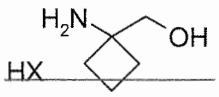
22. The use of claim 17, wherein the disease that can be treated by the inhibition of the PDE4-enzyme is selected from Crohn's disease or ulcerative colitis.

23. The use of claim 17, wherein the disease that can be treated by the inhibition of the PDE4-enzyme is selected from depression, bipolar or manic depression, acute and chronic anxiety states, schizophrenia, Alzheimer's disease, Parkinson's disease, acute and chronic multiple sclerosis or acute and chronic pain and brain damage caused by stroke, hypoxia or cranio-cerebral trauma, dry eyes syndrome and glaucoma.

24. Pharmaceutical composition comprising a compound according to one of claims 1 to 15.

25. Pharmaceutical composition characterised in that they contain a compound of formula **I**, **II** or **III** according to one of claims 1 to 15 in combination with one or more active substances selected from the group consisting of betamimetics, corticosteroids, anticholinergics, other PDE4 inhibitors, NSAIDS, COX2-inhibitors, EP4-receptor antagonists, EGFR-inhibitors, LTD4-antagonists, CCR3-inhibitors, iNOS-inhibitors, MRP4-inhibitors and SYK inhibitors.

~~**26.** A method of manufacturing the compound A~~

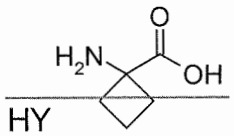


A

~~wherein **HX** is a pharmaceutically acceptable acid,~~

~~comprising the steps a) and b), wherein in~~

~~step a) compound **B**~~



B

wherein **HY** is a pharmaceutically acceptable acid,

is reduced by borane and wherein in

step b) a pharmaceutically acceptable acid **HX** is added in order to obtain compound A.

27. The method of claim 25, wherein the borane for the reduction in step a) is added directly.

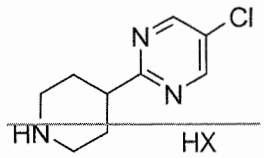
28. The method of claim 25, wherein the borane for the reduction in step a) is generated in-situ.

29. The method of claim 27, wherein the borane for the reduction in step a) is generated either from the combination of $NaBH_4$ and I_2 or from the combination of $NaBH_4$ and BF_3-OEt_2.

30. The method of one of claims 25 to 28, wherein **HX** is either tosylic acid or hydrochloricacid.

31. The method of one of claims 25 to 29, wherein the pharmaceutically acceptable acid **HY** in compound **B** is HCl.

32. A method of manufacturing compound **C**

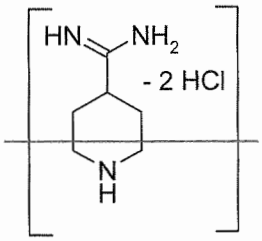


C

~~wherein **HX** is tosylic acid, hydrochloric acid or sulphuric acid,~~

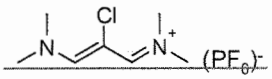
~~comprising the steps A), B) and C),~~

~~wherein in step A) 4-cyano-piperidine is contacted first with an acid and is then reacted with ammonia in order to obtain intermediate **E**~~



E

~~and wherein in step B) intermediate **E** is reacted with compound **D** in the presence of a base~~



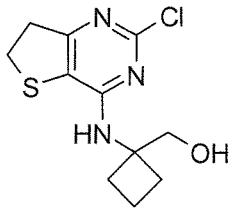
D

~~and wherein in step C) the acid **HX** is added.~~

~~33. The method of claim 31, wherein in step A) 4-cyano-piperidine is contacted with hydrochloric acid and is then reacted with ammonia in order to obtain intermediate **E**.~~

~~34. The method of one of claims 31 to 32, wherein in step B) intermediate **E** is reacted with compound **D** in the presence of sodium methanolate.~~

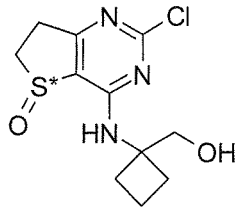
~~35.~~26. Intermediate of formula **VIII**



VIII

and its salts.

~~36.~~27. Intermediate of formula **IX**



IX ,

wherein **S*** stand for a sulphur atom that represents a chiral center,

and its salts.