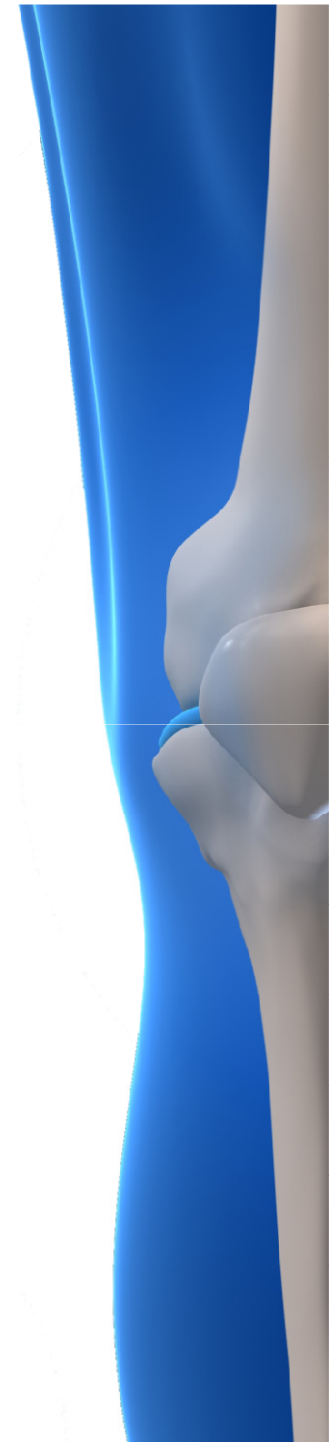




Bonus BioGroup

November 2013

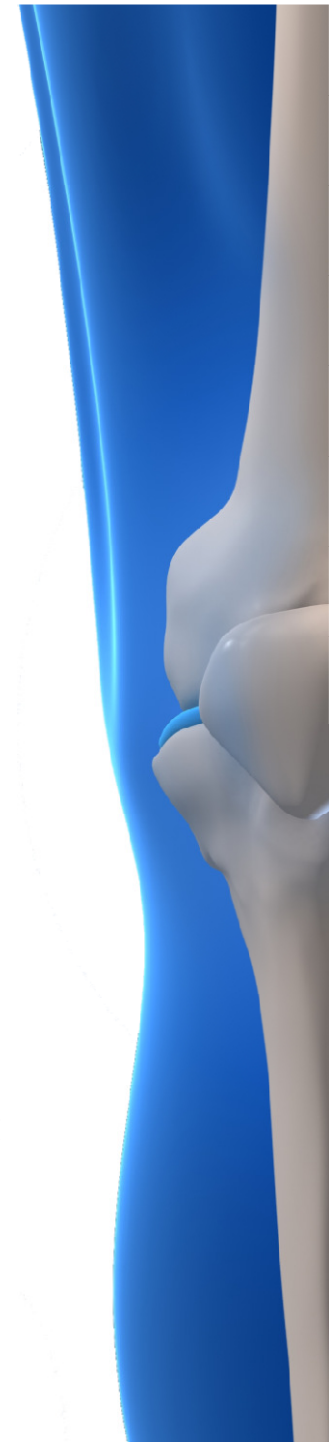




Disclaimer and Information Regarding the Company Future Activity

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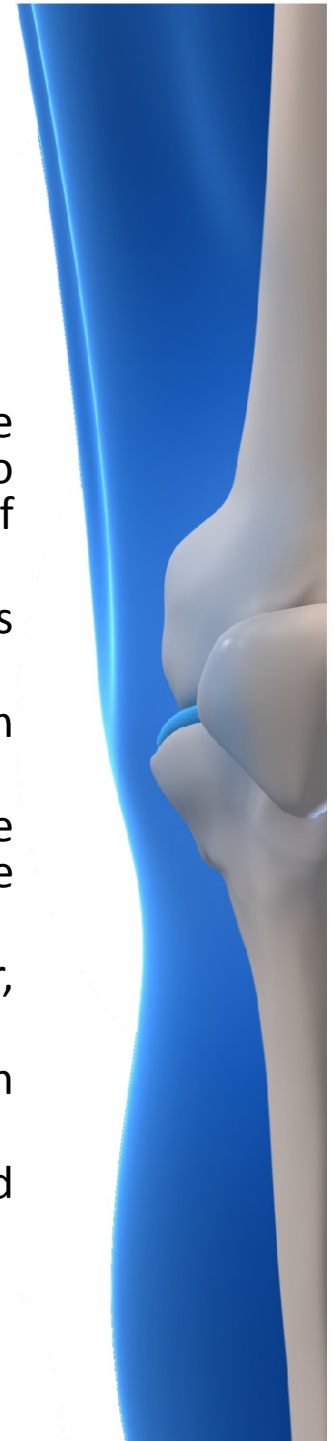
This presentation includes, among other things, information with a look to the future, as Securities Law, 1968, which is based on the company's estimates the potential for its development, documents, and information is the company preliminary factors relevant professional development plan of the company, these estimates may not be realized, all or some of them are, or are realized in a different than information as mentioned above, includes, among other things, forecasts, targets, assessments and information. Another, related events or future affairs, which are not certain and not under the control of the Company ("information with a look to the future"). Therefore, you are urged to use your own assessment and consult with your own professional advisors prior to making any investment decisions.





Bonus BioGroup

- The company was founded in 2008 by experts in the field of tissue engineering and cell medicine, amongst them Dr. Shai Meretzki, who founded Pluristem, and Prof. Avinoam Kaduri, who served as Chairman of the European Organization of Biotechnology Companies.
- The company develops living human bone grafts, generated from cells sampled from the patient's own body.
- The company employs over 20 people, with more than half of them awarded PhDs.
- In July 2013, the company has accomplished the establishment of the world's first human bone graft production facility, in its new 750 square meters building complex in Matam Industrial Park, Haifa.
- The company is expected to enter a clinical trial before the end of the year, subject to regulatory approval.
- Within approximately 4 months of the human bone graft transplant in patients, preliminary interim results may be achieved.
- The regulatory approval process for the company's products is estimated to be relatively short, as they are based on cells originated in the patient





Management Team

Dr. Shai Meretzki, CEO and President

Dr. Meretzki has proven operational, management and leadership abilities in life science companies.

Former founder, CEO and CTO of Pluristem Life Systems, Inc. (OTCBB: PSTI),

Dr. Meretzki has Ph.D. and M.Sc. in biotechnology from the Technion Israel Institute of Technology in cooperation with the Weizmann Institute, Israel. Dr. Meretzki has also graduated as a Chemical engineer and has additional B.Sc. in biology.

Dr. Meretzki has wide experience in the healthcare industry. Significant management experience has performed extensive biological and chemical R&D for various companies and organizations in Israel. Dr. Shai Meretzki has developed unique bioreactor system for the *ex vivo* expansion of adult stem cells.

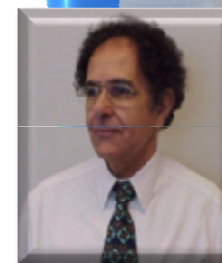


Dr. Avinoam Kadouri, Founder, Head of SAB

Dr. Kadouri is one of the leading scientists in industrial biotechnology with a worldwide reputation. He has 15 years experience as R&D Director and worldwide Process Development Director at Serono International.

Dr. Kadouri was also the Chairman of ACTIP (Animal Cell Technology Industrial Platform), an important European Organization of the major biotechnology companies in Europe. He is a member of several SAB (scientific advisory boards) of leading biotechnology companies in the US, Europe and Israel.

Dr. Kadouri was associate Professor in leading research institutes, has published a large number of manuscripts in life science and biotechnology and holds several applied patents.



Yossi Rauch, Chairman of the Board

Mr. Yossi Rauch served as Chief Economist and Manager of the Economics Department of Leumi PIA, Israel's largest mutual fund company. He was also Manager of the Treasury Department of Koor-Trade, a group of international trade companies.

Mr. Yossi Rauch holds an MBA in Finance & Accounting and Computers & Information Systems from Tel Aviv University; and a BA in Economics and Business Administration from Bar-Ilan University.



Roie Ben Yair, CFO

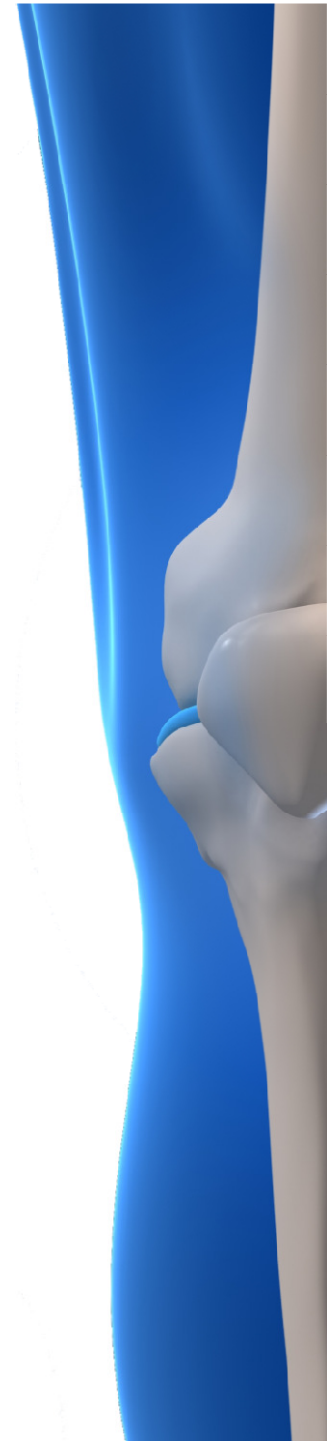
Mr Roie Ben Yair is qualified as a Certified Public Accountant in Israel. Mr Ben Yair has joined Bonus in 2011 and has an experience in auditing public and private companies, and dealings with the tax authorities. Mr Ben Yair took part in preparing prospectuses for offerings for different companies in Israel and in the USA.

