

```
1  $PROBLEM TWO COMPARTMENT INTRAVENOUS BOLUS      ;DATE = 6/2/04 PROGRAMMER=XXXX
2                                                    ;Units: Time=hr, Concentration=ug/ml,
3                                                    ;Dose=100 or 250 mg
4                                                    ;Clearance = L/hr, Volume = L
5
6  $DATA IV2EST_PAR.CSV IGNORE=C
7
8  $INPUT ID TIME CONC=DV AMT DOSE MDV
9
10 $SUBROUTINE ADVAN3 TRANS4
11
12 $PK
13   CL = THETA(1)*EXP(ETA(1))      ;CL
14   V1 = THETA(2)*EXP(ETA(2))      ;Central volume of distribution
15   Q  = THETA(3)*EXP(ETA(3))      ;Intercompartment Clearance
16   V2 = THETA(4)*EXP(ETA(4))      ;Peripheral volume
17   S1 = V1
18
19 $ERROR
20   IPRED=F
21   Y=F+F*ERR(1)+ERR(2)
22                                     ;Additive and proportional residual error model
23
24 $THETA (0.1,1)      ;POPCL
25 $THETA (1,10)       ;POPVOL
26 $THETA (0.1,1.5)   ;POPQ
27 $THETA (1,5)        ;POPV2
28
29 $OMEGA 0.09         ;BSVCL
30 $OMEGA 0.09         ;BSVV1
31 $OMEGA 0.09         ;BSVQ
32 $OMEGA 0.09         ;BSVV2
33
34 $SIGMA 0.01         ;ERRCV
35 $SIGMA 1            ;ERRSD
36
37 $ESTIMATION METHOD=0 MAXEVAL=9999 PRINT=5 POSTHOC
38 $COVARIANCE
39
40 $TABLE ID TIME DV IPRED DOSE
41 NOPRINT ONEHEADER FILE=iv2est_par.fit
42
43
```