



fit

## Read the data

```
julia> data = read_pumas(simdf,cvs=[:isPM, :wt])  
Population  
Subjects: 10  
Covariates: isPM, wt  
Observables: dv
```

Use this data to estimate the parameters of our model.

```
julia> res = fit(model,data,param,Pumas.FOCEI())  
FittedPumasModel  
  
Successful minimization: true  
  
Likelihood approximation: Pumas.FOCEI  
Objective function value: 8084.54  
Total number of observation records: 1210  
Number of active observation records: 1210  
Number of subjects: 10  
  
-----  
          Estimate  
-----  
tvcl      4.8809  
tvv       89.739  
pmoncl    -0.73558  
 $\Omega_{1,1}$     0.10822  
 $\Omega_{2,2}$     0.051508  
 $\sigma_{prop}$   0.042149  
-----
```



# infer

```
julia> infer(res)
Calculating: variance-covariance matrix
. Done.
FittedPumasModelInference

Successful minimization:           true

Likelihood approximation:          Pumas.FOCEI
Objective function value:          8084.54
Total number of observation records: 1210
Number of active observation records: 1210
Number of subjects:                10
```

	Estimate	RSE	95.0% C.I.
tvcl	4.8809	12.932	[ 3.6438 ; 6.1181 ]
tvv	89.739	7.3011	[ 76.898 ; 102.58 ]
pmoncl	-0.73558	-7.9587	[ -0.85032 ; -0.62084 ]
$\Omega_{1,1}$	0.10822	26.546	[ 0.051913 ; 0.16452 ]
$\Omega_{2,2}$	0.051508	41.275	[ 0.0098391 ; 0.093176 ]
$\sigma_{prop}$	0.042149	3.3957	[ 0.039344 ; 0.044954 ]