Abstract

COMPOUNDS FOR THE TREATMENT OF PERIPHERAL NEUROPATHIES

A compound of formula A1 or A2 for use in the treatment of a demyelinating peripheral neuropathy: wherein A is $COOR_5$, $OPO(OR_5)_2$, $PO(OR_5)_2$, SO_2OR_5, POR_5OR_5 or 1*H*-tetrazol-5-yl, R_5 being H or an ester-forming group, optionally C_{1-6}alkyl; W is a bond, C_{1-3}alkylene or C_{2-3}alkenylene; Y is C_{6-10}aryl or C_{2-9}heteroaryl eg C_{3-9}heteroaryl, optionally substituted by 1 to 3 radicals selected from halogen, OH, NO_2, C_{1-6}alkyl, C_{1-6}alkoxy; halo-substituted C_{1-6}alkyl and halo-substituted C_{1-6}alkoxy; Z is chosen from Formula (I) : wherein the asterisks of Z indicate the point of attachment between $-C(R_3)(R_4)-$ and A of Formula (Ia) or (Ib), respectively; R_6 is chosen from hydrogen and C_{1-6}alkyl; and J_1 and J_2 are independently methylene or a heteroatom chosen from S, O and NR_5; wherein R_5 is chosen from hydrogen and C_{1-6}alkyl; and any alkylene of Z can be further substituted by one to three radicals chosen from halo, hydroxy, C_{1-6}alkyl; or R_6 can be attached to a carbon atom of Y to form a 5-7 member ring; R_1 is C_{6-10}aryl or C_{2-9}heteroaryl eg C_{3-9}heteroaryl, optionally substituted by C_{1-6}alkyl, C_{6-10}aryl, C_{6-10}arylC_{1-4}alkyl, C_{3-9}heteroaryl, C_{3-9}heteroarylC_{1-4}alkyl, C_{3-8}cycloalkyl, C_{3-8}cycloalkylC_{1-4}alkyl, C_{3-8}heterocycloalkyl or C_{3-8}heterocycloalkylC_{1-4}alkyl; wherein any aryl, heteroaryl, cycloalkyl or heterocycloalkyl of R_1 may be substituted by 1 to 5 groups selected from halogen, C_{1-6}alkyl, C_{1-6}alkoxy and halo substituted-C_{1-6}alkyl or -C_{1-6}alkoxy; R_2 is H, C_{1-6}alkyl, halo substituted C_{1-6}alkyl, C_{2-6}alkenyl or C_{2-6}alkynyl; and each of R_3 and R_4, independently, is H, halogen, OH, C_{1-6}alkyl, C_{1-6}alkoxy or halo substituted C_{1-6}alkyl or C_{1-6}alkoxy; and the N-oxide derivatives thereof or prodrugs thereof, or a pharmacologically acceptable salt, solvate or hydrate thereof.

Figure 1A