

Cosmetic evaluation: do your *in vitro* models lack predictive power? It is an architectural problem

Current cell culture systems limit research and development by failing to reproduce the complexity of the *in vivo* microenvironment. Organisyl® introduces the first biomimetic epidermis based on a physiological extracellular matrix, enabling more reliable and predictive testing.

- Traditional models fail to recreate the dynamic environment of living tissues.

Biomimicry & Predictivity: Stop Testing Blindly.

Organisyl® reproduces the exact porosity, mechanical behavior, and biological signaling context of the human matrix, providing a robust platform to secure scientific and regulatory claims.

- Reduce batch variability and operational costs.

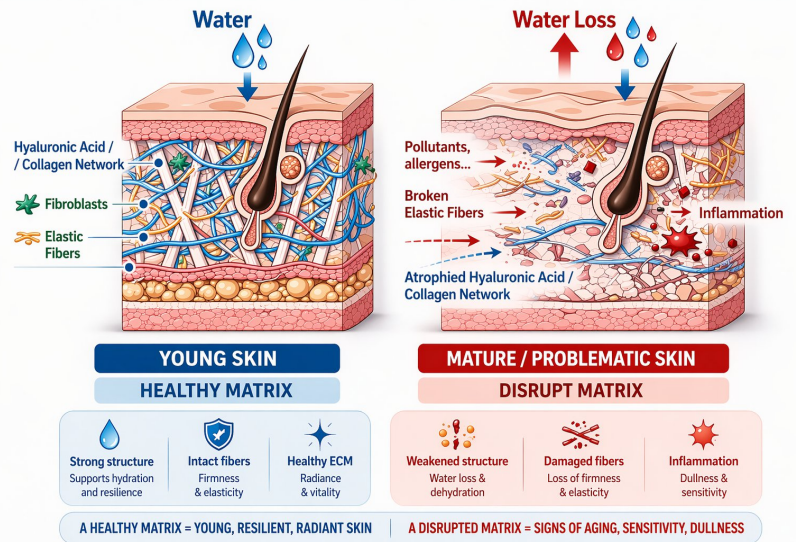
Scalability & Standardization: Industrialize Your Testing Processes.

Our patented manufacturing process enables standardized large-scale production of reproducible, high-quality tissue models suitable for regulatory submissions and industrial applications.

- Eliminate dependence on generic explants.

Customization & Inclusivity: Target skin population.

From young skin to mature skin, we want to produce customized 3D skin models on demand to validate globally relevant formulations and ensure population-relevant efficacy and safety.

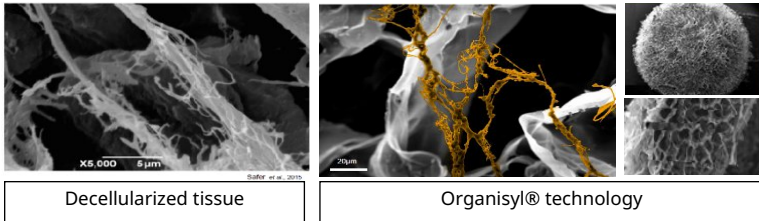


Organisyl® technology is a unique and breakthrough technology recreating organ-specific ECM

