Two Arm Time-To-Event Outcome: Patient Outcome Simulation Examples

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# Two Arm, Time-To-Event Outcome - Patient Outcome Simulation Examples

This example demonstrates how to add new patient outcome simulation functionality into East using an R function.

For all examples, we assume the trial design consists of standard of care and an experimental treatment. The patient outcomes are time-to-event. The intent of these examples is to demonstrate how to add new ways to simulate time-to-event data using R.

**East Workbook**: 2ArmTimeToEventOutcomePatientSimulation.cywx

**R Studio Project File**: 2ArmTimeToEventOutcomePatientSimulation.Rproj.

In the RCode directory of this example you will find the following R files:

1. 2ArmTimeToEventOutcomePatientSimulationExample1.R - This file provides an example R function to simulate patient time-to-event data from a Weibull distribution.
2. 2ArmTimeToEventOutcomePatientSimulationExample2.R - This file provides an example R function to simulate patient data from a mixture of exponential distributions. The mixture is based on having any number of patient groups in the study where each group has a different Exponential distribution for simulating the time-to-event from.

In addition, if you would like to experiment with these examples to and would like some code to help you get started, we have provided fill-in-the-blank type code files in the FillInTheBlankRCode directory.

## Example 1 - Simulation of Patient Time-To-Event Data from a Weibull Distribution

To replace the patient outcome simulation..

## Example 2 - Simulation of Patient Time-To-Event Data from a Mixture of Distributions

Simulate patient data from a mixture of exponential distributions. The mixture is based on having any number of patient groups in the study where each group has a different Exponential distribution for simulating the time-to-event from.