

STEROID NOMENCLATURE

I. Systematic names

These must conform to the IUPAC-IUB 1967 Revised Tentative Rules for Steroid Nomenclature [*J. steroid Biochem* 1 (1970) 143-175].

II. Trivial names

The following are examples of trivial names which may be used without reference to their systematic names:

Aetiocholanolone*	3 α -Hydroxy-5 β -androstan-17-one
Aldosterone	18,11-Hemiacetal of 11 β ,21-dihydroxy-3,20-dioxo-4-pregnen-18-al
Androsterone	3 α -Hydroxy-5 α -androstan-17-one
Cholesterol	5-Cholesten-3 β -ol
Cholic acid	3 α ,7 α ,12 α -Trihydroxy-5 β -cholan-24- <i>oic</i> acid
Corticosterone	11 β ,21-Dihydroxy-4-pregnene-3,20-dione
Cortisol	11 β ,17,21-Trihydroxy-4-pregnene-3,20-dione
Cortisone	17,21-Dihydroxy-4-pregnene-3,11,20-trione
Dehydroepiandrosterone (DHA)	3 β -Hydroxy-5-androsten-17-one
Deoxycorticosterone (DOC)	21-Hydroxy-4-pregnene-3,20-dione
Ergosterol	5,7,22-Ergostatrien-3 β -ol
Oestradiol-17 β *	1,3,5(10)-Oestratriene-3,17 β -diol*
Oestriol*	1,3,5(10)-Oestratriene-3,16 α -17 β -triol*
Oestrone*	3-Hydroxy-1,3,5(10)-oestratrien-17-one*
Progesterone	4-Pregnene-3,20-dione
Testosterone	17 β -Hydroxy-4-androsten-3-one

*The diphthongs æ and œ may be replaced by the letter e.

Trivial names may be prefixed to denote their derivatives or stereoisomers. In addition to prefixes used in systematic nomenclature (hydroxy, oxo, etc.) the following are frequently used "epi" (inversion of a substituent), "dehydro" (removal of two hydrogen atoms from two adjacent carbon atoms or from a carbinol grouping) and "deoxy" (replacement of a hydroxy group by a hydrogen atom). "Dihydro", "tetrahydro", etc. may be used to indicate addition of hydrogen in double bonds but not to carbonyl groups. Names so derived should indicate the site and when necessary the steric outcome of the structural change defined by the prefix. Examples of correctly derived names are 11-oxoetiocholanolone, 6 β -hydroxycortisone, epitestosterone, 11-epicortisol (not epicortisol), 7-dehydrocholesterol, 11-dehydrocorticosterone, 11-deoxycortisol and 22-dihydroergosterol.

With a few generally accepted exceptions such as deoxycorticosterone (11-deoxycorticosterone), deoxycholic acid (7-deoxycholic acid) and dehydroepiandrosterone (5-dehydroepiandrosterone) trivial names should be unambiguous.

The prefix "allo" (change from 5 β to 5 α configuration) and the symbol Δ^x (unsaturation at position x) may not be used.

The following are examples of trivial names not generally accepted but frequently used in specialized publications:

Androstenedione	4-Androstene-3,17-dione
20 α -Cortol	5 β -Pregnane-3 α ,11 β ,17,20 α ,21-pentol
20 β -Cortol	5 β -Pregnane-3 α ,11 β ,17,20 β ,21-pentol
20 α -Cortolone	3 α -17,20 α ,21-Tetrahydroxy-5 β -pregnan-11-one
20 β -Cortolone	3 α -17,20 β ,21-Tetrahydroxy-5 β -pregnan-11-one
Dihydrotestosterone	17 β -Hydroxy-5 α -androstan-3-one
Pregnanediol	5 β -Pregnane-3 α ,20 α -diol
Pregnanetriol	5 β -Pregnane-3 α ,17,20 α -triol
Pregnenolone	3 β -Hydroxy-5-pregnen-20-one
Tetrahydroaldosterone*	18,11-Hemiacetal of 3 α ,11 β ,21-trihydroxy-20-oxo-5 β -pregnan-18-al
Tetrahydrocortisol*	3 α ,11 β ,17,21-Tetrahydroxy-5 β -pregnan-20-one
Tetrahydrocortisone*	3 α ,17,21-Trihydroxy-5 β -pregnane-11,20-dione
20 α -Dihydroprogesterone	20 α -Hydroxy-4-pregnen-3-one

*In this instance, "Tetrahydro" indicates addition of hydrogen to a double bond and a carbonyl group

Such names may not be used in the title nor in the summary. They may be used in the text when their meaning is clearly defined by the subject-matter (e.g. pregnenolone as an intermediate in the biosynthesis of progesterone or pregnanediol estimated in the urine). Otherwise, they should be used in the same manner as less familiar trivial names (see below).

Less familiar trivial names are acceptable only when their use leads to a substantial saving of space, i.e. when they are much shorter than their systematic names and when they are frequently referred to. Their systematic names should be given at their first mention when only one or a few such trivial names are used. Otherwise, their systematic names should be listed in a footnote or tabulated in the text.

No trivial name may designate an impossible structure (e.g. 20-hydroxyprogesterone).

III. Abbreviations

The use of abbreviations should be largely confined to tables and figures. Commonly used abbreviations such as DHA (dehydroepiandrosterone) or DOC (deoxycorticosterone) are acceptable in the text. Less common abbreviations may be used in the text only when this leads to a substantial saving of space without loss of clarity. All abbreviations must be defined in the text, in a footnote to the text, a footnote to a table, or in the legend to a figure, as appropriate.