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# Urgently needed: single, round and vital cell spheroids for the development of model- or testing systems

### **Current challenges – Scope of application**

- Model systems mimicking the natural environment of cells are required.
- Rapid and reliable formation of cell models for time depended bedside therapies of patients.
- Working in a xeno-free environment for human cells.
- Optimal assay systems for stem cell or cancer research, pharmacology or toxicology.

# **BIOFLOAT<sup>TM</sup> – The xeno-free solution for** perfect spheroids



- Rapid and round spheroid generation allowing cell-cell contacts to resemble natural environment.
- Cell and protein attachment reliably avoided for optimal cell analysis.



Applicable to various complex systems, bioreactors, tubings or microfluidic chips

# **BIOFLOAT<sup>TM</sup> – A new technology for perfect cell spheroids** rapid, reliable, reproducible



## **BIOFLOAT<sup>TM</sup> – Features**

chemical treatment.



## **BIOFLOAT<sup>TM</sup> outperform current competitor**



96-well plates (second, third row) after 1, 3, 6, 9 days.

DIY coating of polystyrene, glass and PDMS by simple rinsing process – no

- Stable anti-adhesive layer.
- Coating prevents attachment of proteins and cells.
- Generation of cell instructive surfaces by biological tags.

Fig. 1: Hepatocytes in BIOFLOATTM 96-well plates (first row) and in benchmark

- Round uniform hepatocyte spheroids. No satellites.
- Rapid and reliable formation of spheroids within few hours.
- CYP activity measurable  $\rightarrow$  vital hepatocyte spheroids.
- FACILITATES the development of in vivo similar model- or testing systems for research and industry application.