TITLE: Interactive Data Visualization for Enhanced Clinical Trial Reporting

ABSTRACT

<u>Wonderful Wednesday (WW)</u> is an initiative of the <u>Visualization Interest Group (VIS SIG)</u> within the Statisticians in the <u>Pharmaceutical Industry group (PSI)</u>, focusing on enhancing data visualization skills for clinical trials. I have actively contributed to this open-source initiative, improving interactive trial reports and statistical data visualization.

During the presentation, attendees will be introduced to a comprehensive interactive subject profile comprising numerous Analysis Data Model (ADaM) datasets, offering a well-rounded view of each participant. Additionally, we will showcase dataxray, a tool designed to generate concise statistical descriptions of these datasets. We will conclude by presenting a detailed statistical analysis report displaying individual patient data and overall treatment effects on a unified dashboard.

A key benefit of these interactive reports is their ability to be easily shared (emailed, deployed on an internal company webpage, or added to GitHub pages) due to their server-free architecture. Efforts are also underway to integrate these reports into production by incorporating them into the safety monitoring system for clinical trials.

LINKS

Designing a visual patient profile:

Dashboard: https://agstn.github.io/PatientProfiler/PatientProfiler.html

CODE (repo): https://github.com/agstn/PatientProfiler

dataxray: An interactive table interface for data summaries

Example: https://agstn.github.io/dataxray/

ADSL Example: https://rpubs.com/acalatroni/863850 CODE (repo): https://github.com/agstn/dataxray

Glucose Monitoring (CGM) Visualization

Report: https://agstn.github.io/CGM/ CODE: Embedded in the Report

Table of contents of All WW contributions:

CODE & Visualizations: https://github.com/agstn/WW