsenic, consists essentially in various formulations of arsenic trioxide existing or to be further developed depending on the indication. Medsenic masters the liquid IV mode of administration and now a patented oral type of formulation for easiness of use and decreased adverse effects.

BioSenic Group believes that it will be interesting to examine the anti-inflammatory properties of arsenic trioxide in combination with the anti-inflammatory properties of the MSCs (ALLOB) cells, which could potentially have a complementary effect. The activities to be developed on the basis of MSCs (ALLOB) cells are not only restricted to bone repair but could potentially also be applied to tissue repair. As tissue damage is observed in autoimmune diseases, BioSenic Group would like to examine if innovative techniques from the use of MSCs (ALLOB) cells can be applied to the autoimmune diseases treatable by arsenic trioxide.

4.5.1 *ALLOB: allogeneic cell product*

ALLOB is BioSenic's off-the-shelf, allogeneic cell therapy platform consisting of human allogeneic bone-forming cells derived from *ex-vivo* cultured bone marrow mesenchymal stromal cells (MSC) from healthy adult donors, offering numerous advantages in product quality, injectable quantity, production, logistics and cost as compared to an autologous approach.

To address critical factors for the development and commercialization of its cell therapy products, BioSenic has established a proprietary, optimized cell production process that improves consistency, scalability, cost effectiveness and ease of use of the product ALLOB or its possible innovative derivatives, whenever they will be deemed necessary in the course of BioSenic's business development. This optimized cell production process has significantly increased the production yield, generating 100,000 of doses of ALLOB per bone marrow donation. Additionally, the final ALLOB product will be cryopreserved, enabling easy shipment and the capability to be stored in a frozen form at the hospital level. The process will therefore substantially reduce overall production costs, simplify supply chain logistics, improve patient accessibility, and facilitate global commercialization.



The above scheme shows the manufacturing process of BioSenic's allogeneic cell therapy platform (ALLOB) starting with bone marrow harvesting from healthy donors to obtain the mesenchymal stem cells that are expanded and differentiated into bone-forming cells and implanted at the bone defect site. The finished product is delivered in an off-the-shelf cryopreserved formulation.

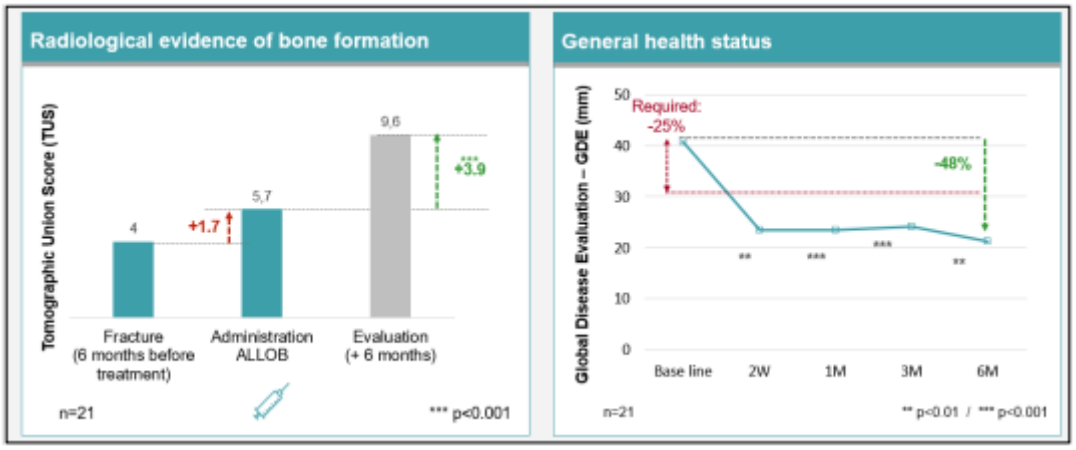
Currently, ALLOB targets one indication: difficult tibial fractures and could be further developed for lumbar spinal fusion.

a. ALLOB – Difficult fractures

Although most fractures heal normally, some fractures may not heal within the usual time frame and is known as delayed bone healing within 4 to 6 months and absence of bone healing within 9 to 12 months in the most severe cases. Several factors can increase the risks of delayed healing complications like, for example, smoking, violent shocks (for example, due to a road accident) or even the type of fracture (an open fracture). The location of the fracture is also an important factor: among the bones of the arms and legs, the tibia is known for being the most at risk for complications. Tibial fractures with several risk factors could lead to complications such as delayed union and greatly reduce the quality of life. To date, there is no treatment for fractures considered at risk of delayed complications. The current practice on diagnosis of complications is to wait at least 6-12 months before considering alternative interventions to promote fracture healing.

Constituted of bone cells produced from the bone marrow of healthy adult donors, ALLOB cells, have shown to be capable of forming bone and repairing fractures after injection in preclinical studies. When directly injected into a fracture, ALLOB cells should therefore promote the healing of the fracture by re-establishing a healthy environment, stimulating bone healing, reducing healing time, reducing repair complications, and thus to lead to improvement of the quality of life for the patient.

ALLOB has shown preliminary evidence of effectiveness in the treatment of delayed bone healing fractures in a Phase I/IIa study involving 21 patients. The study demonstrated efficacy in bone formation and improvement of general health status, when injected three months after the fracture. At six months post administration, 100% of the patients met the primary endpoint, defined as an increase of at least two points on the radiological Tomographic Union Score (TUS) or an improvement of at least 25% of the clinical Global Disease Evaluation (GDE) score vs. baseline. Radiological evaluation of fracture healing showed an improvement of 3.9 points on average on the TUS scale, nearly twice the required minimum of 2.0 points. This minimum two-point increase was achieved by 16 out of 21 patients (76%). The Global Disease Evaluation (GDE) score to assess the general health condition of the patient, improved 48% on average. The minimum 25% improvement was achieved by 16 out of 21 patients (76%).



ALLOB is currently being evaluated in a Phase IIb study in patients with expected difficult-to-heal tibial fracture. The Phase IIb study is a randomized, double-blind, placebo-controlled study. In this study, the potential of ALLOB to accelerate fracture healing and prevent late-stage complications in patients with difficult fractures in the shinbone (tibia), is being tested and compared to placebo, on top of standard of care after a follow-up period of 6 months. ALLOB is applied – at variance to the first study – by a single percutaneous injection 24-96 hours post reduction surgery in patients with fresh tibial fractures, thought to be at risk for delayed or non-union. The study has been approved in 7 European countries (Belgium, Czech Republic, France, Germany, Hungary, Poland and Spain). The study had been expected to enrol 178 patients in over 40 sites. However, BioSenic managed to improve the statistical analysis of the study via an optimal radiological assessment of the acceleration of bone formation at 3 months following an intra-fracture administration of ALLOB, compared to standard practice alone. This allows BioSenic to reduce the number of required patients to 132 evaluable patients while maintaining the same statistical power. In addition, BioSenic also introduced an interim analysis based on the assessment of radiological data from approximately 66 evaluable patients at 3 months post-administration. Following the CTA approval by regulatory authorities in Europe, BioSenic has initiated patient recruitment in January 2021 and reached the inclusion of 56 patients, in January 2023. After some delays in patient recruitment in 2021 and early 2022 due to COVID-19, BioSenic currently expects to recruit on average one new patient every 10 days.

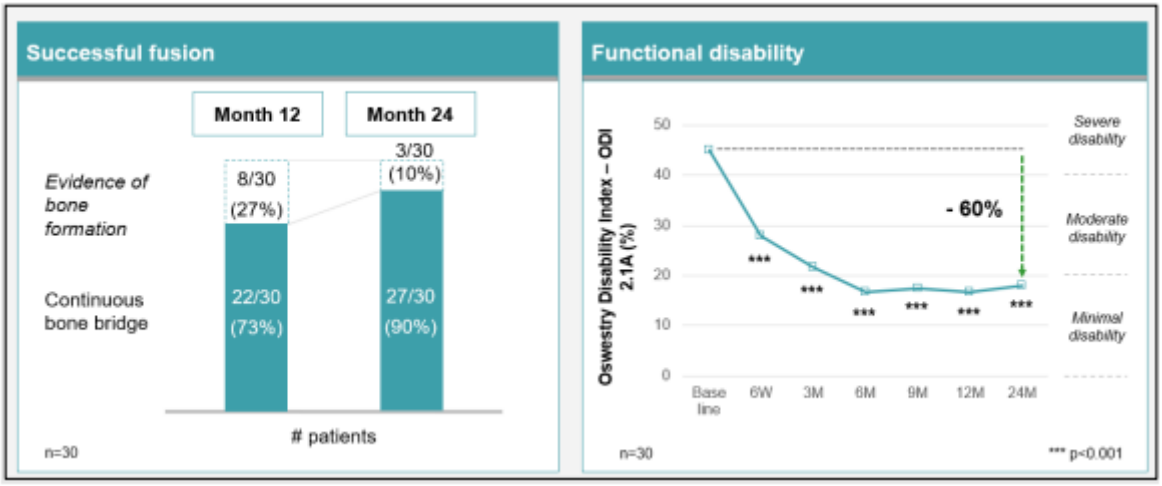
b. ALLOB – Lumbar spinal fusion

Due to ageing populations and sedentary lifestyles, the number of people suffering from degenerative spine disorders continues to increase. Today, spinal fusion procedures are performed to relieve pain and improve patient daily functioning in a broad spectrum of degenerative spine disorders. Spinal fusion consists of bridging two or more vertebrae with the use of a cage and graft material, traditionally autologous bone graft or demineralized bone matrix – placed into the intervertebral space – for fusing an unstable portion of the spine and immobilizing a painful intervertebral motion segment.

Over 1,000,000 spinal fusion procedures are performed annually in the US and EU, of which half at lumbar level and the market is growing at a rate of 5% per year. Although spinal fusion surgery is routine, non-fusion, slow progression to fusion and failure to eliminate pain are still frequent with up to 35% of patients not being satisfied with their surgery.

A multi-center, open-label proof-of-concept Phase IIa study was designed to evaluate the safety and efficacy of ALLOB administered in addition to the standard of care procedure in which an interbody cage with bioceramic granules is implanted into the spine to achieve fusion of the lumbar vertebrae. The main endpoints of the 24-month follow-up analysis included safety and radiological assessments to evaluate vertebrae fusion (continuous bone bridges) and clinical assessments to evaluate improvement in patients' functional disability as well as reduction in back and leg pain. The study evaluated 30 patients treated with ALLOB, 29 patients attended the 24-month visit.

In the Phase IIa study, ALLOB Lumbar Spinal Fusion showed promising 24-month results in bone formation and disability reduction. The 24-month data showed a high percentage of successful lumbar vertebrae fusion of 90%. Patients also continued to experience important clinical improvements in function and pain, from as early as six months after treatment, up to the 24-month follow-up period.

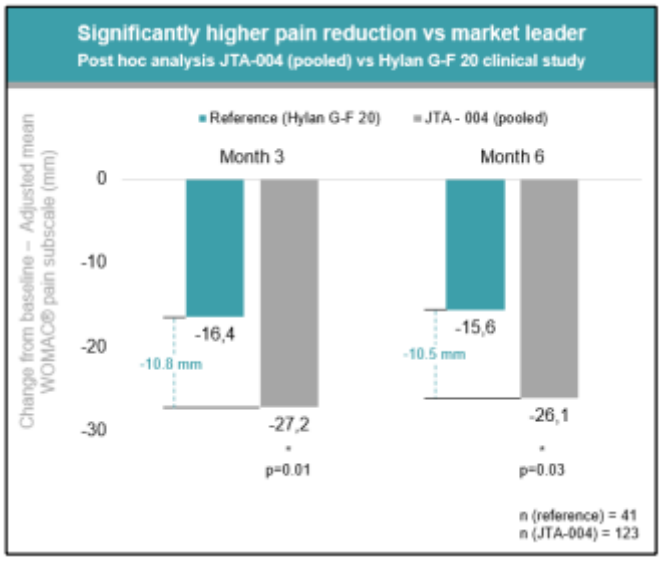


4.5.2 *JTA-004: off-the-shelf protein solution*

JTA-004 is a next generation of intra-articular injectable for the treatment of osteoarthritic pain in the knee. Consisting of a unique patented mix of plasma proteins, hyaluronic acid a natural component of knee synovial fluid, and a fast-acting analgesic, JTA-004 intends to provide added lubrication and protection to the cartilage of the arthritic joint and to alleviate osteoarthritic pain.

Osteoarthritis (OA), also known as degenerative joint disease, is the most common chronic joint condition in which the protective cartilage in the joints progressively break down resulting in joint pain, swelling, stiffness and limited range of motion. The knee is one of the joints that are mostly affected by osteoarthritis, with an estimated 250 million cases worldwide. The prevalence of knee osteoarthritis (KOA) is expected to increase in the coming years due to increasingly aging and obese population. Currently, there is no cure for KOA and treatments focus on relieving and controlling pain and symptoms, while preventing disease progression, minimizing disability, and improving quality of life. Most drugs prescribed to KOA patients are topical or oral analgesics and anti-inflammatory drugs. Ultimately, severe KOA led to highly invasive surgical interventions such as total knee replacement.

In a completed Phase IIb study involving 164 patients, JTA-004 showed an improved pain relief at 3 and 6 months compared to Hylan G-F 20, the global market leader in osteoarthritis treatment.



In August 2021, BioSenic announced the topline results from the multicentre, randomized, double-blind, placebo- and active-controlled Phase III study. The study was conducted in 7 European countries and Hong Kong and included a total of 743 patients. Despite JTA-004's favourable safety profile, the study did not achieve its main objectives as no statistically significant difference in pain reduction could be observed between any of the treatment, placebo and comparator groups, with all treatment arms showing similar efficacy. A statistically significant difference in favour of JTA-004 and the active comparator versus placebo was seen in a post-hoc analysis in a subset of patients with higher pain scores at entry. This is still under investigation and may justify further work on a particular subtype of patients with very active knee osteoarthritis.

In March 2022, BioSenic announced it was redefining its strategic priorities to concentrate specifically only on the development of its most advanced clinical asset, ALLOB. As a result, BioSenic will focus its R&D activities to support the clinical development of ALLOB and all activities related to the development of the pre-clinical iMSCg platform as well as all other non ALLOB related activities, including the further development or reshaping of JTA-004, will be transiently at least on hold.

4.5.3 *Arsenic trioxide (ATO)*

ATO is currently classified as an antineoplastic agent (ATC code L01XX27: Anti immunomodulating agents – other antineoplastic agents). The classification as chemotherapy results from its first established properties as an anti-cancer agent. In the case of a successful outcome of the envisaged clinical trials of the BioSenic Group based on ATO, it can be expected that ATO will also become classified as anti-inflammatory or immunomodulatory agent.

ATO in Oncology

Arsenic derivatives have been identified as compounds with therapeutic potential for over 2000 years in Greek and Chinese medicine. Orally administered arsenic, in the form of Fowler's Solution was first discovered to have leuco-reductive properties and used in the treatment of leukaemia in 1878. Since then, ATO (Trisenox®) has been investigated and used in the treatment of various types of leukaemia including chronic myeloid leukaemia (CML) and acute promyelocytic leukaemia (APL).

ATO in autoimmune and inflammatory indications

<u>Pre-clinical studies</u>

Although ATO can potentially be widely used in many auto-immune diseases that benefit from its dual mechanism of action (induction of apoptosis in activated, pathogenic cells and regulatory action on pro-inflammatory cytokine levels), Medsenic focus on Chronic Graft versus Host Disease (cGvHD), moderate to

severe Systemic Lupus erythematosus (SLE) and Systemic Sclerosis (SSc) is based on preclinical studies which provided good preliminary data for the ensuing clinical studies in human patients.

The role of ATO has also been explored in murine models of autoimmune and inflammatory diseases (Bobe et al., 2006)[6].

Intraperitoneal administration of ATO was able to achieve quasi total regression of antibody and cell mediated manifestations in MRL lymphoproliferative strain (MRL/*lpr*) mice. ATO was also shown to eliminate, through activation of caspases, activated autoreactive T lymphocytes responsible for lymphoproliferation and skin, lung and kidney lesions, leading to significant prolonged survival rates. ATO markedly reduced anti-DNA autoantibodies, rheumatoid factor, Interleukin 18 (IL-18), interferon gamma (IFN-γ), nitric oxide metabolite, Tumor necrosis factor alpha (TNF-α), Fas ligand, and Interleukin – 10 (IL-10) levels. Furthermore, ATO restored cellular reduced glutathione levels, thereby limiting the toxic effect of nitric oxide overproduced in MPR/*lpr* mice. Overall, ATO protected young mice from developing the syndrome and induced almost total disease disappearance in older affected mice (Bobe et al., 2006).

In a Trinitrobenzene sulfonic acid (TNBS) induced colitis model of inflammatory bowel disease, ATO used either in a preventive or curative mode markedly reduced the induced colitis, leading to prolonged mice survival. In addition, intraperitoneal ATO was able to inhibit NF-κB expression and DNA-binding in colon extracts, leading to decreased cytokine gene expression (i.e., TNFα, IL-1β, IL-12, IL-17, IL-18 and IL-23). Furthermore, ATO reduced nitric oxide synthase and highly enhanced procaspase-3 and activated caspase-3, leading to neutrophil elimination by probably inducing apoptosis (Singer et al., 2011)[7].

In a murine model of scleroderma (hypochlorite induced), (Kavian et al., 2012)[8], intraperitoneal ATO inhibited the production of autoantibodies and was associated with a clinical benefit, as shown by the reduced skin and lung fibrosis. These beneficial effects were mediated through reactive oxygen species (ROS) generation that selectively killed activated pathogenic fibroblast containing low levels of glutathione.

In the direct murine model of sclerodermatous cGvHD (Kavian et al., 2012), the ATO effect was reportedly mediated through the depletion of glutathione and the overproduction of Hhat killed activated CD4 T cells, in particular Th17 cells, and plasmacytoid dendritic cells, two key cell types in cGvHD pathophysiology initiation.

The above studies show arsenic trioxide is an active medication for a series of autoimmune disorders and may be used in clinical trials since it gives positive data at the preclinical level to substantiate promising expectations for clinical studies at the proof of concept or observatory levels (Phase II type studies).

Clinical studies

Medsenic is first developing the use of arsenic trioxide (ATO) for the treatment of Chronic Graft versus Host Disease (cGvHD), moderate to severe Systemic Lupus erythematosus (SLE) and Systemic Sclerosis (SSc). The initial clinical work of Medsenic with ATO was based on the development of an IV formulation, ArsciMed. Given the challenges with the IV administration for both patients and hospitals, Medsenic is now focussing on the use of a patented oral formulation of ATO. The bioequivalence of oral ATO with IV ATO has been shown by Medsenic in a bioavailability study APML5. Please see Section 4.10 for more details.

a. cGvHD

Graft versus Host Disease is one of the most common and clinically significant complications affecting long-term survivors of allogeneic hematopoietic stem cell transplantation. GvHD is divided into two main categories: acute and chronic. GvHD is primarily mediated by the transplanted immune system that can lead to severe multiorgan damage, and represents one of the major limitations of allogeneic hematopoietic cell

[6] Bobé P, Bonardelle D, Benihoud K, Opolon P, Chelbi-Alix MK. Arsenic trioxide: A promising novel therapeutic agent for lymphoproliferative and autoimmune syndromes in MRL/lpr mice. Blood. 2006 Dec 15;108(13):3967–75.
[7] Singer M, Trugnan G and Chelbi-Alix M.K. Arsenic trioxide reduces 2,4,6-trinitrobenzene sulfonic acid-induced murine colitis via nuclear factor- κB down-regulation and caspase-3 activation, in *Innate Immunity*, 2011 Aug;17(4):365-74. doi: 10.1177/1753425910371668. Epub 2010 Aug 6. Abstract.
[8] Kavian N, Marut W, Servettaz A, et al. Reactive oxygen species-mediated killing of activated fibroblasts by arsenic trioxide ameliorates fibrosis in a murine model of systemic sclerosis. Arthritis Rheum. 2012 Oct;64(10):3430–3440. Abstract.

transplantation, with substantial morbidity and mortality. It is estimated that 30% to 70% of patients surviving more than 100 days will develop chronic GvHD (cGvHD)[9]. GvHD is the cause of death in up to one third of all long-term survivors after transplantation for leukaemia. Furthermore, cGvHD is consistently associated with decreased quality of life, impaired functional status, ongoing need for immunosuppressive medications and infectious complications. The cGvHD condition is a challenge clinically because it is a systemic disease, affecting several organs and functions and corticosteroids remain the primary therapy available at present.

Medsenic already completed two Phase II clinical trials with ATO in relation to cGvHD. The first clinical trial (Study GMED16-001) investigated the overall response rate to treatment with ATO in combination with prednisone with or without cyclosporine. As this trial was conducted with an IV formulation of ATO developed by Medsenic and given that the envisaged Phase III trial will be using an oral formulation of ATO rather than IV ATO, a bioavailability study (Study APML5) was also carried out, which successfully confirmed the bioequivalence of the two formulations. The clinical protocol of phase II is now easily extrapolated to a planned Phase III clinical trial for a confirmatory treatment of cGvHD and essentially involves a limited course of daily administration of arsenic trioxide in an oral form, executed over a limited period of time, i.e. three to four weeks, with a possible additional course of equivalent time of administration (that is possibly two cycles of treatment) in the case of a positive, long term result, justified by the mode of action of arsenic trioxide, which has been found to change the pathological immune system, giving some type of immune tolerance to the treated organism and thus return to homeostasis and normal functioning. Please revert to Section 4.10.4 for more information about the clinical trials.

b. SLE

Systemic lupus erythematosus (SLE) is the most common type of lupus. SLE is an autoimmune disease in which the immune system attacks its own tissues, causing widespread inflammation and tissue damage in the affected organs. It can affect the joints, skin, brain, lungs, kidneys, and blood vessels. The seriousness of SLE can range from mild to life-threatening. SLE can limit a person's physical, mental, and social functioning. These limitations experienced by people with SLE can impact their quality of life, especially if they experience fatigue. Fatigue is the most common symptom negatively affecting the quality of life of people with SLE. Based on available data on incidence, it is estimated that each year 16,000 to 17,000 persons are newly diagnosed with lupus in the United States, of which approximately 70% suffer from SLE. An estimated number of 1.5 million Americans, and at least 5 million people worldwide have a form of lupus[10]. There is currently no cure for lupus, in spite of many clinical trials, some reaching some positive results in delaying the disease or decreasing symptoms.

The same scheme of treatment as for cGvHD will be applied to SLE patients. A Phase IIa clinical trial for SLE conducted by Medsenic on a limited cohort of SLE patients has previously established proof of concept of safety for the patient and efficacy on the course of the autoimmune disease, published in 2021.[11]

c. SSc

Systemic sclerosis (SSc) is an autoimmune rheumatic disease characterised by excessive production and accumulation of collagen, called fibrosis, in the skin and internal organs and by injuries to small arteries. SSc is often categorised as "limited" or "diffuse" referring to the degree of skin involvement. The limited form affects areas below, but not above, the elbows and knees with or without involvement of the face. The diffuse form also affects the skin above the elbows and knees and can also spread to the torso. Visceral organs, including the kidneys, heart, lungs, and gastrointestinal tract can also be affected by the fibrotic process. Prognosis is determined by the form of the disease and the extent of visceral involvement. Patients with limited systemic sclerosis have a better prognosis than those with the diffuse form. Death is most often caused by lung, heart, and kidney involvement. Overall 10-year survival is 90% for limited systemic sclerosis and is 70%

[9] Cooke et al., The Biology of Chronic Graft-versus-Host Disease: A Task Force Report from the National Institutes of Health Consensus Development Project on Criteria for Clinical Trials in Chronic Graft-versus-Host Disease, Biol Blood Marrow Transplant 23 (2017) 211–234.
[10] Best estimates of the Lupus Foundation of America, https://www.lupus.org/resources/lupus-facts-and-statistics.
[11] Mohamed Hamidou, Antoine Néel, Joel Poupon, Zahir Amoura, Mikael Ebbo, Jean Sibilia, Jean-Francois Viallard, Benjamin Gaborit, Christelle Volteau, Jean Benoit Hardouin, Eric Hachulla and François Rieger, Safety and efficacy of low-dose intravenous arsenic trioxide in systemic lupus erythematosus: an open-label phase IIa trial (Lupsenic), Arthritis Res Ther. 2021, Mar 3, 23(&):70. Doi: 10.1186/s13075-021-02454-6. Abstract.

for diffuse systemic sclerosis.[12] Predictors of early mortality include male sex, late onset, diffuse disease, pulmonary arterial hypertension, and renal crisis. There is currently no cure for SSc.

Also for systemic sclerosis patients BioSenic Group intends to apply the same scheme of treatment as described in paragraph a. above, with the limitation that only preclinical data are available on two different models of SSc in the mouse. These preclinical data are positive and highly encouraging to proceed towards human clinical trials.

Given that the safety of ATO has been well established in the framework of human cancer patients studies and recognised by the FDA and EMA, this will allow the BioSenic Group to enter into clinical trials for SSc at the level of Phase II. The protocol for the Phase II trial is largely finalised, before an IND meeting can be submitted and the trial can start.

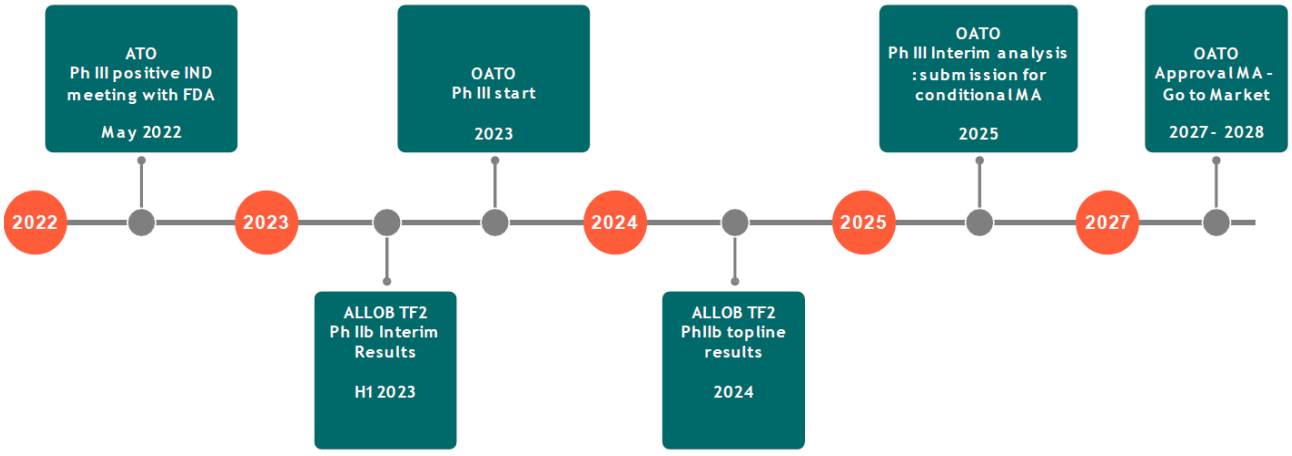
d. Septic shock and other indications

Preclinical data validating the positive action of ATO on animal models show that septic shock is potentially also amenable to treatment with ATO. The same could apply for other diseases such as Crohn's disease, rheumatoid arthritis, multiple sclerosis and COVID 19 (Long COVID). However, given the current phase of development of the BioSenic Group and the funding available, the Group is currently concentrating on cGvHD, SLE and SSc. Although direct preclinical work for septic shock (on the bacteria most commonly found in sepsis in humans) still needs to be carried out by the BioSenic Group in complex and potentially dangerous experiments in a high safety L4 laboratory, the consequences of a septic shock are however known, with specific cytokines released in excessive quantities. These cytokines are indeed established targets of arsenic in the recent preclinical experiments of BioSenic Group. Sepsis is thus the most likely next candidate for the further expansion of the clinical pipeline of BioSenic Group (funding permitting).

4.6 Current clinical pipeline and outlook

Currently BioSenic Group is concentrating specifically on the development of its two most advanced clinical assets, (i) the allogeneic cell therapy platform, ALLOB, targeting markets with large unmet medical needs and limited innovation and (ii) the preparation of a Phase III clinical trial for the use of oral arsenic trioxide for the treatment of cGvHD, which is expected to take approximately 4 years to complete the last patient visit.

See the summary timeline below for more details on these two clinical assets.



BioSenic Group is targeting two indications with ALLOB: difficult tibial fractures and lumbar spinal fusion. ALLOB is still being evaluated in a Phase IIb study in patients with difficult-to-heal tibial fracture. The Phase IIb study is a randomized, double-blind, placebo-controlled study. In this study, the potential of ALLOB to accelerate fracture healing and prevent late-stage complications in patients at risk with difficult fractures in the shinbone (tibia), is being tested and compared to placebo, on top of standard of care after a follow-up

[12] BioSenic's estimation.

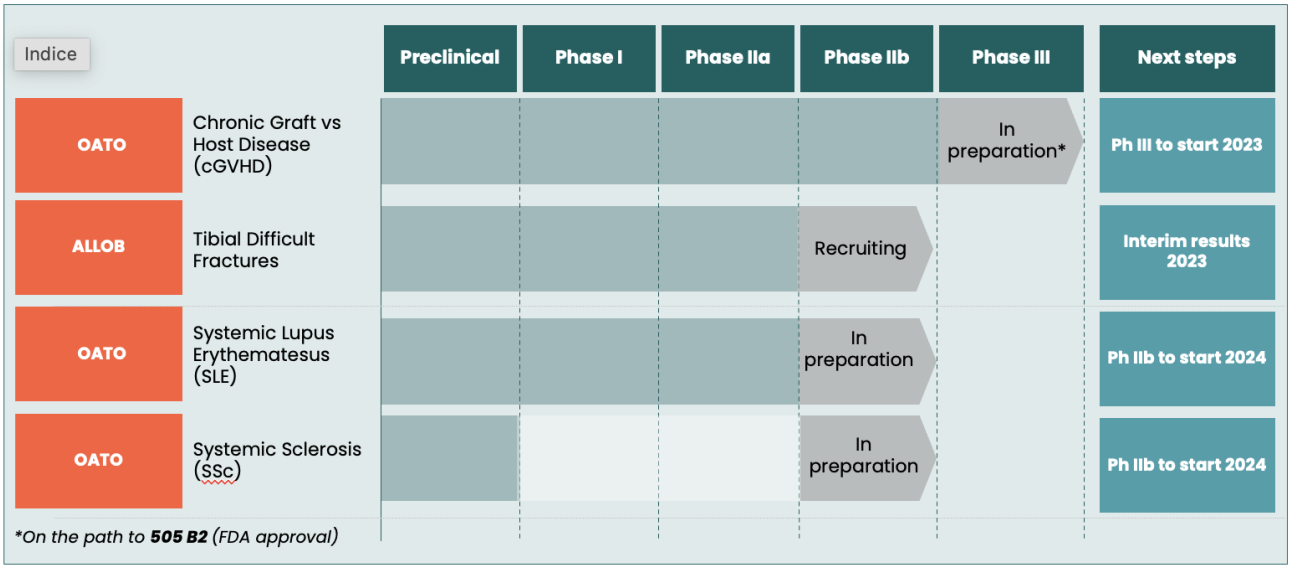
period of 6 months. ALLOB is being applied early on by a single percutaneous injection 24-96 hours post reduction surgery in patients with fresh tibial fractures at risks for delayed union or non-union. The study has been approved in 7 European countries (Belgium, Czech Republic, France, Germany, Hungary, Poland and Spain). The study protocol involved the enrolment of 178 patients in over 40 sites, but is in the stage of proposing major amendments. Following the initial CTA approval by regulatory authorities in Europe, BioSenic has initiated patient recruitment in January 2021. However, as BioSenic managed to improve the statistical analysis of the study via an optimal radiological assessment of the acceleration of bone formation at 3 months following an intra-fracture administration of ALLOB, compared to standard practice alone, BioSenic has been able to reduce the number of required patients to 132 evaluable patients while maintaining the same statistical power.

In addition, BioSenic will also introduce an interim analysis based on the assessment of radiological data from approximately 66 evaluable patients at 3 months post-administration. As per 31 December 2022, 55 patients have been recruited. The interim analysis will provide an opportunity to document the efficacy of ALLOB and to achieve a relevant clinical milestone at an earlier time point. An independent Data and Safety Monitoring Board (DSMB) will evaluate the interim analysis and could recommend completing the study early for efficacy if the targeted, more stringent interim efficacy level in bone healing has been achieved. Similarly, the study will operationally remain unchanged.

The proposed amendments to the statistical analysis and the introduction of the interim analysis have been submitted to the relevant regulatory authorities for approval in the seven different countries where the ALLOB Phase IIb study is being conducted. Such approvals have been obtained for all countries, except for Germany for which BioSenic is still waiting for the approval confirmation. It is expected that, even if the amended study protocol is not approved in Germany, this will not have a significant impact on the overall timing of the ALLOB Phase IIb study as previously communicated.

BioSenic's subsidiary Medsenic has completed the set-up of the technical conditions (regulatory, CRO designation and clinical centers identification) for the Phase III clinical trial for the use of oral arsenic trioxide to treat cGvHD. It is currently expected that the first recruited patient will be treated in Q2 2023.

Future Pipeline Development



BioSenic Group continues to advance development of its cell therapy platform with a view to creating innovative products based on professional MSCs for orthopaedic applications and beyond, at the cutting-edge of innovation in cell therapies, including inflammatory diseases and other disease areas of high unmet medical needs, essentially in the immunopathological field.

BioSenic Group will also continue to prepare for the start of its Phase III for the use of oral arsenic trioxide for cGvHD.

In parallel, BioSenic Group will search for partnerships with interested biopharmaceutical companies for performing the two Phase II clinical trials, randomized, on top of standard care, against placebo for SLE and SSc. BioSenic Group expects to use the existing cash and the proceeds of anticipated future fundraisings (via shares or (convertible) bonds) in priority for continuing the Phase IIb clinical trial for ALLOB and for progressing the Phase III clinical trial in cGvHD. As a result, it will only be possible to start the SLE and SSc Phase II clinical trials if the BioSenic Group succeeds in concluding a strong partnership with a biopharmaceutical company or if it manages to successfully out-license some of its technology. The start of SLE and SSc Phase II clinical trials is therefore not envisioned before end of 2023.

Outlook

In the present ongoing Phase IIb ALLOB clinical study in difficult tibial fractures, BioSenic expects to report topline interim results in the first half of 2023. After some delays in patient recruitment in 2021 and early 2022 due to COVID-19, BioSenic currently expects to recruit on average one new patient every 10 days. Any unexpected significant new peaks in the spread of COVID-19 might slow down patient recruitment although this is currently not anticipated. An interim analysis will be conducted and the recommendations of the independent Data and Safety Monitoring Board (DSMB) will be announced slightly before the reporting of the topline interim results.

In October 2022, BioSenic regained worldwide rights to ALLOB, via a unilateral termination notice received from Shenzhen Pregene Biopharma Co., Ltd ("Pregene"). BioSenic, Pregene and Link Health Pharma Co., Ltd ("LinkHealth") signed an exclusive license agreement in October 2020 for the manufacturing, clinical development and commercialization of BioSenic's allogeneic, off-the-shelf, bone cell therapy platform ALLOB in China (including Hong Kong and Macau), Taiwan, Singapore, South Korea, and Thailand. The termination of the license agreement also terminated the ongoing discussions with Pregene and Link Health about the global commercialisation rights of ALLOB. BioSenic has now regained all development manufacture and commercialization rights of ALLOB from Pregene. This will also now enable BioSenic to negotiate rights for ALLOB with LinkHealth, and other partners. Pregene shall transfer data to BioSenic and not participate in any future development or commercialization activities for the product.

Following the restructuring of the management team and the appointment of Mr François Rieger as CEO and executive director, Ms Véronique Pomi-Schneiter as COO and executive director and Michel Wurm as CMO, BioSenic in the process of completing the management team with a new CFO.

The Medsenic Phase II clinical study with arsenic trioxide in the first-line treatment of cGvHD is complete and provided positive results. A Phase III study with oral arsenic trioxide in the first-line treatment of cGvHD, for which Medsenic received positive pre-IND response from the FDA, is currently anticipated to start in 2023. A phase IIa clinical trial for systemic lupus erythematosus ("SLE") had previously established safety for the patient and efficacy on the course of the autoimmune disease. Positive preclinical work gives good grounds for a Phase II clinical trial on systemic sclerosis ("SSc"). Phase IIb clinical trials for SLE and SSc are in the planning stage with the protocols for both studies being largely ready. BioSenic Group, however, expects to use the existing cash and the proceeds of anticipated future fundraisings (via shares or (convertible) bonds) in priority for continuing the Phase IIb clinical trial for ALLOB and for progressing the Phase III clinical trial in cGvHD. As a result, it will only be possible to start the SLE and SSc Phase IIb clinical trials in if the BioSenic Group succeeds in concluding a strong partnership with a biopharmaceutical company or if it manages to successfully out-license some of its technology. The start of SLE and SSc Phase II clinical trials is therefore not envisioned before end of 2023.

Disciplined cost and cash management will be actively enforced. The operating cash burn for the full year 2022 is in the range of €8-9 million. The situation is actively and closely monitored. BioSenic anticipates having sufficient cash to carry out its business objectives until end Q1 2023, assuming amongst other full issuance of the new convertible bond facility. Please revert to the going concern statement in the Securities Note for all key assumptions taken.

4.7 Principal autoimmune markets

The below table summarises the market size, opportunities and competition for the treatments of cGvHD, SLE and SSc:

	ATO	ATO	ATO
	Chronic Graft vs Host Disease (cGVHD)	**Systemic Lupus Erythematosus (SLE)**	**Systemic Sclerosis (SSc)**
Addressable Population	Pool/Incidence USA : 32'462/4'061 Europe : 28'276/3'342	Pool/Incidence USA : 201'297/16'960 Europe : 179'588/9'469	Pool/Incidence USA : 79'656/ 6'207 Europe : 50'284/3'918
Market Size (patients)	15'184/1'851	125'692/8'722	42'880/3'341
Peak Sales (Forecast)	400-500m€	3-4b€	1-1,5b€
Competition	• **No real treatment** on the market. Other actual tested medications are second or third line therapies.	• **No real treatment** on the market. Other actual tested medications are second or third line therapies.	• **No real treatment** on the market. Other actual tested medications are second or third line therapies.
Unmet Medical Need	• **First line treatment** to replace the only existing treatment is ciclosporin and corticosteroids	• **First line treatment** to replace the only existing treatment is ciclosporin and corticosteroids	• **First line treatment** to replace the only existing treatment is mycophenolate mofetil (MMF) and small doses of corticosteroids

Source: Non-public info provided by Phebra to Medsenic in 2022; Market Analysis NextStep 2019; Nature 2022; IPSOR Survey with data from EMBT; ASTCT; NIH; SNFMI Top 7: EU5, US, JP & CN (2020)

4.7.1 *Chronic Graft versus Host Disease*

Graft versus Host Disease (GvHD) is one of the most common and clinically significant complications affecting long-term survivors of allogeneic hematopoietic stem cell transplantation (allo-SCT). GvHD is primarily mediated by the transplanted immune system that can lead to severe multiorgan damage, and represents one of the major limitations of allogeneic hematopoietic cell transplantation (HSCT), with substantial morbidity and mortality. It is estimated that 30% to 70% of patients surviving more than 100 days will develop chronic GvHD (cGvHD). GvHD is the cause of death in up to one third of all long-term survivors after transplantation for leukaemia. Furthermore, cGvHD is consistently associated with decreased quality of life, impaired functional status, ongoing need for immunosuppressive medications and infectious complications. The cGvHD condition is a challenge clinically and corticosteroids remain the primary therapy available at present. (Socié and Ritz, 2014)[13].

GvHD is divided into two main categories: acute and chronic. While these categories were historically defined as clinical manifestations before and after day 100 post-transplant, respectively, the National Institute of Health (NIH) Consensus Development Projects on Criteria for Clinical Trials in Chronic GvHD abolished the day 100 time limit in 2005 (refined in 2014). Characteristics of each category are detailed in Table 1.

[13] Gérard Socié and Jerome Ritz. Current issues in chronic graft-versus-host disease. Blood. 2014 Jul 17;124(3):374-384. doi: 10.1182/blood-2014-01-514752. Epub 2014 Jun 9. Article.

Table 1: Comparison of the 2 categories of GvHD

	Acute GvHD (aGvHD)	**Chronic GvHD (cGvHD)**
Timing of Onset	Usually manifests within 100 days (most typically within 20-40 days) after HSCT; Can also present as persistent, recurrent (relapse of an earlier episode), or late- onset acute GvHD occurring more than 100 days after transplantation	Generally manifests more than 100 days after HSCT
Clinical Manifestation Locations	Skin, liver, gastrointestinal tract	Skin, mouth, eyes, liver, lung, vagina, esophagus, nails, hair, musculoskeletal, kidney, other
Pathological Manifestation	Selective epithelial damage of target organs	May involve inflammation, cell-mediated immunity, humoral immunity, and fibrosis
Cause	Caused by response of mature donor T cells to mismatched host polymorphic histocompatibility	Not fully understood, however, involves a complex immune reaction with both T and B cells

*Sources: Socié and Ritz, 2014[14]

Chronic GvHD – Manifestation and Pathophysiology:

Chronic GvHD is a multiorgan disease associated with significant immunodeficiency which makes treatment with immunosuppressive medications challenging due to the increased risk of severe, life-threatening infections[15]. This form is a serious and common complication of allogeneic HSCT, which incidence varies widely (35–70%) among studies of allogeneic recipients, based upon the time period specified, source of hematopoietic stem cells, type of donor, and post- transplant immunosuppression. It can develop after or extend from aGvHD or develop de novo.

Transplant recipients with cGvHD have a reduced quality of life and increased risks of long-term morbidity and mortality, as compared with transplant recipients who do not have cGvHD. cGvHD is the main cause of late non-relapse mortality and morbidity after allo-SCT.

Signs and symptoms of cGvHD vary between individuals and in the same individual over time, making determination of GvHD severity challenging; cGvHD commonly affects the skin, eyes, mouth, liver, gastrointestinal tract, lungs and genitalia. Main histopathologic and clinical manifestations of cGvHD include lichen-type skin involvement, dryness, and sclerosis of a number of organs (including skin, mouth, vagina, eyes, liver, and lung), serositis, and fasciitis. It is often characterized by fibrosis of the organ affected.

Although the pathophysiology of chronic GvHD remains poorly understood when compared with acute GvHD, some of the most severe organ manifestations are linked to end organ fibrosis. In particular, fibrotic cutaneous and bronchiolar changes, resulting in scleroderma-like changes and bronchiolitis obliterans syndrome (BOS), respectively, are two of the most devastating outcomes for these patients. Clinical manifestations of chronic GvHD nearly always present during the first year after transplantation[16].

Chronic GvHD – Diagnosis and Scoring:

Historically, diagnosis and scoring for chronic GvHD have been difficult because of pleiotropic organ manifestations and heterogeneous diagnostic criteria; however, a major advancement in the field was the development of NIH consensus criteria to define a clinical disease model and framework that could be

[14] Gérard Socié and Jerome Ritz. Current issues in chronic graft-versus-host disease. Blood. 2014 Jul 17;124(3):374-384. doi: 10.1182/blood-2014-01-514752. Epub 2014 Jun 9. Article.
[15] Bruce R. Blazar, Kelli P. A. MacDonald, Geoffrey R. Hill; Immune regulatory cell infusion for graft-versus-host disease prevention and therapy. Blood 2018; 131 (24): 2651–2660. doi: https://doi.org/10.1182/blood-2017-11-785865
[16] Madan Jagasia, Robert Zeiser, Michael Arbushites, Patricia Delaite, Brian Gadbaw, Nikolas von Bubnoff, Ruxolitinib for the treatment of patients with steroid-refractory GVHD: an introduction to the REACH trials, Immunotherapy (2018) 10(5), 391–402. Abstract.

rigorously applied to clinical studies. The revised 2014 NIH criteria have brought much-needed consistency to terminology and methods for disease diagnosis and staging.

The NIH Staging and Working Group established a scoring system on a 0–3 scale that described the extent and severity of cGvHD for each organ or site based on consensus criteria for organ scoring. cGvHD is classified as mild, moderate or severe, based on the number and severity of involved organs.

Mild chronic GvHD involves 2 or fewer organs with no more than score 1 and no lung involvement. Mild cGvHD is associated with a good prognosis and is generally treated with topical or local therapies, although systemic therapy may sometimes be required for patients presenting high risk features such as thrombocytopenia and hyperbilirubinemia. Patients with mild or asymptomatic manifestations limited to a single organ or site can often be managed with close observation or topical treatment or by slowing the taper of prophylactic immunosuppressive treatment (Jagasia et al., 2015)[17].

Moderate disease is 3 or more organs involved with score 1, any organ with score 2, or lung with score 1. Severe disease is any organ with a score of 3 or lung with a score of 2, and means that substantial organ damage already exists. Moderate to severe cGvHD usually requires systemic immunosuppressive treatment, with the most severe cases being associated with higher treatment-related mortality and lower survival.

Please see table below for more details on scoring.

Table 2: Chronic GvHD Classification

Classification	**Criteria**
Mild Chronic GvHD	1 or 2 organs involved with no more than score 1 *And* Lung score 0
Moderate Chronic GvHD	3 or more organs involved with no more than score 1 OR At least 1 organ (not lung) with a score of 2 OR Lung score 1
Severe Chronic GvHD	At least 1 organ with a score of 3 OR Lung score of 2 or 3

Key Points:
1. In skin: higher of the two scores to be used for calculating global severity.
2. In lung: FEV1 (forced expiratory volume in 1 second) is used instead of clinical score for calculating global severity.
3. If the entire abnormality in an organ is noted to be unequivocally explained by a non-GVHD documented cause, that organ is not included for calculation of the global severity.
4. If the abnormality in an organ is attributed to multifactorial causes (GVHD plus other causes) the scored organ will be used for calculation of the global severity regardless of the contributing causes (no downgrading of organ severity score).

Chronic GvHD is clearly a debilitating and life-threatening disease in its moderate to severe forms. cGvHD continues to account for significant morbidity and mortality in the outcome of patients undergoing allo-SCT. Although improvements have been made in the prevention of acute GvHD through better genetic choices in donors, these advances have not resulted in a concomitant decrease in the incidence of cGvHD (Lee et al., 2015). On the contrary, the prevalence of cGvHD keeps increasing over the past 20 years (Socié and Ritz, 2014)[18]. Though improvements in supportive care have been made, most of cGvHD patients continue to have

[17] Madan H. Jagasia, Hildegard T. Greinix, Mukta Arora, Kirsten M. Williams, Daniel Wolff, EdwardW. Cowen, Jeanne Palmer, DanielWeisdorf, Nathaniel S. Treister, Guang-Shing Cheng, Holly Kerr, Pamela Stratton, Rafael F. Duarte, George B. McDonald, Yoshihiro Inamoto, Afonso Vigorito, Sally Arai, Manuel B. Datiles, David Jacobsohn, Theo Heller, Carrie L. Kitko, Sandra A. Mitchell, Paul J. Martin, Howard Shulman, Roy S. Wu, Corey S. Cutler, Georgia B. Vogelsang, Stephanie J. Lee, Steven Z. Pavletic, Mary E.D. Flowers, National Institutes of Health Consensus Development Project on Criteria for Clinical Trials in Chronic Graft-versus-Host Disease: I. The 2014 Diagnosis and Staging Working Group Report, in Biol Blood Marrow Transplan 21 (2015) 389 – 401. Link to publication.

[18] Gérard Socié and Jerome Ritz. Current issues in chronic graft-versus-host disease. Blood. 2014 Jul 17;124(3):374-384. doi: 10.1182/blood-2014-01-514752. Epub 2014 Jun 9. Article.

poor clinical function and altered quality of life. Thus, there is currently an unmet medical need for successful cGvHD therapies.

Market size[19]

The total patient population in the U.S. suffering from cGvHD (prevalence) early 2023 is estimated at 32,462 patients. This estimate is based on the prevalence as observed in the U.S. in 2016[20], an annual growth rate of 2% and the observation that for severe cases the average mortality rate within 2 to 10 years is approximately 50%. The number of new patients suffering from cGvHD (incidence) in the U.S. is estimated at 4,061 in 2022.

The incidence of cGvHD in the European Union is estimated at 3,342 patients in 2022. The total patient population in the European Union is estimated at 28,276.

Taking into account the expected competitive landscape and the fact that BioSenic Group targets moderate to severe cases of cGvHD (approx. 75% of all cases), BioSenic Group believes to be able to cover 25% of the total addressable patient population with is treatment, leading to an estimated total number of patients treated with ATO (market size) of 15,184 for the incidence and 1,851 new patients per year.

Overview of current treatments

Standard of care for the treatment of cGvHD is dependent upon the organ or site affected and can be topical or systemic. The National Comprehensive Cancer Network (NCCN) guidelines and the European Society for Blood and marrow Transplantation (EBMT) consensus both agree that steroids should be the first line treatment and advocate the use of ibrutinib, approved in the U.S. and the EU for second or further line treatment. However, both also state that there are no standard therapies for steroid resistant patients. About half of the patients become resistant to increasing daily doses of corticosteroids.

Treatment of cGvHD is aimed at improving quality of life by reducing symptoms, preventing immune mediated damage and disability whilst avoiding the toxicities associated with treatment. There are three treatment goals: 1) to reduce the activated status of B and T cells, 2) to have an anti-inflammatory effect and 3) to slow down the development of fibrosis.

The current available treatments for cGvHD include corticosteroids, which has been the mainstay of first line treatment for the last three decades, administered along or in combination with other immunosuppressants such as calcineurin inhibitors. Systemic treatment typically begins with prednisone at 0.5 to 1 mg/kg per day, followed by a taper to reach an alternate-day regimen, with or without cyclosporine or tacrolimus[21]. However, treatment with corticosteroids is problematic and often inadequate or toxic. Side effects include myopathy, infections, hyperglycaemia, avascular necrosis, cataracts and decline in bone mass. Appropriate management of cGvHD requires a continuous recalibration of immunosuppressive treatment, and as a general principle the minimum dose sufficient to control GvHD manifestations should be used. Manifestations of chronic GvHD can reappear or worsen when the intensity of immunosuppressive treatment is closely calibrated to the minimum dose needed to control GvHD. Treatment with corticosteroids is associated with suboptimal results in the management of chronic GvHD.[22]

Duration of immunosuppressive therapy is determined largely by clinical response, but is often prolonged. Approximately 50% of patients are cured within 7 years after starting systemic treatment, as indicated by resolution of disease manifestations and permanent withdrawal of systemic treatment. Approximately 10%

[19] Study from ISPOR (the Professional Society for Health Economics and Outcomes Research) with respect to the European market and ASTCT (American Society for Transplantation and Cellular Therapy) for the U.S. market.
[20] Prevalence of cGvHD in the U.S. based on the Medicare FFS and PharMetrics commercial databases.
[21] Cyclosporin or tacrolimus are T-cells immunosuppressants specifically aimed at treating acute GvHD, an early pathological stage after grafting which is different from a chronic (later) disease, which is autoimmune and distinct (and sometimes overlapping). BioSenic Group excludes these patients from our clinical trials. Cyclosporine and tacrolimus are still in various types of trials to test for their benefits, usually as second line treatments after the first line of corticosteroids has failed.
[22] Dominique Rongvaux-Gaïda, Maëva Dupuis, Joël Poupon, Nouzha Djebrani-Oussedik, Catherine Lemonnier, François Rieger. High Response Rate and Corticosteroid Sparing with Arsenic Trioxide-Based First-Line Therapy in Chronic Graft-versus-Host Disease after Allogeneic Hematopoietic Stem Cell Transplantation, in Transplantation and Cellular Therapy, Volume 28, Issue 10, October 2022, Pages 679.e1-679.e11. Abstract.

require continued systemic treatment of an indefinite period beyond 7 years, and the remaining 40% have recurrent malignancy or die within 7 years during treatment of chronic GvHD. It is therefore necessary to develop alternative treatments of cGvHD as first-line therapy that would allow reducing the dose and the time of corticosteroids administration, and that would allow for good efficacy, tolerability and safety.

Additionally, corticosteroids are only effective in approximately 40-50% of cases meaning that 50-60% of patients experience a reoccurrence of cGvHD and require a second line treatment within 2 years after initial systemic treatment. Indications for secondary treatment include worsening manifestations of chronic GvHD in a previously affected organ, development of signs and symptoms of cGvHD in a previously unaffected organ, absence of improvement after 1 month of standard primary treatment, inability to decrease prednisone below 1 mg/kg per day within 2 months, or significant treatment-related toxicity.[23]

After four decades of evaluating different therapeutic approaches including antibodies, cellular therapies, small molecule inhibitors and cytokines, three drugs were approved by the FDA in the last five years for second line treatment and beyond: ibrutinib, belumosudil and ruxolitinib:

- Ibrutinib, a Bruton Tyrosine Kinase (BTK) inhibitor, was approved by the FDA in August 2017 for cGvHD after failure of one or more lines of systemic therapy (IMBRUVICA PI 2020)
- Belumosudil, a ROCK2 inhibitor, was approved in July 2021, for adult and paediatric patients 12 years and older with cGVHD after failure of at least two prior lines of systemic therapy (REZUROCK PI 2021)
- Ruxolitinib, a JAK 1 and 2 inhibitor, was approved in September 2021 for cGvHD after failure of one or two lines of systemic therapy in adult and paediatric patients 12 years and older (JAKAFI)

	Ibrutinib (Imbruvica®) JANSSEN	Ruxolitinib (Jakafi®) INCYTE (listed on Nasdaq) NOVARTIS (license for outside US)	Belumosudil (REZUROC®) ROCKstar (KD025) KADMON (Sanofi group, listed on Euronext Paris)	Arscimed (GMED16-001) Phase II Arsicor (GMED23-002) Phase III MEDSENIC
Phase completed	III	III	III	II
Adverse effects	+++	++	++	+
Administration	Oral; chronic	Oral; chronic	Oral; chronic	Oral; two 3-week cycles
Orphan designation	YES	YES	YES	YES
Indications	cGvHD 2nd line – repositioning	cGvHD 2nd line – repositioning	cGvHD 3nd line – repositioning	cGvHD 1rd line – repositioning
Characteristics	Janus kinase ½ inhibitor ; cancer Study PCYC-1129-CA (NCT02195869), an open-label, multi-center, single-arm clinical trial enrolling 42 patients with cGVHD after failure of first-line corticosteroid therapy and requiring additional therapy	Janus kinase ½ inhibitor; cancer A Randomized, open-label, multicenter trial – REACH-3 (NCT03112603) – of ruxolitinib compared to best available therapy (BAT) for corticosteroid-refractory cGvHD after allogeneic stem cell transplantation	A ROCK2 inhibitor In a pivotal clinical trial in the United States for the treatment of chronic graft-versus-host-disease (cGvHD). In Oct 2018, the U.S. Food and Drug Administration granted Breakthrough Therapy Designation to KD025 for the treatment of cGvHD) after two or more lines of systemic therapy	- A ROS activator - An inflammatory cytokine inhibitor Non chronic delivery (Few weeks) A Phase II IV trial with demonstrated safety and efficacy on moderate to severe cGvHD; Primary endpoint met at 6 months; Rapid decrease of initial prednisone. Adequate as a first line therapy IV drug (Arscimed)

[23] Dominique Rongvaux-Gaïda, Maëva Dupuis, Joël Poupon, Nouzha Djebrani-Oussedik, Catherine Lemonnier, François Rieger. High Response Rate and Corticosteroid Sparing with Arsenic Trioxide-Based First-Line Therapy in Chronic Graft-versus-Host Disease after Allogeneic Hematopoietic Stem Cell Transplantation, in Transplantation and Cellular Therapy, Volume 28, Issue 10, October 2022, Pages 679.e1-679.e11. Abstract.

				with Generics, however with cancer authorization only. Our oral drug formulation is under IP protection (priority date: 2015). Its equivalent bioavailability to the IV drug is now proven.
Marketing Authorisation **Approval date:** - **Europe (EMA)** - **USA (FDA)**	EMA: NO for cGvHD (only for types of blood cancers) (Oct 21, 2014) FDA: YES (Aug 2, 2017)	EMA: YES (May 2022) FDA: YES (Sept 22, 2021)	EMA: NO FDA: YES (July 19, 2021)	NO – dependent on Phase III success (2023 – 2027)

However, as the above-mentioned drugs are long-term immunosuppressive treatments and come with a risk of serious side effects (including serious infections; hemorrhage; increase in the risk of atrial fibrillation and heart failure; increased risk of certain types of cancer) [24,25] BioSenic Group believes that there continues to be a high unmet medical need for a first line therapy for alternative treatments and/or in combination with corticosteroids having a higher risk-benefit ratio. The proposed treatment with (O)ATO only includes one or two 3-week cycles and the clinical studies with arsenic trioxide in acute promyelocytic leukaemia have shown side effects of a lower intensity and which are reversible. BioSenic Group therefore believes that arsenic trioxide, as a specific immunomodulator (not an immunosuppressant), for the first-line treatment of cGvHD could offer significant benefits over the other available treatment options.

ATO in GvHD – Rationale for Development

As all the manifestations described above are closely related to those observed in humans with cGvHD, Medsenic decided to develop ATO in combination with corticosteroids as first line therapy for patients with newly diagnosed cGvHD after allo-SCT. The addition of ATO to prednisone should increase the Overall Response Rate (ORR) and enable a more rapid and effective corticosteroid taper.

