

# Navigating Programming Language Transitions in Pharma



Community Meeting  
12:00 EST  
26<sup>th</sup> Nov, 2024

# R Consortium Pragmatic Support with Global Reach

- R Consortium Community **Grants** and Sponsorships Over **USD \$1.4 Million**
- Organize large scale **collaborative projects**
  - **R Validation Hub**
  - R-Ladies
  - R Submissions Working Group
- Co-host multidisciplinary **data science forums**
  - Stanford Data Institute
- Direct support for key **R events**
  - useR!, New York R, R/Medicine, R/Pharma, more
- Direct support for **R User Groups**





# Join the R Consortium!

*The R Validation Hub is a Working Group under the R Consortium*



- Enhance the R ecosystem
- Help ensure the future of R
- **Collaborate** with your peers across industry
- Provide **leadership** in the **R Community**
- **Protect** your **investment** in R
- Support open source

# Our Membership

**Genentech**  
*A Member of the Roche Group*



Microsoft



**posit**<sup>TM</sup>

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UNLOCKING DATA TO DRIVE YOUR BUSINESS

**GSK**



esri



**Pfizer**

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Google

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AMERICAN STATISTICAL ASSOCIATION  
Promoting the Practice and Profession of Statistics<sup>®</sup>

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**ASCENT**





# Understanding each other (poll)

- What industry you are in?
- What programming language do you use for most of your work (R, SAS, etc)?
- What does your programming support? (GxP work, Exploratory Data analysis, etc)
- Is there interest in your company in switching over to R for clinical work?





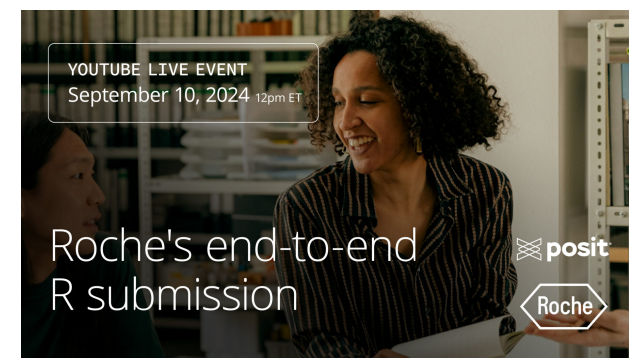
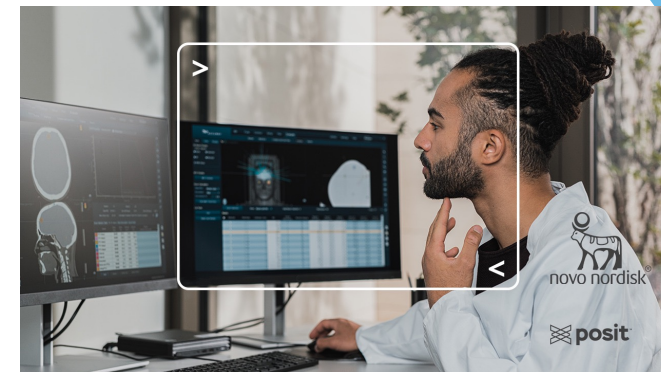
# Structure of today's community meeting

- Overview of industry examples of using R
- Discussion
  - Do you have preferences in using R vs SAS for different kinds of work? For instance, for submissions, general analysis, etc.
  - Are there any obstacles to switching and what are the parts that make it easy?
  - Examples of success/pain points in transitioning to R
  - And more...



# Examples of R in the Industry

- *Novo Nordisk: Journey to an R-based FDA submission*  
([posit.co blog link](#) / [YouTube link](#)) – September 2023
  - Submitted its first R-driven package to the FDA
  - An in-depth look at Novo Nordisk's computing platform and internal R package suite
  - Risk assessment categorization heavily based on the R Validation Hub `{riskmetric}` along with an internal app for users to submit packages
- *Roche's end-to-end R submission for a new drug application*  
([posit.co blog link](#) / [YouTube link](#)) – September 2024
  - Showcases use of open-source R in regulatory submission process
  - Effective presentation and validation of R-generated data and documentation
  - Broadly followed R Validation Hub's white paper
- *These are just a couple of examples! Which others can you think of?*



# Discussion Questions

- Do you have preferences in using R vs SAS for different kinds of work? For instance, for submissions, general analysis, etc.
- Are there any obstacles to switching and what are the parts that make it easy?
- Examples of success/pain points in transitioning to R
- And discuss anything more under related to our discussion topic (*Navigating Programming Language Transitions in Pharma*) as you wish!





**Thank you for joining!**

