Pirana

The flexible modeling environment for NONMEM

Quick Guide: Xpose graphics using Pirana

Version 1.1

Scope

This Pirana Quick Guide explains how to use Pirana to generate diagnostic graphs using Xpose. Please note that a separate Quick Guide describes how to create VPCs in PsN / Xpose.

Generating appropriate NONMEM output tables for Xpose

- Before Xpose diagnostic graphics can be generated, the model first needs to be executed while generating output tables in a specific format and naming.
- Briefly, for a controlstream named run10.mod, output tables such as sdtab10 (observations/predictions), patab10 (parameters), cotab10 (continuous covariates), and catab10 (categorical covariates) should be generated, with the NOPRINT and ONEHEADER options.
- For more information on how to generate Xpose-ready $TABLE output files, please refer to the Xpose manual.

Generating Xpose graphs using the integrated Pirana menu

- Select the preferred run and select Xpose from the right mouse-button menu, and subsequently 'Run Xpose commands' (Figure 1).
- In the dialog window that is opened, different Xpose graphs may be selected and defined (Figure 2).
- From the **Commands menu** (red square), **multiple** Xpose plots may be added to the included list of Xpose plots.
- Additional **Arguments** may be specified for each Xpose command. A reference to possible arguments is provided under the **?** sign.

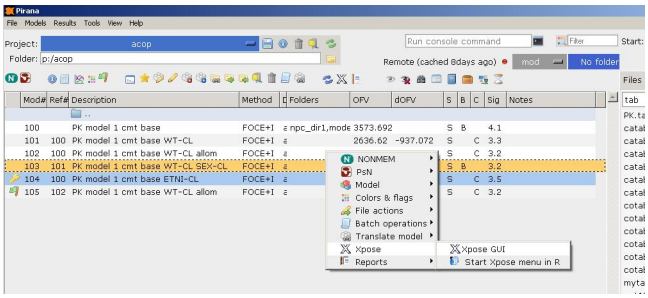

Figure 1: Selecting a run and executing the Rub Xpose commands winow

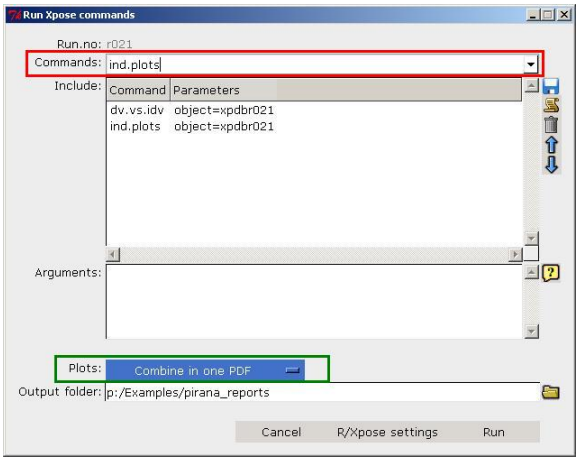

Figure 2: Run Xpose commands window

- Several options are available for the output format of the **Plots**. The easiest option is to automatically generate the graph and save as PDF (default) or PNG file.
- If multiple Xpose graphs are selected, these will be appended in the output file (except PNG).
- Alternative output formats of the plots are to generate the R-code only, or to to generate Sweave code for LaTeX documents.
- If all settings have been configured, the plot(s) may be generated by pressing the execute button ($>$).
- If output was directed to a PDF file, the PDF will be opened automatically once it is generated (Figure).
- Lists of commands can be saved and loaded from this dialog as well. This can be useful e.g. for standardized report generation.

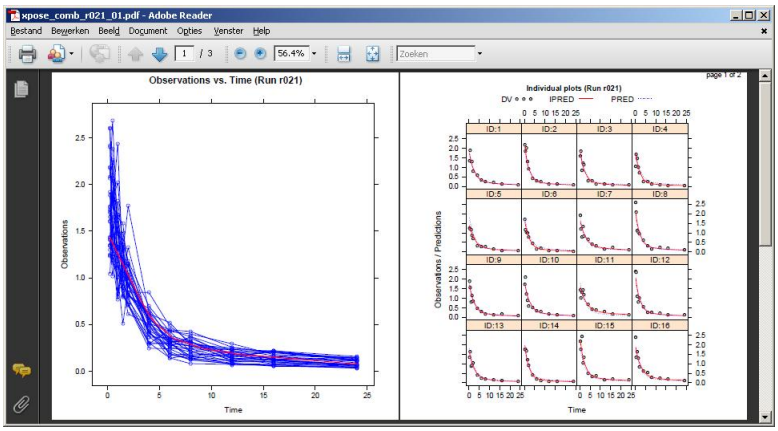

Figure 3: Xpose graphs in output PDF file

Generating Xpose graphs using the conventional menu in R

- Alternatively, it is possible to automatically open the text-based Xpose menu in R from within Pirana.
- Select the preferred run and select Xpose from the right mouse-button menu, and subsequently ' Start Xpose menu' (Figure 1).
- The Xpose menu will now be started in R and the associated table files will be loaded into Xpose, from where graphs may be generated.