CollPlant Overview

HCW Global Investment Conference

September 2019
Safe Harbor Statement

Certain statements in this presentation constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act and are usually identified by the use of words such as “anticipates,” “believes,” “estimates,” “expects,” “intends,” “may,” “plans,” “projects,” “seeks,” “should,” “will,” and variations of such words or similar expressions. We intend these forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Securities Exchange Act and are making this statement for purposes of complying with those safe harbor provisions. These forward-looking statements reflect our current views about our plans, intentions, expectations, strategies and prospects, which are based on the information currently available to us and on assumptions we have made. Although we believe that our plans, intentions, expectations, strategies and prospects as reflected in or suggested by those forward-looking statements are reasonable, we can give no assurance that the plans, intentions, expectations or strategies will be attained or achieved. Furthermore, actual results may differ materially from those described in the forward-looking statements and will be affected by a variety of risks and factors that are beyond our control. Risks and uncertainties for our company include, but are not limited to: the Company’s history of significant losses, its ability to continue as a going concern, and its need to raise additional capital and its inability to obtain additional capital on acceptable terms, or at all; the Company’s expectations regarding the timing and cost of commencing clinical trials with respect to tissues and organs which are based on its rhCollagen based BioInk, dermal fillers for aesthetics, breast implants, VergenixSTR, and VergenixFG; the Company’s ability to obtain favorable pre-clinical and clinical trial results; regulatory action with respect to its rhCollagen based BioInk, dermal fillers for aesthetics, breast implants, VergenixSTR, and VergenixFG including but not limited to acceptance of an application for marketing authorization, review and approval of such application, and, if approved, the scope of the approved indication and labeling; commercial success and market acceptance of the Company’s rhCollagen based BioInk, dermal fillers for aesthetics, VergenixSTR, and VergenixFG; the Company’s ability to establish sales and marketing capabilities or enter into agreements with third parties and its reliance on third party distributors and resellers; the Company’s ability to establish and maintain strategic partnerships and other corporate collaborations; the Company’s reliance on third parties to conduct some or all aspects of its product manufacturing; the scope of protection the Company is able to establish and maintain for intellectual property rights and the Company’s ability to operate its business without infringing the intellectual property rights of others; the overall global economic environment; the impact of competition and new technologies; general market, political, and economic conditions in the countries in which the Company operates; projected capital expenditures and liquidity; changes in the Company’s strategy; and litigation and regulatory proceedings. Many of these factors that will determine actual results are beyond our ability to control or predict. For a discussion of the factors that may cause our actual results, performance or achievements to differ materially from any future results, performance or achievements expressed or implied in such forward-looking statements, see the “Risk Factors” section of included in our most recently filed Annual Report on Form 20-F. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof.

The statements made in this presentation speak only as of the date stated herein, and subsequent events and developments may cause our expectations and beliefs to change. Unless otherwise required by applicable securities laws, we do not intend, nor do we undertake any obligation, to update or revise any forward-looking statements contained in this presentation to reflect subsequent information, events, results or circumstances or otherwise. While we may elect to update these forward-looking statements publicly at some point in the future, we specifically disclaim any obligation to do so, whether as a result of new information, future events or otherwise, except as required by law.

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Overview

- **Deep Tech*** company developing, manufacturing and commercializing regenerative medicine products

- Proprietary technology platform that enables mass production of recombinant human collagen (rhCollagen)

- rhCollagen-based products aimed at 3D Bioprinting of tissues and organs, and medical aesthetics markets

- Strategic agreement with United Therapeutics (NASDAQ: UTHR) for 3D bioprinting of lung transplants and other life saving organs

* Deep Technologies are novel technologies that offer significant advances over those currently in use.
Experienced management team

Prof. Oded Shoseyov  
Co-Founder & Chief Scientist  
Pauli Clean Tech  
CBD Tech.  
Fulcrum-SPD  
Melodea  
Hebrew University

