ggPMX standing report

/home/matt/src/nlmixr/vignettes $18\ October,\ 2019$

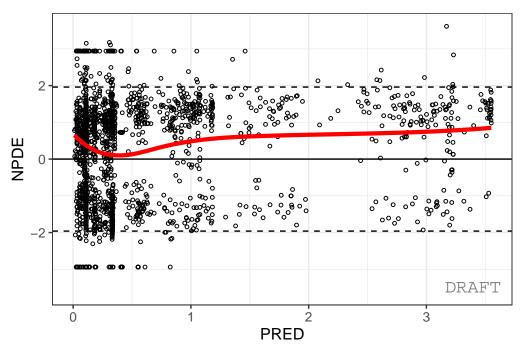
Contents

Key model diagnostics	2
NPDE vs PRED	2
NPDE vs TIME	
IWRES vs IPRED	
IWRES vs TIME	
Distribution of random effects	
VPC	
Supplementary diagnostics	8
Distribution of IWRES	8
EBE-based diagnostics	
Observations vs predictions	
Residual plots	
ndividual plots (selection)	16
tratified key diagnostics	17
NPDE vs TIME by categorical covariates	17
IWRES vs TIME by categorical covariates	
VPC by categorical covariates	

Key model diagnostics

NPDE vs PRED

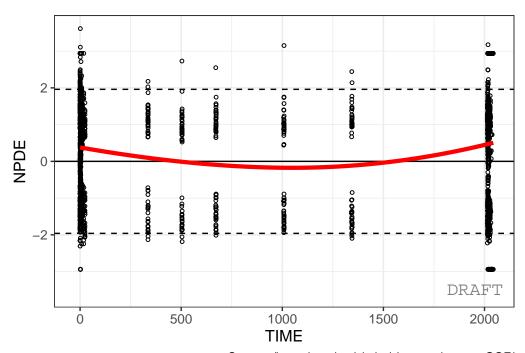
NPDE vs PRED



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/npde_pred-1

NPDE vs TIME

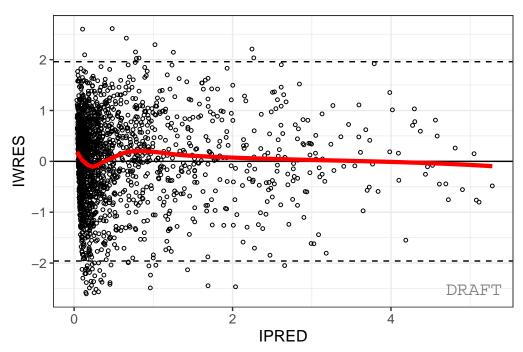
NPDE vs TIME



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/npde_time-2

IWRES vs IPRED

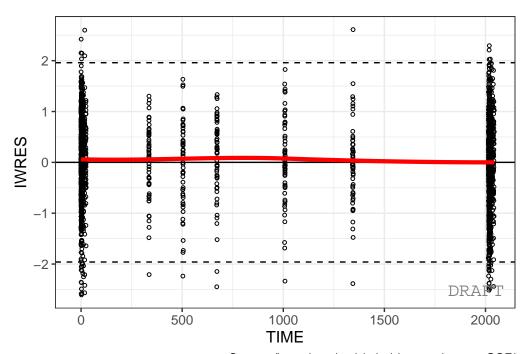
IWRES vs IPRED



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/iwres_ipred-3

IWRES vs TIME

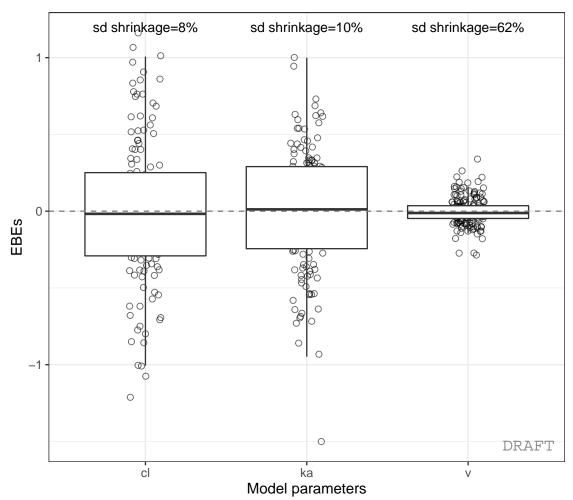
IWRES vs TIME



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/iwres_time-4

Distribution of random effects

EBE distribution



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/eta_box-5

\mathbf{VPC}

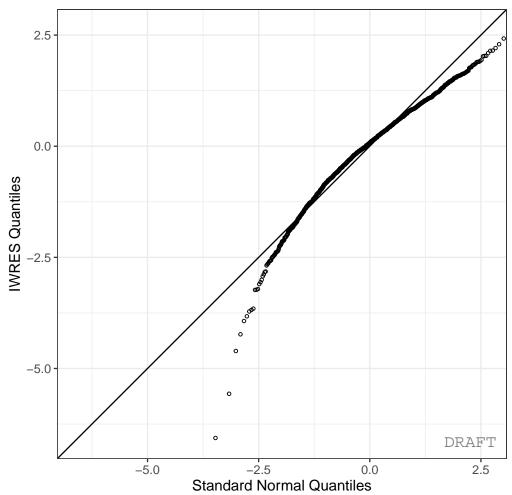
Percentile VPC (with observations) 7.5 5.0 0.0 1000 TIME

Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/ pmx_vpc-6

Supplementary diagnostics

Distribution of IWRES

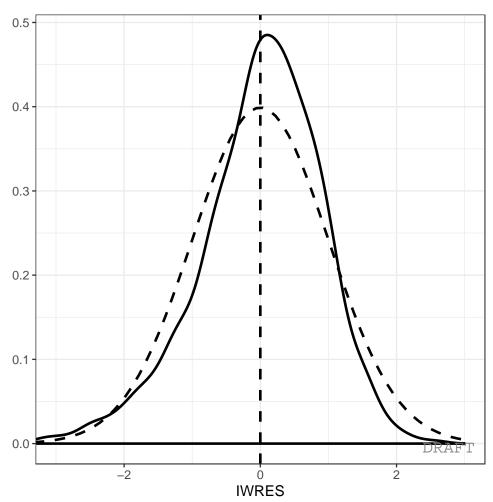
QQ plot of IWRES



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/iwres_qq-7

Distribution of IWRES

Density plot of IWRES

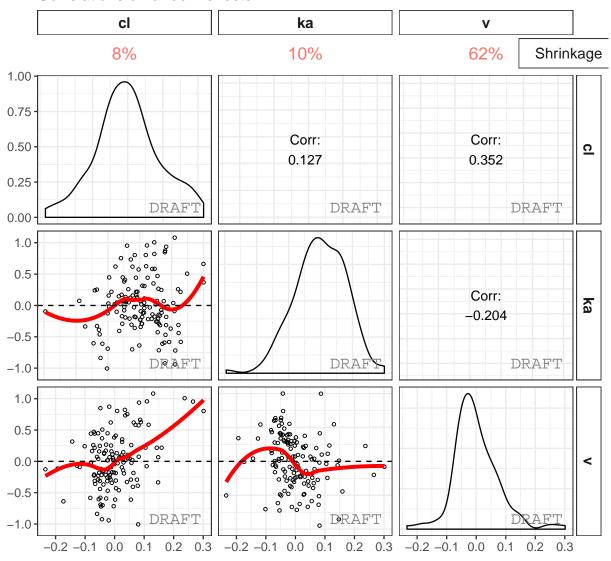


Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/iwres_dens-8

EBE-based diagnostics

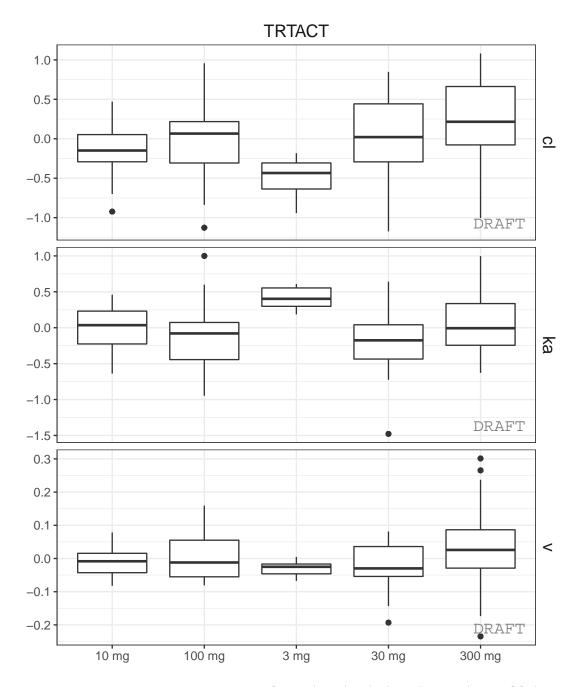
Distribution and correlation of EBEs

Correlations of random effects



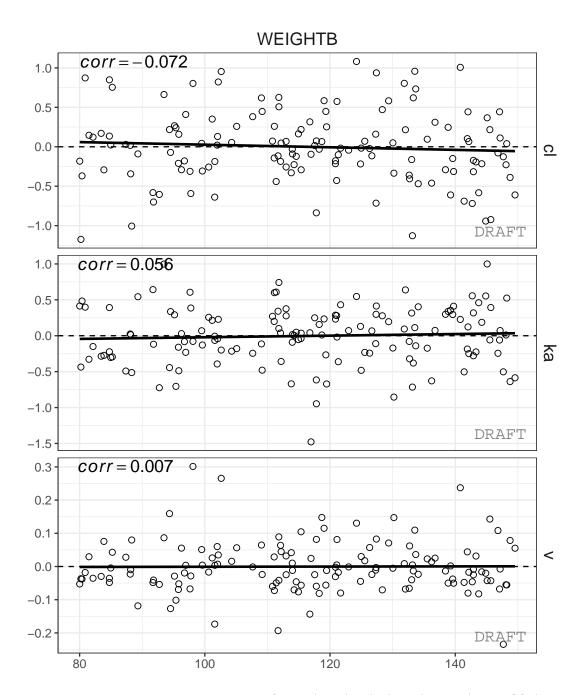
Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/eta_matrix-9