- Organisyl®, the first *in vitro* dermis ECM to recreate reconstructed skin

IN VIVO ECM

Organisyl®



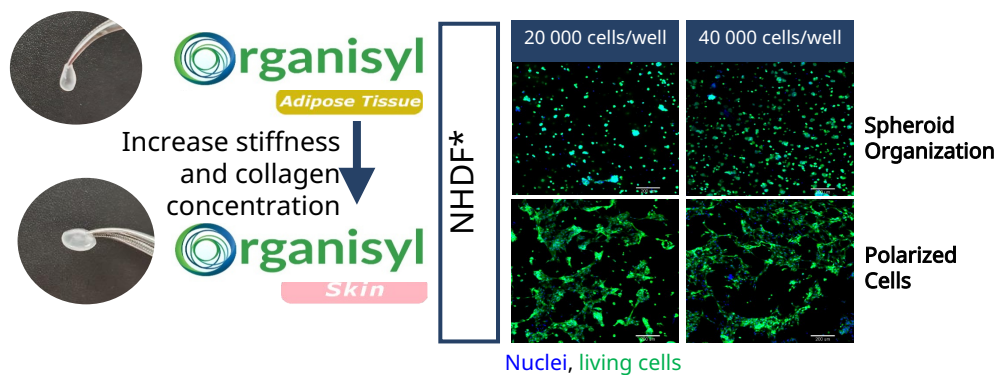
Same features of Interpenetrated network of HA/collagen	Same chemical properties	Same range of stiffness : 100pa-20kPa	Same porosity : 100-200 µm	Same viscoelastic properties
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Young Skin VS Mature/Problematic Skin:

- ECM Composition & Stiffness Change with Age
- Cellular Behavior Is Controlled by the Microenvironment
- Mechanical Properties Drive Skin Aging Phenotypes

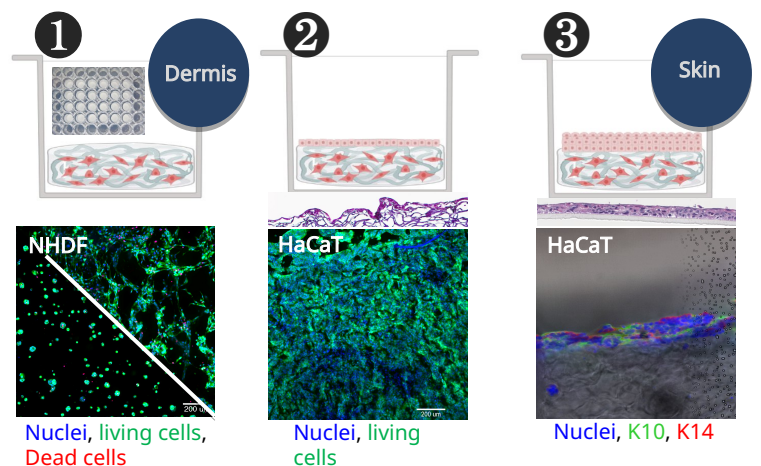
Organisyl® reproduces the cellular microenvironment of any organ by reproducing ECM composition and physical properties (porosity, viscoelasticity, stiffness).

- Efficient polarization of fibroblast cells in Organisyl® Skin compared to Adipose Tissue



* : Normal Human Dermal Fibroblasts

- Reconstructed epidermis at the surface of Organisyl® Skin

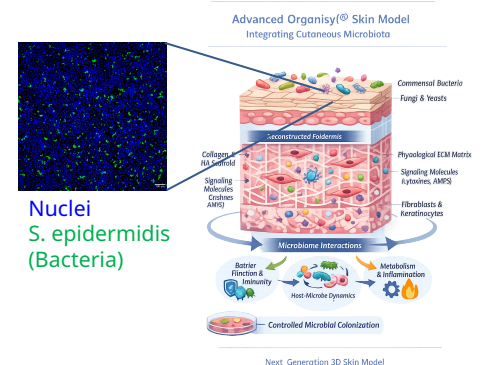


- Conclusion — Toward Next-Generation Skin Models

The Organisyl® Skin platform represents a major step forward in the development of physiologically relevant *in vitro* skin models by:

- Reproducing the structural and mechanical properties of the extracellular matrix with cell-matrix interactions to improve the predictivity of cosmetic and dermatological testing.
- Combining structural biomimicry, cellular functionality, and microbial ecology.

Organisyl® Skin model providing a powerful predictive tool for next-generation cosmetic science, dermatology, and translational research.



We are looking for industrial partners to advance innovative skin model development.
Learn more at organisyl.org | Contact: nathalie.maubon@organisyl.org