```
$PROBLEM ONE COMPARTMENT INTRAVENOUS BOLUS      ;DATE = 6/2/04 PROGRAMMER=XXXX
                                                ;Units: Time=hr, Concentration=ug/ml,
                                                ;Dose = 100 or 250 mg
                                                ;Clearance = L/hr, Volume = L

$DATA IV1EST_PAR.CSV IGNORE=C

$INPUT ID TIME CONC=DV AMT DOSE MDV

$SUBROUTINE ADVAN1 TRANS2

$PK
   CL    = THETA(1)*EXP(ETA(1))   ;CL
   V     = THETA(2)*EXP(ETA(2))   ;V
   S1    = V

$ERROR
   IPRED=F
   Y=F+F*ERR(1)+ERR(2)         ;Additive and proportional residual error model


$THETA (0.1,1)   ;POPCL
$THETA (1,10)    ;POPV

$OMEGA  0.09     ;BSVCL
$OMEGA  0.09     ;BSVV

$SIGMA 0.01      ;ERRCV
$SIGMA 1         ;ERRSD

$ESTIMATION METHOD=0 MAXEVAL=9999 PRINT=5 POSTHOC
$COVARIANCE

$TABLE ID TIME DV IPRED DOSE
 NOPRINT ONEHEADER FILE=iv1est_par.fit
```