Mr Ben Yair has a Bachelor's degree with highest honors in Accounting and Economics awarded by Haifa University.



Vision

**Bonus BioGroup will develop
its unique technology to be a global leader
in the field of tissue engineering
and live bone transplantation.**



Bone Tissue Regeneration

The Need

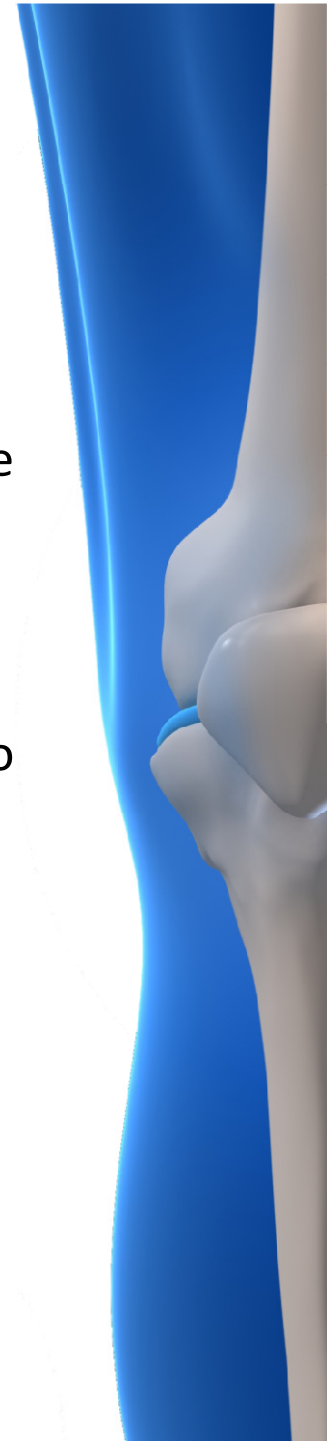
- There is need for more effective and efficient solution for bone transplantations to be used in major clinical situations

Objective

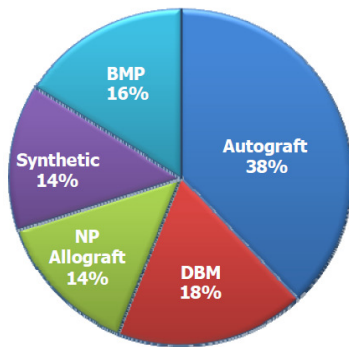
- Developing biological bone substitutes, which is designed to renew, replace, or improve tissue or whole organs

Solution

- Production of unique biological bone grafts, which are combined in different cell types, 3D structure and spatial configuration required to complete the existing bone deficiency in the patient



Currently Used Solutions



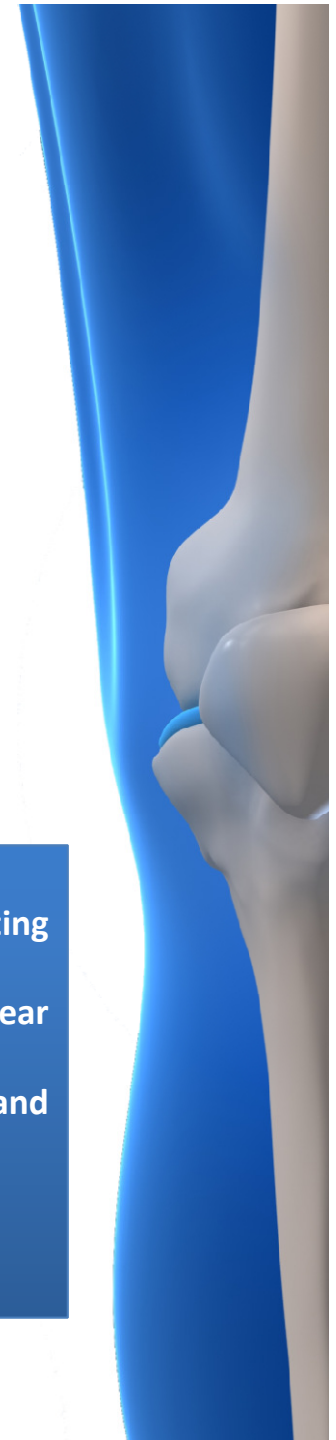
Repairing bone graft is performed today in one of two ways:

Autologous bone grafts

- Occasionally, the patient needs an unattainable amount of bone tissue.
- While harvesting the bone from patient's body, bone strength and quality of remaining bone in the harvesting area are damaged.
- Bone harvesting from patient's body causes pain, discomfort and mobility problems.
- Recovery from bone harvesting surgery and self bone graft is relatively long.

Allogeneic bone grafts

- Absorption efficiency.
- Relatively low acceptance resulting from rejection of foreign tissue.
- Disease transmission risk and fear of infection and viral infection.
- Very long bone deficiency repair and recovery period.





Existing Market Waiting for a Change

About 2 to 2.5 million bone transplants are performed worldwide each year*

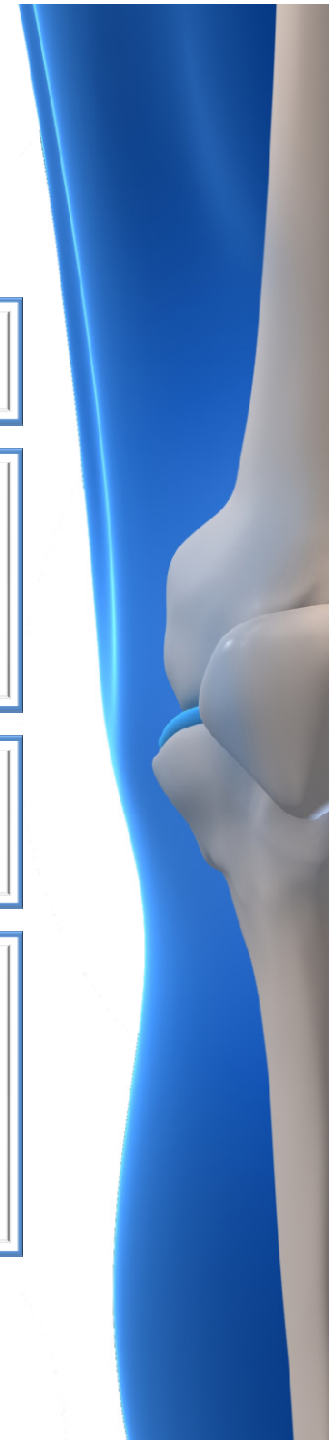
Rate of use of implants made of self-bone harvested from the patient's body is estimated at about 38% of all bone transplants, despite being "recommended treatment" for bone deficiencies, due to the problems associated with using autologous self-bone, harvested from the patient's body

Bone substitutes global market is estimated at \$ 1.9 billion in 2010, and is expected to reach approximately \$ 3.3 billion by 2017.

Potential for market expansion: Bonus estimates that the developed technology will enable, in the future, building a complex tissue, containing a combination of bone tissue and cartilage tissue, designed to replace damaged cartilage tissue and/or rehabilitation of joints. Estimated joint market - \$28 billion in 2010, expected to reach \$32.4 billion in 2015.

* **Companiesandmarkets.com**, Bone Graft Substitutes - Global Pipeline Analysis, Competitive Landscape and Market Forecast to 2017 (July 19, 2011).

