Quantitative Systems Pharmacology (QSP) Melanoma Model

Software capable of predicting efficacy for your novel therapeutics. This model is trained using data from 14-clinical trials, spanning 12 drug regimens and 4 distinct therapeutic agents including the standard chemotherapy treatment dacarbazine and emerging immuno-modulating therapies.

Key Applications

- Predict the efficacy for molecules and compounds under development
- Optimize clinical trial protocols, including treatment sequences, combinations and doses
- Compare different therapeutics with the same or similar targets or against existing treatments

Key Features

- Convenient, efficient, and thorough generation and calibration of virtual populations
- Includes both qualitative and quantitative data during model training
- Represents clinical trials with specific entrance criteria
- Plot and analyze simulation results in the same platform
- Automatically visualize connections between model components
- Export data to other programs for ad hoc analyses

Sound Science

Explicit handling

of tumor size enables modeling of the commonly-used RECIST standard

Generates

virtual populations that include inter-patient variability in pathophysiology as well as clinical endpoints

Core oncological

processes are explicitly represented, including cancer cell growth dynamics and pertinent interactions with biological components in skin tissue

Includes

detailed interactions between the tumor and immune responses, specifically those relevant to checkpoint inhibitor therapies

The melanoma model

incorporates cellular biochemical processes across multiple scales (eg, specific cells to clinical endpoints)