morpholino-3-oxopropen-1-yl)-phenyl)-piperidin-4-yl)-1-piperazinecarboxamide,

4-((1-methylpyrrol-2-yl)-carbonyl)-N-(1-(4-(3-morpholino-3-oxopropyl)-phenyl)-piperidin-4-yl)-1-piperazinecarboxamide,

6-(4-(4-((1-methylpyrrol-2-yl)-carbonyl)-1-piperazinecarbamoyl)-piperidin-1-yl)-nicotinic acid,

4-((1-methylpyrrol-2-yl)-carbonyl)-N-(1-(5-(4-morpholinylcarbonyl)pyridin-2-yl)-piperidin-4-yl)-1-piperazinecarboxamide,

4-((1-ethylpyrrol-2-yl)-carbonyl)-N-(1-(4-(2-morpholinoethylcarbamoyl)phenyl)-piperidin-4-yl)-1-piperazinecarboxamide, and

4-((1-ethylpyrrol-2-yl)-carbonyl)-N-(1-(4-(2-(1,2,3-triazol-1-yl)-ethyl)-phenyl)-piperidin-4-yl)-1-piperazinecarboxamide.

[Claim 6]

A pharmaceutical composition comprising an effective amount of at least one of the compounds according to claims 1 to 5 or pharmaceutically acceptable salts thereof, and a pharmaceutically acceptable carrier.

[Claim 7]

A prostaglandin D synthase inhibitor comprising an effective amount of a compound according to any one of claims 1 to 5 or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

[Claim 8]

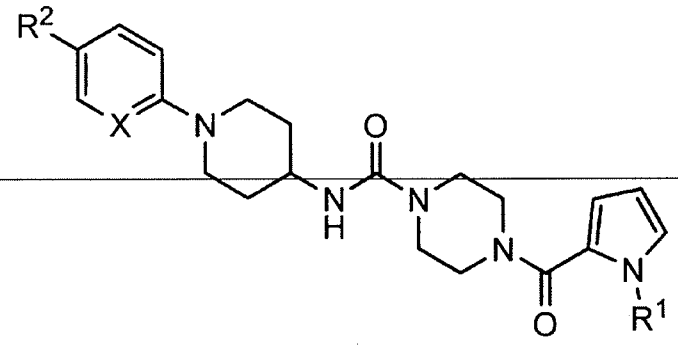
An agent for preventing or treating a disease associated with prostaglandin D2 or a metabolite thereof, the agent comprising an effective amount of a compound according to any one of claims 1 to 5 or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier, wherein the disease is an allergic disease or inflammatory disease.

~~[Claim 9]~~

~~The agent according to claim 8, wherein the disease associated with prostaglandin D2 or a metabolite is an allergic disease or inflammatory disease.~~

~~[Claim 10]~~

~~A method for treating a disease associated with prostaglandin D2 or a metabolite thereof, comprising administering to a patient in need of such treatment an effective amount of a piperazine compound represented by Formula (I) or a salt thereof~~



(I)

~~wherein~~

~~X represents CH or an N atom;~~

~~R^1 represents C_{1-6} alkyl;~~

~~R^2 represents C_{1-6} alkyl that may have one or more substituents, C_{2-6} alkenyl that may have one or more substituents, $-(C=O)-N(R^3)(R^4)$, or $-(C=O)-OR^5$,~~

~~R^3 and R^4 are the same or different, and each represents hydrogen or C_{1-6} alkyl that may have one or more substituents; or R^3 and R^4, taken together with a nitrogen atom to which R^3 and R^4 are attached, may form a saturated heterocyclic group; and~~

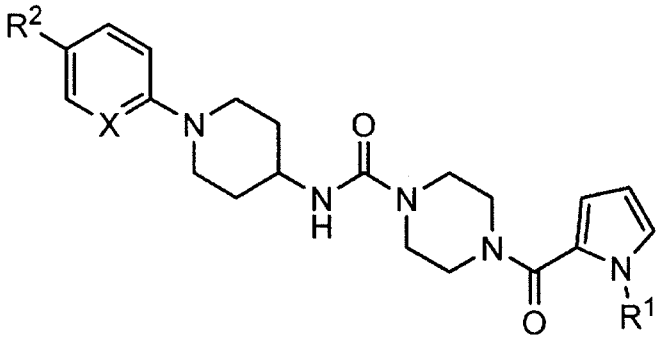
~~R^5 represents hydrogen or C_{1-6} alkyl that may have one or more substituents or aralkyl.~~

~~[Claim 11]~~

~~The method according to claim 10, wherein the disease associated with prostaglandin D2 or a metabolite thereof is an allergic disease or inflammatory disease.~~

[Claim ~~12~~9]

A piperazine compound represented by Formula I or a salt thereof for use in the treatment of a disease associated with prostaglandin D2 or a metabolite thereof



(I)

wherein

X represents CH or an N atom;

R^1 represents C_{1-6} alkyl;

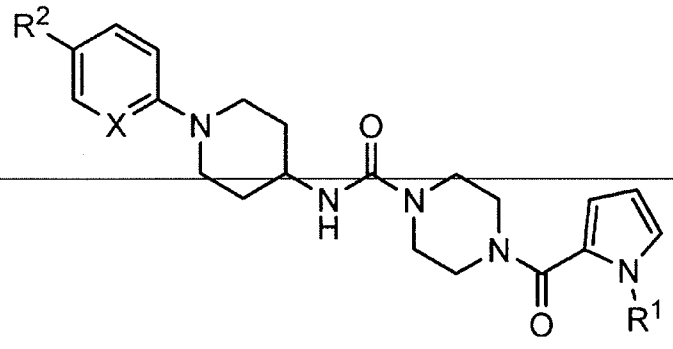
R^2 represents C_{1-6} alkyl that may have one or more substituents, C_{2-6} alkenyl that may have one or more substituents, $-(C=O)-N(R^3)(R^4)$, or $-(C=O)-OR^5$,

R^3 and R^4 are the same or different, and each represents hydrogen or C_{1-6} alkyl that may have one or more substituents; or R^3 and R^4, taken together with a nitrogen atom to which R^3 and R^4 are attached, may form a saturated heterocyclic group; and

R^5 represents hydrogen or C_{1-6} alkyl that may have one or more substituents or aralkyl.

~~[Claim 13]~~

~~Use of a piperazine compound represented by Formula I or a salt thereof for treating a disease associated with prostaglandin D2 or a metabolite thereof~~



(I)

~~wherein~~

~~X represents CH or an N atom;~~

~~R^1 represents C_{1-6} alkyl;~~

~~R^2 represents C_{1-6} alkyl that may have one or more substituents, C_{2-6} alkenyl that may have one or more substituents, -(C=O)-N(R^3)(R^4), or -(C=O)-OR^5,~~

~~R^3 and R^4 are the same or different, and each represents hydrogen or C_{1-6} alkyl that may have one or more substituents; or R^3 and R^4, taken together with a nitrogen atom to which R^3 and R^4 are attached, may form a saturated heterocyclic group; and~~

~~R^5 represents hydrogen or C_{1-6} alkyl that may have one or more substituents or aralkyl.~~