![R consortium logo]

Food and Drug Administration
Center for Drug Evaluation and Research 5901-B Ammendale Road
Beltsville, MD 20705-1266

Re: R Consortium R Submission Pilot 3 (ADaM extension)

Dear Sir/Madam:

This letter serves as an introduction to the R Consortium R Submission Pilot 3 (an ADaM extension
to Pilot 1) focusing on the submission of ADaM data. The objective of this R submission Pilot 3 is to test the
concept that an R-language based submission package is aligned with FDA requirements and meets the expec-
tations of the FDA Staff, including assessing code review and analyses reproducibility. All submission materi-
als and communications from this pilot will be shared publicly, with the aim of providing a working example
for future R language based FDA submissions. This is an FDA-industry collaboration through the non-profit
organization R Consortium.

The R Consortium R submission Pilot 3 (an ADaM extension to Pilot 1) package follows the eCTD folder
structure and contains the following module 5 deliverables:
- A cover letter
- SAS transport files (xpt) data generated using R
- R code to generate 5 ADaM datasets which were used to generate the outputs from the Pilot 1 R sub-
  mission
- Outputs that were regenerated from Pilot 1 using these R ADaM datasets generated in this project
- One proprietary R package "pilot3"
- An Analysis Data Reviewer's Guide (ADRG)

In this pilot, we aimed to provide a working example of R submission in eCTD format to the
pharmaceutical industry in compliance with the FDA Electronic Submissions Gateway requirements. Based
on the submission package, FDA Staff can review and reproduce submitted R codes. More specifically, we ex-
pect the FDA Staff to
- Receive electronic submission package in eCTD format
- Load the submitted proprietary R package (i.e. "pilot3"))
- Install and load open source packages used in this submission
- Reproduce the ADaM datasets and analysis results
- Share potential improvements to the submission deliverables and processes via written
  communication

All data, code, material and communications from this pilot will be shared publicly.

Different open-source packages were used when generating each of these ADaM datasets to test wider use
case scenarios. Evaluating FDA's acceptance of system/software validation evidence is not in the scope of this
pilot.

On behalf of the R Consortium R Submission Working Group, we hope the R submission Pilot 3 (an ADaM
extension to Pilot 1) can establish a working example to guide the industry for future submission using the R
language.

Kind regards,

Pilot 3 Team