3D SYSTEMS

Press Release

3D Systems Corporation
333 Three D Systems Circle
Rock Hill, SC 29730
www.3dsystems.com
NYSE:DDD

Investor Contact: investor.relations@3dsystems.com
Media Contact: press@3dsystems.com

3D Systems Announces Breakthrough in Bioprinting Technology and Expansion of Regenerative Medicine Initiative

- Demonstration of high rate, micron-level printing capability enabling vascularization required to sustain living cells
- Critical technology elements reach level required to dramatically expand application opportunities in human body
- Pathway for accelerated new drug therapy development and reduced need for animal testing through bioprinted cellular in vitro laboratory tools
- Company expanding investment in 2021 to commercialize targeted applications and accelerate long term, profitable growth in healthcare

ROCK HILL, South Carolina, January 27, 2021 – 3D Systems (NYSE:DDD) today announced its decision to significantly expand its development efforts focused on regenerative medicine and bioprinting solutions. This decision was driven by the tremendous progress made in collaboration with United Therapeutics Corporation (NASDAQ:UTHR) and its organ manufacturing and transplantation-focused subsidiary, Lung Biotechnology PBC, on the development of 3D printing systems for solid-organ scaffolds. Leveraging this work as well as accomplishments with additional partners, 3D Systems intends to invest, further develop, and commercialize solutions for the diverse application opportunities in regenerative medicine, including the development of non-solid organ applications requiring biologically sustainable vasculature.

In 2020, 3D Systems and United Therapeutics achieved significant progress in the development of a next-generation additive manufacturing platform solution for lung scaffolds that is capable of full size, vascularized, rapid, micron-level printing. 3D Systems' capabilities as a technology innovator, spanning hardware, software, and materials science, combined with United

Therapeutics' renowned expertise in regenerative medicine has enabled advances in lung modeling, 3D printing, as well as material formulation using a unique rhCollagen, and material handling to yield significant capabilities in bioprinters and biomaterials for lung manufacturing. As a result, 3D Systems has built a portfolio of unique capabilities specifically designed to address the requirements of regenerative medicine applications. The newly developed Print to Perfusion™ process enables 3D printing of high-resolution scaffolds which can be perfused with living cells to create tissues. The ability to print large, vascularized, highly detailed hydrogel scaffolds at rapid speeds is now opening new opportunities for a range of tissue applications. To advance these efforts, 3D Systems is expanding its high-speed Figure 4® technology through innovation tailored to bioprinting and regenerative medicine. Building upon these capabilities, the company – in collaboration with its partners – will be able to advance innovation into numerous applications within the human body. The company also believes these capabilities have the potential to enable novel laboratory testing methods to accelerate the development of new drug therapies while reducing the need for animal testing.

"Over the last years as bioprinting and regenerative medicine have evolved, we've seen a growing need to place cells at high-resolution in a nurturing matrix to produce complex tissues," said Chuck Hull, co-founder, executive vice president and chief technology officer, 3D Systems. "Precise 3D printing with hydrogels, followed by perfusion of cells into the printed scaffold is the best way to achieve this, and we are thankful our work with United Therapeutics has given us the opportunity to advance and perfect this technology."

"Our collaboration with 3D Systems has allowed us to take a first-principles approach to regenerative medicine," said Derek Morris, associate director of engineering, Lung Biotechnology PBC. "The full size, vascularized lung scaffolds produced by 3D System's printers allow our cellularization teams to focus on our mission to build an unlimited supply of transplantable organs."

Building on the progress the company has made to date, 3D Systems is infusing additional resources into its regenerative medicine R&D efforts to accelerate development programs that expand on the scope of potential applications. The company intends to add additional regenerative medicine domain expertise to its team, complementing the deep technology experience and expertise focused on these advanced applications. Additionally, the company is growing its roster of partners to broaden the portfolio of solutions the company offers. 3D

Systems previously announced collaborations with CollPlant Biotechnologies (NASDAQ:CLGN) and Antleron that expanded its capabilities in regenerative medicine.

CollPlant is the developer of proprietary recombinant human collagen (rhCollagen) BioInk technology, which is also being used in collaboration with United Therapeutics. Bringing together 3D Systems' expertise in 3D printing and healthcare and CollPlant's expertise in rhCollagen-based BioInks will enable joint development of tissue and scaffold bioprinting processes for third party collaborators. As a result, the companies are jointly addressing an unmet market need for a comprehensive solution to produce tissues and scaffolds for regenerative medicine applications.

