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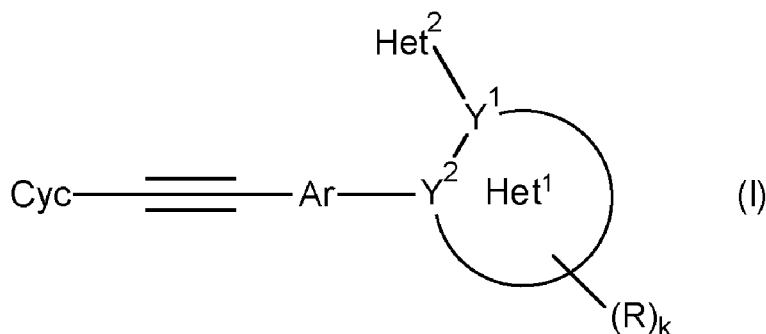
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(54) Title: NOVEL INHIBITOR COMPOUNDS OF PHOSPHODIESTERASE TYPE 10A



(57) Abstract: The present invention relates to compounds of the formula I and their salts etc. which are inhibitors of phosphodiesterase type 10A and to their use for the manufacture of a medicament and which thus are suitable for treating or controlling of medical disorders selected from neurological disorders and psychiatric disorders, for ameliorating the symptoms associated with such disorders and for reducing the risk of such disorders wherein Y¹ and Y² are adjacent atoms in Het¹, which are independently selected from the group consisting of carbon and nitrogen; k is 0, 1, 2 or 3; Het¹ is a bivalent monocyclic 5- or 6-membered heteroaromatic radical, having 1, 2 or 3 heteroatoms or heteroatom moieties selected from O, S, N and N-R^a as ring members, or a bivalent fused bicyclic 8-, 9- or 10-membered heteroaromatic radical, having 1, 2, 3 or 4 heteroatoms or heteroatom moieties selected from O, S, N and N-R^a as ring members; Het² is inter alia monocyclic 5- or 6-membered hetaryl, having 1, 2 or 3 heteroatoms or heteroatom moieties selected from O, S, N and N-R^{1a} as ring members, Cyc is inter alia optionally substituted monocyclic 5- or 6-membered hetaryl or optionally substituted fused 8-, 9- or 10-membered bicyclic hetaryl; Ar is optionally substituted phenylene or optionally substituted bivalent 6-membered hetaryl; R is attached to a carbon atom of Het¹ and inter alia - halogen, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, C₁-C₆-alkoxy, C₁-C₆-fluoroalkyl, C₁-C₆-fluoroalkoxy, C₃-C₆-cycloalkyl etc.