In regards to the nonclinical proof-of-concept for GvHD, recent ATO data is publicly available. Briefly, (Hu et al., 2019)[26] demonstrated that intraperitoneal ATO could improve the clinical symptoms and prolonged the survival of aGvHD mice through upregulating the expression of Nrf2 and HO-1 proteins to reduce the CD4+ T/CD8+ T ratio and decrease the concentration of TNF-a and IFN-g. Moreover, (Liu et al., 2020)[27] aimed to explore macrophage polarization in acute graft- versus-host disease after hematopoietic stem cell transplantation. They investigated if intraperitoneal ATO could correct this imbalance. The data suggest that macrophage polarization is involved in the pathogenesis of aGvHD and that ATO treatment modulates macrophage polarization toward an M2 phenotype.

[24] Fatal bleeding events have occurred in patients who received IMBRUVICA®. Major hemorrhage (≥ Grade 3, serious, or any central nervous system events) occurred in 4.2% of patients, with fatalities occurring in 0.4% of 2,838 patients who received IMBRUVICA® in 27 clinical trials. Fatal and non-fatal infections (including bacterial, viral, or fungal) have occurred with IMBRUVICA® therapy. Grade 3 or greater infections occurred in 21% of 1,476 patients who received IMBRUVICA® in clinical trials. Fatal and serious cardiac arrhythmias and cardiac failure have occurred with IMBRUVICA®. Deaths due to cardiac causes or sudden deaths occurred in 1% of 4,896 patients who received IMBRUVICA® in clinical trials. Link to source.

[25] Jakafi can cause serious side effects including low blood counts and infection. Some people who take Jakafi have developed certain types of non-melanoma skin cancers. Increases in blood cholesterol levels can also occur. In patients who took another JAK inhibitor to treat rheumatoid arthritis, there was an increased risk of potentially fatal cardiovascular events like heart attack or stroke in patients with risk factors for these events who smoke now or smoked in the past, as well as an increased risk of blood clots in legs or lungs and new (secondary) cancers like lymphoma, especially in patients who smoke now or smoked in the past. Link to source.

[26] Xiaoli Hu, Liwei Li, Sai Yan, Zhiqiang Li. Arsenic trioxide suppresses acute graft-versus-host disease byactivating the Nrf2/HO-1 pathway in mice. British Journal of Haematology, 2019,186,e117–e162. Link to article.

[27] Xiao Liu, Yan Su, Xueyan Sun, Haixia Fu, Qiusha Huang, Qi Chen, Xiaodong Mo, Meng Lv, Yuan Kong, Lanping Xu, Xiaojun Huang, Xiaohui Zhang.Arsenic trioxide alleviates acute graft-versus-host disease by modulating macrophage polarization. Sci China Life Sci. 2020 Nov;63(11):1744-1754. Abstract.

Mechanism of action: ATO action results in apoptosis

As mentioned above, multiple molecular targets have been reported in the literature for arsenic trioxide. Arsenic trioxide does affect several intracellular signal transduction pathways and leads to important modifications in the cell function. As reported years ago, arsenic trioxide actions may result in apoptosis (i.e., induced cell death) induction for overactive immune cells, inhibition of growth, inhibition of inflammatory signal transduction and promotion of cell differentiation (Miller et al., 2002)[28].

Arsenic trioxide can disturb natural oxidation and reduction equilibria in activated cells through various mechanisms involved in complex redox reactions with endogenous oxidants and cellular antioxidant systems. Reactive oxygen species generated in response to arsenic exposure lead to accumulation of intracellular hydrogen peroxide, and trigger apoptosis through Cytochrome C release and subsequent activation of the caspase pathway (Miller et al., 2002).

Compared to corticosteroids, which are non-specific potent immunosuppressors, ATO is a specific immunomodulator, which has the advantage to significantly lower possible adverse effects.

ATO has been shown to induce apoptosis in human CD4+ and CD8+ T cells via the mitochondrial pathway by inducing oxidative stress and by regulating Bcl-2 family protein expression (Gupta et al., 2003)[29].

It has recently been established (Maier et al., 2014)[30] that ATO inhibits NLRP1 inflammasome activation, and also the NAIP5/NLRC4 and NLRP3 inflammasome responses to their effectors leading to inflammation inhibition.

ATO may induce apoptosis via changes in the mitochondrial membrane potential (Miller et al., 2002).

Pharmaceutical Development of Oral ATO Formulation

An intravenous formulation of ATO (Trisenox®) has been marketed in the United States since September 2000 for the treatment of APL. However, the IV administration of ATO is a challenge for both patients and hospitals due to the frequency of vascular administration required. In order to improve the convenience of administration and tolerance for patients, an oral formulation of ATO has been developed by Phebra, an Australian-owned manufacturer that developed and holds the license to Phenasen® Concentrated Injection (ATO) which is virtually identical to Trisenox and is approved for patient with APL in Australia, New Zealand, United Kingdom, and Canada. Oral ATO (OATO) contains the same active ingredient as Trisenox®. The bioequivalence of OATO with IV ATO has been researched by Medsenic in a bioavailability study APML5.

Chemistry, Manufacturing and Controls

For its envisaged clinical trials, Medsenic intends to use the arsenic element as the starting material for the manufacturing of Arsenic (III) oxide (As) drug substance in accordance with the Guidance for Industry ICH Q11 Guidance for Industry ICH Q11 "Development and manufacture of drug substances (November 2012) and ICH Q11 Q&As (August 2017)".

More information about the arsenic trioxide element that Medsenic intends to use as starting material are as follows:

- Molecular Formula: As
  CAS RN#: 7740-38-2;
  Molecular weight: 74.92 g/mol
- As is manufactured by PPM PURE METALS starting from As.

[28] Wilson H. Miller, Hyman M. Schipper, Janet S. Lee, Jack Singer, and Samuel Waxman, Mechanisms of Action of Arsenic Trioxide, CANCER RESEARCH 62, 3893–3903,2002. Abstract.
[29] Gupta S, Yel L, Kim D, Kim C, Chiplunkar S, Gollapudi S. Arsenic trioxide induces apoptosis in peripheral blood T lymphocyte subsets by inducing oxidative stress: a role of bcl-2. Mol Cancer Ther (2003) 2(8):711–9. Abstract.
[30] Nolan K. Maier, Devorah Crown, Jie Liu, Stephen H. Leppla and Mahtab Moayeri. Arsenic trioxidesand other arsenical compounds inhibit the NLRP1, NLRP3, and NAIP5/NLRC4 inflammasomes, J Immunol. 2014 Jan 15; 192(2): 10.4049/jimmunol.1301434. Abstract.

Arsenic Powder is justified as a regulatory starting material on the basis of the following considerations in ICH Q11:

- Arsenic Powder is a substance of defined chemical properties and structure.
- Arsenic Powder is incorporated as a significant fragment into the structure of the drug substance.
- Arsenic Powder is a commercially available chemical sold as a commodity in a preexisting, non-pharmaceutical market: high purity Arsenic has numerous applications as a semiconductor and other electronic applications.
- Arsenic Powder can be sourced from several suppliers.
- Arsenic Powder is controlled by appropriate specifications to ensure adequate control of impurities in the final drug substance.

4.7.2 *Systemic lupus erythematosus*

4.7.2.1 Description

Systemic lupus erythematosus (SLE) is the most common type of lupus. SLE is an autoimmune disease in which the immune system attacks its own tissues, causing widespread inflammation and tissue damage in the affected organs. It can affect the joints, skin, brain, lungs, kidneys, and blood vessels. The seriousness of SLE can range from mild to life-threatening. SLE can limit a person's physical, mental, and social functioning. These limitations experienced by people with SLE can impact their quality of life, especially if they experience fatigue. Fatigue is the most common symptom negatively affecting the quality of life of people with SLE.

4.7.2.2 Market size

Based on a recent review published in Nature Reviews in 2022[31], the incidence in the European Union is 2.9/100,000 per year. Taking into account a population in top 5 countries of 326.5 million, this leads to nearly 9,500 new cases per year. The prevalence is estimated at 55/100,000, which leads to an addressable population in Europe of nearly 180,000 patients.

In the U.S. the incidence is 5.11/100,000, leading to approximately 17,000 new cases each year, of which 1,300 are serious cases of lupus. The prevalence in the U.S. is estimated at 60.65/100,000. Mortality is estimated at 1.72/100,000.

The above-mentioned incidence rates have remained stable, but overall patient population has grown due to a general population increase.

Taking into account the expected competitive landscape, BioSenic Group believes to be able to cover 33% of the total addressable patient population with is treatment, leading to an estimated total number of patients treated with ATO (market size) of 125,692 and 8,722 new patients per year.

4.7.2.3 Competition

There is no real treatment for SLE on the market. Standard of care is treatment with hydrochloroquine and corticosteroids. Given the specific immunomodulatory effects of ATO, which have a direct effect on specific aspects of the response of the immune system (rather than suppressing the entire immune system), BioSenic Group intends to position ATO as a potential first line treatment for SLE.

To BioSenic's knowledge, the two main competitors having an FDA approved treatment for SLE are:

(i) Aurinia and its product Voclosporine®, which received FDA approval in January 2021 for use in combination with a background immunosuppressive therapy regimen for one subtype of SLE (lupus nephritis which affects the kidneys); and

[31] Barber, M.R.W., Drenkard, C., Falasinnu, T. et al. Global epidemiology of systemic lupus erythematosus. Nat Rev Rheumatol 17, 515–532 (2021). https://doi.org/10.1038/s41584-021-00668-1.

(ii) GlaxoSmithKline and its product Benlysta®, which received its first FDA approval in March 2011, for which however efficacy results are not high[32] and which does not treat the same diseases as the ones targeted by Medsenic.

BioSenic Group believes that notwithstanding the above-mentioned available treatments, there is still a high unmet medical need for further treatment options for SLE. Especially for treatments, like with ATO, that could potentially target a wider spectrum of actions because it affects all types of SLE or that could evidence a higher efficacy result than current treatment options.

Although BioSenic Group is not aware of any significant results, other future competitors of the BioSenic Group might be the companies as set out in Section 4.7.1 (Overview of the current treatments) that are currently commercialising a therapy for cGvHD and that might decide to conduct further research to reposition their drug for the treatment of SLE.

4.7.3 *Systemic sclerosis*

4.7.3.1 Description

Systemic sclerosis (SSc) is an autoimmune rheumatic disease characterised by excessive production and accumulation of collagen, called fibrosis, in the skin and internal organs and by injuries to small arteries. SSc is often categorised as "limited" or "diffuse" referring to the degree of skin involvement. The limited form affects areas below, but not above, the elbows and knees with or without involvement of the face. The diffuse form also affects the skin above the elbows and knees and can also spread to the torso. Visceral organs, including the kidneys, heart, lungs, and gastrointestinal tract can also be affected by the fibrotic process. Prognosis is determined by the form of the disease and the extent of visceral involvement. Patients with limited systemic sclerosis have a better prognosis than those with the diffuse form. Death is most often caused by lung, heart, and kidney involvement. Overall 10-year survival is estimated at 90% for limited systemic sclerosis and 70% for diffuse systemic sclerosis[33]. Predictors of early mortality include male sex, late onset, diffuse disease, pulmonary arterial hypertension, and renal crisis.

4.7.3.2 Market size[34]

The incidence in the European Union is estimated between 4.5 and 18.7/1,000,000. Based on an average incidence of 12/1,000,000, this leads to 3,918 patients per year. The total patient population suffering from SSC in the European Union is estimated at 50,284, with a prevalence of 154/1,000,000.

In the U.S. the incidence is 18.7/1,000,000, leading to approximately 6,207 new patients each year. The prevalence in the U.S. is estimated at 240/1,000,000 which leads to a total patient population of nearly 80,000.

Taking into account the expected competitive landscape, BioSenic Group believes to be able to cover 33% of the total addressable patient population with is treatment, leading to an estimated total number of patients treated with ATO (market size) of 42,880 and 3,341 new patients per year.

4.7.3.3 Competition

There are no real treatments on the market. Standard of care is low doses of corticosteroids (as high doses could worsen the disease). Medsenic envisages to develop a first line treatment based on ATO given the specific immunomodulatory effects of ATO, which have a direct effect on specific aspects of the response of the immune system rather than suppressing the entire immune system such as corticosteroids.

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[32] See for example: "What are the benefits and risks of belimumab for treating systemic lupus erythematosus (an autoimmune disease that affects the whole body)?", link: When compared against placebo: (i) belimumab is more likely to reduce SLE disease activity, and to reduce the amount of glucocorticoids needed;(ii) belimumab probably makes little to no difference to health-related quality of life improvement; numbers of serious adverse events; and deaths.
[33] Company estimates.
[34] SNFMI, Orphanet maladies rares, NIH.

In this field, repositioned drugs are in development but BioSenic is not aware any successful medication to date. BioSenic is aware that the following companies are working on the repositioning of drugs for treatment of SSc include: Bristol-Myers Squibb Company (abatacept); Boehringer Ingelheim International GmbH; AbbVie; Johnson & Johnson (Guselkumab (phase II)); GlaxoSmithKline plc; and Biogen.

Other future competitors of the BioSenic Group might be the companies as set out in Section 4.7.1 (Overview of the current treatments) that are currently commercialising a therapy for cGvHD and that might decide to conduct further research to reposition their drug for the treatment of SSc (as is currently the case for Belumosudil (REZUROCK™)).

4.8 Principal Bone disorder markets

The bone-related disorder industry, in which BioSenic operates, encompasses various pathologies, from orthopaedic conditions such as severe fractures and treatments of degenerating disc disease. Depending on the indication, competition could come from pharmaceutical, biopharmaceutical (including regenerative and cell therapy companies) and/or medical devices companies, as well as new discoveries from academic research institutions.

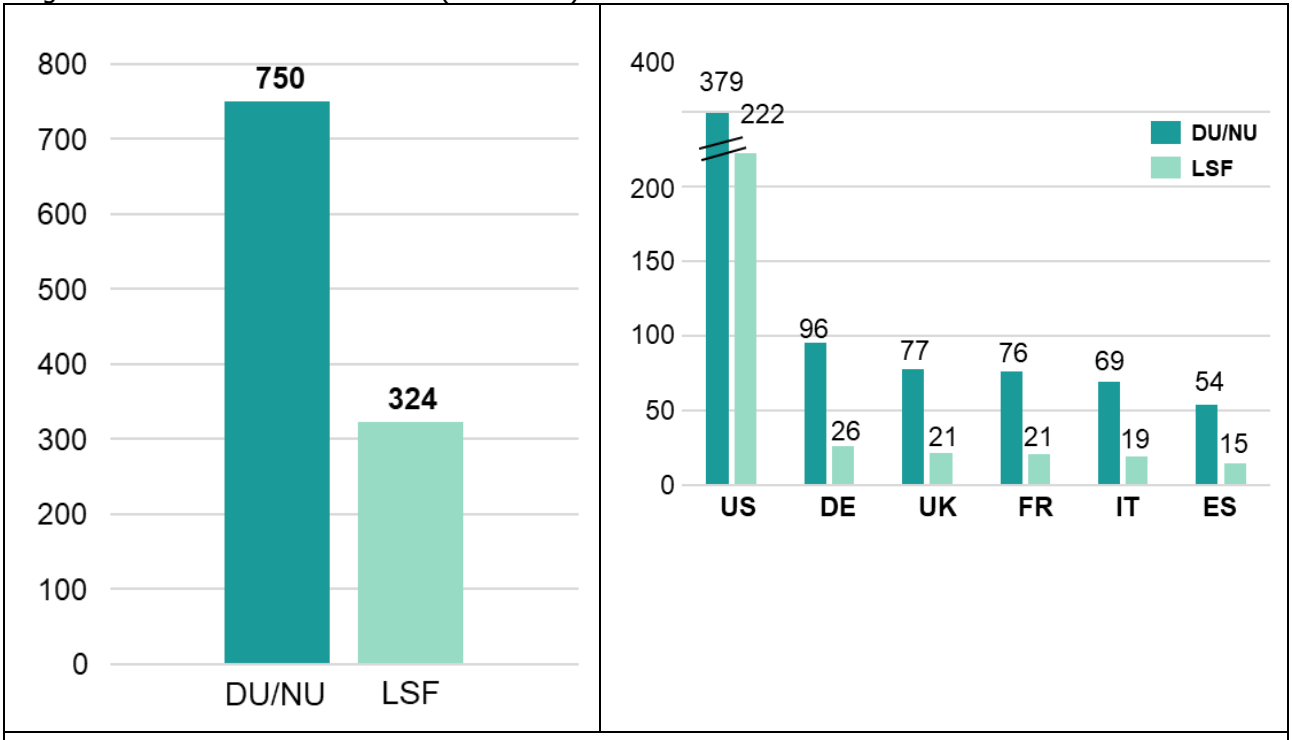
The market space in which BioSenic operates covers fracture repair, spinal implants, bone growth stimuli and orthobiologics (excluding the osteoporosis market) and represents an estimated global market of around $ 22 billion (2019) for the treatment of more than 250 million patients, which can be broken down in the following segments[35] [36]:

Segment	Number of patients	Product sales in million USD	% Change YOY
Fracture repair	8,000,000	7,449.3	3.4%
Spinal implants / instrumentation	3,000,000	9,654.1	3.5%
Bone growth stimulation	Included above	670	
Orthobiologics	250,000,000	5,291.1	4.0%
Total	**261,000,000**	**23,064.5**	

- Fracture repairs covers all the materials used today for repairing fractures both internally and externally such as plates, screws, intramedullary nails, pins, wires, staples and external fixators.
- Spinal implants/instrumentation are all the materials used to treat degenerative disc disease, herniated discs, scoliosis, vertebral fractures and others such as pedicle screws, plates, rods, hooks, screws, artificial discs, motion preserving devices, discectomy tools and vertebroplasty/kyphoplasty products.
- Bone growth stimulation refers to equipment that is used for treating fractures and in support of spinal fusion to stimulate bone growth through ultrasound, pulsed electromagnetic fields and extracorporeal shock wave therapy.
- Orthobiologics are biologic and biochemical products with application across orthopaedics such as allograft and xenograft, synthetic bone graft substitutes, hyaluronic acid viscosupplements, autologous platelet/plasma systems, cell-based products for tissue repair, growth factors and bone proteins, soft tissue repair, replacement and reinforcement products and anti-adhesion technologies.

[35] Orthoworld, The Orthopaedic Industry Annual Report, 2020 (relating to fracture repair, spine and orthobiologics) – Global Data - Medipoint, Bone Growth Stimulators Analysis and Market Forecast, 2017 (relating to bone growth stimulation).
[36] Vos et al., *A systematic analysis for the Global Burden of Disease Study 2010*. Lancet 2012; 380:2163-96

Target Patient Numbers EU5 and US (thousands)



Sources: IQVIA Primary Market Research, n=32; [1] Mills et al., 2017; [2] Wennergren et al., 2015; [3] Papin et al., 2017; [4] Coles et al., 2000; [5] Robinson et al, 2003; [6] Audigé et al., 2005; [7] Phieffer et al., 2006; [8]Rajaee, S. et al., 2012 [9] GlobalData. Spinal Fusion ;[10] Lieberman et al., 2003;[11] Vail & Convington, 1997;[12] Makin, 1992; EMA 2015, Public summary of opinion on orphan designation for ALLOB in ON; [13] United Nations World Prospects Population 2017

In this space, BioSenic currently focuses on three main orthopaedic conditions: difficult-to-heal fractures, lumbar spinal fusion and osteoarthritis of the knee (addressed below). The market addressed by BioSenic is characterized by high unmet medical needs (defined as a medical need that is not addressed adequately by an existing therapy[37]). Indeed, most current treatments have either shown limited efficacy or require invasive surgery at significant risk of major complications and often limited long-term benefit. In addition, most treatments are associated with long hospitalization and recovery time after surgery with a persisting risk for re-intervention. Despite this, the fields targeted by BioSenic have so far remained relatively clear of new treatments and there are very few reported clinical trials. In bone cell therapy, clinical development programmes are still limited to a small number of indications and companies, although there is a growing interest at the level of academic research.

4.8.1 *Difficult-to-heal fractures*

Description

Bone is a naturally regenerative organ, and fractures are currently naturally well-managed in a majority of patients. However, there are traumatic situations in which bone fails to regenerate, leading either to a slowed-down regeneration process (delayed-union) or even a totally interrupted regeneration process (non-union). Inadequate reduction of a fracture leading to instability or poor immobilization may be a reason for delay in fracture union. Clinical studies have shown that several factors can impair one or more stages of the natural fracture healing process causing delayed-union or non-union that may require further pharmacological or surgical interventions. Factors which may influence fracture healing and increase the risk of a delayed-union or a non-union fracture can be patient-independent such as the type and degree of injury or the localization

[37] FDA Guidance for Industry – Available Therapy, July 2004.

and the type of the fracture (e.g. high-energy and/or open fractures) and the quality of the initial surgery, or patient-related, such as age, smoking, alcohol consumption or a medical condition.

Typically, delayed-union suggest that the union is slow, but will eventually occur without additional surgical or non-surgical interventions. Currently, there is no universally validated approach to quantitatively evaluate the progression of fracture healing at various time points from fracture onset to complete recovery. Fracture leads to acute pain and functional impairment that gradually resolve over time if bone fracture healing progresses to a point allowing full functional recovery. The definitions of delayed-union are still subject of interpretations, and the diagnosis of delayed-union is mainly based on time. Commonly, a delayed-union fracture is defined as a fracture that has not united within a period of time (3-7 months) that would be considered adequate for bone healing[38].

Because the lack of commonly accepted criteria for diagnosis, combined with heterogeneity in need for intervention, there are, for now, no standard approaches to assess the risk for and treatment of delayed-unions. Consequently, diagnosis and therapeutic decisions are made on a case by case basis. Once the risk of delayed-union is established, surgeons re-assess the assumption of fracture stability and evaluate the need or feasibility for an immediate revision surgery affecting the fracture site. Commonly, the severity of the patient's condition does not require or allow an immediate revision, and a "wait and see" attitude is mostly adopted until the diagnosis of delayed-union is confirmed or the situation improves. This "wait and see" approach may last several months, which delays the patient's return to a normal life and places a significant financial burden on society.

Market Size

In the US, long bone fractures account for approximately 10% of all non-fatal injuries[39]. Close to 10 million fractures occur every year and over 3 million fracture repair surgeries are performed in Europe, the US and Japan. This led to revenues of almost $7.5 billion in the global fracture repair market in 2019, an increase of 3.4% compared to the year before. This market is expected to continue to grow steadily over the coming years[40]. Major driving factors for the fracture repair devices market are population growth, the increase in the elderly population, growing healthcare costs, and the increase in prevention measures for various orthopaedic-related problems. The leading causes of orthopaedic fracture cases are the ageing population, increasing participation in sports and rising number of road accidents.

Tibia fractures are common. In the USA there are 492,000 tibia, fibula and ankle fractures, leading to 77,000 hospitalizations p.a. In the UK, the incidence is 55/100,000 (18-49 yrs old) and 65/100,000 (<50 yrs old) p.a. In tibial shaft fracture, non-union was reported in up to 10–20% of patients; in an analysis on 853 US patients, 12% had NU[41]. The target population (high risk patients) is therefore estimated around 750,000. Recombinant human Bone Metalloproteinase 2 (rhBMP-2) has been popular in the USA (Infuse® from Medtronic), but has been plagued by safety concerns and is currently only used off-label for the most severe cases.

Competition

BioSenic is developing cell products using allogeneic optimally differentiated bone-forming cells for the treatment of delayed-union fractures that retain the bone-inducing (osteoinductive) properties of the MSCs they are derived from. To its knowledge, it is the only company that develops products that combine the osteoinductive properties of MSC, with the bone-forming (osteogenic) capabilities of osteoblasts, thereby demonstrating much greater regenerative potential. BioSenic's allogeneic bone cell products, ALLOB, is now a Phase iIb clinical trial for the treatment of difficult-to-heal fractures, i.e. fractures considered at risk of delayed-

[38] Liebergall et al., Stem cell-based therapy for prevention of delayed fracture union. Molecular Therapy 2013 (8), 1631-1638.
[39] Kanakaris et al., The health economics of the treatment of long-bone non-unions. *Injury* 2007(38S)S77-S84.
[40] Orthoworld. The orthopaedic industry annual report for year ending December 31, 2017.
[41] Antonova E, et al. Tibia shaft fractures: costly burden of non-unions, *BMC Musculoskeletal Disorders*, 2013, 14, 42; Curtis E, et al, Epidemiology of Fractures in the United Kingdom 1988-2012: Variation with age, sex, geography, ethnicity and socioeconomic status, *Bone*. 2016 Jun; 87: 19–26; Hernandez RK, et al, Patient-related risk factors for fracture-healing complications in the United Kingdom General Practice Research Database, *Acta Orthop*. 2012 Dec; 83(6): 653–660.

union or non-union. Delayed-union or non-union fractures are rarely treated by physicians which is reflected in the very limited number of ongoing clinical trials reported on *ClinicalTrials.gov* for these conditions.[42] BioSenic believes that it can play a significant role in leading this market, as an early actor in the field evolving the paradigm for the treatment of high-risk fractures. Instead of waiting (for the confirmation of a delayed-union or non-union diagnosis), surgeons will be provided with ALLOB as an early non-invasive therapeutic option, offering reduced healing time and yielding substantial cost savings[43].

Established non-unions are generally treated with bone autograft, harvested from the patient's ileac crest with or without intramedullary nailing, plating, and external fixation devices. Besides the fact that this treatment presents a success rate 1-year post-surgery of about 75-85%, it is still associated with considerable side-effects, with complications, such as the need for a secondary invasive surgery at the harvest site and pain at harvest site that can persist for several years, and infection reported in 20% of patients (for iliac crest harvest procedures in particular)[44].

In the early phase of delayed-union fractures, several non-invasive techniques have been developed to stimulate a biological healing response of the fracture, such as ultrasound stimulation (Exogen® from Bioventus). In the rare cases that delayed-union fractures are surgically treated, the use of osteosynthesis material and bone grafts is a well-established practice for the repair of fractures. There are numerous choices for bone graft matrices ranging from (i) bone autograft to (ii) multitude allografts, mostly cadaver bone, demineralized bone matrix (DBM), and cellular bone matrix (CBM) (from Nuvasive, Zimmer Biomet, Orthofix, Allosource, etc.), or (iii) synthetic bone substitutes (from Stryker, Zimmer Biomet, Kuros Bioscience, DePuy Synthes, etc.). Next to bone void filler products in support of bone graft surgeries, some medical devices companies have also developed "injectable" bone void filler products for unhealed fractures of non-weight-bearing bones. These products are all registered as Devices, not Drugs.

Apart from bone grafting, Infuse®/InductOs® (the ortho-biological product (*i.e.*, protein) rhBMP-2; Medtronic-the recombinant bone morphogenetic factor) is, to BioSenic's knowledge, the only pharmaceutical therapy approved in Europe and in the US in a restricted indication (treatment of acute, open tibial shaft fractures that have been stabilized with intramedullary nail fixation after appropriate wound management). Studies have revealed unsatisfactory results for other "orthobiologics" in fracture healing (rhBMP-7 from Olympus Biotech, rhPDGF from Wright Medical Group, PTH from Lilly and *Romosozumab* from Amgen/UCB), forcing them to withdraw the products from the market or discontinue their clinical development. Kuros Biosciences completed in 2011 a Phase IIb trial with vPTH (variant of the parathyroid hormone) in combination with a matrix for treating fresh tibia fractures however since then no further news has been announced.

The majority of the identified companies work on non-union fractures. To BioSenic's knowledge, BioSenic is the only cell therapy company focusing on providing an early (first three months for the phase iIa and a few days for ALLOb IIb), allogeneic (off-the-shelf and ready to use immediately), minimally-invasive therapeutic option for difficult-to-heal fractures.

Overview of cell therapy companies active in unhealed fractures and spinal fusion[45].

Marketed Products				
Company	**Indications**	**Type of product**	**Route of Administration**	**Regulatory Path***
Medtronic	• Spinal fusion • Tibial fractures	Orthobiologic (rhBMP-2) with scaffold	Local Injection	BLA

[42] From www.clinicaltrials.gov, Indication "Delayed Union of Fracture", Status "Not yet recruiting", "Recruiting", "Active, non-recruiting" and recently "Completed", last consulted on October 25, 2019.
[43] Heckman et al. The economics of treating tibia fractures. The cost of delayed unions. Bull Hosp Jt Dis. 1997(56)63-72.
[44] Friedlaender G, et al. Osteogenic protein-1 (BMP-7) in the treatment of tibial non-unions: a prospective, randomised clinical trial comparing Rhop-1 with fresh autograft. *J Bone Joint Surg Am*. 2001(83)151-158.
[45] Company websites and clinicaltrials.gov.

DePuy Synthes *(supplied by LifeNet Health)*	• Spinal fusion	Bone Fillers	Surgery	Device / Procedure
Nuvasive *(supplied by AlloSource)*	• Spinal fusion	Bone allograft with cells	Surgery	Device / Procedure
Stryker	• Spinal fusion • Trauma	Bone Fillers	Surgery	Device / Procedure
Zimmer Biomet	• Musculoskeletal defects	Bone allograft Bone Marrow Aspirate	Surgery	Device / Procedure
Orthofix *(supplied by MTF Biologics)*	• Spinal fusion • Orthopedic reconstruction	Bone allograft with cells	Surgery	Device / Procedure
AlloSource	• Spinal fusion • Trauma	Bone allograft With/without cells Bone Fillers	Surgery	Device / Procedure
Smith and Nephew (Bioventus)	• Osseous defects (incl. fresh fractures, delayed unions, non-unions)	Low frequency ultra-sound device	Procedure	Procedure

Products in Development					
Company	**Indications**	**Type of product**	**Route of Administration**	**Regulatory Path***	**Phase of Development**
BioSenic	• Delayed union fractures • Spinal fusion	Off-the-shelf differentiated osteoprogenitor cells	Local Injection	ATMP	Phase II2b
Kuros	• Spinal fusion • Tibial fractures	Orthobiologic (PTH) + scaffold	Local Injection	BLA	Phase II (recruiting)
Novadip	• Spinal fusion • Other bone defects	Autologous, adipose-derived MSC (3D structure)	Surgery	ATMP	Phase I/II (completed)
Epibone	Bone defects	Adipose-derived MSC + scaffold	Surgery	ATMP	Phase I/II
Mesoblast	Chronic low back pain	Bone marrow-derived MPC + scaffold	Local injection	ATMP	Phase III (completed)
Shanghai iCELL Biotechnology Co.	Non-union fractures	Human amniotic epithelial cells (hAECs)	Local injection	ATMP?	Phase I/II (status unknown)
DiscGenics	Disc degenerative disease	allogeneic (off-the-shelf), injectable discogenic cells	Local Injection	ATMP	Phase I/II (completed)
EntaraBio	Non-union fractures	Orthobiologic (PTH)	Local injection	BLA	Preclinical

Stryker (Olympus Biotech)	Tibial fractures	Orthobiologic (BMP-7) + scaffold	Local injection	BLA	Discontinued in US & EU since 2014
Biostar	Osteonecrosis	Autologous adipose-derived MSC	Local injection	ATMP	Clinical status unclear

* Products approved as devices/procedures are not required to demonstrate efficacy to the same standards

ALLOB has multiple advantages over these products. It is composed of MSCs that have been differentiated into bone progenitor cells, which therefore demonstrate osteoinductive (induce local bone cell differentiation) and osteogenic (form bone themselves) properties. This is clearly advantageous compared with other products that only have undifferentiated cells that only demonstrate osteoinductive properties, or only have a small number of cells remaining in the bone graft. Furthermore, ALLOB is off-the-shelf and therefore available immediately, as no manufacture of patient (autologous) cells is needed. As such, the patient can be treated early, where they are most likely to benefit from the treatment and higher numbers of cells are available to be used, further enhancing ALLOB's efficacy.

4.8.2 *Spinal fusion*

Description

Spinal fusion is considered as the gold standard surgery for treating a broad spectrum of degenerative spine disorders, including degenerative disc disease, spondylolisthesis, scoliosis and stenosis, to relieve pain and improve function. Spinal fusion consists of bridging two or more vertebrae with the use of a cage and graft material, traditionally autologous bone graft or bone substitutes such as bioceramics (β-tricalcium phosphate or β-TCP) and cadaver bone – placed into the intervertebral space – for fusing an unstable portion of the spine or immobilizing a painful vertebral motion segment.

Despite the fact that spinal fusion surgery is routine, complications such as non-union and failure to relieve lower back pain are unfortunately still frequent. One of the most common complications encountered in spinal fusion surgery is failed fusion (complete or partial), reported in approximately 5% to 35% of procedures, which could lead to debilitating pain, deformities, and often require subsequent revision surgery. Its management is one of the most challenging problems in this field. Procedures to salvage failed lumbar fusions focus on achieving a solid fusion, and consequently relieving and controlling pain and symptoms, minimizing disability, and improving the quality of life. However, revision surgeries are associated with higher procedure-related complication rates, technical difficulties, and longer operative times. Moreover, success rates are poor and often unreliable for both fusion and clinical results. Furthermore, bone autograft is a very painful procedure, though efficacious, that surgeons want to move away from. Orthobiologics such as Infuse®/InductOs® have shown efficacy but also significant safety concerns.

Market Size

Over 1.5 million spinal fusions are performed each year in Europe and the US, the majority of which are to address degenerative disc diseases[46]. BioSenic's estimates regarding market size are based on hospital discharge data and market reports. Using these data, BioSenic estimates that each year 686,000 patients in EU5[47], the US and Japan undergo lumbar spinal fusion surgery.

In recent years, the spinal fusion market in the US has grown considerably, from 260,000 procedures in 2002[48] to 797,604 in 2019[15]. According to a recent GlobalData report, this growth is largely due to the increase in indications for which spinal surgery can be performed[49]. GlobalData estimated that the market will continue

[46] Spinal Fusion – Global Market 2015-2028, Global Data, 2019.
[47] France, Germany, Italy, Spain and United Kingdom
[48] North Maerica Spinal Surgery Market Outlook to 2025. GlobalData, August 2018.
[49] Spinal Fusion – Global Analysis and Market Forecast. GlobalData, Linda Tian, December 2016.

to grow, albeit at a smaller annual rate of 3.5-4.5%. On the one hand, the ageing population and sedentary lifestyle result further expansion in the number of procedures, but on the other hand, changing reimbursement policies may start putting pressure on the market.

Competition

The spinal fusion market (see table in previous Section) is segmented into two product classes, namely, (i) hardware devices (plates, screws and cages) and (ii) bone grafts. These two classes are inter-related as the hardware is needed to stabilise the vertebrae and the grafts are needed to promote fusion. Bone autograft is still perceived as the gold-standard for spinal fusion procedures, despite safety concerns (in particular donor site pain)[50]. As a wide array of alternatives is now on the market, a gradual shift is observed from bone autograft towards bone substitutes. This overcrowded product class - with over 200 different products available for the surgeons - is currently dominated by the major medical device manufacturers. The bone substitutes on the market are (i) allografts (mostly cadaver bone) demineralized bone matrix (DBM), and cellular bone matrix (CBM) (from Zimmer Biomet, Orthofix, etc.) and (ii) ceramics and other fillers (from DePuy Synthes, Stryker, Zimmer Biomet, Kuros Bioscience, etc.). The market for bone substitutes is characterized by rapid technological change, frequent introduction of new products and evolving surgical practices toward minimally invasive procedures. Experts estimate that this market will be driven mostly by innovation and by the companies' novel positioning as part of a broad therapy system. In such a therapeutic setting, the synergic combination of hardware devices, bone substitutes and adapted surgeries would ensure better therapeutic outcomes.

By contrast, the regenerative segment of the spinal fusion market has little or no competition with only one approved orthobiologics therapy available in Europe and in the US, Infuse®/InductOs® (the recombinant growth factor rhBMP-2 from Medtronic). The negative media coverage surrounding Medtronic's Infuse® (along with FDA and US Senate investigations and lawsuits, and decreased sales) has opened the market to alternative therapies[51]. For orthobiologics, the vPTH biomaterial (KUR-113) from Kuros is currently evaluated in a Phase IIa trial in the US in spinal fusion[52]. However, in this changing landscape, BioSenic believes that its allogeneic cell products, used as an add-on therapy to synthetic bone substitutes in standard fusion procedures, could offer a better treatment option and be cost-effective by achieving a faster and more solid fusion.

Multiple companies are addressing spinal fusion, or other spinal applications through cell therapy[53]:

Novadip Biosciences (BEL) has initiated a Phase I/II trial in 2017 which completed end 2020 using their autologous adipose derived MSC's incorporated in an allogeneic DBM (product candidate NVD-001) for the treatment of low grade degenerative lumbar spondylolisthesis by interbody fusion[54]. As mentioned previously, Novadip is now focusing its development with its second-generation therapy (NVD-003) for critical size bone reconstruction. Unlike Novadip Biosciences, BioSenic's ALLOB is allogeneic and off-the-shelf and readily available for patients in the first instance and at greater numbers of cells. Secondly, ALLOB retains the osteoinductive properties of MSCs, while also able to form bone itself (osteogenic properties), unlike un-differentiated MSCs.

Other companies are addressing chronic low back pain through cell therapy[55], such as Mesoblast (AUS) and its product candidate Rexlemestrocel-L currently in phase III study[56], or DiscGenics (USA) and its product candidate IDCT in phase I/II study in the US. These cell therapies are developed to address the underlying degenerative disc disease and could become an additional treatment option to patients with degenerative disc

[50] Myeroff C and Archdeacon M. Autogenous Bone Graft: Donor sites and Techniques. The Journal of Bone and Joint Surgery. 2011; 93A (23): 2227-36.
[51] http://www.drugwatch.com/infuse/ and "Medtronic must face revived U.S. lawsuit over Infuse" (Reuters, 28 Dec. 2016)
[52] Press Releases from Kuros Bioscience, dated 3 September 2019.
[53] From www.clinicaltrials.gov, Indication "Spinal Fusion" + "Cell", Status "Not yet recruiting", "Recruiting", "Active, non-recruiting" and recently "Completed", last consulted on October 28, 2019.
[54] https://www.clinicaltrialsregister.eu/ctr-search/trial/2016-002642-23/results#endPointsSection
[55] From www.clinicaltrials.gov, Indication "Spinal Fusion" or "Symptomatic Lumbar Disc Degeneration" + "Cell", Status "Not yet recruiting", "Recruiting", "Active, non-recruiting" and recently "Completed", last consulted on October 28, 2019.
[56] End of recruiting – www.clinicaltrials.gov

disease before going for a surgical intervention. However, these products do not target the other degenerative spine disorders, such as spondylolisthesis, scoliosis and stenosis, which will ultimately require a spinal fusion. These products are not developed to promote spinal fusion.

Please refer to the table in the previous Section for a comprehensive list of companies and competing products.

4.9 Osteoarthritis of the knee

Description and Market Size

Osteoarthritis ("**OA**"), also known as degenerative joint disease, is the most common chronic joint condition in which the protective cartilage in the joints progressively breaks down resulting in joint pain, swelling, stiffness and limited range of motion. The knee is one of the joints that are mostly affected by osteoarthritis, with an estimated 250M cases worldwide[57]. Based on studies analysing the prevalence of symptomatic knee osteoarthritis, BioSenic estimated that there are about 27 million patients suffering from this common orthopaedic condition in the US, Europe and Japan or about 3% of the total population of 838 million people in these countries.

The prevalence of knee osteoarthritis ("**KOA**") is expected to increase in the coming years due to an increasingly aging and obese population. Annual growth is currently estimated at 5-6% according to a recent Global Data report[58]. Currently, there is no cure for KOA and treatments focus on relieving and controlling pain and symptoms, (inadequately) preventing disease progression, minimizing disability, and improving quality of life. Most drugs prescribed to KOA patients are topical or oral analgesics and anti-inflammatory drugs. Ultimately, severe KOA leads to highly invasive surgical interventions such as revision, or total knee replacement.

Intra-articular injections are the most commonly used treatments for moderate KOA. Intra-articular injection of corticosteroids is used to relieve pain, but the treatment effect only lasts several weeks following an injection and could be associated with adverse effects on cartilage (increased cartilage volume loss) in patients receiving prolonged treatment. Intra-articular injection of hyaluronic acid ("**HA**"), also known as viscosupplementation, is also widely used for treating symptomatic KOA, despite controversies around its potential efficacy. The worldwide sales of viscosupplements had an estimated value of $2.1B in 2016[59].

JTA-004 is developed as a single intra-articular injection composed of 3 active substances: human plasma supplemented with HA and an analgesic agent. Once injected in the joint cavity, JTA-004 aims to increase the viscosity of the synovial fluid, leading to joint lubrication, mechanical support and cartilage protection of the arthritic joint.

Such a composition with viscoelastic properties and analgesics may be modified depending the subtype of KOA considered. Although the further clinical development of JTA-004 itself is currently on hold given the negative outcome of the Phase III trial (see Section 4.10.3 for more information), BioSenic Group will be undertaking preclinical work involving the scientific and physiological aspects of the co-use of arsenic trioxide as an anti-inflammatory component.

Competition

There is currently no cure for OA. Treatments for OA focus on relieving and controlling pain and symptoms, preventing disease progression, minimizing disability, and improving quality of life. Management of OA includes varied techniques and principles, both non-pharmacological and pharmacological in nature.

[57] Vos et al., *A systematic analysis for the Global Burden of Disease Study 2010*. Lancet 2012; 380:2163-96
[58] Viscosupplementation: Global Analysis and Market Forecasts, April 2017, Global Data
[59] Viscosupplementation: Global Analysis and Market Forecasts, April 2017, Global Data

Most treatments consist of a combination of the following methods: education, weight loss, exercise, joint protection, physical and occupational therapy. A large number of drugs are also prescribed for patients with OA, typically used to reduce the inflammation, which in turn decreases pain and stiffness. These drugs include paracetamol and non-steroidal anti-inflammatory drugs ("**NSAIDs**"), COX-2 inhibitors, topical analgesics, narcotic analgesics, glucosamine and chondroitin, tramadol and intra-articular (IA) corticosteroids (Manek and Lane, 2000). Although effective in reducing symptoms, NSAIDs are often associated with side effects sometimes described as costly for society. The primary safety concern with NSAIDs is the increase in gastrointestinal problems, including ulceration, haemorrhage, and perforation (Roth, 2011). Compared to traditional NSAIDs, COX-2 inhibitors claim to be more selective in their mode of action, with reduced gastrointestinal complications. However, an increased risk of cardiovascular complications has been attributed to various NSAIDs including COX-2 inhibitors (McGettigan and Henry, 2006). IA steroids are effective but usually have quite short duration of effect (Godwin and Dawes, 2004).

In severe cases, when the therapies above cease to provide benefit or pain relief, surgery may be considered as a last-resort effort to manage OA symptoms. Surgical interventions include total joint arthroplasty and joint lavage and debridement. There is no evidence demonstrating that lavage or debridement is more effective in relieving pain or improving function than non-surgical treatment (Moseley et al., 2002). Arthroplasty has, however, demonstrated significantly reduced knee pain and increased functionality in patients who were severely incapacitated before surgery (Pendleton et al., 2000). Prosthesis loosening and infection are among the complications that can occur. Moreover, such surgical procedures are highly invasive taking months of revalidation to gain recovery.

Although there are several non-surgical treatments available for the treatment of knee OA, their long-term use and their safety have not been systematically monitored. Intra-articular injection of HA has been used in the treatment of symptoms associated with KOA with a favourable safety profile (Pagnano and Westrich, 2005). This therapeutic technique for the treatment of KOA is based on the physiologic importance of HA in synovial joints. Its therapeutic goal is to address the cause of pain by improving mobility of the joint and protection of the cartilage by replacing the low elastoviscous osteoarthritic synovial fluid with high elastoviscous solutions of HA or its derivatives.

HA-based treatments dominate the sales in the KOA space, with sales of $1.3bn in 2016 in the seven major markets. There are several different formulations of intra-articular injection of HA with widely different molecular weights. This difference of molecular weight ("MW") is thought to be of importance with respect to the volume/amount and number of injections, the residence time in the joint and biological effects (Huang et al., 2010).

Today, the US market is dominated by Sanofi, whose products (namely, Synvisc® and Synvisc-One®) have an estimated market share of about 40-50%. Other players on the US market are Anika Therapeutics, Ferring and Fidia Pharma each of which has an estimated market share of 12-13%. The European market is much more fragmented, and each local market has its leading brands[60].

In Europe, HA-based products are not reimbursed in most major countries (in the UK they are reimbursed on a local hospital level) due to their questionable efficacy and long-term benefit. HA-based products are, however, reimbursed in the US.

Competing Products for KOA:

Company	Product	Technology	Indication	Status	Trials
INTRA-ARTICURAL INJECTIONS					

[60] Viscosupplementation: Global Analysis and Market Forecasts, April 2017, Global Data

Sanofi (FR)	Synvisc Synvisc One	HA Three injections One injection	Knee osteoarthritis	Market (2009)	NCT04333160 – Ph III completed 2020 NCT00131352 – Ph III completed 2009 Sales $432.7m (2018)
Anika (US)	Cyngal (Medical Device)	HA (Crosslinked, HMW) + Corticosteroid	Pain in osteoarthritis	Market EU (2016) Canada	NCT01891396 – Ph III Completed 2014 NCT02381652 – Open Completed 2015 NCT03191903 – Ph III Completed 2018
Flexion (US)	Zilretta (Drug)	Corticosteroid	Pain in knee osteoarthritis	Market USA (2017)	NCT02357459 – Ph III Completed 2016 NCT03046446 – Open Completed 2016 Oct 31, 2019 : FDA Clearance of the IND for FX201, a Gene Therapy Candidate for the Treatment of OA Sales ~$20m (2018)
Ferring	Euflexxa (Medical Device)	HA	Pain in knee osteoarthritis	Market (2011)	NCT00423371 – Phase II/III Completed 2007
Fidia	Hymovis (Medical Device)	HA	Pain in knee osteoarthritis	Market (2015)	NCT01372475 – Phase III Completed 2013
IN DEVELOPMENT FOR PAIN					
Centrexion (US)	CNTX-4975	Trans-capsein TRPV1 agonsit	Pain in knee osteoarthritis	Phase III (FDA Fast Track)	NCT03429049 – Ph III (completed with results) NCT03660943 – Ph III (completed with results) NCT03661996 – Ph III Different Treatment Regimen (completed with results)
Mestex (CH)	Lopain (MTX-071)	Resiniferatoxin TRPV1 agonist	Pain in knee osteoarthritis	Phase iIb	NCT02566564 (completed)
IN DEVELOPMENT AS Disease Modifying Osteoarthritis Drug (DMOAD)					
Samumed (US)	Lorecivivint (SM04690)	Wnt pathway inhibitor (DYRK1A and CLK2 inhibitor)	Pain DMOAD	Phase III	NCT03928184 – Ph III (completed)
Galapagos (BE)	GLPG1972	ADAMTS-5 inhibitor	Pain DMOAD	Phase II	NCT03595618 – Ph II – Completed **Failed to meet primary endpoints**
Unity Biotechnology (US)	UBX0101	MDM2/p53 protein interaction	Pain DMOAD	Phase II	NCT04129944 – Phase II – Completed **Failed to meet primary endpoint**
Symic Bio (US)	SB-061	Extracellular matrix targeting drug	Pain DMOAD	Phase IIA	NCT03231280 – Phase IIA - Completed

HMW: High Molecular Weight; DMOAD: Disease-modifying Osteoarthritis Drug

Due to the difference in HA preparations (linear or reticulated, varying MW and/or concentration), assessment criteria, statistical methodologies, injection schedules (1, 2, 3 or 5 injections per cycle for 1 to 3 cycles per

year), the quality and injection techniques among other causes, outcome of clinical trials with intra-articular injection of HA had been contradictory, which has led to a critical view by certain medical associations with regards to this symptomatic treatment. However, during the last few years, multiple large scale meta-analyses on the efficacy of intra-articular injection of HA have been conducted (Maheu et al., 2018; Johansen et al., 2016; Strand V. et al., 2015; Campbell et al., 2015;) and several independent experts groups from US (Bannuru et al., 2015; Bhadra et al., 2017; Trojian et al., 2015), EU (Henrotin et al. 2015; Bruyère et al., 2016; Cooper et al., 2016) and Canada (Bhandari et al., 2017) have reviewed these and previous findings to address the controversies surrounding HA. As the meta-analyses have demonstrated the efficacy and safety of intra-articular injection of HA showing that 60-70% of patients were responders, the experts groups recommended the use of HA as a treatment option for early to moderate knee osteoarthritis. These recommendations are also supported by the wide use of intra-articular injection of HA in practice (representing a $2 bn global market), which shows that patients find the benefit of it in real life.

JTA-004 has the opportunity to provide a novel treatment option to the currently underserved KOA patient population that, albeit not a DMOAD, will offer better long-term benefit compared to existing HA-based treatments on the market, by providing better symptom relief and maintaining cartilage integrity for longer, thereby delaying the need for surgery. Although the primary and consequently key secondary endpoints of the Phase III trial with JTA-004 were not reached (please refer to Section 4.10.3 below) a post-hoc analysis indicated that a statistically significant difference in favour of JTA-004 and the active comparator versus placebo was seen in a subset of patients with higher pain scores at entry. BioSenic therefore plans to re-evaluate the data of JTA-004 in the light of new ideas, involving the fact that KOA may have several clinical subtypes and one subtype could be more amenable to the treatment.

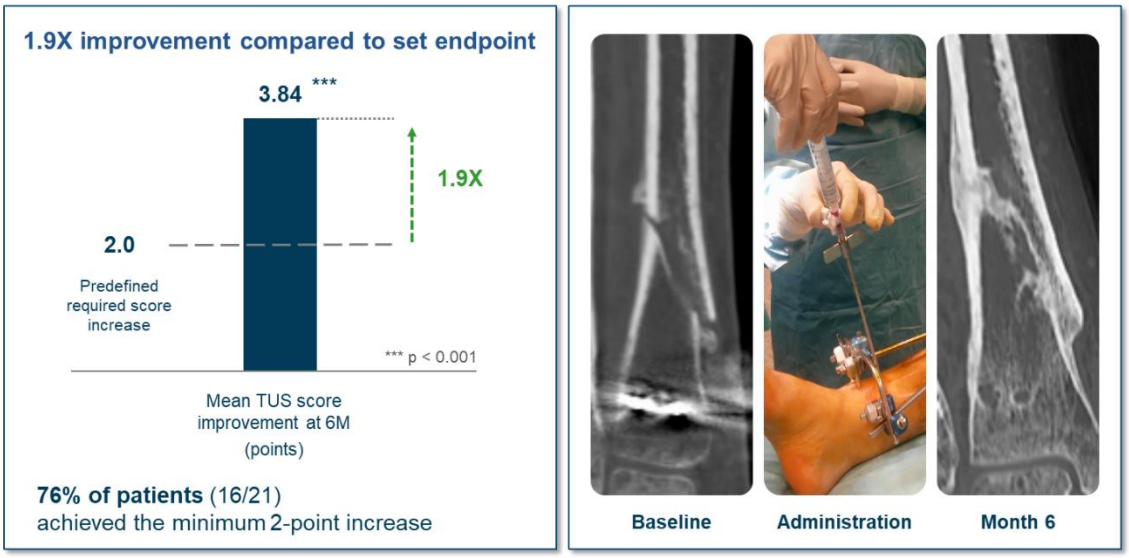
4.10 Results clinical studies

4.10.1 *Delayed-union fractures*

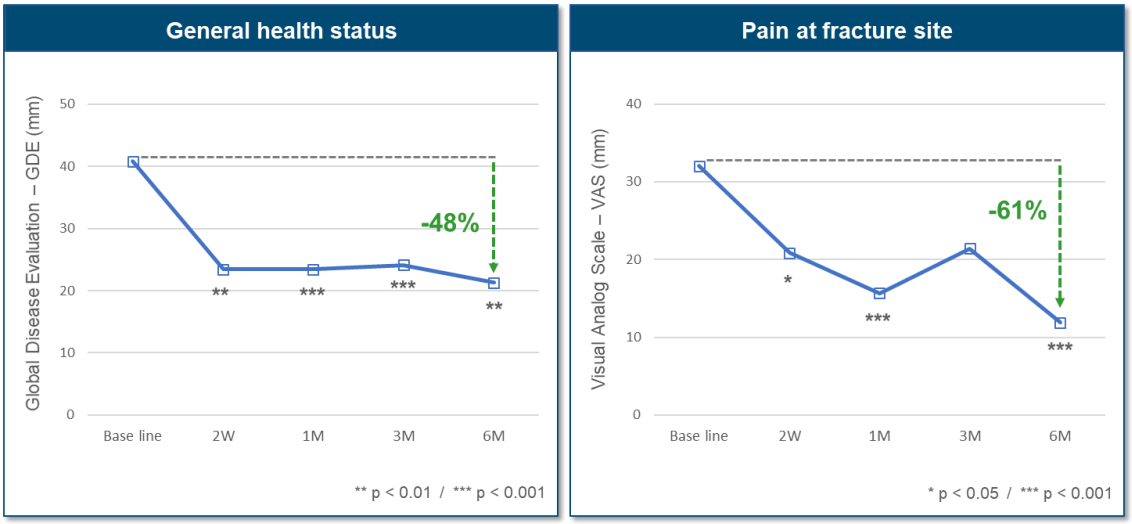
The Phase I/IIa study was a six-month open-label trial to evaluate the safety and efficacy of ALLOB in the treatment of delayed-union fractures of long bones. The study evaluated 21 patients, who each had a fracture that had failed to consolidate after a minimum of three and a maximum of seven months. Each patient received a single percutaneous administration of ALLOB directly into the fracture site and completed a six-month follow-up. Fracture healing of ALLOB-treated patients was assessed using both radiological evaluation (based on CT-scan) and clinical evaluation (e.g. health status and pain).

At six months post administration, 100% of the patients met the primary endpoint, defined as an increase of at least two points on the radiological Tomographic Union Score (TUS) or an improvement of at least 25% of the clinical Global Disease Evaluation (GDE) score vs. baseline.

From a radiological perspective, the patients improved by on average 3.84 points on the TUS scale (statistically significant) almost twice the required increase of two points. This minimum two-point increase was achieved by 16 out of 21 patients (76%).



From a clinical perspective, the health status of patients, as measured by the Global Disease Evaluation (GDE) score, improved statistically significantly by on average 48%. The minimum 25% improvement was achieved by 16 out of 21 patients (76%). Pain at the fracture site, an important secondary endpoint, was statistically significantly reduced by on average 61%.



Overall, ALLOB was shown to be well-tolerated and the safety profile was consistent with the interim analysis reported on 20 September 2017. As previously described in the literature covering clinical studies with allogeneic mesenchymal stem cells or their derivatives, it was observed that blood samples of about half of the patients contained donor-specific antibodies, either pre-existing or developed after administration, without clinical consequences.

ALLOB is currently being evaluated in a randomized, double-blind, placebo-controlled Phase iIb study in patients with high-risk tibial fractures. The study is in the process of recruiting the planned 132 patients.

Recent published medical data has provided new information on timing and dynamics of radiological evidence of fracture resolution. Based on this new evidence, BioSenic has improved the statistical analysis of the ALLOB Phase IIb study. The updated analysis will provide an optimal radiological assessment of the acceleration of bone formation at 3 months following an intra-fracture administration of ALLOB, compared to standard practice alone. The updated statistical analysis converts one of the current secondary endpoints to a primary endpoint

and will therefore have limited impact on the study conduct. The amendment also enables a reduction of approximately 20% of the required patient numbers from 178 patients to 132 evaluable patients while maintaining the same statistical power. Additionally, this updated analysis could facilitate the definition of clinical trial objectives and endpoints in the measurement of fracture healing in subsequent studies.

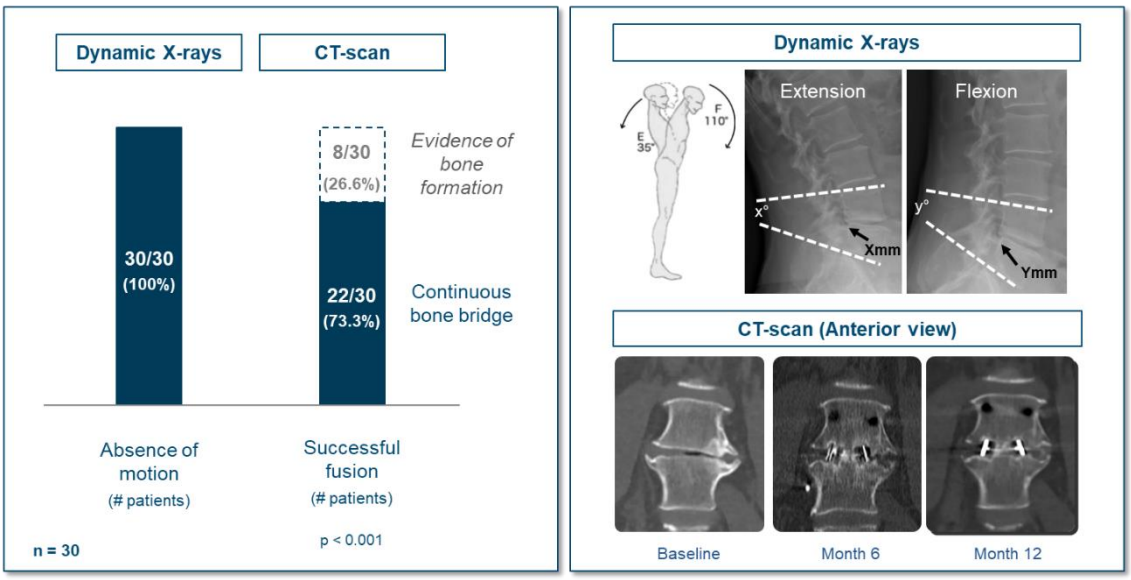
In addition, BioSenic will also implement an interim analysis based on the assessment of radiological data from approximately 66 evaluable patients at 3 months post-administration. The interim analysis will provide an opportunity to document the efficacy of ALLOB and to achieve a relevant clinical milestone at an earlier time point. An independent Data and Safety Monitoring Board (DSMB) will evaluate the interim analysis and could recommend completing the study early for efficacy if the targeted, more stringent interim efficacy level in bone healing has been achieved. Similarly, the study will operationally remain unchanged.