** **Bccresearch report**, orthopedic-implants-regenerative-products

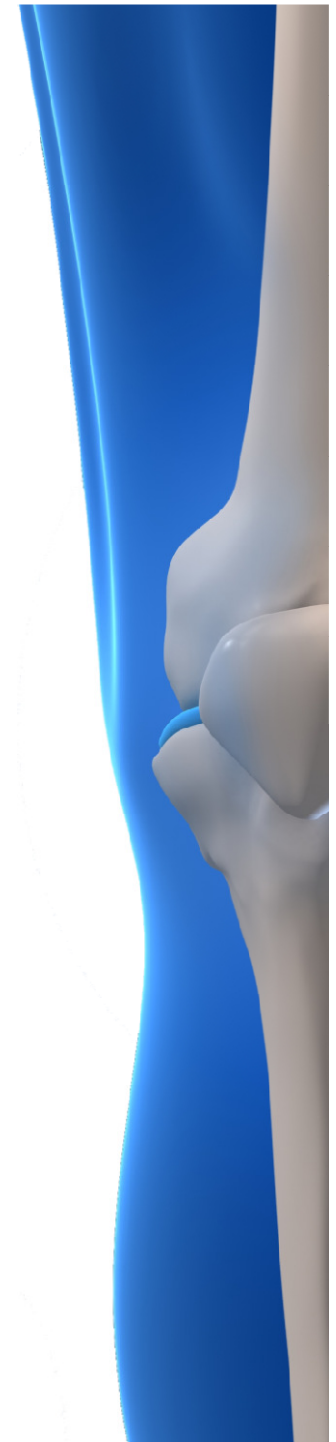


Bonus BioGroup's Solution

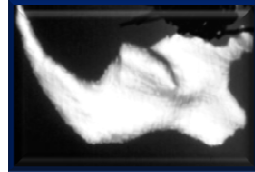
- 3D tissue growth of live human bone, made of stem cells, derived from the patient's fat tissue.
- Production of unique biological bone grafts, which are composed of different cell types, 3D structure and spatial configuration matching the configuration required to complete the existing bone deficiency in the patient.
- Use of 3D scaffold or matrix, geometrically predesigned according to the patient's need, which are used to grow the cells outside the patient's body and generate live bone for transplantation .



At the end of the growing process, a unique, ready-to use biological graft is formed. The graft is made of autologous living bone, consisting of different cell types, grown from the patient's own cells and configured for their bone deficit.



Bone Tissue operation Scheme



Lipo- suction

Scaffold,
impregnated with
expanded bone
cells, ready for
transplant

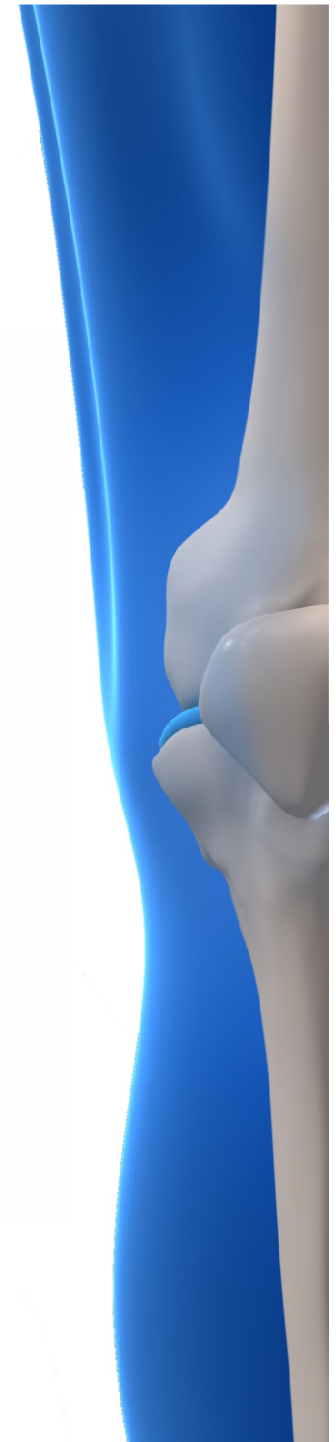
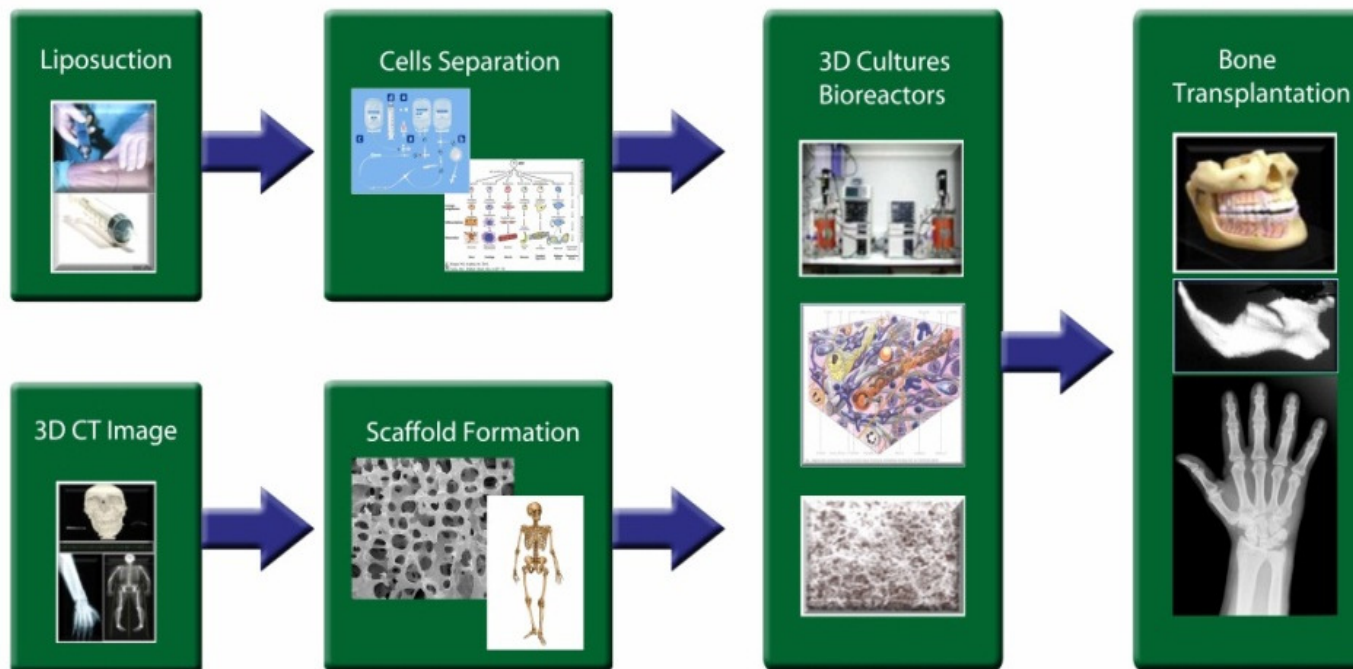
Mesenchymal stem
cells separation

