



The Incredible Destiny Of Reconstructed Skin

The incredible destiny of reconstructed skin

Research has always been at the heart of our approach. Our 21 research centers, located around the world, are dedicated to different areas of research. In Lyon, at the heart of the Lyonbiopôle innovation center that brings together different pharmaceutical activities, lies Episkin. It is the only center in the world dedicated to tissue engineering and predictive assessment, the world leader in the production of reconstructed human skin and mucous membranes.

A two-fold journey

In the early 1980s, one of our young biologists managed to reconstruct the first human epidermis.

Since then, almost a dozen more complex skin tissue models have emerged in our laboratories: from the first reconstructed epidermis in 1983, followed by a pigmented one in 1994, to full skin (epidermis + dermis) in 1986 and with immune function in 2006, to — more recently — photo-aged skin or skin with modular regenerative potential in 2007 and Asian skin in 2010.

These tissue models are fantastic tools for modeling different physiological functions of the skin, such as its ability to pigment or renew itself, in order to better understand it. They are also remarkable assets for predicting complex phenomena such as allergy or skin irritation. Finally, they play a key role in demonstrating the efficacy of active ingredients.

Our test platforms routinely use the dozen reconstructed skin and cornea models we produce in Lyon to safely assess a thousand formulas and a hundred-some ingredients per year. We also participate in validations by European and international authorities of alternative methods to animal testing, and five of our models have already been validated and are now marketed worldwide as replacement methods for testing corrosivity, phototoxicity, genotoxicity, skin irritation and eye irritation.



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MODELS

APPLICATIONS

	T-Skin Human Full Thickness Model							
	SkinEthic RHE Human Epidermis							
	RHE-LC Human Epidermal Model Langerhans cells							
	EpiSkin Human Epidermis							
	SkinEthic RHPE Pigmented Epidermis							
	SkinEthic HCE Corneal Epithelium							
	SkinEthic HO2E Oesophageal Epithelium							
	SkinEthic HOE Oral Epithelium							
	SkinEthic HGE Gingival Epithelium							
	SkinEthic HVE Vaginal Epithelium							
	SkinEthic HBE Bladder Epithelium							



Skin Irritation



Skin Corrosion



UV Exposure



Bacterial Adhesion



DNA Damage



OMICS



Permeability



Medical Devices

Episkin - at the forefront of Human Tissue Engineering