

```
1 $PROBLEM PROJECT PKPD singledose i.v bolus effect compartment ;DATE 6-2-04 PROGRAMMER:
2 ;UNITS: Time=hour, Concentration=ug/ml
3 ;Dose=100mg or 250mg,
4 Clearance=L/hr, Volume = L,
5
6 $DATA iv1pkpdest_ceadvan6.csv IGNORE=C
7 $INPUT ID TIME AMT EFF=DV CMT CLI VI
8 $SUBROUTINE ADVAN6 TRANS1 TOL=3
9 $MODEL
10 COMP = CENTRAL
11 COMP = EFFECT
12
13 $PK
14 CL = CLI ; Individual Clearance in L/hr
15 V = VI ; Individual Volume of distribution in L
16 KE = CL/V ; Elimination rate constant
17 K1E = 0.001*KE ; negligible loss to effect cmt
18 KEO = THETA(1)*EXP(ETA(1)); KEO
19 EMAX = THETA(2)*EXP(ETA(2))
20 EC50 = THETA(3)*EXP(ETA(3))
21 S1 = V
22
23
24 $DES
25 DADT(1) = -CL/V*A(1)
26 DADT(2) = KEO*((A(1)/S1)-A(2)) ; Effect compartment
27 ;A(2) = Ce
28
29 $ERROR
30 CP = A(1)/S1
31 CE = A(2)
32 E = EMAX*CE/(EC50+CE)
33 IPRED =E
34 Y = E+ERR(1)
35
36 $THETA (0.01,0.5) ;POPKEO
37 $THETA (1,100) ;POPEMAX
38 $THETA (1,10) ;POPEC50
39
40 $OMEGA 0.09 ;BSVKEO
41 $OMEGA 0.09 ;BSVEMAX
42 $OMEGA 0.09 ;BSVEC50
43
44 $SIGMA 0.1 ;ERRCV
45
46 $ESTIMATION METHOD=0 MAXEVAL=9990 PRINT=10 POSTHOC
47 $COVARIANCE
48
49 $TABLE ID TIME DV IPRED
50 NOPRINT ONEHEADER FILE=iv1pkpdest_ceadvan6.fit
51
```