Bone formation

Stem cells are
seeded into the
Scaffold

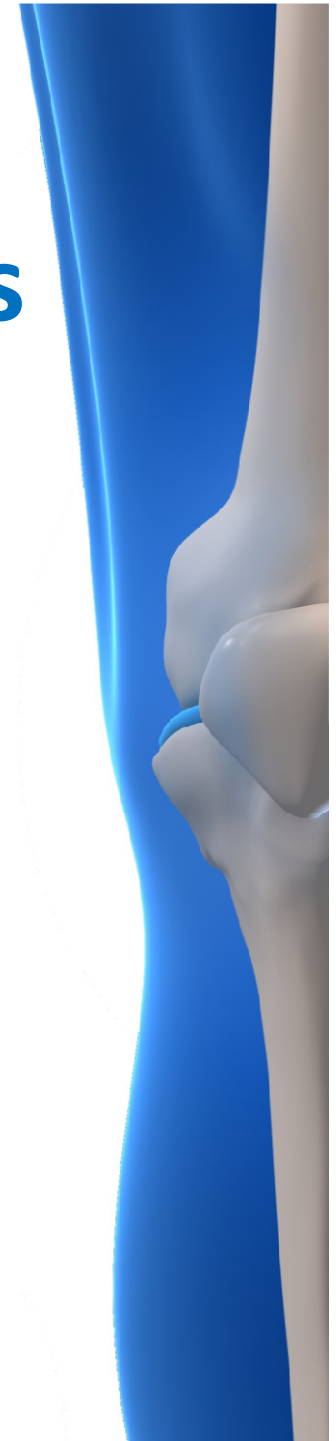
Bone Tissue Engineering

Bone Tissue Engineering



Bonus BioGroup's Uniqueness

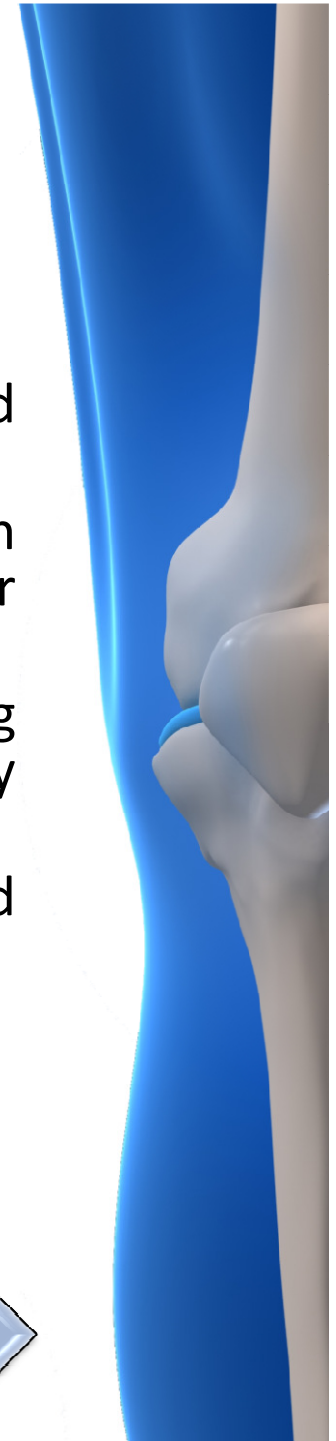
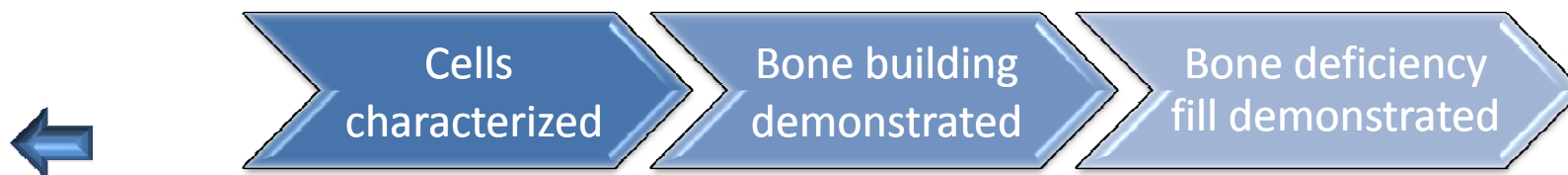
- **Pioneers in Novel technology** – innovative technology for constructing biologically live human bone implants to be used for a variety of medical, orthopedic and dental application. The artificial live bone is constructed outside the patient body having the correct shape and size needed for transplantation.
- **Bone component** – Bone implant including all the needed progenitor cells, stem cells, bone cells, and other cells that support the growth and reception-harmonization of the bone implant.
- **Unique 3D high-density bone graft** – based on multi-cells cultures, allowing the bone graft to be biologically and histologically similar to the structure of the natural bone.
- **Autologous** – cultured from the patient's own cells, this bone regenerative methodology is a powerful tool for treating a variety of bone and joints diseases without running the risk of tissue rejections and surgery failures.



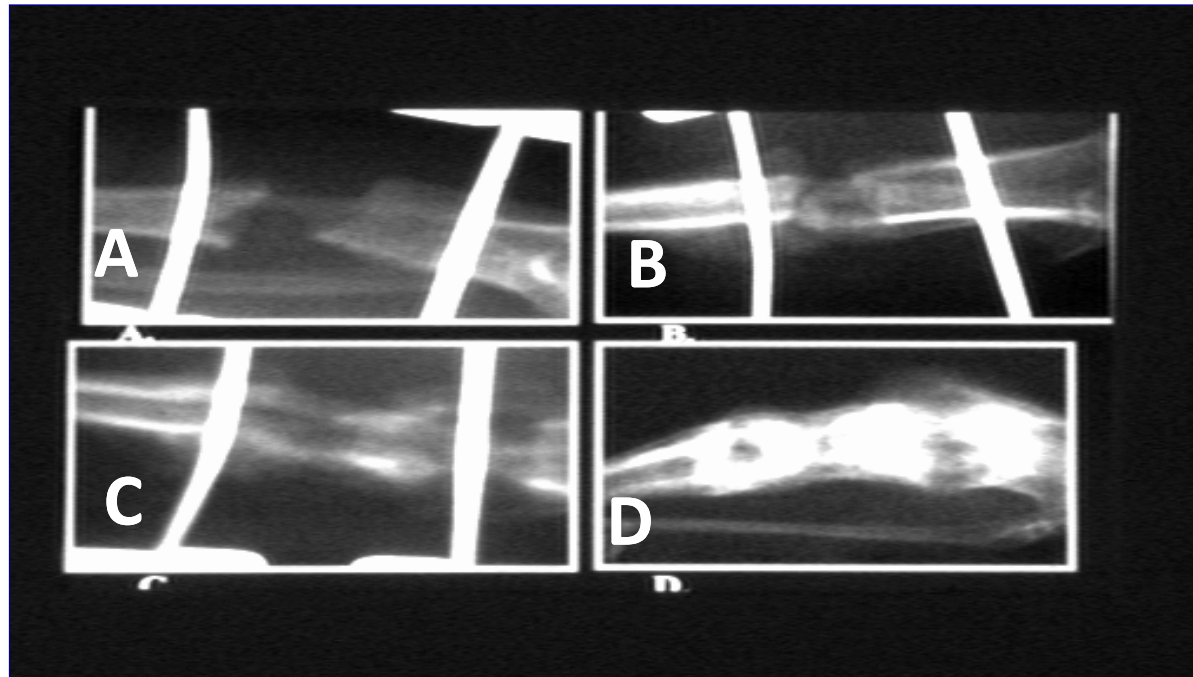
Successful Results

- Bonus conducted successful preclinical trials, carried out since 2009.
- Bonus was able to grow the required cells on a 3D scaffold, and produce bone tissue ready for transplantation within 4 weeks.
- Bonus demonstrated capability to produce living human bone, ready for transplantation in bone deficiency area, and human bone grafting in animals models.
- A complete regeneration of bone - demonstrated within six weeks.
- Bone deficiency repaired - within a period of six weeks.

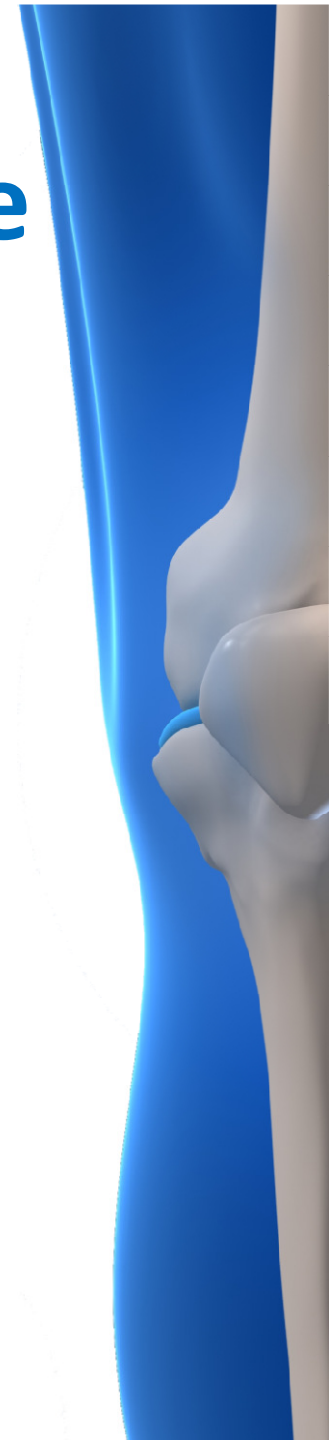
Major scientific achievements so far:



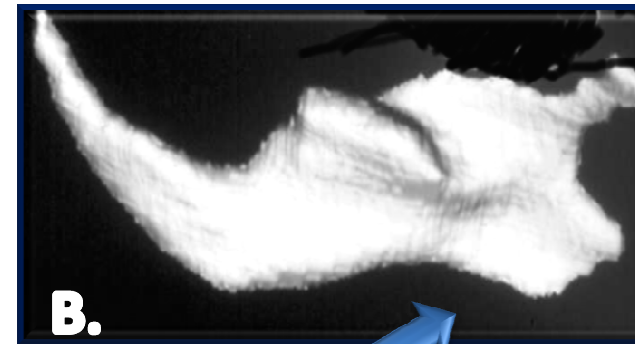
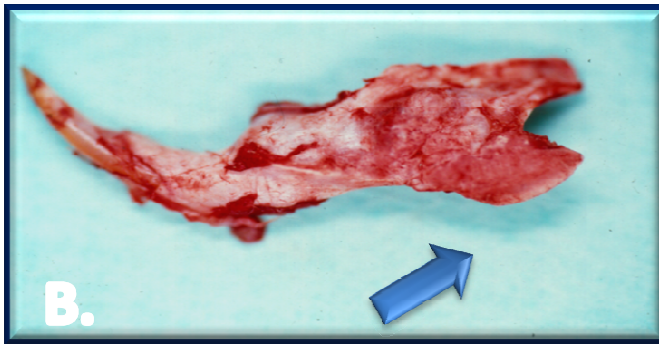
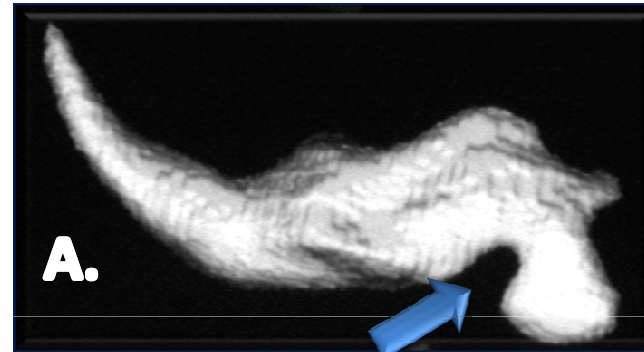
Preclinical Results- Human Bone Implant into Animal Model