Yehiel Tal  
CEO  
Regentis Biomaterials  
ProChon Biotech  
Kulicke & Soffa Industries

Eran Rotem  
Deputy CEO & CFO  
Tefron, CFO (NYSE,TASE)  
Healthcare Tech., CFO (NASDAQ) & Gamida  
E&Y

Nadav Orr, PhD  
VP R&D  
Ethicon Biosurgery, Johnson & Johnson

Ilana Belzer, PhD  
COO  
BioHarvest  
Procogina Ltd.  
Omrix Biopharmaceuticals  
Interpharm

Philippe Bensimon, PharmD  
VP RA/QA/CA  
Maquet Getinge  
3M Medical
CollPlant’s technology
Co-expression of 5 human genes in tobacco plants for the production of functional type I human recombinant Collagen

Structural genes
- Col1α1
- Col1α2

Enzyme genes
- P4Hα
- P4Hβ
- LH-3

Post translational modifications

Stable production in tobacco plant
Plant-derived rhCollagen
The ideal building block for regenerative medicine

Clear advantages over animal-derived collagen

Better bio-functionality
• Accelerates human cell proliferation
• Faster tissue healing

Superior homogeneity
• Controlled physical/rheological properties
• Reproducibility
• Transparency (not visible)

Improved safety and greater purity
• Non-immunogenic
• Non-allergenic
• No pathogens
• No foreign body response

Animal-derived
Few cell binding domains due to partially denatured crosslinked collagen
Slow cell proliferation and slow tissue repair Foreign body reactions (e.g. granuloma)
Fast cell proliferation and fast tissue repair

Plant-derived
Many cell binding domains enabled by perfect triple helix enhance cellular attachment
Medical aesthetics
Regenerative dermal filler
Dermal fillers market overview

~2,091,476 HA procedures in 2017 in the US¹

Global dermal filler market, 2017²

Cost per syringe: $100-$250/unit³

2017 Procedure breakdown, U.S (by material)*

- Calcium Hydroxylapatite: 78%
- Collagen: 9%
- Fat: 5%
- Hyaluronic acid: 1%
- Polylactic acid: 4%
- Polymethyl methacrylate microspheres: 0%
- PRP: 3%

²https://www.gminsights.com/industry-analysis/dermal-filler-market
Combining the advantages of Collagen and Hyaluronic Acid

HA

Physical properties

- Highly viscous: Provides mechanical stability after injection
- Convenient injection: 37-32G needle, 10-15N expression force
- High lifting capacity
- Transparent

rhCollagen

Biological properties

- Promotes cell adhesion and proliferation
- Promotes tissue regeneration
- Non allergic/non immunogenic
Photocurable rhCollagen-HA regenerative dermal filler

- Easy injection (30G needle)
- Sculpturing before curing
- Optimized post curing stiffness
- Good tissue retention

Injection  Sculpturing  Photocuring in-situ
3D Bioprinting

tissues & organs
Organ transplantations are expensive and inefficient

Average transplant costs and wait times in USA:

<table>
<thead>
<tr>
<th>Organ</th>
<th>Number/year</th>
<th>Cost/year</th>
<th>Wait days</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEART</td>
<td>2,725</td>
<td>$1.4 million</td>
<td>191 days</td>
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<tr>
<td>KIDNEY</td>
<td>16,804</td>
<td>$415,000</td>
<td>679 days</td>
</tr>
<tr>
<td>LUNGS</td>
<td>1,397</td>
<td>$1.2 million</td>
<td>185 days</td>
</tr>
<tr>
<td>PANCREAS</td>
<td>136</td>
<td>$347,000</td>
<td>281 days</td>
</tr>
<tr>
<td>LIVER</td>
<td>6,158</td>
<td>$813,000</td>
<td>239 days</td>
</tr>
<tr>
<td>CORNEA</td>
<td>50,099</td>
<td>$30,200</td>
<td>50 days</td>
</tr>
</tbody>
</table>