Antleron co-creates, as an innovation pioneer in the field of regenerative medicine, personalized manufacturing solutions for advanced therapy applications. Antleron integrates core technologies such as 3D printing, bioreactors, and artificial intelligence with bioprocess know-how to enable disruptive manufacturing workflows that convert cells into living therapies. The 3D Systems/Antleron partnership wants to make 3D printing an integrated part of modular and digital factory-of-the-future solutions to enable sustainable and personalized manufacturing of cell & gene therapies, vaccines, tissues, and organs.

3D Systems has delivered additive manufacturing solutions to the healthcare industry for more than 25 years. The company is renowned for its VSP® surgical planning solutions which have enabled the planning of more than 140,000 patient-specific surgical cases, as well as the production of more than two million medical devices from its operations in Littleton, Colorado, and Leuven, Belgium. 3D Systems' NextDent® 5100 digital dentistry solution is recognized as the industry leader in transforming prosthodontic and orthodontic production at dental laboratories and clinics. The company also has a long-standing relationship with Align Technology, Inc. (NASDAQ:ALGN), the makers of Invisalign clear aligners, iTero scanners, and exocad CAD/CAM services, for which it has co-developed proprietary solutions comprised of customized hardware, software, and non-aligner materials that are used to mass-produce more than 500,000 unique patient-specific aligners per day.

Commenting on the future of regenerative medicine at 3D Systems, Dr. Jeffrey Graves, president and CEO, said, "The progress that Chuck Hull and his team have made over the last three years, in collaboration with the Team from United Therapeutics, has been absolutely remarkable. Through unique developments in new printer hardware, software, and biomaterials

technology, they have laid the foundation needed for accelerated commercialization of bioprinting at 3D Systems. Taking a strong application focus we will now expand our commercialization efforts in this nascent industry, which we believe will experience significant growth over the next decade. We expect these efforts to bring substantial benefits to the healthcare patients in critical need, both through direct applications within the human body, as well as in accelerating the development of drug therapies in the pharmaceutical industry. We anticipate regenerative medicine to be an exciting growth driver for our healthcare business over the next decade."

Forward-Looking Statements

Certain statements made in this release that are not statements of historical or current facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the company to be materially different from historical results or from any future results or projections expressed or implied by such forward-looking statements. In many cases, forward-looking statements can be identified by terms such as "believes," "belief," "expects," "may," "will," "estimates," "intends," "anticipates" or "plans" or the negative of these terms or other comparable terminology. Forward-looking statements are based upon management's beliefs, assumptions, and current expectations and may include comments as to the company's beliefs and expectations as to future events and trends affecting its business, including with respect to the development, expansion and commercialization of new technology, and are necessarily subject to uncertainties, many of which are outside the control of the company. The factors described under the headings "Forward-Looking Statements" and "Risk Factors" in the company's periodic filings with the Securities and Exchange Commission, as well as other factors, could cause actual results to differ materially from those reflected or predicted in forward-looking statements. Although management believes that the expectations reflected in the forward-looking statements are reasonable, forward-looking statements are not, and should not be relied upon as a guarantee of future performance or results, nor will they necessarily prove to be accurate indications of the times at which such performance or results will be achieved. The forward-looking statements included are made only as of the date of the statement. 3D Systems undertakes no obligation to update or review any forward-looking statements made by management or on its behalf, whether as a result of future developments, subsequent events or circumstances or otherwise.

About 3D Systems

More than 30 years ago, 3D Systems brought the innovation of 3D printing to the manufacturing industry. Today, as the leading additive manufacturing solutions partner, we bring innovation, performance, and reliability to every interaction - empowering our customers to create products and business models never before possible. Thanks to our unique offering of hardware, software, materials, and services, each application-specific solution is powered by the expertise of our application engineers who collaborate with customers to transform how they deliver their products and services. 3D Systems' solutions address a variety of advanced applications in healthcare and industrial markets such as medical and dental, aerospace & defense, automotive, and durable goods. More information on the company is available at www.3dsystems.com.

# # #