The proposed amendments to the statistical analysis and the introduction of the interim analysis have been submitted to the relevant regulatory authorities for approval in the seven different countries where the ALLOB Phase IIb study is being conducted (six of which already responded positively with the last response for Germany still being pending). It is expected that, even if the amended study protocol is not approved in Germany, this will not have a significant impact on the overall timing of the ALLOB Phase IIb study as previously communicated. BioSenic expects to announce the recommendation of the DSMB for the interim analysis and to report topline results as scheduled by the first half of 2023. If there would be significant new peaks in the spread of the COVID-19 virus during the first half of 2023 affecting patient recruitment, this timeline might get extended.

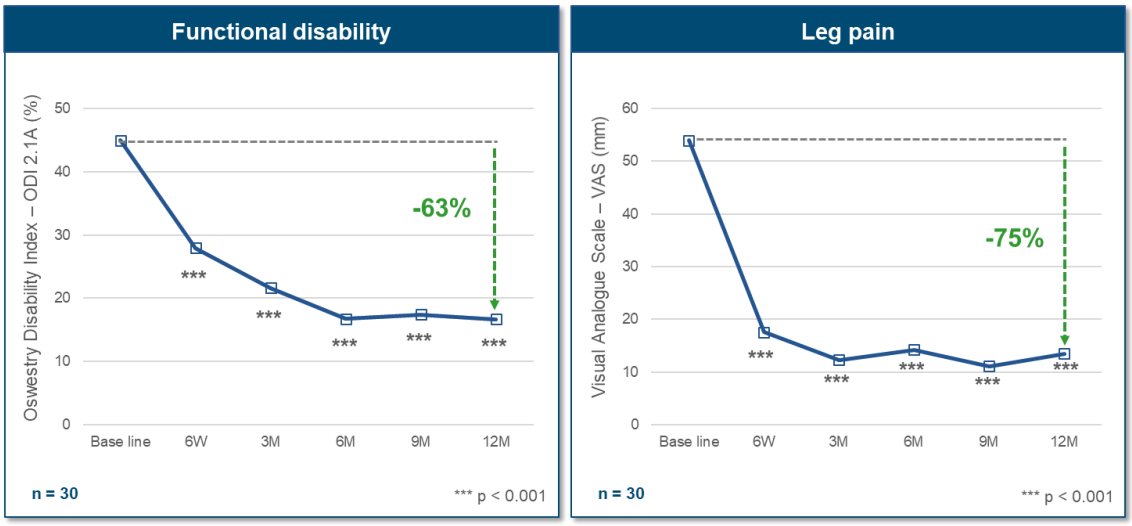
4.10.2 *Lumbar spinal fusion*

The Phase IIa trial in lumbar spinal fusion was designed to evaluate the safety and efficacy of the addition of ALLOB to the standard of care procedure in which an interbody cage with bioceramic granules is implanted to achieve fusion of the lumbar vertebrae. The primary endpoints of the study assessed at 12-month included radiological assessments to evaluate fusion (continuous bone bridges) and clinical assessments to evaluate improvement in patients' functional disability. The secondary endpoints included the assessment of intervertebral mobility (absence of motion at the treated lumbar level), back and leg pain reduction, as well as safety and tolerability. The study evaluated 30 patients treated with ALLOB in combination with standard of care procedure.

From a radiological perspective, data collected from CT-scans over a 12-month period showed successful fusion ($p < 0.001$) of the lumbar vertebrae in 22 out of 30 patients (73.3%), while the remaining 8 patients showed some evidence of bone formation without fusion. For the first 15 patients who already reached the 24-month follow-up time point, 13 out of 15 patients (86.7%) showed successful fusion. In addition, radiological data collected from dynamic X-rays at 12 months demonstrated that treatment with ALLOB resulted in the immobilisation of the treated intervertebral segment in all patients.



From a clinical perspective, treatment with ALLOB resulted in a clear and statistically significant clinical improvement from the pre-treatment baseline in functional disability, with a mean score improvement of 63.0% (p< 0.001) on the Oswestry Disability Index. Furthermore, treatment with ALLOB resulted in a strong reduction in back and leg pain of 67.0% and 75.0% respectively.



From a safety perspective, treatment with ALLOB was well tolerated in all patients. As previously described in the literature covering clinical studies with allogeneic mesenchymal stem cells or their derivatives, it was observed that blood samples of 65% of the patients contained donor-specific antibodies, either pre-existing or developed after administration, however no clinical consequences were observed.

These strong results showed an improvement (60.0% to 73.3%) compared to 12-month interim analysis reported in September 2017 for the first cohort of 15 patients.

In October 2020, BioSenic announced positive 24-month follow-up results for the Phase IIa lumbar spinal fusion study. Radiological data collected from CT-scans at 24 months showed a successful fusion of the lumbar vertebrae in 27 out of 30 patients (90%). In addition, the remaining 3 patients showed radiological evidence of bone formation. Treatment with ALLOB resulted in a clear and statistically significant clinical improvement in function and reduction in pain over the 24-month follow-up period. Functional disability improved from the pre-treatment baseline to 24-month by a mean score of 60% (p<0.001) on the Oswestry Disability Index. Back and leg pain were strongly reduced by 57 to 62% (p<0.001) and 68 to 70% (p<0.001) respectively

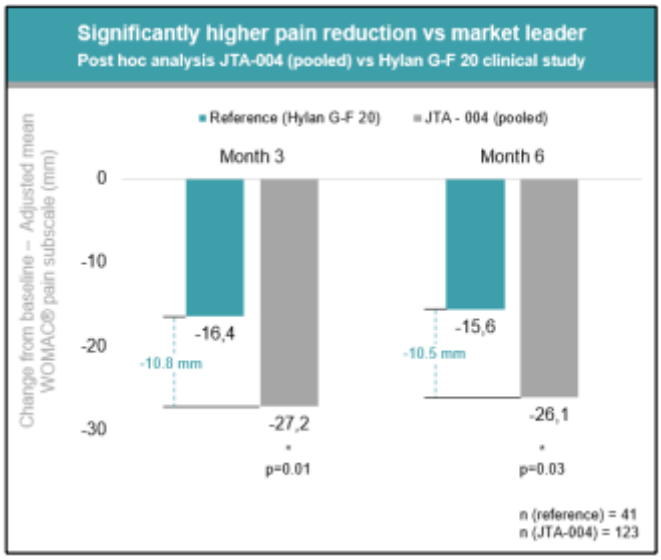
compared to pre-treatment baseline. Treatment with ALLOB was generally well-tolerated by the patients, consistent with previous reported results.

4.10.3 *JTA-004 (discontinued)*

JTA-004 is a next generation of intra-articular injectable for the treatment of osteoarthritic pain in the knee. Consisting of a unique patented mix of plasma proteins, hyaluronic acid - a natural component of knee synovial fluid, and a fast-acting analgesic, JTA-004 intends to provide added lubrication and protection to the cartilage of the arthritic joint and to alleviate osteoarthritic pain.

Osteoarthritis (OA), also known as degenerative joint disease, is the most common chronic joint condition in which the protective cartilage in the joints progressively break down resulting in joint pain, swelling, stiffness and limited range of motion. The knee is one of the joints that are mostly affected by osteoarthritis, with an estimated 250 million cases worldwide[61]. The prevalence of knee osteoarthritis (KOA) is expected to increase in the coming years due to increasingly aging and obese population. Currently, there is no cure for KOA and treatments focus on relieving and controlling pain and symptoms, preventing disease progression, minimizing disability, and improving quality of life. Most drugs prescribed to KOA patients are topical or oral analgesics and anti-inflammatory drugs. Ultimately, severe KOA led to highly invasive surgical interventions such as total knee replacement.

In a completed Phase IIb study involving 164 patients, JTA-004 showed an improved pain relief at 3 and 6 months compared to Hylan G-F 20, the global market leader in osteoarthritis treatment.



in August 2021, Bone Therapeutics announced the topline results from the multicenter, randomized, double-blind, placebo- and active-controlled Phase III study. The study was conducted in 7 European countries and Hong Kong and included a total of 743 patients. Despite JTA-004's favourable safety profile, the study did not achieve its main objectives as no statistically significant difference in pain reduction could be observed between any of the treatment, placebo and comparator groups, with all treatment arms showing similar efficacy. A statistically significant difference in favour of JTA-004 and the active comparator versus placebo was seen in a post-hoc analysis in a subset of patients with higher pain scores at entry.

In March 2022, Bone Therapeutics announced it was redefining its strategic priorities to concentrate specifically on the development of its most advanced clinical asset, ALLOB. As a result, Bone Therapeutics will focus its R&D activities to support the clinical development of ALLOB and all activities related to the development of

[61] Vos et al., A systematic analysis for the Global Burden of Disease Study 2010. Lancet 2012; 380:2163-96

the pre-clinical iMSCg platform as well as all other non ALLOB related activities, including the further development of JTA-004, will be stopped.

4.10.4 *Chronic Graft vs Host Disease*

4.10.4.1 General – ATO – Drug product specifications

Most of the nonclinical data is derived from the published literature, from U.S. Trisenox® Approval Package (NDA_21-248) and from the supportive European Public Assessment Report of Trisenox® (Trisenox® EPAR, 2016).

In line with the 3Rs principles (reduce, replace, refine), Medsenic considers that clinical data should prevail on nonclinical investigations and that existing nonclinical data adequately characterize the safety profile in animals; additional nonclinical studies would not add value and are therefore deemed unnecessary to support the proposed clinical development program, and thereafter in anticipation of an Market Approval in the target indication. This position was endorsed for arsenic trioxide (IV formulation) by the FDA in 2019 (PIND 145160 meeting minutes).

To support the development of oral ATO and to allow reliance on the nonclinical data already available for the IV formulation of ATO and the currently marketed product Phenasen®, equivalent to Trisenox® marketed in Australia, New Zealand and Canada a bioavailability (BA) study (Study APML5) was conducted in APL patients and confirmed the bioequivalence (BE) between the IV and oral formulations. Therefore, Medsenic considers that no additional nonclinical investigations are necessary for oral ATO.

As ATO is not described in any pharmacopeia, its specifications have been defined in-house based on current available data and in line with ICH guidance (ICH guidelines Q6A *Specifications: Tests Procedures and Acceptance Criteria for New Drug substances and New Drug Products*, Q3A (R2) *Impurities in New Drug Substances*, Q3C (R8) *Guideline for Residual Solvents* and Q3D *Guideline on Elemental Impurities*).
The drug substance specifications of oral ATO developed by Medsenic are presented in Table 1 below.

Medsenic considers that the specifications comply with current compendial standards and provide a good characterization of the drug substance in terms of identity, purity and content, and are adequate for control of the quality of ATO. These specifications are fully supported by batch data and stability data.

Further detailed justifications are provided below for tests for the control of impurities:

- Metallic Arsenic test: As (0) may remain in suspension due to incomplete oxidation. Despite it is removed by filtering, its level is controlled in the drug substance to ensure complete removal.
- Arsenic pentoxide content: Arsenic could potentially be oxidized to As (V) which in consequence may form Arsenic (V) oxide. Therefore, the level of arsenic pentoxide is controlled in the drug substance.
- Loss on drying test: water content and acetone are controlled by this test. The limit of 0.5% is in keeping with batch data and provides sufficient control of the Class 3 solvent acetone at the maximum daily dose in accordance with ICH guideline Q3C (R8).
- The levels of potential metal residues different from Arsenic (which is a microelement of Arsenic Trioxide molecule) are routinely controlled in the drug substance. Acceptance criteria have been established in accordance with ICH guideline Q3D (R1) for elemental impurities in drug substance with daily dose of not more than 1 g per day. It should also be noted that that the parenteral route of administration was considered for setting the specifications for elemental impurities in the drug substance, which leads to the establishment of more stringent acceptance limits compared to the oral route of administration intended for oral ATO capsules.

Table 1: Specifications for ATO Drug Substance

Test	Acceptance Criteria	Method
Appearance	White to off white powder.	Visual
Identification	A. The resulting yellow precipitate dissolves when adding NH3 solution.	Chemical test

	B. HPLC: The retention time of the major peak in the Sample solution corresponds to that in the Standard solution, as obtained in the As 2O5 test.		HPLC
	C. IR: The spectrum of the sample matches the I.R. spectrum of Arsenic Trioxide reference standard.		IR spectroscopy
Solubility	Practically insoluble to sparingly soluble in water. Practically insoluble in ethanol, chloroform and ethyl ether. It dissolves in solutions of alkali hydroxides (1M NaOH).		Dissolution test
Appearance of solution	Clear and colourless.		Turbidity and colour tests
pH of solution	4.0 – 7.0		Potentiometry
Sulphides	≤ 10 ppm		Colour test
Nitrate	≤ 100 ppm		IC
Nitrite	≤ 100 ppm		IC
Chloride	≤ 50 ppm		IC
Assay	99.5 – 101.5% (on dried basis)		Titration
Metallic Arsenic content	≤ 0.10%		Gravimetry
As 2O5 content	≤ 0.05%		HPLC
Loss on drying	≤ 0.5%		Gravimetry
Metallic Impurities	Cd	≤ 2 ppm	ICP-OES
	Pb	≤ 5 ppm	
	Hg	≤ 3 ppm	
	Co	≤ 5 ppm	
	V	≤ 10 ppm	
	Ni	≤ 20 ppm	
	Li	≤ 250 ppm	
	Sb	≤ 90 ppm	
	Cu	≤ 300 ppm	
Iron content	≤ 5 ppm		ICP-OES

Test	**Acceptance Criteria**		**Method**
Bacterial endotoxins	≤ 1.0 EU/mg		LAL test
Microbiological analysis	TAMC	≤ 100 CFU/g	USP <61>
	TYMC	≤ 10 CFU/g	USP <61>
	Escherichia coli	Absence	USP <62>
	Salmonella	Absence	USP <62>
	Pseudomonas aeruginosa	Absence	USP <62>
	Staphylococcus aureus	Absence	USP <62>

The drug product specifications have been developed in line with ICH guidance for an oral solid dosage form (ICH guidelines Q6A *Specifications: Tests Procedures and Acceptance Criteria for New Drug substances and New Drug Products* and Q3B (R2) *Impurities in New Drug Products* and USP General Chapter <2> *Oral Drug Products – Products Quality Tests*).

The drug product specifications for the oral ATO capsules developed by Medsenic are presented in Table 2 below. These specifications are fully supported by batch data and stability data.

Table 2: Specifications for Oral ATO Capsules, 1mg, 5 mg and 10 mg

Appearance
1 mg: Orange coloured size 3 capsule white to off white powder fill
5 mg: White coloured size 3 capsule with white to off white powder fill
10 mg: Orange and white coloured size 3 capsule with white to off white powder fill
Visual
All strengths:
Release: Retention time of the
sample is ± 2% of that of the reference standard.
Shelf-life: N/A

Test	**Acceptance Criteria at Release and Shelf-life (Unless Specified Otherwise)**	**Method**
Assay	**1 mg:** **Release**: 93.0 - 105.0% of Label Claim **5 mg and 10 mg:** **Release**: 95.0 - 105.0% of Label Claim **All strengths:** **Shelf-life:** 90.0 - 105.0% of Label Claim	HPLC-UV
Uniformity of Dosage Units	**All strengths:** **Release:** Complies USP <905> **Shelf-life:** N/A	USP <905>
Limit test for Related Substances	**All strengths:** NMT 0.5% Arsenic Pentoxide (As 2O5, Arsenic (V) oxide)	HPLC-UV
Dissolution	Q ≥ 80% at 30 minutes	USP II (Paddles), HPLC-UV
Water Content	Report Result	USP <921> (Karl Fischer)
Microbiological Content		
TAMC	≤ 10^3 CFU/g	USP <61>
TYMC	≤ 10^2 CFU/g	USP <62>
Specified Microorganisms: Escherichia coli	Absent in 1 g	USP <62>

4.10.4.2 Phase II IV ATO Study

Design and Objective:

Study GMED16-001 was a single-arm, prospective, national, multicentre, (non-randomized), open-label phase II trial to investigate the overall response rate (complete response and partial response) to treatment with ATO in combination with prednisone with or without cyclosporine, at 6 months after diagnosis of moderate to severe cGvHD conducted in France[62].

Secondary Endpoints:

Secondary endpoints included Failure-free survival (FFS), Non-relapse mortality (NRM) of infectious and non-infectious origin, Overall survival (OS), Progression-free survival (PFS), Sparing of long-term use of corticosteroids, quality of life self-reported by patient (Lee Symptom Scale (LSS) and FACT-BMT), tolerability and safety of ATO + prednisone, with or without cyclosporine.

[62] See for further details: https://clinicaltrials.gov/ct2/show/NCT02966301?term=gmed16&draw=2&rank=1

Patient Enrolment and Demographics:

The study was planned to enrol 24 patients. A total of 22 (21 + 1 not treated P01-01) patients were enrolled in the study with recruitment starting in December 2016 and ending on 30 June 2019.

- One patient did not receive ATO because of relapse of leukaemia before treatment was initiated (Patient N ° P01-01). This patient is not considered in the full analysis set nor in the safety set and is not part of the final analysis.
- One patient was withdrawn per patient wishes and with physician approval following hepatic toxicity after receiving 2 ATO infusions. Withdrawal occurred once the toxicity resolved (Patient N° P01-05). This patient is not considered in the full analysis set population.
- Seventeen patients (81%) were counted in the Per Protocol (PP) population (3 were excluded with protocol deviations: 2 patients with late M6 visit + 21 and 26 days from planned date) and 1 patient with a half-dose in part of the 1st treatment cycle.

Table 3: Chronic GvHD at Baseline (Safety Population)

Overall severity according to physicians, n (%)	**Safety Population (n=21)**
Mild	1 (4.8)
Moderate	6 (28.6)
Severe	14 (66.7)
Number of organs involved according to Chronic Form A, n (%)	**Safety Population (n=21)**
1	2 (9.5)
2	2 (9.5)
3	4 (19.0)
4	3 (14.3)
5	8 (38.1)
6	2 (9.5)

Methodology:

In this study, the ATO was administered during a cycle of 4 weeks including 11 infusions of 0.15 mg/kg/day, while the administration of prednisone was maintained at 1 mg/kg/day every day during the first 2 weeks, before eventually tapering down (as per investigator's choice) until the response assessment at 6 weeks.

The first 11 patients of the study received ATO as the solution for injection Trisenox®, while all subsequent patients recruited in this study were given Arscimed®, the IV formulation developed by Medsenic. Each patient was administered the same product throughout the treatment cycles, therefore the same patient always received the same formulation.

The response rate was defined according to the NIH consensus response criteria (Jagasia et al., 2019; Lee et al., 2015):

- Complete remission (CR): the complete disappearance of any sign of chronic GvHD.
- Partial remission (PR): improvement of 1 or more point on a 4 to 7-point scale or an improvement of 2 or more points on a 10 to 12-point scale in at least 1 organ or site without progression in any other organ or site.

If the response assessment at 6 weeks (and later) indicated Complete or Partial Response, prednisone administration was to be tapered down.

A threshold of 60% overall response rate for treatment with corticosteroids with or without cyclosporin in study GMED16-001 was chosen as a realistic estimate. According to modern diagnostic and response assessment criteria, an improvement of the overall response rate by 15% to 75% is considered to be clinically meaningful for the treatment of moderate to severe cGvHD.

Twelve patients (57.1%) had 1 cycle of treatment with ATO and 9 (42.9%) had two cycles of treatment with ATO. 10 Patients had a concomitant treatment with ciclosporin at one point during the study. At entry, all patient received corticosteroids at a mean dose of 0.93 ± 0.21 mg/kg/day.

Results:

Primary endpoint

In the FAS (Full Analysis Set) population, 75% of patients achieved complete (35%) or partial (40%) clinical response at 6 months per investigator evaluation (main endpoint). In the PP (Per Protocol) population, 82.4% of patients achieved complete (41.2%) or partial (41.2%) remission.

Secondary endpoints

Table 4: Survival Secondary Endpoints

	Timepoint	Percentage of FAS Population	Additional Notes
Estimated failure-free survival rate	**Month 6**	90%	Two patients received additional systemic treatment for cGvHD before M6. Between M6 and M12, 4 patients received additional systemic treatment for cGvHD and 1 patient died. No patient experienced early failure (before week 6).
	Month 12	65%	
Progression-free Survival	**Month 6**	95%	cGvHD progression was diagnosed in one (5%) patient within 6 months after first ATO infusion and in 2 patients (15%) between M6 and M12.
	Month 12	83.8%	
Overall survival rate	**Month 6**	100%	One patient died after 6.4 months from a septic shock not related to ATO. One patient died after the planned M12 date, but before the M12 visit could take place.
	Month 12	95%	
Estimated non-relapse mortality rate	**Month 6**	0%	As mentioned above, one patient died after 6.4 months.
	Month 12	5%	

As regards sparing corticosteroids, the mean daily dose of prednisone was 0.92 ± 0.21 mg/Kg at baseline, and decreased quickly after first ATO infusion. Six out of 20 patients (30.0%) at M6 and 9 out of 19 patients (47.4%) at M12 were definitively weaned from prednisone[63].

For quality of life secondary endpoints:
- According to the Lee Symptom Scale, there was a significant decrease from baseline: -8.5 ± 20.14 (median: -10.2) points at M6 (p=0.030) which was not significant anymore at M12: -5.2 ± 20.6 (median -1.0; p=0.189) with high between-individual heterogeneity.
- The FACT-BMT was only partially responded in most patients, limiting the interpretation of the results.
- The Chronic Form B (a self-evaluation of severity) was assessed at baseline by 13 patients. Between baseline and M6, 4/10 patients (40%) estimated that their cGvHD improved, 4/10 (40%) considered that there was neither improvement nor worsening and 2/10 (20%) considered their condition to be worsened. From baseline to M12, 1/8 patients (12.5%) considered their disease worse and 5/8 (62.5%) that it did not vary and 2/8 (25%) that it improved.

Conclusion

[63] Dominique Rongvaux-Gaïda, Maëva Dupuis, Joël Poupon, Nouzha Djebrani-Oussedik, Catherine Lemonnier, François Rieger. High Response Rate and Corticosteroid Sparing with Arsenic Trioxide-Based First-Line Therapy in Chronic Graft-versus-Host Disease after Allogeneic Hematopoietic Stem Cell Transplantation, in Transplantation and Cellular Therapy, Volume 28, Issue 10, October 2022, Pages 679.e1-679.e11. Abstract.

Though this is a non-comparative study, these results can be contrasted with the average overall response rate observed with the standard of care of corticosteroids averaging at 40-60%.[64] Additionally, in this study the mean daily dose of Prednisone decreasing quickly after first ATO shows the potential of ATO to reduce patient exposure to corticosteroids. As regards the tolerability and safety results, two types of adverse effects linked to ATO (hepatic toxicity and cardiac QT lengthening (rare)) were observed, but these effect were reversible once the treatment with ATO was transiently stopped. (Hamidou et al 2021[65]).

This study demonstrates that the response rate with ATO is far larger than that observed in corticosteroids alone therefore this Phase II study can be considered as a proof of concept to support the initiation of the Phase III trial. Of note, the study was conducted in accordance to Good Clinical Practice, as required per FDA Acceptance of Foreign Clinical Studies Not Conducted Under an IND.

4.10.4.3 APML5 Bioavailability Study

As the envisaged Phase III study for cGvHD will be using an oral formulation of ATO rather than IV ATO, which has been more thoroughly researched, a bioavailability study (Study APML5) to confirm the bioequivalence of the two formulations was also carried out.

Design and Objectives:

The APML5 trial (ACTRN12616001022459) was a phase 1, 2-part 2- sequence, 4-period bioavailability study in 31 patients with previously untreated acute promyelocytic leukaemia (APL), embedded with a standard-of-care consolidation regimen (ATRA + IV ATO). The study aim was to characterise the bioavailability of encapsulated oral ATO (licensed from Phebra) in patients with APL by comparing the total arsenic AUC whole blood (WB) and plasma (PL) after oral and IV ATO administration.

Patient Enrolment and Demographics:

Initial pharmacokinetic data from the APML5 part 1 pilot (n=9) indicated oral and IV ATO provide comparable arsenic exposure over repeated cycles of consolidation.

To conclusively establish bioequivalence, 22 patients at 12 sites were randomized in APML5 part 2 (Jan 2019-June 2020) to IV or oral ATO 0.15 mg/kg/d. The target accrual of 20 evaluable patients was reached after 2 replacements (replaced patients had insufficient PK data). Median age was 45.9 years (range 23.4-75.2), 10 male, 10 female, 14 standard-risk, and 6 high-risk.

Methodology:

PK sampling was conducted in week 1 of cycles 1 and 3, and the alternate route in week 1 of cycles 2 & 4. Total arsenic was quantitated by inductively coupled plasma mass spectrometry. Point estimates of mean oral/IV arsenic ratios +/- 90% confidence intervals (CI) for AUC (µmol/l.h) and C (µmol/l) in WB and PL were calculated by linear mixed model analysis incorporating fixed and random effects.

Results:

Both ATO formulations were associated with significant increases in AUCain WB and PL from day 1 to day 4 of each cycle ($p<0.001$), indicative of short-term arsenic accumulation, but no accumulation occurred between sequential cycles. Estimates of the geometric mean of the oral/IV ratio for each PK parameter closely approximate unity and the 90% CI fall with the conventional bioequivalence limits (0.80, 1.25). Distinguishing adverse events (AEs) specifically related to oral ATO from those related to IV ATO is problematic, since IV ATO was also administered for 3 weeks in cycles that commenced with 1 week of oral ATO. Nevertheless, no

[64] Bruce R. Blazar, Kelli P. A. MacDonald, Geoffrey R. Hill; Immune regulatory cell infusion for graft-versus-host disease prevention and therapy. Blood 2018; 131 (24): 2651–2660. doi: https://doi.org/10.1182/blood-2017-11-785865

[65] Mohamed Hamidou, Antoine Néel, Joel Poupon, Zahir Amoura, Mikael Ebbo, Jean Sibilia, Jean-Francois Viallard, Benjamin Gaborit, Christelle Volteau, Jean Benoit Hardouin, Eric Hachulla and François Rieger, Safety and efficacy of low-dose intravenous arsenic trioxide in systemic lupus erythematosus: an open-label phase IIa trial (Lupsenic), Arthritis Res Ther. 2021, Mar 3, 23(&):70. Doi: 10.1186/s13075-021-02454-6. Abstract.

excess of grade 3-4 AEs (including gastrointestinal toxicity) was noted in cycles that contained oral ATO, and no instances of oral or IV ATO-associated QTc prolongation were observed during part 2 of APML5, despite monitoring with twice weekly electrocardiograms in each cycle. One patient with high-risk disease relapsed after consolidation.

These results confirmed the bioequivalence of oral and IV formulations of ATO when administered in the context of standard-of-care. Unexpected toxicity signals were also not evident. This study provides rationale for the use of oral ATO in the place of IV ATO.

Geometric Mean of Oral/IV Ratio

The data demonstrated low inter and intra patient variability and indicate that oral ATO (OATO) and IV ATO provide comparable arsenic exposure over repeated cycles of consolidation. The study APML5 provides clear evidence supporting the use of efficacy and safety data from studies with IV formulation, in clinical development of the oral ATO formulation.

APML 5 Study Safety Data

In addition to the safety data regarding IV ATO specifically, study APML5, a randomized crossover bioavailability study supported the bioequivalence of the OATO and IV ATO when administered in the context of SOC consolidation, and unexpected toxicity signals were not seen.

A review of AEs (adverse events) from the study shows a safety profile similar to that previously reported for ATO. 12 on treatment SAEs (serious adverse events) were reported in 10 patients on the study. The SAEs were typical of those expected to be observed in APL patients undergoing ATO treatment (infection, hip deformity, febrile neutropenia, peripheral neuropathy, laryngeal mucositis, pain in extremity, upper respiratory tract infection, headache, thromboembolic event, worsening diverticulitis, and vascular access complication).

The most common AEs were headache, nausea, peripheral sensory neuropathy, constipation, fatigue, vomiting, infection, decreased neutrophil count, and pain. When comparing AEs that occurred in cycles where oral ATO was administered with AEs that occurred in cycles without oral ATO, both vomiting (5 out of 6 patients experiencing the AE) and nausea (10 of the 17 patients experiencing the AE) were more common with oral ATO. Peripheral sensory neuropathy was less commonly observed in cycles with oral ATO (2 of 9 patients with AEs). Elevation in serum enzymes (alanine amino transferase, aspartate aminotransferase, GGT, or alkaline phosphatase) were more common with oral ATO cycles (11 events in 4 patients) when compared to cycles without oral ATO (3 events in 2 patients). Serum enzyme elevations in cycles with oral ATO did lead to the withdrawal of 1 patient after their 3rd cycle.

Conclusion

BioSenic believes that the totality of safety data available at the time of filing will be sufficient for the regulator to make an informed decision about safety of OATO in forthcoming clinical trials.

4.10.4.4 Phase III study for cGvHD (Study GMED23-002)

The proposed Phase III study (Study GMED23-002) that BioSenic Group envisages to start in 2023 is a multicentre, international, randomized, double- blind placebo-controlled Phase 3 study to assess the efficacy and safety of OATO as add on therapy to corticosteroids as first line treatment of in cGvHD.

One hundred and eighty-two (182) total patients with newly diagnosed moderate or severe cGvHD as defined by the NIH Consensus Development Project Criteria are planned to be enrolled and will be randomized in a 1:1 ratio (91 patients in each group) receiving either 0.15 mg/kg/day OATO (Arm A) or matching placebo (Arm B) both arms in combination with prednisone (starting at 1 mg/kg/day). Treatment with OATO/placebo will be administered continuously during a cycle of three weeks (21 days of administration) started within 7 days after cGvHD established diagnosis. Systemic corticosteroids are currently the standard-of-care (SOC) for cGvHD. Corticosteroid therapy will be tapered as per a standard taper regimen with the goal of reducing exposure to high- moderate dose corticosteroids as quickly as possible according to clinical severity of cGvHD. A standard

steroid taper schedule is provided in table below. The randomization between arms will be stratified according to NIH Global Severity grade (moderate vs. severe), immunosuppressive treatment at inclusion (yes or no), and region of participant's study site. An interim analysis will be performed when 50% of patients have completed their M6 visit. Based on the statistical date of the interim analysis, BioSenic will consider applying for conditional market approval by the FDA in the U.S. or the like in selected countries (e.g. compassionate use in France).

The design of Study GMED23-002 as a controlled study avoids the difficult interpretability of single arm trials. The controlled add-on design proposed is in line with the NIH consensus development project on criteria for clinical trials in first line treatment of chronic GvHD. The study is proposed to be a randomized trial in order to reduce bias in the conduct and interpretation of the results in line with the recommendation of *ICH Topic E9 Statistical Principles for Clinical Trials* (ICH-E9_ Guideline, 1998). A double-blind design was chosen for this study in accordance with the ICH Guideline as preferable for the main endpoints and the Patient Reported Outcome (PRO) measures.

The chosen study design will allow for interpretation of treatment effect in terms of efficacy and safety. The safety of this study will be monitored by an independent data monitoring committee (IDMC) as outlined in the DMC charter and in accordance with Medsenic's Pharmacovigilance procedures.

Approximately 70 centres in various countries including the U.S. will participate and are expected to enrol 3 to 4 patients each. The overall duration of the study is expected to be 48 months (study duration for a considered patient: 6 months).

The planned study timelines are as follows:

- First patient first visit: 2023
- Last patient-last visit: 2027

Prednisone Taper Schedule

Week	Dose (mg/kg actual body weight/day)
0	1.00 qod
2	0.85 qod
4	0.75 qod
6	0.65 qod
8	0.55 qod
10	0.45 qod
12	0.35 qod
14	0.25 qod
16	0.20 qod
18	0.15 qod
20	0.10 qod
22	0.05 qod
24	0.0

Medsenic aims to achieve that this randomized, double- blind, placebo-controlled Phase III study will provide sufficient evidence of safety and efficacy of OATO in combination with corticosteroids as first line treatment of cGvHD.

4.10.5 *Phase IIa study to evaluate ATO in Systemic Lupus (SLE)*

Background

Lupus animal model has shown that arsenic trioxide (ATO), a treatment of acute promyelocytic leukaemia, could be effective in SLE. The clinical trial was conducted with 11 SLE patients (LUPSENIC study;

NCT01738360)[66] to evaluate the safety and efficacy of a short course of intravenous ATO in patients with active SLE (Hamidou et al., 2021)[67].

Methods

This phase IIa, open-label, dose-escalating study enrolled 11 adult SLE patients with a non-organ threatening disease, clinically active despite conventional therapy. Patients received 10 IV infusions of ATO within 24 days. The first group received 0.10 mg/kg per injection, with dose-escalating to 0.15 mg/kg in a second group, and to 0.20 mg/kg in a third group. The primary endpoint was the occurrence of adverse events (AEs) and secondary endpoints were the number of SLE Responder Index 4 (SRI-4) responders at week 24 and reduction of corticosteroid dosage. In an exploratory analysis, we collected long-term data for safety and attainment of lupus low disease activity state (LLDAS).

Results

The study results demonstrated an acceptable safety and tolerability of the doses between 0.10 and 0.20 mg/kg used repeatedly during less than one month. Twelve SAEs related to six patients were observed. Four SAEs were related to the treatment (grade 3 neutropenia, osteitis, neuropathy), two of which were attributable to ATO (neutropenia in the two patients treated with mycophenolate). Two patients suffered a severe flare during the last 4 weeks of the trial. The other SAEs were attributed to the SLE condition itself and to concomitant immunosuppressive treatments. A total of 119 adverse events were observed and defined as non-serious. Causality to ATO was not fully determined in 45% of the non-serious AEs, however a toxicity of ATO was excluded and the observed symptoms were not unusual.

At W24, five patients among 10 were SRI-4 responders. Overall, mean corticosteroid dosage decreased from 11.25 mg/day at baseline to 6 mg/day at W24 ($P < 0.01$). In the long term, 6 patients attained LLDAS at W52, which continued at last follow-up (median LLDAS duration 3 years, range 2-4).

Conclusions

A short course of ATO has an acceptable safety profile in SLE patients and encouraging efficacy.

4.11 Regulatory framework

In each country where it conducts its research and intends to market its products and product candidates, BioSenic has to comply with regulatory laws and regulations (hereinafter, collectively the "**Regulatory Regulations**"), including regulations laid down by regulatory agencies and by other national or supra-national regulatory authorities (hereinafter, collectively the Competent Authorities). The Competent Authorities include the European Medicines Agency ("**EMA**") in the European Union and the national Competent Authorities, and Food and Drug Administration ("**FDA**") in the United States. BioSenic also has to comply with industry standards incorporated by such Regulatory Regulations, that regulate nearly all aspects of BioSenic's activities.

BioSenic's pharmaceutical product candidates are subject to substantial requirements that govern among other things their testing, manufacturing, quality control, safety, efficacy, labelling, storage, record keeping, marketing approval, advertising, promotion, pricing, and reimbursement. The process of maintaining continued compliance with the regulatory requirements requires the expenditure of substantial amounts of time and money.

4.11.1 *Medicinal product regulations*

ALLOB

ALLOB is an advanced therapy medicinal product (ATMPs – as defined in regulation 1394/2007) which has been developed in compliance with the European legislation. ALLOB has been classified as tissue engineered

[66] https://clinicaltrials.gov/ct2/show/study/NCT01738360?term=NCT01738360&draw=2&rank=1

[67] Mohamed Hamidou, Antoine Néel, Joel Poupon, Zahir Amoura, Mikael Ebbo, Jean Sibilia, Jean-Francois Viallard, Benjamin Gaborit, Christelle Volteau, Jean Benoit Hardouin, Eric Hachulla and François Rieger, Safety and efficacy of low-dose intravenous arsenic trioxide in systemic lupus erythematosus: an open-label phase IIa trial (Lupsenic), Arthritis Res Ther. 2021, Mar 3, 23(&):70. Doi: 10.1186/s13075-021-02454-6. Abstract.

products by EMA on 19 July 2011 based on Regulation 726/2004. Under Regulation 1394/2007, a "tissue engineered product" means a product that contains or consists of engineered cells (cells that have been subject to substantial manipulation or are not intended to be used for the same function in the recipient as in the donor) or tissues, and is presented as having properties for, or is used in or administered to human beings with a view to regenerating, repairing or replacing a human tissue. In the US, ALLOB is a cellular therapy as defined in the C–R – Code of Federal Regulations Title 21, part 1271 "Human Cells, Tissues, and Cellular and Tissue-based products" and regulated as biological products under section 351 of the PHS Act (42 U.S.C. 262) and the Federal Food, Drug, and Cosmetic Act (the act) and will fall under the Biological License Application regulation. In Japan, ALLOB will fall under the legislation for regenerative medicine which allows for conditional marketing approval after Phase II clinical trials.

BioSenic received orphan drug status for ALLOB (EMA: 2013; FDA: 2014) for the treatment of (non-traumatic) osteonecrosis (EMA: 2013; FDA: 2014) as well as for the osteogenesis imperfecta treatment for ALLOB product (EMA: 2015; USFDA: 2015).

JTA-004

JTA-004 is combination product which is comprised of a protein solution supplemented with hyaluronic acid (HA) and an analgesic agent. The product has been developed in compliance with the European legislation. The current published scientific literature supports that hyaluronic acid achieves its primary intended purpose of treatment of pain in OA of the knee through chemical action within the body (reference made to the FDA's announcement in the Federal Register in December 2018 (83 FR 64844). In addition, JTA-004 utilizes a biologic (human plasma) to entrap the HA fibres. Therefore, JTA-004 is classified in Europe as a medicinal product (as defined in Directive 2001/83/EC as amended, Article 1) and in US as a Drug (as defined in Section 201(g) of the FD&C Act (21 USC 321(g)) unlike most products containing hyaluronic acid which are registered as devices.

Arsenic trioxide (As(2)O(3))

Arsenic trioxide is classified as an antineoplastic agent (ATC code L01XX27: Anti immunomodulating agents – other antineoplastic agents). Arsenic trioxide is classified in Europe as a medicinal product (as defined in Directive 2001/83/EC as amended, Article 1) and in the US as a Drug (as defined in Section 201(g) of the FD&C Act (21 USC 321(g)).

Medsenic's product candidate OATO for the treatment of cGvHD received a favourable opinion from the FDA Committee to follow the 505(b)(2) new drug application (NDA) pathway, instead of a "stand-alone" or "full" NDA. Section 505(b)(2) permits the submission of an NDA where at least some of the information required for approval comes from studies not conducted by or for the applicant and for which the applicant has not obtained a right of reference. Some examples of products that may be allowed to follow a 505(b)(2) path to approval are drugs that have a new dosage form, strength, route of administration, formulation or indication. See section 4.11.4 for more information about the benefits of the 505(b)(2) pathway.

Medsenic has received orphan drug designation for the treatment of GvHD by arsenic trioxide from EMA and FDA in 2019 (see following section for more information on the benefits of an orphan drug designation).

Orphan Drug Designation

Orphan Drug Designation ("**ODD**") provides a special status to a drug developed for the treatment of rare diseases or rare medical conditions. When obtaining orphan designation, BioSenic benefits from a number of incentives, including regulatory assistance and market exclusivity (10 years in Europe and 7 years in the US) once the medicine is approved for commercialisation. Through the ODD scheme, BioSenic benefits from significant fee reductions (90% or more) in respect of the protocol development and scientific advice and product registration procedure in Europe as well as in the US.

4.11.2 *Manufacturing site regulations*

The testing, storage, and distribution of human tissues and cells (intended for human use) and of manufactured products derived from human tissues and cells (intended for human use) is specifically regulated (in Europe by Directive 2004/23/EC, which e.g., requires the licensing of tissue establishments).

BioSenic is registered as a "Tissue Establishment" (according to the Belgian RD2 of 28 September 2009 and the Belgian Law of 19 December 2008 transposing the Directive 2004/23/EC).

BioSenic's manufacturing site[68] has been inspected by the Belgian national competent authorities (Federal Agency for Medicines and Health Products, Belgium) and is registered as a "Pharmaceutical Establishment" and accredited as a "GMP" facility by the Belgian Competent Authorities (Federal Agency for Medicines and Health Products), as requested by the Directive 2001/83/EC, 2009/120/EC and regulation EC 1394/2007. Manufacturing authorization and intra-EU distribution for ALLOB and JTA-004 Human Investigational Medicinal Products has been granted by the Belgian National Competent Authority under the number 1698 IMP.

Overview of manufacturing authorizations

Agreement / license	Competent Authority*	Date of approval
Manufacturing authorization and intra-EU distribution authorization for JTA & ALLOB	Federal Agency for Medicines and Health Products	Authorization since February 2011 updated on 8 Jan 2013. Last update (JTA-004) on January 2017 Scope reviewed to cover packaging, storage, importation, distribution and QC activities since March 2021
GMP agreement	Federal Agency for Medicines and Health Products	Authorization since 23 Jan 2012 (Addition of production site-Gosselies- on 19 December 2017) Authorization for JTA since 29 Sept 2014 Scope reviewed to cover packaging, storage, importation, distribution and QC activities since March 2021 (after on-site inspection)
Tissue Bank / Intermediary Structure (ALLOB)	Federal Agency for Medicines and Health Products	Authorization since 1 March 2013 Not impacted by the deal with Catalent
Tissue Importer Establishment	Federal Agency for Medicines and Health Products	Authorization since 1 March 2020 Not impacted by the deal with Catalent

** In the EU, the national Competent Authority is entitled to grant accreditation to the whole of the EU.*

4.11.3 *Clinical study regulation*

The preclinical and clinical development paths are broadly similar in Europe (governed by Directive 2001/20) and in the US. Initially, non-clinical studies are conducted to evaluate the mode of action and safety through *in vitro* and *in vivo* studies. Upon successful completion of preclinical studies, a request for a Clinical Trial Authorisation (CTA, in the EU) or an Investigational New Drug application (IND, in the US), needs to be approved by the relevant Competent Authorities to be allowed to start. In addition to obtaining Competent Authority approval, clinical trials must receive Ethics Committee (in the EU) or Institutional Review Board, "IRB" (in the US) approval for every research site (e.g., hospital) where the clinical trials are conducted. Clinical trials are typically conducted in sequential phases, Phases I, II, III and IV. Phase IV trials are conducted as post-marketing pharmacovigilance studies to identify and evaluate the causality of any long-term effects during a lengthy period treatment for a greater number of patients. These phases may be compressed, may overlap or may be omitted in some circumstances.

The rate of completion of BioSenic's clinical trials may be delayed by many factors, including slower than anticipated patient enrolment or adverse events occurring during clinical trials.

Competent Authorities are aware of the specificities of cell-based product candidates, and pay more attention to their upfront characterisation and to the development of assays to measure their biological activity. For clinical studies with ATMPs, Competent Authorities typically have between two and six months from the date of receipt of the CTA application to raise any objections to the proposed trial. USFDA shall provide a written

[68] In November 2020, BioSenic sold its manufacturing site but kept GMP certification to cover packaging, storage, distribution and QC activities

determination 30 days after FDA receives the IND application. Competent Authorities may also require additional data before allowing studies to commence and could demand that studies be discontinued, for example if there are significant safety issues.

For most of its studies, BioSenic sought National Scientific advice and EMA scientific advice before designing its clinical trials in order to incorporate the requirements of the EMA.

BioSenic has received approval from Regulatory Agencies and Ethic Committees of several European countries for its clinical trials concerning ALLOB and JTA-004.

ALLOB

ALLOB Phase II/IIa studies were approved in Belgium and Germany. ALLOB Phase iIb study (ALLOB-TF2) was approved in Belgium, Czech Republic, Germany, France, Hungary, Poland and Spain. The study is in the recruitment phase (first patient treated in January 2021) and the end of recruitment is planned for Q4 2024 topline interim results are expected during the first half of 2023. An interim analysis will be conducted and the recommendations of the independent Data and Safety Monitoring Board (DSMB) will be announced shortly after the interim results being available in 2023.

JTA-004

JTA-004 phase II/III study (JTA-KOA1) was approved in Belgium and is finalized. A phase III study (JTA-KOA2) was approved in Belgium, Czech Republic, Denmark, Moldavia, Poland, United Kingdom and Hong-Kong. The recruitment has ended in December 2020 (last patient first visit) and topline results were reported on 21 August 2021.

ATO

BioSenic envisages to start recruitment in 2023 for its Phase III trial for cGvHD, along the lines defined by the May 2022 pre IND Meeting with FDA. Two Phase IIb trials are under preparation, with the protocols being ready, for SLE and SSc.

4.11.4 *Marketing approval*

Although different terminology is used, the data requirements, overall compliance to GMP, GCP and other regulatory requirements and the assessment as well as decision making process for marketing approval are similar in the EU and in the US. Upon availability of initial efficacy data from Phase II clinical trials *and* confirmatory/pivotal Phase III clinical trial data, BioSenic may submit a request for marketing authorization:

- ALLOB: to EMA in the EU (a Marketing Authorization Application ("**MAA**")) or a Biologics License Application ("**BLA**") to FDA in the US.
- JTA-004: to national Competent Authorities ("**CA**") through a Decentralized Procedure ("**DCP**") in the EU (MAA) or a New Drug Application ("**NDA**") to FDA in the US.
- OATO: through an NDA to FDA in the US and to a MAA to EMA in the EU, although marketing in the EU is only envisaged (alongside other options such as partnering and out-licensing) after having received marketing authorisation in the US.

  OATO for the treatment of cGvHD is authorized for a 505(b)(2) regulatory approval pathway in the US:

  - OATO is composed of ATO which has been in clinical use for decades. This active ingredient is currently marketed in liquid form as Trisenox® (Teva Pharmaceuticals Industries, Ltd Inc., NDA 021248) for the treatment of APL by IV administration. ATO is not currently approved for any other disease and not for the treatment of cGvHD.
  - The planned NDA of OATO will be submitted in accordance with the FDA's regulations at 21 CFR 314.54, with Trisenox® as reference listed drug.
  - Indeed, as defined in the draft Guidance for Industry: Applications covered by section 505(b)(2), OATO falls into the scope of 'Changes for previously approved drugs' compared to Trisenox® (CDER, 1998).

- For the non-clinical data, BioSenic Group intends to rely on published literature as well as FDA's findings of safety and/or effectiveness as reflected in the FDA-approved labeling of Trisenox® to avoid carrying out unnecessary studies with respect to the 3Rs (i.e., replacement, reduction and refinement alternatives). It is anticipated that the requested FDA findings will include clinical safety, clinical pharmacology and animal pharmacology and animal safety findings.
- The NDA for OATO thus present both Trisenox® proprietary information and published non-clinical data for ATO. The NDA will contain full CMC (chemistry, manufacturing and controls) information related to the formulation development of OATO.
- Trisenox® was granted marketing authorization from the FDA in September 2000 and from the European Commission (EC) in March 2002. Trisenox® is a concentrate for solution for infusion containing 1 mg/mL or 2 mg/mL of ATO and supplied in a 10 mL clear sealed type I borosilicate glass ampoule. The 1mg/mL strength has been discontinued from marketing in the US, but the product was not discontinued for safety or efficacy reasons so the comparability of the two products remains acceptable.
- OATO and Trisenox® contain the same quantity of the same active ingredient, ATO (1 mg/mL). A comparative bioavailability study was performed between the two different formulations: IV Phenasen® and Oral ATO, in parallel to bioequivalence for APL patients. BioSenic Group considers that this is sufficient to bridge the two drug formulations and to establish a scientifically reliance justifying the use of data from Trisenox® equivalent to Phenasen® in OATO NDA.

The 505(b)(2) regulatory pathway is intended for FDA approval of pharmaceutical products that use molecules (pharmacological agents) that have been previously approved by the FDA or have already been proven to be safe and effective. Products which rely on the 505(b)(2) regulatory pathway are technically NDAs. However, compared to the traditional approval route used for NCEs (new chemical entities), which rely on the 505(b)(1) regulatory pathway, the clinical requirements are substantially reduced given that the sponsor may rely on existing safety and efficacy data. Products that may qualify for the 505(b)(2) regulatory pathway include modifications to the dosage form, formulation, strength, route of administration, dosing regimen or indication for use[69]. 505(b)(2) product candidates have the potential advantage of requiring significantly lower development costs and shorter development timelines compared to NCEs[70]. In addition, 505(b)(2) product candidates can be granted exclusivity by the FDA or may enjoy patent protection. This exclusivity refers to certain delays and prohibitions on the approval of competing drugs. With orphan designation, as is the case for OATO for the treatment of cGvHD, the FDA grants a seven-year market exclusivity for that medicine that applies specifically to that designated orphan use.

Authorities (FDA and/or EMA and/or CA may grant approval if the quality, safety *and* efficacy of the medicinal product/drug are proven, deny the approval or request additional studies or data. Following favourable assessment and decision, the products may be commercially launched in the relevant territory. There can be no guarantee that such approval will be obtained or maintained. In practice, effective market launch is often further conditioned upon completion of pricing and reimbursement negotiations with Competent Authorities involved in healthcare and pharmaceutical expenditure at the national or regional level.

When granting marketing authorization, Competent Authorities may impose upon BioSenic an obligation to conduct additional clinical testing or other post-approval commitments in addition to mandatory pharmacovigilance requirements (referred to as Phase IV clinical trials) (Regulation 1394/2007). Additionally, marketing authorization may be subjected to limitations on the indicated uses for the product. Also, after marketing authorization has been obtained, the marketed product and its manufacturer and marketing authorization holder will continue to be subject to Regulatory Regulations and monitoring by Competent Authorities. The conditions for marketing authorization include requirements that the manufacturer of the product complies with applicable legislation including GMP, related implementing measures and applicable guidelines that involve, amongst others, ongoing inspections of manufacturing and storage facilities.

BioSenic has not received approvals for commercialisation yet.

[69] https://www.chiltern.com/wp-content/uploads/Chiltern_What-is-505b2_11.19.15_VF.pdf
[70] https://camargopharma.com/assets/general/whitepapers/camargo-white-paper-generics-companies.pdf.

4.11.5 *Pricing and reimbursement*

In Europe, pricing and reimbursement for pharmaceuticals are not harmonized and fall within the exclusive competence of the national authorities, provided that basic transparency requirements defined at the European level are met as set forth in the EU Transparency Directive 89/105/EEC. Consequently, reimbursement mechanisms by private and public health insurers vary from country to country. In public health insurance systems, reimbursement is determined by guidelines established by the legislator or a competent national authority. In general, inclusion of a product in reimbursement schemes is dependent upon proof of the product efficacy, medical need, and economic benefits of the product to patients and the healthcare system in general. Acceptance for reimbursement comes with cost, use and often volume restrictions, which again vary from country to country.

The pricing and reimbursement level for BioSenic's products will depend on the strength of the clinical data set and, as for most novel therapies, restrictions may apply. In most countries, national Competent Authorities ensure that the prices of registered medicinal products sold in their territory are not excessive. In making this judgment, they usually compare the proposed national price either to prices of existing treatments and/or prices in other countries also taking into account the type of treatment (preventive, curative or symptomatic), the degree of innovation, the therapeutic breakthrough, volume of sales, sales forecast, size of the target population and/or the improvement (including cost savings) over comparable treatments. Given the growing burden of medical treatments on national health budgets, reimbursement and insurance coverage is an important determinant of the accessibility of medicines. The various public and private plans, formulary restrictions, reimbursement policies, patient advocacy groups, and cost-sharing requirements may play a role in determining access to products marketed by the Group. The national Competent Authorities may also use a range of policies and other initiatives intended to influence pharmaceutical consumption. To address the above, BioSenic integrates as part of its clinical development programs the collection of data aimed at facilitating the evaluation of therapeutic benefit, in terms of efficacy and/or reduction in side effect profile, and of its cost. Concomitantly with marketing authorization applications, BioSenic will engage in a dialogue with key decision makers at different payers in order to identify unique preferences and concerns by payer type and to obtain insight in the perceived value drivers, reimbursement barriers and price elasticity for its products.

An intravenous formulation of ATO (Trisenox®) has been granted market authorisation in the United States since September 2000 for the treatment of APL. The European Commission (EC) also granted market authorisation for the EU in March 2002. BioSenic Group expect that the oral formulation of ATO that BioSenic Group is developing will lead to a higher price than Trisenox or compared to other intravenous formulations. The price effect may be further reinforced by new formulations (including ArsciCop) that BioSenic Group might develop in the future.

4.12 Material agreements of BioSenic Group

4.12.1 *Material agreement of BioSenic*

BioSenic has entered into the following material agreements:

4.12.1.1 License agreement between Université libre de Bruxelles (ULB) and BioSenic regarding ULB-028 patent family

BioSenic entered into a license agreement with the ULB regarding the ULB-028 patent family which is owned by the ULB. This agreement provides BioSenic and its affiliates with an exclusive and worldwide license over the technology claimed by the ULB-028 patent family for all human applications and in the field of skeletal (bone, joint, any orthopaedic) and dental applications for veterinary applications. The ULB retains the right to operate this technology for research and educational purposes only. BioSenic may grant sublicenses, the identity of such sub-licensee(s) being subjected to prior approval by the ULB. In consideration of the rights granted to BioSenic, BioSenic must make payments to the ULB upon achievement of certain development and

patent related milestones. In addition, BioSenic must pay to the ULB royalties based on the net sales of BioSenic and on the revenues received from sublicensees.

The royalty duty on net sales and revenues received from sublicensees shall exist as long as valid claims exist. The royalties are 2% as long as said licensee improvement (i.e., ALLOB product), if unlicensed, would infringe a ULB-028 patent valid claim in that given territory and 1% instead of 2% in territories where no ULB-028 patent valid claim is covering the Licensee Improvement (i.e., ALLOB product) if a valid claim is covering said Licensee Improvement in the territory where the product is manufactured. Otherwise, if there is no valid patent claim where the ALLOB product is distributed and manufactured, there is no royalty.

The royalty should stop on the date of expiry of the patent.

This license agreement will expire on the date of expiry of the last to expire patents in the licensed patent family or ten years after the first commercialization date, whichever is latest. Either party may terminate the agreement if the other party (i) is in breach of its terms and fails or has not taken reasonable steps to remedy the breach within 60 days of receiving written notice to do so, (ii) is declared bankrupt, is the subject of any proceeding related to its liquidation or insolvency, has its assets placed in the hands of a receiver or makes accommodation for the benefits of creditors or (iii) ceases to do business. BioSenic shall have the right, but shall be under no obligation, to terminate the agreement, within six months prior written notice to ULB. If BioSenic (i) commits an act of dishonesty or fraud with respect to ULB or the bone cell therapy technology or (ii) challenges (or assists others to challenge) ULB's ownership of, or the validity of the ULB-028 patent, ULB shall have the right to terminate the agreement immediately upon written notice to BioSenic, without court intervention and without having to respect any notice period.

4.12.1.2 License agreement between Glob-Co and BioSenic regarding the BPBONE-001, BPBONE-002 and BONE-011 patent families (JTA patent families)

The previous agreements between BioSenic and Enrico Bastianelli regarding the BPBONE-001, BPBONE-002 and BONE-011 (dated 2007, 2014 and 2016) were replaced in 2020 by an agreement between BioSenic and Glob-Co SRL. Glob-Co SRL is owned by more than 25% by Enrico Bastianelli and its registered office is in Jumet, Belgium.

In 2020, BioSenic entered into a license agreement with Glob-Co SRL regarding the JTA patent families BPBONE-001, BONE-002, BONE-011 and any future patents related to the JTA technology. This agreement provides to BioSenic an exclusive, worldwide and sublicensable license over the technology claimed by the BPBONE-001, BPBONE-002 and BONE-001 patent families for all human indications. This agreement further provides to Glob-Co SRL an exclusive, worldwide and sublicensable license over the same technology for all veterinary applications.

In consideration of the rights granted to BioSenic, BioSenic pays to Glob-Co SRL an annual fee of € 48.000 until the first commercialization of a product from the JTA technology.

Royalties agreed on net sales from product of the JTA technology are 6%, until € 300.000 payment and then 3%. Royalties for indirect revenues (i.e., sub-license revenues) are 8.75%.

BioSenic recognizes that it must diligently perform research and development obligations and objectives and must use its best efforts to promote, market and distribute the above technology. In the case of failure to do so, Glob-Co SRL may terminate the agreement. If the exploitation of the technology by BioSenic would be delayed for a period of 15 months in comparison to the objectives except in case of *force majeure*, Glob-Co SRL may also terminate the license agreement.

The license agreement will expire on the date of expiry of the patents in the licensed patent family or ten years after the first commercialization date. Either party may terminate the agreement if the other party (i) is in breach of its terms and fails or has not taken reasonable steps to remedy the breach within 60 days of

receiving written notice to do so, (ii) is declared bankrupt, has its assets placed in the hands of a receiver or makes accommodation for the benefits of creditors or (iii) ceases to do business. If the development of the technology is not sufficiently supported by public research grants, BioSenic has also the right to terminate the agreement.

