

## BICO's CELLINK Bioprinters Used by CTIBIOTECH to Produce World's First Immunized Human Skin Model

**The breakthrough was achieved by CELLINK's longtime customer CTIBIOTECH and the NOVOPLASM Research Consortium by leveraging 3D bioprinted skin and cold plasma wound healing treatment**

Today BICO's CELLINK, a leader in 3D bioprinting, announced that its BIO X has enabled the production of the world's first immunized skin model. The breakthrough was achieved by CELLINK's customer and partner of more than four years, CTIBIOTECH, a French regenerative medicine company. The technology was achieved by converging technologies that include 3D bioprinting, tissue engineering and human cells, biological materials and proteins.

"CTIBIOTECH invested several million euros in the past seven years in industrialization of human tissue bioprinting (skin, liver, tumours etc.) for biomedical, pharmaceutical and dermocosmetics applications," says Dr. Nico Forraz, Chief Executive Officer at CTIBIOTECH. "CELLINK's BIO X provides a flexible technology platform to implement standardization of human tissue production."

According to the World Health Organization, 11 million individuals suffer burns that require medical attention every year, and transplant options for burn victims are limited to skin grafts from the victims' own body. Unfortunately, donated skin is often rejected and attacked by the recipient's immune system, and both transplanted skin from one's own body or a donors can leave significant scarring. By producing skin with immune cells, this breakthrough poised to be a gamechanger for burn victims by enabling the printing of skin.

"This breakthrough is a perfect use of the BIO X and reaffirms our steadfast commitment to pushing the boundaries of science," says Itedale Namro Redwan, Chief Scientific Officer, CELLINK. "We're proud to be working with CTIBIOTECH to accelerate solutions for public health issues and improve the lives of the millions who suffer from burn injuries each year."

The advancement was developed in collaboration with the NOVOPLASM Consortium, a French government program consisting of the French Army Biomedical Research Institute, CTIBIOTECH, École Polytechnique, and Institute Pasteur with the goal of developing cold plasma technology for the treatment of infected burns and the wound healing of skin grafts. Cold plasma is a medical treatment that leverages extremely cold electrically charged gases to increase nitrogen and oxygen in tissue which help during burn recovery with infection control and tissue regeneration.

"3D Bioprinting is a key technology in CTIBIOTECH's portfolio of human tissue production methods to support regenerative medicine and healthcare applications," says Professor Colin McGuckin, President and Chief Scientific Officer at CTIBIOTECH. "With CELLINK's BIO X combined with our proprietary tissue

engineering protocols and expertise, we are now able to produce over 200 identical functional human skins (with immune cells, sebocytes, melanocytes etc.) from a single donor, to support validation of medical devices and other therapeutic strategies for burns patients."

Companies interested in learning more about CELLINK's broad offering of 3D bioprinters, please visit: [www.cellink.com](http://www.cellink.com)

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**About BICO**

Founded in 2016, BICO (formerly CELLINK) is the leading bio convergence company in the world. By combining different technologies, such as robotics, artificial intelligence, computer science, and 3D bioprinting with biology, we enable our customers to improve people's health and lives for the better.

The company has a focus on developing technologies that will advance Health 4.0 Next Generation Core Industry Ecosystems that enable tissue engineering, diagnostics, multiomics, and cell line development. BICO's technologies enable researchers in the life sciences to culture cells in 3D, perform high-throughput drug screening and print human tissues and organs for the medical, pharmaceutical, and cosmetic industries. We create the future of health.

The Group's instruments in the field amounts to 25,000, including all the top 20 pharmaceutical companies, are being used in more than 65 countries, and have been cited in more than 9,500 publications. BICO is listed on Nasdaq Stockholm under BICO. [www.bico.com](http://www.bico.com)

**About CELLINK**

CELLINK is creating the future of health as part of BICO, the world's leading bio convergence company. When CELLINK released the first universal bioink in 2016, it democratized the cost of entry for researchers around the world and played a major role in turning the then up-and-coming field of 3D bioprinting into a thriving \$1 billion industry. Today, the company's best-in-class bioinks, bioprinters, software and services have been cited in over 700 publications and are trusted by more than 1,000 academic, pharmaceutical and industrial labs. At the forefront of the bioprinting industry, CELLINK aims to alleviate organ donor shortage with biofabricated transplantable organs and remains committed to reducing our dependence on animal testing and increasing efficiencies in drug development with more physiologically relevant bioprinted organ models. Visit [cellink.com](http://cellink.com) to learn more. BICO is listed on the Nasdaq Stockholm Main Market under BICO.

**About CTIBIOTECH - Cellular Therapy Research Institute**

CTIBIOTECH develops and produces predictive models of human tissues and cells for biomedical, pharmaceutical and dermatocosmetic research and development. CTIBIOTECH is home to a team of world-class experts who have pioneered innovation in bioengineering and regenerative medicine over the past 30 years. CTIBIOTECH partners with public and private organizations to develop innovative solutions for efficacy and safety testing of active ingredients, dermatocosmetics, drug candidates, cell therapies and medical devices. For more information: [www.ctibiotech.com](http://www.ctibiotech.com)