BIOSTAR CAPITAL | VISIONARY HEALTHCARE INVESTORS

Investment Target Identification

Karen Washington

March 12, 2019

Lexie Kirsch

POLLEX CONSULTING

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March 12, 2019

Karen Washington
Senior Vice President
BioStar Capital

Dear Karen Washington,

Thank you for choosing Pollex Consulting to identify a promising target company for BioStar Capital to acquire later this year.

In this report you will find an overview of the company we have selected and its disruptive technology. This company does not have a sell sheet at this time otherwise we would have included that as well. We hope you will find this company as impressive we did.

Please do not hesitate to reach out to me with any questions or comments. I look forward to hearing back from you.

Sincerely,

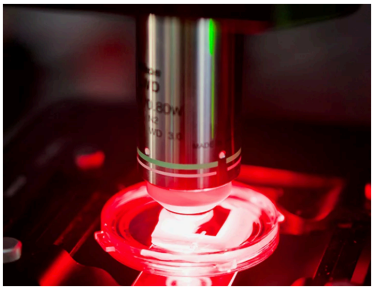
Lexie Kirsch
Human Factors Engineer and Medical Technology Consultant
Pollex Consulting

PRELLIS BIOLOGICS

Taking into account BioStar Capital's interest in transformational medical device technologies in cardiovascular medicine, Pollex Consulting has identified **Prellis Biologics, Inc.** as a promising company for acquisition. Prellis Biologics is a biotechnology company that uses holographic 3D (three-dimensional) laser printing technology to build human tissues and organs. This disruptive technology has applications not only in the research and development of novel therapeutics but also in the production of transplantable organs for patients using their own cells.

PRELLIS BIOLOGICS

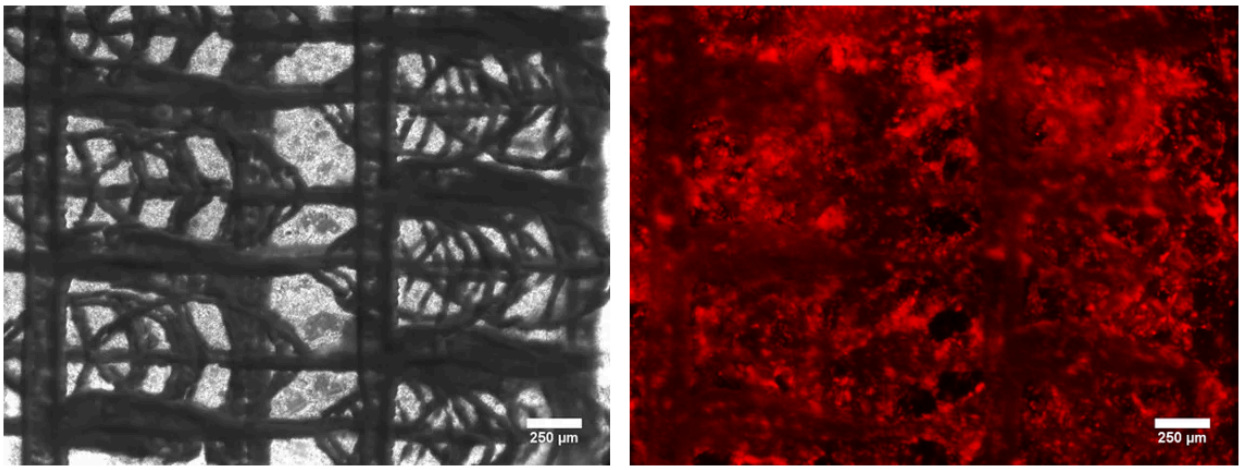
building life with light



Prellis Biologics	
Date of company inception	October 2016
Location of headquarters	San Francisco, CA
Number of employees	11-50
Estimated 2018 revenue	$2M
Location of development team	San Francisco, CA
Location of product manufacture	San Francisco, CA

PRELLIS BIOLOGICS

What makes Prellis Biologics' technology disruptive is that it's the fastest and highest resolution holographic 3D printing technology on the planet.[1] More specifically, they use a specialized optical wave-front technology to project and print several hundred thousand voxels (the 3D-equivalent of pixels) simultaneously in all three dimensions.[2] This technology allows the user to create complex vascularized tissue structures, of which the applications are numerous. Researchers are already using these pre-vascularized tissue scaffolds with "stunning results," and they anticipate these scaffolds will greatly accelerate tumor immunotherapy, stem cell, and regenerative medicine research.[3] In addition to aiding researchers in their laboratories, this technology is also intended to aid healthcare providers in their search for organ transplants for their patients. Instead of relying on organ donations, healthcare providers can build organs from their own patients' cells, which may reduce the likelihood of organ rejection.