4.12.1.3 Sublicense agreement between Enrico Bastianelli SRL and BioSenic regarding the BONE-001, BONE-002, BONE-013, BONE-017, BONE-018 and BONE-019 ALLOB patent families

The previous agreement between BioSenic and Enrico Bastianelli regarding BONE-001, BONE-002, BONE-013 and BONE-017 ALLOB patent families (dated 2016) was replaced in 2020 by an agreement between BioSenic and Glob-Co SRL. Glob-Co SRL is owned by more than 25% by Enrico Bastianelli and its registered office is in Jumet, Belgium.

Under this agreement, Glob-Co is granted an exclusive, royalty-free, sublicensable, and worldwide license over the technology claimed by the BONE-001, BONE-002, BONE-013, BONE-017, BONE-018 and BONE-019 ALLOB patent families (patent rights, data and know how related to the said patent rights) for veterinary applications.

Bone will further pay Glob-Co a royalty of 1% of the net revenues from any Commercial Exploitation or License of any ALLOB Technology product or program used for the treatment of severe acute respiratory syndrome (SARS).

4.12.1.4 Loan agreement with the European Investment Bank

On 1 July 2021, BioSenic announced that it has signed a loan agreement of up to €16 million with the European Investment Bank (EIB). The EIB financing would support and prepare the enhanced viscosupplement JTA-004 for future regulatory approval and commercialization. JTA-004, was being evaluated in a registrational phase III clinical trial for the treatment of osteoarthritic pain in the knee. Due to the fact that the primary end-points and accompanying objectives of the Phase III results were not met as anticipated, further investments are currently put on hold.

The EIB financing is currently used to accelerate the clinical development of ALLOB, BioSenic's scalable allogeneic cell therapy platform. ALLOB is currently being tested in a phase IIb study in patients with difficult-to-heal tibial fractures. Patient recruitment of this study is currently anticipated to be completed in Q4 2024. The planned topline interim results (following recruitment of 66 patients) are expected during the first half of 2023. An intermediary analysis of the interim results is going to be submitted mid-2023 to an independent scientific committee on the grounds of the completed new statistical analysis, in order to evaluate precisely the chances of success of ALLOB IIb. The outcome of the interim analysis should also allow BioSenic Group to better consider its partnering or out-licensing options in relation to ALLOB.

The loan financing is further supplemented by an agreement to issue warrants to the EIB: 800,000 warrants were issued with the disbursement of the first tranche and 500,000 warrants with the disbursement of the second tranche. Each warrant will give the holder the right to subscribe to one ordinary share BioSenic at the subscription price of €0.01 and with an exercise price which will be equal to the minimum of the 30-day volume-weighted average price and the last closing stock price of BioSenic’s shares at the date of the acknowledgment of the unconditional subscription of the warrant.

The warrants have a maturity of 10 years and become exercisable from the repayment date of the relevant tranche, subject to certain customary exceptions. The warrant agreement further includes an anti-dilution provision which could apply in case of change in BioSenic's share capital, including capital increases if they exceed €15 million in aggregate starting from the disbursement of the first tranche.

The first tranche of €8 million was received on 6 September 2021 (upon approval of the issuance of associated warrants by BioSenic's General Meetings on 23 August 2021).

The second €8 million tranche will be released when specific clinical and commercial milestones have been achieved. However, given the disappointing results of JTA Phase III published on 30 August 2021, the

milestones (some of which relate to a future licensing agreement for JTA-004) will be further negotiated with the European Investment Bank. Successful outcome of such negotiations cannot be guaranteed. The second €8 million tranche has accordingly been excluded in the forward looking cash projections of BioSenic and new negotiations with the European Investment Bank will need to be scheduled first.

Pursuant to the loan facility, BioSenic is not allowed to incur financial indebtedness towards third parties exceeding €2 million.

The loan facility is in the form of a senior loan, repayable to the EIB in a single payment five years following the disbursement of each of the two tranches. The loan carries a fixed interest of 2% per year paid annually and a 3% capitalized interest.

4.12.1.5 Agreements between BioSenic and Medsenic's shareholders

BioSenic entered into two agreements in relation to Medsenic.

a. Subscription agreement between a large majority of the shareholders of Medsenic, as subscribers, and BioSenic

Upon the terms and subject to the conditions set forth in a subscription agreement dated 9 August 2022, the subscribers transferred to BioSenic 37,649 shares in Medsenic, representing 51% of the fully diluted share capital of Medsenic, on 24 October 2022 (the "Completion Date"). In exchange for the subscription, the subscribers received 90,668,594 new ordinary shares of BioSenic on the Completion Date.

b. Shareholders' agreement relating to Medsenic between BioSenic, as majority shareholder, and Medsenic's minority shareholders

Pursuant to a shareholders' agreement dated 24 October 2022 between BioSenic and the shareholders of Medsenic holding the remaining 49% of the shares of Medsenic (the "**Minority Shareholders**"), the Minority Shareholders agree to contribute all of their remaining Medsenic shares into BioSenic in two instalments, each time for half of their remaining shareholding. These additional contributions shall take place at the same time as the first two equity raises of BioSenic (except for capital increases relating to the exercise of warrants and conversions of convertible bonds, but including the capital increase carried out pursuant to the ALLOB warrants, if the conditions for execution are met) to be carried out within approximately 7 to 15 months from Completion Date in order to finance the continuation of BioSenic's activities. These additional contributions are not contemplated before such timeframe, and therefore also not together with any placement of new securities that is envisaged by BioSenic in Q1 2013 (see the Securities Note for more information on the BioSenic Group's working capital and funding objectives). In the event that the conditions for the exercise of the ALLOB warrants (and the capital increase resulting from such exercise) are not met, the contribution of the remaining half of the shares will be postponed to the next capital increase of BioSenic which shall take place in 24 months from the Completion Date.

Except in case of material adverse change in BioSenic's assets, liabilities or clinical trials, these contributions will be made on the basis of Medsenic's valuation as used for the Contribution and by using the same price per share of BioSenic as used for the simultaneous equity raise (which shall not be lower than the valuation of BioSenic used for the Contribution). However, if Medsenic obtains extended development and commercialisation rights from Phebra (including for the US, UK and Japan) under economically favourable terms for Medsenic, the valuation of any shares not yet contributed to BioSenic will be revaluated by an independent expert if the value of Medsenic would exceed the range set out in the external valuation report prepared for the Contribution. For more information on the license agreement and the marketing and supply agreements with Phebra, please revert to Section 7.4.4.2. Positive events can also be expected to lead to a higher share price and could therefore also result in a positive revaluation of BioSenic.

The contribution of the remaining 49% should occur within two years following the Completion Date (i.e., by 24 October 2024) and if BioSenic has not completed a capital increase within these 2 years , the contribution of their remaining Medsenic shares will be made in one instalment based on the same valuations as used for the Contribution. BioSenic also benefits from a call option right over the remaining 49% of Medsenic's shares to enforce such contributions. BioSenic may exercise the call option, at its sole discretion, for all (and not part) of the shares until the 24 October 2025.

For more information about the governance of Medsenic, please revert to Section 6.4.1.2 of this Registration Document.

4.12.2 *Material agreements of Medsenic*

BioSenic's subsidiary Medsenic has entered into the following material agreements:

4.12.2.1 License agreement with the *Centre national de la recherche scientifique* (CNRS) in France

Medsenic entered into a license agreement with CNRS regarding the arsenic salts for autoimmune indications 2002 patent family which is owned by the CNRS. This agreement provides Medsenic and its affiliates with an exclusive and worldwide license over the technology claimed by the CNRS patent family for all human and veterinary autoimmune applications. CNRS retains the right to operate this technology for research and educational purposes only. BioSenic may grant sublicenses, the identity of such sub-licensee(s) being subjected to prior approval by CNRS. In consideration of the rights granted to Medsenic, Medsenic must make payments to the CNRS upon achievement of certain development and patent related milestones. This part has been amended by an agreement with CNRS through 3% Medsenic shares granted against the suppression of the milestones and royalty payments. It is worth mentioning that any new intellectual property on the use of arsenic salts will be 100% property of Medsenic.

4.12.2.2 License agreement and marketing and supply agreement with Phebra

Medsenic and Phebra entered into (i) a license agreement on 21 May 2021 and (ii) a marketing and supply agreement on 31 May 2021 for the oral formulation of arsenic trioxide in the following indications: Graft Versus Host Disease, Systemic Sclerosis, Systemic Lupus Erythematosus, infectious diseases related to COVID-19 and CNS inflammatory diseases related to Multiple Sclerosis. In consideration for the license, Phebra received 3,151 shares (4.3% of the shares currently outstanding) in Medsenic. Please revert to Section 7.4.4.2 of this Registration Document for more information about the agreements with Phebra.

4.13 Partnerships

BioSenic is conducting several partnerships in product licensing, manufacturing, process development and research. These transactions reposition BioSenic around its focus on product and platform development.

4.13.1 *Licensing agreement with Link Health and Pregene*

In October 2020, BioSenic, Link Health Pharma Co., Ltd ("Link Health") and Shenzhen Pregene Biopharma Co., Ltd. ("Pregene") signed an exclusive license agreement for the manufacturing, clinical development and commercialization of BioSenic's allogeneic, off-the-shelf, bone cell therapy platform ALLOB in China (including Hong Kong and Macau), Taiwan, Singapore, South Korea, and Thailand.

Under the agreement, BioSenic was eligible to receive up to €55 million in development, regulatory and commercial milestone payments. BioSenic was also entitled to receive tiered double-digit royalties on annual net sales of ALLOB. BioSenic retained development and commercialization rights to ALLOB in all other geographies outside of those covered by this agreement. BioSenic received €1 million as upfront payment.

In November 2021, BioSenic signed a non-binding term sheet for the global rights for ALLOB, with Link Health and Pregene. These discussions were, however, terminated in October 2022 when Pregene notified the

unilateral termination of the licensing agreement. As a result, BioSenic has regained all development manufacture and commercialization rights of ALLOB worldwide.

Link Health, which was granted rights in Hong Kong, Macau, Taiwan, Singapore, South Korea, and Thailand, has expressed continued interest in ALLOB and is willing to pursue the collaboration with BioSenic. BioSenic and Link Health are in active discussions to precise the terms and scope of their collaboration. BioSenic having regained all development manufacture and commercialization rights of ALLOB from Pregene, will entitle BioSenic to negotiate rights for ALLOB with, Link Health, and other partners.

4.13.2 *Manufacturing collaboration with Catalent*

In October 2020, BioSenic signed share purchase and supply agreements with Catalent Pharma Solutions, Inc., the leading global provider of advanced delivery technologies, development, and manufacturing solutions for drugs, biologics, cell and gene therapies, and consumer health products The agreements streamline and economize the manufacturing operations of ALLOB, BioSenic's allogeneic cell therapy product.

Under the terms of the transaction, Catalent acquires BioSenic's cell therapy manufacturing subsidiary, SCTS, for gross proceeds of €12 million. Following completion of the transaction, the SCTS manufacturing infrastructure and production operating teams became part of Catalent's Cell & Gene Therapy division.

Concurrently, BioSenic and Catalent entered into associated supply agreements. This grants BioSenic access to Catalent's global network of clinical and commercial manufacturing facilities, and ensures ongoing optimization, sustainability and a global reach for the production of ALLOB as the product heads through clinical development and anticipated commercialization.

4.13.3 *Cell therapy process development with Rigenerand*

In January 2021, BioSenic and Rigenerand SRL, the biotech company that both develops and manufactures medicinal products for cell therapy applications, primarily for regenerative medicine and oncology, signed a first agreement for a process development partnership.

The scope of collaborations between BioSenic and Rigenerand aims to focus on different aspects of product and process development for BioSenic's expanding therapeutic portfolio. Rigenerand will contribute to improving the processes involved in the development and manufacture of BioSenic's MSC based allogeneic differentiated cell therapy products as they advance towards patients. The first collaboration between the two organizations will initially focus on augmented professional bone-forming cells – cells that are differentiated and programmed for a specific task. There is also potential for BioSenic to broaden its therapeutic targets and explore new mechanisms of action with potential gene modifications for its therapeutic portfolio.

4.13.4 *License agreement and marketing and supply agreement with Phebra*

Medsenic and Phebra entered into (i) a license agreement on 21 May 2021 and (ii) a marketing and supply agreement on 31 May 2021 for the oral formulation of arsenic trioxide in the following indications: Graft Versus Host Disease, Systemic Sclerosis, Systemic Lupus Erythematosus, infectious diseases related to COVID-19 and CNS inflammatory diseases related to Multiple Sclerosis. Please revert to Section 7.4.4.2 of this Registration Document for more information.

4.14 Collaborations

4.14.1 *Industrial collaborations*

BioSenic has entered into industrial collaborations with CER Groupe (Belgium), to study the immune response of human cells xenografts in a non-animal heterologous model, to study the effect of ALLOB product on osteomyelitis and to study the efficacy and biodistribution of allogenic products in an ARDS model. Both two

first projects are CWALity[71] projects founded by the Region, while the third project is a "Technical support" project founded by the Region. The first project (XENOMOD) ended in April 2017, the second project (ALLGEL) ended in May 2019, and the third project (2020131) is still ongoing. CER Groupe is the merger of various non-profit associations, has forged a solid expertise in the field of biomedical research, and is currently recognized by the Region as a certified Research Centre.

4.14.2 *Academic / Clinical collaborations*

4.14.2.1 Collaboration with the Université libre de Bruxelles

BioSenic has a core academic, research and license collaboration with the Université libre de Bruxelles and Erasme University Hospital (Brussels). The Université libre de Bruxelles, owner of the ULB-028 patent family entitled "Osteogenic differentiation of bone marrow stem cells, and osteoprogenitor or osteoblastic cells and populations" (see Section 4.11.1 "License agreement between Université libre de Bruxelles (ULB) and BioSenic regarding ULB-028 patent family") concerning the cell therapy, has granted BioSenic a worldwide and exclusive license to use, modify, perform research, develop, manufacture and commercialize the licensed product for all human applications and in the field of skeletal (bone, joint, any orthopaedic) and dental applications for veterinary indications.

4.14.2.2 Collaboration with CHU of Liège (Sart-Tilman)

According to Belgian Law, when human biological material is used for the manufacturing of allogeneic advanced therapy medicinal products, the reception and processing of the human biological material and its distribution to a Pharmaceutical Establishment can be done via an accredited "Intermediary Structure" tissue establishment if the latter has an agreement with an accredited Tissue Bank which remains responsible for the donation, testing, procurement and release of the human biological material. BioSenic works in collaboration with the LTCG, the accredited Tissue Bank from the CHU based in Liège Sart-Tilman.

4.14.2.3 Collaboration with the Centre for Microscopy and Molecular Imaging (CMMI)

BioSenic is cooperating for several of its research projects with the Centre for Microscopy and Molecular Imaging (CMMI) that was created in a joint venture between the Université de Mons and Université libre de Bruxelles. The CMMI has created a profound expertise in imaging and cellular labelling that gives BioSenic access to essential information for preclinical characterization and validation of products and allows better evaluation of safety and efficacy of clinical products in development. Currently, one project, funded by the Region, is ongoing in cooperation with the CMMI: the "BIOPOTAN" project study the short-term and mid-term biodistribution and functional evaluation of human osteoblastic cells in a delayed union murine fracture model.

4.15 Financing Agreements

BioSenic has entered into a number of agreements which cover long and short (<1 year) term financing requirements. In addition, BioSenic has obtained a number of loan facilities through regional investment offices (considered as related parties) such as Novallia SA.

BioSenic has the following financing agreements in place:

- Under the framework of the European Regional Development Fund 2007-2013 (ERDF/FEDER) BioSenic has been granted, through a selection progress organized by the Region through Novallia SA, a long-term subordinated loan for an amount of € 300,000 for a period of 7 years (with a 1-year moratorium in respect of capital reimbursements). The loan served to finance A Phase IIA, multicentre, open study on the safety and efficacy of allogeneic bone-forming cells (ALLOB) implantation in multiple non-infected delayed-union (DU) fractures. The loan carries a market-based interest rate and as of the second-year fixed quarterly

[71] CWALity, Collaboration in Wallonia ability, a platform from the Region to promote collaboration between PMEs and local research organisms.

instalments are due to reimburse the capital. There are no securities provided by BioSenic in respect of this loan agreement. The loan was granted on 2 May 2016, received on 11 May 2016 and the final repayment is foreseen on 30 June 2023.

- In June 2019, BioSenic obtained non-dilutive subordinated bonds for an amount of € 3.5 million. The non-dilutive subordinated bonds were issued in registered form, redeemable at 100% of their principal amount with a maturity of 48 months (in June 2023) and a coupon of 8% per annum. The coupon will be payable annually.

- In May 2020, BioSenic obtained non-dilutive subordinated bonds (1,600 bonds) for an amount of € 4.0 million with the option to convert. This enables BioSenic's bond investors to be repaid in BioSenic's shares, with a conversion price of € 7.0 per share. The unsecured convertible bonds will be issued in registered form, redeemable at 100% of their principal amount with a maturity of 38 months and a coupon of 8% per annum. The coupon will be payable annually. The conversion price of € 7.0 per share mitigates the dilution of existing shareholders in the event that the bonds would be redeemed in ordinary shares of BioSenic. BioSenic renegotiated 800 convertible bonds issued on 7 May 2020 (for an amount of € 2 million) to Patronale Life into a loan subject to the same repayment terms as the agreement with the EIB, with the issuance of 200,000 additional warrants approved by the Extraordinary General Meeting.

- In July 2021, BioSenic secured a loan agreement of up to € 16.0 million with the European Investment Bank (EIB). The EIB loan financing will be disbursed in two tranches of € 8.0 million each, subject to conditions precedent. Following the approval of the issuance of associated warrants by BioSenic's General Meetings at the end of August 2021, BioSenic's received a payment from the EIB for the first tranche of € 8.0 million and the EIB was granted 800,000 warrants. Each of the two tranches is repayable to the EIB in a single payment five years following the disbursement of each respective tranche. The loan carries a fixed interest of 2% per year paid annually and a 3% capitalized interest.

- In May 2022, BioSenic signed a subscription agreement for a maximum € 5 million convertible bonds (CBs) facility arranged by ABO Securities, through its affiliated entity Global Tech Opportunities 15. The proceeds of the financing will be used to advance the clinical development of BioSenic's allogeneic bone cell therapy, ALLOB. ABO Securities, on behalf of the CB investor, commits to subscribe to up to € 5 million in CBs. The CBs will be issued and subscribed in ten tranches. A first tranche of 10 CBs with an aggregate principal amount of € 0.5 million was issued on 9 June 2022. The second and third tranche of 20 CBs in the aggregate were issued on 2 September 2022, while the fourth tranche was subscribed on 23 September 2022. A fifth tranche was subscribed on 8 December 2022. The issue and subscription of the remaining five tranches with a principal amount of € 500,000 each can be requested at BioSenic's sole discretion over an eighteen-month period beginning on the signing date of the subscription agreement, subject to customary conditions to be met.

Medsenic has the following financing agreements in place:

Repayable advances:

- Medsenic has been granted a repayable advance from ADI – BPI France (conditional advances at zero interest) for an amount of € 900,000 for a period of 9 years. The loan served to finance the validation of the efficacy of an arsenical compound for the treatment of the chronic and autoimmune component of graft versus host disease. The loan does not carry any interest rate. Fixed quarterly instalments of € 37,500 are due to reimburse the principal amount. There are no security interests provided by Medsenic in respect of this loan agreement. The loan was granted in 2016 and the final repayment is foreseen on 30 June 2025.

- Medsenic has been granted a repayable advance from ADI – BPI France for a total amount of € 700,000 (€ 210,000 of which will be paid in 2024) for a period of 11 years. The loan served to finance the testing on efficacy and tolerance of arsenic trioxide in first-line treatment of systemic sclerosis. The loan does not carry any interest rate. Variable instalments based on a depreciation table are due to reimburse the principal

amount. There are no security interests provided by Medsenic in respect of this loan agreement. The loan was granted in 2018 and the final repayment is foreseen on 30 September 2029.

Loans from BPI

- Medsenic has been granted a long-term subordinated loan from BPI ("*Prêt Amorçage Investissement FEI*") for an amount of € 375,000 for a period of 8 years. The loan served to finance the validation of the efficacy of an arsenical compound for the treatment of the chronic and autoimmune component of graft versus host disease. The loan carries an annual market-based interest rate of 4.68% and fixed quarterly instalments of € 18,750 are due to reimburse the principal amount. There are no security interests provided by Medsenic in respect of this loan agreement. This financing benefits from a 40.00% guarantee from the Fonds National de Garantie "Prêt d'Amorçage Investissement" and a 40.00% guarantee from the European Investment Fund (EIF). The loan was granted on 5 July 2017 and the final repayment is foreseen on 31 March 2026.

- Medsenic has been granted a long-term subordinated loan of from BPI ("*Prêt Amorçage Investissement FEI*") for an amount of € 125,000 for a period of 8 years. The loan served to finance the studies on efficacy and tolerance of arsenic trioxide in first-line treatment of systemic sclerosis. The loan carries an annual market-based interest rate of 4.09% and fixed quarterly instalments of € 6,250 are due to reimburse the principal amount. There are no security interests provided by Medsenic in respect of this loan agreement. This financing benefits from a 30.00% guarantee from Bpifrance Financement under the national guarantee fund "Prêt d'Amorçage Investissement" as well as a 50.00% guarantee from the InnovFin scheme of the European Investment Fund (EIF). The loan was granted on 29/06/2018 and the final repayment is foreseen on 31 March 2027.

- Medsenic has been granted a long-term subordinated loan from BPI (*prêt garanti par l'état* or "State Guaranteed Loan") for an amount of € 300,000 for a period of 6 years. The loan is a Covid support financing. The loan carries an annual market-based interest rate of 2.25% and fixed monthly instalments of € 6,445 are due to reimburse the principal amount. There are no security interests provided by Medsenic in respect of this loan agreement. This financing benefits from a 90% State guarantee under the "FDG Etat Coronavirus" guarantee fund. The loan was granted on 21 April 2020 and the final repayment is foreseen on 25 April 2026.

- Medsenic has been granted a long-term subordinated loan of from BPI ("*Prêt Innovation R&D*") for an amount of € 500,000 for a period of 6 years. The loan served to finance the R&D innovation project - 3 generation drug project. The loan carries an annual market-based interest rate of 0.79% and fixed annually instalments of € 100,000 are due to reimburse the principal amount. There are no security interests provided by Medsenic in respect of this loan agreement. The loan was granted on 06/08/2021 and the final repayment is foreseen on 31 December 2028.

Other loans

- Medsenic has been granted a State-guaranteed loan (*prêt garanti par l'état*) of € 300,000 with the CIC Ouest bank on 20 April 2020 for an initial term of one year, then amended to 21 January 2021, and on 12 March 2021 for 5 years, at 0.70% per year. This loan has a deferred principal repayment from the initial maturity of the State Guaranteed Loan (SGP) on 25 April 2021 to 24 May 2022. This financing is accompanied by a State guarantee provided for by the Amending Finance Act No. 2020-289 of 23 March 2020 and the specifications defined by the Order of 23 March 2020 granting a 90% State guarantee to credit institutions and financial companies pursuant to the aforementioned Act.

4.16 Grants and subsidies

From incorporation until 30 June 2022, BioSenic has been awarded non-dilutive financial support from the Region and by the European Commission totalling € 35.30 million. This financial support has been granted in the form of recoverable cash advances ("**RCAs**") for an amount of € 30.43 million of which € 29.99 million has been paid out to BioSenic as of 30 June 2022, and in the form of (non-refundable) subsidies for an amount of € 5.09 million of which € 4.80 million has been paid out to BioSenic as of 30 June 2022. BioSenic intends to continue to apply for RCAs and subsidies to fund its development and research programs.

Each subsidy is defined by a contract number and a name (subsidy name).

4.16.1.1 Recoverable cash advances

RCAs are dedicated to support specific research and development programs. After approval/grant, RCA contracts consist of three steps, i.e., the "research phase", the "decision phase" and the "exploitation phase". During the research phase, BioSenic receives funds from the Region based on statements of expenses. At the end of the research phase, BioSenic should within a period of six months decide whether or not to exploit the results of the research program (decision phase). The exploitation phase has a duration of in nearly all cases of 25 years. In the event BioSenic decides to exploit the results under an RCA, the relevant RCA becomes refundable. The reimbursements of the RCAs to the Region consist of two elements, i.e., turnover-dependent reimbursements (a percentage of turnover) and turnover-independent reimbursements (an annual lump-sum independent of BioSenic's turnover).

BioSenic owns the results of the subsidized research. Subject to certain exceptions, BioSenic cannot grant to third parties, by way of license or otherwise, any right to use the results of the subsidized research without the prior consent of the Region. A similar prior consent by the Region is needed in case of a transfer by BioSenic of an intellectual property right resulting from the subsidized research or a transfer or license of a prototype or installation. Obtaining such consent from the Region could give rise to a review of the applicable financial terms.

Contracts granted contain the following specific conditions:

- Funding by the Region covers **45%** of the budgeted costs (contracts 7539, 7646, 7720, 7763, 7813, 7845, 7852 and 1510583), covered **55%** of the budgeted costs (contracts 7280, 7405, 7406, 7433 and 7620), covered **60%** of the budgeted costs (contracts 6064, 6187, 6700, 6446, 6337, 6539, 6804, 6805, 6834, 6855, 7029, 7028, 7187, 7217 and 7253), covered **70%** of the budgeted costs (contracts 5369 and 5827) **or** covered **75%** of the budgeted project costs if there is a collaboration with a company established in Region (contracts 5993, 6081 and 7186);
- Certain activities have to be performed within the European Union;
- Turnover-independent reimbursements represent in the aggregate 30% of the principal amount;
- The exploitation phase has a duration of **25 years** (except 15 years for contract 7720);
- Turnover-dependent reimbursements are detailed in the table below and depends on the actual outcome of the project compared to the outcome projected at the time of grant of the RCA (below or above projections);
- Interests (at Euribor 1 year or at IBOR 1 year if higher and as applicable on the first day of the month in which the decision to grant the relevant RCA was made + 100 basis points) accrue as of the 1st day of the exploitation phase;
- Turnover-independent reimbursements and turnover-dependent reimbursements are, in the aggregate (including the accrued interests), capped at **200%** of the principal amount paid out by the Region;

- In case of bankruptcy, the research results obtained by BioSenic under the Contracts granted are expressed to be assumed by the Region by operation of law.

BioSenic has contracted the following RCAs with the Region:

Contract N°	Name	Budget (k€)	Exploitation phase	Turnover-independent reimbursement (k€)	Total reimbursed 06/2022 (k€)	Turnover-dependent reimbursement
5369	HOMING*	648	2012-2041	648	648	5%
5827	MATOB*	744	2012-2041	744	744	5%
6064	PREOB*	998	2013-2041	240	240	0.2%
6446	METHODES*	660	2014-2041	198	184	0.073%
5993	JOINTAIC*	432	2014-2042	130	117	0.085%
6804	PROFAB*	734	2015-2042	110	110	1.28%
6834	STABCELL*	394	2015-2041	59	59	0.04%
6805	ALLOB NU*	600	2015-2042	180	93	0.2%
6337	PREOB NU*	2,960	2015-2041	444	444	0.59%
6187-6700	ALLOB*	1,306	2015-2042	392	176	1.2%
6081	GXP*	1,519	2015-2041	167	167	0.007%
6539	MAXBONE*	676	2015-2042	203	101	0.08%
6855	JTA*	600	2016-2042	180	100	0.042%
7029	CRYO*	550	2016-2042	165	83	0.37%
7028	PREOB ON3*	815	2016-2041	81	81	0.05%
7187	BANK*	258	2016-2042	78	15	0.175%
7253	JTA PROD*	742	2017-2041	223	52	0.1%
7186	ALLOB IF*	620	2017-2042	186	62	1.28%
7217	MXB BIOPRINTING*	995	2017-2042	294	60	0.1093%
7405	MECA OB*	1,815	2018-2043	545	18	0.847%
7539	LIPO*	519	2018-2043	156	5	0.23%
7280	MO SELECT*	353	2018-2043	106	9	0.082%
7406	CRYOFIN*	1,185	2018-2043	355	36	0.553%
7433	ALLOB SEQ*	1,892	2019-2043	568	38	0.90%
7620	EXCIP*	1,576	2019-2044	0	0	0.08%
1510583	ALLGEL	155	2019-2043	47	0	0.04%
7720	RUSTUS	454	2019-2033	136	5	0.25%
7763	PROSTERIL	719	2020-2045	219	0	0.04%
7852	ALLOPROD	913	2021-2046	274	0	0.05%
7646	JTA-NEXT	2,156	2020-2044	648	0	0.20%
7813	CELLSORT	613	2020-2045	184	0	0.05%
7845	BIOPOTAN	1,057	2021-2046	317	0	0.05%
8251	JTA KOA2	1,000	2022-2047	300	0	0.25%

TOTAL	**30,658**	**8,577**	**3,686**

**Exploitation already signified to the Region*

A brief description of BioSenic's subsidies is given in the table below.

Subsidy Names	Related Company's Projects & Activities	Description
HOMING	Cell therapy product	Study of homing properties of the cell therapy product
MATOB	Cell therapy product	Study of secretion of extracellular matrix proteins of the cell therapy product
PREOB	PREOB	Phase IIB clinical study in osteonecrosis with PREOB
METHODES	PREOB & ALLOB	Optimisation of QC analytical methods
JOINTAIC	JTA	Pharmaceutical development of JTA
STABCELL	PREOB & ALLOB	Optimisation of PREOB and ALLOB stability
ALLOB NU	ALLOB	Preclinical and clinical development of ALLOB
PREOB NU	PREOB	Non-union clinical study with PREOB
ALLOB	ALLOB	Preclinical and clinical development of ALLOB
GXP	Quality system	Set-up of preclinical, clinical and quality control quality systems
MAXBONE	MXB	Pharmaceutical development of MXB
JTA	JTA	Pharmaceutical development of JTA
CRYO	ALLOB	Development of cryopreservation of ALLOB
PREOB ON3	PREOB	Phase III clinical study in osteonecrosis with PREOB
BANK	ALLOB	Optimization of human biological material supply
ALLOB IF	ALLOB	Preclinical and clinical development of ALLOB in spine fusion
MXB BIOPRINTING	MXB	Preclinical development of 3D MXB cell-matrix products
MECA OB	ALLOB	Study of cell mechanisms implicated in chemotaxis and migration of osteoblastic cells
ALLOB SEQ	ALLOB	Study of the ALLOB cells secretome and its impact on the serum profile of key proteins implicated in bone reconstruction in delayed-union fractures phase II study.
LIPO	ALLOB	Influence of obesity and diabetes on osteogenic potential of ALLOB
ALLGEL	ALLOB	Preclinical study of ALLOB for bone repair in osteitis in small animals
JTA-NEXT	JTA	Increased stability of JTA-004 and product development of JTA-NEXT
RUSTUS	ALLOB	Radiographic and tomographic scores during fracture healing
CELLSORT	ALLOB	Characterization of allogenic product by Cell sorting
BIOPOTAN	ALLOB	Short and middle term biodistribution and functional evaluation of allogeneic products in DU murine model
PROFAB	PREOB	Optimisation of PREOB production
JTA PROD	JTA	Optimisation of JTA production
MO SELECT	ALLOB	Optimisation of bone marrow selection

Subsidy Names	Related Company's Projects & Activities	Description
CRYOFIN	ALLOB	Optimisation of ALLOB cryopreservation
EXCIP	PREOB	Development of a new excipient to increase the stability of PREOB
PROSTERIL	ALLOB	Manufacturing of cell therapy products: aseptic risk assessment, detection methods and product protection techniques
ALLOPROD	ALLOB	Increasing the production capacity of allogenic product and optimization of the production process

4.16.1.2 Subsidies

Subsidies granted by the Region are dedicated to funded research programs and patent applications.

Subsidies granted by the Region and amounting to € 5.09 million are related to patent applications (contracts 820020, 920572, 820018, 920571, 820060, 820126, 920569, 820127, 820125, 920570, 1120242, 1320011, 1320145, 1320190, 820019, 820046, 820047, 1120198, 1220075, 1320146, 1120197, 1220076, 1320144, 1220028, and 1220029) together the "**Patent Subsidies**") and research programs (contracts n° 1017112, 6559, 607051, 1217891, 1318272, 1318269 and 1318215).

As of 30 June 2022, BioSenic has been granted subsidies related to patent applications totalling € 1.60 million of which € 1.34 million has been received. The balance will be granted based on statements of expenses to be submitted to the Region.

BioSenic has also been granted subsidies for a total amount of € 3.21 million of which € 2.90 million by the Region to fund:

- 45% of costs of research programs under the contracts with the number 8346, 8353, 8325 and 2020131 for an amount of € 629,000;
- 70% of costs of research programs under the contracts with the number 1017112, 6559, 1217891, 1318272 and 1318269 for an amount of € 1,653,000;
- 80% of costs of research programs under contract n°1318215 for an amount of € 224,000;
- 90% of costs of research program under contract n°7120 for an amount of € 395,000.

And by the European Commission to fund 100% of costs of a research program for an amount of € 0.31 million (contract n° 607051).

These Region and European Commission subsidies for research are not refundable. Out of the abovementioned subsidies € 3.19 million has been effectively paid out on 30 June 2022.

In addition, BioSenic had received non-refundable subsidies from different programs (AWEX, Horizon…) for a total amount of € 274,000.

BioSenic owns the intellectual property rights which would result from the research programs or with regard to a patent covered by a subsidy. Subject to certain exceptions, BioSenic cannot grant to third parties, by way of license, transfer or otherwise, any right to use the patents (with regard to the Patent Subsidies) or the results (with regard to Research Subsidies) without the prior consent of the Region. In addition, certain subsidies contain an obligation for BioSenic to exploit the patent in the countries where the protection was granted and to make an industrial use of the underlying invention.

In case of bankruptcy, liquidation or dissolution, the rights to the patents covered by the Patent Subsidies relating thereto will be assumed by the Region by operation of law unless the subsidy is reimbursed, in case of liquidation or dissolution. If BioSenic would lose its qualification of "small or medium-sized enterprise", the subsidies under the Patent Subsidies will terminate and no additional expenses will be covered by such Patent Subsidies.

4.17 Intellectual property

4.17.1 *Patents and patent applications owned or licensed by BioSenic*

BioSenic's research programmes and product candidates are covered by several patent families (patents and patents applications), which are either owned by BioSenic or licensed to BioSenic. There are three key ALLOB product patents: (i) ULB-028 granted in Europe, Japan, Singapore, Hong-Kong, the US and Canada, (ii) BONE-001 granted in Europe, Japan, Canada, India, Hong Kong, Singapore, South Korea and Australia, and (iii) BONE-017 granted in Australia, Belgium, South Korea and Israel and in pending application in Europe, the US, Japan, China, Canada, India, South Korea, Hong Kong, Singapore, Macau, Thailand, Brazil and Russia. Further JTA-004 is covered by two key patents: (i) BPBONE-0001 is granted in Europe, US, Japan, Australia, Canada, China, Hong Kong, Israel, India, South Korea, Brazil and Singapore, and (ii) BONE-011 is granted in Europe, Australia, Hong Kong, Israel, South Korea, China, Canada and Singapore.

In total, BioSenic's intellectual property portfolio comprises 13 patent families (please see section 4.17.2 below for the intellectual property owned or licensed by Medsenic):

- ULB-028 (WO 2007/093431): Cell populations comprising osteoblastic cells characterised by the expression of certain cell markers, and further comprising the method for obtaining such cell populations.

- BONE-001 (WO 2009/087213): Cell populations comprising osteoblastic cells characterised by the expression of certain cell markers, and further comprising the method for obtaining such cell populations.

- BONE-002 (WO 2009/080749): Therapeutic use of isolated bone-forming cells in the treatment of the inflammatory component of inflammatory rheumatic diseases (IRD).

- BONE-004 (WO 2009/135905): Isolated mesenchymal stem cells (MSC) derived from bone marrow and expressing certain cell-surface markers and methods for obtaining such MSC.

- BONE-006 (WO 2009/135914): Therapeutic use of isolated bone-forming cells in the treatment of bone diseases or conditions associated with immunodeficiency or immunosuppression.

- BONE-011 (WO 2014/049063): Discovery of advantageous properties of solvent/detergent-treated plasma in pharmaceutical formulations, which render the formulations particularly suitable for administration to bone or joints, such as to treat musculoskeletal diseases.

- BPBONE-001 (WO 2009/101194): Intra-articular pharmaceutical composition for use in the treatment and/or the prevention of acute or chronic osteoarticular diseases, such as osteoarthritis, and acute or chronic osteoarticular symptoms (*i.e.*, pain, loss of mobility and/or function).

- BPBONE-002 (WO 2009/101210): Pharmaceutical composition for use in the treatment and/or the prevention of acute or chronic osteoarticular diseases and acute or chronic osteoarticular symptoms, especially osteoarthritis.

- BONE-013 (WO 2016/170112): Method for *in vitro* preservation of cells comprising maintaining adherent mesenchymal stem cells (MSC) or adherent MSC-derived cells in suspension in a composition comprising at least 20% v/v human plasma or human serum or a mixture thereof.

- BONE-017 (WO 2019/076591): Cell populations comprising osteoblastic cells characterised by the expression of certain cell markers, and further comprising the method for obtaining such a cell population.

- BONE-018 (WO 2020/064791): Cell populations comprising osteoblastic cells characterised by the expression of certain cell markers, and further comprising the method for obtaining such a cell population.

- BONE-019 (WO 2020/064793): Methods and uses for determining osteogenic potential of *in vitro* differentiated cells.

- BONE-020 (WO 2020/229526): Improved lyophilized formulations involving hyaluronic acid and plasmatic proteins, and uses thereof.

BioSenic owns the exclusive worldwide license on ULB-028.

Overview of patents and patent applications.

Reference	Publication No	Title (product)	Priority date	Territory	End of term
ULB-028	WO 2007/093431	Osteogenic differentiation of bone marrow stem cells, and osteoprogenitor or osteoblastic cells and populations (ALLOB)	16 Feb 2006	JP SG US CA EP HK	16 Feb 2027 16 Feb 2027 30 Aug 2028 16 Feb 2027 16 Feb 2027 16 Feb 2027
BONE-001	WO 2009/087213	Osteogenic differentiation of bone marrow stem cells and mesenchymal stem cells using a combination of growth factors (ALLOB)	11 Jan 2008	JP SG AU AU-DIV EP CA IN HK KR-DIV (US)	9 Jan 2029 9 Jan 2029 9 Jan 2029 9 Jan 2029 9 Jan 2029 9 Jan 2029 9 Jan 2029 9 Jan 2029 9 Jan 2029 under examination
BONE-002	WO 2009/080749	Human bone-forming cells in the treatment of inflammatory rheumatic diseases (ALLOB)	21 Dec 2007	AU EP HK JP SG CA KR (US)	19 Dec 2028 19 Dec 2028 19 Dec 2028 19 Dec 2028 19 Dec 2028 19 Dec 2028 19 Dec 2028 under examination
BONE-004	WO 2009/135905	Mesenchymal stem cells and bone-forming cells (ALLOB)	7 May 2008	EP SG AU US JP	7 May 2029 7 May 2029 7 May 2029 13 Feb 2030 7 May 2029
BONE-006	WO 2009/135914	Human bone-forming cells in the treatment of conditions and bone diseases associated with immunodeficiency or immunosuppression (cell technology)	7 May 2008	JP-DIV2 HK	7 May 2029 7 May 2029
BONE-011	WO 2014/049063	Formulations involving solvent/detergent-treated plasma (S/D plasma) and uses thereof (JTA-004)	26 Sep 2013	EP SG KR AU HK IL	26 Sep 2033 26 Sep 2033 26 Sep 2033 26 Sep 2033 26 Sep 2033 26 Sep 2033

Reference	Publication No	Title (product)	Priority date	Territory	End of term
				CA	26 Sep 2033
				CN	26 Sep 2033
				(CN-DIV, IN, JP-DIV, US)	under examination
BPBONE-001	WO 2009/101194	Pharmaceutical composition for use in the treatment and/or the prevention of osteoarticular diseases (JTA-004)	13 Feb 2009	EP	13 Feb 2029
				JP-DIV	13 Feb 2029
				CN	13 Feb 2029
				HK	13 Feb 2029
				SG	13 Feb 2029
				AU	13 Feb 2029
				KR	13 Feb 2030
				KR-DIV	13 Feb 2029
				CA	13 Feb 2029
				US	13 Feb 2029
				US-DIV	13 Feb 2029
				IN	13 Feb 2029
				IL	13 Feb 2029
				BZ	13 Feb 2029
BPBONE-002	WO 2009/101210	Pharmaceutical composition for use in the treatment and/or prevention of osteoarticular diseases (JTA cell technology)	16 Feb 2009	EP	16 Feb 2029
				SG	16 Feb 2029
				AU	16 Feb 2029
				JP	16 Feb 2029
				US	16 Feb 2029
				IL	16 Feb 2029
				IN	16 Feb 2029
				CA	16 Feb 2029
BONE-013	WO 2016/170112	*In vitro* preservation of therapeutic cells (cell technology)	23 Apr 2015	AU	23 April 2036
				CA	23 April 2036
				KR	23 April 2036
				EP	23 April 2036
				JP	23 April 2036
				HK	23 April 2036
				SG	23 April 2036
				(CN)	under examination
BONE-017	WO 2019/076591	Method for differentiating mesenchymal stem cells (ALLOB)	20 Oct 2017	AU	25 Sept 2038
				BE	25 Sept 2038
				KR	25 Sept 2038
				IL	25 Sept 2038
				(EP, US, CN, JP, BR, RU, HK, MA, IN, SG, TH, CA)	under examination
BONE-018	WO 2020/064791	Method for differentiating mesenchymal stem cells (ALLOB)		Belgium (Australia, Brazil, China, Europe, India, Indonesia, Israel, Japan, Korea, Malaysia, Mexico, Russia, Singapore, Taiwan, Thailand, US)	25 Sep 2039 under examination
BONE-019	WO 2020/064793	Method for assessing the osteogenic properties of a cell product (ALLOB)		Belgium (Australia, China, Europe, Korea, Japan, Singapore, Thailand, US)	25 Sep 2039 under examination
BONE-020	WO 2020/229526	Freeze-dried cake suitable for rapid resuspension (JTA-004)		Belgium	13 May 2040 under examination

Reference	Publication No	Title (product)	Priority date	Territory	End of term
				(other national entries planned by the end of 2021)	

Overview of patent ownership and related contracts.

Reference	Product (Clinical stage)	Owner(s)	Contract(s)
ULB-028	ALLOB (Phase IIb)	Université libre de Bruxelles (ULB)	Exclusive, sublicensable, worldwide license to BioSenic
BONE-001	ALLOB (Phase IIb)	BioSenic SA	BioSenic grants an exclusive right to Glob-Co SRL for veterinary applications
BONE-002	ALLOB (Phase IIb)	BioSenic SA	BioSenic grants an exclusive right to Glob-Co SRL for veterinary applications
BONE-004	ALLOB (Phase IIb)	BioSenic SA	
BONE-006	Cell technology	BioSenic SA	
BONE-011	JTA-004 (Phase III)	BioSenic SA (50%) Glob-Co SRL (50%)	A worldwide exclusive license has been granted to Glob-Co SRL on veterinary applications
BPBONE-001	JTA-004 (Phase III)	BioSenic SA (50%) Glob-Co SRL (50%)	A worldwide exclusive license has been granted to Glob-Co SRL on veterinary applications
BPBONE-002	JTA cell technology	BioSenic SA (50%) Glob-Co SRL (50%)	A worldwide exclusive license has been granted to Glob-Co SRL on veterinary applications
BONE-013	Excipient for cell products	BioSenic SA	BioSenic grants a worldwide and exclusive right to Glob-Co SRL for veterinary applications
BONE-017	ALLOB (Phase IIb)	BioSenic SA	BioSenic grants a worldwide and exclusive right to Glob-Co SRL for veterinary applications
BONE-018	ALLOB (Phase IIb)	BioSenic SA	BioSenic grants a worldwide and exclusive right to Glob-Co SRL for veterinary applications
BONE-019	ALLOB (Phase IIb)	BioSenic SA	BioSenic grants a worldwide and exclusive right to Glob-Co SRL for veterinary applications
BONE-020	JTA-004 (Phase III)	BioSenic SA	BioSenic grants a worldwide and exclusive right to Glob-Co SRL for veterinary applications

4.17.2 *Overview of intellectual property owned or licensed by Medsenic*

Patents owned by Medsenic

- Method for treating multiple sclerosis using arsenic trioxide

Assignee	Country	Priority date	Country of priority	Date of filing	Application number	Date of Publication	Publication number	Date of patent	Patent number	Status	Independent claim	Expiration date
MEDSENIC	USA			09/05/2017	15/590254			21/07/2020	10716807	ISSUED	1. A method of treating relapsing-remitting multiple sclerosis in a patient, comprising administering	09/05/2037
MEDSENIC	PCT	09/05/2017	US	04/05/2018	PCT/EP2018/061614	15/11/2018	WO2018/206465			LAPSED	1. Arsenic trioxide, for use as a medicament for treating multiple sclerosis.	
MEDSENIC	CHINA	09/05/2017	US	04/05/2018	201880030806.1	17/03/2020	CN110891580A			ONGOING EXAMINATION	(amended claims _15.07.2021) 1. Use of arsenic trioxide, for the manufacture of a medicament for treating relapsing-remitting	04/05/2038
MEDSENIC	EUROPE	09/05/2017	US	04/05/2018	18722530.5	18/03/2020	3621628			ONGOING EXAMINATION	(amended claims_17.06.2020) 1. Arsenic trioxide, for use as a medicament for treating multiple sclerosis.	04/05/2038

- Use of an arsenic compound for treating a cytokine storm

Assignee	Country	Priority date	Country of priority	Date of filing	Application number	Date of Publication	Publication number	Date of patent	Patent number	Status	Expiration date
MEDSENIC	EUROPE			03/04/2020	20168111.1					APPLICATION WITHDRAWN	
MEDSENIC	EUROPE			22/10/2020	20306261.7					ONGOING EXAMINATION	22/10/2040
MEDSENIC	PCT	03/04/2020 22/10/2020	EP EP	06/04/2021	PCT/EP2021/058975					ONGOING EXAMINATION	03/10/2022

- Use of metal ions to potentiate the therapeutic effects of arsenic (ArsciCop)

Assignee	Country	Priority date	Country of priority	Date of filing	Application number	Date of Publication	Publication number	Status	Expiration date
MEDSENIC	CHINA			31/05/2019	201910469782.6			APPLICATION WITHDRAWN	
MEDSENIC	EUROPE			21/05/2019	19305644.7			APPLICATION WITHDRAWN	
MEDSENIC	PCT	21/05/2019	EP	20/05/2020	PCT/EP2020/064189	26/11/2020	WO2020/234414	LAPSED	
MEDSENIC	AUSTRALIA	21/05/2019	EP	20/05/2020	2020280911			ONGOING EXAMINATION	20/05/2040
MEDSENIC	CANADA	21/05/2019	EP	20/05/2020	3138472			ONGOING EXAMINATION	20/05/2040
MEDSENIC	CHINA	21/05/2019	EP	20/05/2020	202080040613.1			ONGOING EXAMINATION	20/05/2040
MEDSENIC	EUROPE	21/05/2019	EP	20/05/2020	20726163.7			IN THE PROCESS OF FILING	20/05/2040
MEDSENIC	JAPAN	21/05/2019	EP	20/05/2020	En attente			ONGOING EXAMINATION	20/05/2040
MEDSENIC	RUSSIA	21/05/2019	EP	20/05/2020	2021137699			ONGOING EXAMINATION	20/05/2040
MEDSENIC	USA	21/05/2019	EP	20/05/2020	17/611975			ONGOING EXAMINATION	20/05/2040

Overview of intellectual property for which Medsenic holds a valid license from a third party

- CNRS: use of arsenic therapy for autoimmune and inflammatory diseases

Assignee	Country	Title	Priority date	Country of priority	Priority number	Date of filing	Application number	Date of Publication	Publication number	Date of patent	Patent number	Status	Abstract	Expiration date
CNRS	FRANCE	THERAPIE PAR L'ARSENIC DU SYNDROME AUTOIMMUNLYMPHOPROLIFERATIF DE TYPE APLS CHEZ LA SOURIS COMME CHEZ L'HOMME	/	/	/	26.04.2002	205276	31.10.2003	2838965	25.06.2004	2838965	ISSUED	THERAPIE PAR L'ARSENIC DU SYNDROME AUTOIMMUNLYMPHOPROLIF ERATIF DE TYPE APLS CHEZ LA SOURIS COMME CHEZ L'HOMME.	26/04/2022
CNRS	CANADA	ARSENIC THERAPY FOR APLS-TYPE AUTOIMMUNE LYMPHOPROLIFERATIVE SYNDROME IN MICE AND HUMANS	26/04/2002	FRANCE	FR02/05276	25/04/2003	PCT/FR03/001314	06/11/2003	2003/090766	08/03/2011	CA2483764	ISSUED	The invention relates to the use of an arsenic compound for the preparation of a medicament that is used to treat autoimmune diseases.	25/04/2023
CNRS	EUROPE	ARSENIC THERAPY FOR AUTOIMMUNE DISEASES	26/04/2002	FRANCE	FR0205276	25.04.2003	03740670.9	06.11.2003	WO 2003/090766	25.11.2009	EP1499330	ISSUED	The invention relates to the use of an arsenic compound for the preparation of a medicament that is used to treat autoimmune diseases.	25/04/2023
CNRS	USA	ARSENIC THERAPY FOR AUTOIMMUNE AND/OR INFLAMMATORY DISEASES IN MICE AND HUMANS	26/04/2002	FRANCE	FR0205276	08/06/2009	12/480,299	03/12/2009	US2009/0297624	12/03/2013	US8,394,422	ISSUED	The invention relates to the use of an arsenic compound for the preparation of a medicament that is used to treat autoimmune or inflammatory diseases.	08/06/2029
CNRS	USA	ARSENIC THERAPY FOR APLS-TYPE AUTOIMMUNE LYMPHOPROLIFERATIVE SYNDROME IN MICE AND HUMANS	26/04/2002	FRANCE	FR0205276	02/10/2008	12/244,732	16/04/2009	US2009/0098216	30/07/2013	US8,497,300	ISSUED	The invention relates to the use of an arsenic compound for the preparation of a medicament that is used to treat an APLS type autoimmune disease.	02/10/2028

- Phebra: Oral formulation of arsenic trioxide for use in various immunopathologies

Assignee	Country	Title	Application number	Publication Date	Publication number	Date of patent	Patent number	Status	Expiration date
PHEBRA	AUSTRALIA	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	2016212703				2016212703	Registered	29/01/2036
PHEBRA	BRAZIL	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	BR112017016252-0					Pending	29/01/2036
PHEBRA	CANADA	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	2974843					Pending	29/01/2036
PHEBRA	CHINA	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	201680008050.1			16/10/2020	ZL201680008050.1	Registered	29/01/2036
PHEBRA	EUROPE	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	16742586.7		3250213			Pending	29/01/2036
PHEBRA	HONG KONG	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	17112586.6				1238556	Registered	29/01/2036
PHEBRA	ISRAEL	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	253631				253631	Registered	29/01/2036
PHEBRA	INDIA	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	201717026810					Pending	
PHEBRA	JAPAN	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	2017-558598			02/09/2020	6749940	Registered	29/01/2036
PHEBRA	REPUBLIC OF KOREA	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	10-2017-7024098					Pending	29/01/2036
PHEBRA	MEXICO	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	MX/a/2017/009659				MX382596	Registered	29/01/2036
PHEBRA	NEW ZEALAND	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	734043					Pending	29/01/2036
PHEBRA	SINGAPORE	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	11201706150Q				11201706150Q	Registered	29/01/2036
PHEBRA	USA	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	15/547102			03/12/2019	10493099	Registered	29/01/2036
PHEBRA	REPUBLIC OF SOUTH AFRICA	COMPOSITIONS CONTAINING ARSENIC AND THEIR USE IN METHODS OF TREATMENT	2017/05400			18/12/2019	2017/05400	Registered	29/01/2036
PHEBRA	UNITED ARAB EMIRATES	ARSENIC COMPOSITIONS	P6000781/2019					Pending	02/08/2037
PHEBRA	AUSTRALIA	ARSENIC COMPOSITIONS	2017368444				2017368444	Registered	02/08/2037
PHEBRA	BRAZIL	ARSENIC COMPOSITIONS	BR112019007498-8					Pending	02/08/2037
PHEBRA	CANADA	ARSENIC COMPOSITIONS	3041357					Pending	02/08/2037
PHEBRA	CHILE	ARSENIC COMPOSITIONS	201901422					Pending	
PHEBRA	CHINA	ARSENIC COMPOSITIONS	201780069613.2					Pending	
PHEBRA	EUROPE	ARSENIC COMPOSITIONS	17876251.4		3548044			Pending	02/08/2037
PHEBRA	HONG KONG	ARSENIC COMPOSITIONS	19130928.5					Pending	
PHEBRA	ISRAEL	ARSENIC COMPOSITIONS	265986					Pending	
PHEBRA	INDIA	ARSENIC COMPOSITIONS	201917023361					Pending	
PHEBRA	JAPAN	ARSENIC COMPOSITIONS	2019-524985	16/01/2020	JP 2020500845 A			Pending	
PHEBRA	REPUBLIC OF KOREA	ARSENIC COMPOSITIONS	10-2019-7013881					Pending	
PHEBRA	MEXICO	ARSENIC COMPOSITIONS	MX/a/2019/006107				384297	Registered	02/08/2037
PHEBRA	NEW ZEALAND	ARSENIC COMPOSITIONS	752214					Pending	02/08/2037
PHEBRA	PERU	ARSENIC COMPOSITIONS	000939-2019-DIN	24/10/2019	PE20191544 A1			Pending	02/08/2037
PHEBRA	SAUDI ARABIA	ARSENIC COMPOSITIONS	519401885					Pending	02/08/2037
PHEBRA	SINGAPORE	ARSENIC COMPOSITIONS	11201903064S				11201903064S	Registered	02/08/2037
PHEBRA	TAIWAN	ARSENIC COMPOSITIONS	106126050	16/06/2018	TW201821087 A			Pending	
PHEBRA	USA	ARSENIC COMPOSITIONS	16/465693	16/01/2020	US 2020/0016196 A1		11241453	Registered	
PHEBRA	REPUBLIC OF SOUTH AFRICA	ARSENIC COMPOSITIONS	2019/02156			27/01/2021	2019/02156	Registered	02/08/2037

4.17.3 *Trademarks and designs of BioSenic*

On the date of this Registration Document, BioSenic obtained trademarks for ALLOB, MXB and JTA products. ALLOB was internationally registered under class 5 and/or class 42 in the Benelux, the EU, the US, Canada, Japan, Taiwan, Hong Kong and South Korea. International registration of MXB under class 5 and class 42 was obtained in September 2015 in EU, US, Japan, Korea, Australia, Canada, Israel and Hong Kong. International registration of JTA under class 5 and/or class 42 was obtained in September 2015 in the EU, the US, Japan, Korea, China, Australia, Canada Israel and Hong Kong.

With regard to the designs, the following names and logos are respectively protected for BioSenic and Medsenic:

4.18 Manufacturing

4.18.1 *Biosenic*

BioSenic aims to achieve the following objectives through its manufacturing process:

- Provide adequate production capacity at all stages of the development of BioSenic;
- Continuous optimization of processes to reduce costs and increase capacity of the available infrastructure;
- Protection of knowhow through in-house production and strictly manage relations with contract manufacturing organisation.

The cellular based product manufactured has been manufactured by BioSenic until November 2020. Sufficient number of doses have been produced and release to support the current clinical trial ALLOB-TF2 with a comfortable overage. These batches have the following product specifications:

- ALLOB is a cellular-based product consisting in viable human allogeneic bone-forming cells derived from *ex vivo* cultured bone marrow mesenchymal stromal cells. They are not genetically modified and not combined.
- The product is a medicinal product which has been developed in compliance with the European legislation and has been classified as a tissue engineered product within the European regulatory framework governing the advanced therapy in Europe (Regulation 1394/2007). Under Regulation 1394/2007, a tissue engineered product means a product that contains or consists of engineered cells (cells that have been subject to substantial manipulation or are not intended to be used for the same function in the recipient as in the donor), administered to human beings with a view to regenerating, repairing or replacing a human tissue.
- In the US, ALLOB is a cellular therapy as defined in the–C–R – Code of Federal Regulations Title 21, part 1271 "Human Cells, Tissues, and Cellular and Tissue-based products" and regulated as biological products under section 351 of the PHS Act (42 U.S.C. 262) and the Federal Food, Drug, and Cosmetic Act (the act) and will fall under the Biological License Application regulation.
- Today based on one Bone Marrow collection from a healthy donor, up to 100.000 doses of ALLOB drug product can be produced. The drug product is cryo-preserved allowing easy shipment to the patient and ready to be used injectable medicinal product.

The protein-based products manufactured by the third-party (since the first clinical batches) have the following specifications:

- JTA-004 is an off-the-shelf protein solution containing three active pharmaceutical ingredients (API): the virus-inactivated pooled fresh frozen human plasma, the sodium hyaluronate (HA) and the α2-adrernergic receptor agonist 2-(2,6-dichlorophenylamino)-2-imidazoline hydrochloride (clonidine HCl), developed for the treatment of patients suffering from osteoarthritis (OA).

