



IUPAC
Chemistry and Human Health Division



IFCC
Scientific Division

Committee/Subcommittee on Nomenclature, Properties and Units (C-SC-NPU)

Minutes of the Committee meeting via Skype Tuesday January 30th 2018

Participants:

Alice Lund (NO)
Christine Portin (SE)
Gunnar Nordin (SE)
Helle Møller Johannessen (DK)
Karin Toska (NO)
Robert Flatman (AU)
Ulla Magdal Petersen (DK)
Young Bae Lee Hansen (DK)

Agenda

Unfinished items from the November 2018 meeting in Copenhagen

Subtypes of lymphocytes

The classification of the nucleated haematology cells is outdated. Many new subtypes of lymphocytes are identified via their CD-markers, and there is a need for NPU coding. But there is not yet international agreement on either classification system or terms. The release centres will find members for a WG with both C-NPU members and laboratory specialists from all 3 Scandinavian countries (report to KT), to try to describe a common classification model. The aim is for the WG to be filled by mid February, and for the result to be introduced as a suggestion at the C-NPU meeting in Helsinki in June 2018.

Free, conjugated, non-complexed (da.: unconjugated)

These terms have no definitions, and are not used consistently. UMP will circulate a collection of examples of their use, and initiate a mail discussion on use and possible definitions.

Skin, scrapings and skin surface

Definitions from the November 2018 meeting are agreed:

Skin surface

- Material present on the skin surface, like organisms, chemical substances, DNA or dust, that may be removed for examination purposes by e.g. wiping or swabbing

Scrapings

- A part of the top layer of skin, nail, etc., that may be removed for examination purposes by shaving or scraping

Skin

- The living organ covering the body, having secretion to the surface



IUPAC
Chemistry and Human Health Division



IFCC
Scientific Division

Committee/Subcommittee on Nomenclature, Properties and Units (C-SC-NPU)

It was discussed whether the system of 'Sweat production' should be 'Skin' or 'Skin surface' – it was decided to leave the only 2 NPU definitions of this type unchanged, as the k-o-p 'areic mass rate' seems to suggest a surface:

NPU28735 Skin surface(spec.)—Sweat production; areic mass rate(proc.) = ? g/(m² min)

NPU17183 Skin surface(spec.)—Sweat tolerance; k-o-p(list; Pilocarpine i.c.; proc.)

The NPU definition NPU03790 concerning 'Water evaporation' from 'Skin surface' was considered unclear and will be retired.

InChI and InChIKey

NPU coding may be needed for very new chemical substances having neither a CAS identifier or a registered name. If the chemical structure is known, it may be fully described using a IUPAC InChI sequence, which can then serve as an 'internal definition' in the NPU database. The corresponding IUPAC InChIKey may then be used as a reference ID. Terms for these substances may be local or proprietary, until they are formally registered and named. There is a risk of establishing duplicates when registering traditionally identified substances later, so the technique should be an emergency measure for now.

Norm and normalization

The undefined concept 'norm' is used in many NPU codes, usually in the combination 'actual/norm'. It represents the use of a local reference.

'actual' represents the patient system

'norm' represents a local reference system or a local reference value

A local reference may be e.g. pooled plasma analyzed at the same time. Dividing the patient system result by the reference result may serve to reduce result variation due to the analytical process.

As the measurement unit is the same for both 'actual' and 'norm' values, the final result will have the unit '1'. The k-o-p may be e.g. 'relative substance concentration':

NPU08952 P—Antithrombin; rel.subst.c.(coag.; actual/norm; proc.) = ?

In some cases the 'normalization' may be considered part of the technical procedure, and 'actual/norm' left out. Further discussion is required as to when 'actual/norm' is needed. UMP will circulate examples of actual use.

/UMP