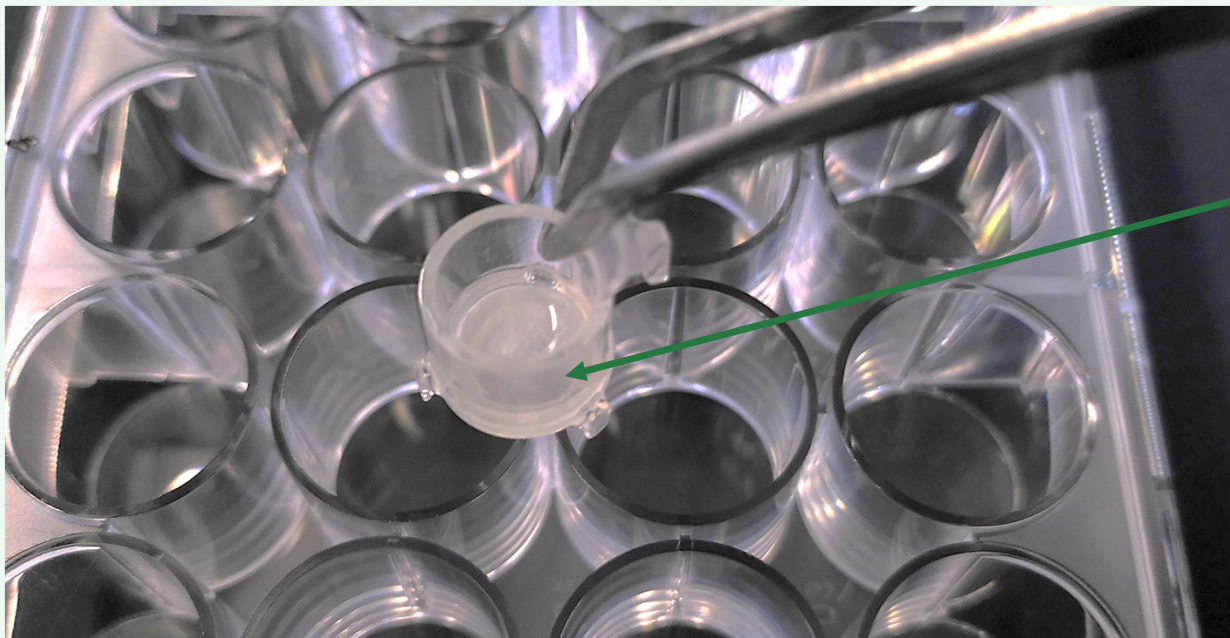


StRoMa³

revolutionizing 3D membranes for modern drug screening

New product perspectives in the market for cell culture consumables

cell culture consumable: trans-well inserts



- 👍 animal-free
- 👍 biomimetic



background: Global competitors' basic patents for trans-well inserts have expired.

Problem – Lack of valid predictive models in drug screening



Germany: 300.000 animals per year in translational and applied research*

Humans are no 80 kg mice!

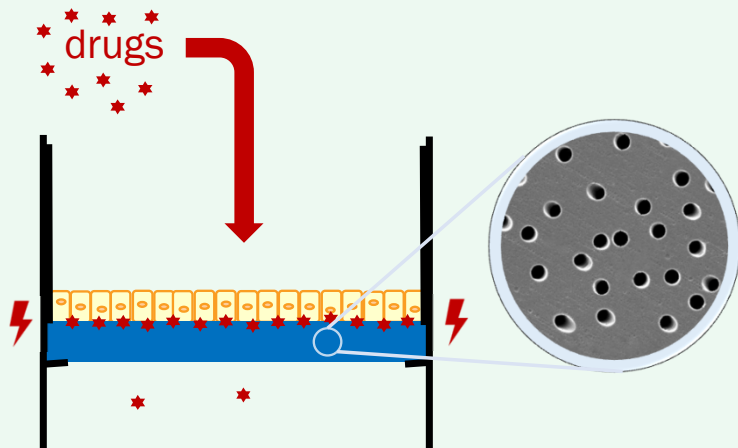


Growing political pressure to reduce animal experiments.