- The product is a medicinal product which has been developed in compliance with the European legislation. The product is lyophilized and should be resuspended just before intra-articular injection into the patient knee.

The manufacturing process of BioSenic's products is as follows:

- ALLOB, for current clinical trials, was manufactured in BioSenic certified facilities[72] until November 2020.

- The ALLOB manufacturing process consists in the *ex vivo* culture of human bone marrow-derived mesenchymal stromal cells in order to generate human bone-forming cells. ALLOB manufacturing processes have been developed to minimize the number of cell manipulations and to limit the number of reagents entering in contact with the cells. ALLOB is manufactured following standardized and validated manufacturing process by trained operators. Manufacturing process includes several key steps. At the end of manufacturing, ALLOB cells are collected, formulated in excipient, placed in tubes aseptically filled and then cryopreserved. Each ALLOB batch is controlled for safety, identity and potency prior release.

- Future ALLOB production campaigns will be done in collaboration with a Contract Manufacturing Organisation.

- The manufacturing process of JTA is based on a mixing of the different APIs followed by a lyophilisation cycle.

- The production of JTA is done in collaboration with a Contract Manufacturing Organisation.

Facilities and capacity:

- BioSenic has been producing at its facility based at the Biopark in Gosselies which is GMP approved. The available capacity met the requirements for the current pre-clinical, clinical developments and the first commercialization steps.

- BioSenic's production activities were transferred to the new facilities at the BioPark of Gosselies (south of Brussels) in the course of 2018. The new facility has been inspected by the inspectorate of the Belgian Federal Agency for Medicines and Health Products (FAMHP). The GMP certificate has been issued by the FAMHP on 19 December 2017 and the authorization to manufacture the ALLOB investigational medical products according to GMP on 19 January 2018.

- The registration of the Gosselies site as "Structure Intermediaire" for human body material, according the Belgian Royal Decree of 28 September 2009 has been introduced with the Blood and Human Body Material division of the FAMHP. The site has been inspected successfully on 22 March 2018.

- BioSenic is also registered as Tissue Importer Establishment according to the Belgian Royal Decree of 28 September 2009 since March 2020 after being successfully inspected by the Blood and Human Body Material division of the FAMHP.

[72] BioSenic received a GMP agreement for its facilities at the Plateforme Wallonne de Therapie Cellulaire (PWTC) building in Gosselies from the FAMPH on 21 November 2017. A renewal of the authorization was received following an inspection on 24 December 2019.
In March 2021, BioSenic renewed its GMP agreement to cover Quality Control and Supply Activities (Manufacturing Activities have been removed from the agreement). The BioSenic received authorization under number 1698 IMP for the manufacturing, quality control, importation and intra-EU distribution for ALLOB and JTA.

4.18.2 *Medsenic*

Medsenic aims to achieve the following objectives:

- Provide adequate production capacity of any galenic form of arsenic trioxide at all stages of the development of BioSenic;
- Continuous optimization of processes to reduce costs and increase capacity of the available external or internal manufacturing infrastructures;
- Protection of know-how through in-house production and strictly manage relations with contract manufacturing organisations.

The production of arsenic trioxide is a complex process, but handled by several chemical companies (ChemCon, Umicore, etc.) and no specific difficulties are envisioned concerning the supply of raw material (As).

The IV formulation ("**Arscimed**") is protected by Medsenic's know-how and allows its manufacturing by any contracting CDMO.

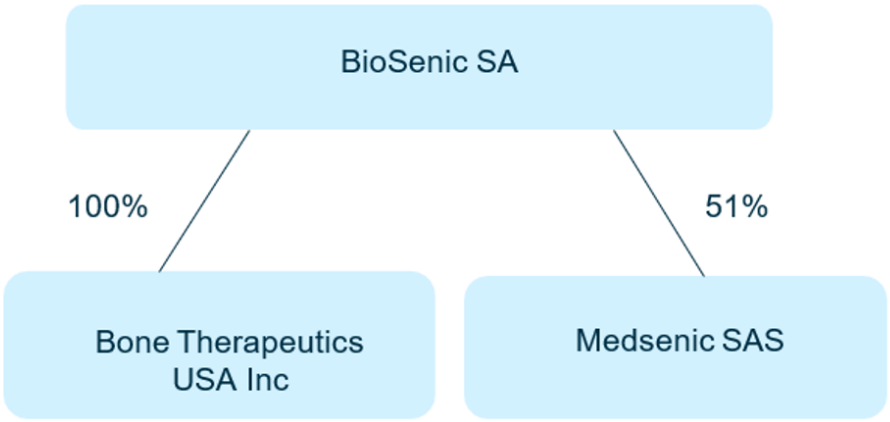
The oral formulation of arsenic trioxide ("**ArsciCor**" / "**OATO**") is under exclusive licencing from Phebra and supply is subject to the terms of a marketing and supply agreement signed in 2021 with Phebra. The manufacturing facilities were in Australia but are being established in the United Kingdom. Phebra will supply OATO through a contract manufacturer based in the United Kingdom, which is chosen and selected by Phebra.

BioSenic Group intends to develop an new oral formulation arsenic trioxide / copper combination ("**ArsciCop**"), granting BioSenic Group the exclusive right to use such OATO/copper formulation. Pre-clinical studies on animals have indicated a potential for allowing decreased amounts of administered arsenic for equivalent therapeutic effects and less reversible adverse effects. The further development of ArsciCop will in principle require a Phase I clinical trial to establish the safety and bioavalability and bioequivalence.

5 ORGANISATIONAL STRUCTURE

5.1 Organigram

At the date of this Registration Document, BioSenic has the following affiliates:



France

- Medsenic, a simplified joint-stock company (*société par actions simplifiée*), with registered office at no. 204 Avenue de Colmar, 67100 Strasbourg, France and registered with the commercial register of Strasbourg under number 527 761 530. Medsenic was incorporated on 21 October 2010 for a duration of 99 years, unless dissolved earlier or unless the duration is extended.

United States of America

- Bone Therapeutics USA, an incorporation company with registered office at 10 Milk Street, Suite 1055, 02108 MA Boston and with identification number 001166538. Bone Therapeutics USA Inc. was incorporated on 26 March 2015.

BioSenic's voting power held in Medsenic SAS and in Bone Therapeutics USA Inc is identical to the proportion of ownership interest held.

5.2 Information on holdings

Following the completion of the Contribution, BioSenic acquired 51% of the shares issued by Medsenic. The remaining shares of Medsenic continue to be held by the existing shareholders of Medsenic, of which the largest three shareholders are Mr François Rieger (holding 15.11 %), Ms Véronique Pomi-Schneiter (holding 7.56 %) and the fund CAP INNOV EST (holding 7.98 %).

Pursuant to a shareholders' agreement dated 24 October 2022 between BioSenic and the shareholders of Medsenic holding the remaining 49% of the shares of Medsenic (the "**Minority Shareholders**"), the Minority Shareholders agree to contribute all of their remaining Medsenic shares into BioSenic in two instalments, each time for half of their remaining shareholding. These additional contributions shall take place at the same time as the first two equity raises of BioSenic (except for capital increases relating to the exercise of warrants and conversions of convertible bonds, but including the capital increase carried out pursuant to the ALLOB warrants, if the conditions for execution are met) to be carried out within around 7 to 15 months from Completion Date in order to finance the continuation of BioSenic's activities. These additional contributions are not contemplated before such timeframe, and therefore also not together with any placement of new securities that is envisaged by BioSenic in Q1 2013 (see the Securities Note for more information on the BioSenic Group's working capital and funding objectives). In the event that the conditions for the exercise of the ALLOB

warrants (and the capital increase resulting from such exercise) are not met, the contribution of the remaining half of the shares will be postponed to the next capital increase of BioSenic which shall take place in 24 months from the Completion Date.

Except in case of material adverse change in BioSenic's assets, liabilities or clinical trials, these contributions will be made on the basis of Medsenic's valuation as used for the Contribution and by using the same price per share of BioSenic as used for the simultaneous equity raise (which shall not be lower than the valuation of BioSenic used for the Contribution). However, if Medsenic obtains extended development and commercialisation rights from Phebra (including for the US, UK and Japan) under economically favourable terms for Medsenic, the valuation of any shares not yet contributed to BioSenic will be revaluated by an independent expert. Positive events can also be expected to lead to a higher share price and could therefore also result in a positive revaluation of BioSenic.

The contribution of the remaining 49% should occur within two years following the Completion Date (i.e., by 24 October 2024) and if BioSenic has not completed a capital increase within these 2 years, the contribution of their remaining Medsenic shares will be made in one instalment based on the same valuations as used for the Contribution.

BioSenic also holds 100% of the shares issued by Bone Therapeutics USA Inc.

6 CORPORATE GOVERNANCE

6.1 General

This Section summarizes the rules and principles on the basis of which the corporate governance of BioSenic has been organized pursuant to Belgian Code on Companies and Associations, and BioSenic's corporate governance charter (the "**Corporate Governance Charter**") adopted by the Board of Directors on 25 August 2020 in accordance with the new Belgian Corporate Governance Code 2020 (the "**Corporate Governance Code**" or "**CGC**") by the Royal Decree of 12 May 2019 designating the corporate governance code to be complied with by listed companies published on 17 May 2019 in the Belgian Official Gazette (*Moniteur belge*). The Corporate Governance Charter is available on BioSenic's website (https://biosenic.com/investors). A copy of the Corporate Governance Charter can be obtained free of charge at the registered office of BioSenic.

The text of the Corporate Governance Code is available on the website of the Corporate Governance Committee at https://www.corporategovernancecommittee.be/en/over-de-code-2020/2020-belgian-code-corporate-governance.

This Section also provides a summary overview of Medsenic's corporate governance of Medsenic as set out in BioSenic's articles of association and in the Medsenic Shareholders' Agreement. The articles of association of Medsenic are attached to this Registration Document as Annex 2.

6.2 Compliance with the Corporate Governance Code

The Board of Directors intends to comply with the provisions of the Corporate Governance Code but believes that the size and the current state of development of BioSenic justifies certain deviations. These deviations are further detailed in Section 6.3 hereinafter.

The Corporate Governance Charter includes the following main chapters:
- Definitions;
- Structure and organisation;
- Shareholders;
- Transactions between BioSenic and its Board Members or the Members of the Management Team;
- Transactions involving Shares of BioSenic;
- Application of the CGC; and
- Miscellaneous.

The Appendices to the Corporate Governance Charter include the following:
- Terms of Reference of the Board;
- Policy for Transactions and other Contractual Relationships between BioSenic and its Board Members or Members of the Management Team;
- Rules for the Prevention of Market Abuse;
- Terms of Reference of the Audit Committee;
- Terms of Reference of the Nomination and Remuneration Committee; and
- Terms of Reference of the Management Team.

6.3 Deviations from the Corporate Governance Code

The Board of Directors of BioSenic complies with the Corporate Governance Code. However, BioSenic deviates from the following principles:

- *Remuneration of non-executive directors in BioSenic's shares (principle 7.6):* given the legal constraints under Belgian law to purchase own shares in order to grant these to relevant beneficiaries, the non-executive directors of BioSenic do not receive a portion of their remuneration in BioSenic's shares.

- *No grant of stock options to non-executive directors (principle 7.6):* given the technical impossibility for BioSenic to purchase its own shares and grant such existing shares of BioSenic to non-executive directors, those directors can receive warrants (subscription rights) to subscribe for new shares under the template 2020 Warrants Plan. This plan provides that the warrants shall vest and be exercisable at any time and without restriction unless BioSenic decides that these warrants may not be exercised before the end of the third calendar year following the calendar year during which the warrants were offered and indicates this in the offer thereof. Those grants can attract profiles with high potential, incentivize the beneficiaries in the development of BioSenic, and play a role as retention tool of the teams.

- *Minimum threshold of shares to be held by the executives (principle 7.9):* at the date hereof, BioSenic has not fixed any minimum threshold for the detention of shares by the Executive Directors. However, warrants on BioSenic's shares were granted to the ex-CEO and ex-CFO on 28 May 2020. These warrants shall vest and be exercisable at any time and without restriction unless BioSenic decides that these warrants may not be exercised before the end of the third calendar year following the calendar year during which the warrants were offered and indicates this in the offer thereof (which was not done for the warrants granted on 28 May 2020).

- *Appointment of a company secretary (principle 3.19):* At the date hereof, no company secretary has been appointed by the Board. Since the IPO (6 February 2015), the Board of Directors has assigned the law firms Allen & Overy (Belgium) LLP (until March 2019) and Osborne Clarke SCRL / CVBA (since March 2019) to provide services in this respect, including the drafting of minutes of Board meetings. Given the limited size of BioSenic, the Board of Directors is of the opinion that there is no need to appoint a full time Company secretary.

- *The audit committee, the remuneration committee and the nomination committee should be composed of at least three board members (principle 4.3):* At the date hereof, the Audit Committee and the Nomination and Remuneration Committee of BioSenic are only composed of 2 members. The Board of Directors is of the opinion that the current members of these two committees have the necessary independence, skills, knowledge, experience and capacity to execute their duties effectively.

- *Promotion of diversity (principle 4.23)*: BioSenic has not adopted a diversity policy yet. However, BioSenic ensures that it meets the minimum gender diversity requirement at the level of the Board of Directors of BioSenic.

  Article 7:86 of the Belgian Code on Companies and Associations imposes that at least one third of the board members are of a different gender than the other board members. The minimum is rounded to the closest unit and if the director is a legal person, his or her gender shall be determined by that of its permanent representative. The Board of Directors of BioSenic complies with Belgian laws on gender as it is currently composed of 7 Directors, out of which two are of a different gender.

  In addition, except for the Audit Committee, one third of the members of the Executive Committee are of a different gender and half of the members of the Remuneration and Nomination Committee are of a different gender.

  As regards the employees not included above, BioSenic records 86% female employees and 14% male employees.

In accordance with the Corporate Governance Code, the Board of Directors will review the Corporate Governance Charter from time to time and adopt such amendments thereto as it deems necessary and appropriate. The Corporate Governance Charter and BioSenic's articles of association are available at BioSenic's website and at its registered office and can be obtained free of charge.

6.4 Board of Directors

6.4.1 *Composition of the Board of Directors*

6.4.1.1 Composition of the Board of Directors of BioSenic SA

The Board of Directors is the main decision-making body of BioSenic and has full power to perform all acts that are necessary or useful to accomplish BioSenic's corporate purpose, save for those acts for which only the shareholders' meeting of BioSenic has the required powers in accordance with applicable laws or BioSenic's articles of association. The responsibility for the management of BioSenic is entrusted to the Board of Directors as a collegial body.

The Board of Directors pursues the long-term success of BioSenic by providing entrepreneurial leadership, while assessing and managing the risks of BioSenic.

The Board of Directors is composed of at least three members as set out in the articles of association and the Corporate Governance Charter.

At least half of the members of the Board of Directors are Non-Executive Directors, and at least three members of the Board of Directors are Independent Directors, within the meaning of inter alia Article 7:87, §1 of the Belgian Code on Companies and Associations.

The members of the Board of Directors are appointed by the shareholders' meeting of BioSenic for a renewable term of maximum four years. If a director mandate becomes vacant, the remaining members of the Board of Directors will have the right to temporarily appoint a new director to fill the vacancy. The shareholders' meeting can revoke the mandate of any director at any time.

In principle the Board of Directors meets at least four times a year, and also whenever a meeting is deemed necessary or advisable for its proper functioning. A meeting of the Board of Directors is validly constituted if there is a quorum, which requires that at least half of the members of the Board of Directors or present or represented during the board meeting. In any event, the Board of Directors can only validly deliberate if at least two Directors are present in person.

The table below provides an overview of the current mandates at the date of this Document:

Name	Position	Start or renewal of mandate	End of mandate	Nature of mandate	Professional address
François Rieger	Chairman	2022	2026	Executive	27, rue des Délices, 1203 Geneva, Switzerland
Véronique Pomi-Schneiter	Executive Director	2022	2026	Executive	26, route de la Robardière, 44120 Vertou, France
Finsys Management SRL, represented by Jean-Luc Vandebroek	Director	2022	2026	Non-Executive	Rue Charles Plisnier 25, 1420 Braine l'Alleud, Belgium
Capital Grand Est, represented by Jean-François Rax	Director	2022	2026	Non-Executive	Avenue de l'Europe 16, Immeuble Sxb1, 67300 Schiltigheim, France
Innoste SA, represented by Jean Stéphenne	Director	2018	2025	Independent	Avenue Alexandre 8, 1330 Rixensart, Belgium
Revital Rattenbach	Director	2022	2026	Independent	Rue des Ecouffes 1, 75004 Paris, France

Name	Position	Start or renewal of mandate	End of mandate	Nature of mandate	Professional address
Yves Sagot	Director	2023	2026	Independent	Chemin de la Combe, 73100 Tresserve, France

A brief overview of the relevant experience of the members of the Board of Directors is set out below.

- **Mr François Rieger** holds a PhD in Neurobiology, which he completed in 1973 at the Ecole Normale Supérieure de Paris, rue d'Ulm. His work allowed him to purify and characterize the structure of acetylcholinesterase, the main current target of Alzheimer's disease treatments. He then went on to study the cholinergic synapse and neuromuscular pathologies related to deficient functioning of nerve impulse transmission. He was appointed Visiting Assistant Professor of Neuropathology at Harvard University from 1975 to 1978, and upon his return to France, he developed a research team in a joint INSERM/CNRS unit at the Pitié-Salpêtrière Hospital on the role of ion channels in the function and morphogenesis of mammalian nerve and muscle. A stay from 1985 to 1988, at the Rockfeller University in New-York, in the laboratory of Professor Gerald Edelman, Nobel Prize, as Senior Associate Researcher, allowed him to extend his field of investigation to the field of Cellular Adhesion Proteins and to demonstrate the implication of N-CAM and cytotactin/tenascin in synaptic morphogenesis and innervation-reinnervation phenomena. In 1990, he established in his laboratory a new line of research on the primary factors of Multiple Sclerosis, an autoimmune demyelinating disease in humans, which led his laboratory to characterize a gliotoxic protein factor in MS patients and, later, in 1998, to discover in humans a fossil retrovirus still active through its envelope protein, and involved in the triggering of the autoimmune cascade in the disease. In 2007, F. Rieger created in Geneva a Binational Scientific Interest Group on the Broader Theme of Aging and Longevity, with the participation of several Franco-Swiss scientific leaders, intended to take into account both the molecular and societal aspects of this largely unexplored field. F. Rieger is Director of Research at the CNRS and author or co-author of more than 175 international publications in the field of Life Sciences and Neurosciences. F. Rieger is currently leading an Innovative Project concerning the therapeutics of Autoimmune Diseases and a co-Founder of the biotech Medsenic. He has led two successful Phase II clinical trials on Systemic Lupus erythematosus and Graft-versus Host Disease, opening a solid path towards the use of several formulations of active arsenic for the treatment of chronic, autoimmune diseases.

- **Ms Véronique Pomi-Schneiter** has 30 years of experience in operational leadership, human resource management, resource utilisation and organisational development in highly decentralised organisations. Graduated of the IFG Lorraine Business School, she has been a consultant, manager and director of companies in the consulting and human resources sector. In 2010, Véronique decided to found Medsenic with Prof François Rieger, to bring her expertise in business development and fundraising. Her experience includes streamlining operations, developing, and implementing organisational solutions and applying global HR expertise to influence the achievement of strategic objectives.

- **Mr Jean-Luc Vandebroek (permanent representative of Finsys Management SRL)** is a seasoned finance executive with extensive international finance experience at major public and privately-owned companies. Jean-Luc has built a successful career spanning 15 years at the Belgian-US retailer, Delhaize Group (now Ahold Delhaize). During this period, he held various senior financial positions with increasing responsibility, including roles as Corporate Director Finance Europe and US and Vice President Finance BeLux. He later became Group Chief Financial Officer at Fluxys, a listed, pan-European gas infrastructure group, where he was responsible for the financing of large infrastructure investments using diverse forms of funding on capital markets. Prior to joining Bone Therapeutics, Jean-Luc served as Director and Chief Financial Officer of Moteo Two Wheels and Bihr Europe, the motorcycle division of Alcopa Group, a Belgian family holding with an annual revenue of

around EUR 1.7 billion. Until 2021 Jean-Luc was active within Bone Therapeutics as CFO. Today he is Chief Financial Officer at Hyloris Pharmaceuticals.

- **Mr Jean Stéphenne (permanent representative of Innoste SA)** is a highly experienced life sciences executive, who has served in senior leadership roles at a large number of biotechnology and pharmaceutical companies, most recently as Chairman of BioSenic. Together with the Board of BioSenic, he oversaw the clinical development and European marketing authorization of its most advanced allogeneic cell therapy product for the treatment of complex perianal fistulas in Crohn's disease. Jean Stéphenne was also previously a Member of the Corporate Executive Team of GlaxoSmithKline (GSK) and Chief Executive of GSK Biologicals (now GSK Vaccines). During his 40-year tenure, he grew a company of 50 people into a fully integrated worldwide leader in vaccine development, with 12,000 employees. Jean Stéphenne currently serves on the Board of various life sciences companies including OncoDNA, CureVac, Vaxxilon and Bepharbel. Previous board positions include Besix Group, BNP Paribas Fortis, GBL and IBA. For his contribution to the Belgian economy and global public health, he has received diverse business recognitions and was honored with various titles by the Belgian and British governments.

- **Mr Jean-François Rax** graduated as a Biochemistry and Biotechnology engineer from INSA Lyon and joined Capital Grand Est in 2014, an independent regional private equity firm approved by the AMF with more than €180M of assets under management and which has been supporting more than 60 SMEs and start-ups in the French Grand Est Region since 2012. With 12 years of experience in venture capital & seed financing and before that 4 years in consulting and technology transfer (Inserm Transfert Initiative, Alcimed, Inra Transfert, Inserm Transfert), Jean-François is now a member of the Executive Board / Director of Investments at Capital Grand Est.

- **Ms Revital Rattenbach** is a seasoned entrepreneur in biotech with 15+ years of experience, Revital Rattenbach is the founding CEO of 4P pharma, a clinical stage biotech specialized in drug regeneration for treating severe diseases including osteoarthritis and acute and chronic pulmonary complications of viral infections (for more information, see https://4p-pharma.com/). Under her CEOship, 4P Pharma assembled a unique circular drug development platform which delivered 2 programs in clinical stage while nurturing a furnished preclinical pipeline. She signed multiple academic and pharma collaborations worldwide and closed series of fundraising since 4P incorporation 8 years ago. Prior to her role at 4P, Revital was the founding CEO of PharmaSeed Europe (2013-2014) a research organization specialized in early development where she supervised all BD activities, finance and operations. Prior to PharmaSeed, Revital started her entrepreneurship path by co-founding Astem, a spin-off of Sorbonne University to activate endogenous adult stem cells. She holds a PhD in Biology from University of Paris VI and an MBA from Sorbonne University.

- **Mr Yves Sagot** co-founded Relief Therapeutics in 2013 to develop a clinical asset acquired from Merck Serono. In 2016, Relief Therapeutics went public on the Swiss stock exchange (SIX) after a reverse merger with THERAMetrics. Whilst maintaining his activities as Chief Scientific Officer at Relief Therapeutics, Yves Sagot created MBS Sagot Consulting in 2018 to provide to the life science market senior expertise covering research and early clinical development. Subsequently, after leaving Relief Therapeutics, he is a private investor in biotechnology via MBS Invest & Consult Sàrl. He is also one of the ambassadors of the Léon Bérard Cancer Center, an internationally recognized research center in Lyon, France. He has authored 25 papers that have been published in international peer-reviewed journals, holds three granted patents and received the Serono CEO Award in 2001 and the Merck Serono Reward and Recognition Award in 2008. Yves received a Certificate of Advanced Studies in Management of Medtech, Biotech & Pharma Ventures from the Management of Technology EPFL in Lausanne, Switzerland., holds a Ph.D in Neurobiology and a Masters in Pharmacology and Fundamental Toxicology from the Université Paul Sabatier (UPS), Toulouse, France.

6.4.1.2 Composition of the Strategic Committee (CS) of Medsenic SAS

Medsenic is managed by a President. The President may be supported by a General Manager proposed by BioSenic. The CS consist of no more than five members. The Chairman of the CS shall be appointed by the members among them at a simple majority vote. Two members of the CS shall be appointed among candidates proposed by BioSenic (the "**Majority Shareholder Member**"). As long as (i) François Rieger holds more than 15% of the capital and voting rights of BioSenic and that (ii) the implementation of the additional contribution in kind by the Minority Shareholders of 24.5% of their remaining Medsenic shares to BioSenic referred to in Section 1.8 of this Registration Document has not taken place, Mr. François Rieger shall be automatically appointed as a Majority Shareholder Member. The current Majority Shareholder Members are François Rieger and Finsys Management SRL, represented by Jean-Luc Vandebroek.

Moreover:

- One Member shall be appointed among candidates proposed by the founders of Medsenic (the "**Founders Member**"). The current Founders Member is Véronique Pomi-Schneiter.

- One Member shall be appointed among candidates proposed by the Minority Shareholders (excluding the Founders) (the "**Minority Shareholders Member**"). The Current Minority Shareholders Member is Bernard Emery.

- One Member shall be appointed among candidates proposed by the Founders and approved by BioSenic (the "**Independent Member**"). The current Independent Member is Xavier Guille Des Buttes.

Upon completion of the contribution of the remaining 49% of the shares in Medsenic into BioSenic, it is envisaged to dissolve the CS.

Each Member has one vote, it being specified that, in case of tied vote, the Chairman shall have a casting vote. The term of office of the Members will be a three year period, renewable. In principle, the CS shall meet at least four times per year and as often as it may be necessary.

The role of the Strategic Committee is to supervise the management of Medsenic and to authorize certain important decisions.

The table below provides an overview of the current Strategic Committee of Medsenic on date of this Document:

Name	Position	Start or renewal of mandate	End of mandate	Nature of mandate	Professional address
François Rieger	President, Member and Chairman of the CS	2022	2025	Executive	27, rue des Délices, 1203 Geneva, Switzerland
Véronique Pomi-Schneiter	Director (employee) Member	2022	2025	Executive	26, route de la Robardière, 44120 Vertou, France
Xavier Guille des Buttes	Member	2022	2025	Non-Executive	Rue de Kléber 3, 44000 Nantes, France
Finsys Management SRL, represented by Jean-Luc Vandebroek	Member	2022	2025	Non-Executive	Rue Charles Plisnier 25, 1420 Braine l'Alleud, Belgium

Name	Position	Start or renewal of mandate	End of mandate	Nature of mandate	Professional address
Bernard Emery	Member	2022	2025	Non-Executive	Avenue des Champs-Elysées 66, 75008 Paris, France

A brief overview of the relevant experience of the members of the Strategic Committee is set out below.

- **Mr Xavier Guille des Buttes** did his entire professional career in the pharmaceutical industry. For more than thirty years, he held management positions in the French subsidiary of the German group Schering AG. He was successively Marketing Director, Managing Director of the Pharmaceutical Division, and Chairman of the Management Board until June 2006. Member of the Board of Directors of Hemarina since 2013, and Member of the Strategy Committee of Medsenic since 2015 (not paid). He also accompanies a number of companies in the health sector as a director (e.g. Genfit, Delpharm Holding, Diagast). Xavier Guille des Buttes also chairs the *Fondation de la Catho de Lille* (higher education). He is a graduate of the *Ecole Supérieure des Sciences Commerciales d'Angers* (ESSCA), the *Institut du Commerce*.

- **Mr Bernard Emery** was Deputy Managing Director of Ceva Santé Animale in charge of strategy and mergers and acquisitions from 1999 to 2014, a director of Ceva Santé Animale from 1999 to 2010, and a member of the Strategic Committee of Medsenic since 2015 (not paid).

- For an overview of the relevant experience of **Mr François Rieger**, **Ms Véronique Pomi-Schneiter** and **Mr Jean-Luc Vandebroek**, we refer to the overview in Section 6.4.1.1 above.

6.4.1.3 Litigations statement

At the date of this Document, none of the members of the Board of Directors and the Executive Committee of BioSenic nor the members of the Strategic Committee of Medsenic, have at any time within at least the past five years:

- had any conviction in relation to fraudulent offences; or
- been adjudged bankrupt or entered into an agreement with creditors to pay all or part of its debts; or
- been a director, member of the administrative, management or supervisory bodies and/or senior manager of any company at any time of, or within 12 months preceding, any bankruptcy, receivership, liquidation or administration; or
- had his assets be the subject of any receivership or has been a partner of a partnership at the time of, or within 12 months preceding, any assets thereof being the subject of a receivership; or
- been subject to any official public incrimination and/or sanctions by any statutory or regulatory authority or by designated professional bodies; or
- ever been disqualified by a court from acting as a director member of the administrative, management or supervisory bodies and/or senior manager of a company or from acting in the management or conduct of the affairs of any company.

6.4.2 Other mandates

Other than set out in the table below, no member of the Board of Directors or member of the Executive Committee of BioSenic has, at any time in the previous five years, been a member of the administrative,

management or supervisory bodies or partner of any companies or partnerships. Over the five years preceding the date of this Registration Document, the members of the Board of Directors and the members of the Executive Committee hold or have held in addition to their function with BioSenic, the following main directorships of administrative, management or supervisory bodies and partnerships:

Board of Directors and/or Executive Committee Members	Current Mandates	Past Mandates
François Rieger	Chairman of Medsenic Member and Chairman of the CS	None
Véronique Pomi-Schneiter	Executive Director Medsenic	None
Jean-Luc Vandebroek (permanent representative of Finsys Management SRL)	CFO Hyloris	Director of Bihr Europe SA Director of Moteo Two Wheels Europe NV Director at SISE SA
Jean Stéphenne (permanent representative of Innosté SA)	Chairman at Vesalius Biocapital Chairman at Nanocyl Chairman at Bepharbel Chairman at OncoDNA Director at NSide Chairman at Curevac	Director at Ronveaux Chairman at BioSenic Chairman of BioWin Director at Merieux Development Chairman at Vaxxilon Chairman at BESIX Director at Belgian Foundation against Cancer President of Welbio and Foundation University Louvain
Jean-François Rax (permanent representative of Capital Grand Est)	Director of the following companies: Anagenesis Biotechnologies Defymed Emosis Diagnostics Exeliom Biosciences Fibermetrix Fizimed Peptimimesis Pims Technology Syndivia Urania Therapeutics VistaCare Medical Wizzvet	None
Revital Rattenbach	President of the following companies: 4P-Pharma 4moving Biotech 4Living biotech	None
Yves Sagot	Manager of MBS Sagot Consulting	Managing Partner of Relief Therapeutics S.A.

6.4.3 *Activity report*

In 2021, the Board of Directors met 11 times discuss and decide on specific matters. Below is the detail of the attendance:

BOARD OF DIRECTORS	Number of attendances[73]
Innoste SA, represented by M. Jean Stéphenne	11/11
mC4Tx SRL, represented by Miguel Forte	11/11
Claudia D'Augusta	11/11
Castanea Management SARL, represented by M. Damian Marron	11/11
ClearSteer Consulting LLC, represented by Mrs Gloria Matthews	10/11
Jean-Paul Prieels	11/11
Finsys Management SRL, represented by Jean-Luc Vandebroek	11/11

6.4.4 *Committees within the Board of Directors*

6.4.4.1 General

The Board of Directors has established a nomination and remuneration committee (the "**Nomination and Remuneration Committee**") and an Audit Committee (the "**Audit Committee**"). These committees (the "**Committees**") have a mere advisory role.

The Board of Directors has determined the terms of reference of each Committee with respect to its respective organisation, procedures, policies and activities.

6.4.4.2 Audit Committee

6.4.4.2.1 Role

The Audit Committee supports the Board of Directors in fulfilling its monitoring responsibilities in respect of control in the broadest sense.

6.4.4.2.2 Composition

The Corporate Governance Charter of BioSenic states that the Audit Committee is composed out of at least two members, all its members being Non-Executive Directors. At least one of the members of the Audit Committee is an independent Director, who has accounting and auditing expertise. This expertise in accounting and auditing implies a degree of higher studies in economics or finance or relevant professional experience in those matters.

The Audit Committee is chaired by one of its members, who may not be the chairman of the Board of Directors.

The duration of the mandate of a member of the Audit Committee will not exceed the duration of his/her mandate as director of BioSenic.

[73] Number of attendances compared to the maximum number of attendances considering time of appointment and conflicts of interest. All Directors who were not present, were excused.

Following completion of the Contribution, the composition of the Audit Committee shall be as follows:

Name	Position	Professional address
Finsys Management SRL, represented by Jean-Luc Vandebroek	President—Non-executive Director	Rue Charles Plisnier 25, 1420 Braine l'Alleud, Belgium
Revital Rattenbach	Member—Independent Director	Rue des Ecouffes 1, 75004 Paris

Currently the Audit Committee is counting 2 members. Jean-Luc Vandebroek (as permanent representative of Finsys Management SRL) and Revital Rattenbach qualify both in respect of having the necessary competences and qualifications in respect of accounting and audit matters as well as both of the members having an extensive experience in the management of biotech companies.

6.4.4.2.3 Operation

The Audit Committee will meet at least four times a year and whenever a meeting is deemed necessary or advisable for its proper functioning. Decisions are taken by a majority vote. The Chairman of the Board of Directors has a permanent invitation to attend the meetings of the Audit Committee. The Audit Committee may also invite other persons to attend its meetings.

The Audit Committee meets with the external auditor and the internal auditor (if any) at least twice a year, to discuss matters relating to its terms of reference, issues falling within the powers of the Audit Committee and any issues arising from the audit process and, in particular, any material weaknesses in the internal audit.

During 2021, the Audit Committee met four times.

6.4.4.3 Nomination and Remuneration Committee

6.4.4.3.1 Role

The Nomination and Remuneration Committee makes recommendations to the Board of Directors with respect to the appointment of Directors, the Executive Directors and other members of the Executive Committee. In addition, the Nomination and Remuneration Committee makes recommendations to the Board of Directors on BioSenic's remuneration policy, on any remuneration whatsoever granted to the Directors and members of the Executive Committee and on any agreements or provisions relating to the early termination of employment or collaboration with the Directors and members of the Executive Committee.

6.4.4.3.2 Composition

The Nomination and Remuneration Committee is composed of at least two Directors. All members of the Nomination and Remuneration Committee are Non-Executive Directors, with a majority being independent Directors. The majority of the members has the necessary expertise with regard to remuneration policies, i.e. has a degree in higher education and has at least three years' experience in personnel management matters or matters related to the remuneration of Directors and managers of companies. The Board of Directors considers that all members of the Nomination and Remuneration Committee have sufficient experience in personnel management and matters related to remuneration.

The Nomination and Remuneration Committee is chaired by the chairman of the Board of Directors or by another non-executive member of the Nomination and Remuneration Committee. The chairman of the Board of Directors has a permanent invitation to attend the meetings of the Nomination and Remuneration Committee, except for meetings at which his own appointment, removal or remuneration is discussed. The

chairman of the Board of Directors does not chair the Nomination and Remuneration Committee when dealing with the designation of his or her successor.

The duration of the term of a member of the Nomination and Remuneration Committee will not exceed the duration of his mandate as director of BioSenic.

The following Directors are members of the Nomination and Remuneration Committee:

Name	Position	Professional address
Innoste SA, represented by Jean Stéphenne	Chairman—Independent Director	Avenue Alexandre 8, 1330 Rixensart, Belgium
Revital Rattenbach	Member—Independent Director	Rue des Ecouffes 1, 75004 Paris

6.4.4.3.3 Operation

The Nomination and Remuneration Committee meets at least twice a year, and whenever a meeting is deemed necessary and advisable for its proper functioning. Decisions are taken by a majority vote. The chairman of the Board of Directors has a permanent invitation to attend the meetings of the Nomination and Remuneration Committee, except for meetings at which his own appointment, removal or remuneration is discussed. The Nomination and Remuneration Committee may invite other persons to attend its meetings (it being understood that a member of the Board of Directors may not attend the meeting of the Nomination and Remuneration Committee which handles his remuneration).

During 2021, the Nomination and Remuneration Committee met three times with particular emphasis on the:

- performance evaluation 2020 of the Executive Directors including bonus determination;
- definition of the objectives 2021 of the Executive Directors;
- discussion about a new stock option plan for Board members and employees;
- discussion about nomination of Tony Ting (CSO), Sven Kili (CMO ad interim), Anne Leselbaum (CMO), Valérie Chapelle (HR Director ad interim) and Lieve Creten (CFO ad interim);
- the discussion on the remuneration report and remuneration policy.

6.5 Executive Committee

6.5.1 *General*

The Board of Directors of BioSenic has established an Executive Committee (the "**Executive Committee**"), which advises the Board of Directors, and which therefore does not constitute a management committee (*comité de direction*) under article 7:104 of the Belgian Code on Companies and Associations. The terms of reference of the Executive Committee have been determined by the Board of Directors.

Medsenic is managed by a President. The President may be supported by a General Manager proposed by BioSenic. For information on the Strategic Committee of Medsenic, please refer to Section 6.4.1.2.

6.5.2 *Executive Committee*

6.5.2.1 Role

The Executive Committee assists the Executive Directors in the management of BioSenic. The Executive Committee reports to and is accountable to the Board of Directors for the discharge of its responsibilities.

6.5.2.2 Composition

The Executive Directors (CEO and COO) together with the CSO, the Chief Investor Relation Officer and the CMO are members of the Executive Committee. The Executive Committee is chaired by the CEO of BioSenic and in his absence by the COO. The members of the Executive Committee are appointed and may be dismissed by the Board of Directors at any time. The Board of Directors appoints them on the basis of the recommendations of the Nomination and Remuneration Committee, which also assists the Board of Directors on the remuneration policy for the members of the Executive Committee, as well as their individual remunerations

The remuneration, duration and the conditions of the resignation of the members of the Executive Committee are governed by the agreements entered into between BioSenic and each member of the Executive Committee in respect of their function within BioSenic.

The current members of the Executive Committee are listed in the table below:

Name	Title
François Rieger	Chief Executive Officer and Executive Director
Véronique Pomi-Schneiter	Chief Operational Officer and Executive Director
Carole Nicco	Chief Scientific Officer
Michel Wurm	CMO ad interim
Alexia Rieger	Chief Investor Relation Officer

A brief overview of the relevant experience of the Executive Committee members in place is set out below.

- **Mr François Rieger** (79), **(CEO)** holds a PhD in Neurobiology, which he completed in 1973 at the *Ecole Normale Supérieure de Paris, rue d'Ulm*. His work allowed him to purify and characterize the structure of acetylcholinesterase, the main current target of Alzheimer's disease treatments. He then went on to study the cholinergic synapse and neuromuscular pathologies related to deficient functioning of nerve impulse transmission. He was appointed Visiting Assistant Professor of Neuropathology at Harvard University from 1975 to 1978, and upon his return to France, he developed a research team in a joint INSERM/CNRS unit at the Pitié-Salpêtrière Hospital on the role of ion channels in the function and morphogenesis of mammalian nerve and muscle. A stay from 1985 to 1988, at the Rockfeller University in New-York, in the laboratory of Professor Gerald Edelman, Nobel Prize, as Senior Associate Researcher, allowed him to extend his field of investigation to the field of Cellular Adhesion Proteins and to demonstrate the implication of N-CAM and cytotactin/tenascin in synaptic morphogenesis and innervation-reinnervation phenomena. In 1990, he established in his laboratory a new line of research on the primary factors of Multiple Sclerosis, an autoimmune demyelinating disease in humans, which led his laboratory to characterize a gliotoxic protein factor in MS patients and, later, in 1998, to discover in humans a fossil retrovirus still active through its envelope protein, and involved in the triggering of the autoimmune cascade in the disease. In 2007, F. Rieger created in Geneva a Binational Scientific Interest Group on the Broader Theme of Aging and Longevity, with the participation of several Franco-Swiss scientific leaders, intended to take into account both the

molecular and societal aspects of this largely unexplored field. F. Rieger is Director of Research at the CNRS and author or co-author of more than 175 international publications in the field of Life Sciences and Neurosciences. F. Rieger is currently leading an Innovative Project concerning the therapeutics of Autoimmune Diseases and a co-Founder of the biotech Medsenic. He has led two successful Phase II clinical trials on Systemic Lupus erythematosus and Graft-versus Host Disease, opening a solid path towards the use of several formulations of active arsenic for the treatment of chronic, autoimmune diseases.

- **Ms Véronique Pomi-Schneiter** (58), **(COO)** has 30 years of experience in operational leadership, human resource management, resource utilisation and organisational development in highly decentralised organisations. Graduated of the IFG Lorraine Business School, she has been a consultant, manager and director of companies in the consulting and human resources sector. In 2010, Véronique decided to found Medsenic with Prof François Rieger, to bring her expertise in business development and fundraising. Her experience includes streamlining operations, developing, and implementing organisational solutions and applying global HR expertise to influence the achievement of strategic objectives.

- **Dr Carole Nicco** (50), **(CSO)** obtained a Ph.D. in human physiology and physiopathology from Denis Diderot University of Paris in 2000. After two years working for the startup Protexel, she obtained a full-time position as a research engineer at Paris Cité University. From 2005 to 2023 she was one of the PI's and the lab manager of the research team now called "Pathogeny and innovative treatments for chronic fibro-inflammatory diseases'' at Cochin Institute, a biomedical research center affiliated with INSERM (Unit 1016), CNRS (UMR 8104) and the Paris Cité University. She was head of the conventional pré-clinical facility of the Cochin Institute for 10 years. Dr. Nicco brings research experience in cancer biology, inflammation, immunity, new target identification, and drug discovery. she has directed dozens of preclinical studies for pathologies ranging from cancer to endometriosis, as well as in autoimmune diseases (systemic lupus erythematous, systemic sclerosis, chronic graft versus host disease) or pathologies implicating the immune system, including wound healing, uveitis, sepsis, hepatitis, and endometriosis. Additionally, she has led numerous therapeutic projects from initial inception to preclinical development in cancer, gynecologic and autoimmune diseases for academic projects but also in collaboration with Vertex, Boiron, IPRAD, GYNOV and Medsenic. She has more than 110 articles published in international referenced journals. Dr. Nicco was vice-president of the international non-profit International Society of Antioxidants in Nutrition and Health for 2 years and becomes president of Redox Medicine Society in 2023. Since 2016, she has been a member of the scientific committees and advisory board of four international congresses: Paris Redox, Targeting Mitochondria, Targeting Microbiota, Skin challenges.

- **Michel Wurm** (68), **(CMO *ad interim*)**. During his career in France, Switzerland, Germany and the U.S., devoted to the development of innovative medicines, Michel Wurm, M.D. has designed and/or managed more than fifty international Phase 2 and Phase 3 clinical studies over twenty countries. He acted in Big Pharma as well as Biotech and CRO in multiple therapeutic areas, including cardiovascular diseases (hypertension, atherosclerosis, angina, cardiac failure, veinous diseases), inflammation, rheumatology, auto-immunity, metabolism (dyslipidemias, NIDDM and its complications), dermatology, neurology (insomnia, migraine, pain), etc. Michael has been involved in many domains of value creation in the field of innovative drug development, launching start-ups, filing patents, defining development objectives and strategies, communicating on sciences and finance, raising funds, including on stock markets, interacting with regulatory agencies, including the FDA and the EMA, bringing technological advancement to the management of clinical trials. He co-authored numerous publications in high impact factor journals. He also wrote the French version of the Investigator's Guide to Clinical Research, *Le Guide de l'Investigateur en Recherche Clinique*, (Centerwatch, Boston, 2002).

- **Alexia Rieger** (27), **(Chief Investor Relation Officer)** Alexia Rieger graduated from the Ecole Hotelière of Lausanne and pursued her studies in the field of the finance by getting a Master degree

in Financial Markets and Investments at Skema Business School. She cumulated professional experiences in different financial fields such as in portfolio management for Architas (AXA subsidiary) and in an M&A boutique focused on helping startups to raise funds (VC: Seed to Serie B), based in Geneva. More recently, Alexia joined Medsenic SAS as Business and Financial Officer. She works on the strategy and the finances of BioSenic to develop the entity in the future, in addition to working, since the beginning, on the reverse merger between BioSenic and Medsenic. Alexia is the daughter of Executive Director and CEO François Rieger.

6.5.3 *Operation*

The Executive Committee meets regularly whenever it is required for its proper functioning.

The CEO and the COO have been appointed as Executive Directors of BioSenic and can be removed by the Board of Directors of BioSenic. The CEO and the COO are entrusted by the Board of Directors with the day-to-day management of BioSenic.

6.6 Internal control and risk management systems

6.6.1 *Internal mechanism*

The role of the Executive Directors & Executive Committee is to develop and maintain adequate control system to assure:

- the realization of company objectives;
- the reliability of financial information;
- the adherence to applicable laws and regulations;
- monitor the internal and external impact of the risks identified by its Committees, and the management of the risks identified.

The Audit Committee has guiding, supervisory and monitoring role with respect to the Executive Directors & Executive Committee, as regards the development, maintenance and execution of internal controls and:

- assists the Board of Directors in respect of control issues in general;
- acts as the interface between the Board of Directors and the external auditors of BioSenic.

No internal audit role has been assigned at this point in time as the size of the business does not justify a permanent role. In this respect, typical internal audit activities will be outsourced from time to time whereby the Audit Committee will determine frequency of these audits and select topics to be addressed.

6.6.2 *Financial risk management*

6.6.2.1 Liquidity risk management

BioSenic manages liquidity risk by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

BioSenic's main sources of cash inflows at current are obtained through capital increases, subsidies, government loans and where appropriate loans from commercial banks to finance long-term requirements (investment in infrastructure). A key objective of the Board together with the Executive Directors is to ensure that BioSenic remains adequately financed to meet its immediate and medium-term needs.

If necessary and appropriate BioSenic assures itself of short-term borrowing facilities to cover short-term cash requirements.

6.6.2.2 Interest rate risk management

BioSenic and Medsenic have long term investments loans granted by third parties (including the European Investment Bank and investors in (convertible) bonds issued by BioSenic)) and by regional investment bodies (for the fixed part, but also including the turnover independent reimbursements (30%) related to RCA's concluded as of 2009). The group at current does not undertake any hedging.

All the negotiated interest rates are fixed and no loans are exposed to variable rates.

6.6.2.3 Credit risk

BioSenic believes that its credit risk, relating to receivables, is limited because currently almost all of its receivables are with public institutions. Cash and cash equivalent and short-term deposits are invested with highly reputable banks and financial institutions.

The maximum credit risk, to which the Group is theoretically exposed as at the balance sheet date, is the carrying amount of the financial assets. At the end of the reporting period no financial assets were past due, consequently no financial assets were subject to impairment.

6.6.2.4 Foreign exchange risk

BioSenic is currently not exposed to any significant foreign currency risk.

However, should BioSenic enter into long term collaboration agreements with third parties for which revenues would be expressed in a foreign currency, BioSenic might in such case consider to enter into a hedging arrangement to cover such currency exposure (in case the related expenditure is planned in local currency). BioSenic will also monitor exposure in this respect following the establishment of its US subsidiary. At current, there is no significant exposure in USD.

6.6.3 *Controls, supervision and correctives actions*

Within the Board of Directors, an annual strategy meeting is organised:

- The management presents strategic plans for the different aspects of the business;
- The Board of Directors reviews these plans and selects between strategic options when necessary;
- The Board reviews on a regular basis the validity of the strategic options chosen and redirect where necessary.

The Executive Directors develop a long term financial plan (minimum 3 years looking forward) incorporating the strategy decided upon – this plan is updated on a regular basis to keep it in line with the strategy plans.

The Executive Directors develop an annual budget which is approved by the board and which is closely monitored during the year. Deviations are reported to the Board of Directors and corrective action is taken when necessary.

BioSenic has implemented an ERP system in support of its financial and logistics management. This system will be evaluated at regular intervals in how far it meets the needs of the organization. Where and when necessary, the system will be further upgraded to address new needs or to strengthen controls.

In general supervision and monitoring of the operations of BioSenic is done on a permanent/daily basis at all levels within BioSenic. As a general policy deviations are reported at all times to the supervisory level.

6.7 Market abuse regulations

In its Governance Charter, BioSenic established several rules to prevent illegal use of inside information by Directors, shareholders, management members and employees, or the appearance of such use.

These prohibitive provisions and the monitoring of compliance with them are primarily intended to protect the market. Insider dealing attacks the very essence of the market. If insiders are given the opportunity to make profits on the basis of inside information (or even if the mere impression thereof is created), investors will turn their back on the market. A decreased interest may affect the liquidity of listed shares and prevents optimal company financing.

An insider can be given access to inside information within the scope of the normal performance of his duties. The insider has the strict obligation to treat this information confidentially and is not allowed to trade financial instruments of BioSenic to which this inside information relates.

BioSenic keeps a list of all persons (employees or persons otherwise working for BioSenic) having (had) access, on a regular or occasional basis, to inside information. BioSenic will regularly update this list and transmit it to the FSMA whenever the FSMA requests BioSenic to do so.

6.8 Remuneration report

BioSenic complies with the law of 28 April 2020 implementing the EU Directive 2017/828 as regards the encouragement of long-term shareholder engagement.

6.8.1 *Procedure*

The Nomination and Remuneration Committee (or Remco), set up by the Board, is responsible for outlining a remuneration policy for the Executive and Non-Executive Directors.

6.8.1.1 Directors

Board members are remunerated based on a benchmarking exercise done on a regular basis by the Remco with other peer companies to ensure that this remuneration is fair, reasonable and competitive and is sufficient to attract, retain and motivate the Directors of BioSenic. In this respect the Remco and the Board shared the view that all board members independent and non-independent, should be compensated equally with a fixed compensation. For the Chairman and the chairs of the committees the board proposed a supplementary compensation.

At the date of the publication of the 2021 annual report, all non-executive members of the Board of Directors have decided to suspend and waive their compensation for the first quarter of 2022 and until further notice. As a result, no remuneration has been paid to the Non-Executive Directors until completion of the Contribution on 24 October 2022.

Without prejudice to the powers granted by law to the shareholders' meeting, the Board of Directors may set and revise at regular intervals the rules and the level of compensation for its Directors.

6.8.1.2 Executive Directors and the Executive Committee

The remuneration of the Executive Directors and the remuneration of the members of the Executive Committee are determined by the Board of Directors on recommendations made by the Nomination and Remuneration

Committee, further to recommendations made by the Executive Directors (except where their own remuneration is concerned). BioSenic strives to offer a competitive remuneration within the sector.

6.8.2 *Remuneration policy*

6.8.2.1 Director's remuneration

The remuneration of the Directors is determined by the shareholders' meeting upon proposal of the Board of Directors on the basis of the recommendations made by the Nomination and Remuneration Committee. The following remuneration policy is in place for the Non-Executive Directors' remuneration. There has not been a deviation from the remuneration policy.

The Non-Executive Directors received a fixed remuneration in consideration for their membership of the Board of Directors and their membership of the Committees.

The Nomination and Remuneration Committee recommends the level of remuneration for Non-Executive Directors, subject to approval by the Board of Directors and, subsequently, by the shareholders' meeting. The Nomination and Remuneration Committee benchmarks Directors' compensation against peer companies to ensure that it is competitive. Remuneration is linked to the time committed to the Board of Directors and its various committees.

The shareholders' meeting decided to maintain the resolution approved in 2016 concerning the remuneration of the non-executive Directors, as follows: a fixed annual remuneration for the members of the Board of Directors of €20,000; an additional annual remuneration for the Chairman of the Board of Directors of €20,000; and an additional annual remuneration for membership of each committee of the Board of Directors of €5,000 for committee members and €10,000 for the chairman of a committee.

Following the Contribution, the shareholders' meeting of 24 October 2022 decided to fix the remuneration of the executive directors as follows:

- a fixed annual remuneration of EUR 40,000 for Mr François Rieger; and
- a fixed annual remuneration of EUR 30,000 for Ms Véronique Pomi-Schneiter.

The shareholders' meeting also approved the proposal of the nomination and remuneration committee of BioSenic to grant each year 20,000 warrants to each executive director. On the date of this Registration Document, such warrants have not yet been granted.

The total remuneration for the Non-Executive Directors for 2021 amounts to €150,000. The table below provides an overview of the remuneration per Independent Directors. No remuneration has been paid to the Non-Executive Directors from January 2022 until the Contribution (on 24 October 2022).

Name, Position	Fixed Remuneration (€)			Variable Remuneration (€)		Extra-ordinary items (€)	Pension expense (€)	Total remu-neration (€)	Fixed	Variable
	Base compensation	Attendance fees	Other benefits	One-year variable	Multi-year variable					
Innoste S.A., with as permanent representative Jean Stéphenne	50,000	/	/	/	/	/	/	50,000	100%	0%
Claudia D'Augusta	30,000	/	/	/	/	/	/	30,000	100%	0%
Castanea Management SARL with as permanent	25,000	/	/	/	/	/	/	25,000	100%	0%

representative Damian Marron										
Jean-Paul Prieels	25,000	/	/	/	/	/	/	25,000	100%	0%
ClearSteer Consulting LLC with permanent representative Gloria Matthews	20,000	/	/	/	/	/	/	20,000	100%	0%
Total	**150,000**	**/**	**/**	**/**	**/**	**/**	**/**	**150,000**	**100%**	**0%**

All Directors will be entitled to a reimbursement of out-of-pocket expenses actually incurred as a result of participation in meetings of the Board of Directors.

There are no loans outstanding from, respectively, BioSenic or from Medsenic to any members of the Board of Directors, Executive Committee and the Strategic Committee of both companies. There are no employment or service agreements that provide for notice periods or indemnities between BioSenic and Non-Executive Directors.

Also, any agreement, entered or extended on or after 3 May 2010, between BioSenic and a Non-Executive Director, which would provide for a variable remuneration, must be submitted for approval to the next annual shareholders' meeting.

The table below provides an overview of positions of shares held directly or indirectly on 20 January 2023 by the Non-Executive Members of the Board of Directors. The overview must be read together with the notes referred to below.

Non-Executive Directors	Shares	
	Number	%*
Innoste S.A., with as permanent representative Jean Stéphenne	109,538	0.089%
Finsys Management SRL	2,880	0.002%

** calculated as the percentage of all outstanding shares and warrants totalling to 125,206,411 (of which 124,008,857 are shares and 1,197,554 are warrants) at the date of the Registration Document.*

The table below provides an overview of the main condition of the warrant plans as well as information related to the financial year 2021 regarding Non-Executive Members of the Board of Directors:

	Main condition of the warrant plans					Information related to the financial year 2021		
Name Position[74]	Plan ID	Grant date	Vesting Date	Retention period	Exercise period	A) Number of options vested; B) Value at exercise price (€)	A) Number of options exercised ; B) Date of exercise	Number of options expired
Jean Stéphenne, Chairman	Plan A	28-02-2019	1/3 at 28-02-2020 2/3 at 28-02-2021 3/3 at 28-02-2022	-	28/02/2029 - 28/02/2029	A) 6,666 B) 4.11	-	-
Jean Stéphenne, Chairman	Plan 2020	23-12-2020	23-12–2020	-	24/12/2023 - 23/12/2027	A) 14,332 B) 2.55	-	-
Claudia D'Augusta, Director	Plan 2020	23-12-2020	23-12-2020	-	24/12/2023 - 23/12/2027	A) 3,000 B) 2.55	-	-

[74] Please note that the warrants have been offered to BioSenic of the representative named in the table, which is the case for Jean Stéphenne, Damian Marron and Gloria Matthews.

Jean-Paul Prieels, Director	Plan 2020	23-12-2020	23-12-2020	-	24/12/2023 - 23/12/2027	A) 3,000[75] B) 2.74	-	-
Damian Marron, Director	Plan A	28-02-2019	1/3 at 28-02-2020 2/3 at 28-02-2021 3/3 at 28-02-2022	-	28-02-2029 - 28/02/2029	A) 666 B) 4.11	-	-
Damian Marron, Director	Plan 2020	23–12-2020	23-12-2020	-	24/12/2023 - 23/12/2027	A) 2,000 B) 2.55	-	-
Gloria Matthews, Director	Plan 2020	23–12-2020	23-12-2020	-	24/12/2023 - 23/12/2027	A) 2,000 B) 2.55	-	-

No warrants have been granted to the Non-Executive Directors in 2022.

6.8.2.2 Remuneration of the CEO and the other Executive Directors and the Executive Committee

6.8.2.2.1 Remuneration policy

The remuneration package applicable in 2022 for the Executive Directors and the members of the Executive Committee is in line with the remuneration levels in comparable companies for these functions.

Due to a challenging economic environment, no variable remuneration was granted for the year 2021 to the Executive Directors and the members of the Executive Committee. However, as soon as BioSenic's financial situation again allows this, it is intended to again introduce a variable remuneration for the Executive Directors and the members of the Executive Committee.

The key components of this policy can be summarized as follows:

- BioSenic wants to offer a market competitive compensation to allow the recruitment, retention and motivation of expert and qualified professionals and considering the scope of their responsibilities.
- The remuneration will be structured to allow linking an appropriate part of the remuneration to individual performance and the performance of BioSenic and to align the interest of the individual as much as possible with the interest of BioSenic and its shareholders.
- For this purpose, key performance indicators (corporate and individual) are agreed upon in advance. These indicators can be operational or financial in nature (progress in clinical and preclinical programs, financial management of key financial parameters, realization of collaborations or concluding new grants, investor relation activities, compliance matters and regulatory approvals and successful completion of audits). The valuation period is aligned with the fiscal year. The weights of each performance factors applied in 2020 can be found in the table below.

