

```
1  $PROBLEM ONE COMPARTMENT INTRAVENOUS BOLUS          ;DATE = 6/2/04 PROGRAMMER=XXXX
2  ;Units: Time=hr, Concentration=ug/ml,
3  ;Amount=mg
4
5  $DATA IV1EST_CRSO.CSV IGNORE=C
6
7  $INPUT ID TIME CONC=DV AMT DOSE EVID OCC MDV
8
9  $SUBROUTINE ADVAN1 TRANS2
10
11 $PK
12   OC1=0
13   IF(OCC.EQ.1)OC1=1
14   OC2=0
15   IF(OCC.EQ.2)OC2=1
16
17   BOVCL = ETA(3)*OC1+ETA(4)*OC2
18   BOVV = ETA(5)*OC1+ETA(6)*OC2
19
20   TVCL = THETA(1)
21   CL   = TVCL*EXP(ETA(1)+BOVCL)          ;Clearance in L/hr
22
23   TVV  = THETA(2)
24   V    = TVV*EXP(ETA(2)+BOVV)          ;Volume of distribution in L
25   S1=V
26
27 $ERROR
28   IPRED=F
29   Y=F+F*ERR(1)+ERR(2)
30                                     ;Additive and proportional residual error model
31
32 $THETA
33   (0.1,1)          ;POPCL
34   (1,10)           ;POPVOL
35
36
37 $OMEGA 0.09          ;BSVCL
38 $OMEGA 0.09          ;BSVV
39 $OMEGA BLOCK(1) 0.09 ;BOVCL occ=1
40 $OMEGA BLOCK(1) SAME ;BOVCL occ=2;SAME specifies random effects
41                                     ;sampled from the same distribution
42                                     ;each occasion.
43 $OMEGA BLOCK(1) 0.09 ;BOVV occ=1
44 $OMEGA BLOCK(1) SAME ;BOVV occ=2
45
46
47 $SIGMA
48   0.01          ;ERRCV
49   1             ;ERRSD
50
51 $ESTIMATION METHOD=0 MAXEVAL=9999 PRINT=5 POSTHOC
52 $COVARIANCE
53
54 $TABLE ID TIME DV IPRED DOSE
55   NOPRINT ONEHEADER FILE=ivlestbov_crso.fit
56
57
```