* Bundesamt für Risikobewertung

State-of-the-art materials for current test systems

2D membranes → 2D in-vitro models



🗨️ Insufficient drug transport

→ drugs are sticking to membrane

🗨️ Low pharmacological information value

→ simple, one layered tissues

Lack on
transferable data
for clinical translation

iterations

time

high costs



Animal-based physiological scaffolds



🗨️ Standardization hardly guaranteed

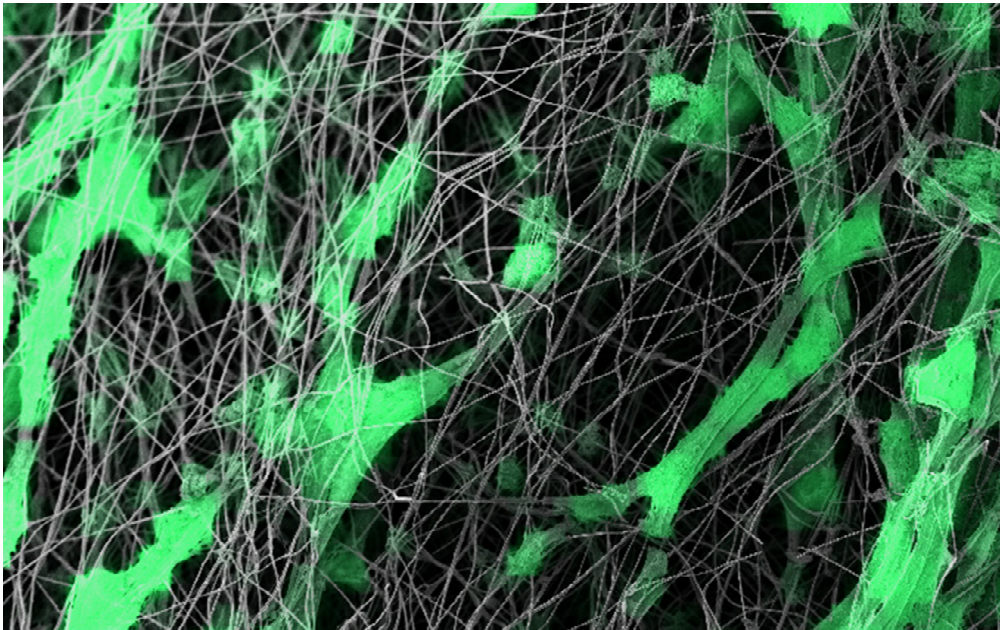
→ animal-specific fluctuations

🗨️ Expensive

→ complex, difficult-to-standardize process

Solution-Synthetic 3D membrane mimics the basic structure of human tissues

StRoMa³ - next generation 3D membrane for modern drug screening



Synthetic 3D scaffold,
which mimics the
basic structure of human tissues

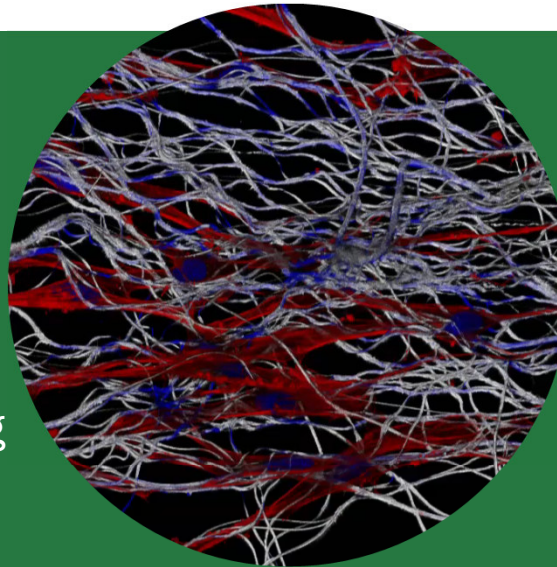
Platform technology:
Applicability on almost all organ types



patenting W02022/148564A1 - High-porosity nanofiber nonwovens as a support structure for stromal tissue

Advantages - Synthetic 3D membrane mimics basic structure of human tissues

- 👍 Animal-free / Fully synthetic
- 👍 Highly valid predictive data
- 👍 Acceleration in drug screening
- 👍 3D structured / biomimetic
- 👍 Familiar methodology
- 👍 Applicable for all organ types