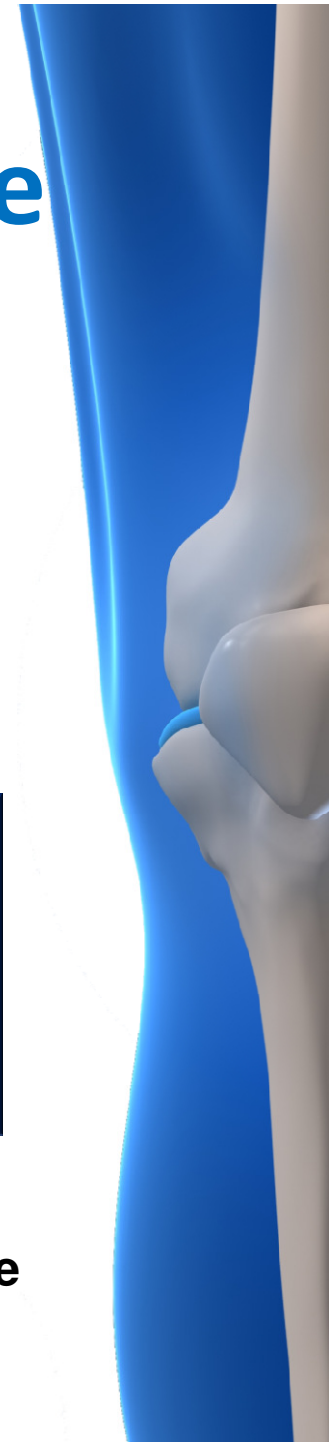
bone defect repair: X-ray images of tibia on the day of bone defect induction: time 0 (A), two weeks (B), four weeks (C) and six weeks (D).



Preclinical Results- Human Bone Implant into Animal Model



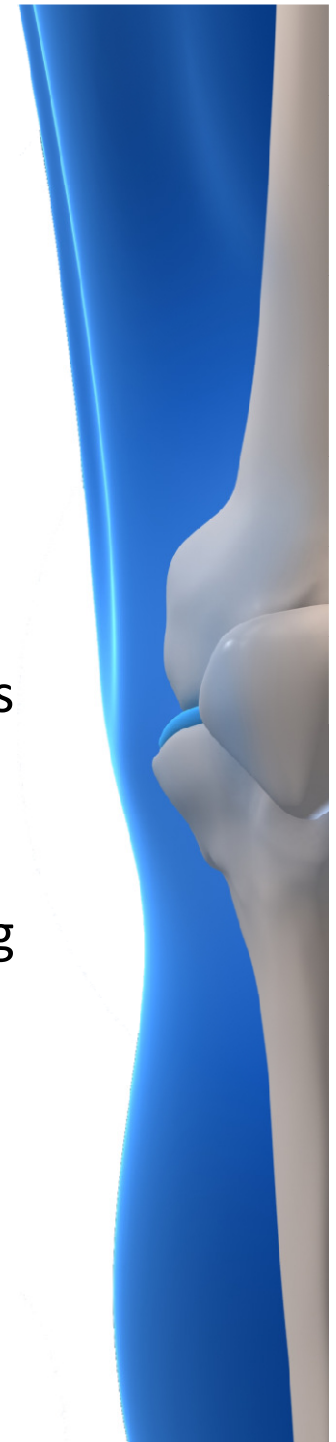
bone defect repair: bone defect (3x4 mm) on the day of operation (A), and six weeks after treatment with human bone implant (arrow) (B).



Bonus Solution's Benefits

Implant made by predesigned live human bone, will allow:

- Handling a broad range of bone gaps or bone deficiencies resulting from skeleton diseases.
- Acceptance in the patient's body without risk of rejection.
- Better and faster acceptance, compared to existing BioGroup alternatives.
- Perfect match for the patient bone deficiency
- Reducing the risk of surgical failures



Clinical Trials

The company is expected to commence several clinical trials this year. The first indication the company will test is the filling of contained bone deficits (“Three Walls Gaps”).

The planned procedure for this clinical trial will be:

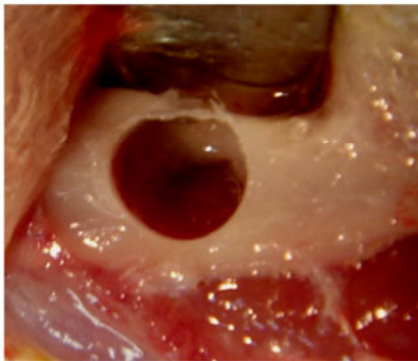


FIGURE 1 - Bone defect

Liposuction



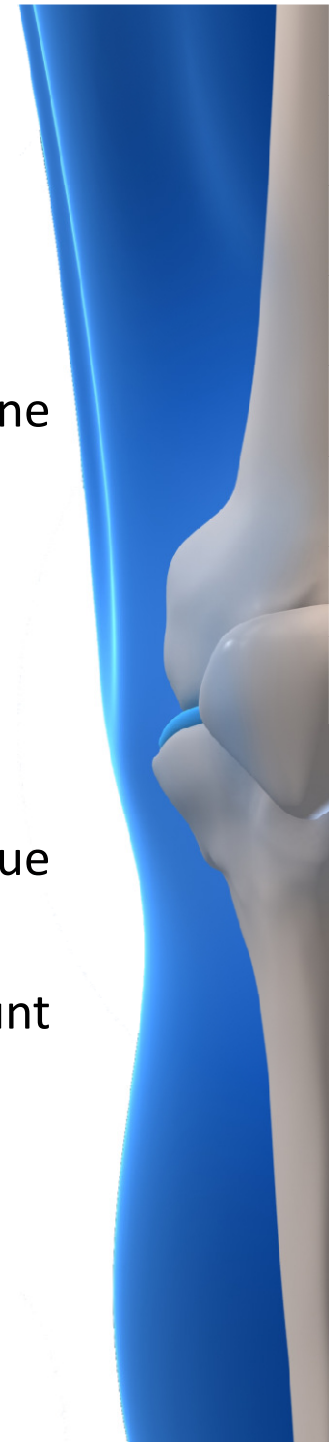
Extraction of mesenchymal cells from the tissue



