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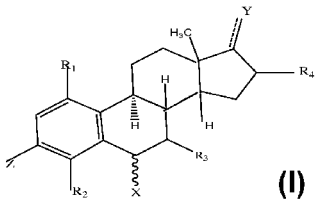
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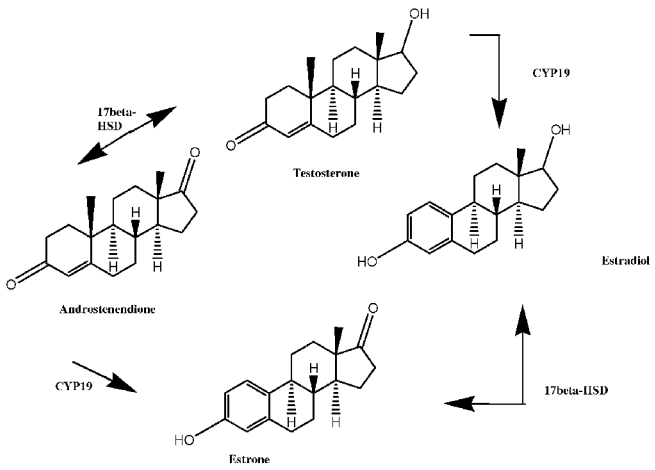
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(54) Title: 6-SUBSTITUTED ESTRADIOL DERIVATIVES AND METHODS OF USE



(I)

FIG. 1



(57) Abstract: wherein R1 and Z are as descπbed above, X is selected from the group consisting of C1 -C6 alkyl, a substituted alkyl, a halogen, a halogenated alkyl, a glucoronide, -NH2, -SO2NH2, COOH, -CN, -CH2CN, -NHCN, -CHO, -COOsalt, -0S02alkyl, -SH, SCH3 -CH (CH2) nCOOCH3, - (CH2) n-O-CH3, -CH2OH, - (CH2) n-O-NH2, NH (CH2) nCH3, NH (CH2) nOCH3, - NH (CH2) nCHOH- COOH, - N (CH3) 2, 10 (CH2)n(NH)CH20H, -NHCOOH, -(CH2)nNHCOOH, -N02, -SCN, -SO2alkyl, -B (OH) 2, - (CH2) nN (CH3) -S02 NH3, - (CH2) nNH-S02-NH2, -NHC (=S) CH3, and -NHNH2, R3 is selected from the group consisting of H, a C1-C6 alkyl, a substituted alkyl, a halogen, and ahalogenated alkyl, R4 and Y are independently selected from a group consisting of O, -OH, -H, a -C1-C6 alkyl, a substituted alkyl, a halogen, a halogenated alkyl, a sulfate, a glucoronide, a bulky group, a phenyl or a substituted phenyl group, a cyclo- or heterocyclo group, pipeπdine, piperazine, morpholine, pyπmidine, -NH2, 20 N(CH2)n CH3 etc, and the respective eπantiomers, other stereochemical isomers, hydrates, solvates, tautomers and pharmaceutically acceptable salts of said compounds

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