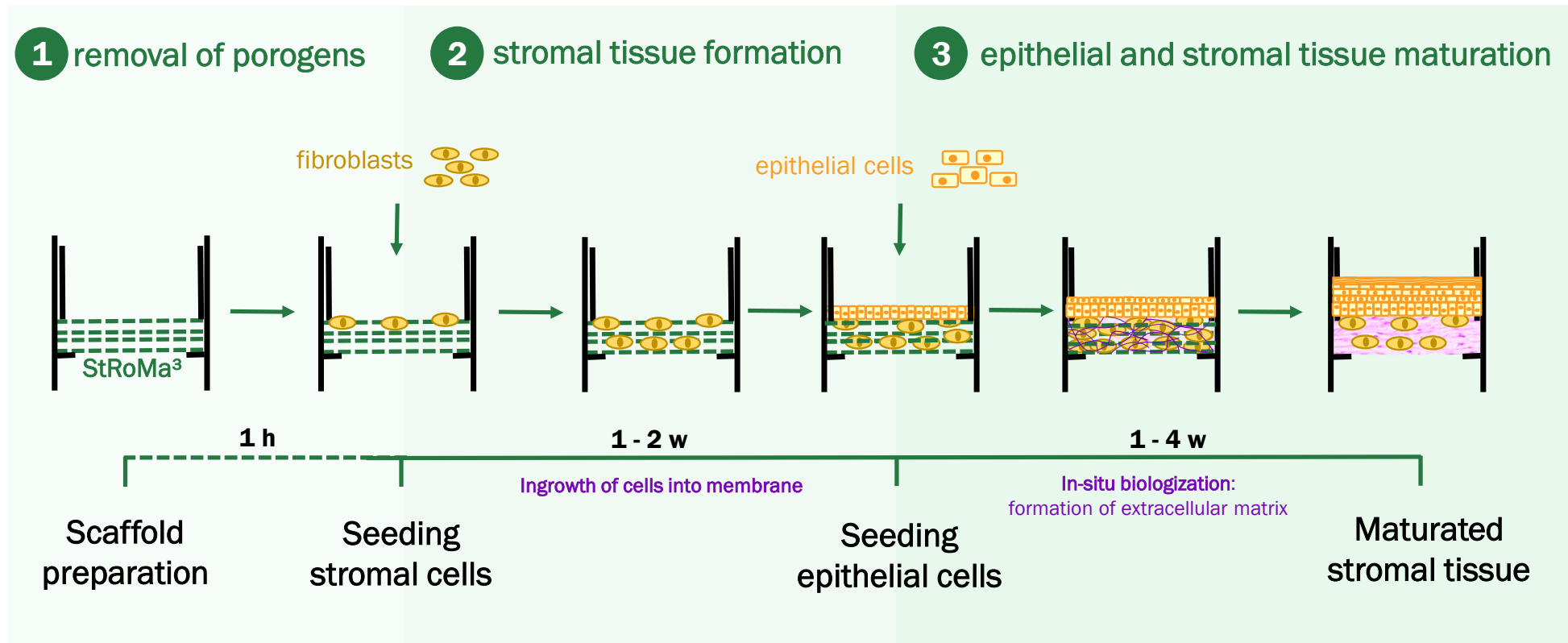
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collaboration

