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1 $PROBLEM Singledose i.v bolus-Emax effect (PKPD)
2                                     ;DATE 6-2-04 PROGRAMMER:xxxxx
3                                     ;Dose=100mg or 250mg
4                                     ;UNITS: Time=hour, Concentration=ug/ml
5                                     ;Effect = Biomarker concentration, ng/ml
6
7 $DATA iv1pkpdest_emax.csv IGNORE=C
8
9 $INPUT ID TIME AMT EFF=DV CLI VI
10
11 $SUBROUTINE ADVAN1 TRANS2
12
13 $PK
14     CL = CLI                       ; Individual Clearance in L/hr
15     V  = VI                         ; Individual Volume of distribution in L
16     S1 = V
17
18 $ERROR
19     EMAX = THETA(1)*EXP(ETA(1))
20     EC50 = THETA(2)*EXP(ETA(2))
21     CP   = F
22     E    = EMAX*F/(EC50+F)
23     IPRED = E
24     Y     = E*EXP(ERR(1))
25
26 $THETA (1,100)                     ;POPEMAX
27 $THETA (0.1,5)                     ;POPEC50
28
29 $OMEGA 0.09                        ;BSVEMAX
30 $OMEGA 0.09                        ;POPEC50
31
32 $SIGMA 0.0025                      ;ERRCV
33
34 $ESTIMATION METHOD=0 MAXEVAL=9990 PRINT=10 POSTHOC
35 $COVARIANCE
36
37 $TABLE ID TIME DV IPRED CP
38 NOPRINT ONEHEADER FILE=IV1PKPDEST_EMAX.FIT
39
```