Growing the cells to bone tissue of the required amount



Inserting the bone into the deficit

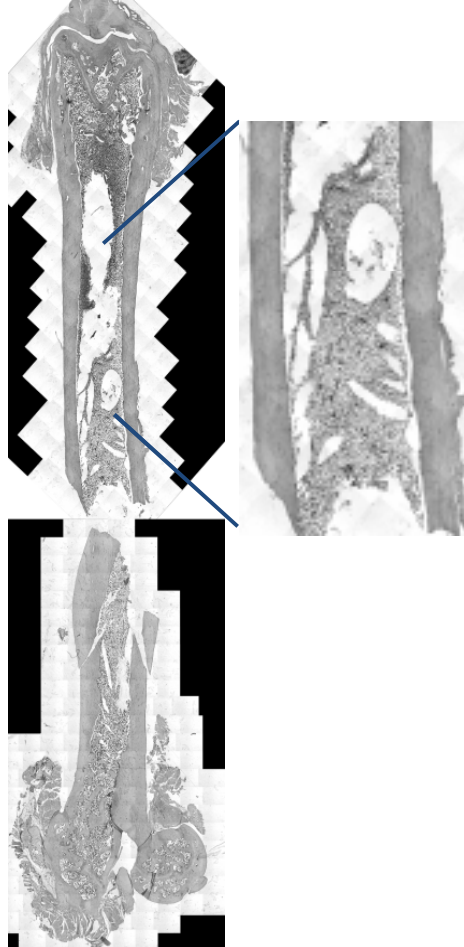


Human Bone Implant into Animal Model

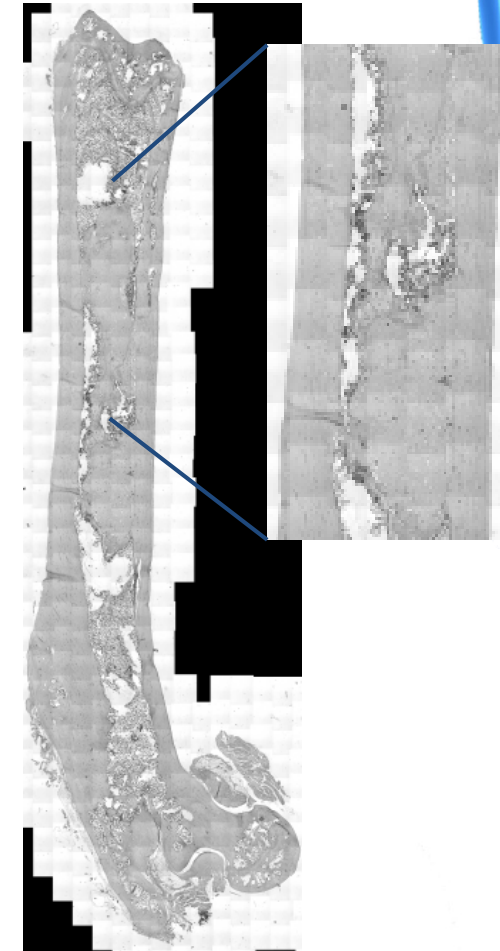
Bone Implant



Control



Bone Implant



Human Bone Implant into Animal Model

Left



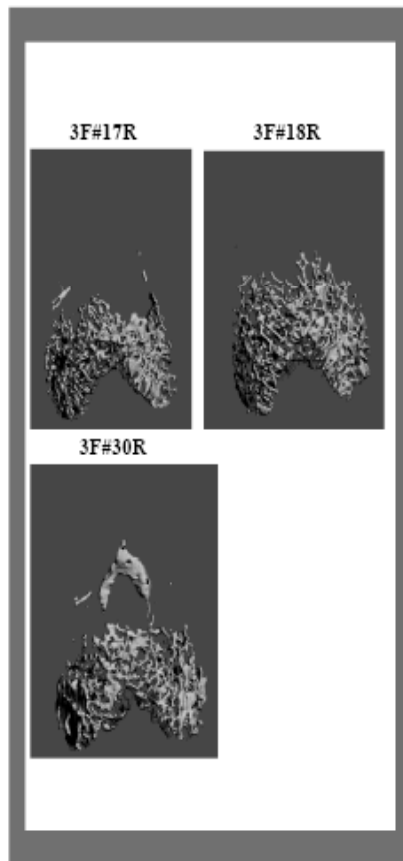
Right BonoFill treated



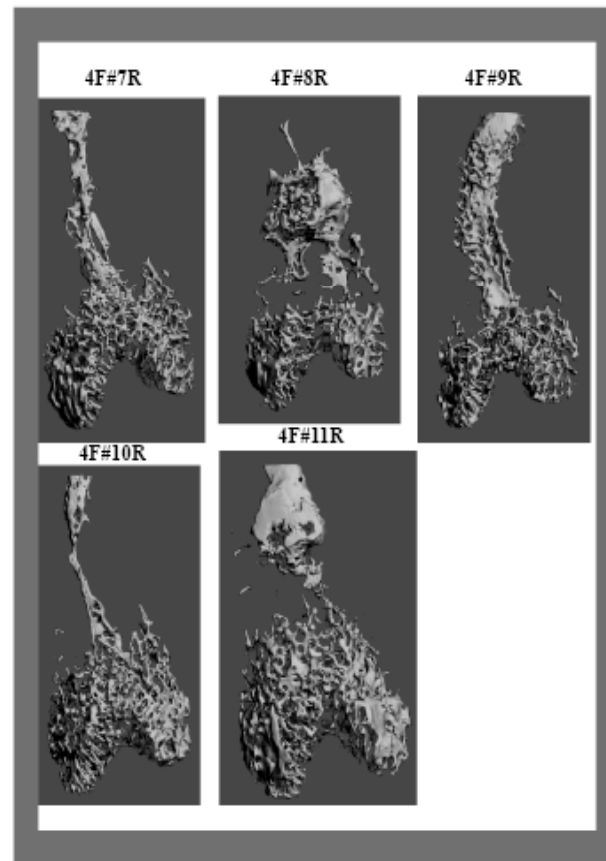


Human Bone Implant into Animal

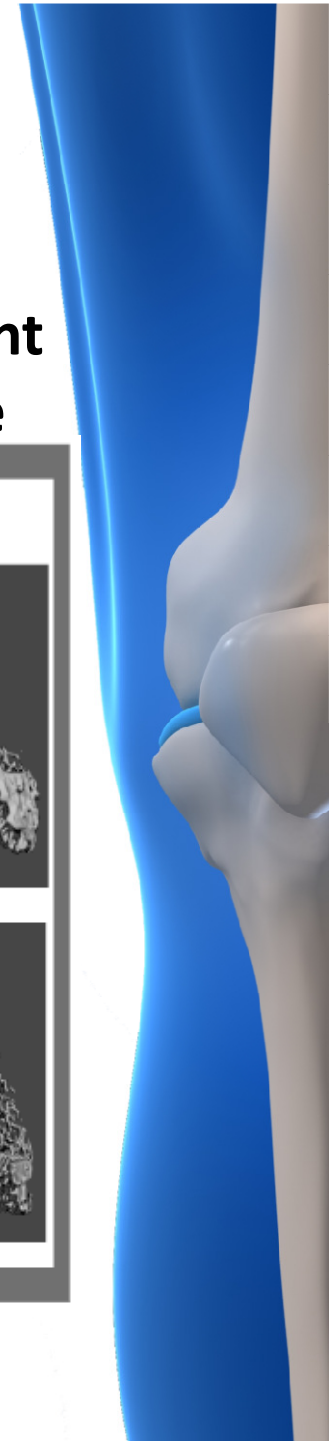
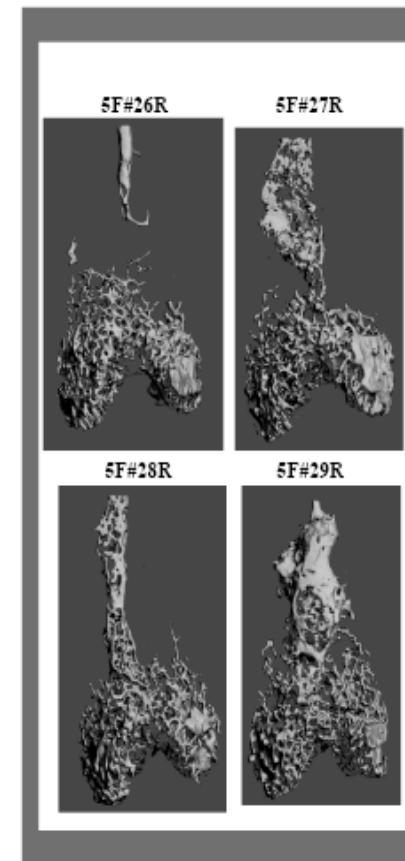
Model Control



