1 Summary

The scmreport script is used for summarizing the results of an scm or scmplus run. The examples below show output for an scmplus run. The output of scmreport is a summary of the contents of the scm log file. NONMEM output files are not parsed.

2 Output with default settings

```
scmreport run11.scm
```

Model	N_test	N_ok	N_localmin	N_failed	StepSelected	StepStashed	StepReadded	BackstepRemoved
CLAGE-5	6	6	0	0	-	3	7	-
CLCRCL-5	2	2	0	0	2	-	-	-
CLDOSE-2	3	3	0	0	3	-	-	-
CLQUAT-2	4	4	0	0	-	1	7	-
CLRACE-2	4	4	0	0	4	-	-	3
CLSEX-2	2	2	0	0	7	1	7	-
KMAGE-5	4	4	0	0	-	1	7	-
KMQUAT-2	4	4	0	0	-	1	7	-
KMRACE-2	4	4	0	0	-	1	7	-
KMSEX-2	4	4	0	0	-	1	7	-
V1AGE-5	4	4	0	0	-	1	7	-
V1DOSE-2	4	4	0	0	-	1	7	-
V1QUAT-2	4	4	0	0	-	1	7	-
V1RACE-2	8	8	0	0	-	5	7	-
V1SEX-2	1	1	0	0	1	-	-	-
V2AGE-5	4	4	0	0	-	1	7	-
V2DOSE-2	7	7	0	0	-	4	7	-
V2QUAT-2	5	5	0	0	5	-	-	2
V2RACE-2	4	4	0	0	-	1	7	-
V2SEX-2	5	5	0	0	-	2	7	-
VMAGE-5	4	4	0	0	-	1	7	-
VMQUAT-2	3	3	0	0	8	1	7	1
VMRACE-2	4	4	0	0	-	1	7	-
VMSEX-2	4	4	0	0	-	1	7	-

Model
The name of the model in the scm log file, which is composed of the parameter, covariate and state number.

N_test
The number of times, i.e. in how many iterations, the parameter-covariate relation has been tested.

N_ok
How many times, out of N_test, does the scm log file list an ofv that such that extended model has lower ofv than the base model?

N_localmin
How many times, out of N_test, did the run end in a local minimum, i.e. the log file lists a higher ofv for the extended model than for the base model?

N_failed
How many times, out of N_test, did the scm log file state that the model failed?

StepSelected
In which forward step, if any, was the parameter-covariate relation selected?

StepStashed
Only for scmplus: In which forward step, if any, was the parameter-covariate relation stashed, i.e. removed from the set of relations tested again?

StepReadded
Only for scmplus: In which forward step, if any, was a previously stashed parameter-covariate relation retested?

BackstepRemoved

Both for scm and scmplus: In which backward step, if any, was a previously selected parameter-covariate relation removed?

3   Output with option -ofv_table

```
scmreport run11.scm -ofv
```

```
Step            covariate parameter state     BASEOFV        NEWOFV       OFVDROP  pvalue
Forward 1          SEX       V1       2    -10610.81224  -10679.13889    68.32665   0.01
Forward 2          CRCL      CL       5    -10679.13889  -10702.00697    22.86808   0.01
Forward 3          DOSE      CL       2    -10702.00697  -10721.34202    19.33506   0.01
Forward 4          RACE      CL       2    -10721.34202  -10736.86380    15.52178   0.01
Forward 5          QUAT      V2       2    -10736.86380  -10744.14780     7.28400   0.01
Forward 6                                        -             -            -
Forward 7          SEX       CL       2    -10744.14780  -10809.78278    65.63498   0.01
Forward 8          QUAT      VM       2    -10809.78278  -10816.90670     7.12392   0.01
Forward 9                                        -             -            -
Backward 1         QUAT      VM       1    -10816.90670  -10810.62442    -6.28228  0.0001
Backward 2         QUAT      V2       1    -10810.62442  -10802.97823    -7.64619  0.0001
Backward 3         RACE      CL       1    -10802.97823  -10782.58130   -20.39694  0.0001
Backward 4                                        -             -            -
Final included     CRCL      CL       5         -             -            -
Final included     DOSE      CL       2         -             -            -
Final included     SEX       CL       2         -             -            -
Final included     SEX       V1       2         -             -            -
```

Step

The search direction and the step number in that direction. The last rows list the included relations at the end of the scm or scmplus run.

covariate

The name of the covariate.

parameter

The name of the parameter.

state

The scm state number.

BASEOFV

Base ofv as read from the scm log file for the step.

NEWOFV

New ofv for the selected model as read from the scm log file for the step.

OFVDROP

Drop between BASEOFV and NEWOFV as read from the scm log file.

pvalue

The p-value cutoff for selecting/excluding a relation as read from the scm log file.

4   Input and options

4.1   Required input

The name of an scm or scmplus run directory is a required argument.

4.2   Optional input

−ofv_table

Show ofv etc for selected relations, instead of the default which is a summary of all tested relations.

−decimals = *N*

Only used in combination with option -ofv_table. Number of decimals to display for OFV columns. Default is 5.

−toR

Print results as data frame code. Default not set.

−logfile

Name of scm logfile in the directory. Default is the name of the logfile in version_and_option_info.txt, so normally this option is only needed if version_and_option_info.txt is not present, or if the entire folder has been moved so that version_and_option_info.txt cannot be used.

−help

Print help text and exit.

−version

Print version information and exit.