

# denovoSkin

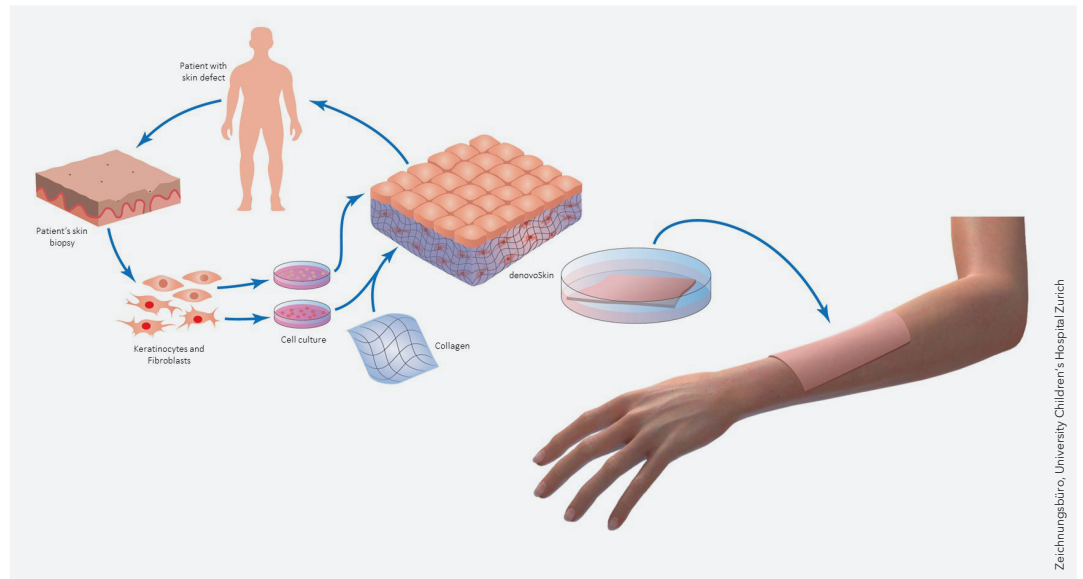
---

Personalized skin grafts  
to treat skin defects



Wyss Zurich  
Translating  
Science into Life

# denovoSkin



Zeichnungsbüro, University Children's Hospital Zurich

## Contact

Dr. Daniela Marino  
Dr. Fabienne Hartmann-Fritsch  
Project Co-Leaders  
+41 44 632 82 61

[daniela.marino@wysszurich.ch](mailto:daniela.marino@wysszurich.ch)  
[fabienne.hartmann-fritsch@wysszurich.ch](mailto:fabienne.hartmann-fritsch@wysszurich.ch)

## Partners

Julius Clinical  
Tissue Biology Research Unit,  
University Children's Hospital Zurich

Others:  
SkyCell  
University Children's Hospital  
Dutch Burn Center  
VUMC Amsterdam  
University Hospital Zurich  
University Hospital Birmingham  
Voisin Life Science Consulting

## Mentors

Prof. Dr. med. Martin Meuli  
Prof. Ernst Reichmann

## Website

<https://cutiss.swiss/de/cutiss-ag/>

## Personalized skin grafts to treat skin defects

After severe wounding, human skin fails to regenerate and physiologically heals by scar formation. Worldwide, millions of people suffer from severe skin defects or diseases requiring surgical interventions to restore skin function.

Existing therapies frequently leave these patients with permanent, painful, disfiguring, and debilitating scars. Scars may impair movement and growth, and often require several follow-up surgeries, intense homecare and psychosocial rehabilitation. Severe skin defects significantly affect quality of life in a long term, along with the economic burden for the health-care system. Human skin is composed of an outer epidermis, a dermis and a hypodermis. The components of the dermis control and regulate scarring. Today, standard of care consists in harvesting a thin layer of healthy patient's skin, which contains the epidermis but only remnants of the dermis. Since sufficient dermis is missing, these grafts often develop into scars. Furthermore, in severe cases, where most of the skin has been destroyed (e.g. burns), the shortage of healthy skin represents a real clinical challenge.

In 2001 a team of the University-Children's Hospital Zurich led by Professor Reichmann pursued the vision of bio-engineering personalized dermo-epidermal skin grafts, using patients' own cells. One of the developed products, denovoSkin, is the result of fifteen years of research. A first-in-man safety study was completed with denovoSkin with very promising results. denovoSkin has obtained Orphan Drug Designation for a treatment of burns (by Swissmedic, EMA, and FDA). With the support of the Regenerative Medicine Technology Platform of Wyss Zurich the team will now proceed with product development, testing denovoSkin's efficacy in pivotal phase II multicentric studies and preparing for market authorization in terms of regulatory and reimbursement activities.



denovoSkin  
is a Wyss Zurich project  
[www.wysszurich.uzh.ch](http://www.wysszurich.uzh.ch)