Bone Implant Low Dose

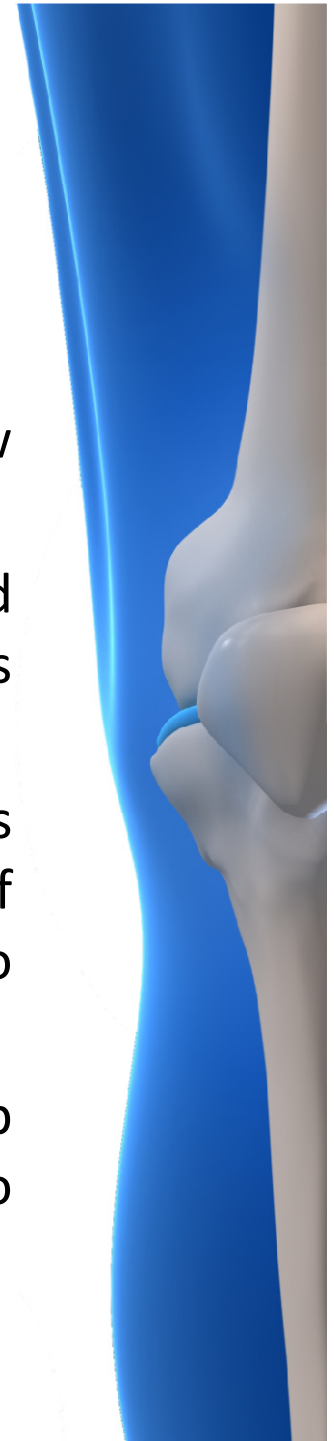


Bone Implant High Dose

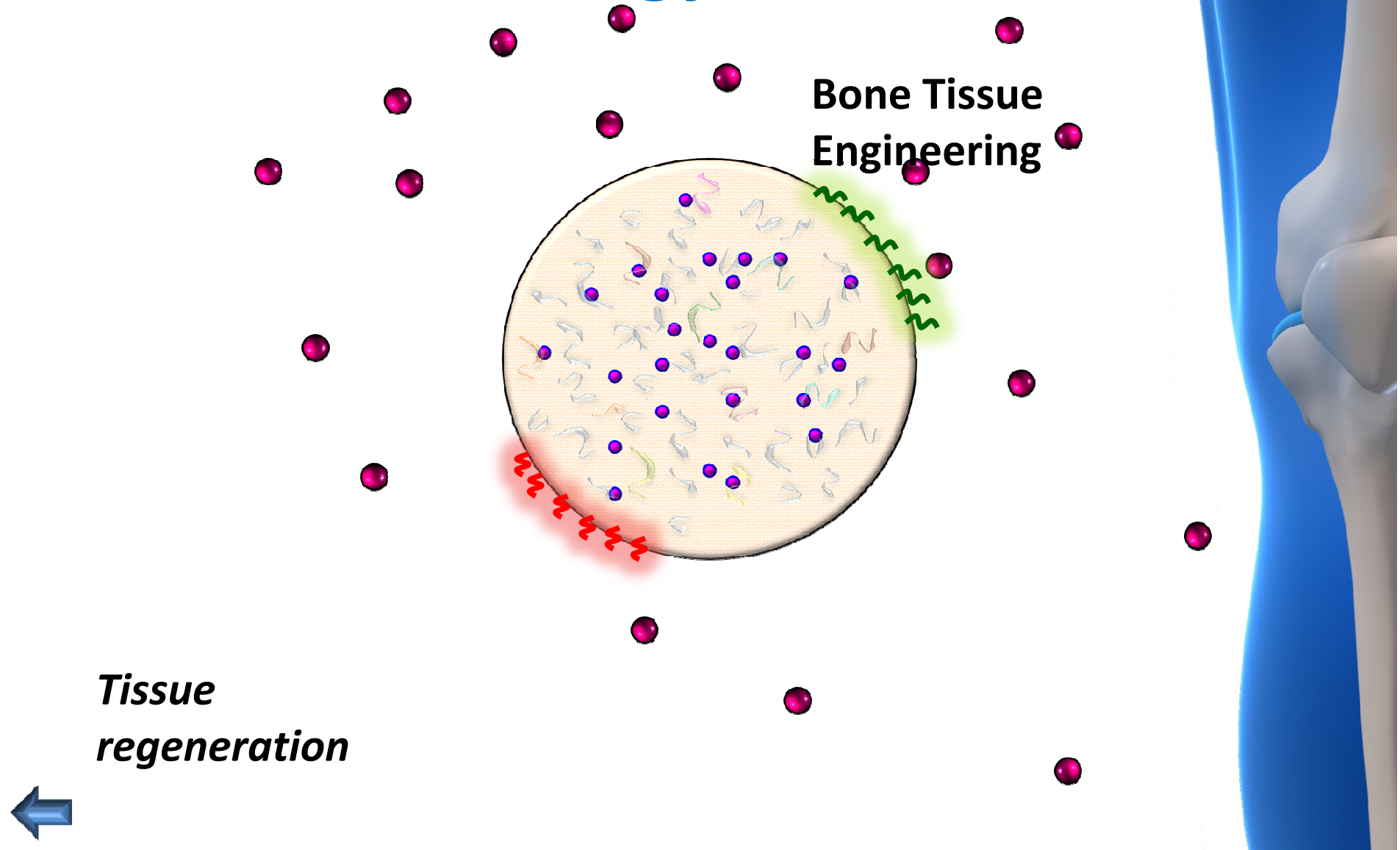


Cellora

- In August 2012 Bonus BioGroup has acquired a new technology from American Cellora LLC.
- The acquired technology may enable the regeneration and production of both hard and soft tissue inside the patient's body.
- The technology will serve as a substitute for processes being handled outside the patient's body, in a variety of medical applications, where there is no necessity to produce 3D pre-defined biological tissue.
- Combining this technology, Bonus will be able to develop and produce a variety of **off-the-shelf products** that do not require patient compatibility in advance.



Cellora's Technology

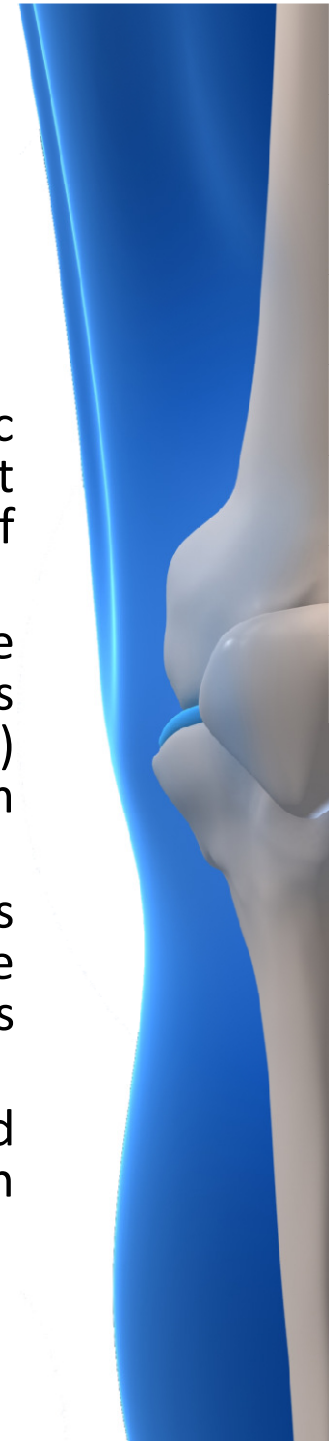


Collaboration with MIT

- Bonus BioGroup has signed an agreement for strategic collaboration and joint development with the world's most prestigious research institutions, Massachusetts Institute of Technology (MIT), and Harvard University
- The development will be performed simultaneously in the Harvard-MIT Biomedical Engineering Center, which operates under the Harvard-MIT Health, Sciences and Technology (HST) Department, and Bonus BioGroup's R&D Center in Matam Industrial Park, Haifa
- The Research and Development in the United States will focus upon the development of shelf products, which will complete the solution package offered by Bonus BioGroup and expand its variety of applications
- Bonus is entitled to carry out any action to commercialize and market the shelf products worldwide exclusively at its own discretion



**Massachusetts
Institute of
Technology**



Intellectual Property

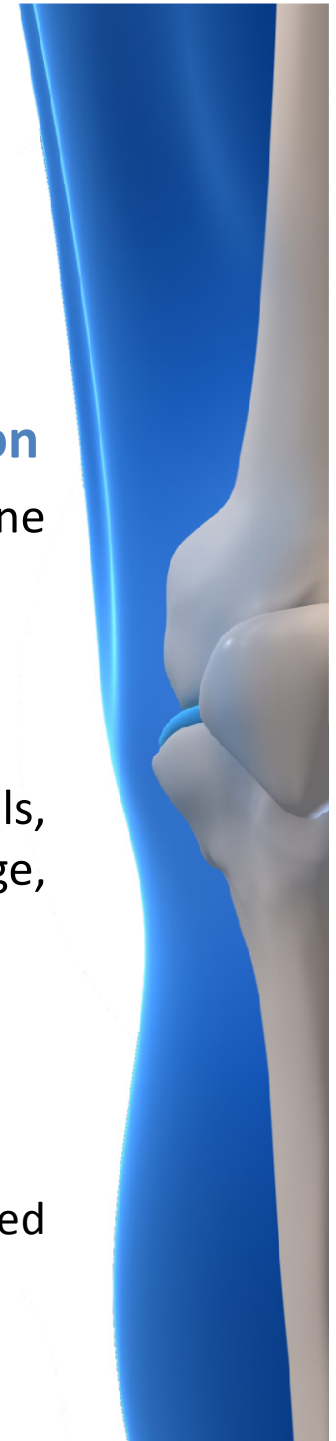
- **Biological implants are protected with a patent application**

The patent application covering the field of 3D cultures growth of bone tissue and cartilage, for medical purposes*

- **Patent protection**

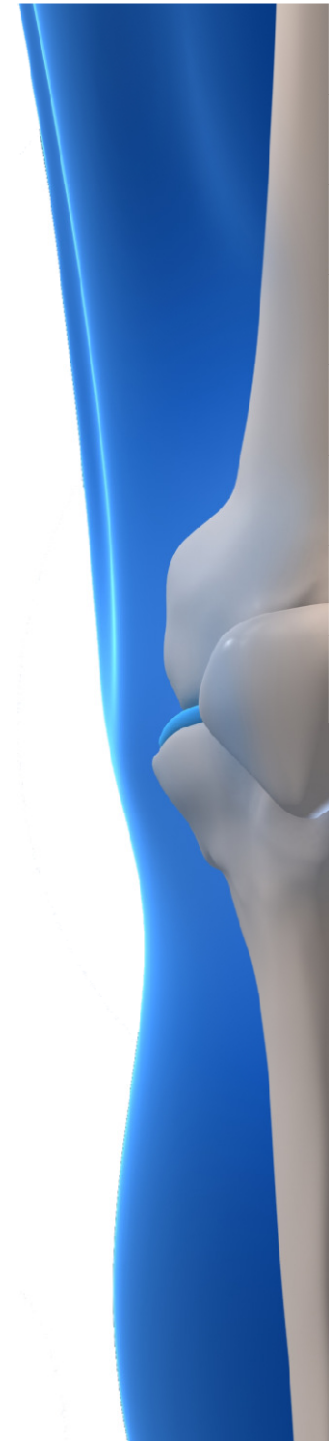
Based on innovative technology, for producing 3D cultures of cells, required for the development of innovative cell product range, suitable for most orthopedic and dental relevant applications.

* Bone implants grown on a 3D structure, or on carriers, within controlled growth systems.