The advent of 3D bioprinting is expected to enable unlimited, economical access to organs around the world

~30,000 US transplants per year

115,000 US waiting list

900,000 US deaths per year from organ impairment


U.S. Department of Health & Human Services
https://optn.transplant.hrsa.gov/data/

3D bioprinting major market segments

**Organs**
- Lungs
- Liver
- Kidney
- Heart

**Endocrine glands**
- Ovary
- Pancreas
- Thyroid

**Tissues**
- Skin
- Cornea
- Bones
- Cartilage
- Breast
- Heart valves

**Scaffolds**
- Spine fusion
- Non-union fractures
- Craniomaxillofacial
- Nerve conduits
- Tendons & ligaments

**ORGANS** 900,000 patients\(^1\)

**OVARY** 700,000 patients\(^2\)

**BREAST** 500,000 patients\(^3\)

**SPINE FUSION** 400,000 patients\(^4\)

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\(^2\) https://www.womenshealth.gov/menopause/early-or-premature-menopause

\(^3\) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3634232/


BioInk for 3D printing of tissues and organs

CollPlant’s rhCollagen-based BioInk offers ideal characteristics for 3D bioprinting

- Optimal rheology at room temperature - Viscosity and gelation kinetics
- Biocompatible – supports viability of different cell types
- Non immunogenic, excellent safety profile in clinical use (rhCollagen)
- Tunable physical and mechanical properties
Collaboration agreement with United Therapeutics (Oct. 2018)

- Global licensing and commercialization agreement for 3D Bioprinting of solid organ scaffolds for human transplants
- Collaboration combines CollPlant’s proprietary BioInk technology and United Therapeutics’ regenerative medicine and organ manufacturing capabilities

Agreement highlights:
- $5M upfront payment
- Up to $39M milestone and option payments
- Royalties on product sales
- United Therapeutics has the option to expand the license to add up to three organs
- United Therapeutics will establish a U.S. facility for the manufacture of CollPlant's rhCollagen and BioInk
3D bioprinting of trachea and bronchi

100µ perfused vessels

Courtesy of United Therapeutics
Breast implants

CollPlant
Revolutionizing Tissue Repair
Breast implants market overview

Current breast reconstruction is based on synthetic breast implantation, free flap surgery/autologous fat tissue transfer - all of which replace tissue rather than regenerate it

Market

$1.4B worldwide (2018)¹

Cost

$ 5-10K per procedure in US²

Procedure*¹

- Breast augmentation
- Breast lift
- Breast reconstruction³

* US segmentation

1. Analytical Research Cognizance, Global Breast Implant Market, March 2019

~2,500,000 Breast implant procedures WW (2017)⁴
~500,000 in US (2018)⁵

FDA alert:

Patients with breast implants have an increased risk of developing breast implant Associated- Anaplastic Large Cell Lymphoma (Feb 2019)⁶
CollPlant’s 3D bioprinted breast implants

Breast scaffold printing

Loading ECM components + autologous fat cells

Implantation and vascularization

Implant replacement by newly formed tissue
NASDAQ (CLGN) listed ADR since Jan. 2018
Market Cap of ~ $16M*

45 employees
- Strong R&D team
- Fully integrated
- Production team with eight years track record

* As of August 30, 2019
Planned 12-month milestones

- **Medical aesthetics**
  - Sign collaboration agreement with strategic partner
  - Photocurable dermal filler animal study

- **3D Bioprinting**
  - Expand collaborations with key players
  - Breast implants animal study
CollPlant investment highlights

- Only commercially viable technology currently available that can produce truly human collagen
- Strategic agreement with United Therapeutics (UTHR) for 3D bioprinting of lungs and other life-saving organs
- Multi-billion dollar market: innovative rhCollagen products initially aimed at 3D bioprinting and medical aesthetics
- Clinically validated technology
- Broadly applicable technology: Ideal building block/scaffolding molecule for regenerative medicine
- Proven management team
Thank you