

April 24, 2019



CollPlant Announces Publication of Study in Science Translational Medicine Showing Composite Matrix Based on rhCollagen, Ceramics and Bone Morphogenic Protein Led to Bone Growth Superior to Standard of Care

Found to be efficacious at concentrations down to 1/30th of the standard dosage

Study results support evaluations in clinical trials for orthopedic conditions requiring augmented healing

REHOVOT, Israel, April 24, 2019 /PRNewswire/ -- **CollPlant** (NASDAQ: CLGN), a regenerative medicine company, today announced the publication of a study titled, "Bone Repair with a Receptor Optimized BMP-2/6/Activin Chimera Delivered In a Novel Ceramic/rhCollagen Matrix is Superior to BMP-2" in the April issue of [Science Translational Medicine](#). The study was led by Bioventus which developed the Matrix with CollPlant.

Human bone morphogenetic proteins (BMP)s are FDA approved for use in humans as bone graft substitutes and are typically delivered through an absorbable collagen sponge (ACS). However, in order to be efficacious, BMPs are delivered in high doses which can lead to serious side effects including an increased risk of uncontrolled bone formation and cancer.

The published article reports results from a study in non-human primates for bone regeneration using a receptor optimized chimera version of BMP-2/BMP-6/activin A delivered in a composite matrix formulated with CollPlant's rhCollagen and ceramic granules. The rhCollagen matrix was specifically designed for high retention of the BMP chimera and has a unique design for cell infiltration and bone tissue growth. The treatment demonstrated tissue ingrowth that generated superior bone formation at concentrations of BMP that were 1/10th to 1/30th of the standard dosage of BMP-2 concentration approved by the FDA for clinical use in humans.

"We are very pleased with the excellent results of this collaborative study. Our rhCollagen served as a very effective delivery vehicle for the BMP version used in this study. The study results demonstrate the potential for a new treatment that is far superior to the current standard of care in terms of both efficacy and safety. Moreover, the far improved safety

profile resulting from a significant dose reduction of the BMP used in standard of care may expand the opportunities for using this treatment in a broader range of patients," stated Yehiel Tal, CollPlant's Chief Executive Officer.

"We believe our rhCollagen is the ideal building block for scaffolds used in regenerative medicine applications, including orthobiologics in both hard and soft tissue repair, 3D bioprinting of tissues and organs, medical aesthetics, and advanced wound care," concluded Mr. Tal.

About CollPlant

CollPlant is a regenerative medicine company focused on 3D bioprinting of tissues and organs, medical aesthetics, and on developing and commercializing tissue repair products for orthobiologics, and advanced wound care markets. Our products are based on our rhCollagen (recombinant human collagen) that is produced with CollPlant's proprietary plant based genetic engineering technology.

Our products address indications for the diverse fields of organ and tissue repair, and are ushering in a new era in regenerative medicine. Our flagship rhCollagen BioInk product line is ideal for 3D bioprinting of tissues and organs. We recently entered into a licensing agreement with United Therapeutics, whereby United Therapeutics is using CollPlant's BioInks in the manufacture of 3D bioprinted lungs for transplant in humans. CollPlant's unique Vergenix line of rhCollagen products includes a soft tissue repair matrix for treating tendinopathy and a wound repair matrix to promote a rapid optimal healing of acute and chronic wounds.

For more information about CollPlant, visit <http://www.collplant.com>


Safe Harbor Statements

This press release may include forward-looking statements. Forward-looking statements may include, but are not limited to, statements relating to CollPlant's objectives plans and strategies, as well as statements, other than historical facts, that address activities, events or developments that CollPlant intends, expects, projects, believes or anticipates will or may occur in the future. These statements are often characterized by terminology such as "believes," "hopes," "may," "anticipates," "should," "intends," "plans," "will," "expects," "estimates," "projects," "positioned," "strategy" and similar expressions and are based on assumptions and assessments made in light of management's experience and perception of historical trends, current conditions, expected future developments and other factors believed to be appropriate. Forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied in such statements. Many factors could cause CollPlant's actual activities or results to differ materially from the activities and results anticipated in forward-looking statements, including, but not limited to, the following: 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, VergenixSTR, and VergenixFG; the Company's ability to obtain favorable pre-clinical and clinical trial results; regulatory action with respect to rhCollagen based BioInk, dermal fillers for aesthetics, 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. More detailed information about the risks and uncertainties affecting CollPlant is contained under the heading "Risk Factors" included in CollPlant's most recent annual report on Form 20-F filed with the SEC, and in other filings that CollPlant has made and may make with the SEC in the future. The forward-looking statements contained in this press release are made as of the date of this press release and reflect CollPlant's current views with respect to future events, and CollPlant does not undertake and specifically disclaims any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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