Regulatory

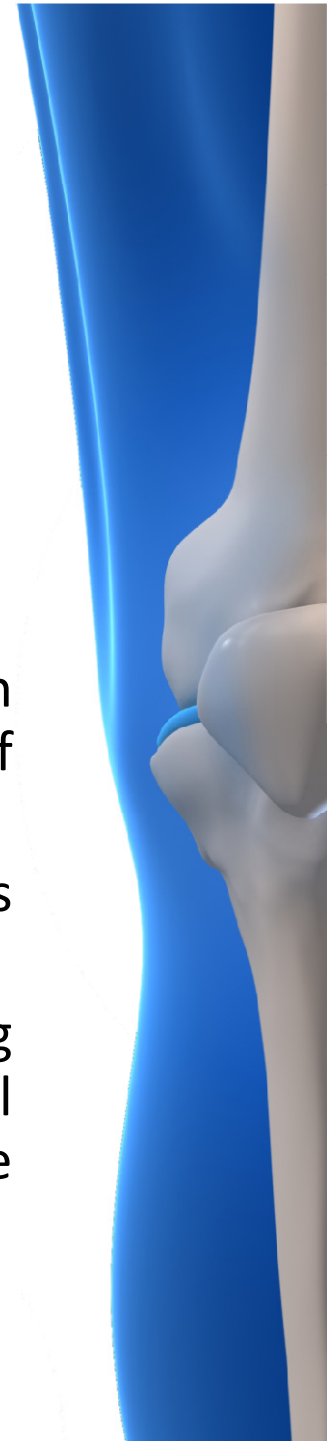
- Regulatory process for approval of clinical use of human, live cells, which were taken from the patient's body, is shorter and cheaper, compared to the regulatory process required for approval of clinical use of cells, originated in a foreign body.
- Since the safety of a medical product based on living autologous cells is higher, the regulatory demands for the approval of autologous cells-based products are close to the demands for the approval of biological products, focusing mainly on aspects of product stability and cells characteristics.



Business Model

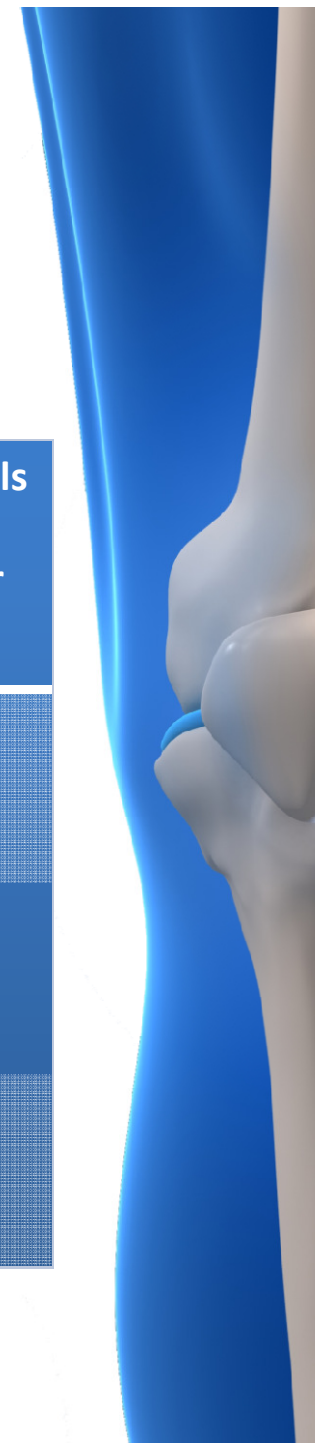
Bonus promotes development and commercialization of unique human live biological implants

- Upon completion of development, Bonus will establish manufacturing centers worldwide for the production of living human bones, for transplantation purposes.
- Each production center will be able to produce thousands of bones a year.
- Bonus will be a market leader superior at that existing product and according its estimates, it will be able to sell its products at a higher price level than the bone transplant market's average.

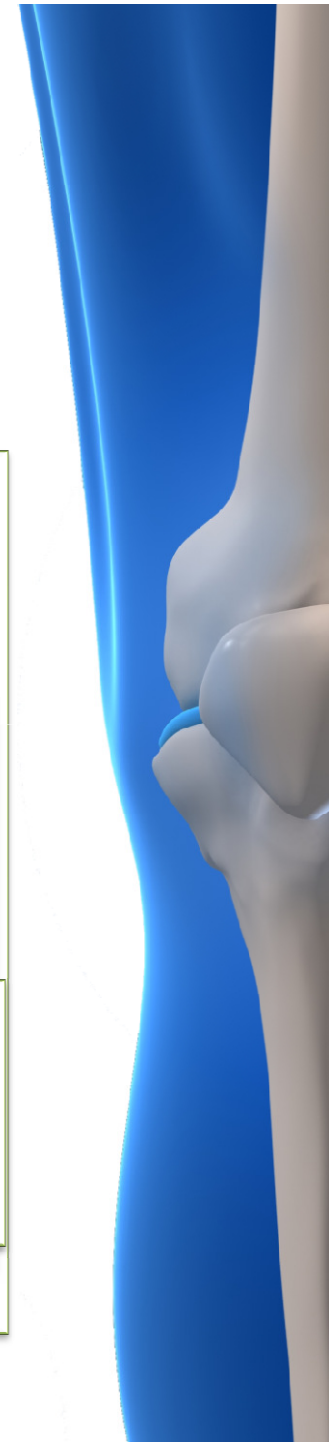
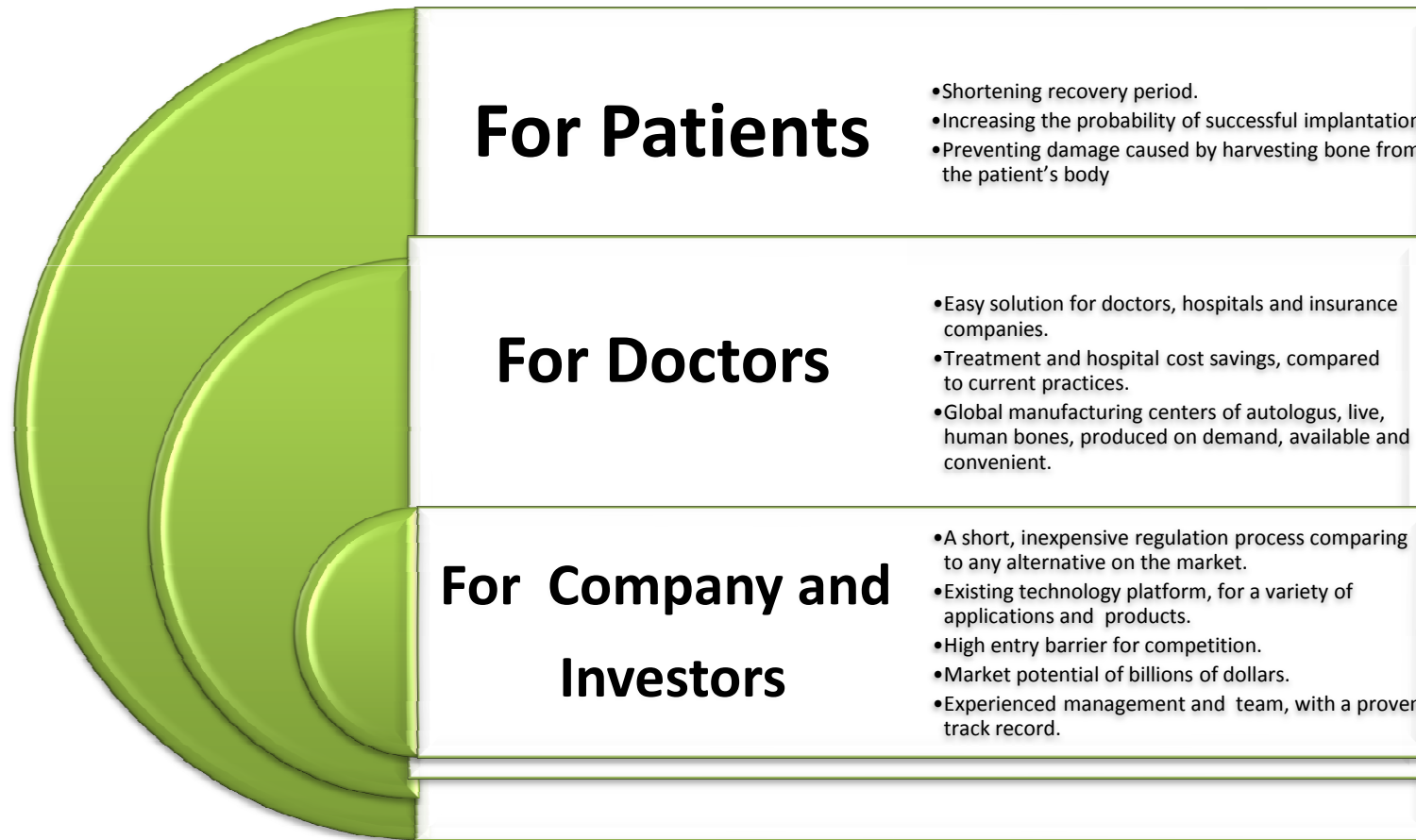


Plan for 2013-2014

Action	Pre- clinical trails	clinical trails	End of clinical trails and establishing production center
Bone graft for dental use	2013		
Bone graft for dental use	2013-2014		
Development of new products	2013-2014		



Summary



Thank You

Dr Meretzki Shai – CEO & President

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Haifa 31905, Israel