EBE vs. covariates



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/eta_cats-10

EBE vs. covariates

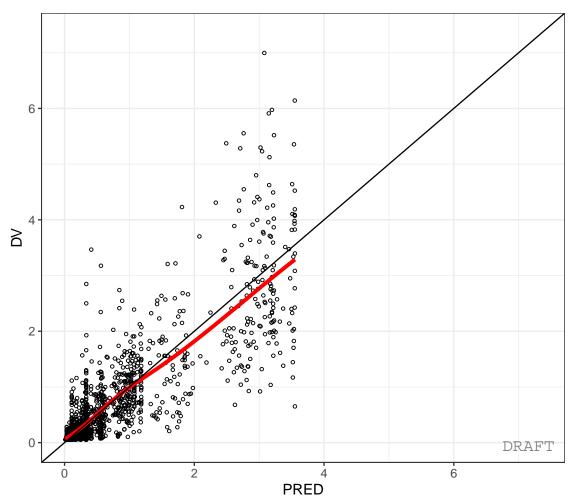


Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/ eta_conts-11

Observations vs predictions

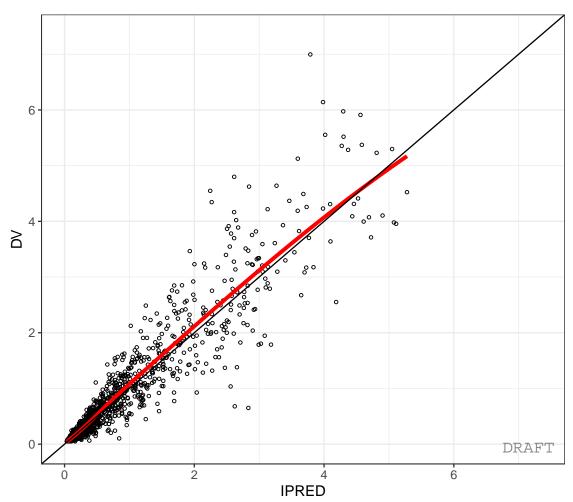
DV vs PRED

DV vs PRED



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/ dv_pred-12

DV vs IPRED

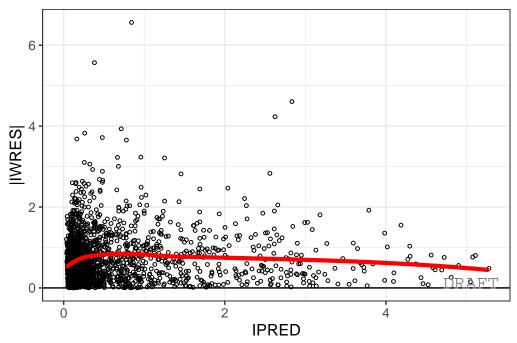


Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/ dv_ipred-13

Residual plots

|IWRES| vs IPRED

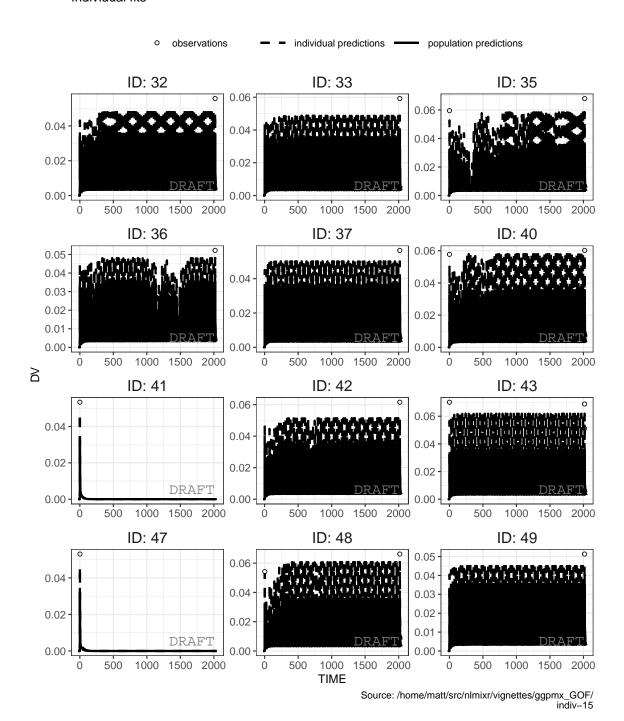
|IWRES| vs IPRED



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/ abs_iwres_ipred-14