Performance factor	Weight
Financial (cash position end of year, budget management, funding strategy development)	35%
Business development & Commercialization strategy development (commercial deal, scientific partnership)	30%

[75] Jean-Paul Prieels refused the warrants in February 2021.

Performance factor	Weight
Clinical trials progress (recruitment timelines, sites initiations and activations)	25%
Regulatory Strategy development	10%

- The variable remuneration will be partly in cash and partly in shares, warrants or other instruments allowing acquiring shares through schemes to be approved by the annual shareholder meeting.

- The variable remuneration will only be paid when the key performance indicators agreed upon in advance are effectively met. The remuneration committee will evaluate the realization of the performance criteria and will make a proposal in respect of the variable remuneration to the Board.

- The maximum variable remuneration is set at [50% * base salary] for the CEO. For the other Executive Directors, the maximum variable remuneration is set between [20% and 30% * base salary] depending on the positions.

- BioSenic's articles of association explicitly allow to deviate from what has been defined under Article 7:91 of the Belgian Code on Companies and Associations (by decision of the General meeting date: 5 February 2015). Article 7:91 stipulates that: "Unless otherwise provided for in the articles of association or expressly approved by the general meeting, at least one quarter of the variable remuneration of an Executive Director in a listed company must be based on predetermined and objectively measurable performance criteria over a period of at least two years, and another quarter must be based on predetermined and objectively measurable criteria over a period of at least three years".

- In accordance with Article 7:92 of the Belgian Code on Companies and Associations, which applies to agreements with leaders entered into or extended after 3 May 2010, any such agreement which includes a provision providing for a severance package exceeding 12 months' remuneration, or, on motivated advice of the Nomination and Remuneration Committee, exceeding 18 months, must be submitted for prior approval to the next annual shareholders' meeting. Any proposal to grant a higher severance package must be communicated to the works council (or to other designated bodies or persons representing the employees, if this council does not exist; i.e., the employee representatives in the committee for the prevention and protection in the workplace or, in the absence of this committee, to the trade union delegation) at least thirty days prior to the publication of the convening notice of the next annual general shareholders meeting, which may then give its advice to the annual general shareholders meeting, at the latest on the day of publication of the convening notice of the annual general shareholders' meeting. This advice is published on the website of BioSenic.

- In accordance with Article 7:149 of the Belgian Code on Companies and Associations, which applies to agreements with leaders entered into or extended after 3 May 2010, any such agreement which includes a provision providing for a severance package exceeding 12 months' remuneration, or, on motivated advice of the Nomination and Remuneration Committee, exceeding 18 months, must be submitted for prior approval to the next annual shareholders' meeting. Any proposal to grant a higher severance package must be communicated to the works council (or to other designated bodies or persons representing the employees, if this council does not exist; i.e., the employee representatives in the committee for the prevention and protection in the workplace or, in the absence of this committee, to the trade union delegation) at least thirty days prior to the publication of the convening notice of the next annual general shareholders meeting, which may then give its advice to the annual general shareholders meeting, at the latest on the day of publication of the convening notice of the annual general shareholders' meeting. This advice is published on the website of BioSenic.

- In accordance with Article 7:90 of the Belgian Code on Companies and Associations, the criteria for granting variable remuneration to leaders must, as of 1 January 2011, be included in the contractual or other provisions governing the relevant legal relationship. The variable remuneration can only be paid out if the milestones for the reference period have been met. If the aforementioned obligations are not complied with, the variable remuneration may not be taken into account for calculating the severance pay.

- BioSenic currently does not foresee in a specific pension plan neither for the CEO nor for the other members of the Executive Committee.

This remuneration report includes the amount of the remuneration of, and any other benefits granted to, BioSenic's CEO in 2021, on a broken-down basis.

	Fixed Remuneration (€)			Variable Remuneration (€)						
Name, Position	Base compensation	Administrator compensation	Other benefits	One-year variable	Multi-year variable	Extra-ordinary items (€)	Pension expense (€)	Total remu-neration (€)	Fixed	Variable
Miguel Forte, CEO	319,461	/	19,666	/	/	/	/	339,127	100%	0%

Other benefits include transportation repayments and phone bills repayments.

The one-year variable is a bonus based on key performance indicators stated above. The maximum variable remuneration is set at [50% * base salary] for the CEO. For the year 2021, the CEO performance was set at 75%. However, due to a challenging economic environment, no variable remuneration was granted for the year 2021.

Following completion of the Contribution, Mr François Rieger was appointed as new CEO of BioSenic on 24 October 2022.

In accordance with the employment contract entered into between Medsenic and Mr François Rieger, a gross fixed annual remuneration of EUR 115,000 is paid by Medsenic to Mr François Rieger.

The Executive Committee (excluding the CEO) in place during 2021 was as follows:

- Finsys Management SRL, represented by Jean-Luc Vandebroek, CFO, until 31 December 2021;
- Lieve Creten B.V., represented by Lieve Creten, CFO ad interim, from 20 September 2021;
- Venture Advanced Therapies Limited, represented by Stefanos Theoharis, CBO, from 26 March 2020;
- Antony Ting, CSO, from 01 April 2021;
- Zam Consulting SRL, represented by Olivier Godeaux, CMO, until 30 March 2021;
- Sven Kili Consulting Ltd, represented by Sven Kili, CMO ad interim, from 15 January 2021 until 31 August 2021;
- Clinical Drug Development S.L, represented by Anne Leselbaum, CMO, from 23 August 2021;
- Anne-Sophie Lebrun, COO, from 1 August 2020.

Following the Contribution, the following Executive Committee (excluding the CFO) has been appointed:

- François Rieger, Chief Executive Officer and Executive Director;
- Véronique Pomi-Schneiter, Chief Operational Officer and Executive Director;
- Michel Wurm, Chief Medical Officer ad interim;
- Carole Nicco, Chief Scientific Officer;
- Alexia Rieger, Chief Investor Relation Officer. Alexia Rieger is the daughter of Executive Director and CEO François Rieger.

Neither BioSenic nor Medsenic currently provides for a specific pension plan for the CEO or for the other members of the Executive Committee.

The contracts with all members of the Executive Committee can be terminated at any time, subject to certain pre-agreed notice periods not exceeding 12 months, which may, at the discretion of BioSenic, be replaced by a corresponding compensatory payment.

Please find the amount of remuneration for 2021 on a broken-down basis for the other Members of the Executive Committee:

	Fixed Remuneration (€)			Variable Remuneration (€)		Extra-ordinary items (€)	Pension expense (€)	Total remunera-tion (€)		
Name, Position	Base compensation	Administrator compensation	Other benefits	One-year variable	Multi-year variable				Fixed	Variable
Other Members of the Executive Committee	1,303,471	/	56,208	/	/	/	/	1,359,679	100%	0%

The remuneration for 2022 on a broken-down basis for the other Members of the Executive Committee is as follows:

	Fixed Remuneration (€)			Variable Remuneration (€)		Extra-ordinary items (€)	Pension expense (€)	Total remunera-tion (€)		
Name, Position	Base compensation	Administrator compensation	Other benefits	One-year variable	Multi-year variable				Fixed	Variable
Other Members of the Executive Committee	639,219	/	40,754	/	/	/	/	639,219	100%	0%

Other benefits include transportation repayments and phone bills repayments.

The one-year variable is a bonus based on key performance indicators stated above. The maximum variable remuneration is set between [20% and 30% * base salary] depending on the positions. For the year 2021, the average performance of the Executive Committee (excluding the CEO) was set at 89%. However, due to a challenging economic environment, no variable remuneration was granted for the year 2021 and 2022.

The table below provides an overview of the main condition of the warrant plans as well as information related to the financial year 2021 regarding members of the Executive Committee:

	Main condition of the warrant plans					Information related to the financial year 2021		
Name Position	Plan ID	Grant date	Vesting Date	Retention period	Exercise period	A) Number of options vested; B) Value at exercise price (€)	A) Number of options exercised; B) Date of exercise	Number of options expired
Miguel Forte, CEO	Plan 2020	29-05-2020	29-06-2020	-	30/05/2023 - 29/05/2027	A) 51,724 B) 2.74	-	-
Miguel Forte, CEO	Plan 2020	23-12-2020	23-12-2020	-	24/12/2023 - 23/12/2027	A) 58,000 B) 2.55	-	-
Jean-Luc Vandebroek, CFO	Plan A	28-02-2019	1/3 at 28-02-2020 2/3 at 28-02-2021 3/3–at 28-02-2022	-	28-02-2029 - 28/02/2029	A) 24,000 B) 4.11	-	-
Jean-Luc Vandebroek, CFO	Plan 2020	29-05-2020	29-05-2020	-	30/05/2023 - 29/05/2027	A) 12,000 B) 2.74	-	-
Jean-Luc Vandebroek, CFO	Plan 2020	23–12-2020	23-12-2020	-	24/12/2023 - 23/12/2027	A) 7,500 B) 2.55	-	-
Olivier Godeaux, CMO	Plan 2020	23–12-2020	23-12-2020	-	24/12/2023 - 23/12/2027	A) 5,000 B) 2.55	-	-
Stefanos Theoharis, CBO	Plan 2020	23–12-2020	23-12-2020	-	24/12/2023 - 23/12/2027	A) 5,000 B) 2.55	-	-

On the date of the Prospectus, no member of the Executive Committee (composed of François Rieger, Véronique Pomi-Schneiter, Michel Wurm, Carole Nicco and Alexia Rieger) has been granted any warrants. The shareholders' meeting of 24 October 2022 did however approve to grant each year 20,000 warrants of BioSenic to each executive director (i.e., François Rieger and Véronique Pomi-Schneiter), but such warrants have not yet been granted.

On the date of the Prospectus François Rieger holds 26,589,361 shares in BioSenic and Véronique Pomi-Schneiter holds 13,306,121 shares in BioSenic. None of the other members of the Executive Committee holds directly or indirectly any shares in BioSenic.

7 RELATED PARTY TRANSACTIONS

7.1 General

Each member of the Executive Committee and each Director needs to focus to arrange his or her personal business to avoid direct and indirect conflicts of interest with BioSenic. BioSenic's corporate governance charter contains specific procedures when potential conflicts could appear.

7.2 Conflicts of interest of Directors

There is a conflict of interest when the director has a direct or indirect financial interest adverse to that of BioSenic. In accordance with Article 7:96 of the Belgian Code on Companies and Associations, a director of a limited company which "*has, directly or indirectly, an interest of an economic nature in a decision or an operation under the Board of Directors*" is held to follow a particular procedure. In accordance with BioSenic's Corporate Governance Charter, if members of the Board, or of the Executive Committee or their permanent representatives are confronted with possible conflicting interests arising from a decision or transaction of BioSenic, they must inform the Chairman of the Board thereof as soon as possible. Conflicting interests include conflicting proprietary interests, functional or political interests or interests involving family members (up to the second degree).

If Article 7:96 of the Belgian Code on Companies and Associations is applicable, the Board member involved must abstain from participating in the deliberations and in the voting regarding the agenda items affected by such conflict of interest.

7.3 Existing conflicts of interest of members of the Board of Directors and of the Executive Committee

Mr François Rieger (CEO and Executive Director) and Ms Véronique Pomi-Schneiter (COO and Executive Director) are both party to a shareholders agreement with BioSenic dated 24 October 2022 in relation to the shares they hold in Medsenic. Mr François Rieger currently holds 22.60% of the shares in Medsenic and Ms Véronique Pomi-Schneiter currently holds 11.31% of the shares in Medsenic. Under that shareholders' agreement they have both committed to contribute their remaining shares in Medsenic to BioSenic in exchange for newly issued shares, based on a price per share of BioSenic equal to the price as used for the envisaged future equity raise. However, if Medsenic obtains extended development and commercialisation rights from Phebra (including for the US, UK and Japan) under economically favourable terms for Medsenic, the valuation of any shares not yet contributed to BioSenic will be need to be revaluated which could potentially lead to a conflict of interests. See Section 7.4.4.1 below for more information.

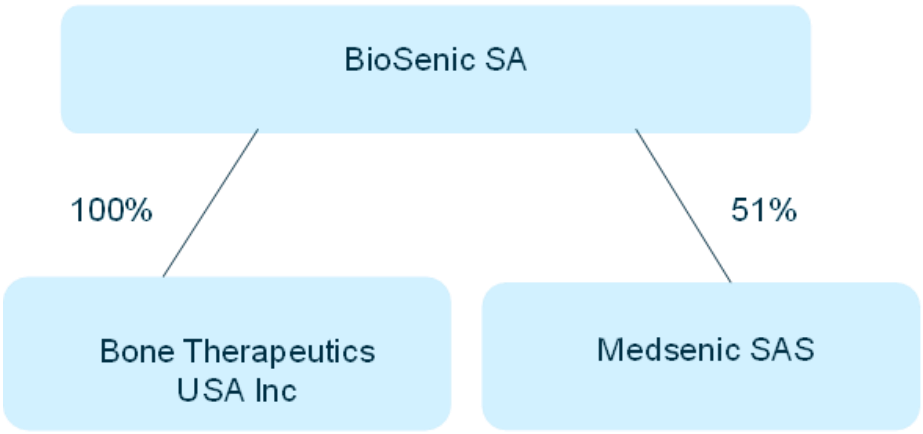
Each of Mr François Rieger and Ms Véronique Pomi-Schneiter also agreed to a lock-up of the shares in BioSenic that they acquired in exchange for contributing the relevant part of their Medsenic shares on 24 October 2022. Such lock-up does not apply to any transfers approved by the Board of Directors of BioSenic. See Section 7.4.4.1 below for more information.

In addition, a potential conflict might arise in the future for any Executive Directors to whom a variable remuneration would be granted (if any) or in relation to any other compensation-related matters.

On the basis of information provided by the relevant members of the Board of Directors and of the Executive Committee of BioSenic, as well as by the President and the members of the Strategic Committee of Medsenic, and except as disclosed above, there are, on the date of this Prospectus, no potential conflicts of interest between any duties of the members of, respectively, the Board of Directors and members of the Executive Committee of BioSenic and the President and members of the Strategic Committee of Medsenic, on the one hand, and their private interest and/or other duties, on the other hand.

7.4 Related Party Transactions

At the date of this Registration Document, BioSenic has the following affiliates:



7.4.1 *Transactions with Bone Therapeutics USA Inc.*

In course of 2021, expenses related to all activities executed through Bone Therapeutics USA Inc. have been re-invoiced to BioSenic on 31 December 2021.

7.4.2 *Transactions with the Executive Committee*

There are no transactions with the Executive Committee.

For information on the Executive Committee remuneration, see Section 6.8.2.2 "Remuneration of the CEO and the other Executive Directors and the Executive Committee".

7.4.3 *Transactions with Medsenic*

BioSenic has granted Medsenic a convertible loan of maximum € 2 million, which can be converted into Medsenic's share capital at a valuation equivalent to the one retained in the framework of the Contribution of the 37,649 shares of Medsenic to the capital of BioSenic, less a risk premium of 20%. The issuance will provide for a maximum drawdown of 4 tranches of convertible bonds of € 500,000, each bearing interest at the rate of 6% per annum, that can and must be made available by BioSenic over 4 months: September, October, November and December 2022. In the event that Medsenic's financing needs are lower than expected, the third and/or fourth tranche of convertible bonds may not be issued or subscribed. At the date of the Prospectus, two tranches have been made available. The maturity date of each loan tranche made available is 31 December 2023.

7.4.4 *Transactions with the shareholders of Medsenic*

7.4.4.1 BioSenic's transaction with the shareholders of Medsenic

BioSenic entered into two agreements relating to Medsenic.

a. Subscription agreement between a large majority of the shareholders of Medsenic, as subscribers, and BioSenic

Upon the terms and subject to the conditions set forth in this subscription agreement, the subscribers transferred to BioSenic 37,649 shares in Medsenic, representing 51% of the fully diluted share capital of Medsenic. In exchange to the subscription, the subscribers received 90,668,594 new ordinary shares of BioSenic.

Under the subscription agreement, the shareholders of Medsenic also agreed not to sell the 90,668,594 new shares in BioSenic that they received in consideration for the Contribution for a period of nine months as of 24 October 2022 (i.e., until 24 July 2023). However, on 28 February 2023 2% of the New Shares held by each of Véronique Pomi-Schneiter and François Rieger shall be released from the lock up and shall no longer be locked shares. The lock-up undertaking does not apply to:

- any transfer of locked shares by a locked shareholder to one or more of its affiliated companies;
- any transfer pursuant to a public takeover bid or squeeze out on the shares of BioSenic; and
- any transfer which is approved by the Board of Directors of BioSenic deciding on a discretionary basis.

b. Shareholders' agreement relating to Medsenic between BioSenic, as majority shareholder, and Medsenic's minority shareholders

Pursuant to a shareholders' agreement dated 24 October 2022 between BioSenic and the shareholders of Medsenic holding the remaining 49% of the shares of Medsenic (the "**Minority Shareholders**"), the Minority Shareholders agree to contribute all of their remaining Medsenic shares into BioSenic in two instalments, each time for half of their remaining shareholding. These additional contributions shall take place at the same time as the first two equity raises of BioSenic (except for capital increases relating to the exercise of warrants and conversions of convertible bonds, but including the capital increase carried out pursuant to the ALLOB warrants, if the conditions for execution are met) to be carried out within approximately 7 to 15 months from Completion Date in order to finance the continuation of BioSenic's activities. These additional contributions are not contemplated before such timeframe, and therefore also not together with any placement of new securities that is envisaged by BioSenic in Q1 2013 (see the Securities Note for more information on the BioSenic Group's working capital and funding objectives). In the event that the conditions for the exercise of the ALLOB warrants (and the capital increase resulting from such exercise) are not met, the contribution of the remaining half of the shares will be postponed to the next capital increase of BioSenic which shall take place in 24 months from the Completion Date.

Except in case of material adverse change in BioSenic's assets, liabilities or clinical trials, these contributions will be made on the basis of Medsenic's valuation as used for the Contribution and by using the same price per share of BioSenic as used for the simultaneous equity raise (which shall not be lower than the valuation of BioSenic used for the Contribution). However, if Medsenic obtains extended development and commercialisation rights from Phebra (including for the US, UK and Japan) under economically favourable terms for Medsenic, the valuation of any shares not yet contributed to BioSenic will be revaluated by an independent expert. For more information on the license agreement and the marketing and supply agreements with Phebra, please revert to Section 7.4.4.2.

If BioSenic has not completed a capital increase within 2 years from completion of the Contribution, the contribution of their remaining Medsenic shares will be made in one instalment based on the same valuations as used for the Contribution. BioSenic also benefits from a call option right over the remaining 49% of Medsenic's shares to enforce such contributions. BioSenic may exercise the call option, at its sole discretion, for all (and not part) of the shares until the 24 October 2025.

For more information about the governance of Medsenic, please revert to Section 6.4.1.2 of this Registration Document.

7.4.4.2 Medsenic's transaction with the shareholders of Medsenic

a. Medsenic’s transaction with Phebra

Medsenic and Phebra entered into (i) a license agreement on 21 May 2021 and (ii) a marketing and supply agreement on 31 May 2021 for the oral formulation of arsenic trioxide ("**OATO**") in the following indications (the "**Field**"): Graft Versus Host Disease ("**GvHD**"), Systemic Sclerosis ("**SSc**"), Systemic Lupus Erythematosus

("**SLE**"), infectious diseases related to COVID-19 and CNS inflammatory diseases related to Multiple Sclerosis (referred to as Multiple Sclerosis) (the "**Phebra Agreements**").

Under the agreements, Phebra has granted an exclusive license to Medsenic to use the oral formulation of arsenic trioxide for its research and clinical development in the above-mentioned immunopathologies and to market, sell and distribute OATO in such field in the European Union and in French speaking territories ("**Medsenic Territories**"). Under the license agreement, Medsenic agreed to commence a clinical study using Phebra OATO before 31 May 2023. If such study would not start before 31 May 2023, Phebra could terminate the license agreement unless the parties agree to postpone such date. All costs relating to the research and clinical development will be borne by Medsenic. Phebra will supply (either directly or via a contract manufacturer) the OATO for Medsenic and Phebra will be responsible and retain full liability for the manufacture, packaging, testing and batch release of OATO in the Field, regardless of whether it carries out such responsibilities itself or uses one or more subcontractors to do so.

In consideration for the license granted for the Medsenic Territories, Phebra received 3,151 shares (4.3% of the shares currently outstanding) in Medsenic. Phebra has the right to commercialise OATO in the Field in all countries outside the Medsenic Territories against payment to Medsenic of a royalty of 55% of the net sales profits. BioSenic Group and Phebra are currently analysing the possibility to extend the Medsenic Territories and the commercial terms thereof, which is expected to require lengthy and complex discussions and agreements based on partially unknown commercial and competitive factors.

8 EMPLOYEES

8.1 Number of employees

As of 31 December 2022, BioSenic employs 7 people and Medsenic employs 5 people. The table below shows the evolution of employment since 2020 and does not take into account the temporary workers, consultants and the members of management. In 2020, 2021 and 2022, neither BioSenic nor Medsenic employed any temporary employees. 17 FTEs of BioSenic moved to Catalent Gosselies SA as part of the sale of SCTS in 2020.

As of 31 December	2022		2021		2020	
	BioSenic	Medsenic	BioSenic	Medsenic	BioSenic	Medsenic
R&D	6	3	15	3	25	3
Administration	1	2	5	1	5	1
Total	7	5	20	4	30	4
Total of BioSenic and Medsenic	**12**		**24**		**34**	

Sixteen percent of employees have obtained a doctorate and 30% a master's degree. Scientific specialization domains include cellular and molecular biology, pharmaceutical sciences, veterinary medicine, physiology and life sciences.

With regard to Medsenic, 50% have obtained a doctoral degree, 50% have a Master or equivalent degree.

8.2 Arrangements for involving the employees in the capital

Both BioSenic and Medsenic have created a pool of warrants to grant to employees. For BioSenic, reference is made to Section 9.3 for more detailed information on the warrant plan A, warrant plan 2020/05 and warrant plan 2020/12 for BioSenic's employees, consultants and directors.

Medsenic has granted the warrants (*bons de souscription de parts de créateur d'entreprise* – "BSPCE") for the benefit of persons and in the following proportions:

- 1,513 BSPCE-2016 and 218 BSPCE-2017 to Mrs. Véronique Pomi, employee and founder of Medsenic;
- 1,512 BSPCE-2016 and 217 BSPCE-2017 to Mr. François Rieger, President and founder of Medsenic.

9 SHARES AND SHAREHOLDERS

9.1 Shareholders

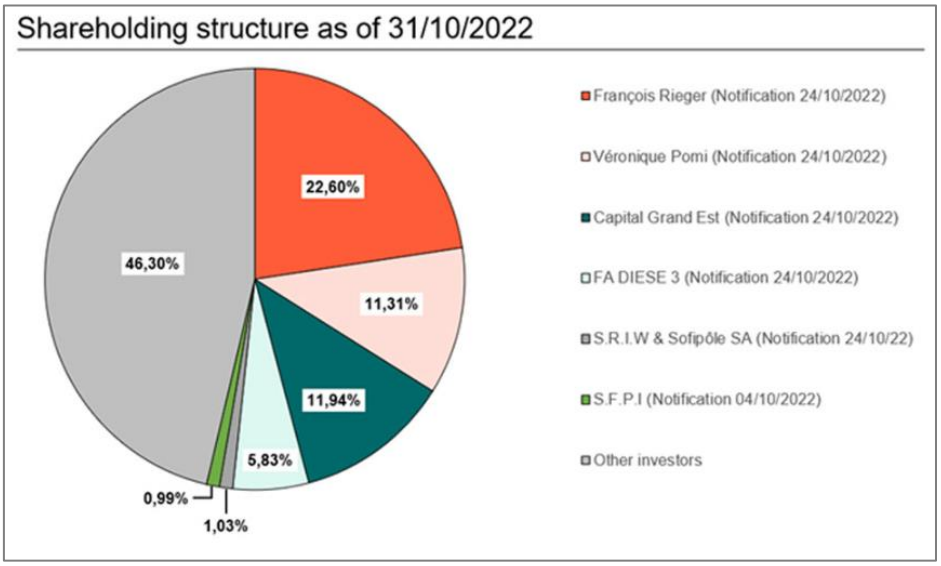
9.1.1 *Securities issued by BioSenic*

As per 31 January 2023, there are 124,008,857 shares representing a total share capital of BioSenic of € 33,800,668.71. There are only ordinary shares without nominal value, and there are no special rights attached to any of the ordinary shares, nor special shareholder rights for any of the shareholders of BioSenic. Each shareholder of BioSenic is entitled to one vote per share. The share capital is entirely and unconditionally subscribed and fully paid up. Please see Section 9.2.1 below for an overview of the issuances of new shares since the beginning of 2022.

On 24 October 2022, the capital of BioSenic was increased from €5,600,090.51 to €32,800,668.71 through the issuance of 90,668,594 new shares in consideration for the contribution in kind of 37,649 outstanding shares in Medsenic SAS.

As per 31 January 2023, the total of exercisable warrants is 197,554 warrants for the former Executive committee members, consultants and Board members, 800,000 warrants for EIB and 200,000 warrants for Patronale Life, which give right to subscribe to an equal number of shares. This represents a total of 1,197,554 warrants. See Section 9.3 for more information about the outstanding warrants.

The graph below provides an overview of the shareholders that have notified BioSenic of their ownership of shares of BioSenic. This overview is based on the most recent transparency declaration submitted to BioSenic. All transparency notifications are available under the 'Investors' section of https://www.biosenic.com/investors.



BioSenic has a relatively widely held shareholder base, and no single shareholder controls BioSenic. To the best knowledge of BioSenic, there are no arrangements in place which may, at a subsequent date, result in a change in control of BioSenic.

9.1.2 *Securities issued by Medsenic*

At the date of this Document, there are 73,820.00 shares without nominal value representing a total share capital of the Medsenic of € 738,200.00. There are only ordinary shares, and there are no special rights attached to any of the ordinary shares, nor special shareholder rights for any of the shareholders of Medsenic. The share capital is entirely and unconditionally subscribed and fully paid up.

The total of outstanding warrants (*bons de souscription de parts de créateur d'entreprise* – "BSPCE") within Medsenic is 3,025 BSPCE 2016 and 435 BSPCE 2017. Please revert to Section 9.4 for more information about the BSPCEs.

Following the Contribution, Medsenic has issued convertible bonds to BioSenic for a total aggregate amount of EUR 1 million. Please revert to Section 7.4.3 for more information about these convertible bonds.

9.2 History of share capital

9.2.1 *History of the share capital of BioSenic since IPO - Capital increase and issuance of shares*

On 5 February 2015, the share capital was increased by a contribution in cash further to the completion of the initial public offering of BioSenic, in the amount of € 6,077,750 with issuance of 2,012,500 shares. The new shares were issued at a price of € 16 per share (of which 3.02 in share capital and 12.98 in issuance premium). The aggregate issuance premium amounted to € 26,122,250.00. Following the capital increase, the share capital of BioSenic amounted to € 16,544,052.63 and was represented by 5,470,740 shares.

On 5 February 2015, the share capital was increased by a contribution in cash further to the conversion of the convertible bonds, in the amount of € 3,252,657.78 with issuance of 1,077,039 shares. The new shares were issued at a price of € 9.61 per share (of which 3.02 in share capital and 6.59 issuance premium). The aggregate issuance premium amounted to € 7,097,342.22. Following the capital increase, the share capital of BioSenic amounted to € 19,796,710.41 and was represented by 6,547,779 shares.

On 10 February 2015, the share capital was increased by contribution in cash further to the exercise of the over-allotment subscription right, in the amount of € 911,662.50 with issuance of 301,875 shares. The new shares were issued at a price of € 16 per share (of which 3.02 in share capital and 12.98 in issuance premium). The aggregate issuance premium amounted to € 3,918,337.50. Following the capital increase, the share capital of BioSenic amounted to € 20,708,372.90, represented by 6,849,654 shares.

On 30 October 2017, the share capital was decreased by an incorporation of losses of an amount of € 6,045,571.41 without any reduction of shares.

On 7 March 2018, a total amount of € 19.45 million in committed capital has been subscribed.

On 9 March 2018, as a result of the exercise of bond warrants and the conversion of the convertible bonds placed via a private placement on 7 March 2018, the share capital was increased by € 1,210,754 with issuance of 565,773 shares. The aggregate share premium for this transaction amounts to € 4,791,588.

From April 2018 to June 2018, as a result of the conversion of the convertible bonds placed via a private placement on 7 March 2018, the share capital was increased by € 464,215 with issuance of 216,923 shares. The aggregate share premium for this transaction amounts to € 1,413,251.

On 9 July 2018, the share capital was decreased by an incorporation of losses of an amount of € 4,830,335.13 without any reduction of shares.

From July 2018 to December 2018, as a result of the conversion of the convertible bonds placed via a private placement on 7 March 2018, the share capital was increased by € 1,051,076 with issuance of 678,196 shares. The aggregate share premium for this transaction amounts to € 4,608,258.

From January 2019 to June 2019, as a result of the conversion of the convertible bonds placed via a private placement on 7 March 2018, the share capital was increased by € 968,552 with issuance of 641,425 shares. The aggregate share premium for this transaction amounts to € 1,313,907.

Via the Private Placement on 27 June 2019, BioSenic has raised € 5.0 million and placed 1,351,352 new shares with current and new institutional investors in Belgium. The share capital was increased by € 2,040,542. The aggregate share premium for this transaction amounts to € 2,959,458. Following the capital increase, the share capital of BioSenic amounted to € 15,540,605 and was represented by 10,303,323 shares.

From July 2019 till 12 December 2019, as a result of the conversion of the convertible bonds placed via a private placement on 7 March 2018, the share capital was increased by € 479,218 with issuance of 317,363 shares and amounts to € 16,019,823.16 and is represented by 10,620,686 shares. The aggregate share premium for this transaction amounts to € 595,732.

On 12 December 2019, BioSenic decided to reduce its share capital by the incorporation of the losses. After the operation the share capital amounts to € 5,427,597.19.

On 18 December 2019, as a result of the conversion of the convertible bonds placed via a private placement on 7 March 2018, the share capital was increased by € 26,116.08 with issuance of 51,208 shares. The aggregate share premium for this transaction amounts to € 136,378.31.

On 29 January 2020, as a result of the conversion of the convertible bonds placed via a private placement on 7 March 2018, the share capital was increased by € 80,699.85 with issuance of 158,235 shares. The aggregate share premium for this transaction amounts to € 451,774.60.

On 26 February 2020, as a result of the conversion of the convertible bonds placed via a private placement on 7 March 2018, the share capital was increased by €61,311.18 with issuance of 120,218 shares. The aggregate share premium for this transaction amounts to € 393,671.85.

On 25 March 2020, as a result of the conversion of the convertible bonds placed via a private placement on 7 March 2018, the share capital was increased by € 79,592.64 with issuance of 156,064 shares. The aggregate share premium for this transaction amounts to € 320,397.19.

On 30 April 2020, as a result of the immediate conversion of the convertible bonds placed via a private placement announced on 29 April 2020, the share capital was increased by € 203,302.32 with issuance of 398,632 shares. The aggregate share premium for this transaction amounts to € 796,697.15.

On 7 May 2020, as a result of the conversion of the convertible bonds placed via a private placement on 7 March 2018, the share capital was increased by € 80,629.47 with issuance of 158,097 shares. The aggregate share premium for this transaction amounts to € 306,864.56.

On 21 August 2020, as a result of the conversion of the convertible bonds placed via a private placement announced on 29 April 2020, the share capital was increased by € 100,332.81 with issuance of 196,731 shares. The aggregate share premium for this transaction amounts to € 312,154.16.

On 8 October 2020, as a result of the conversion of the convertible bonds placed via a private placement announced on 29 April 2020, the share capital was increased by € 106,802.16 with issuance of 209,416 shares. The aggregate share premium for this transaction amounts to € 280,691.85.

Via the Private Placement on 15 December 2020, BioSenic has raised € 9.92 million and placed 4,408,881 new shares with current and new institutional investors in Belgium. The share capital was increased by € 2,248,529. The aggregate share premium for this transaction amounts to € 7,671,471. Following the capital increase, the share capital of BioSenic amounted to € 8,414,913 and was represented by 16,478,168 shares.

On 26 February 2021, BioSenic decided to reduce its share capital by the incorporation of the losses. After the operation the share capital amounts to € 3,812,557.67.

Via the Private Placement on 3 December 2021, BioSenic has raised € 3.3 million and placed 4,832,352 new shares with current and new institutional investors. The share capital was increased by € 1,111,441. The aggregate share premium for this transaction amounts to € 2,174,558. Following the capital increase, the share capital of BioSenic amounted to € 4,923,998.63 and was represented by 21,310,520 shares.

On 30 May 2022, BioSenic signed a subscription agreement for a maximum € 5 million convertible bonds facility arranged by ABO Securities, through its affiliated entity Global Tech Opportunities 15. The proceeds of the financing will be used to advance the clinical development of BioSenic's asset, the allogeneic bone cell therapy, ALLOB. ABO Securities, on behalf of the convertible bonds investor, commits to subscribe to up to € 5 million in convertible bonds. The convertible bonds will be issued and subscribed in ten tranches. A first tranche of 10 convertible bonds with an aggregate principal amount of € 0.5 million was issued on 9 June 2022. The second and third tranche of 20 convertible bonds in the aggregate were issued on 2 September 2022, while the fourth tranche was subscribed on 23 September 2022. A fifth tranche was subscribed on 8 December 2022. The issue and subscription of the remaining five tranches with a principal amount of € 500,000 each can be requested at BioSenic's sole discretion over an eighteen-month period beginning on the signing date of the subscription agreement, subject to customary conditions to be met.

Date	Transaction	Number and class of shares issued	Issue price per share (€) including issuance premium	Capital increase/ decrease (€)	Share capital after transaction (€)	Aggregate number of shares after capital increase
05/02/2015	Capital increase	2,012,500	16	6,077,750	16,544,052.63	5,470,740
05/02/2015	Capital increase	1,077,039	9.61	3,252,657.78	19,796,710.41	6,547,779
10/02/2015	Capital increase	301,875	16	911,662.50	20,708,372.90	6,849,654
30/10/2017	Incorporation of losses	None	Not applicable	-6,045,571.41	14,662,801.49	6,849,654
09/03/2018	Capital increase / conversion convertible bonds	565,773	10.61	1,210,754.22	15,873,555.71	7,415,427
04/2018 – 06/2018	Capital increase / conversion convertible bonds	216,923	8.66 (average issue price)	94,872.62	16,337,770.93	7,632,350
09/07/2018	Incorporation of losses	None	Not applicable	-4,830,335.13	11,507,435.80	7,632,350
07/2018 – 12/2018	Capital increase / conversion convertible bonds	678,196	8.30 (average issue price)	1,024,076	12,531,511.76	8,310,546
01/2019 – 06/2019	Capital increase / conversion convertible bonds	641,425	3.56 (average issue price)	968,552	13,500,063.51	8,951,971
01/07/2019	Capital increase	1,351,352	3.70	2,040,542	15,540,605.03	10,303,323
10/07/2019	Capital increase / conversion convertible bonds	49,522	3.79 (average issue price)	74,778	15,615,383.25	10,352,845
21/08/2019	Capital increase / conversion convertible bonds	93,952	3.51 (average issue price)	141,868	15,757,250.77	10,446,797
11/09/2019	Capital increase / conversion convertible bonds	33,200	3.54 (average issue price)	50,132	15,807,382.77	10,479,997
14/11/2019	Capital increase / conversion convertible bonds	140,689	3.13 (average issue price)	212,440	16,019,823.16	10,620,686
12/12/2019	Incorporation of losses	None	Not applicable	-10,592,225.97	5,427,597.19	10,620,686
18/12/2019	Capital increase/conversion convertible bonds	51,208	3.17 (average issue price)	26,116	5,453,713,27	10,671,894
29/01/2020	Capital increase/conversion convertible bonds	158,235	3.37 (average issue price)	80,700	5,534,413.12	10,830,129

Date	Transaction	Number and class of shares issued	Issue price per share (€) including issuance premium	Capital increase/ decrease (€)	Share capital after transaction (€)	Aggregate number of shares after capital increase
26/02/2020	Capital increase/conversion convertible bonds	120,218	3.78 (average issue price)	61,311	5,595,724.30	10,950,347
25/03/2020	Capital increase/conversion convertible bonds	156,064	2.79 (average issue price)	79,593	5,675,316.94	11,106,411
30/04/2020	Capital increase / conversion convertible bonds	398.632	2.51 (average issue price)	203,302.32	5,878,619.26	11.505.043
07/05/2020	Capital increase / conversion convertible bonds	158.097	2.45 (average issue price)	80,629.47	5.959.248.73	11.663.140
21/08/2020	Capital increase / conversion convertible bonds	196,731	2.10 (average issue price)	100,332.81	6,059,581.54	11,859,871
08/10/2020	Capital increase / conversion convertible bonds	209,416	1.85 (average issue price)	106,802.16	6,166,383.70	12,069,287
15/12/2020	Capital increase	4,408,881	2.25	2,248,529	8,414,913.01	16,478,168
26/02/2021	Incorporation of losses	None	Not applicable	-4,602,355.34	3,812,557.67	16,478,168
03/12/2021	Capital increase	4,832,352	0.68	1,111,441	4,923,998.63	21,310,520
20/06/2022	Capital increase / conversion convertible bonds	185,185	0.27	42,592.55	4,966,591.18	21,495,705
04/07/2022	Capital increase / conversion convertible bonds	200,000	0.25	46,000.00	5,012,591.18	21.695.705
19/07/2022	Capital increase / conversion convertible bonds	217,391	0.23	49,999.93	5,062,591.11	21,913,096
28/07/2022	Capital increase / conversion convertible bonds	217,391	0.23	49,999.93	5,112,591.04	22,130,487
08/08/2022	Capital increase / conversion convertible bonds	416,666	0.24	95,833.18	5,208,424.22	22,547,153
12/08/2022	Capital increase / conversion convertible bonds	416,666	0.24	95,833.18	5,304,257.40	22,963,819
23/08/2022	Capital increase / conversion convertible bonds	208,333	0.24	47,916.59	5,352,173.99	23,172,152
31/08/2022	Capital increase / conversion convertible bonds	208,333	0.24	47,916.59	5,400,090.58	23,380,485
12/09/2022	Capital increase / conversion convertible bonds	217,391	0.23	49,999.93	5,450,090.51	23,597,876
22/09/2022	Capital increase / conversion	238,095	0.21	50,000.00	5,500,090.51	23,835,971

Date	Transaction	Number and class of shares issued	Issue price per share (€) including issuance premium	Capital increase/ decrease (€)	Share capital after transaction (€)	Aggregate number of shares after capital increase
	convertible bonds					
04/10/2022	Capital increase / conversion convertible bonds	294,117	0.17	50,000.00	5,550,090.51	24,130,088
14/10/2022	Capital increase / conversion convertible bonds	333,333	0.15	50,000.00	5,600,090.51	24,463,421
24/10/2022	Contribution in kind	90,668,594	0.45	27,200,578.20	32,800,668.71	115,132,015
28/10/2022	Capital increase / conversion convertible bonds	833,333	0.12	100,000.00	32,900,668.71	115,965,348
28/10/2022	Capital increase / conversion convertible bonds	1,666,666	0.12	200,000.00	33,100,668.71	117,632,014
08/11/2022	Capital increase / conversion convertible bonds	769,230	0.13	100,000.00	33,200,668.71	118,401,244
17/11/2022	Capital increase / conversion convertible bonds	2,727,272	0.11	300,000.00	33,500,668.71	121,128,516
06/12/2022	Capital increase / conversion convertible bonds	769,230	0.13	100,000.00	33,600,668.71	121,897,746
16/01/2023	Capital increase / conversion convertible bonds	1,111,111	0,09	100,000.00	33,700,668.71	123,008,857
26/01/2023	Capital increase / conversion convertible bonds	1,000,000	0,10	100,000.00	33,800,668.71	124,008,857

9.2.2 *History of share capital of Medsenic since 1 January 2020*

Pursuant to the deliberations of the Extraordinary General Meeting of Medsenic on 25 February 2022, the share capital was increased by a nominal amount of € 31,510 by issuing to Phebra 3,151 new ordinary shares of Medsenic with a nominal value of € 10 each as consideration for the contribution of tangible (i.e., documentation related to (and explaining) the IP) and intangible assets, thereby increasing the share capital from € 663,850 to € 695,360.

Under the terms of the Chairman of Medsenic's decisions dated 15 April 2022, it was noted that Medsenic's share capital had been increased by a nominal amount of € 42,840 through the issue of 4,284 preference shares of category P, with a nominal value of € 10 each, issued at a unit subscription price of € 217 (including the issue premium), resulting from the conversion of 4,104 bonds convertible into preference shares of category P called "OC-2021" issued by the ordinary annual and extraordinary general meeting of Medsenic's partners on 21 May 2021, the capital being increased from € 695,360 to € 738,200.

9.3 Warrant plans of BioSenic

9.3.1 *Warrant plans issued*

BioSenic currently has 3 warrant plans outstanding for its employees, Board members, Executive committee members and consultants:

On 24 February 2014, the extraordinary shareholders' meeting of BioSenic created and approved a plan which consisted in the issue of 113,760 warrants for employees, consultants and Directors (plan A). At the date of the Document, 87,998 warrants have been granted and accepted. The ordinary shareholders' meeting of 10 June 2020 took note of the number of Plan A warrants still available for granting, i.e. 25,761 warrants and decided to cancel the said residual warrants.

On 28 May 2020, the Board of Directors of BioSenic created and approved a plan which consisted in the issue of 69,978 warrants for employees, management members and Directors (plan 2020/05). All warrants have been granted and accepted.

On 23 December 2020, the Board of Directors of BioSenic created and approved a plan which consisted in the issue of 99,832 warrants for employees, management members and Directors (plan 2020/12). All warrants have been granted and accepted except for Jean-Paul Prieels that refused 2,000 warrants.

On the date of this Prospectus, the following warrants are outstanding in accordance with the above-mentioned plans:

Plan	Total
Former CEO	109,724
Former CFO	43,500
Former CBO	5,000
Consultant	5,000
Board members	29,330
Former CMO	5,000
Total	**197,554**

On 23 August 2021, the extraordinary shareholders' meeting of BioSenic issued warrants to the European Investment Bank and to Patronale Life. On the date of this prospectus, the following warrants are outstanding:

Plan	Total
European Investment Bank	800,000
Patronale Life NV	200,000
Total	**1,000,000**

On 24 October 2022, the extraordinary shareholders' meeting of BioSenic issued and allotted 24.463.421 new "ALLOB" warrants to each of the existing shareholders of BioSenic (excluding for the avoidance of doubts the shareholders of Medsenic SAS which simultaneously contributed 51% of their shares into BioSenic's capital). Each warrant allows the holder to subscribe for one new share of BioSenic at an exercise price of EUR 0.45, subject to the condition precedent of statistically positive interim results of the ALLOB phase IIB showing that the primary endpoint is met, which would be the case in the context of an interim analysis if the RUST score is higher than 1.46.

9.3.2 *Summary of the outstanding warrant plans*

The relevant terms and conditions of BioSenic's existing **warrant plan A** are set out below:

- **Vesting**: 1/3 on the first anniversary of the grant of the warrants, 1/3 on the second anniversary of the grant and 1/3 on the third anniversary of the grant, under the conditions that the beneficiary is working for BioSenic. Warrants will vest immediately in case of a change of control, an initial public offering or a public takeover bid.

- **Exercise period**: when vested, the warrants are exercisable at any time outside the closed period (as determined in BioSenic's Dealing Code), but not later than 10 years following the creation of these warrants.

- **Exercise price**: the exercise price will be determined by the Board of Directors of BioSenic, in accordance with the rules applicable to listed companies:

    - at the closing price of the share of the day preceding the day of the offer; or

    - the 30-day average price of the share of the 30 calendar days preceding the date of the offer.

- **Term**: ten years. All warrants that have not been exercised within the ten-year period as of their creation (i.e., prior to 24 February 2024) become null and void.

The relevant terms and conditions of BioSenic's existing **warrant plan 2020 of May and December** are set out below:

- **Vesting:** The Warrants will become vested to the Grantee upon acceptance by the Grantee (without any further conditions), i.e. upon receipt by BioSenic of the duly completed acceptance form within the time limit.

- **Exercise period:** the Warrants shall not become exercisable before the first day of the fourth calendar year following the Offer and after the last day of the tenth year following the date of issuance (the "Exercise Period").

- **Exercise price**: the exercise price will be determined by the Board of Directors of BioSenic, in accordance with the rules applicable to listed companies.

    - at the closing price of the share of the day preceding the day of the offer; or

    - the 30-day average price of the share of the 30 calendar days preceding the date of the offer.

- **Term**: seven years. All warrants that have not been exercised within the seven-year period as of their creation become null and void.

No new warrant plan has been issued in 2021.

The relevant terms and conditions of BioSenic's existing "**ALLOB" warrants plan** are set out below:

- **Vesting:** The ALLOB warrants may be exercised upon successful ALLOB interim Phase IIB results (statistically positive results (primary endpoint is met, which, in the context of an interim analysis, would be if the RUST score is higher than 1.46, upon the decision of the ad-hoc independent committee, validating the SAP conclusions drawn by an independent CRO) (the "**Triggering Event**"). BioSenic expects to announce the ALLOB interim Phase IIB results during the first half of 2023.

- **Exercise period:** The ALLOB warrants may be exercised from the Triggering Event until the first anniversary of the Triggering Event.

- **Exercise price**: The exercise price of each ALLOB warrant shall be equal to € 0.45.

- **Term**: The ALLOB warrants will expire on the first anniversary of the Triggering Event.

The relevant terms and conditions of BioSenic's existing **warrant plan for the EIB Warrant** are set out below:

- **Subscription Price**: The subscription price is equal to €0.01 per EIB Warrant (and offset by an arrangement fee of the same amount paid by Bone Therapeutics to the EIB).

- **Maturity Date**: The EIB Warrants have a defined life of five (5) years. However, Bone Therapeutics undertakes to issue identical warrants with a life of five (5) years after the Expiry Date.

- **Exercise price**: The exercise price of each EIB Warrant will be equal to the lower of (i) the average of the closing prices of BioSenic's shares during the thirty (30) days preceding the notarisation of the unconditional subscription of the EIB Warrants and (ii) the closing price of the Bone Therapeutics share on the day preceding the notarisation of the unconditional subscription of the EIB Warrants.

- **Exercise Period**: The EIB Warrants may be exercised from the earlier of (i) the occurrence of a Voluntary or Mandatory Early Redemption Event and (ii) six months prior to the maturity of a Tranche, until maturity.

- **Other**: In cases where the Beneficiary has the right to transfer the EIB Warrants, BioSenic, its agent or its shareholders (in that order), has a right of first refusal to redeem the EIB Warrants on the same terms and conditions.

The relevant terms and conditions of BioSenic's existing **warrant plan for the Patronale Life Warrant** are set out below:

- **Subscription Price**: The subscription price is equal to €0.01 per Patronale Life Warrant.

- **Maturity Date**: The Patronale Life Warrants have a defined life of five (5) years.

- **Exercise price**: The exercise price of each Patronale Life Warrant will be equal to the lower of (i) the average of the closing prices of BioSenic's shares during the thirty (30) days preceding the notarisation of the unconditional subscription of the Patronale Life Warrants and (ii) the closing price of the Bone Therapeutics share on the day preceding the notarisation of the unconditional subscription of the Patronale Life Warrants.

- **Exercise Period**: The Patronale Life Warrants may be exercised from the earlier of (i) the occurrence of a Voluntary or Mandatory Early Redemption Event and (ii) six months prior to the maturity of a Tranche, until maturity.

- **Other**: In cases where the Beneficiary has the right to transfer the Patronale Life Warrants, BioSenic, its agent or its shareholders (in that order), has a right of first refusal to redeem the Patronale Life Warrants on the same terms and conditions.

9.4 Warrant plans of Medsenic

Medsenic has granted warrants (*bons de souscription de parts de créateur d'entreprise* – "BSPCE") to the following persons and in the following proportions:

- 1,513 BSPCE-2016 and 218 BSPCE-2017 to Mrs. Véronique Pomi, employee and founder of Medsenic;
- 1,512 BSPCE-2016 and 217 BSPCE-2017 to Mr. François Rieger, President and founder of Medsenic.

All 3,025 BSPCE-2016 and 435 BSPCE-2017 remain outstanding.

The relevant terms and conditions of the Medsenic's existing **BSPCE-2016** are set out below:

- **Exercise period**: from May 26, 2017 to May 25, 2027.
- **Exercise price**: € 162 per ordinary share.
- **Term**: ten years. All warrants that have not been exercised within the ten-year period as of their creation become null and void.

The relevant terms and conditions of Medsenic's existing **BSPCE 2017** are set out below:

- **Exercise period:** from December 20, 2017 to December 19, 2027.
- **Exercise price**: € 217 per ordinary share.
- **Term**: seven years. All warrants that have not been exercised within the ten-year period as of their creation become null and void.

According to provision 3.2.3 (vi) of the Subscription Agreement both of the BSPCE 2016 and BSPCE 2017 will become null and void if they are not exercised before the last contribution of the remaining 49% of Medsenic's shares, which is expected to occur by no later than 24 October 2024.

In the context of the contribution of the 51% of shares of Medsenic into BioSenic's capital on 24 October 2022, the value per Medsenic share was set at € 1,083.

No new warrant plan has been issued since 2017.

10 ARTICLES OF ASSOCIATION

10.1 Objects and purposes

10.1.1 *BioSenic's object*

In accordance with article 3 of BioSenic's articles of association, its corporate object is as follows:

BioSenic has as its purpose, both in Belgium as well as abroad, in its own name or on behalf of third parties, for its own account or for the account of others or in collaboration with third parties:

- research and development of products and processes in the pharmaceutical, bio-technological, cellular or derived domains, that are able to have an economical value for human or animal health, diagnostic and therapeutic, in neutraceuticals or cosmetics, based, amongst others, on genetics, cell biology and in vitro or in vivo pharmacology;
- commercialisation of products or processes in the abovementioned fields of application;
- acquisition, disposal, exploitation, valorisation, commercialisation and management of any intellectual property rights whatsoever, property rights, usage rights, trademarks, patents, blueprints, licenses, etc;
- file and exploit patents, drawings and models, trademarks and other intellectual and patrimonial rights in relation to the abovementioned items;
- preparation, information, publications and editing in all media in relation to the abovementioned items;

BioSenic may carry out, in Belgium as well as abroad, all industrial, commercial, financial, movable and immovable transactions, of a nature directly or indirectly enlarge or promote its business. It can acquire all any movable or immovable assets, even if those assets do not have a direct or indirect connection with BioSenic's purpose.

BioSenic may consent with any form of surety guaranteeing obligations of related or associated companies, companies in which it has participation or all third parties in general.

BioSenic may, by any means whatsoever, take up interests in, cooperate or merge with other associations, businesses, firms or companies that have an identical, similar or related corporate purpose, or that are likely to promote their business or to facilitate the sale of its products or services.

10.1.2 *Medsenic's object and purpose*

In accordance with article 2 of Medsenic's articles of association, its corporate object is as follows:

The purpose of the company is, directly or indirectly, both in France and abroad:

- the development of treatments based on arsenic derivatives to treat autoimmune diseases or diseases concerning the immune system, or diagnostic means, all directly or indirectly, on its own behalf or on behalf of third parties, either alone or with third parties;
- the taking, acquisition, exploitation or transfer of all processes, patents and intellectual property rights concerning the said activities;
- the performance of scientific studies and services on behalf of third parties directly or indirectly related to the corporate purpose;

- the direct or indirect participation of the company, by any means, in any business or company created or to be created, which may be related to the company's purpose, in particular through the creation of new companies, contributions, partnerships, subscriptions or repurchases of securities or corporate rights, mergers, alliances or joint ventures or economic interest groups or management leases;

- and more generally, all industrial, commercial and financial operations, movable and immovable property, which may be directly or indirectly related to the company's purpose and to all similar or related purposes which may promote its extension or development

10.2 Description of any provision of the articles of association that would have an effect of delaying, deferring or preventing a change in control of BioSenic

The Board of Directors of BioSenic has not been authorized by the shareholders' meeting to purchase its own shares and neither do the articles of association authorize the Board of Directors to purchase own shares in case of imminent serious harm to BioSenic in accordance with Article 7:215, §1, 4th indent of the Belgian Code on Companies and Associations.

In principle, from the date of the FSMA's notification to BioSenic of a public takeover bid on the financial instruments of BioSenic, the authorization of the Board of Directors to increase BioSenic's share capital in cash or in kind, while limiting or cancelling the preferential subscription right, is suspended.

However, BioSenic's extraordinary shareholders' meeting held on 24 October 2022 expressly granted the Board of Directors the authority to increase BioSenic's share capital, in one or several times, from the date of the FSMA's notification to BioSenic of a public takeover bid on the financial instruments of BioSenic and subject to the limitations imposed by the Belgian Code on Companies and Associations. This authorization became effective on 28 October 2022 and will be valid until 28 October 2025.

11 SUMMARY OF MATERIAL INFORMATION DISCLOSED SINCE JANUARY 2022

The following information is a summary of the inside information that has been disclosed under the Market Abuse Regulation (Regulation 5EU) No. 596/2014) and other relevant information disclosed over the last 12 months and that is relevant as at the date of the Document of BioSenic:

Clinical results:

On 29 March 2022, BioSenic announced it is redefining its strategic priorities to concentrate specifically on the development of its most advanced clinical asset, the allogeneic cell therapy platform, ALLOB.

On 15 July 2022, BioSenic announced an optimized statistical analysis and the implementation of an interim analysis for the ongoing Phase IIb clinical trial with its allogeneic bone cell therapy product, ALLOB.

On 8 November 2022, BioSenic announced an update on its systemic autoimmune disease platform, originally designed by Medsenic.

Cash position:

On 19 January 2022, BioSenic provided fourth quarter 2021 business update and 2022 outlook.

On 12 April 2022, BioSenic announced securing a € 5 Million convertible bonds financing.

On 29 April 2022, BioSenic announced 2021 full year results.

On 1 June 2022, BioSenic provided first quarter 2022 business update.

On 7 September 2022, BioSenic reported half year 2022 results.

On 21 October 2022, BioSenic provided third quarter 2022 business update.

Corporate:

On 23 March 2022, BioSenic announced that it has received a transparency notification dated 16 March 2022 indicating that the shareholdings held by Nyenburgh Holding NV have crossed below the minimum threshold of 5%.

On 12 May 2022, BioSenic entered into exclusive reverse merger discussions with Medsenic.

On 31 May 2022, BioSenic signed definitive subscription agreement for a maximum of € 5M convertible bonds facility with ABO.

On 30 June 2022, BioSenic announced an increase in the total number of voting rights and shares as a result of the issuance of new shares following the conversion of convertible bonds issued on 9 June 2022.

On 29 July 2022, BioSenic announced an increase in the total number of voting rights and shares as a result of the issuance of new shares following the conversion of convertible bonds issued on 9 June 2022.

On 10 August 2022, BioSenic announced to broaden and derisk therapeutic portfolio by acquiring majority participation in Medsenic.

On 31 August 2022, BioSenic announced an increase in the total number of voting rights and shares as a result of the issuance of new shares following the conversion of convertible bonds issued on 9 June 2022.

On 30 September 2022, BioSenic announced an increase in the total number of voting rights and shares as a result of the issuance of new shares following the conversion of convertible bonds issued on 9 June 2022.

On 7 October 2022, BioSenic announced that it will regain worldwide rights to its allogeneic, off-the-shelf, bone cell therapy platform ALLOB further to the unilateral termination notice received from Shenzhen Pregene Biopharma Co., Ltd.

On 11 October 2022, BioSenic received a transparency notification from S.F.P.I (*Société Fédérale de Participation et d'Investissement*)/F.P.I.M (*Federale Participatien en Investeringsmaatschappij*) dated 04 October 2022.

On 25 October 2022, BioSenic announced the closing of its acquisition of a majority participation in Medsenic.

On 3 November 2022, BioSenic announced an increase in the total number of voting rights and shares as a result of the issuance of new shares following the conversion of convertible bonds and the shares issued to Medsenic shareholders on 24 October 2022.

On 4 November 2022, BioSenic received a transparency notification received from S.R.I.W. SA and Sofipôle SA.

On 21 November 2022, BioSenic received a transparency notification received from François Rieger, Véronique Pomi, Capital Grand Est, FA DIESE 3 and CPH Banque.

On 1 December 2022, BioSenic announced an increase in the total number of voting rights and shares as a result of the issuance of new shares following the conversion of convertible bonds.

On 2 December 2022, BioSenic announced that it has appointed Michel Wurm, MD, as interim Chief Medical Officer (CMO), responsible for the development of both of BioSenic's cell therapy and autoimmune disease platforms.

On 5 January 2023, BioSenic announced an increase in the total number of voting rights and shares as a result of the issuance of new shares following the conversion of convertible bonds.

On 18 January 2023, BioSenic announced the strengthening of its scientific team with the appointment of Dr Carole Nicco as CSO.

On 27 January, BioSenic announced the appointment of Yves Sagot as a Member of the Board and Independent Director.

