

VITVO ADVANTAGES

- - VITVO is a closed system with exchange gas-optimized membrane transportability (allow molecular, macroscopical, histological evaluations in remote, i.e centralized facility in an academic center/CRO)
- - VITVO simulates real cell and tissue environment (cancer)
- - VITVO loading is associated with homogeneity in cell distribution after inoculum in the 3 dimensions.



VITVO ADVANTAGES

- - VITVO respects the biology of the tumor (i.e. antigen expression)
- - VITVO can host multiple cell types in a minimal volume
- - VITVO can host Multiple cell types loaded in the two faces
- - VITVO has fast read-out without the need of a dedicated device (each luminometer reading multi-well plates)



VITVO POSSIBLE APPLICATIONS

- To address chemotherapy/TKI efficacy in 3D
- To address biologics efficacy in 3D (PD/PK), i.e tumor penetration of a monoclonal antibody
- To address putative drugs toxicity in 3D (hepatocytes)
- To address cell therapies efficacy (possibility to load Targets and Effectors at variable ratios in a 3D relevant model CAR-T, MSC)
- To minimize animal uses (3R)
- To host tumor spheroids (Glioblastoma) also loaded in the two faces



VITVO POSSIBLE APPLICATIONS

- Cancer metabolomics
(i.e. tumor/stroma interaction)
- 3D reconstruction after primary tumor biopsies
and in VITVO loading for drug testing (i.e PD-1 e
PDL-1)
- Histology testing after cell loading (metacrilate
embedding)
- Histology testing after cytotoxicity (surrogate
of minimal residual disease)
- Migration assays in 3D

