

Predictive cell killing assays

In vitro modeling of the immunosuppressive tumor microenvironment

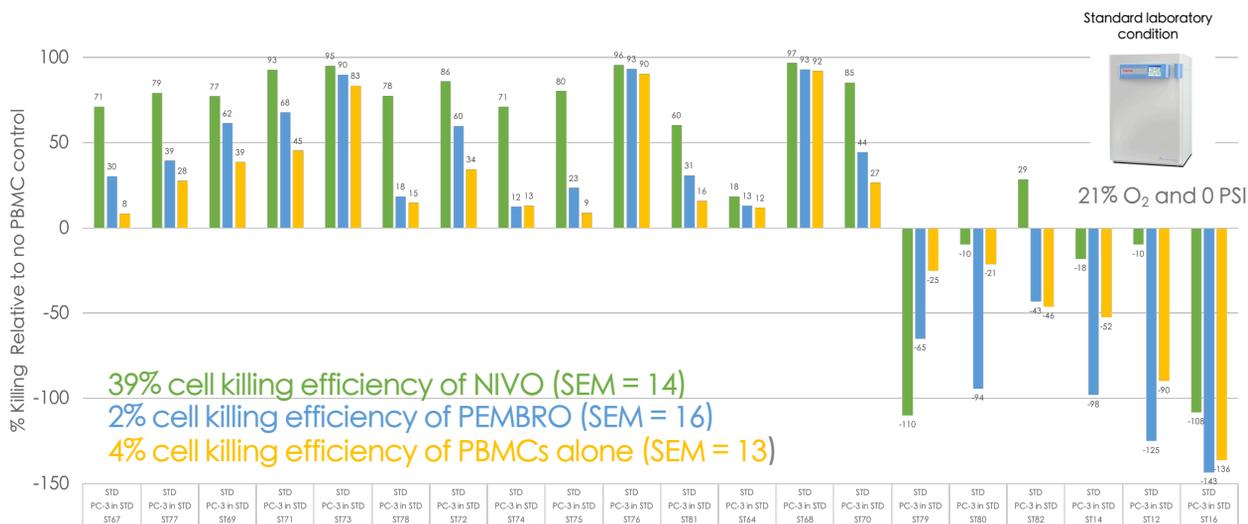
avatar™
cell control system



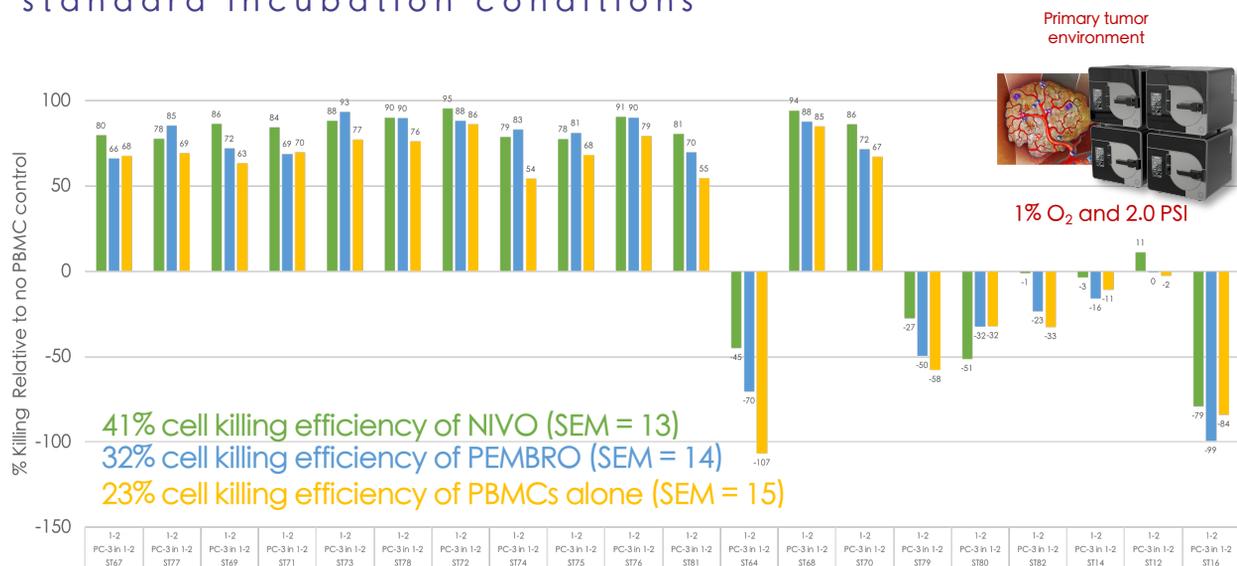
The avatar system can model the immunosuppressive tumor microenvironment to generate predictive cell killing results



Nivolumab exhibits increased tumor killing activity versus Pembrolizumab under standard incubation conditions (39% versus 2%)



Pembrolizumab exhibits dramatic increase in tumor killing activity under Avatar conditions when compared to standard incubation conditions



How does your drug perform in the tumor microenvironment?

- All cell killing in CO₂ incubator at 20% O₂ and 0 PSI
- 20:1 effector to target ratio (PBMCs:PC-3)
- 5 day cell killing period in standard or Avatar conditions
- No activation of PBMCs (no IL2)
- RPMI1640+10% FBS + p/s
- PC-3 prostate cancer cell line
- 21 healthy donor PBMCs from frozen stock
- Cell killing measured by CellTiter Glo Assay
- 3-4 technical replicates