Taurus Base Version History

Version 1.0 (September 2020)

The first release includes all the radionuclides published in Parts 2-4 of the ICRP series dedicated to occupational intakes of radionuclides (OIR)

– Compiled with GNU gfortran version 6.3 (64-bit).

Version 1.1 (December 2020)

– Compiled with GNU gfortran version 10.2 (64-bit) for a faster executable.

Version 1.2 (May 2022)

– Extended the list of radionuclides by including the elements published in the last part the OIR series (Part 5).
– Added an input tool to help the user to set the value of the measurement uncertainty and uncertainty distribution for all rows in the 'Measurement data' table.
– Added the option of selecting the regional decimal separator (point , comma).
– Added the option of choosing between two definitions of the bioassay quantity 'Skeleton'.
– Updated the "User Guide".
– Improved the robustness of the fitting algorithm (for retrospective calculations).
– Added a warning message when the calculated bioassay values and doses might be inaccurate for user-defined absorption types.
– Fixed a bug that in some cases interrupted retrospective calculations with multiple chronic intakes.

Version 1.3 (April 2023)

– Added Neodymium to the Forms.chm file.
– Fixed bug to avoid crash for consecutive retrospective and quick calculations.
– Changed installation program to enforce "readonly" attribute to *.it files in folder \data.
– Changed default destination folder in the installation wizard.

Version 1.4 (January 2024)

– Fixed bugs for cases with multiple intakes:
   o for incorrect calculation of total urine excretion rate when at least one intake starts during the urine collection period
   o to prevent unwanted warning during fitting in presence of excluded measurements

Updated on 30/04/2025

Version 1.5 (April 2025)

- Fixed bug in the calculation of the bioassay "OIR-Skeleton" for carbon monoxide
- Set "Type F" as first listed Form in the Intake Regimes area for lead (the ICRP default)
- Corrected display of Taurus version number
- Generalised the chi-square test to include 'below LOD' data
- Added options for user-defined absorption parameters
  - for ingestion
  - for inhalation of mercury-vapour

Taurus Advanced Version History

Version 2.1 (May 2024) – Official release

Version 2.1.1 (June 2024)

- Added extra functionality to user-defined deposition tool
- Improved robustness of goodness-of-fit calculations
- Changes to default values of sampling parameters in Bayesian analysis tool
- Fixed bug in linked intake regimes menu

Version 2.2 (December 2024)

- Fixed bug in user-defined deposition tool
- Fixed bug in nuclear mixture tool
- Changed number of time points for quick calculation
- Added extra organs for equivalent and absorbed doses output
- Added extra functionality to user-defined deposition tool

Updated on 30/04/2025