

- **Emtree 2023.03 release notes**

General improvements

Developments around COVID 19 / SARS COV II respectively are no longer a strong focus but are still being observed and added to the taxonomy.

Diseases

More than 230 new concepts added as a part of continuous disease taxonomy improvement:

- “infection” branch taxonomy revision and expansion finished (“parasitosis”; “communicable disease”; “infections associated with other infections or conditions”; “prion disease” and “respiratory tract infection”)
- revision of "cardiomegaly" and "cardiomyopathy" branches with taxonomy improvement and synonyms distribution correction.
- review of "pregnancy disorders", "pregnancy complications", and "labor complications" branches with taxonomy improvement and synonyms distribution correction.
- “lymphatic system disease”
- “myositis”
- “demyelinating disease”
- rearrangement of “head and neck tumor” branch taxonomy is finished on “top” level.

Drugs and chemicals

Updates regarding all sources that are routinely monitored have been provided.

- The United States Adopted Names published from March 2023 until June 2023 (included) were incorporated or existing data was updated.
- Names of newly approved drugs, drugs under consideration and drug trade names and updates on existing data as published by the FDA, EMA and MHRA in the period February 2023 – May 2023 (included) were incorporated.

Additional COVID-19 related updates have been provided.

- 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 July 1st 2023.

In total, 52 new concepts have been added.

Medical devices

- 775 new alternative labels have been added to the medical device branch of Emtree.
- Of these 775 new alternative labels 536 comprise new device trade names. These include FDA’s recently 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.

- 26 new concepts have been added.
 - 5 new concepts were added to improve the branch of 'organ on a chip': 'skin on a chip', 'gut on a chip', 'blood brain barrier on a chip', 'nerve on a chip', and 'multi organ chip'.
 - 9 concepts concerning microfluidics and pumps and valves were added: 'microfluidic device', 'micropump', 'microvalve', 'minivalve', 'microaxial pump', 'axial flow pump', 'microinjection pump', 'injection pump', and 'osmotic micropump'.
 - 4 Diagnostic kit concepts were added: 'BCA protein assay kit', 'alpha defensin test kit', 'Tumor necrosis factor receptor test kit', 'tumor necrosis factor test kit'
 - The branch of 'laboratory device' has been restructured and 2 concepts have been added: 'general laboratory equipment' and 'pH meter'.
 - 6 other concepts added are: 'mechanomyograph', 'cell morphology analyzer', 'wearable device', 'smart device', 'smart home system' and 'home device'.
- Part of our maintenance efforts include addition and maintenance of GMDN (Global Medical Device Nomenclature) terms. 24 new GMDN terms have been added to existing Emtree concepts as alternative labels in this release. All GMDN terms in Emtree were updated with the most recent information from the GMDN website. By improving and maintaining our coverage of GMDN terms we provide a connection with terms as used by FDA's GUDID.

Anatomy

11 new concepts added, 9 of which are cell lines.

Organisms:

63 new nodes of which 39 are SARS-CoV-2 variants, isolates or pseudoviruses were added.

In total 223 new terms were introduced for organisms.

Various genera have been restructured due to new insights and the process to unhide previously hidden ranks is continuing.