Key Features & Benefits

- Verified and extensively tested software, currently used at the FDA
- More clinical trial designs than any other platform
- Wide choice of traditional and group sequential designs, incorporating the latest statistical methodologies to design innovative adaptive trials
- Flexible options for survival designs
- Powerful customizable simulation engines for sensitivity analysis and prediction
- Convenient trial monitoring dashboard to analyze interim data and facilitate decision-making
- Customizable charts and tables to enhance communication with stakeholders
- Comprehensive user manual & help tools
- Industry-leading and responsive technical support

What’s New?

Three new modules: MCPMOD, ENRICH, PROGRAM

- Design and analyze dose-finding studies using MCPMod methodology
- Simulate clinical trials with flexible adaptation options for population enrichment and strong control of type I error
- Simulate a sequence of ancillary trials with flexible Go/No-Go rules

Disable efficacy or futility boundaries at selected interim looks

Compute Bayesian probability of success and predictive power

Design and simulate survival studies accounting for stratification

Test multiple hypotheses using graphical methods

Major Enhancements to Existing Modules:

BASE
- Design trials with Super Superiority margin

SEQUENTIAL
- Design group sequential trials for equivalence studies

SURVIVAL
- Generate Go/No-Go based survival simulations with survival and binary intermediate endpoints

ADAPT/SURVADAPT
- Conduct SBI sample size re-estimation for Non Inferiority design and flexible monitoring with Muller and Schafer

MAMS
- Generate MAMS (multi-arm multi-stage) designs with Discrete endpoint and p-value combination approaches. Survival endpoints as well as continuous endpoints

PREDICT
- predict events using Weibull distribution

ESCALATE
- alternative method mTPI-2

ENDPOINTS
- simulate trials with mixed endpoints

Fixed Sample Size & Group Sequential Designs for Superiority, Non Inferiority and Equivalence

Charts & Tables

- Display boundaries on multiple scales (Z, score, delta, conditional power)
- Selectively apply efficacy and/or futility boundaries at each look

Families
- Error Spending Functions
- Zemel (Chen, Pocock, O’Brien-Fleming, Gamma, Rho, Interpolated, Generalized Halbedel-Peto
- Wang-Tsiatis
- Peto-Glazier
- p-value
- Conditional Power
- Delta/Sigma

Options
- Unequal Spacing of Looks
- Boundaries at Selected Looks
- Non-Binding Futility Boundaries

Interim Monitoring Dashboard

- Error Spending Function
- Conditional Power
- Adjusted p-value
- Adjusted Point Estimate
- Post-Hoc Power
- Repeated Confidence Intervals

Survival Design Options

- Piecewise Hazards, Dropout & Accrual
- Simulate Non-Proportional Hazards
- Flexible or fixed follow-up
- Committed Accrual Duration or Subjects
- Stratified sampling and stratified logrank tests

Multiple Comparison Procedures

- Dunnett’s Single Step & Step Down
- Bonferroni & Weighted Bonferroni
- Sidak
- Holm’s Step Down
- Hochberg’s Step Up
- Fixed Sequence
- Fallback

Stopping Boundaries
- Average Sample Number
- Error Spending
- Error vs. Treatment Effect
- Sample Size/Events vs. Time
- Study Duration vs. Accrual

Fixed Sample Size & Group Sequential Designs

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Succeed with East®

Successful studies begin with the right design. East is the industry standard for designing adequate and well-controlled clinical trials as per FDA and EMA guidance. Since 1994, East has reliably and continuously enabled drug and medical device trial sponsors of all sizes to optimize their trial planning and monitoring efforts.

About Cytel Architect®

A modern and fully verified platform, specifically built to support clinical study planning and analysis, Cytel Architect opens new possibilities for innovation in design software by providing:

- An intuitive user experience to make complex methods
- Powerful simulation capabilities and data exploration tools
- R and SAS integration for users to extend core capabilities
- Customizable reporting tools to create documents with all the salient design operating characteristics
- A common integrated environment for all of Cytel’s design packages: Compass, and East®

Empower

Play a more strategic role in your organization. East 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 fixed, group sequential, and adaptive designs. Easily evaluate the robustness of your design to critical assumptions by performing sensitivity analysis. Use the tables and graphs to compare the operating characteristics of different approaches.

Share

Communicate the merits of various trial design options to the project team with the help of readily understood graphs, tables, and flexible reporting capabilities. Share design properties in real time with East Architect’s powerful simulation capabilities.

Trust

Depend on East, knowing it has been fully verified and intensely tested. East-generated designs have been relied upon for 25 years in countless actual studies at all the major pharmaceutical, biotech companies, and the FDA.

Streamline the Design, Simulation, and Monitoring of Fixed and Adaptive Clinical Trials

- Simultaneously compare and contrast power curves for several designs
- View plot data to create tabular displays of operating characteristics
- Customize charts for effective communication with team members
- Make data driven predictions
- Predict enrolments and events at the planning as well as interim stage
- Provide time-sensitive recommendations in an on-going study
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- MCPMOD, ENRICH, PROGRAM
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  - Simulate a sequence of oncology trials with flexible Go/No-Go rules
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- Test multiple hypotheses using graphical methods

**Fixed Sample Size & Group Sequential Designs**

for Superiority, Non Inferiority and Equivalence

**Charts & Tables**

- Display boundaries on multiple scales: Z-score, p-value, delta, delta/sigma
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Game-changing new features in Multiple Comparison Procedure - Modelling, Population Enrichment, and Program Design, address emerging and persistent challenges in modern drug development.

East MCPMOD

The European Medicines Agency (EMA) has qualified the Multiple Comparison Procedure – Modelling (MCP-Mod) approach as an efficient statistical methodology for design and analysis of phase II dose finding studies under model uncertainty. East MCPMOD allows for the design and analysis of such studies for normal, binomial and count endpoints, with a variety of candidate models, dose selection criteria, and optimal allocations.

East ENRICH

East ENRICH supports the simulation of clinical trial designs with adaptation options for population enrichment, while strongly controlling type-1 error rate. It provides flexibility in defining the promising zone for sample size increase, and enrichment zone for subgroup selection.

East PROGRAM

East PROGRAM simulates a sequence of clinical trials within an oncology program. One can simulate a dose escalation trial (3+3, mTPI, CRM, BLRM, from East ESCALATE) followed by a cohort expansion phase. Alternatively, one can simulate a single-arm Phase 2 trial followed by a two-arm Phase 3 two trial. Both alternatives allow for the incorporation of flexible Go/No-Go rules.

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Other Enhancements:

**BASE**
Super Superiority

**MAMS**
Binomial multi-stage
Survival p-value combination

**SEQUENTIAL**
Equivalence Group Sequential

**ADAPT/SURVADAPT**
SSR for Non-Inferiority designs

**PREDICT**
Weibull distribution

**ESCALATE**
mTPI-2

**MEP**
Mixed endpoint type
gMCP

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East Modules

East® supports flexible configurations of Fourteen modules, allowing users to choose a variety of packages based on their unique design needs.

New Modules
May Require Additional Modules

**MCPMOD**
**ENRICH**
**PROGRAM**

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