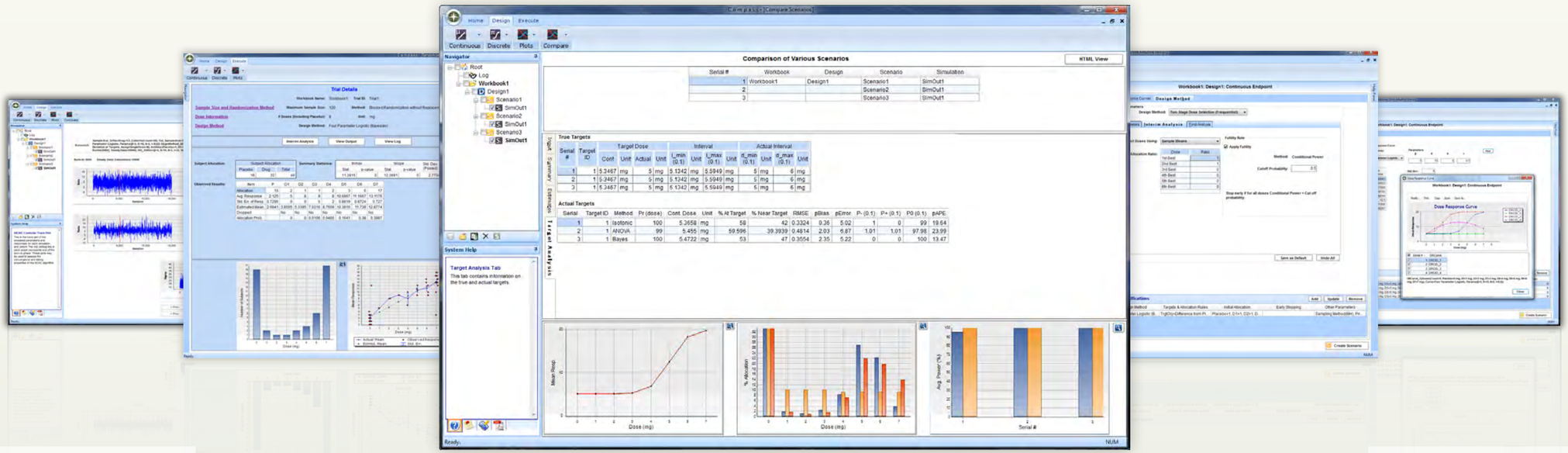
Compass™

Cytel

Get the Dose Right

Compass™

Accelerate the Design, Simulation, and Execution of Dose-Finding Studies



- Automatically performs interim analysis and adaptive randomization
- Randomization dashboard to monitor interim data
- Log file with audit trail to ensure integrity of trial

Get the Dose Right with Compass

Compass is Cytel's software package dedicated to the design, simulation, and execution of early phase clinical trials. Identifying the right dose is essential for later stage clinical success, and ultimately, market approval.

Compass provides a systematic way to investigate and compare conventional versus adaptive dose-finding designs. The adaptive approaches can help accelerate development timelines, reducing patients and costs.

Compass is the only software solution with both Bayesian and frequentist adaptive methods, and R code extensibility. The insightful simulation and visualization tools allow you to explore the operating characteristics and practical implications of your design.

Once a design has been chosen, Compass will perform the randomization, conduct interim analysis on imported data, and update allocation for the following cohort. A randomization dashboard allows you to monitor the interim data quickly and easily, while a detailed log file ensures the integrity of your trial.

Empower

Play a more strategic role in your organization. Compass simplifies and automates study design and simulation, freeing more of your time to contribute in greater ways to the success of your trial or program.

Assess

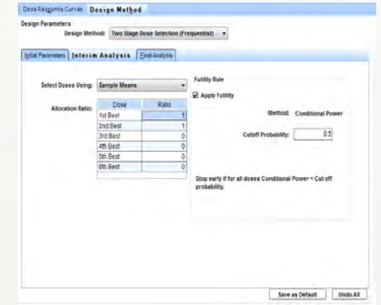
Rapidly generate multiple adaptive or conventional early phase designs. Easily perform sensitivity analysis to quickly evaluate a design's robustness to critical assumptions. Use the tables and graphs to compare the operating characteristics of different approaches.

Share

Communicate the merits of a trial plan to the project team with the help of readily understood graphs, tables, and flexible reporting capabilities. Share design properties in real time.

Trust

Compass has been intensively tested and validated. To execute a dose-finding trial, rely on the same dose randomization algorithms that power the simulations. An automatically generated log file provides an audit trail of decisions made throughout the trial.



- Simple two-stage designs for adaptively dropping doses
- Several methods for adjusting and combining p-values
- Early stopping rules by conditional power

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Get the Dose Right

What's new in Compass 2.0?

- Randomization dashboard for adaptive dose-finding trial execution
- Two-stage Bayesian and Frequentist designs for adaptively dropping doses
- Faster Bayesian Monte Carlo algorithms
- Early stopping for futility by conditional power in frequentist designs

Key Features & Benefits

- Model accruals and response time
- Flexibly allocate subjects in cohorts to a single or many doses
- Generate response data through dose-response models
- Modify simulations using your
- own R code
- Validated and tested software, currently used at the FDA
- Powerful customizable simulation engines for sensitivity analysis and prediction
- Customizable charts and tables to enhance communication with stakeholders
- Powerful response-adaptive randomizer and log file
- Excellent user manual, help tools, and technical support

Design Options

Frequentist

Up and down with 1 or 2 targets
T-test based up and down with 1 or 2 targets
Maximizing design
ANOVA
2-stage designs

Adjust p-values using Bonferroni, Simes, Sidak, Dunnett; Combine p-values using Inverse Normal, Fisher's Product

Bayesian

Four parameter logistic
Emax
Normal Dynamic Linear model
2-stage designs

Targets

Absolute differences
Differences from Placebo
Quantiles of the dose-response curve
Best dose
R specified target

Allocation logics

Probability that the dose is a target
Reduction in standard deviation
R specified allocation logic

Early stopping

Futility
Efficacy

Simulation outputs

Summary statistics
Simulation-specific stats
Patient level simulation data
Design simulation comparisons

Plots

Dose response curves
Distribution of subjects
Subject response
Mean squared error
Estimated means/proportions
Target doses
MCMC diagnostics
Credible intervals

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Request an Evaluation Today

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