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Codevalues, Syntax and Terminology for Dope Agents

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Introduction

To facilitate the transmission of clear, unambiguous and sufficient information in the health care domain, between various language and cultural regions in Europe, the EC and EFTA countries have established a CEN (Comitee Europeen de Normalisation) Technical Committee on Medical Informatics, CEN/TC 251. Within TC 251 seven working groups deal with various aspects of the transmission of information. Of these, working group 2, WG 2, centers on models for semantics, terminology, coding and classification.

One aspect is the coding of drugs and other chemicals and the syntax for presentation of results. At present options are for the use of IUPAC and IFCC recommendations.

Proposal

It is suggested that IUPAC and IFCC recommendations and conventions on terminology, quantities and units be applied also in the domain of Sports Medicine, including doping-control systems and that concepts be represented by Chemical Abstract Service numbers in the transmission of data. The linguistic expression of code-values is then free to be in systematic names, in preferred terms or in a local idiom.

Examples

Amount-of-substance with the unit mole (abbr. mol) and substance concentration with the unit mole/litre to replace mass in gram and mass concentration in gram/litre. Also the use of a prefix in a denominator is deprecated. Thus: pmol/L and not pg/ml. In the case of a ratio with the unit one, the unit is usually omitted, but the kind-of-quantity is to be given. For instance, the non-acceptable expression ppm indicating 1/1 000 000 gives no information on whether volume, amount-of-substance, mass or pressure is intended.

Because of the identical molar mass of testosterone and epitestosterone (molar mass ratio = 288,41/288,43) the value for the ratio (T/E ratio) is the same whether mass ratio or substance ratio is applied. But the lack of information on kind-of-quantity will cause uncertainty with a variety of hormones.

The molar mass is better expressed in g/L or g/l rather than in D for dalton. Megabites are usually expressed by MB, not mb meaning millibarn i.e. an Avoirdupoit area unit. Calibration of several polypeptide hormones is by use of WHO International Standards, IS. Identification of the WHO calibrator is a must because variation in "active" component present in different IS often precludes comparison of values obtained. The term beta hCG is a code for the beta chain, not for the combined alfa and beta chain complex.

Harmonisation of these minor "harmless" differences in expression when transmitting data, will cause limited inconvenience for the sender and be of much relieve for the recipient.