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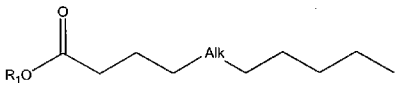
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(54) **Title**: USE OF PUFAS TO TREAT NERVE DAMAGE



(I)

(57) **Abstract**: The present invention provides use of compounds which are polyunsaturated fatty acid (PUFA) derivatives of formula (I), in the form of racemates, stereoisomers or mixtures of stereoisomers, or pharmaceutically acceptable salts, or solvates thereof, wherein -Alk- is $-(CH_2)_4-CH(OR_2)-[trans]CH=CH-[cis]CH=CH-$, $-(CH_2)_4-[cis]CH=CH-$ $[trans]CH=CH-CH(OR_2)-$, $-CH(OR_2)-[trans]CH=CH-[cis]CH=CH-CH_2-$ $[cis]CH=CH-(CH_2)_3-$, $-(CH_2)_3-CH(OR_2)-[trans]CH=CH-[cis]CH=CH-CH_2-[cis]CH=CH-$, or $-(CH_2)_3-[cis]CH=CH-CH_2-[cis]CH=CH-[trans]CH=CH-$ $CH(OR_2)-$; R_1 is a hydrogen atom; or R_1 is a C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_6-C_{10} aryl, 5- to 10-membered heteroaryl, C_3-C_7 carbocyclyl or 5- to 10-membered heterocyclyl group; or R_1 is a group of formula $-CH_2-CH(OR_3)-CH_2-(OR_4)$, wherein R_3 and R_4 are each independently hydrogen atoms or $-(C=O)-R_6$, wherein R_6 is an aliphatic group having from 3 to 29 carbon atoms; or R_1 is a group of formula $-(CH_2OCH_2)_mOH$, wherein m is an integer of from 1 to 200; or R_1 is a drug moiety; each R_2 is the-same or different- and each independently represents a hydrogen atom; or a group $-(C=O)-R_5$, wherein R_5 is a C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, C_6- C_{10} aryl, 5- to 10-membered heteroaryl, C_3-C_7 carbocyclyl or 5- to 10-membered heterocyclyl group, or R_5 is an aliphatic group having from 3 to 29 carbon atoms, or R_5 is a drug moiety; or a group of formula $-(CH_2OCH_2)_nOH$, wherein n is an integer of from 1 to 200; or a drug moiety; and wherein said alkyl, alkenyl, alkynyl and aliphatic groups are the same or different and are each unsubstituted or substituted with 1, 2 or 3 unsubstituted substituents which are the same or different and are selected from halogen atoms and C_1-C_4 alkoxy, C_2-C_4 alkenyloxy, C_1-C_4 haloalkyl, C_2-C_4 haloalkenyl, C_1-C_4 haloalkoxy, C_2-C_4 haloalkenyloxy, hydroxyl, -SR', and -NR'R" groups where R' and R" are the same or different and represent hydrogen or unsubstituted C_1-C_2 alkyl; said aryl, heteroaryl, carbocyclyl and heterocyclyl groups are the same or different and are each unsubstituted or substituted by 1, 2, 3 or 4 unsubstituted substituents which are the same or different and are selected from halogen atoms, and cyano, nitro, C_1-C_4 alkyl, C_1-C_4 alkoxy, C_2-C_4 alkenyl, C_2-C_4 alkenyloxy, C_1- C_4 haloalkyl, C_2-C_4 haloalkenyl, C_1-C_4 haloalkoxy, C_2-C_4 haloalkenyloxy, hydroxyl, C_1-C_4 hydroxyalkyl, -SR' and -NR'R" groups wherein each R' and R" is the same or different and represents hydrogen or unsubstituted C_1-C_4 alkyl; in the manufacture of a medicament for use in treating or preventing nerve damage in a mammal.

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