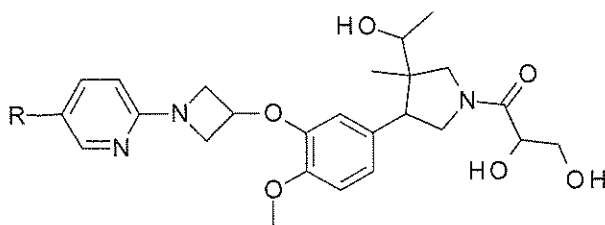


International Application Publication WO 01/47905 discloses certain pyrrolidine derivative compounds as inhibitors of phosphodiesterase, in particular, PDE4, and recites the compounds as useful in treating a number of diseases including asthma.

Summary

In one aspect, there is provided a compound of the formula



or a pharmaceutically acceptable salt thereof, wherein R is hydrogen or methyl.

In another aspect, there is provided a pharmaceutical composition comprising a compound as disclosed above, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, diluent or excipient.

In another aspect, there is provided a pharmaceutical composition comprising a first component which is a compound as disclosed above, or a pharmaceutically acceptable salt thereof, and a second component which is tadalafil, and a pharmaceutically acceptable carrier, diluent or excipient

In another aspect, there is provided use of a compound as disclosed above, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment of overactive bladder.

In another aspect, there is provided use of a compound as disclosed above, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment of overactive bladder, wherein said compound is to be administered in combination with tadalafil.

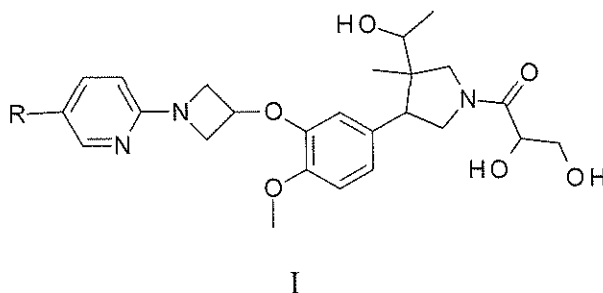
In another aspect, there is provided a compound as disclosed above, or a pharmaceutically acceptable salt thereof, for use in therapy.

In another aspect, there is provided a compound as disclosed above, or a pharmaceutically acceptable salt thereof, for use in the treatment of overactive bladder.

Detailed Disclosure

The present invention provides novel compounds which are inhibitors of PDE4 and as such, are useful in treatment of overactive bladder and other disorders. The compounds provided address the need for safe and effective treatments of conditions associated with PDE4 such as overactive bladder.

The present invention provides a compound of formula I



wherein R is hydrogen or methyl, or a pharmaceutically acceptable salt thereof.

A particular compound of formula I is one wherein R is methyl or a pharmaceutically acceptable salt thereof.

A particular compound of formula I is (2S)-3-[(3S,4S)-3-[(1R)-1-hydroxyethyl]-4-(4-methoxy-3-[[1-(5-methylpyridin-2-yl)azetidin-3-yl]oxy}phenyl)-3-methylpyrrolidin-1-yl]-3-oxopropane-1,2-diol, or a pharmaceutically acceptable salt thereof.

Further, the present invention provides a pharmaceutical composition comprising a compound of formula I, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, diluent or excipient. In a particular embodiment, the pharmaceutical composition further comprises one or more other therapeutic agents such as tadalafil. As such, the present invention provides a pharmaceutical composition comprising a first component which is a compound of formula I, or a pharmaceutically acceptable salt thereof, and a second component which is tadalafil, and a pharmaceutically acceptable carrier, diluent or excipient.

Further, the present invention provides a compound of formula I, or a pharmaceutically acceptable salt thereof, for use in therapy.

7. ~~Use A method of treating overactive bladder comprising administering to a patient in need thereof an effective amount of a compound according to any one of claims 1 to 4, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment of overactive bladder.~~
8. ~~Use A method of treating overactive bladder comprising administering to a patient in need thereof an effective amount of a compound according to any one of claims 1 to 4, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment of overactive bladder, wherein said compound is to be administered in combination with an effective amount of tadalafil.~~
9. ~~The use of claim 8, wherein the compound is~~
~~A method of treating overactive bladder comprising administering to a patient in need thereof an effective amount of (2S)-3-[(3S,4S)-3-[(1R)-1-hydroxyethyl]-4-(4-methoxy-3-{[1-(5-methylpyridin-2-yl)azetidin-3-yl]oxy}phenyl)-3-methylpyrrolidin-1-yl]-3-oxopropane-1,2-diol, or a pharmaceutically acceptable salt thereof, in combination with an effective amount of tadalafil.~~
10. A compound as claimed in any one of claims 1 to 4, or a pharmaceutically acceptable salt thereof, for use in therapy.
11. A compound as claimed in any one of claims 1 to 4, or a pharmaceutically acceptable salt thereof, for use in the treatment of overactive bladder.