Individual plots (selection)

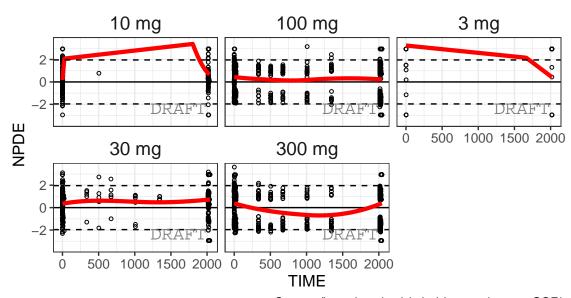
Individual fits



Stratified key diagnostics

NPDE vs TIME by categorical covariates

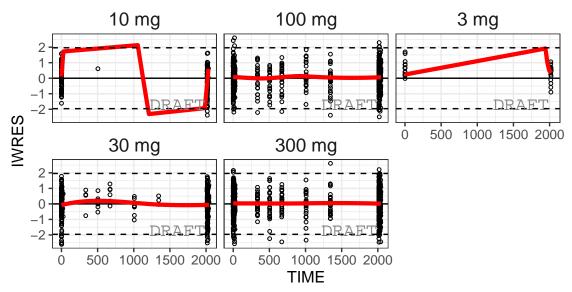
NPDE vs TIME by TRTACT



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/npde_time-16

IWRES vs TIME by categorical covariates

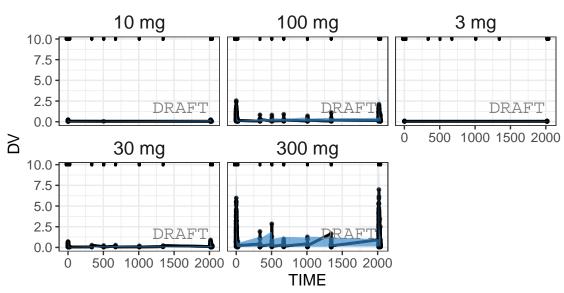
IWRES vs TIME by TRTACT



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/iwres_time-17

VPC by categorical covariates

Percentile VPC by TRTACT (with observations)



Source: /home/matt/src/nlmixr/vignettes/ggpmx_GOF/pmx_vpc-18