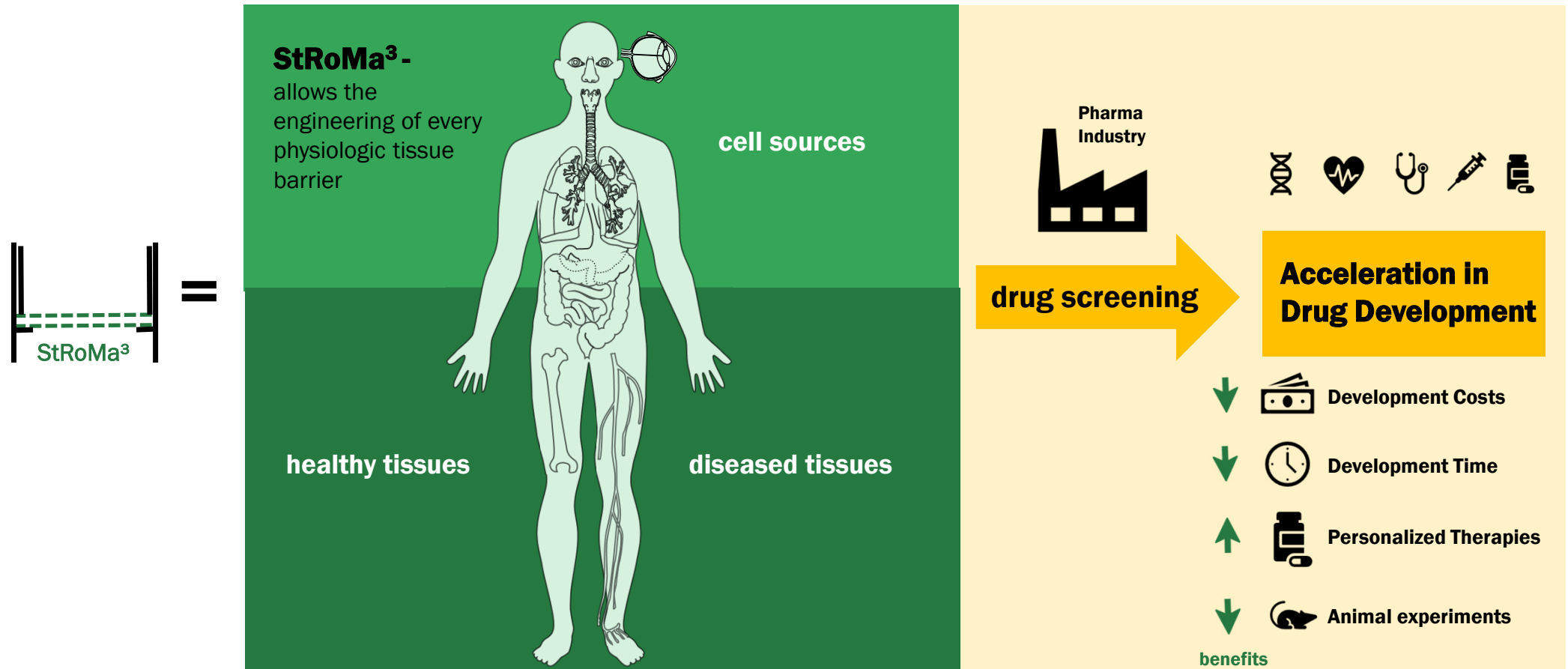


Application procedure is similar to current processes

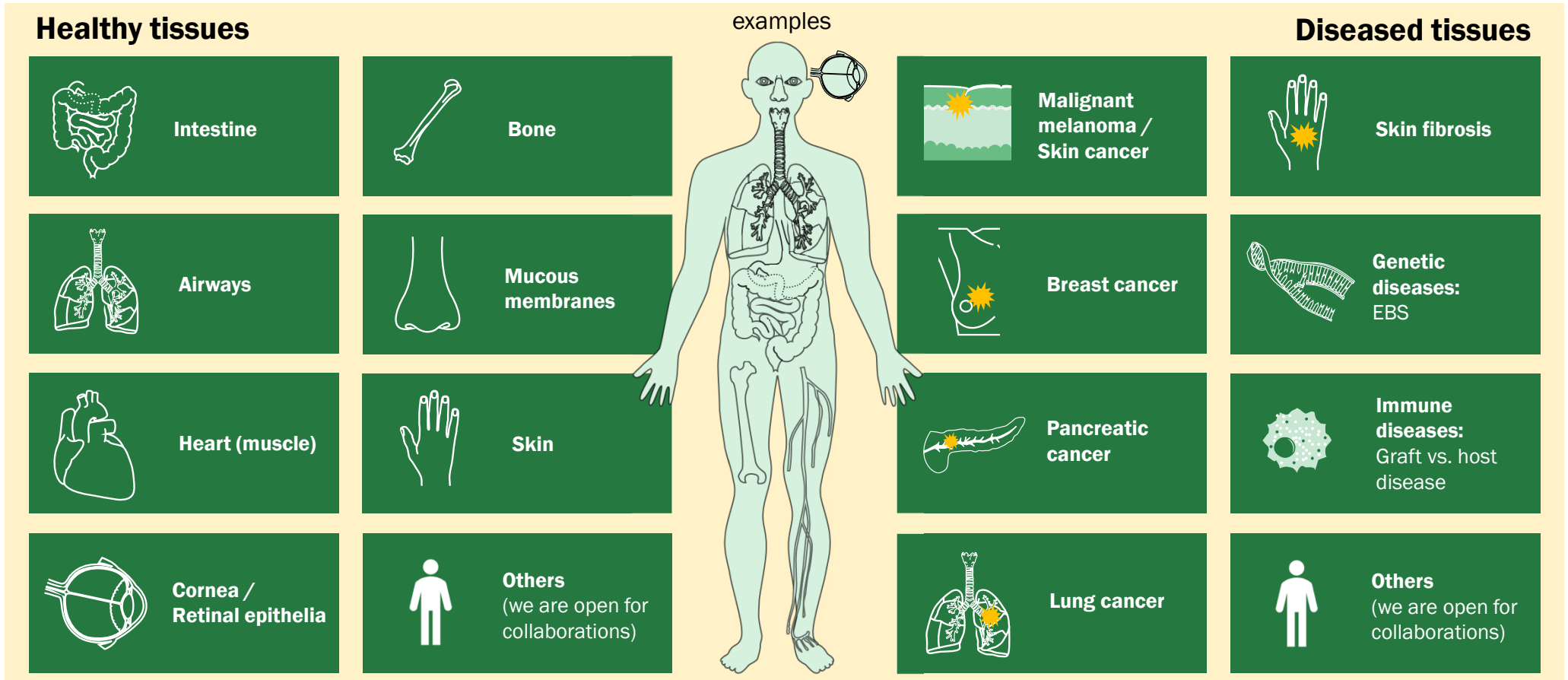


👍 **Stromal tissue and its extracellular matrix is finally integrated in StRoMa³ membrane.**

