Emtree 2022.02 release notes

General improvements

The developments on COVID-19 retains our special attention, more detail can be found below.

Diseases

5 new concepts added under branch experimental disease

510 disease concepts have been added to "neoplasm" branch:

As a part of long-term project "neoplasm" branch Emtree taxonomy improvement the work on "neoplasms subdivided by anatomical site" is ongoing. The following changes were done recently:

• Revision and expansion of "respiratory tract tumor" branch. As a part of Emtree taxonomy improvement "respiratory tract tumor" expanded from 8 NTs with 67 diseases in Emtree 2021.01 to 8 NTs with 162 diseases in Emtree 2021.02, hierarchy levels were improved (95 new concepts were added or moved to this branch, incorrectly assigned altlabels transferred/new concepts created)

• Revision and expansion of "cardiovascular system tumor" branch. As a part of Emtree taxonomy improvement "cardiovascular system tumor" expanded from 3 NTs with 80 diseases in Emtree 2021.01 to 4 NTs with 235 diseases in Emtree 2021.02, hierarchy levels were improved (155 new concepts were added or moved to this branch, incorrectly assigned altlabels transferred/new concepts created)

• Revision and expansion of "skin tumor" branch. As a part of Emtree taxonomy improvement "skin tumor" expanded from 9 NTs with 85 diseases in Emtree 2021.01 to 5 NTs with 249 diseases in Emtree 2021.02, hierarchy levels were significantly improved (164 new concepts were added or moved to this branch, incorrectly assigned altlabels transferred/new concepts created)

• "Nevi and melanomas" branch has been created (based on MeSH taxonomy). "Melanoma" and "nevus" concepts have been united under this concept, hierarchy levels were significantly improved. "Melanoma" had 11 NTs with 16 diseases, "nevus" had 6 NTs with 13 diseases in Emtree 2021.01. "Nevi and melanomas" have 4 NTs with 125 diseases in Emtree 2021.02. (96 new concepts were added or moved to this branch, incorrectly assigned altlabels transferred/new concepts created). "Nevi and melanomas" is not NT of "neoplasms subdivided by anatomical site", but this branch was chosen and revised because it's closely related to "skin tumor".

79 new concepts have been added as part of the revision and expansion of the hypersensitivity/allergy branch, and 5 new concepts to the hypersensibility branch. In the wider scope of this hypersensitivity-revision also 53 new skin disease related concepts were added (a.o. 5 itching-, 15 urticaria- and 33 dermatitis-related)

Barotrauma-related concepts were revised, whereby a new branchlet for diving disorders and 10 new concepts were introduced, and a correction was made for the concepts of hyper- and hypobarism, in that hyperbaric pressure and hypobaric pressure are now part of the parameter branch.

Furthermore, 14 new tooth disease-related concepts, 11 device complications, 9 new intoxication-related concepts, and 5 seizure-related concepts have been added.

Drugs and chemicals

- Updates with regards to all sources that are routinely monitored have been provided.
 - The United States Adopted Names published from November 2021 until February 2022 (included) were incorporated.
 - Names of newly approved drugs, drugs under consideration, orphan drug assignments and drug trade names as published by the FDA, EMA and MHRA in the period October 2021 -January 2022 (included) were incorporated.
 - The content of list 126 (published on 25/01/2022) of proposed INNs as published by the WHO was incorporated (227 entries including COVID-19 special edition and Addendum) and published corrections on previous lists were processed.
- Data on COVID-19 related clinical trials as published on ClinicalTrials.gov (database of privately and publicly funded clinical studies conducted around the world, supplied by the US National Library of Medicine) until February 2022 was used to identify relevant new COVID-19/SARS-CoV-2 concepts or additional synonyms for addition within the regular editorial guidelines.
- Taxonomy data on COVID-19 vaccines was updated with (WHO or nationally) approved vaccines and new trade names etc.
- Data on drugs under consideration or approved by the FDA, EMA and WHO to treat COVID-19/SARS-CoV-2 infection was monitored and updated up until mid-March 2022.
- In total, 253 new concepts were added.

Medical devices

- 6 new medical device concepts were added to increase consistency within Emtree (patch clamp amplifier, absorbent dressing, intraoral scanner, inductively coupled plasma mass spectrometer, vacuum centrifuge, thoracic electrode)
- 592 new AltLabels have been added to the medical device branch of Emtree.
- Part of our maintenance efforts include addition of GMDN (Global Medical Device Nomenclature) terms. 19 new terms have been added to existing Emtree concepts as AltLabel in this release. These additions include 11 terms concerning in vitro diagnostic devices. By improving and maintaining our coverage of GMDN terms we provide a connection with terms as used by FDA's GUDID.
- 552 new labels regarding device trade names have been added, including FDA approved devices until the date of editorial freeze. Most of the new trade name labels have been acquired from the websites of their corresponding manufacturers. This is an ongoing effort and will be continued in future releases.

Procedures

- Addition of 121 medical procedures
- Addition of 67 questionnaires under branch 'assessment of humans'

Anatomy

Expansion and revision of branches:

- skeletal muscle (87 new muscle concepts added)
- artery (75 new artery concepts added)

Organisms

In total 78 new organisms have been added to Emtree.

Among the new concepts 46 are new SARS-CoV-2 related concepts; including the BA.2 lineage that recently emerged

The hierarchy and appearance of the SARS-CoV-2 branch has been expanded:

- To follow the pangolin lineage, all B.1 types (that includes the variants of interest Alpha, Beta, Delta, Omicron and others) have been organized under the node SARS-CoV-2 B.1 lineage
- PrefLabels have been switched between the pangolin lineage names to the Greek letter nomenclature. Mutations of the known variants have been made children of these variants
- A node to contain pseudovirusses used for research have been added under the node SARS-CoV-2 pseudovirus