Emtree 2021.02 release notes

General improvements

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

Diseases

283 disease concepts have been added including:

- Additions of 58 disorders linked to COVID-19 (6 complications and 52 related to treatment and diagnosis)
- Revision and expansion of “vector borne disease” branch. As a part of Emtree taxonomy improvement “vector borne disease” expanded from just two diseases in Emtree 2021.01 to 9 nodes with 185 diseases (45 new concepts added and 140 previously unclassified as “vector borne” classified). A lot of vector borne diseases also are zoonoses, so this is related to the next point
- Revision and expansion of “zoonosis” branch started. As a part of Emtree taxonomy improvement “zoonosis” expanded from 19 nodes with 42 diseases in Emtree 2021.01 to 4 top nodes with 311 diseases and more hierarchy levels in between (10 new branches/concepts added and more than 250 previously unclassified as “zoonosis” classified). Around 50 more disease expected to be added/classified in the next release
- Revision and expansion of “hepatitis” branch. As a part of Emtree taxonomy improvement “hepatitis” branch expanded from 17 nodes with 53 diseases in Emtree 2021.01 to 20 nodes with 103 diseases (25 new concepts added, incorrectly assigned altlabels transferred/new concepts created)
- Addition of 4 experimental diseases

Drugs and chemicals

- Updates with regards to all sources that are routinely monitored have been provided.
  - The United States Adopted Names published from November 2020 until February 2021 (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 2020 - January 2021 (included) were incorporated.
  - The content of lists 124 (published on 22/01/2021, not to be confused with list 124 - COVID-19 special edition published on 23/10/2020) of proposed INNs as published by the WHO incorporated and published corrections on previous lists were processed.
- The content of the proposed INN list 124 - COVID-19 special edition (of which the data was added to the previous Emtree version) was revisited to add additional data.
- 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) was used to identify relevant new COVID-19/SARS-CoV-2 concepts or additional synonyms for addition within the regular editorial guidelines.
- In total, 179 new concepts were added.
Medical devices

- 98 new device concepts have been added to Emtree. There has been an addition of 22 concepts related to in vitro diagnostic test kits. The branch of ‘biomarker detection kit’ has been restructured. The concept ‘robot’ has been added as a medical device (previously a synonym for ‘robotics’), ‘service robot’ and ‘medical robot’ are added as children; 14 ‘robot’ concepts where added. Medical devices related to chromatography have been reviewed, 20 concepts have been added, from which 11 concepts describing a chromatography column.

- 1128 GMDN terms and definitions have been incorporated to existing and new concepts providing a connection with terms as used by FDA’s GUDID.

- Of the above added GMDN terms 8 additions where due to COVID related diagnostic devices.

- 2642 device trade names have been added, including FDA approved devices till date of editorial freeze. There will be a continued focus on device trade names.

- In total 4033 alternative labels have been added to medical device concepts.

Procedures

- Additions of 13 new “(micro)array”-concepts

- Expansion of “phytoremediation” branch

- Addition of 121 questionnaires, 7 of which COVID related, under branch “assessment of humans”

- Addition of 155 new procedures of which:
  - 32 under branch “surgery”
  - 35 under branch “therapy”
  - 38 under branch “diagnosis”

Parameters

- Addition to chemical structure branch of 7 crystalline structures

- Addition of 58 new parameters of which:
  - 12 under “physical parameters” branch
  - 9 under branch “cellular parameters” branch
  - 9 under “epidemiological data” branch
  - 6 under “sensory system parameters” branch
  - 2 under “developmental, age and growth parameters” branch
  - 3 under “medical parameters” branch
  - 3 under “respiratory parameters” branch
  - 2 under “urogenital system parameters” branch

Anatomy

- Merge of “skull suture” into “cranial suture” and addition of 4 narrower terms

Organisms

143 new labels and in total 39 new organism concepts have been added;
as part of the integration of COVID-19 related concepts

- 15 new SARS-CoV-2 isolates/variants: B1.525; CAL.20C; Lineage P.3 and the variant reported in Bretagne (France) on the 16th of March
- 64 new labels are new spell variants of pre-existing isolates and strains of SARS-CoV-2 (isolates/variants)
- Addition of coronavirus related items (concepts: 1; and labels: 6)

as part of regular improvements:

- Neisseria meningitidis serogroups have been split from Neisseria meningitidis

### Society and environment

- Addition of “disaster management” and “lockdown”-related concepts
- Addition of “data protection”-related concepts
- Additions to “insurance” and “health legislation” branches
- Addition of 4 “instant food” and 8 “sauce”-concepts
- Additions of “sport”- and “recreation”-related concepts
- Additions to “education” branch
- Expansion of “well-being”-branch

### Biological functions

- Expansion of signal transduction branch by addition of 55 signaling and neurotransmission concepts