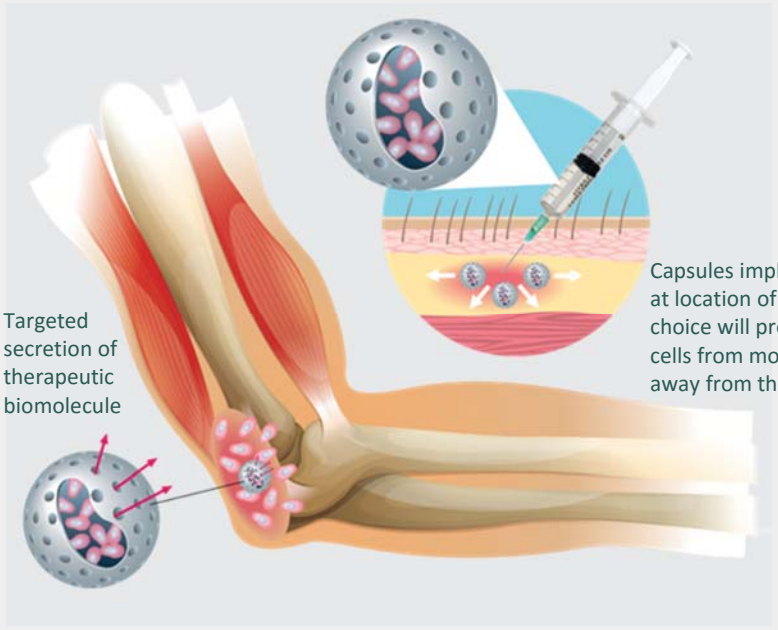
Cell-in-a-Box® technology:

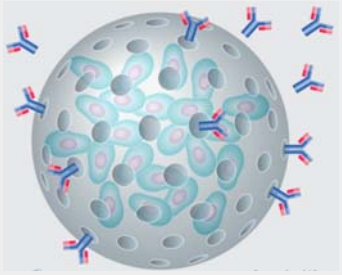
- **Foreign cells** (from another person or from an animal) can be put in patients without being rejected
- **Cells** survive and are healthy in the patient for long periods (months, even years)
- **Implanted encapsulated cells** remain at the site of injection and don't move away
- **Biomolecules** produced by the implanted cells are secreted from the capsules

➡ Effectively **Implanting a cell factory** that makes a specific medicine **in the patient** as is needed.

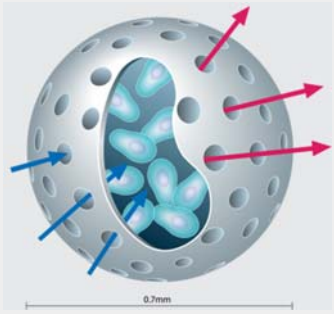
- Capsules with cells are **not rejected** – they are immunologically inert
- Capsules with cells can be **frozen** before injection into patients **and stored for long periods**

➡ Allowing **easy, cost effective production, shipment** to clinic **and storage** till required for patient





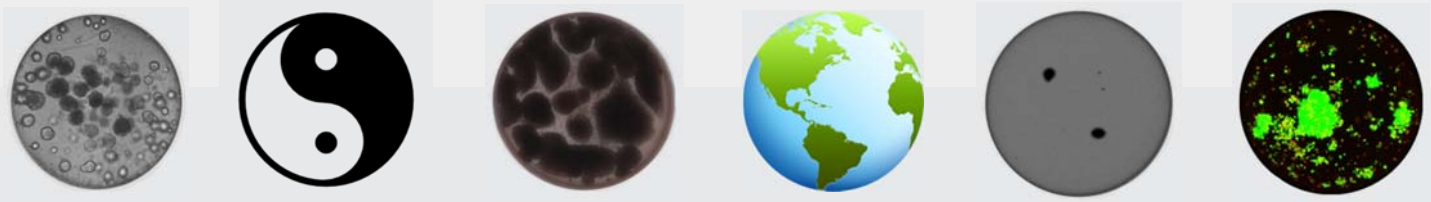
Any biomolecule secreted from the cells in the capsules will be released outside the capsules (example shown here is antibodies)



Prodrugs or nutrients can enter the capsules (blue arrows). Activated drugs, therapeutics biomolecules and waste products from the cells can exit the capsules (red arrows)

World-wide unique Cell-in-a-Box® capsules:

- **used in 27 human patients for up to 2 years without any adverse effects and have a good safety record**
- **are manufactured at pre-clinical laboratory grade as well as at large scale cGMP grade for use in clinical trials**
- **please see our website for details contracting Cell-in-a-Box® services or manufacturing** www.austrianova.com



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Part of the SG Austria Group

Cell-in-a-Box® technology allows:

- living cells to be encapsulated in inert and biocompatible cellulose sulphate polymers
- up to 10,000 human or animal cells to be encapsulated per standard sized capsule (0.7mm)
- long term viability of cells in the capsules over long periods (months, possibly years) both in the lab and in the body
- immuno-protection of the cells in the body so that even cross-species implants are not rejected
- cells to be constrained to the site of application/implantation
- nutrients and waste products to freely diffuse in and out of the capsules because of the porous outer-membrane
- any biomolecules produced by the encapsulated cells to be released from the capsules
- long-term storage by freezing (up to 5 years) after production and high cell viability (>90%) after thawing
- cells to be protected for cryo-shipments; vapour phase of liquid nitrogen or dry ice

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