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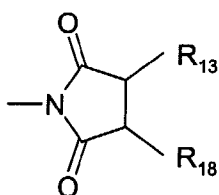
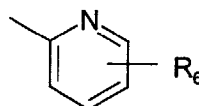
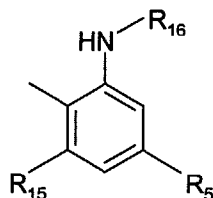
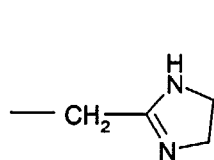
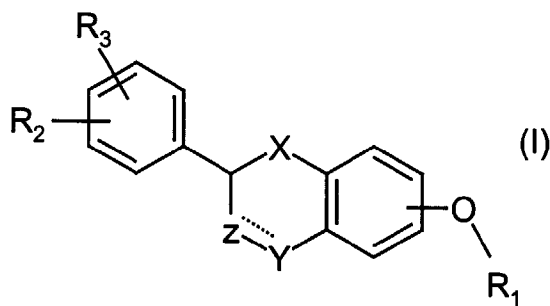
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(54) Title: NEW COMPOUNDS, WHICH ARE POTENT INHIBITORS OF $\text{Na}^+/\text{Ca}^{2+}$ EXCHANGE MECHANISM AND ARE USEFUL IN THE TREATMENT OF ARRHYTHMIAS



(57) Abstract: Therapeutically active compounds of formula (I): wherein X is -O-, -CH₂- or -C(O)-; Z is -CHR₉- or valence bond; Y is -CH₂-, -C(O)-, CH(OR₁₀)-, -CH(NR₁₁R₁₂)-, -O-, -S-, -S(O)- or -S(O)₂-, provided that in case Z is a valence bond, Y is not C(O); the dashed line represents an optional double bond in which case Z is -CR₉- and Y is -CH-, C(OR₁₀)- or -C(NR₁₁R₁₂)-; R₁ is -(CH₂)_nNR₄R₇ or one of the following groups: n is 1 - 4; R₂ and R₃ are independently H, lower alkyl, lower alkoxy, -NO₂, halogen, -CF₃, -OH, -NHR₈ or -COOH; R₄ and R₇ are independently H, lower alkyl or lower hydroxyalkyl; R₅ is H, lower alkoxy, -CF₃, -NH₂ or -CN; R₆ is -NO₂, -NR₁₄R₁₉, -CF₃ or R₈ and R₁₆ are independently H or acyl; R₉ is H or lower alkyl; R₁₀ is H, alkylsulfonyl or acyl; R₁₁ and R₁₂ are independently H, lower alkyl or acyl; R₁₃ and R₁₈ are independently H or -OR₂₀; R₁₄ and R₁₉ are independently H, acyl, alkylsulfonyl, C(S)NHR₁₇ or C(O)NHR₁₇; R₁₅ is H or NH₂; R₁₇ is H or lower alkyl; R₂₀ is H or acyl; and pharmaceutically acceptable salts and

esters thereof are disclosed. The compounds are potent inhibitors of $\text{Na}^+/\text{Ca}^{2+}$ exchange mechanism.

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