New Tissue Engineering Scaffolds for Researchers

CD Bioparticles, a leading manufacturer and supplier of numerous drug delivery products and services, announced the launch of its biodegradable and custom <u>Tissue</u> <u>Engineering Scaffolds</u>, including 3D Cell Culture Substrate and Engineered Tissue Scaffolds, to support regenerative medicine researchers in need of research and development materials.

CD Bioparticles now provides researchers with specialized delivery technologies, tissue engineering scaffold designs and modifications, and cutting-edge technology platforms that can help customers overcome challenges such as lack of support structures that can facilitate the formation of new tissues with good biocompatibility in studies of healing or replacement of damaged tissues, the inability to provide a favorable environment for cell growth and the study of tissue regeneration after injury or loss, and high costs of animal testing in drug development and testing.

These tissue-engineered scaffolds can provide an environment that closely resembles the native tissue and promote cell adhesion, proliferation, and differentiation by mimicking the structure and composition of the extracellular matrix. In addition, scaffolds can provide 3D structures that allow regulation of cell growth and organization.

Meanwhile, CD Bioparticles' biomimetic tissue engineering scaffolds can be manufactured in a variety of sizes, shapes, and porosities to meet the unique needs of the target tissue or organ. In addition, scaffolds can be modified to incorporate bioactive compounds, growth factors or medications to accelerate the healing process and enhance tissue regeneration.

These custom-designed scaffolds can be used in a variety of applications and tissues. For example, these new scaffolds can be applied in regenerative medicine to restore bone, cartilage, skin, blood vessels, and organs like the liver or heart that have been injured. They can also be used to create in vitro models that mimic diseased tissues or organs. These models allow researchers to study disease progression, test potential therapies, and evaluate the safety and efficacy of drugs in a controlled environment. As such, tissue-engineered scaffolds provide a valuable tool for drug discovery and personalized medicine.

Scaffolds hold great promise in the field of organ transplantation, providing a platform for growing functional organs in the laboratory. By seeding cells onto scaffolds, researchers aim to create fully functional organs that can be transplanted into patients, potentially solving the problem of donor organ shortage and reducing the risk of rejection. They can also be used for cosmetic and plastic surgery, and dental and orthopedic applications.

For more information on CD Bioparticles' new 3D Cell Culture Substrate and Engineered Tissue Scaffolds, please visit <u>https://www.cd-bioparticles.net/tissue-engineering-scaffold</u>.

About CD Bioparticles

CD Bioparticles is an established drug delivery company that provides customized solutions for developing and manufacturing novel biocompatible drug delivery systems. It specializes in various formulation and drug delivery technologies, from conventional liposomes and PEGylated liposomes to polymer microspheres and nanoparticles for drug delivery. The company also provides contract research services for drug delivery formulation, formulation feasibility study, process development and scale-up, as well as analytical and non-clinical research services.