12 APPENDIX A – ABBREVIATIONS AND DEFINITIONS

Abbreviations

AE	Adverse Event
Allo-SCT	Allogeneic hematopoietic stem cell transplantation
API	Active Pharmaceutical Ingredient
APL	Acute promyelocytic leukaemia
ATMP	Advanced Therapy Medicinal Product
ATO	arsenic trioxide
BLA	Biologics License Application
β-TCP	β-tricalcium phosphate
BMP	Bone Morphogenetic Protein
CDMO	Contract Development and Manufacturing Organizations
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CHU	*Centre Hospitalier Universitaire*
CMO	Chief Medical Officer
CMC	Chemistry, Manufacturing and Controls
CNRS	*Centre National de la Recherche Scientifique*
COO	Chief Operational Officer
CSO	Chief Scientific Officer
CTA	Clinical trial application
DBM	Demineralized Bone Matrix
DU	Delayed Union (fracture)
DSMB	Data Safety Monitoring Board
EFDR/FEDER	European Regional Development Fund (*Fonds Européen de Développement Régional*)
EMA	European Medicines Agency
EU	European Union
FAMHP	(Belgian) Federal Agency for Medicines and Health
FDA	Food and Drug Administration (in the US)
FSMA	Financial Services and Markets Authority in Belgium
GAAP	(Belgian) Generally Accepted Accounting Principles
GCP	Good Clinical Practice
GDE	Global Disease Evaluation
GMP	Good Manufacturing Practice
GIE	*Groupement d'Intérêt Economique* (Economic Interest Grouping)
HA	Hyaluronic acid
hAEC	human Amniotic Epithelial Cell
HSCT	Allogeneic hematopoietic cell transplantation
IA	Intra-articular
ICH	International Council for Harmonisation

IFRS	International Financial Reporting Standards
IMP	Investigation Medicinal Product
IND	Investigational New Drug application (in the US)
IRD	Inflammatory Rheumatic Disease
IV	Intravenous
KOA	Knee Osteoarthrisis
KOL	Key opinion leader
MAA	Marketing authorization application
MSC	Mesenchymal Stem Cells
MW	Molecular weight
NCE	A New Chemical Entity is an active ingredient that contains no active moiety that has been previously approved by the Agency in an application submitted under section 505 of the Federal Food, Drug, and Cosmetic Act or has been previously marketed as a drug in the US
NIH	National Institute of Health
NSAIDs	Non-steroidal anti-inflammatory drugs
NU	Non-Union (fracture)
OA	Osteoarthrisis
OATO	oral formulation of arsenic trioxide
ODD	Orphan Drug Designation
ON	Osteonecrosis
PDGF	Platelet-Derived Growth Factor
PTH	ParaThyroid Hormone
Pre-IND	Pre-investigational new drug application, which allows the sponsor-investigator the opportunity to discuss the proposed project and receive guidance directly from the FDA prior to submitting an IND
PWTC	*Plateforme Wallonne de la Thérapie Cellulaire* (Walloon Platform for cell therapy)
RCA(s)	Recoverable Cash Advance(s)
RA	Rheumatoid Arthritis
rh	recombinant human
SAE	Serious Adverse Events
SCTS	Skeletal Cell Therapy Support SA
SISE	*Société d'Infrastructures, de Services et d'Energies SA*
SME	Small and Medium Enterprise
SF	Spinal Fusion
SLE	Systemic Lupus erythematosus, which is the most common type of lupus, is an autoimmune disease in which the immune system attacks its own tissues, causing widespread inflammation and tissue damage in the affected organs.
SOC	Standard of care
SSc	Systemic Sclerosis is an autoimmune rheumatic disease characterised by excessive production and accumulation of

	collagen, called fibrosis, in the skin and internal organs and by injuries to small arteries.
THA	Total Hip Arthroplasty
TUS	Tomographic Union Score
ULB	*Université libre de Bruxelles*
ULg	*Université de Liège*

Definitions

Advanced therapy medicinal product	Medicine for human use that are based on gene therapy, somatic cell therapy or tissue engineering (EMA classification 1394/2007).
aGvHD	Acute Graft versus Host Disease
cGvHD	Chronic Graft versus Host Disease
ArsciCop	The oral formulation of arsenic trioxide combined with metal ions to potentiate the therapeutic effects of arsenic
ArsciCor	The oral formulation of arsenic trioxide
Arscimed	IV (intravenous) formulation of arsenic trioxide
Allogeneic	Said for tissues or cells when the donor is different from the recipient (i.e., the patient)
Audit Committee	The audit committee installed by the Board of Directors.
Autologous	Said for tissues or cells when the donor is the same as the recipient (i.e., the patient).
Belgian Code on Companies and Associations	*Code des sociétés et des associations* enacted by the Belgian Law of 23 March 2019 regarding the implementation of the Belgian code on companies and associations, as applicable to BioSenic as of 24 June 2019 following the publication in the Belgian Official Gazette (*Moniteur belge*) of the approval by the extraordinary shareholders' meeting dd. 12 June 2019 to opt-in under the Belgian Code on Companies and Associations.
BioSenic	BioSenic SA, a limited liability company incorporated in the form of a 'société anonyme' under the laws of Belgium, with registered office at Granbonpré 11, Building H, 1435 Mont-Saint-Guibert (Belgium) and registered with the legal entities register (Charleroi) under number 0882.015.654.
BioSenic Group	The consolidated group of BioSenic, Medsenic SAS and Bone Therapeutics USA Inc..
Biovigilance (MCH)	The process of monitoring, reporting and preventing all risks associated with the therapeutic use of products derived from human biological materials, in accordance with the Belgium law (as issued on 12 December 2003 and as amended on 17 July 2017).
Board of Directors	The board of directors of BioSenic.
BSPCE	Warrants (*bons de souscription de parts de créateur d'entreprise*) issued by Medsenic.
cGvHD	Chronic Graft versus Host Disease.
Chairman	The chairman of the Board of Directors
CHU	Centre Hospitalier Universitaire de Liège
CNRS	The *Centre National de la Recherche Scientifique* located in France

Company	BioSenic SA.
Competent Authority (Regulatory Agency)	National organization that regulates medicinal products for human use in accordance with the European directives and national law. Clinical trials of medicinal products in human subjects require authorisation by the competent authority.
Contribution	The contribution of 51% of the shares in Medsenic SAS into BioSenic as approved by the extraordinary shareholders' meeting on 24 October 2022.
Corporate Governance Charter	The corporate governance charter of BioSenic.
Corporate Governance Code (or CGC)	The new Belgian Corporate Governance Code 2020 introduced by the Royal Decree of 12 May 2019 designating the corporate governance code to be complied with by listed companies published on 17 May 2019 in the Belgian Official Gazette (*Moniteur belge*). The third Belgian Code on Corporate Governance, which replaces the versions previously published in 2004 and 2009.
Completion Date	The date of approval of the contribution of the 51% stake in Medsenic into BioSenic by the extraordinary shareholders' meeting of BioSenic, being 24 October 2022.
Delayed-union fracture	A medical condition defined as a fracture that has not united within a period of time that would be considered adequate for bone healing.
Directive 2004/23/EC	European Law on setting standards of quality and safety for the donation, procurement, testing, processing, preservation, storage and distribution of human tissues and cells.
Director	A member of the Board of Directors
Ethics Committee	Established committee that ensures that research conducted within a hospital complies with moral and ethical principles. Clinical trials of medicinal products in human subjects require positive opinion by the ethic committee.
Euronext Brussels	The regulated market operated by Euronext Brussels SA/NV.
Euronext Paris	The regulated market operated by Euronext Paris SA.
Ex vivo	Taking place outside the organism.
Executive Committee	The team consisting of the CEO, COO, CSO, Chief Investor Relation Officer, and CMO.
Executive Directors	Directors entrusted with the day-to-day management of BioSenic.
Exosomes	Exosomes are extracellular vesicles generated by all cells and they carry nucleic acids, proteins, lipids, and metabolites. They are mediators of near and long-distance intercellular communication in health and disease and affect various aspects of cell biology.
GMP (Good manufacturing practise)	Tart of quality assurance which ensures that products are consistently produced and controlled to the quality standards appropriate to their intended use.
Group	The consolidated group of BioSenic and Medsenic.
GvHD	Graft versus Host Disease.
FAS population	The full analysis set population, meaning that the targets of the analysis are only the treated patients.
Homeostasis	Self-regulating process by which biological systems tend to maintain internal stability.

Hospital Exemption	Allows hospitals and medical practitioners to provide ATMP-classified products to patients, e.g., in case of high unmet medical need because there is no authorized ATMP alternative available. Said products are custom-made for an individual patient, prepared on a non-routine basis, and used within the same Member State in a hospital under the exclusive professional responsibility of a medical practitioner.
Inflammatory Rheumatic Diseases	Autoimmune diseases characterized by inflammation and loss of function of muscles, joints, bones and other tissues producing symptoms such as pain, swelling and stiffness (e.g., osteoarthritis, rheumatoid arthritis, ankylosing spondylitis…)
JTA Technology	Enhanced hyaluronan-based bone void fillers, and viscosupplements for osteoarthritis (including JTA-004 and JTA NEXT)
Medsenic	Medsenic SAS, a company incorporated and existing under the laws of France, having its registered office at No 204 Avenue de Colmar, F-67100 Strasbourg (France), 527 761 530 R.C.S. Strasbourg.
Medsenic Shareholders' Agreement	The shareholders' agreement relating to Medsenic dated 24 October 2022 between BioSenic and the shareholders of Medsenic holding the remaining 49% of the shares of Medsenic.
Mesenchymal stem cells	Multipotent stem cells that can convert into cell types such as bone cells, cartilage cells, fat cells, etc.
Minority Shareholders	The minority shareholders of Medsenic currently holding the remaining 49% of the shares of Medsenic.
MXB	A combined cell-matrix product of BioSenic for large bone defects and maxillofacial applications.
Nomination and Remuneration Committee	The nomination and remuneration committee of BioSenic installed by the Board of Directors.
Non-Executive Directors	Directors who are not entrusted with the daily management of BioSenic.
Non-union fracture	A medical condition characterised by a failure to achieve bone union within 6-9 months as, all reparative processes have ceased, hence requiring additional surgical intervention.
Orphan Drug Designation	A special status to a drug developed for the treatment of a rare disease or medical condition. This enables the product to gain exclusivity when reaching market and creates additional value (e.g., easier marketing approval, extended exclusivity periods, fee reduction etc.) This status was received for PREOB and ALLOB in osteonecrosis of the femoral head by the EMA and the FDA.
Osteoarthritis	A degenerative joint disease.
Osteoblast	Bone-forming cell.
Osteocyte	A terminal bone forming cell embedded in mineralized bone matrix.
Osteogenesis	The capacity to produce new bone
Osteonecrosis (of the hip)	A medical condition characterized by the death of bone cells and loss of the associated marrow elements. It is a painful condition in which the joint degenerates progressively, ultimately leading to collapse of the femoral head.
Osteosynthesis	A surgical procedure performed to stabilize a fracture by mechanical devices such as metal plates, pins, rods, wires or screws.

Orthobiologics	Substances (e.g., growth factors) naturally found in human body, which are used as a drug (in higher concentrations) to improve bone healing.
Patent Subsidies	The subsidies granted by the Region and, to a lesser extent, the European Commission, to partially finance BioSenic's patents applications.
Phase I/IIa	A first-in-man proof-of-concept pilot study in which the product will be administered to humans for the first time and in which efficacy parameters will be assessed.
Phase IIa	A proof-of-concept pilot study in which the product has already been administered to human – in general in another indication - and in which efficacy parameters will be assessed.
Phase IIb	A proof-of-concept pilot study in which the product has already been administered to human – in general in another indication - and in which efficacy parameters will be assessed.
Phase III	A pivotal study in which the product has already been shown to be safe and efficacious in the indication, and in which the safety and efficacy will be further confirmed in a larger group of patients.
Phase IV	Studies done after the product has been marketed to gather information on the drug's effect in various populations and any side effects associated with long-term use.
Pharmacovigilance	The process of collecting, monitoring and evaluating adverse events in clinical trials for safety purpose.
Phebra	Phebra PTY Limited, (ABN 99 059 357 890) having its principal place of business at 19 Orion Road, Lane Cove West, NSW 2066, Australia.
PP population	Per protocol population, meaning that the targeted population is the one that is treated with no protocol deviation.
Region	The Walloon Region.
Registration Document	This registration document, as well as any supplement thereto.
Regulation S	Regulation S under the Securities Act.
Regulatory regulations	Applicable regulatory laws and regulations.
Research Grants and Research Subsidies	The grants and subsidies granted by the Region, and to a lesser extent the European Commission, to partially finance BioSenic's research and development programmes.
Rheumatoid arthritis	A chronic systemic inflammatory disease affecting the joints.
Scaffold	Scaffolds in orthopaedics are surgical implants that replace and/or strengthen injured musculoskeletal tissues. Besides providing structural integrity, scaffolds form a substrate for cells to growth. Scaffolds are composed of natural material derived from autograft, allograft, xenografts or plants, synthesized from synthetic polymers, ceramics or metals, or are a composite of the aforementioned materials.
Scoliosis	A medical condition that causes abnormal curvature of the spine.
Securities Act	The United States Securities Act of 1933, as amended.
Significant shareholder	A shareholder holding at least 5% of the share capital.
Skeletal Cell Therapy Support SA	An absorbed limited liability company incorporated under the laws of Belgium with registered office at rue Auguste Piccard 37, 6041

	Charleroi and registered with the register of legal entities under number 0841.570.812.
SME Agreement	The agreement dated 24 April 2014 between the Walloon Region and Groupement d'Intérêt Economique BOCEGO (consisting of BioSenic and SCTS) (BOCEGO).
Société d'Infrastructures, de Services et d'Energies SA	A limited liability company incorporated under the laws of Belgium with registered office at avenue Georges Lemaitre 62, 6041 Gosselies and registered with the register of legal entities under number 0841.727.101.
Spinal fusion	A surgical procedure that consists of bridging two or more vertebrae to obtain fusion of an unstable portion of the spine or to immobilize a painful vertebral motion segment.
Spondylolisthesis	A condition in which one or more vertebrae slips out of place onto the vertebra above and below it/them
SLE	Systemic Lupus erythematosus, which is the most common type of lupus, is an autoimmune disease in which the immune system attacks its own tissues, causing widespread inflammation and tissue damage in the affected organs.
SSc	Systemic Sclerosis is an autoimmune rheumatic disease characterised by excessive production and accumulation of collagen, called fibrosis, in the skin and internal organs and by injuries to small arteries.
Stenosis	A narrowing of a channel or a vessel. In this document, spinal stenosis is the narrowing of spaces in the spine (backbone) which causes pressure on the spinal cord and nerves.
Subscription Agreement	The contribution agreement entered between all existing shareholders of Medsenic and BioSenic, with respect to the contribution in kind of 51% of the shares of Medsenic into BioSenic's capital.
Third party payer	An institution or company that provides reimbursement to health care providers for services rendered to a third party (i.e., the patient).
Tissue Bank	An entity that is licensed, accredited or regulated under federal or state law to engage in the recovery, screening, testing, processing, storage or distribution of human biological materials. BioSenic has obtained a license as a tissue bank for handling autologous human biological materials and a license as a tissue bank for handling in collaboration with hospital tissue banks allogeneic human biological materials.
ULB-028 License	The license agreement pursuant to which BioSenic (and its affiliates) has been granted an exclusive and worldwide license in the field of skeletal and dental applications over the technology claimed by the ULB-028 patent family.
Viscosupplementation	A treatment using intra-articular injection of hyaluronan-based preparations which absorb shocks and provide lubrication in order to decrease pain and improve mobility.
Warrants	Warrants issued by BioSenic.

ANNEX 1

MVN
Commissariat aux Comptes

MEDSENIC

Société par Actions Simplifiée
Au capital de 738 200 euros
204, avenue de Colmar
67100 STRASBOURG

527 761 530 RCS STRASBOURG

RAPPORT DU COMMISSAIRE AUX COMPTES
SUR LES COMPTES ANNUELS RETRAITES
EN NORMES IFRS
Exercice clos le 31 décembre 2021
annule et remplace le rapport daté 7 décembre 2022

MVN COMMISSARIAT AUX COMPTES
SAS au capital de 100 000 euros | membre de la CRCC de Paris
42, avenue Kleber – 75116 Paris
mvn@mvn.ec | www.mvn.ec | 01 44 79 35 25
405 224 064 RCS PARIS | APE 6920Z

MVN
Commissariat aux Comptes

MEDSENIC SAS
527 761 530 RCS STRASBOURG
204, avenue de Colmar
67100 STRASBOURG

RAPPORT DU COMMISSAIRE AUX COMPTES
SUR LES COMPTES ANNUELS RETRAITES
EN NORMES IFRS
Exercice clos le 31 décembre 2021
annule et remplace le rapport daté 7 décembre 2022

Au Président,

En notre qualité de commissaire aux comptes de la société MEDSENIC SAS et en réponse à votre demande dans le cadre d'un rapprochement projeté avec une entité cotée, nécessitant la présentation des comptes conformément au référentiel IFRS tel qu'adopté dans l'Union Européenne, nous avons effectué un audit des états financiers de la société relatifs à l'exercice clos le 31 décembre 2021 (ci-après « États Financiers IFRS ») tels qu'ils sont joints au présent rapport.

Ces États Financiers IFRS ont été arrêté par le Président le 5 décembre 2022. Ces États Financiers IFRS ont été établis dans le cadre du passage au référentiel IFRS tel qu'adopté dans l'Union européenne, à partir des comptes sociaux de la société au titre des exercices clos le 31 décembre 2020 et le 31 décembre 2021 préparés en conformité avec les règles et principes comptables français (les « Comptes annuels »), qui ont fait l'objet de notre part d'un audit selon les normes d'exercice professionnel applicables en France. Notre audit nous a conduit à exprimer une opinion sans réserve sur ces comptes annuels clos le 31 décembre 2020 et le 31 décembre 2021. Il nous appartient, sur la base de notre audit, d'exprimer une opinion sur ces États Financiers IFRS.

Nous avons effectué notre audit selon les normes d'exercice professionnel applicables en France et la doctrine professionnelle de la Compagnie nationale des commissaires aux comptes relative à cette intervention ; ces normes requièrent la mise en œuvre de diligences permettant d'obtenir l'assurance raisonnable que les États Financiers IFRS ne comportent pas d'anomalies significatives. Un audit consiste à vérifier, par sondages ou au moyen d'autres méthodes de sélection, les éléments justifiant des montants et informations figurant dans les États Financiers IFRS. Il consiste également à apprécier les principes comptables suivis, les estimations significatives retenues et la présentation d'ensemble des États Financiers IFRS**.** Nous estimons que les éléments que nous avons collectés sont suffisants et appropriés pour fonder notre opinion.

À notre avis, les États Financiers IFRS présentent sincèrement, dans tous leurs aspects significatifs et au regard du référentiel IFRS tel qu'adopté dans l'Union européenne et des règles décrites dans les notes annexes, lesquelles précisent comment les normes comptables internationales adoptées dans l'Union européenne ont été appliquées, le patrimoine et la situation financière de la société au 31 décembre 2021, ainsi que le résultat de ses opérations pour l'exercice écoulé.

Sans remettre en cause l'opinion exprimée ci-dessus, nous attirons votre attention sur la note 6 – Première application des IFRS.

Ce rapport est établi à votre attention dans le contexte décrit ci-avant et ne doit pas être utilisé, diffusé ou cité à d'autres fins.

Ce rapport est régi par la loi française. Les juridictions françaises ont compétence exclusive pour connaître de tout litige, réclamation ou différend pouvant résulter de notre lettre de mission ou du présent rapport, ou de toute question s'y rapportant. Chaque partie renonce irrévocablement à ses droits de s'opposer à une action portée auprès de ces tribunaux, de prétendre que l'action a été intentée auprès d'un tribunal incompétent, ou que ces tribunaux n'ont pas compétence.

Paris, le 3 février 2023

Nicolas METGE
Le Commissaire aux Comptes
Représentant de la société MVN | CC

MVN
Commissariat aux Comptes

MEDSENIC

Société par Actions Simplifiée
Au capital de 738 200 euros
204, avenue de Colmar
67100 STRASBOURG

527 761 530 RCS STRASBOURG

STATUTORY AUDITOR'S REPORT ON ANNUAL ACCOUNTS UNDER IFRS GAAP

Year ended December 31, 2021
cancels and replaces the report dated December 7, 2022

MVN COMMISSARIAT AUX COMPTES
SAS au capital de 100 000 euros | membre de la CRCC de Paris
42, avenue Kléber – 75116 Paris
mvn@mvn.ec | www.mvn.ec | 01 44 79 35 25 |
405 224 064 RCS PARIS | APE 6920Z

MEDSENIC SAS
527 761 530 RCS STRASBOURG
204, avenue de Colmar
67100 STRASBOURG

This is a free translation into English of the auditors' report issued in the French language and is provided solely for the convenience of English speaking readers.

This report should be read in conjunction with, and is construed in accordance with, French law and professional standards applicable in France.

STATUTORY AUDITOR'S REPORT
ON ANNUAL ACCOUNTS
UNDER IFRS GAAP
Year ended December 31, 2021
cancels and replaces the report dated December 7, 2022

To the Chairman,

In our capacity as auditor of MEDSENIC SAS and in response to your request in the context of a planned merger with a listed entity, requiring the presentation of accounts in accordance with IFRS as adopted by the European Union, we have audited the company's financial statements for the year ended December 31, 2021 (hereinafter "IFRS Financial Statements") as attached to this present report.

These IFRS Financial Statements were approved by the Chairman on December 5, 2022. These IFRS Financial Statements were prepared as part of the transition to International Financial Reporting Standards (IFRS) as adopted by the European Union, based on the company's financial statements under financial years ended December 31, 2020 and December 31, 2021 prepared in accordance with French Generally Accepted Accounting rules and Principles (the "Annual accounts"), which have been audited by us in accordance with professional standards applicable in France. Our audit led us to express an unqualified opinion on these annual accounts closed on December 31, 2020 and December 31, 2021. It is our responsibility, based on our audit, to express an opinion on these IFRS Financial Statements.

We conducted our audit in accordance with the professional standards applicable in France and the professional doctrine of the National Company of Auditors relating to this intervention; these standards require the implementation of audit procedures to obtain reasonable assurance that the IFRS Financial Statements are free of material misstatement. An audit consists of verifying, by sampling or by means of other selection methods, the elements justifying the amounts and information appearing in the IFRS Financial Statements. It also consists of assessing the accounting principles followed, the significant estimates used and the overall presentation of the IFRS Financial Statements. We believe that the elements we have collected are sufficient and appropriate to base our opinion.

MVN COMMISSARIAT AUX COMPTES
SAS au capital de 100 000 euros | membre de la CRCC de Paris
42, avenue Kléber – 75116 Paris
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405 224 064 RCS PARIS | APE 6920Z

In our opinion, the financial statements give a true and fair view of the company's net equity and financial position as at December 31, 2021 and financial position as at December 31, 2021, as well as of its financial performance and its cash flows for the year then ended, in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union.

Without calling into question the opinion expressed above, we draw your attention to Note 6 – First application of IFRS.

This report is drawn up for your attention in the context described above and should not be used, disseminated or quoted for any other purpose.

This report is governed by French law. The French courts have exclusive jurisdiction to hear any litigation, claim or disagreement that may arise from our engagement letter or this report, or from any question relating thereto. Each party irrevocably waives its rights to oppose any action brought in such courts, to claim that the action has been brought in a court without jurisdiction, or that such courts lack jurisdiction.

Paris, February 3, 2023

Nicolas METGE
The Auditor
Representative of MVN | CC company

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IFRS FINANCIAL STATEMENTS

MEDSENIC SAS

December 31, 2021

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STATEMENT OF COMPREHENSIVE INCOME

		For the year ended	
(in thousands of euros)	**Note**	**31/12/2021**	**31/12/2020**
Other operating income	7	312	278
Total revenues and operating income		**312**	**278**
Research and development expenses	8, 10	(619)	(645)
General and administrative expenses	9, 10	(570)	(523)
Operating profit/ (loss)		**(877)**	**(890)**
Financial expenses	11	(107)	(15)
Profit/ (loss) before taxes		**(984)**	**(905)**
Income taxes		-	-
Net income/ (loss) for the period		**(984)**	**(905)**
Other comprehensive income			
Remeasurements of post-employment benefit obligations	18	*(5)*	*(0)*
Other comprehensive income		**(5)**	**(0)**
Net income/ (loss) for the period		**(989)**	**(906)**
Basic/diluted loss per share (in euros)	**12**	**(14.89)**	**(13.64)**

STATEMENT OF FINANCIAL POSITION

Assets *(in thousands of euros)*	**Note**	**31/12/2021**	**31/12/2020**	**01/01/2020**
Non-current assets		**38**	**49**	**61**
Property, plant and equipment		13	24	36
Financial assets		25	25	25
Current assets		**1 124**	**997**	**1 245**
Trade and other receivables	13	361	337	573
Other current assets		4	4	4
Cash and cash equivalents	14	759	656	668
TOTAL ASSETS		**1 162**	**1 046**	**1 306**

Equity and liabilities

(in thousands of euros)	**Note**	**31/12/2021**	**31/12/2020**	**01/01/2020**
Equity attributable to company owners		**(2 670)**	**(1 681)**	**(776)**
Share capital		664	664	664
Share premium		3 969	3 969	3 969
Accumulated losses		(7 219)	(6 236)	(5 330)
Other reserves		(83)	(78)	(78)
Non-current liabilities		**2 338**	**2 115**	**1 704**
Interest bearing borrowings	16	1 364	1 046	509
Other non-current liabilities	17	974	1 070	1 195
Current liabilities		**1 494**	**611**	**378**
Interest bearing borrowings	16	1 102	64	7
Trade and other payables	19	208	392	341
Other current liabilities	17	184	155	30
Total liabilities		**3 832**	**2 726**	**2 082**
TOTAL EQUITY AND LIABILITIES		**1 162**	**1 046**	**1 306**

CASH FLOW STATEMENT

	For the year ended	
	31/12/2021	**31/12/2020**
CASH FLOW FROM OPERATING ACTIVITIES		
Operating profit/(loss)	**(877)**	**(890)**
Non-cash adjustments:	-	-
Amortisation and depreciation	13	13
Other	8	8
Working capital movements:	-	-
Trade and other receivables (excluding public grants)	10	26
Trade and other debts	(187)	52
Cash generated from operations	**(1 032)**	**(792)**
Receipt of subsidies linked to the tax credit	(34)	211
Net cash used in operating activities	**(1 067)**	**(581)**
	-	-
CASH FLOW FROM INVESTING ACTIVITIES	-	-
Purchases of intangible and tangible asset	-	-
Net cash used for investing activities	-	-
	-	-
CASH FLOW FROM FINANCING ACTIVITIES	-	-
Proceeds from borrowings	500	600
Repayment of borrowings	(56)	-
Proceeds from convertible borrowings	891	-
Repayments of lease liabilities	(7)	(7)
Repayments of other financial liabilities	(125)	-
Interest paid	(33)	(24)
Net cash generated by financing activities	**1 169**	**569**
	-	-
Net increase (decrease) in cash and cash equivalents	**102**	**(12)**
Cash and cash equivalents at beginning of the year	656	668
Cash and cash equivalents at end of the year	759	656

STATEMENT OF CHANGES IN EQUITY

(In thousands of euros)	Share capital	Share premium	Accumulated losses and other reserves	Other elements of comprehensive income (1)	Total
01/01/2020	**664**	**3,969**	**(5 409)**		**(776)**
Total comprehensive income/(loss) for the period			(905)		(905)
31/12/2020	**664**	**3,969**	**(6 314)**	**-**	**(1 682)**
Total comprehensive income/(loss) for the period			(984)	(5)	(989)
31/12/2021	**664**	**3,969**	**(7 298)**	**(5)**	**(2 670)**

(1) This relates only to the remeasurements of post-employment benefit obligations (see note 12)

- **Share capital:**

As of December 31, 2021, the Company's share capital amounted to €663,850 and it is fully paid up.

It is divided into 66,385 fully subscribed and paid shares with a par value of 10 euros each, of which there are 44,561 ordinary shares and 21,824 P preference shares.

The preferred shares issued by the Company do not carry an unconditional right to avoid paying cash or any other financial asset to their holders. For this reason, in accordance with IAS 32, preferred shares are classified as equity.

The preference shares have the following special rights:

- Right of assignment and preferential liquidation.

- Right of prior approval of certain decisions.

- Right of information and audit.

The company does not hold any own shares.

- **Dividends:**

There was no decision to distribute dividends for the financial years 2021 and 2020.

- **Share-based payment plan:**

The general meeting of the Company decided in March 2016 and December 2017 to issue and allocate Business Creator Share Subscription Warrants (BSPCE), the characteristics of which are as follows:

Plans	Classification	Date of grant	Beneficiaries	Number of BSPCEs granted	Strike price	Vesting date	Expiration date
BSPCE 2016	Equity settled	May 2017	Company executives	3,025	€162/share	2017	May 2027
BSPCE 2017	Equity settled	December 2017	Company executives	435	€217/share	2017	December 2027

Given their vesting dates and terms of allocation, the plans indicated above did not give rise to the recognition of an expense under IFRS 2 in 2021 and 2020.

NOTES ON THE IFRS FINANCIAL STATEMENTS

Note 1. General information

The French company, MEDSENIC SAS, hereinafter referred to as the Company, is domiciled in France 204 Avenue de COLMAR, 67100 STRASBOURG.

The Company is registered under the Strasbourg (64) trade and companies register under number 527 761 530.

The Company is a biopharmaceutical start-up that aims to exploit the new possibilities offered by the therapeutic use of arsenic trioxide (As2O3) and through this, to provide a treatment to patients with autoimmune diseases.

The Company has a legal obligation in France to prepare and publish its annual accounts in accordance with French regulations as published by the *Autorité des Normes Comptables* (French accounting standard setter)

The Company does not hold any shareholdings and therefore does not prepare consolidated financial statements.

The COVID-19 pandemic, which affected world as from March 2020, had no material impact on the accounts of 2020 and 2021, due to the fact that the Company is still primarily focused on research and development activities.

Note 2. Basis of preparation

For the purposes of financial communication within the framework of a business combination in progress, the Company is required to prepare financial statements in accordance with International Financial Reporting Standards (IFRS) as issued by the IASB (International Accounting Standards Board) and as adopted by the European Union.

The standards published by the IASB but not yet adopted by the European Union as of December 31, 2021, have not been applied in advance by the Company.

The financial statements of MEDSENIC SAS for the financial year ended 31 December 2021 were authorized for issue by the Chairman of Medsenic on 5 December 2022. The financial statements are presented in thousands of euros, unless otherwise indicated. Euro is also the functional currency. The functional currency is the currency of the economic environment in which an entity operates. The consolidated financial statements have been prepared on a historical basis, unless otherwise stated.

Note 3. Applicable IFRS standards and interpretation

The new and amended standards and interpretations that have been issued, but are not effective yet, are disclosed below. The Company intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

- Amendments to IAS 16 – Property, Plant and Equipment: Proceeds before Intended Use (applicable for annual periods beginning on or after 1 January 2022)
- Amendments to IAS 37 – Provisions, Contingent Liabilities and Contingent Assets: Onerous Contracts — Cost of Fulfilling a Contract (applicable for annual periods beginning on or after 1 January 2022)
- Amendments to IFRS 3 – Business Combinations: Reference to the Conceptual Framework (applicable for annual periods beginning on or after 1 January 2022)
- Annual Improvements to IFRS Standards 2018–2020 (applicable for annual periods beginning on or after 1 January 2022)
- Amendments to IAS 1 – Presentation of Financial Statements: Classification of Liabilities as Current or Non-current (applicable for annual periods beginning on or after 1 January 2023)

- Amendments to IAS 1 – Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting Policies (applicable for annual periods beginning on or after 1 January 2023)
- Amendments to IAS 8 – Accounting policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates (applicable for annual periods beginning on or after 1 January 2023)
- Amendments to IAS 12 – Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction (applicable for annual periods beginning on or after 1 January 2023)
- Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback (applicable for annual periods beginning on or after 1 January 2024).

It is not expected that the adoption of the new and amended standards listed above will have a material impact on the financial statements of the Company in future periods.

Note 4. Significant accounting policies applied

Intangible assets

Internally generated intangible assets

Expenses contributing to the development of a project are recognised as intangible assets when the entity can demonstrate these, as defined in IAS 38:

- The technical feasibility necessary to complete the intangible asset with a view to its commissioning or sale;
- The intention to complete the intangible asset then to use or sell it;
- Its ability to use or sell the intangible asset;
- How the intangible asset will generate likely future economic benefits;
- The availability of appropriate resources (technical, financial and otherwise) to complete the development and use or sale of the intangible asset;
- And the ability to reliably measure the expenditure attributable to the intangible asset during its development.

The above recognition criteria are only met when a regulatory filing has been made in a major market and the approval from the regulators is considered as highly probable. Where no internally generated intangible asset can be recognised, development expenditure is recognised in profit or loss in the period in which it is incurred.

Financial assets

The financial assets include other receivables and cash and cash equivalents.

Other receivables relate to government grants and VAT receivables that are measured at amortized cost. Receivables related to government grants, including interest-free loans, are recognised when there is reasonable assurance that the Company will comply with the conditions attaching to them and the grant will be received, which generally corresponds to the date at which the Company obtains a confirmation letter from the authorities.

Cash and cash equivalents include cash on hand and in banks, as well as short-term deposits with an original maturity of three months or less.

All bank balances are assessed for expected credit losses. They may have low credit risk at the reporting date if they are held with reputable international banking institutions.

Financial liabilities and equity

Classification as Debt or Equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

The company's main source of external financing is the advances received from BPI France whose repayment is contractually provided for regardless of the outcome of the projects to which they relate. These advances are in accordance with IAS 32 presented as debt.

Financial liabilities

All financial liabilities of the Company are subsequently measured at amortized cost using the effective interest method.

Financial liabilities at amortized cost include:

- trade payables;
- borrowings;
- interest-free government loans: they are initially measured at their fair value less transaction costs, which corresponds to the present value of amounts to be repaid.

The Company derecognises financial liabilities when, and only when, the Company's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss.

Government grants

The Company recognizes a government grant only when there is reasonable assurance that the Company will comply with the conditions attached to the grant and that the grant will be received.

Medsenic receives government aid either in the form of obtaining interest-free repayable advances or in the form of research tax credits.

Regarding the interest-free repayable advances:

The amount of which will be repaid according to a contractually fixed repayment schedule, the amount recognized as a subsidy corresponds to the difference between the fair value of the interest-free advance and the amount of the advance obtained without interest. The difference is recognized directly in the income statement at the same rate as the expenses concerned by these advances. It is specified that the Company has no longer obtained interest-free repayable advances since the 2018 financial year.

Regarding the Research Tax Credit (CIR):

Industrial and commercial companies taxed according to the real regime which carry out research expenses can benefit from a tax credit.

The tax credit is calculated per calendar year and is deducted from the tax due by the company in respect of the year in which the research expenses were incurred. The tax credit no charged can be carried forward, under common law, over the three years following that under which it was observed. The unused portion at the end of this period is refunded to the company. Given the Company's status as an SME within the meaning of the Community, the reimbursement of the CIR occurs in the year following its recognition.

Tax credits are recognized in other operating income in the year in which they were granted.

Share based payments

In accordance with IFRS 2 "Share-based payment", the benefits granted to certain employees in the form of share-based payments are measured at the fair value of the instruments granted Stock purchase and subscription options may be granted to company executives. These options correspond to instruments settled in shares. They are valued at their fair value on the grant date.

This value is recorded in payroll expenses gradually depending on the acquisition by slice, knowing that this acquisition is carried out linearly within each slice, between the date of grant and the date of vesting of the rights (vesting period of the rights), with consideration directly in equity.

The amount recognized as an expense is adjusted where necessary to reflect the number of rights for which it is believed that the non-market service and performance conditions will be met.

In 2017, Company executives were granted stock options in the form of stock warrants ("BSA") or Bons Créateurs d'Entreprise ("BSPCE").

In the absence of a current plan as of 12/31/2021, no expense has been recognized in application of IFRS 2 In the income statement for the 2020 and 2021 financial years.

Segment reporting

The Company does not make the distinction between different operating segments, neither on a business or geographical basis in accordance with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker is the Chairman.

The company is a one segment company.

Events after the reporting period

Events after the reporting period which provide additional information about the Company's position at the closing date (adjusting events) are reflected in the financial statements. Events after the reporting period which are not adjusting events are disclosed in the notes if material.

Note 5. Use of judgments and estimates

In the application of the Company's accounting policies, which are described above, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates. The followings are areas where key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial years.

Share based payments - classification of the share-based payments as debt or equity settled and the determination of vesting period:

Given their dates (vesting date: 2017) and terms of allocation, the plans indicated above did not give rise to the recognition of an expense under IFRS 2 at 31/12/2021 and 31/12/2020.

In the absence of relevant and comparable market data, the BSPCEs were not valued at their fair value.

Convertible bonds - debt or equity classification and valuation of conversion option:

The Company issued convertible bonds in the amount of K€ 891 on May 21, 2021. 4,104 bonds convertible into P preference shares of €217 were issued.
Each convertible bond will entitle the holder to one P Share in the Company with a nominal value of 10 euros.

The Bondholder may request the Conversion of convertible bonds into New P shares:
- from January 15, 2022; or
- prior to any transfer of at least 50.01% of the capital and voting rights of the Company by way of sale of shares, contribution or merger of the latter or in the event of an introduction on a regulated market and provided that this transaction has not been previously approved by the Bondholder.

Each convertible bond bears interest at 5% per annum (increased by 5% in the event of non-conversion) and the interest will be compounded.

The company considered that the CB's rate of remuneration was higher than the rate that would have been used for a bond issue without a conversion option (taking into account the specificities of Medsenic at the time of the issuance of the CBs (unlisted entity, size, ...)).

Given their characteristics, convertible bonds have been classified as debt instruments within the meaning of IAS 32 and recognized as debt on the balance sheet. It is specified that, given the terms of the CBs, there was no "split accounting" given an issue rate considered to be higher than the market rate of a loan without a conversion option, which would have led to a negative option being recognized as equity.

Government grants – interest-free government loans – recognition and measurement:

The government grants consist mainly of the proceeds received under the Research Tax Credit and advances at 0% rate received by BPI France. Tax credits could be challenged in case of control by the tax authorities, to date the Company considers the risk of returning the tax credits received as low.

Regarding to BPI France interest-free advances, they will be reimbursed according to a contractual schedule with possible anticipation in the event of faster success of the projects concerned.

Going concern

As the Company has made significant progress in its clinical programs during the previous year, the Board is of the opinion that it is appropriate to prepare the financial statements of the Company under the assumption of going concern, considering at group level (BioSenic SA now owns 51% of Medsenic since October 24, 2022):

- an annual projected cash burn higher than previous years mainly impacted the start of the Phase 3 clinical trial with cGvHD,
- an assumed continued support from BPI France from which the Company expects to receive non-dilutive funds,
- The total of €2.00 million from convertible bonds issued by BioSenic SA
- the intention of the Company to raise new funds from the capital markets and/or to develop alternative funding strategies, while cost tracking and close cash management will remain a key priority.

The Chairman and his strategic committee remain focused on the Company's liquidity and expect to manage business operations in the next 12 months whilst maintaining adequate liquidity.

In view of the Company significant progress in its clinical programs, combined with ongoing discussions with business and financial partners to obtain sufficient funds, the Board is of the opinion that it is appropriate to prepare the financial statements of the Company under the assumption of going concern.

Note 6. First time adoption of IFRS

These financial statements, as of and for the financial year ended 31 December 2021 are the first the Company has prepared in accordance with IFRS. For periods up to and including the financial year ended 31 December 2020, the Company prepared its financial statements on an accrual basis in accordance with French Generally Accepted Accounting Practices ("French GAAP"), which is the predecessor GAAP.

Accordingly, the Company has prepared financial statements that comply with IFRS applicable as at 31 December 2021, together with the comparative period data for the year ended 31 December 2020, as described in the summary of significant accounting policies. In preparing the financial statements, the Company's opening statement of financial position was prepared as at 1 January 2020, the Company's date of transition to IFRS.

This note explains the relevant IFRS 1 exemptions that have been applied by the Company and the principal adjustments made by the Company in converting its French GAAP financial statements, including the statement of financial position as at 1 January 2020 and the statement of financial position and the statement of comprehensive income for the financial years ended 31 December 2021 and 31 December 2020.

The estimates at 1 January 2020 and all other reporting periods are consistent with those made for the same dates in accordance with French GAAP (after adjustments to reflect any differences in accounting policies).

Reconciliations between French GAAP and IFRS:

Below, the Company presents a reconciliation of the statement of financial position under French GAAP at 1 January 2020 to the statement of financial position under IFRS at 1 January 2020, as well as explanations for the adjustments.

Assets	01/01/2020 French GAAP	IFRS Adjusments	01/01/2020 IFRS	Note
(in thousands of euros)				
Non-current assets	**3 852**	**(3 791)**	**61**	
Intangible assets	3 807	(3 807)	-	a
Property, plant and equipment	19	16	36	b
Financial assets	25	-	25	
Current assets	**1 245**	**-**	**1 245**	
Trade and other receivables	573	-	573	
Other current assets	4	-	4	
Cash and cash equivalents	668	-	668	
TOTAL ASSETS	**5 097**	**(3 791)**	**1 306**	
Equity and liabilities				
Share capital	664	-	664	
Share premium	3 969	-	3 969	
Accumulated losses	(1 716)	(3 615)	(5 330)	c
Other reserves		(78)	(78)	c
Other reserves	**1 340**	**(1 340)**	**-**	d
Equity attributable to company owners	**4 257**	**(5 033)**	**(776)**	
Non-current liabilities	**500**	**1 204**	**1 704**	
Interest bearing borrowings	500	9	509	b
Other long term liabilities	-	1 195	1 195	d
Current liabilities	**341**	38	**378**	
Interest bearing borrowings	-	7	7	b
Trade and other payables	341	0	341	
Other current liabilities	-	30	30	d
Total liabilities	**841**	**1 242**	**2 082**	
TOTAL EQUITY AND LIABILITIES	**5 097**	**(3 791)**	**1 306**	

(a) The IFRS adjustment of K€ (3 807) relates to the intangible assets. As the recognition criteria to activate the development costs as intangible asset in the statement of financial position in accordance with IAS 38 are not met, the development costs are expensed as the incurred. According to French GAAP these development expenses can be recognised as intangible assets in the statement of financial position. Therefore, the carrying amount of the intangible assets need to reversed in the IFRS statement of financial position.

(b) The vehicle leases of the Company have to be accounted for in accordance with IFRS 16, resulting in the recognition of a right-of-use asset and a lease liability. This increases the property, plant and equipment in the amount of K€ 16 and the non-current interest-bearing borrowings of K€ 9 as well as the current interest-bearing borrowings of K€ 7 in the IFRS statement of financial position.

(c) The adjustment of K€ (3 693) concerns (i) the adjustment of development expenses in the intangible assets of K€ (3 807), as described in footnote (a) and (ii) the discounting of BPI France repayable advances of K€ 193, and (iii) the adjustment of K€ (78) relates to the accounting of pension commitments.

(d) Repayable advances received to finance certain projects recognised in other equity under French GAAP. In accordance with IFRS, the fair value of these financial instruments needs to be determined on the loan origination date and subsequently measured at amortized costs. Also, these repayable advances are presented in the non-current liabilities and not part of the equity according to IFRS. Therefore, the amount (K€ 1 340) is eliminated in the other reserves and added to the other long-term liabilities (K€ 1 310) and other current liabilities (K€ 30). The other long-term liabilities amount of K€ 1 310 has been adjusted by K€ (332) due to recognition of the benefit obtained and accounted for in accordance with IAS 20 and by K€ 140 for their update in accordance with IFRS 9, as well as the accounting of pension commitments of K€ 78, resulting in a total IFRS adjustment of K€1 195 in the other long-term liabilities and K€ 30 in the other current liabilities.

Moreover, please note that on January 1, 2020, the Company had a tax loss of K€ 3 815 that could be carried over indefinitely. This, and given the uncertainties as to its use in the foreseeable future, no deferred tax has been recognised in the IFRS statement of financial position presented above, that is, an unrecognised tax asset of K€ 953.

Below, the Company presents a reconciliation of the statement of financial position under French GAAP at 31 December 2020 to the statement of financial position under IFRS at 31 December 2020, as well as explanations for the major adjustments.

Assets	31/12/2020 French GAAP	IFRS Adjustments	31/12/2020 IFRS	Note
(in thousands of euros)				
Current assets	**4 491**	**(4 442)**	**49**	
Intangible assets	4 451	(4 451)	-	a
Property, plant and equipment	15	9	24	b
Financial assets	25	-	25	
Current assets	**997**	-	**997**	
Trade and other receivables	337	-	337	
Other current assets	4	-	4	
Cash and cash equivalents	656	-	656	
TOTAL ASSETS	**5 487**	**(4 442)**	**1 046**	
Equity and liabilities				
Share capital	664	-	664	
Share premium	3 969	-	3 969	
Accumulated losses	(1 977)	(4 258)	(6 236)	c
Other reserves		(78)	(78)	c
Other reserves	**1 340**	**(1 340)**	-	d
Equity attributable to company owners	**3 995**	**(5 676)**	**(1 681)**	
Non-current liabilities	**1 100**	**1 015**	**2 115**	
Interest bearing borrowings	1 100	(54)	1 046	e
Other long term liabilities	-	1 070	1 070	f
Current liabilities	**392**	219	**611**	
Interest bearing borrowings	-	64	64	g
Trade and other payables	392	-	392	
Other current liabilities	-	155	155	
Total liabilities	**1 492**	**1 234**	**2 726**	
TOTAL EQUITY AND LIABILITIES	**5 487**	**(4 442)**	**1 046**	

(a) The IFRS adjustment of K€ (4 451) relates to the intangible assets. As the recognition criteria to activate the development expenses as intangible asset in the statement of financial position in accordance with IAS 38 are not met, the development expenses are expensed as the incur. According to French GAAP these development expenses can be recognised as intangible assets in the statement of financial position. Therefore, the carrying amount of the intangible assets need to be reversed in the IFRS statement of financial position.

(b) The vehicle leases of the Company have to be accounted for in accordance with IFRS 16, resulting in the recognition of a right-of-use asset and a lease liability. This increases the property, plant and equipment in the amount of K€ 9 and the non-current interest-bearing borrowings of K€ 2 as well as the current interest-bearing borrowings of K€ 7 in the IFRS statement of financial position.).

(c) The adjustment of K€ (4 336) concerns (i) the adjustment of development expenses in the intangible assets of K€ (4 451), as described in footnote (a) and (ii) the discounting of BPI France repayable advances of K€ 201 and (iii) K€ (8) of not significant adjustment, and the adjustment of K€ (78) relates to the accounting of pension commitments.

(d) Repayable advances received to finance certain projects recognised in other equity under French GAAP. In accordance with IFRS, the fair value of these financial instruments needs to be determined on the loan origination date and subsequently measured at amortized costs. Also, these repayable advances are presented in the non-current liabilities and not part of the equity according to IFRS. Therefore, the amount (K€ 1 340) is eliminated in the other reserves and added to the other long-term liabilities (K€ 1 216) and other current liabilities (K€ 125). The other long-term liabilities amount of K€ 1 216 has been adjusted by K€ (358) due to the recognition of the benefit obtained and accounted for in accordance with IAS 20 and by K€ 156 for their update in accordance with IFRS 9 (accretion effect), as well as the accounting of pension commitments of K€ 56, resulting in a total IFRS adjustment resulting of K€ 1 070 in the other long-term liabilities and K€ 125 in the other current liabilities.

(e) The adjustment of K€ (54) relates to IFRS 16 as described in (b) for K€ 2 and a current/non-current reclassification of K€ (56).

(f) The adjustment of K€ 64 relates IFRS 16 as described in (b) for K€ 7 and a current/non-current reclassification of K€ 56 as mentioned in (f).

(g) The accounting of pension commitments of K€ 30 and current part of the repayable advances as described (e).

Moreover, please note that on December 31, 2020, the Company had a tax loss of K € 4.340 that could be carried over indefinitely. This, and given the uncertainties as to its use in the foreseeable future, no deferred tax has been recognised in the IFRS statement of financial position presented above, that is, an unrecognised tax asset of K€ 1 084.

Below, the Company presents a reconciliation of the statement of financial position under French GAAP as of 31 December 2021 to the statement of financial position under IFRS at 31 December, 2021, as well as explanations for the major adjustments:

Assets	31/12/2021 French GAAP	IFRS Adjustments	31/12/2021 IFRS	Note
(in thousands of euros)				
Current assets	**5 107**	**(5 068)**	**38**	
Intangible assets	5 070	(5 070)	-	a
Property, plant and equipment	11	2	13	b
Financial assets	25	-	25	
Current assets	**1 124**	-	**1 124**	
Trade and other receivables	361	-	361	
Other current assets	4	-	4	
Cash and cash equivalents	759	-	759	
TOTAL ASSETS	**6 230**	**(5 068)**	**1 162**	
Equity and liabilities				
Share capital	664	-	664	
Share premium	3 969	-	3 969	
Accumulated losses	(2 289)	(4 930)	(7 219)	c
Other reserves		(83)	(83)	c
Other reserves	**1 215**	**(1 215)**	-	d
Equity attributable to company owners	**3 558**	**(6 228)**	**(2 670)**	
Non-current liabilities	**2 463**	**(126)**	**2 338**	
Interest bearing borrowings	2 463	(1 100)	1 364	e
Other long term liabilities	-	974	974	f
Current liabilities	**209**	1 286	**1 494**	
Interest bearing borrowings	-	1 102	1 102	g
Trade and other payables	209	-	208	
Other current liabilities	-	184	184	
Total liabilities	**2 672**	**1 160**	**3 832**	
TOTAL EQUITY AND LIABILITIES	**6 230**	**(5 068)**	**1 162**	

(a) The IFRS adjustment of K€ (5 070) relates to the intangible assets. As the recognition criteria to activate the development expenses as intangible asset in the statement of financial position in accordance with IAS 38 are not met, the development expenses are expensed as the incur. According to French GAAP these development expenses can be recognised as intangible assets in the statement of financial position. Therefore, the intangible assets need to be reduced and the accumulated losses need to be increased by the activated amount in the IFRS statement of financial position.

(b) According to IFRS 16 the vehicle leases of the Company needs to active in the statement of financial position. This increases the property, plant and equipment in the amount of K€ 2 and the current interest-bearing borrowings of K€ 2 in the IFRS statement of financial position.

(c) The adjustment of K€ (5 013) concerns (i) the adjustment of development expenses in the intangible assets of K€ (5 070), as described in footnote (a) and (ii) the discounting of BPI France repayable advances of K€ 156 and (iii) K€ (16) of not significant adjustment, and the adjustment of K€ 83 relates to the accounting of pension commitments.

(d) Repayable advances received to finance certain projects are accounted for in other equity under French standards. Pursuant to IAS 32 Financial instruments: presentation, these financial instruments have been qualified as debt instruments and restated at their fair value when recorded in the opening balance sheet given the absence of remuneration for these advances. Reimbursable advances of K€ 1,340 have been adjusted by - K€ 358 due to recording of the benefit obtained and processed in application of IAS 20 and by + K€ 201 for their update in application of IFRS 9. They are presented for their balance (that is, K€ 1,059) whose K€ 909 in long-term liabilities and K€ 150 in current liabilities taking into account their contractual due date.

(e) The impact of - K€ 1 102 concerns a current/non-current reclassification.

(f) The impact of K€ 974 concerns the restatement of reimbursable advances (d) for K€ 909 and the accounting of pension commitments in application of IAS 19 Employee Benefits of K€ 65.

(g) The impact of K€ 1 102 concerns IFRS 16 for K€ 2 and a current/non-current reclassification for K€ 1 100.

Moreover, please note that on December 31, 2020, the Company had a tax loss of K € 4.956 that could be carried over indefinitely. This, and given the uncertainties as to its use in the foreseeable future, no deferred tax has been recognised on the IFRS statement of financial position presented above, that is, an unrecognised tax asset of K€ 1.253

Below, the Company presents a reconciliation of the statement of comprehensive income under French GAAP for the financial year ended 31 December 2020 to the statement of comprehensive income under IFRS for the financial year ended 31 December 2020

Full year end 31/12/2021 (in EUR thousand):

	31/12/2021 French GAAP	Restatement of development costs (IAS 38)	Impact of IFRS 16	Restatement of the CIR (IAS 20)	Retreatement of BPI France repayable advances (IFRS 9)	Impact of IAS 19	Impacts IFRS	Reclassification by function	31/12/2021 IFRS	
Other operating income				312			312		312	Other operating revenue
Capitalised production	619	(619)		0	0	0	(619)	0	0	
Purchases consumed	(348)	0		0	0	0	0	346	0	
External expenses	(308)	0	8	0	0	0	8	298	0	
Staff costs	(478)	0		0	0	(8)	(8)	486	0	
Levies	(3)	0		0	0	0	0	3	0	
Amortisation	(5)	0	(7)	0	0	0	(7)	13	0	
Others income & expenses	(30)	0		0	0	0	0	30	0	
								(619)	(619)	Research and development expens
								(509)	(509)	General and administrative costs
Operating income	(558)	(619)	0	312	0	(8)	(315)	(1)	(877)	**Operating income**
Financial net income	(62)	0	(1)	0	(45)	0	(45)		(107)	Financial expenses
Exceptional net income	(4)	0		0	0	0	0	4	0	
Net income before taxes	(623)	(619)	0	312	(45)	(8)	(360)	0	(984)	
Income taxes	312	0		(312)	0	0	(312)		0	
Net income for the year	(312)	(619)	0	0	(45)	(8)	(672)	0	(984)	**Net profit for the year**
									0	Other comprehensive income
						(5)	(5)		-5	*Remeasurements of post-employee obligations*
									(989)	**Net income/ (loss) for the period**

Full year end 31/12/2020 (in EUR thousand):

	31/12/2020 French GAAP	Restatement of development costs (IAS 38)	Impact of IFRS 16	Restatement of the CIR (IAS 20)	Reinstatement of the BPI France repayable advances (IFRS 9)	Impact of IAS 19	Impacts IFRS	Reclassification by function	31/12/2020 IFRS	
Other operating revenue				278			278		278	Other operating revenue
Capitalized production	645	(645)					(645)	0	0	
Purchases consumed	(101)	0					0	101	0	
External expenses	(355)	0	0				0	327	0	
Staff costs	(469)	0				(8)	(8)	477	0	
Levies	(3)	0					0	3	0	
Amortization	(3)	2	(3)				(5)	13	0	
Other income & expenses	(15)	0					0	15	0	
								(645)	(645)	Research and development expenses
								(521)	(521)	General and administrative costs
Operating income	**(115)**	**(643)**	**0**	**278**	**0**	**(8)**	**(374)**	**(1)**	**(898)**	**Operating income**
Financial net income	(73)	0	(0)		0		0		(73)	Financial expenses
Exceptional net income	(2)	0					0	2	0	
Net income before taxes	**(189)**	**(643)**	**(0)**	**278**	**0**	**(8)**	**(366)**	**(0)**	**(969)**	
Income taxes	278	0	0	(278)			(278)		0	
Net income for the year	**(162)**	**(643)**	**(0)**	**0**	**0**	**(8)**	**(643)**	**(0)**	**(969)**	**Net income/ (loss) for the period**
									0	Other comprehensive income
						0	0		0	*Remeasurements of post-employment obligations*
									(969)	**Net income/ (loss) for the period**

According to French GAAP it is not required to present a cash flow statement, therefore a reconciliation from French GAAP to IFRS is not presented for the cash flow statement in accordance with IFRS 1.

Note 7. Other operating income

Other operating income consists mainly of income received from the French State in respect of the research tax credit received by the company in the context of its research and development activities relating to 5 ongoing research programs on 31/12/2021 and 31/12/2020.

Note 8. Research and development expenses

Research and development expenses detailed below:

(In thousands of euros)	**31/12/2021**	**31/12/2020**
Staff cost	(277)	(260)
Studies	(308)	(328)
Other external costs	(34)	(57)
Total research and development expenses	**(619)**	**(645)**

Research and development costs are related to 5 ongoing research programs on 31/12/2021 and 31/12/2020. Pending the obtaining of regulatory marketing authorizations, all costs are expensed as incurred in accordance with IAS 38.

Note 9. General and administrative expenses

General and administrative expenses are detailed below:

(In thousands of euros)	**31/12/2021**	**31/12/2020**
Staff Cost	(209)	(217)
Fees (1)	(227)	(214)
Studies	(34)	(1)
Other external costs	(38)	(57)
Depreciation and amortisation	(13)	(13)
Other operation costs	(50)	(22)
Total general and administrative costs	**(570)**	**(523)**

(1) Fees mainly relate to lawyers' fees (no litigation) and other external advice fees.

Note 10. Staff cost

Staff cost expenses are detailed below:

(In thousands of euros)	**31/12/2021**	**31/12/2020**
Salaries	(338)	(331)
Social security costs	(140)	(137)
Retirement commitment	(8)	(8)
Total staff costs recorded in the statement of comprehensive income	**(486)**	**(477)**
Included in research and development expenses	*(277)*	*(260)*
Included in general and administrative expenses	*(209)*	*(217)*

The Company staff consists of 4 employees as of 31/12/2021, unchanged since 31/12/2020.

Note 11. Financial expenses

Financial expenses are detailed below:

(in thousands of euros)	**31/12/2021**	**31/12/2020**
Interest	(62)	(23)
Change in profit or loss of repayable advances (1)	(45)	8
Total financial expenses	**(107)**	**(15)**

(1) BPI's repayable advances were evaluated on the opening balance sheet on the basis of a rate of 4%. Each year, the discount flow constitutes an interest expense (TIE).

