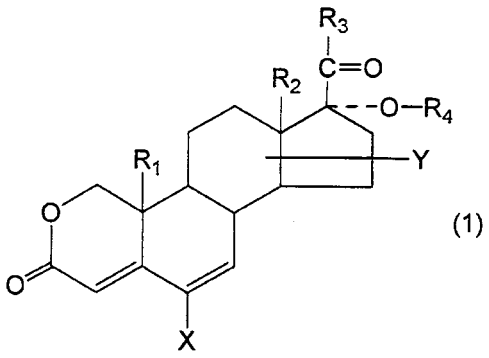
CLAIMS

[Claim 1] A urination disorder-improving agent containing a 2-oxapregnane compound represented by the following formula (1) or a pharmaceutically acceptable salt thereof as an active ingredient:

[Chem. 1]



(1)

wherein R_1 to R_3 are the same or different and each represent an alkyl group, R_4 represents a hydrogen atom or an alkylcarbonyl group, X represents a halogen atom, Y represents a hydroxyl group or oxo group bonded to a 11-position, 15-position, or 16-position of a steroid skeleton of the compound.

[Claim 2] The urination disorder-improving agent according to claim 1, wherein, in the formula (1), R_1 to R_3 are methyl group, R_4 is acetyl group, X is a chlorine atom, Y is a hydroxyl group or oxo group bonded to the 15-position of the steroid skeleton.

[Claim 3] The urination disorder-improving agent according to claim 1 or 2, wherein the compound represented by the formula (1) is 17α-acetoxy-6-

chloro-15β-hydroxy-2-oxa-4,6-pregnadiene-3,20-dione.

[Claim 4] ~~The urination disorder-improving agent according to any one of claims 1 to 3, which~~ A 2-oxapregnane compound represented by the formula (1) or a pharmaceutically acceptable salt thereof recited in any one of claims 1 to 3 for use as an active ingredient in improving a urination disorder, wherein the 2-oxapregnane compound represented by the formula (1) or the pharmaceutically acceptable salt thereof improves at least one urination disorder or symptom selected from feeling of incomplete emptying, slow stream, hesitancy, straining, terminal dribble, post micturition dribble, urinary incontinence, frequent urination, urgency, bladder pain or bladder pain syndrome, pain on urination, cystatrophia, neurogenic bladder, detrusor overactivity or overactive bladder, chronic cystitis, interstitial cystitis, chronic prostatitis, pelvic pain syndrome, underactive bladder, and detrusor hyperactivity with impaired contractile function.

[Claim 5] Use of a 2-oxapregnane compound represented by the formula (1) or a pharmaceutically acceptable salt thereof recited in any one of claims 1 to 3 as an active ingredient in the manufacture of a medicament for improving a urination disorder, wherein the 2-oxapregnane compound represented by the formula (1) or the pharmaceutically acceptable salt

thereof improves at least one urination disorder or symptom selected from feeling of incomplete emptying, slow stream, hesitancy, straining, terminal dribble, post micturition dribble, urinary incontinence, frequent urination, urgency, bladder pain or bladder pain syndrome, pain on urination, cystatrophia, neurogenic bladder, detrusor overactivity or overactive bladder, chronic cystitis, interstitial cystitis, chronic prostatitis, pelvic pain syndrome, underactive bladder, and detrusor hyperactivity with impaired contractile function.

[Claim ~~5~~6] ~~The urination disorder-improving agent according to any one of claims 1 to 4~~The 2-oxapregnane compound represented by the formula (1) or the pharmaceutically acceptable salt thereof for use according to claim 4, or the use according to claim 5, wherein the urination disorder is a urination disorder associated with benign prostatic hyperplasia.

[Claim ~~6~~7] ~~The urination disorder-improving agent according to any one of claims 1 to 4~~The 2-oxapregnane compound represented by the formula (1) or the pharmaceutically acceptable salt thereof for use according to claim 4, or the use according to claim 5, wherein the urination disorder is a urination disorder having no benign prostatic hyperplasia.

[Claim ~~7~~8] ~~The urination disorder-improving agent according to claim 6~~The 2-oxapregnane compound represented by the formula (1) or the pharmaceutically acceptable salt thereof for use according to claim 7, or the use according to claim 7, wherein the urination disorder is a urination disorder associated with a smooth muscle contraction disorder.

[Claim ~~8~~9] ~~The urination disorder-improving agent according to claim 7~~The 2-oxapregnane compound represented by the formula (1) or the pharmaceutically acceptable salt thereof for use according to claim 8, or the use according to claim 8, wherein the urination disorder is a urination disorder associated with at least one disease selected from the following: a disease causing neurogenic bladder; diabetes; and neuropathy associated with diabetes.

[Claim ~~9~~10] ~~The urination disorder-improving agent according to any one of claims 1 to 8, which improves or promotes~~ The 2-oxapregnane compound represented by the formula (1) or the pharmaceutically acceptable salt thereof for use according to any one of claims 4 or 6 to 9, or the use according to any one of claims 5 to 9, for improving or promoting urination.

[Claim ~~10~~11] ~~The urination disorder-improving agent according to any one of claims 1 to 9~~The 2-

oxapregnane compound represented by the formula (1) or the pharmaceutically acceptable salt thereof for use according to any one of claims 4 or 6 to 10, or the use according to any one of claims 5 to 10, wherein a dosage of the ~~agent~~ compound is 0.01 to 100 mg per day ~~in terms of the compound represented by the formula (1)~~.