The following bugs have been detected in NONMEM 7.5.0

1) For $ABBR PROTECT, a base of 0 raised to a positive power can result in INF and NAN, rather than 0. A work-around is to conditionalize the evaluation:

```
IF(BASE/=0.0) THEN
POW=BASE**(EXP1)
ELSE
POW=0.0
ENDIF
```

   Also, PROTECT functions within IF statements are not properly parsed, such as:
   IF(A/B .NE.0.0) …
   As a work-around, place parentheses around the comparator:
   IF( (A/B) .NE.0.0) …
2) For problems using analytical 2nd derivatives (such as $EST LAPLACE NOINTERACTION without NUMERICAL, or $SIM REQUESTSECOND), insufficient memory might be allocated in the PREDPP routine of ADVAN6, ADVAN8, ADVAN13, or ADVAN14. A work-around is to use -prdefault for small problems, and a larger than required $SIZES PC=xxx for larger problems. This bug has been in existence since NONMEM VI.
3) When $SIM TRUE=PRIOR is implemented, random thetas, omegas, and sigmas are generated for each SUBPROBLEM, and DV items are generated using these, but PRED values are calculated based on the initial $THETAS, $OMEGAS, $SIGMAS. As a work-around, set OMEGAS to zero, simulate, and use IPRED values, which are generated with the randomly created population parameters.
4) When ITYP>=1 for $NWPRI is set, the population parameters are incorrectly generated. Use alternative routine
   $SUBROUTINES .. OTHER=ANG.f90

   available on NONMEM web site:

   https://nonmem.iconplc.com/nonmem750/extras

5) Some of the core NONMEM code does not compile with gfortran 11. Use a lower gfortran version.
6) The lognormal pdf is not being calculated correctly.
   As a work-around,

   Use alternative routine
   $SUBROUTINES .. OTHER=DISTRIB.f90

   available on NONMEM web site:

   https://nonmem.iconplc.com/nonmem750/extras