StatsVia

TRAINING & WORKSHOPS

COURSE 02 · HANDS-ON WORKSHOP

R Programming for Clinical Trials: Statistical Analysis & Reporting

Use R and the pharmaverse to build ADaM datasets, run the analyses a clinical study report needs and produce submission-style tables, listings and figures.

```
adsl <- dm |> derive_vars_merged(ex, by_vars = exprs(USUBJID))
fit <- mmrm(CHG ~ TRT01P * AVISIT + BASE + us(AVISIT | USUBJID), data = adlb)
```

WORKSHOP AT A GLANCE

8 modules with hands-on labs
From R setup for regulated work to an end-to-end mini CSR.

The pharmaverse toolkit
admiral, xportr, gtsummary, rtables, tern and mmrm.

Analyses that matter
ANCOVA, MMRM, logistic regression, Kaplan–Meier and Cox models.

Code you keep
A ready-to-use R project and reusable TLF templates.

WHY LEARN WITH STATSVIA

Taught by practitioners
Statisticians who analyse and report trials across all therapeutic areas.

Ready for SAS users
Side-by-side comparisons make the move from SAS to R practical.

Biostatistics Solutions · Hyderabad, India

connect@statsvia.com · +91-9704623666

COURSE 02 · HANDS-ON WORKSHOP

StatsVia

R Programming for Clinical Trials: Statistical Analysis & Reporting

Use R and the pharmaverse to derive ADaM datasets, run the analyses a clinical study report needs and produce submission-style tables, listings and figures.

WHO SHOULD ATTEND

SAS programmers moving to R

Biostatisticians who analyse trial data

Graduates entering clinical research

YOU WILL BE ABLE TO

Build ADaM datasets with admiral

Run core efficacy and safety analyses

Produce submission-style TLFs

QC and document work reproducibly

BEFORE YOU JOIN

Introductory statistics

Some programming experience; R basics help

Bring a laptop with R and RStudio installed

Course modules

Labs use the public CDISC pilot study data

01 R for regulated work
RStudio projects, renv and package management, reproducibility and validation considerations.

02 Clinical data wrangling
Reading SAS datasets with haven, dplyr and tidyr, dates with lubridate, variable labels and formats.

03 ADaM with pharmaverse
Deriving ADSL, ADAE, ADLB and ADTTE with admiral; metadata and transport files with metacore and xportr.

04 Statistical analysis
Summary statistics, t-tests and chi-square, ANCOVA with emmeans, logistic regression.

05 Longitudinal & survival
MMRM with the mmrm package; Kaplan–Meier, log-rank tests and Cox models with survival.

06 Tables & listings
Demographics, adverse event and efficacy tables with gtsummary, rtables, tern and Tplyr; RTF and Word output.

07 Figures
ggplot2 for Kaplan–Meier curves, forest plots, mean change and waterfall plots in submission style.

08 QC, automation & capstone
Double programming against SAS, diffdf and logrx, Quarto reports, and an end-to-end mini CSR.

PACKAGES & TOOLS

R · RStudio · tidyverse · admiral · xportr · gtsummary · rtables · tern · mmrm · survival · ggplot2 · Quarto

YOU TAKE AWAY

Course notes, a ready-to-use R project with every lab script, and reusable TLF templates for your own studies.

HOW THE WORKSHOPS RUN

Choose the format that suits your team

Open workshops

Join programmers and statisticians from other organisations in a scheduled batch.

In-house training

A private batch for your team, tailored to your SOPs, standards, data and tools.

Live online

Instructor-led sessions with shared lab environments, wherever your team is based.

EVERY WORKSHOP INCLUDES

- ✓ Hands-on labs in every module
- ✓ Course notes, datasets and code to keep
- ✓ Q&A with senior statisticians and programmers
- ✓ Small batches, so each participant gets support

BUILD THE FOUNDATION

New to CDISC? Pair this workshop with Course 01, CDISC SDTM & ADaM for Statistical Programmers, to learn how the datasets you analyse are built.

01 · SDTM & ADaM → **02 · R analysis & reporting**

ENQUIRE OR REGISTER

Ask us for upcoming dates, fees and in-house options.

EMAIL
connect@statsvia.com

PHONE
+91-9704623666
+91-9391934799

REGD. OFFICE
Plot No: 118, 1st Floor, Lakshmi Narasimha Puram Colony, Karmanghat, Rangareddy, Hyderabad – 500079