CTIBIOTECH French Track Winner



欧莱雅美牧科技创造营 Beauty Tech Innovation Challenge









CTIBIOTECH - the world leader in real human skin testing

CTISKIN™ by CTIBIOTECH™develop innovative solutions to perform preclinical safety and effcacy evaluation ot active ingredients, dermatocosmetics, personal care and hair care products, therapeutic candidates, cell therapies, aesthetic devices, and medical devices effcacy.

Our bespoke ex vivo bioassays, tissue engineering, and unique award-winning human skin 3D bioprinting technologies, support our clients' skin care innovations to understand and claim biological mechanisms of action.

CTIBIOTECH $^{\text{TM}}$ experts will support your next innovation in skin care with CTISKIN $^{\text{TM}}$ including the largest range of functional 3D Bioprinted human skin models in the world, ex vivo models (skin, hair & scalp, sebaceous gland, baby skin, fat etc.) and in vitro models (all human primary skin cells).

Access CTIBIOTECHTM 's human cells and tissues accredited biobank inventory (over 50,000 human biological specimen), test your ingredients and products on existing CTISKINTM models with contract research or develop a novel human skin model with our open innovation program.

CTISKIN™ by CTIBIOTECH™ provide:

CTISkinTMEx vivo kit -a standardized and ready-to-use solution for you to do your effcacy and safety tests in your lab. Collected immediately after surgery, we provide you with the freshest possible skin biopsies that can be used for up to 11 days post-surgery for all ex vivo skin bioassays.

We work with a network of 200 healthcare professionals worldwide to procure healthy and diseased skin biopsies, hair, scalp and on-demand tissues from living donors with informed ethical consent.

CTSkin™Haircare:

->on scalp discs biopsies evaluating certain proteins involved with hair maintenance and growth

->on micro-dissected hair follicles grown in culture in 3D

CTISkin™ Single Donor Kit

 $From 2 to 6 h \overline{u} man skin cell types from the same donor (keratinocytes, fibroblasts, adipocytes, sebocytes, melanocytes, blood/im mune cells). Different Human cell types from skin pre-clinical grade production by biomedical scientists with over 30 years experience. \\$

CTISkinTM MultiSkin 3D Bioprinted full skin models: A fiexible bioprinting platform to produce as many as 50 to 100 artificial skin models (dermis & epidermis) from one donor skin cells. More than 8 years of extensive R&D nurtured this powerful & flexible technology to screen ingredients, finished products or for preclinical high throughput efficacy evaluation.

 $CTISKINT^{m}$ BY $CTIBIOTECH^{TM}$ are the first in the world to have produced complete immunized skin by 3D printing (Winner of IFSCC "Henry Maso award 2022") and partner with various organizations to develop innovative solutions for safer and better skin care products.

This unique additive manufacturing technology enables 3D-Bioprinting of hundreds of full-thickness skin tissues with immuno-competent and accessory cells (macrophages, neutrophils, T-cells etc); hair follicles; sebaceous glands; vascular endothelium; or melanocytes.

We are advancing these models with neural cells and muscle-related tissues to create screening systems for human skin reactions. Some of this work is published and used in research / screening to investigate skin reactions to active ingredients, cosmetics, hair care and personal care products as well as aesthetic devices.