Note 12. Earnings per share

The earnings and weighted average number of ordinary shares used in the calculation of basic earnings per share are as follows:

(in thousands of euros)	31/12/2021	31/12/2020
Total comprehensive income for the year	(989)	(906)
Weighted average number of ordinary shares for basic loss per share (in number of shares)	66 385	66 385
Basic/diluted loss per share (in euros)	**14,9**	**13.6**

Note 13. Trade and other receivables

As there is no revenue within the meaning of IFRS 15, the Company has not recognised any trade receivables as of 31 December 2021 and is therefore not affected by the provisions of IFRS 9 and IFRS 7 regarding customer credit risk.

Trade and other receivables are detailed as follows:

(in thousands of euros)	31/12/2021	31/12/2020	01/01/2020
Trade receivables	**0**	**0**	**0**
Other receivables	**361**	**337**	**573**
Research tax credits receivable (1)	312	278	489
VAT receivable	49	59	85
Total trade and other receivables	**361**	**337**	**573**

(1) The Company benefits from the provisions of articles "244 quater B" and "49 septimes F" of the French General Tax Code concerning research tax credits. Given the structure of its shareholding, the Company may benefit from the SME status according to the definition of the tax authorities allowing the immediate reimbursement of research tax credit (CIR) claims. Consequently, research tax credit receivables are presented as current assets, as their collection period is always less than 12 months from their grant date.
There was no dispute relating to the research tax credits (CIR) as of December 31, 2021.

Note 14. Cash & cash equivalents

Cash and cash equivalents consist of cash in hand on 31 December 2021 and 31 December 2020.

Note 15. Deferred taxes

According to IAS 12, Income Taxes, deferred taxes are recognized for all taxable temporary differences. Deferred tax assets are recognized for all deductible temporary differences and tax losses carried-forward to the extent that it is probable that taxable profits will be available against which those deductible temporary differences and tax losses carried-forward can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from the initial recognition (other than in a business combination) of assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit. As no taxable profits are expected in the future, no deferred taxes are recognized on the balance sheet.

The tax loss data available on the 31 December 2021 and for which no deferred tax has been recorded amount to €4,956,000 on the 31 December 2021, that is, an unrecognised deferred tax at the rate of 25% of €1,239,000 compared to €4,340,000 on the 31 December 2020, that is, an unrecognised deferred tax at the rate of 25% of €1,084,000.

Note 16. Interest-bearing borrowings

Interest-bearing borrowings and other financial liabilities are initially recorded at their fair value less the transaction costs, and subsequently measured based on the amortised cost method and the effective interest rate.

Issuance costs for instruments outstanding as of the 31/12/2021 is insignificant.

Interest-bearing borrowings are detailed as follows:

(In thousands of euros)	**31/12/2021**	**31/12/2020**	**01/01/2020**
Bond issue convertible into shares (1)	891	-	-
Public Investment Bank borrowings (BPI France) (2)	1 245	800	500
CIC borrowing (3)	300	300	-
Lease liabilities (4)	2	9	16
Accrued interest	28	-	-
Total interest-bearing borrowings	**2 466**	**1 109**	**516**
- Of which are non-current	*1 364*	*1 046*	*509*
- Of which are current	*1 102*	*64*	*7*

(1) A bond issue of € 891,000 occurred on May 21, 2021. 4,104 bonds convertible into P preference shares of €217 were issued. Each convertible bond bears interest at 5% per annum (increased by 5% in the event of non-conversion) and the interest will be compounded. Pursuant to IAS 32, this instrument has been fully qualified as a debt instrument.

(2) The borrowings obtained from BPI France, amounting to €1,244,000 on the 31/12/2021, are explained here:

Seed borrowing of €375,000: This seed borrowing was received from BPI France on the 05/07/2017 with a contract period of 8 years, at the rate of 4,68%. The first repayment was scheduled for 31/12/2020, which was postponed to 30/06/2021. Repayments in 2021 amount to €56 000.	This financing benefits from: - Guarantee under the National Guarantee Fund for an Investment Seed Borrowing of up to 40.00%; - Guarantee of the European Investment Fund (EIF) of up to 40.00%.
Seed borrowing of €125,000: This seed borrowing was received from BPI France on the 29/06/2018 with a contract period of 8 years, at the rate of 4,09%. The first repayment was scheduled for 31/12/2021, which was postponed to 30/06/2022. No repayments were made in 2021.	This financing benefits from: - BPI France Guarantee under the National Guarantee Fund for an Investment Seed Borrowing of up to 30.00 %; - InnovFin Guarantee of the European Investment Fund (EIF) of up to 50.00 %.
State guaranteed borrowing (PGE) of €300,000: This PGE was received from BPI France on 21/04/2020 for an initial period of one year then extended on 22/03/2021 to a period of 5 years, at the rate of 2,25%. The first repayment is scheduled for the 31/07/2022. State guarantee premium of 200 basis points included was applied.	This financing benefits from: - State guarantee under the Coronavirus state EDF guarantee fund of up to 90%.
Innovation R&D borrowing of €500,000: This innovation R&D borrowing received from BPI France on 06/08/2021 for a period of 30 quarters, at the rate of 0,79%. The first repayment is scheduled for the 31/07/2022.	

(3) State guaranteed borrowing (PGE) of €300,000 from the CIC Ouest bank on the 20/04/2020 for an initial period of one year then amended to 21/01/2021, and 12/03/2021 for 5 years, at 0.70% per annum. This borrowing comes with a deferred capital repayment from the initial maturity date of the state guaranteed borrowing (PGE) on 25/04/2021 until 24/05/2022.

This financing comes with:

- A state guarantee provided for by law number 2020-289 of March 23, 2020, on amending finances for 2020 and the specifications defined by decree of March 23, 2020 granting the State guarantee to credit institutions and financial companies of up to 90% under the above-mentioned law.

(4) Lease liabilities concern a restated vehicle lease in accordance with IFRS 16.

Interest-bearing borrowings developed during 2021 financial year:

(In thousands of euros)	31/12/2020	Proceed from borrowings	Repayment of borrowings	Non-cash movement	31/12/2021
Bond borrowing convertible into shares	-	891			891
Borrowings from the Public Investment Bank (BPI France)	800	500	(56)		1,245
CIC borrowing	300				300
Lease liabilities	9		(7)		2
Accrued interest	-			28	28
Total financial liabilities	**1,109**	**1,391**	**(63)**	**28**	**2,466**

Interest-bearing borrowings developed as in the 2020 financial year:

(In thousands of euros)	01/01/2020	Proceed from borrowings	Repayment of borrowings	Non-cash movement	31/12/2020
Public Investment Bank borrowings (BPI France)	500	300			800
CIC borrowing		300			300
Lease liabilities	16		(7)		9
Total financial liabilities	**516**	**600**	**(7)**	**0**	**1,109**

The repayment schedules for interest-bearing borrowings are described below:

31/12/2021	Bond issue convertible into shares	BPI France borrowings	CIC borrowing	Others	Total
(In thousands of euros)					
Within one year	891	179		31	1,100
>1 and <5 years		857	300		1,157
>5 years		208			208
Total	**891**	**1,244**	**300**	**31**	**2,465**
31/12/2020	**Bond issue convertible into shares**	**BPI France borrowings**	**CIC borrowing**	**Others**	
(In thousands of euros)					
Within one year		57		7	64
>1 and <5 years		632	300	2	934
>5 years		112			112
Total	**-**	**800**	**300**	**9**	**1,109**

Note 17. Other liabilities

Other liabilities are described below:

(in thousands of euros)	31/12/2021	31/12/2020	01/01/2020
Interest-free advances (1)	1 059	1 139	1 147
Long-term employee benefits (retirement indemnity)	99	86	78
Other liabilities	**1 158**	**1 225**	**1 226**
- Of which are long-term	974	1 070	1 195
- Of which are current	*184*	*155*	*30*

(1) As part of the financing of its activities, the Company received interest-free conditional advances from BPI France, that is, €900,000 (including K€450 in May 2016 and K€450 in February 2018) under the GrefSenic program and €490,000 in June 2018 under the SclerSenic program.

Pursuant to IFRS 9, these interest-free advances were valued at their fair value on the basis of an interest rate of 4% estimated on the basis of the rates applied by BPI France in remuneration of the interest-bearing borrowings granted to the Company in 2017 and 2018.

Note 18. Liabilities for defined benefit obligations

Employee benefits accounted for pursuant to IAS 19:

- Short-term employee benefits concern employee benefits which are due in full within twelve months following the end of the period during which the employees have rendered the corresponding services. These short-term benefits are filed under expenses for the year.

- Long-term benefits are those which are not due in full within twelve months following the end of the period during which the employees have rendered the corresponding services. These long-term benefits essentially consist of defined benefit obligations provided for in the collective agreement applicable to the Company.

Retirement benefits and other post-employment benefits are funded on the basis of an actuarial valuation carried out by an independent expert and according to the IFRIC position of June 2021.

Liabilities for defined benefit obligations developed as follows:

Value of start of year commitments (31/12/2020):	**86**
Current service cost	8
Changes in assumptions	(1)
Actuarial (losses) and gains related to experience:	6
Value of end of year commitments (31/12/2021):	**99**

Value of start of year commitments (31/12/2020):	**86**
Variation via the comprehensive income statement	8
Variation via other comprehensive income (OCI)	5
Value of end of year commitments (31/12/2021):	**99**

The actuarial assumptions used as of 31/12/2021 are as follows:

- Discount rate: 0.17 %
- Rate of employer contributions: 42% for managers and 37% for non-managers
- Turnover rate: 0 to 6% depending on age
- Salary growth rate: 3 %
- Retirement age: 65 for executives and 63 for non-executives
- Table of mortality rates: INSEE table 2015-2017

Given the amount of commitments, sensitivity tests are not disclosed.

Note 19. Trade and other payables

Trade and other payables are as follows:

(in thousands of euros)	31/12/2021	31/12/2020	01/01/2020
Trade payables	**92**	**265**	**252**
Other payables	**118**	**128**	**89**
Social security payables	110	120	83
Other payables	7	7	6
Total trade and other payables	**209**	**392**	**341**

Note 20. Risk management

The main risks to which the Company is exposed are summarised below:

- **Capital management:**

Strategy to raise funds to ensure the completion of ongoing projects and the implementation of new projects

- **Credit risk:**

Credit risk is the risk of financial loss to the Company if a counterparty to a financial instrument fails in their contractual obligations.

As of 31/12/2021 and 31/12/2020, in the absence of trade receivables, the credit risk stems mainly from cash and cash equivalents placed with nationally reputable banks.

The maximum credit risk to which the Company is theoretically exposed on the balance sheet date is the book value of its financial assets.

- **Liquidity risk:**

Liquidity risk is the risk that the Company would not be able to meet its financial obligations on time or under normal conditions.

The company's main sources of financing are from:

- Borrowings or repayable advances from BPI France and partially guaranteed by public bodies. Arrangements are negotiated on a case-by-case basis depending on the progress of the projects concerned;
- Financing by issuing share-convertible bonds creating the prospect of opening up the Company's capital to new investors in the very short term.

Liquidity risk is considered very low as of 31/12/2021.

- **Foreign exchange risk:**

The Company is not exposed to foreign exchange rate risk insofar as its development is only carried out in France and within the Euro zone.

- **Interest rate risk:**

Given its current financing structure, the Company is not exposed to interest rate risk. Thus, no hedge instrument has been established since 31/12/2021.

Note 21. Off-balance sheet commitments

Apart from the financing commitments received indicated in note 11, there are no other significant off-balance sheet commitments to report.

Note 22. Related party information

17.1 Compensation of executives and corporate officers

Compensation paid to executives and corporate officers amounted to K€ 207 for the 2021 fiscal year and K€ 199 for the 2020 fiscal year. These amounts relate mainly to short-term benefits.

17.2 Transactions with other related parties

There is no other transaction to report.

Note 23. Auditors' fees

The total amount of statutory auditor fees for the financial year ended 31 December, 2021, amounted to €7,700 compared to €6,500 for the previous financial year.

Note 24. Events after the reporting date

Medsenic has decided to issue a bond without public offering for a total amount of EUR 890,568 by issuing 4,104 convertible bonds with a nominal value of EUR 217 into preference shares of class P (the "P Shares") on 21 May 2021 (OC-2021). The Bond was issued in a single tranche of EUR 890,568. On 15 April 2022, after having taken cognisance of the conversion request letters, the Chairman of Medsenic acknowledged the final completion of the capital increase upon conversion of the bonds convertible into shares known as "OC-2021" issued pursuant to the Company's ordinary annual and extraordinary general meeting dated 21 May 2021. The OC-2021 Holders decided to convert a total of 4,104 OC-2021 and, consequently, to subscribe to a total of 4,284 new P Shares of the Company, by offsetting the amount of the bond debt, in principal and in interest, that they held against the Company, for a total amount of 930,582.56 euros.

PHEBRA provided an exclusive patent license in February 2022 under a license agreement signed in 2021 in exchange for a contribution in kind of 3,151 new shares worth K€ 2 980 (share capital increase K€ 32 and share premium increase K€ 2 948).

In May 2022, convertible bonds were converted to 4,284 new shares, which resulted in a share capital increase of K€ 43 (with share premium of K€ 887).

These two transactions resulted in a total increase in shareholders' equity of K€ 3,910 taking into account the share premiums to which they were attached.

Bone Therapeutics granted the Company a loan of maximum € 2 million convertible into Medsenic's share capital at a valuation equivalent to the one retained in the framework of the contribution in kind of the 37,649 shares of Medsenic to the capital of the Company, less a risk premium of 20%. The issuance will provide for a maximum of 4 tranches of 500,000 convertible bonds that can and must be subscribed by the Company over 4 months: August, September, October and November 2022. In the event that Medsenic's financing needs are lower than expected, the third and/or fourth tranche may not be issued or subscribed. At this date, two tranches for a total of 1,000,000 convertible have been subscribed by the Company. The third tranche is ongoing.

On 24 October 2022, the ESM of Bone Therapeutics approve the acquisition of a majority participation of Medsenic valued at EUR 40 million. Further to the ESM, all Medsenic' shareholders have contributed fifty-one percent (51%) of the total outstanding share capital of Medsenic, valued at EUR 40,800,207, at a subscription price per share of EUR 0.45, which values Bone Therapeutics at EUR 10 million. In exchange for the in-kind contribution of 51% of Medsenic' shares, 90,668,594 shares were issued by BioSenic to Medsenic shareholders. The parties have relied on the valuation carried out by an independent expert in order to determine the exchange ratio of one for four.

Note 25. Responsibility statement

The Chairman, represented by all its members, declare that, to the best of its knowledge, the financial statements for the financial year ended 31 December 2021, which have been prepared in accordance with the International Financial Reporting Standards as adopted by the European Union, give a true and fair view of the assets, liabilities, financial position and profit and loss of the Company.

Strasbourg, 5 December 2022

Medsenic SAS

FRANCOIS RIEGER, Chairman of Medsenic

ANNEX 2

MEDSENIC
Société par actions simplifiée au capital de 738.200 euros
Siège social : 204, avenue de Colmar - 67100 Strasbourg
RCS Strasbourg 527 761 530
(la « **Société** »)

STATUTS

Statuts mis à jour aux termes des décisions unanimes des associés date du 24 octobre 2022.

Certifié conforme
Monsieur François RIEGER
Président

ARTICLE 1 – FORME

Il est formé par les présentes une société par actions simplifiée régie par :

- les dispositions des articles L. 227-1 à L. 227-20 et L. 244-1 à L. 244-4 du Code de commerce ;

- dans la mesure où elles sont compatibles avec les dispositions particulières prévues par le présent chapitre, les règles concernant les sociétés anonymes, à l'exception des articles L. 224-2, L. 225-17 à L. 225-102-2, L. 225-103 à L. 225-126, L. 225-243 et du I de l'article L. 233-8 et les dispositions générales relatives à toute société des articles 1832 à 1844-17 du Code civil ;

- les dispositions des présents Statuts.

Elle fonctionne sous la même forme avec un ou plusieurs associés.

Elle ne peut procéder à une offre au public de titres financiers ou à l'admission aux négociations sur un marché réglementé de ses actions. Elle peut néanmoins procéder aux offres définies aux 2 et 3 du I et au II de l'article L. 411-2 du Code monétaire et financier.

Elle peut émettre toutes valeurs mobilières définies à l'article L. 211-2 du Code monétaire et financier, donnant accès au capital ou à l'attribution de titres de créances, dans les conditions prévues par la loi et les présents Statuts.

ARTICLE 2 – OBJET

La Société a pour objet, en France et à l'étranger, directement ou indirectement :

- la mise au point des traitements à base de dérivés d'arsenic pour soigner les maladies auto-immunes ou concernant le système immunitaire, ou des moyens diagnostiques, le tout directement ou indirectement, pour son compte ou pour le compte de tiers, soit seule, soit avec des tiers ;

- la prise, l'acquisition, l'exploitation ou la cession de tous procédés, brevets et droits de propriété intellectuelle concernant lesdites activités ;

- la réalisation d'études scientifiques et de prestations de services pour le compte de tiers se rattachant directement ou indirectement à l'objet social ;

- la participation directe ou indirecte de la Société, par tous moyens, à toutes entreprises ou sociétés créées ou à créer, pouvant se rattacher à l'objet social, notamment par voie de création de sociétés nouvelles, d'apport, commandite, souscription ou rachat de titres ou droits sociaux, fusion, alliance ou association en participation ou groupement d'intérêt économique ou de location gérance ;

- et plus généralement, toutes opérations industrielles, commerciales et financières, mobilières et immobilières pouvant se rattacher directement ou indirectement à l'objet social et à tous objets similaires ou connexes pouvant favoriser son extension ou son développement.

ARTICLE 3 – DENOMINATION SOCIALE

La Société a pour dénomination sociale :

MEDSENIC

Tous actes et documents émanant de la Société et destinés aux tiers doivent indiquer la dénomination sociale, précédée ou suivie immédiatement et lisiblement des mots « Société par actions simplifiée » ou des initiales « SAS » et de l'énonciation du capital social.

ARTICLE 4 – SIEGE SOCIAL

Le siège est fixé au :

204, avenue de Colmar - 67100 Strasbourg

Il pourra être transféré en tout autre endroit de France par simple décision du Président, ce dernier étant alors habilité à modifier en conséquence les Statuts de la Société, et en tout autre lieu suivant décision de l'associé unique ou de la collectivité des associés.

ARTICLE 5 – DUREE

La durée de la Société est fixée à 99 ans à compter de la date d'immatriculation au Registre du commerce et des sociétés, sauf en cas de dissolution anticipée ou prorogation.

La décision de prorogation de la durée de la Société est prise par décision de l'associé unique ou par décision collective des associés.

ARTICLE 6 – APPORTS

Lors de la constitution de la Société, il a été apporté par les associés une somme de 10.000 euros constituant la moitié du capital social fixé à 20.000 euros.

Par décision en date du 16 septembre 2011, l'Assemblée Générale Extraordinaire a constaté la libération intégrale des 2.000 actions constituant le capital social, soit la somme totale de 20.000 euros.

Par décision en date du 16 septembre 2011, l'Assemblée Générale Extraordinaire a décidé d'une augmentation de capital d'un montant de 900 euros pour porter le capital social de 20.000 euros à la somme de 20.900 euros par l'émission de 90 actions nouvelles.

Aux termes d'une délibération de l'Assemblée Générale Extraordinaire en date du 16 septembre 2011, le capital social a été porté à la somme de 245.000 euros par incorporation de la prime d'émission à hauteur de 224.100 euros

Par décision en date du 26 juin 2012, l'Assemblée Générale Extraordinaire a décidé :

1. d'une augmentation de capital d'un montant de 2.470 euros pour porter le capital social de 245.000 euros à la somme de 247.470 euros par l'émission de 247 actions nouvelles.
2. d'une augmentation de capital d'un montant de 7.590 euros pour porter le capital social de 247.470 euros à la somme de 255.060 euros par l'émission de 759 actions nouvelles.

Aux termes d'une délibération de l'Assemblée Générale Extraordinaire en date du 26 juin 2012, le capital social a été porté à la somme de 395.380 euros par incorporation d'une somme de 140.320 euros prélevée sur le compte prime d'émission.

Par décision en date du 12 juin 2013, l'Assemblée Générale Extraordinaire a décidé une augmentation de capital d'un montant de 5.620 euros pour porter le capital social de 395.380 euros à la somme de 401.000 euros par l'émission de 562 actions nouvelles.

Aux termes d'une délibération de l'Assemblée Générale Extraordinaire en date du 12 juin 2013, le capital social a été porté à la somme de 537.000 euros par incorporation d'une somme de 136.000 euros prélevée sur le compte prime d'émission.

Par décision en date du 15 mai 2014, l'Assemblée Générale Extraordinaire a décidé une augmentation de capital d'un montant de 24.770 euros pour porter le capital social de 537.000 euros à la somme de 561.770 euros par l'émission de 2.477 actions nouvelles.

Aux termes d'une délibération de l'Assemblée Générale Extraordinaire en date du 15 mai 2014, le capital social a été porté à la somme de 787.170 euros par incorporation d'une somme de 225.400 euros prélevée sur le compte prime d'émission.

Par décision en date du 12 juin 2014, l'Assemblée Générale Extraordinaire a décidé une augmentation de capital d'un montant de 23.900 euros pour porter le capital social de 787.170 euros à la somme de 811.070 euros par l'émission de 2.390 actions nouvelles.

Aux termes d'une délibération de l'Assemblée Générale Extraordinaire en date du 12 juin 2014, le capital social a été porté à la somme de 952.070 euros par incorporation d'une somme de 141.000 euros prélevée sur le compte prime d'émission.

Par décision en date du 29 avril 2015, l'Assemblée Générale Extraordinaire a décidé une augmentation de capital d'un montant de 31.010 euros pour porter le capital social de 952.070 euros à la somme de 983.080 euros par l'émission de 3.101 actions nouvelles.

Aux termes d'une délibération de l'Assemblée Générale Extraordinaire en date du 29 avril 2015, le capital social a été porté à la somme de 1.144.080 euros par incorporation d'une somme de 161.000 euros prélevée sur le compte prime d'émission.

Par décision du Président en date du 15 mai 2015 sur délégation de pouvoirs de l'Assemblée Générale Extraordinaire en date du 29 avril 2015, il a été procédé à l'émission de 3.225 valeurs mobilières à titre gratuit donnant droit chacune à l'attribution d'un titre de capital ordinaire d'une valeur de 62 euros chacune dont 10 euros de valeur nominale et 52 euros de prime démission.

Par décision du Président en date du 19 octobre 2015, 3.105 valeurs mobilières sur les 3.225 ont été converties en actions et le capital social a été porté de 1.144.080 euros à la somme de 1.175.130 euros par l'émission de 3.105 actions nouvelles.

Par décision en date du 4 novembre 2015, l'Assemblée Générale Extraordinaire a décidé la réduction du capital social d'un montant de 740.000 euros pour le ramener de 1.175.130 euros à la somme de 435.130 euros par annulation de 74.000 actions.

Aux termes de ses délibérations, l'assemblée générale en date du 14 mars 2016, a décidé d'augmenter le capital social d'un montant nominal de 69.630 euros par l'émission de 6.963 nouvelles actions de préférence de catégorie P, d'une valeur nominale de 10 euros chacune, émises au prix de souscription unitaire de 162 euros (prime d'émission comprise), représentant une souscription d'un montant total (prime d'émission incluse) de 1.128.006 euros.

Aux termes des décisions du Président en date du 23 février 2017, il a été constaté l'augmentation du capital social de la Société d'un montant nominal de 69.630 euros par l'émission de 6.963 actions de préférence de catégorie P, d'une valeur nominale de 10 euros chacune, émises au prix de souscription de 162 euros chacune, résultant de l'exercice de 6.963 bons de souscription d'actions dits « BSA Tranche 2 » attachés aux 6.963 ABSA-2016 émises par l'assemblée générale ordinaire annuelle et extraordinaire des associés de la Société en date du 14 mars 2016, le capital étant porté ainsi de 504.760 euros à 574.390 euros.

Aux termes de ses délibérations, l'assemblée générale extraordinaire en date du 20 décembre 2017, a décidé d'augmenter le capital social d'un montant nominal de 78.980 euros par l'émission de 7.898 actions de préférence nouvelles de catégorie P, d'une valeur nominale de 10 euros chacune, émises au prix de souscription unitaire de 217 euros (prime d'émission comprise), représentant une souscription d'un montant total (prime d'émission incluse) de 1.713.866 euros. Le capital est ainsi porté de 574.390 euros à 653.370 euros.

Aux termes de ses délibérations, l'assemblée générale extraordinaire en date du 20 décembre 2017, a décidé d'augmenter le capital social d'un montant nominal de 10.480 euros par l'émission de 1.048 actions ordinaires nouvelles, d'une valeur nominale de 10 euros chacune, émises au prix de souscription unitaire de 217 euros (prime d'émission comprise), représentant une souscription d'un montant total (prime d'émission incluse) de 227.416 euros. Le capital est ainsi porté de 653.370 euros à 663.850 euros.

Aux termes des délibérations de l'assemblée générale extraordinaire de la Société en date du 25 février 2022, le capital social a été augmenté d'un montant nominal de 31.510 euros par voie d'émission de 3.151 actions ordinaires nouvelles de la Société, de 10 euros de valeur nominale chacune, en rémunération de l'apport d'actifs corporels et incorporels, le capital social étant ainsi porté de 663.850 euros à 695.360 euros.

Aux termes des décisions du Président en date du 15 avril 2022, il a été constaté l'augmentation du capital social de la Société d'un montant nominal de 42.840 euros par l'émission de 4.284 actions de préférence de catégorie P, d'une valeur nominale de 10 euros chacune, émises au prix de souscription unitaire de 217 euros (prime d'émission comprise), résultant de la conversion de 4.104 obligations convertibles en actions de préférence de catégorie P dites « OC-2021 » émises par l'assemblée générale ordinaire annuelle et extraordinaire des associés de la Société en date du 21 mai 2021, le capital étant porté ainsi de 695.360 euros à 738.200 euros.

Aux termes des décisions unanimes des associés en date du 24 octobre 2022, il a été décidé de convertir les 26.108 actions de préférence de catégorie P en 26.108 actions ordinaires.

ARTICLE 7 – CAPITAL SOCIAL

Le capital social est fixé à sept cent trente-huit mille deux cents (738.200) euros, divisé en soixante-treize mille huit cent vingt (73.820) actions ordinaires de dix (10) euros de valeur nominale chacune, intégralement libérées et de même catégorie.

ARTICLE 8 – MODIFICATIONS DU CAPITAL

Le capital social peut être augmenté, réduit ou amorti conformément aux lois et règlements en vigueur.

I – Le capital social peut être augmenté, soit par l'émission d'actions nouvelles, soit par élévation du montant nominal des actions existantes.

Il peut également être augmenté par l'exercice des droits attachés à des valeurs mobilières donnant accès au capital, dans les conditions prévues par la loi.

L'émission d'actions nouvelles peut résulter :

- soit d'apports en nature ou en numéraire, ces derniers pouvant être libérés par un versement d'espèces ou par compensation avec des créances liquides et exigibles sur la Société,

- soit de l'utilisation de ressources propres à la Société sous forme d'incorporation de réserves, de bénéfices ou de primes d'émission,

- soit de la combinaison d'apports en numéraire et d'incorporations de réserves, bénéfices ou primes d'émission,

- soit de la conversion ou du remboursement d'obligations en actions.

Les actions nouvelles sont émises soit à leur valeur nominale, soit à la valeur nominale majorée d'une prime d'émission.

Sauf s'il s'agit du paiement du dividende en actions, l'associé unique ou la collectivité des associés délibérant dans les conditions prévues pour les décisions extraordinaires, sur rapport du Président, est seul(e) compétent(e) pour décider une augmentation de capital.

Si l'augmentation du capital est réalisée par incorporation de réserves, bénéfices ou primes d'émission, l'associé unique ou la collectivité des associés délibérant dans les conditions prévues pour les décisions extraordinaires, sur rapport du Président, est seul compétent pour décider de ladite augmentation de capital.

Les associés ont, proportionnellement au nombre de leurs actions, un droit de préférence à la souscription des actions de numéraire émises pour réaliser une augmentation de capital.

L'associé unique ou la collectivité des associés qui décide l'augmentation de capital peut supprimer ce droit préférentiel de souscription, totalement ou partiellement, au profit de personnes nommément désignées ou de catégories de personnes répondant à des caractéristiques déterminées, dans le respect des conditions prévues par la loi.

En outre, chaque associé peut, sous certaines conditions, renoncer individuellement à ce droit préférentiel de souscription.

Le droit à l'attribution d'actions nouvelles, à la suite de l'incorporation au capital de réserves, bénéfices ou primes d'émission appartient au nu-propriétaire, sous réserve des droits de l'usufruitier.

La valeur des apports en nature doit être appréciée par un ou plusieurs commissaires aux comptes nommés dans les conditions prévues par la loi.

II – L'associé unique ou la collectivité des associés délibérant dans les conditions prévues pour les décisions extraordinaires, sur rapport du Président, peut aussi décider ou autoriser la réduction du capital social pour telle cause et de telle manière que ce soit, notamment pour cause de pertes ou par voie de remboursement ou de rachat partiel des actions, de réduction de leur nombre ou de leur valeur nominale, le tout dans les limites et sous les réserves fixées par la loi et, en aucun cas, la réduction de capital ne peut porter atteinte à l'égalité des associés.

III – L'associé unique ou la collectivité des associés délibérant dans les conditions prévues pour les décisions extraordinaires, sur rapport du Président, peut également décider d'amortir tout ou partie du capital social et substituer aux actions de capital des actions de jouissance partiellement ou totalement amorties, le tout en application des articles L. 225-198 et suivants du Code de commerce.

IV – Enfin, l'associé unique ou la collectivité des associés décidant l'augmentation ou la réduction du capital peut déléguer au Président les pouvoirs nécessaires à l'effet de la réaliser.

ARTICLE 9 – LIBERATION DES ACTIONS

Lors de la constitution de la Société, les actions en numéraire sont libérées, lors de la souscription, de la moitié au moins de leur valeur nominale.

Lors d'une augmentation de capital, les actions de numéraire sont libérées, lors de la souscription, d'un quart au moins de leur valeur nominale et, le cas échéant, de la totalité de la prime d'émission.

La libération du surplus doit intervenir en une ou plusieurs fois sur appel du Président, dans le délai de cinq (5) ans à compter de l'immatriculation au Registre du commerce et des sociétés en ce qui concerne le capital initial, et dans le délai de cinq (5) ans à compter du jour où l'opération est devenue définitive en cas d'augmentation de capital.

Les appels de fonds sont portés à la connaissance du ou des souscripteurs quinze (15) jours au moins avant la date fixée pour chaque versement, par lettre recommandée avec demande d'avis de réception, adressée à chaque associé.

Les associés ont la faculté d'effectuer des versements anticipés.

Tout retard dans le versement des sommes dues sur le montant non libéré des actions entraîne de plein droit intérêt au taux légal à partir de la date d'exigibilité, sans préjudice de l'action personnelle que la Société peut exercer contre l'associé défaillant et des mesures d'exécution forcée prévues par la loi.

Conformément aux dispositions de l'article 1843-3 du Code civil, lorsqu'il n'a pas été procédé dans un délai légal aux appels de fonds pour réaliser la libération intégrale du capital, tout intéressé peut demander au président du tribunal statuant en référé soit d'enjoindre sous astreinte aux administrateurs, gérants et dirigeants de procéder à ces appels de fonds, soit de désigner un mandataire chargé de procéder à cette formalité.

ARTICLE 10 – FORME DES ACTIONS

Les actions sont obligatoirement nominatives.

La propriété des actions résulte de leur inscription au nom du ou des titulaires sur des comptes et registre tenus à cet effet, par voie dématérialisée, par la Société.

Une attestation d'inscription en compte est délivrée par la Société à tout associé qui en fait la demande.

Les actions sont indivisibles à l'égard de la Société.

ARTICLE 11 – CESSION ET TRANSMISSION DES ACTIONS

Les actions ne sont négociables qu'après l'immatriculation de la Société au registre du commerce et des sociétés. En cas d'augmentation du capital, les actions sont négociables à compter de la réalisation de celle-ci.

Les actions demeurent négociables après la dissolution de la Société et jusqu'à la clôture de la liquidation.

La propriété des actions résulte de leur inscription en compte individuel au nom du ou des titulaires sur les registres que la Société tient à cet effet au siège social.

La transmission des actions s'opère à l'égard de la Société et des tiers par un virement du compte du cédant au compte du cessionnaire, sur production d'un ordre de mouvement établi sur un formulaire fourni ou agréé par la Société et signé par le cédant ou son mandataire.

L'ordre de mouvement est enregistré sur un registre coté et paraphé, tenu chronologiquement, dit « registre des mouvements de titres ».

La Société est tenue de procéder à cette inscription et à ce virement dès réception de l'ordre de mouvement et, au plus tard, dans les huit (8) jours qui suivent celle-ci.

ARTICLE 12 – DROITS ET OBLIGATIONS ATTACHES AUX ACTIONS

Chaque action donne droit à son propriétaire, dans les bénéfices, l'actif social et le boni de liquidation, à une part proportionnelle à la quotité du capital qu'elle représente.

Chaque action donne droit à une (1) voix. Le droit de vote attaché aux actions est proportionnel au capital qu'elles représentent.

Chaque action donne, en outre, le droit à la représentation dans les décisions de l'associé unique ou de la collectivité des associés, ainsi que le droit d'être informé sur la marche de la Société et d'obtenir communication de certains documents sociaux, dans les conditions prévues par la loi et par les présents Statuts.

Les associés ne sont responsables du passif social qu'à concurrence de leur apport.

Les droits et obligations attachés à l'action suivent le titre dans quelque main qu'il passe. La propriété d'une action emporte de plein droit adhésion aux Statuts et aux décisions de l'associé unique ou de la collectivité des associés régulièrement intervenues.

Le droit de vote attaché à l'action appartient au nu-propriétaire, sauf pour les décisions de l'associé unique ou de la collectivité des associés relatives à l'affectation des bénéfices de la Société où il appartient à l'usufruitier.

Toutefois, le nu-propriétaire a la possibilité d'assister aux décisions collectives auxquelles il doit être convoqué, même à celles pour lesquelles il ne jouit pas du droit de vote. Le droit de l'associé d'obtenir communication de documents sociaux ou de les consulter peut également être exercé par chacun des copropriétaires d'actions indivises, par l'usufruitier et le nu-propriétaire d'actions.

Chaque fois qu'il sera nécessaire de posséder plusieurs actions pour exercer un droit quelconque ou encore en cas d'échange ou d'attribution de titres donnant droit à un titre nouveau contre remise de plusieurs actions, les actions isolées ou en nombre inférieur à celui requis ne donneront aucun droit à leurs porteurs contre la Société, les associés ayant à faire leur affaire personnelle du groupement et, éventuellement, de l'achat ou de la vente du nombre d'actions nécessaires.

ARTICLE 13 – PRESIDENCE DE LA SOCIETE

La Société est représentée, dirigée et administrée par un Président, personne morale ou physique, associé ou non de la Société. Le Président personne morale est représenté par ses représentants légaux.

Le Président est nommé par l'associé unique ou par décision collective des associés.

La durée des fonctions du Président est déterminée par la décision de l'associé unique ou de la collectivité des associés ayant procédé à sa désignation ; en cas de durée déterminée des fonctions du Président, son mandat prendra fin à l'issue de la décision de l'associé unique ou de la collectivité des associés appelée à statuer sur les comptes de l'exercice écoulé et tenue dans l'année au cours de laquelle expire son mandat.

Le Président peut démissionner de son mandat sous réserve de respecter un préavis de trois (3) mois lequel pourra être réduit (i) en cas d'incapacité de travail ou en cas de problème de santé grave rendant impossible la poursuite de son mandat, ou (ii) lors de la consultation de l'associé unique ou de la collectivité des associés qui aura à statuer sur le remplacement du Président démissionnaire.

Le Président est révocable à tout moment, pour juste motif, par l'associé unique ou, en cas de pluralité d'associés, par décision des associés statuant à la majorité prévue pour les décisions collectives ordinaires.

En cas de décès, démission ou empêchement du Président d'exercer ses fonctions pour une durée supérieure à trois mois, il est pourvu à son remplacement par une personne désignée par les associés. Le Président remplaçant ne demeure en fonction que pour le temps restant à courir du mandat de son prédécesseur.

La rémunération du Président est fixée par l'associé unique ou, en cas de pluralité d'associés, par décision des associés statuant à la majorité prévue pour les décisions collectives ordinaires.

Le Président dirige la Société et la représente à l'égard des tiers. A ce titre et sauf limitation fixée par la décision de nomination ou par une décision ultérieure, il est investi de tous les pouvoirs nécessaires pour agir en toutes circonstances au nom de la Société, dans la limite de l'objet social et des pouvoirs expressément dévolus par la loi et les présents Statuts à l'associé unique ou aux décisions collectives des associés.

Le Président est autorisé à consentir des subdélégations ou substitutions de pouvoirs pour une ou plusieurs opérations ou catégories d'opérations déterminées.

ARTICLE 14 - DIRECTEURS GENERAUX ET DIRECTEURS GENERAUX DELEGUES

Un ou plusieurs directeurs généraux ou directeurs généraux délégués, personnes physiques, peuvent être nommés par l'associé unique ou par une décision collective des associés délibérant dans les conditions prévues pour les décisions ordinaires.

Sauf limitation fixée par la décision de nomination ou par une décision ultérieure, les directeurs généraux et les directeurs généraux délégués disposent des mêmes pouvoirs de direction que le Président.

Les directeurs généraux et les directeurs généraux délégués disposent du pouvoir de représenter la Société à l'égard des tiers.

La rémunération éventuelle des fonctions de directeur général ou de directeur général délégué est fixée par l'associé unique ou, en cas de pluralité d'associés, par décision des associés statuant à la majorité prévue pour les décisions collectives ordinaires.

La durée des fonctions de directeur général ou de directeur général délégué est fixée par la décision qui le nomme ; en cas de durée déterminée des fonctions du directeur général ou de directeur général délégué, son mandat prendra fin à l'issue de la décision de l'associé unique ou de la collectivité des associés appelée à statuer sur les comptes de l'exercice écoulé et tenue dans l'année au cours de laquelle expire son mandat. Les fonctions de directeur général ou de directeur général délégué prennent fin soit par le décès, la démission, la révocation, l'expiration de son mandat, soit par l'ouverture à l'encontre de celui-ci d'une procédure de redressement ou de liquidation judiciaires.

Le directeur général ou le directeur général délégué peut démissionner de son mandat sous réserve que sa démission soit adressée à la Société par lettre recommandée avec accusé de réception ou par lettre remise en mains propres contre décharge.

Le directeur général ou le directeur général délégué est révocable à tout moment, pour juste motif, par décision de l'associé unique ou de la collectivité des associés délibérant à la majorité prévue pour les décisions collectives ordinaires.

ARTICLE 15 – COMITE SOCIAL ET ECONOMIQUE

Les membres de la délégation du personnel du comité social et économique exerceront les droits qui leur sont reconnus par l'article L. 2312-76 du Code du travail auprès du Président.

ARTICLE 16 – COMMISSAIRES AUX COMPTES

La nomination d'un commissaire aux comptes titulaire et, le cas échéant, d'un commissaire aux comptes suppléant est obligatoire dans les cas prévus par la loi et par les règlements. Elle est facultative dans les autres cas.

En dehors des cas prévus par la loi, la nomination d'un commissaire aux comptes peut être décidée par décision de l'associé unique ou de la collectivité des associés dans les conditions de majorité prévues pour les décisions collectives ordinaires.

Le commissaire aux comptes doit être informé des décisions de l'associé unique ou des décisions collectives dans les mêmes conditions que les associés.

ARTICLE 17 – CONVENTIONS ENTRE LA SOCIETE ET SES DIRIGEANTS OU SES ASSOCIES

Le commissaire aux comptes ou, s'il n'en a pas été désigné, le Président de la Société présente aux associés un rapport sur les conventions intervenues directement ou par personne interposée entre la Société et son Président, l'un de ses dirigeants, l'un de ses associés disposant d'une fraction des droits de vote supérieure à 10 % ou, s'il s'agit d'une société associée, la société la contrôlant au sens de l'article L. 233-3 du Code de commerce.

Les associés statuent sur ce rapport.

Les conventions non approuvées, produisent néanmoins leurs effets, à charge pour la personne intéressée et éventuellement pour le Président et les autres dirigeants d'en supporter les conséquences dommageables pour la Société.

Par dérogation à ce qui précède, lorsque la Société ne comprend qu'un seul associé, il est seulement fait mention au registre des décisions des conventions intervenues directement ou par personnes interposées entre la Société et son dirigeant, son associé unique ou, s'il s'agit d'une société associée, la société la contrôlant au sens de l'article L. 233-3 du Code de commerce.

ARTICLE 18 – DECISIONS DES ASSOCIES OU DE L'ASSOCIE UNIQUE

18.1. Domaines réservés à la collectivité des associés

Les décisions relevant de la compétence des associés, avec délégation de pouvoirs le cas échéant au Président selon ce qui est prévu par la loi et/ou chaque décision collective, sont les suivantes :

- Transfert du siège social hors transfert dans le même département ou dans un département limitrophe,
- Nomination et renouvellement des commissaires aux comptes,
- Approbation des comptes sociaux annuels et affectation des résultats ; approbation des conventions réglementées,
- Modification des statuts de la Société,
- Dissolution, liquidation amiable de la Société ainsi que toutes les règles relatives à la liquidation et aux pouvoirs du liquidateur,
- Augmentation, amortissement ou réduction du capital, ainsi que l'émission de toute valeur mobilière ouvrant accès immédiatement, potentiellement ou à terme, directement ou indirectement, au capital de la Société ou de filiales dans les conditions prévues par la loi (en ce compris les options de souscription ou d'achat d'actions et autres outils d'intéressement) ;
- Fusions, scissions ou apports partiels d'actifs,
- Transformation de la Société en une société d'une autre forme,
- Prorogation de la durée de la Société.

Sous réserve des dispositions législatives, réglementaires ou statutaires, toute autre décision relève de la compétence du Président et, le cas échéant, du Directeur Général ou du Directeur Général Délégué.

En présence d'un associé unique, celui-ci exercera les pouvoirs dévolus par la loi et les présents Statuts aux associés lorsqu'une prise de décision collective est nécessaire. Les modalités de consultation (notamment de convocation) des associés sont alors inapplicables. L'associé unique prendra ses décisions conformément à l'article 18.4.3 (acte sous seing privé) ci-dessous et pourra se saisir seul des décisions relevant de sa compétence. L'associé unique ne peut déléguer ses pouvoirs. Les décisions prises par l'associé unique sont répertoriées dans un registre qu'il aura fait coter et parapher.

18.2. Forme des décisions

Les décisions collectives des associés sont prises, au choix de l'auteur de la convocation, soit en assemblée générale réunie au siège social ou en tout autre lieu indiqué sur la convocation, soit par consultation écrite, soit par correspondance, étant entendu que chacun des associés y est appelé à se prononcer. Elles peuvent aussi s'exprimer dans un acte authentique ou sous seing privé signé par l'ensemble des associés. Tous moyens de communication (vidéo, télécopie, etc.) peuvent être utilisés dans l'expression des décisions.

Il appartient au Président d'apprécier sous sa responsabilité si le moyen de consultation retenu offre des garanties suffisantes de preuve et permet, si besoin, d'effectuer les formalités inhérentes à la décision prise.

18.3. Nature des décisions

18.3.1. Décisions extraordinaires

Compétence

Les décisions relatives aux modifications statutaires (autres que celle au résultat du transfert de siège en France), à toute émission de titres pouvant donner lieu, par exercice d'un bon, conversion d'obligations ou autrement, à la souscription d'actions ou autres valeurs mobilières donnant accès au capital et de droits de vote de la Société, à toute opération de fusion, scission, apport partiel d'actif, la dissolution anticipée, sont qualifiées d'extraordinaires.

Quorum

Les décisions collectives qualifiées d'extraordinaires ne sont valablement prises, sur première consultation, que si les associés présents ou représentés possèdent au moins un quart des actions ayant le droit de vote.

Sur deuxième consultation, que si les associés présents ou représentés possèdent un cinquième des actions ayant le droit de vote.

Règle de majorité

Les décisions extraordinaires sont prises à la majorité des deux tiers des voix dont disposent les associés présents ou représenté, sauf disposition légale ou clause contraire des statuts prévoyant une majorité plus forte.

18.3.2. Décisions ordinaires

Compétence

Toutes les décisions autres qu'extraordinaires relevant de la compétence des associés de par les présents statuts sont qualifiées d'ordinaires.

Quorum

Les décisions collectives qualifiées d'ordinaires ne sont valablement prises, sur première consultation, que si les associés présents ou représentés possèdent au moins le cinquième des actions ayant le droit de vote.

Sur deuxième consultation aucun quorum n'est requis.

Règle de majorité

Ces décisions sont prises à la majorité simple des voix dont disposent les associés présents ou représentés, sauf disposition légale ou clause contraire des statuts prévoyant une majorité plus forte.

18.4. Modalités pratiques de consultation

18.4.1. Assemblées

La consultation ou la réunion des associés est convoquée par le Président de la Société ou par le Directeur Général ou par un ou plusieurs associés représentant seul ou ensemble au moins 10% du capital et des droits de vote.

Pendant la période de liquidation, l'assemblée est convoquée par le ou les liquidateurs.

L'assemblée est réunie au siège social ou tout autre lieu proposé par l'auteur de la convocation. La convocation est faite par tout moyen écrit (en ce compris électronique) huit (8) jours au moins avant la date de l'assemblée tant sur première convocation que sur deuxième convocation (ces délais pouvant être réduits ou supprimés si tous les associés sont présents ou représentés) et doit indiquer l'ordre du jour.

Dans tous les cas, le(s) commissaire(s) aux comptes est(sont) convoqué(s) aux assemblées générales dans les mêmes conditions que les associés.

L'assemblée est présidée par le Président de la Société ou, en cas d'empêchement, d'absence ou de refus de ce dernier, par l'associé présent détenant le plus grand nombre d'actions sous réserve qu'il accepte cette fonction ; à défaut, l'assemblée élit elle-même son président.

Le président de l'assemblée peut se faire assister d'un secrétaire de son choix, qui peut être pris en dehors des associés.

Les associés peuvent se faire représenter par un mandataire, associé ou non. Le mandat est donné pour l'ensemble des décisions à prendre au cours d'une assemblée.

Pour le décompte de la majorité, sont retenus les votes par mandataire régulièrement désigné.

En cas de vote par correspondance, seuls les formulaires de vote reçus par la Société préalablement à la date de l'assemblée seront pris en compte.

En cas de vote à distance au moyen d'un formulaire de vote électronique, ou d'un vote par procuration donné par signature électronique, celui-ci s'exerce dans les conditions prévues par la réglementation en vigueur, soit sous la forme d'une signature électronique sécurisée au sens du décret 2001-272 du 30 mars 2001, soit sous la forme d'un procédé fiable d'identification garantissant son lien avec l'acte auquel elle se rattache.

Par ailleurs, s'il en est ainsi décidé par l'auteur de la convocation, tout associé peut participer et voter à l'assemblée par vidéoconférence ou tout autre moyen de télécommunication permettant son identification.

A chaque assemblée, il est établi une feuille de présence dûment émargée par les associés présents et les mandataires des associés représentés, à laquelle sont annexés les pouvoirs donnés auxdits mandataires. La feuille de présence est certifiée exacte par le président de l'assemblée et, le cas échéant, par le secrétaire.

Les délibérations des assemblées sont constatées par des procès-verbaux qui mentionnent, sous la responsabilité du président de l'assemblée, les éléments nécessaires à l'information des associés et des tiers et notamment le sens du vote, intervenu résolution par résolution.

Les procès-verbaux sont établis et signés par le président de l'assemblée et le cas échéant, par le secrétaire, sur un registre spécial coté et paraphé.

Les copies ou extraits de ces procès-verbaux sont valablement certifiés conformes par le Président.

18.4.2. Consultation écrite

En cas de consultation écrite, le Président doit adresser à chacun des associés par tout moyen de communication, y compris par courrier électronique, un formulaire de vote, en deux exemplaires, portant les mentions suivantes :

- sa date d'envoi aux associés ;
- la date à laquelle la Société devra avoir reçu les formulaires de vote. A défaut d'indication de cette date, le délai maximal de réception des formulaires sera de huit jours à compter de la date d'expédition du formulaire de vote ;
- la liste des documents joints et nécessaires à la prise de décision ;
- le texte des résolutions proposées avec, sous chaque résolution, l'indication des options de délibérations (oui, non ou abstention) ;
- l'adresse (y compris électronique) à laquelle doivent être retournés les formulaires.

Le(s) commissaire(s) aux comptes est(sont) préalablement informé(s) de toute consultation écrite et du texte des résolutions proposées.

L'associé vote personnellement sans possibilité de donner mandat de vote.

Chaque associé devra compléter le formulaire de vote en cochant, pour chaque résolution, une case unique correspondant au sens de son vote. Si aucune ou plus d'une case ont été cochées pour une même résolution, le vote sera réputé être un vote de rejet.

Chaque associé devra retourner un exemplaire de ce formulaire de vote dûment complété, daté et signé, à l'adresse indiquée, et, à défaut, au siège social.

En cas de vote par télécopie, celle-ci sera datée, paraphée au bas de chaque page et signée sur la dernière page par l'associé qui l'émet.

De même si le Président l'autorise pour un ou plusieurs associés dénommés, le droit de vote peut être exprimé par voie de courrier électronique.

Pour qu'une télécopie ou un courrier électronique soit admis comme exprimant un vote, il convient que pour chaque décision, un vote par « oui », « non » ou « abstention » soit nettement exprimé ; à défaut, l'associé sera considéré comme s'abstenant.

Le défaut de réponse d'un associé dans le délai indiqué vaut abstention totale de l'associé concerné. Dans les cinq jours ouvrés suivant la réception du dernier formulaire de vote et au plus tard le cinquième jour ouvré suivant la date limite fixée pour la réception des formulaires, le Président établit, date et signe le procès-verbal des délibérations. Les formulaires de vote, les preuves d'envoi de ces formulaires et le procès-verbal des délibérations sont conservés au siège social.

18.4.3. Acte sous seing privé

Les associés prennent les décisions dans un acte sous seing privé ; la signature par tous les associés sur ce document unique vaut prise de décision.

Un associé peut être représenté par toute personne de son choix dès lors que le mandat est régulier et spécial.

Le(s) commissaire(s) aux comptes est(sont) tenu(s) informé(s) du projet d'acte sous seing privé ; une copie de l'acte projeté lui(leur) est adressée sur simple demande.

Cet acte devra mentionner, s'il y a lieu, les conditions d'information préalable des associés et, s'il y a lieu, les documents communiqués ou sur lesquels portent les décisions à prendre et notamment ceux visés à l'article 18.5 des présents Statuts, la date, l'objet de l'acte, la nature précise de la décision à adopter et l'identité (nom, prénoms) de chacun des signataires du document.

Cette décision est reportée à sa date dans le registre des procès-verbaux des assemblées générales.

Pour les besoins des tiers ou des formalités, le Président établit des copies certifiées conformes de cet acte.

18.5. Droit de communication et d'information

En vue de l'approbation des comptes, le Président tient à la disposition, au siège social, de l'associé unique ou, en cas de pluralité des associés, de chaque associé, les comptes annuels, le texte des résolutions proposées et, lorsque la loi l'exige, le(s) rapport(s) du commissaire aux comptes et le rapport de gestion.

Pour toute autre consultation, le Président tient à la disposition, au siège social, de l'associé unique ou, en cas de pluralité des associés, de chaque associé, avant qu'il ne se prononce sur la décision, le texte des résolutions proposées et le rapport sur ces résolutions, ainsi que, le cas échéant, le rapport du commissaire aux comptes et des commissaires à compétence particulière.

18.6. Décisions des porteurs d'actions de différentes catégories

En cas de pluralité de catégorie d'actions, les porteurs d'une catégorie d'actions déterminée, que ces actions soient ordinaires ou de préférence, sont consultés selon les mêmes modalités que celles fixées ci-avant pour la collectivité des associés.

L'assemblée spéciale des titulaires de chaque catégorie d'actions délibère et statue dans les conditions de quorum et de majorité prévues à l'article L. 225-99 du Code de commerce, étant précisé que les modalités de convocation et de tenue des assemblées spéciales seront analogues à celles applicables à la collectivité des associés en application des Statuts. Les décisions desdits titulaires peuvent aussi s'exprimer dans un acte authentique ou sous seing privé signé par l'ensemble des titulaires.

Conformément à l'article L. 225-99 alinéa 2 du Code de commerce, les droits attachés à une catégorie d'actions ne peuvent être modifiés qu'après approbation de la collectivité des porteurs de cette catégorie d'actions. En cas d'émission ou d'annulation d'actions appartenant à une catégorie d'actions déjà émises par la Société, et sous réserve que les droits et obligations de cette catégorie d'actions soient inchangés, les droits des porteurs d'une catégorie d'actions donnée seront considérés comme ne faisant l'objet d'aucun aménagement.

Conformément à l'article L. 228-17 du Code de commerce, en cas de fusion ou de scission, les actions de préférence pourront être échangées contre des actions des sociétés bénéficiaires du transfert de patrimoine comportant des droits particuliers équivalents, ou selon une parité d'échange spécifique tenant compte des droits particuliers abandonnés ; en l'absence d'échange contre des actions conférant des droits particuliers équivalents, la fusion ou la scission sera soumise à l'approbation de l'assemblée spéciale des titulaires d'actions de préférence.

18.7. Décisions des obligataires et des titulaires de valeurs mobilières donnant accès au capital

Les titulaires d'obligations et de valeurs mobilières donnant accès au capital sont consultés selon les mêmes conditions que celles fixées pour la collectivité des associés.

Il est précisé que les décisions desdits titulaires peuvent également être prises soit par consultation écrite, soit par correspondance, dans les mêmes conditions de consultation que celles des associés. Elles peuvent aussi s'exprimer dans un acte authentique ou sous seing privé signé par l'ensemble des titulaires.

Les assemblées générales des titulaires de ces valeurs mobilières sont appelées à autoriser toutes modifications au contrat d'émission et à statuer sur toute décision touchant aux conditions de souscription ou d'attribution de titres de capital déterminées au moment de l'émission.

Chaque valeur mobilière donnant accès au capital donne droit à une voix. Les conditions de quorum et de majorité sont celles qui sont déterminées aux deuxième et troisième alinéas de l'article L. 225-96 du Code de commerce.

ARTICLE 19 – EXERCICE SOCIAL

Chaque exercice social a une durée d'une année qui commence le 1er janvier et finit le 31 décembre.

ARTICLE 20 – COMPTES SOCIAUX

Il est tenu une comptabilité régulière des opérations sociales, conformément à la loi et aux usages du commerce.

A la clôture de chaque exercice, le Président dresse l'inventaire des divers éléments de l'actif et du passif existant à cette date, conformément aux dispositions légales et réglementaires.

Il établit également les comptes annuels, ainsi que, lorsque la loi l'exige, des comptes consolidés, un rapport de gestion et un rapport sur la gestion du groupe

L'associé unique ou, si la Société comporte plusieurs associés, les associés approuvent les comptes annuels dans un délai de six mois à compter de la clôture de chaque exercice.

ARTICLE 21 – AFFECTATION ET REPARTITION DES RESULTATS

Les produits nets de l'exercice, déduction faite des frais généraux et autres charges de la Société, ainsi que tous amortissements et provisions, constituent le bénéfice.

Il est fait, sur ce bénéfice, diminué le cas échéant des pertes antérieures, un prélèvement de 5 % au moins, affecté à la réserve légale. Ce prélèvement cesse d'être obligatoire lorsque ladite réserve atteint le dixième du capital social.

Le bénéfice distribuable est constitué par le bénéfice de l'exercice, diminué des pertes antérieures et des sommes portées en réserve en application de la loi ou des Statuts, et augmenté des reports bénéficiaires.

Le bénéfice distribuable est attribuable à l'associé unique. Lorsque la Société comprend plusieurs associés, la part attribuée aux actions sur ce bénéfice est décidée par décision collective des associés.

L'associé unique ou la collective des associés peut également décider la distribution de sommes prélevées sur les réserves disponibles en indiquant expressément les postes de réserves sur lesquels ces prélèvements sont effectués. Toutefois, les dividendes sont prélevés par priorité sur le bénéfice distribuable de l'exercice.

De même, il peut être décidé d'affecter en totalité ou en partie les sommes distribuables aux réserves ou au report à nouveau.

ARTICLE 22 – DISSOLUTION - LIQUIDATION

La Société est dissoute à l'arrivée du terme statutaire, sauf prorogation régulière, et en cas de survenance d'une cause légale de dissolution.

La dissolution entraîne sa liquidation qui est effectuée conformément aux dispositions de la loi et aux décrets pris pour son application.

Le boni de liquidation est réparti entre les associés proportionnellement au nombre de leurs actions.

ARTICLE 23 – CONTESTATIONS

Toutes les contestations relatives aux affaires sociales susceptibles de surgir pendant la durée de la Société ou de sa liquidation, seront jugées conformément à la loi et soumises à la juridiction des tribunaux compétents dans les conditions du droit commun.