MSToolkit: Distributed R for the creation and analysis of simulated clinical trial data

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Abstract

A key tool in the area of pharmaceutical research is simulation-based modeling. This requires the generation and analysis of clinical trial datasets, which can be both complex and computationally intensive.

Pfizer and Mango Solutions collaborated on the development of an R package which allows the generation and analysis of simulated clinical trial data. In order to leverage existing IT infrastructure and programming skillsets, the package was integrated closely with the internal Pfizer Linux Grid cluster. The package was designed to allow SAS to be called as well as R in order to perform the required analyses.

This presentation will discuss the design and implementation of the MSToolkit package, before giving a demonstration of its use.