siera R package

# Overview

This R package ingests ARS metadata (JSON or xlsx), and produces (meta-programmes) R programmes that generate the ARDs (one ARD per output specified in the ARS metadata). When supplied with the underlying ADaM datasets, these R programmes can be run as-is to generate the ARDs.

## Scope

The current scope includes:

### Operations

* Count (n)
* Mean
* Median
* Q1 and Q3
* Min and Max
* Percentage counts based on bigN
* ANOVA p-value
* Chi-Squared p-value

### Working examples

* CDISC ARS Example – complete (5)
* eTFL Portal (1) – all except Risk Difference

## Assumptions

* A fully completed ARS document (JSON or xlsx) is available
* The underlying ADaM datasets are available (if ARD programmes need to be run)

# Package timeline estimate

## High-level estimate to CRAN release

## Package requirements

* Logo
* Public GitHub
  + Created
* Documentation

## Development aim / requirements

### TFL Designer

* ARS-ready export (xlsx and JSON)
  + “Overall” column – different Analysis + Data Subset
  + Denominator – Big N assumption

### siera package

* Option for user to use existing “Operations” Library
* Additional option for user to reference own Operation R script in ARS metadata