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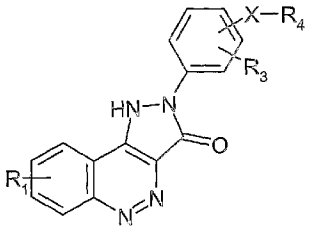
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(54) Title: IMMUNOMODULATING HETEROCYCLIC COMPOUNDS



(I)

(57) Abstract: Compounds of formula (I) are inhibitors of CD80 and useful in immunomodulation therapy: wherein R_1 and R_3 independently represent H; F; CI; Br; $-NO_2$; -CN; C_1-C_6 alkyl optionally substituted by F or Cl; or C_1-C_6 alkoxy optionally substituted by F; R_4 represents a carboxylic acid group (-COOH) or an ester thereof, or $-C(=O)NR_6R_7$, $-NR_7C(=O)R_6$, $-NR_7C(=O)OR_6$, $-NHC(=O)NR_7R_6$ or $-NHC(=S)NR_7R_6$ wherein R_6 represents H, or a radical of formula $-(Alk)_m$-Q wherein m is 0 or 1, Alk is an optionally substituted divalent straight or branched C_1-C_{12} alkylene, or C_2-C_{12} alkenylene, or C_2-C_{12} alkynylene radical or a divalent C_3-C_{12} carbocyclic radical, any of which radicals may contain one or more -O-, -S- or $-N(R_8)$- links wherein R_8 represents H or C_1-C_4 alkyl, C_3.C_4 alkenyl, C_3-C_4 alkynyl, or C_3-C_6 cycloalkyl, and Q represents H; $-NR_9R_{10}$ wherein R_9 and R_{10} independently represents H; C_1-C_4 alkyl; C_3-C_4 alkenyl; C_3-C_4 alkynyl; C_3-C_6 cycloalkyl; an ester group; an optionally substituted carbocyclic or heterocyclic group; or R_9 and R_{10} form a ring when taken together with the nitrogen to which they are attached, which ring is optionally substituted; and R_7 represents H or C_1-C_6 alkyl; or when taken together with the atom or atoms to which they are attached R_6 and R_7 form an optionally substituted monocyclic heterocyclic ring having 5, 6 or 7 ring atoms; and X represents a bond or a divalent radical of formula $-(Z)_n$-(Alk)- or -(Alk)-$(Z)_n$- wherein Z represents -O-, -S- or -NH-, Alk is as defined in relation to R_6 and n is 0 or 1.

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