	A PSI/GSK Training Course
1st November 2021 – 5 week virtual course	**R for Clinical Trial Statisticians** **Presented by:** **Andy Nicholls** **(GSK)**

R is quickly gaining popularity within the pharmaceutical industry due to it being a very powerful object-orientated language, and is able to produce analyses and high quality graphics. It can be used for high performance computing and allows easy integration with other software.

This course is aimed at clinical trial statisticians who are experienced with other software languages (such as SAS) and would like to increase their proficiency in R. The content can also be applied more widely in a non-clinical trial context.

Participation will provide access to extensive course materials in the form of a 'bookdown' site. However, this is designed as a hands-on, interactive course. Both you and the trainers will work entirely within the RStudio Cloud development environment, which will remain accessible between virtual sessions in order to further explore and cement your understanding.

Topics covered include:

1. Introduction to R and RStudio
2. Data types and vectors
3. Welcome to tidyverse
4. Importing/exporting data
5. Handling data
6. Piping
7. Summaries and aggregation
8. Setting and merging

9. Transposing data
10. Introduction to statistical analysis in R
11. R Graphics with ggplot2
    a. Layering
    b. Aesthetics and groups
    c. Graph types: geoms
    d. Panelling: faceting
    e. Themes and styling

This course consists of 5 2-hour training sessions run over 5 weeks, and approximately 4-5 hours of self-practice. Each training session will be repeated on two mornings per week (09:45am – 12:00pm)
Session 1: Monday 1st Nov or Tuesday 2nd Nov
Session 2: Monday 8th Nov or Tuesday 9th Nov
Session 3: Monday 15th Nov or Tuesday 16th Nov
Session 4: Monday 22nd Nov or Tuesday 23rd Nov
Session 5: Monday 29th Nov or Tuesday 30th Nov

Note: A technical requirements drop in session will be scheduled the week before the course to ensure delegates can access the R Studio Cloud workspace and virtual training environment

Registration

Please register online at www.psiweb.org and click on Events.
Registration costs PSI Members on or before 1st October: £320 plus vat PSI Member after 1st October: £360 plus vat Non-Members on or before 1st October: £445 plus vat (includes PSI membership for 2022) Non-Member after 1st October: £485 plus vat (includes PSI membership for 2022)