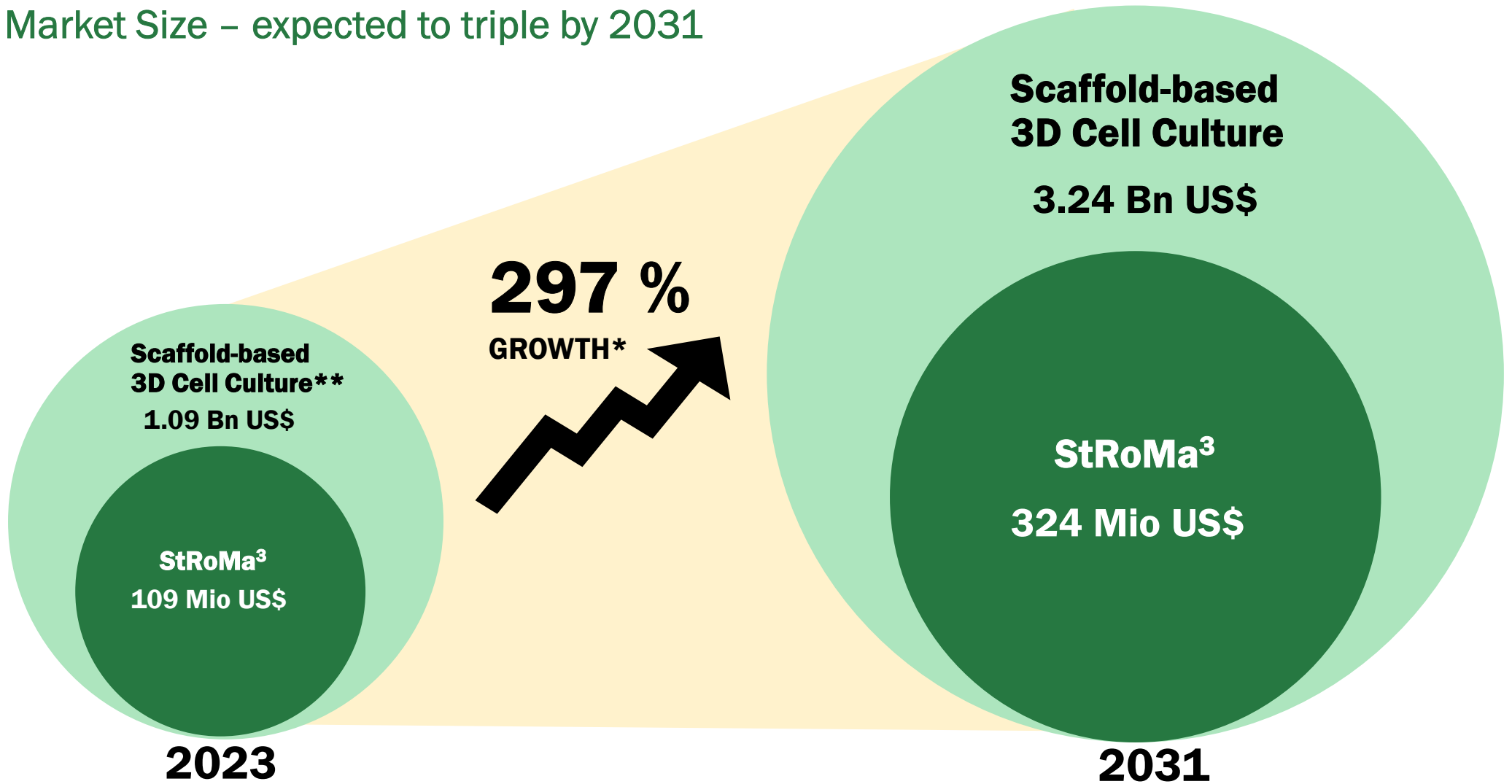
Application – Acceleration in Drug Development



Application – Versatile organ types can be realized



Market Size – expected to triple by 2031



* Strategic Market Research: 3D Cell Culture Market By Technology

** Allied Market Research: 3D Cell Culture Market by Product

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