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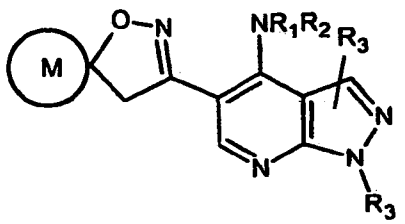
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(54) Title: PYRAZOLO (3, 4-B) PYRIDINE DERIVATIVES AS PHOSPHODIESTERASE INHIBITORS



(I)

(57) Abstract: The present invention relates to phosphodiesterase (PDE) type 4, phosphodiesterase (PDE) type 7 and dual PDE type 4 /PDE type 7 inhibitors. Compounds disclosed herein having the structure of Formura 1: can be useful in the treatment, prevention, inhibition or suppression of CNS diseases, for example, multiple sclerosis; various pathological conditions such as diseases affecting the immune system, including AIDS, rejection of transplant, auto-immune disorders such as T-cell related diseases, for example, rheumatoid arthritis; inflammatory diseases such as respiratory inflammation diseases including chronic obstructive pulmonary disease (COPD), asthma, bronchitis, allergic rhinitis, adult respiratory distress syndrome (ARDS) and other inflammatory diseases including but not limited to psoriasis, shock, atopic dermatitis, eosinophilic granuloma, allergic conjunctivitis, osteoarthritis; gastrointestinal inflammation diseases such as Crohn's disease, colitis, pancreatitis as well as different types of cancers including leukaemia; especially in humans. Processes for the preparation of disclosed compounds, pharmaceutical compositions containing the disclosed compounds and their use as PDE type 4, PDE type 7 and dual PDE type 4 /PDE type 7 inhibitors are provided.

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