Results summary for: CONTROL5

Report generated: 2018-8-22, 16:56:51
Report created by: Sungpil Han
Contents:

General run info:

```
Description       THEOPHYLLINE    POPULATION DATA
NONMEM model file  CONTROL5.ctl
NONMEM output file CONTROL5.out
Reference model   -
NONMEM version    version 7.4.3
Author            Sungpil Han
Dataset           THEOPP
  Dataset ignored -
  Dataset accepted -
# individuals      12
# observations    132
Output file date  N/A
Run started       -
Run finished      -
Table files
Attached folders
Drug
Protocol
Notes in Pirana    Project: Pirana exploration
```

Estimation results: #1 First Order

```
Objective function value: 104.561
Termination message:     minimization successful
                         no. of function evaluations used:      149
                         no. of sig. digits in final est.:  4.7
                         total data points normally distributed (n):        132
                         n*log(2pi) constant to objective function:     242.59977276603360
                         objective function value without constant:     104.56106631146798
                         objective function value with constant:        347.16083907750158
                         reported objective function does not contain constant
                         total effective etas (nind*neta):                     36
                         elapsed estimation  time in seconds:     0.07
                         elapsed covariance  time in seconds:     0.01
                         elapsed postprocess time in seconds:     0.00
                              1
Checks:                  No boundary problems reported by NONMEM
                         All gradients non-zero during estimation
Condition number:        na
```

Table 1: Run CONTROL5. #1 First Order.

Θ	Parameter	Estimate	SE	RSE	95% CI	low
1	MEAN ABSORPTION RATE CONSTANT (1/HR)	2.77	0.708	25.6	4.158 - 1.382	0.
2	MEAN ELIMINATION RATE CONSTANT (1/HR)	0.0781	0.007	9.3	0.092 - 0.064	0.0
3	SLOPE OF CLEARANCE VS WEIGHT RELATIONSHIP (LITERS/HR/KG)	0.0363	0.005	12.5	0.045 - 0.027	0.0

Ω^2	Description	1		2		3	
1		5.55	(87%)				
2		0.0052	(267.2%)	0.0002	(50.8%)		
3		-0.128	(371.1%)	0.0091	(40.9%)	0.515	(41.2%)

Ω	Description	1		2		3	
1		235.6%	(43.5%)				
2		14.4%		1.5%	(25.4%)		
3		-7.6%		81.9%		71.8%	(20.6%)

Σ^2	Description	1	
1		0.388	(27.062%)

hypertargetmodelfileNONMEM control stream

```
;; x1. Author: Sungpil Han
$PROB   THEOPHYLLINE   POPULATION DATA
$INPUT      ID DOSE=AMT TIME CP=DV WT
$DATA       THEOPP

$SUBROUTINES  ADVAN2

$PK
;SCALING PARAMETER=VOLUME/WT SINCE DOSE IS WEIGHT-ADJUSTED
   CALLFL=1
   KA=THETA(1)+ETA(1)
   K=THETA(2)+ETA(2)
   CL=THETA(3)*WT+ETA(3)
   SC=CL/K/WT

$THETA
(.1,3,5) ; MEAN ABSORPTION RATE CONSTANT (1/HR)
(.008,.08,.5) ; MEAN ELIMINATION RATE CONSTANT (1/HR)
(.004,.04,.9) ; SLOPE OF CLEARANCE VS WEIGHT RELATIONSHIP (LITERS/HR/KG)

$OMEGA BLOCK(3)  6 .005 .0002 .3 .006 .4

$ERROR
   Y=F+EPS(1)

$SIGMA  .4

$EST    MAXEVAL=450  PRINT=5
$COV
$TABLE          ID DOSE WT TIME
$SCAT           (RES WRES) VS TIME BY ID
```