Images of multi-layered vascular tissue structures

[1] https://www.facebook.com/pg/PrellisBio/about/?ref=page_internal

[2] https://www.prellisbio.com/technology

[3] https://www.businesswire.com/news/home/20181212005188/en/Prellis-Biologics-Announces-Vascular-Tissue-Blanks%E2%84%A2-Series

Furthermore, increasing the availability of transplantable organs will likely decrease medical expenses associated with organ failure, benefiting both healthcare providers and patients. For instance, 1 in 7 Americans suffer from some form of kidney failure and are treated using dialysis, which costs an average of $89,000 per patient, and end-state kidney disease accounts for over $50B in annual Medicare costs.[4] Using Prellis Biologics' technology to print viable kidneys could reduce this cost as well as improve the lives of millions of people.

Beyond being faster and having a higher resolution than existing print methods, this technology is also user friendly and effective. The user does not need specialized optics or programming knowledge to run the printer—they need only to input a CAD file, and the technology translates the data into the most efficient optical projection for printing, which can be streamlined for rapid iteration and prototyping.[5] This reproducibility is critical for research and development because an inability to reproduce meaningful results leads to high drug failure rates in clinical trials.[6] Prellis Biologics' technology not only develops more accurate models of tissues but also allows for a more accurate method of testing the models.

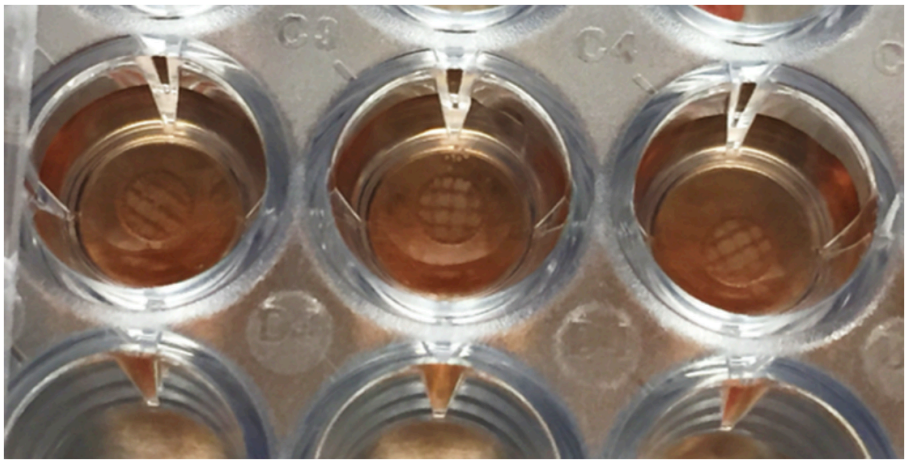


Image of stem cells printed by Prellis engineers and cell biologists

[4] https://www.prellisbio.com/mission

[5] https://www.prellisbio.com/technology

[6] https://www.businesswire.com/news/home/20181212005188/en/Prellis-Biologics-Announces-Vascular-Tissue-Blanks%E2%84%A2-Series

That being said, this technology is still new, so there are a number of potential risks. For example, the printed 3D structure is based on a CAD file that the user inputs. If the CAD file is flawed or based on outdated information, the resulting organ may not be functional or fitted well for the patient, and the printer has no way to inform the user of this problem. Additionally, cell death of approximately 30% during the printing process will lead to a non-functional organ or tissue, and cell damage is dependent on pulse-length, power, and dwell time.[7] If the printer is not run rapidly and the cells have too much exposure to the laser, the organ will also not be viable.

Although findings thus far are promising, this technology has yet to be used for purposes beyond research. We suggest BioStar Capital take this into consideration before making a final decision, especially if the decision is rooted in the biocompatibility of the printed transplant organs.

However, the speed, resolution, complexity, and biocompatibility of the Prellis Biologics technology is unparalleled. If BioStar Capital is interested in pioneering work in human organ engineering, Prellis Biologics is the company to acquire.

Image of the Holograph-X Bioprinter powered by Prellis Biologics

[7] https://www.prellisbio.com/prellis-literature

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