Published by Ministry of Health, Labour and Welfare

Translated by Pharmaceuticals and Medical Devices Agency





This English version is intended to be a reference material to provide convenience for users. In the event of inconsistency between the Japanese original and this English translation, the former shall prevail.

Revision of Precautions

Somatropin (genetical recombination) (preparations indicated for growth hormone-deficient short stature without epiphyseal closure, short stature without epiphyseal closure associated with Turner's syndrome, adult growth hormone deficiency (only in severe cases), and short stature without epiphyseal closure in patients born SGA (small-for-gestational age))

April 4, 2022

Therapeutic category

Pituitary hormone preparations

Non-proprietary name

Somatropin (genetical recombination)

Safety measure

Precautions should be revised in the package insert.

Revision in line with the Instructions for Package Inserts of Prescription Drugs, PAB Notification No. 606 by the Director General of Pharmaceutical Affairs Bureau, MHW, dated April 25, 1997 (Old instructions):

Revised language is underlined.

Current	Revision
Contraindications	Contraindications
Patients with diabetes mellitus (Growth hormone has anti-insulin-	(deleted)
like effects.)	
Precautions Concerning Dosage and Administration	Precautions Concerning Dosage and Administration
<short associated="" stature="" syndrome="" turner's="" with=""></short>	(deleted)
When this drug is administered to patients with short stature	
associated with Turner's syndrome, glucose tolerance should be	
carefully monitored through periodic testing of oral glucose	
tolerance, etc.	
Careful Administration	Careful Administration
(N/A)	Patients with diabetes mellitus, glucose intolerance, or risk factors
	of diabetes mellitus (In patients with diabetes mellitus, blood
	glucose (levels of blood glucose, HbA1c, etc.) and diabetic
	complications (such as diabetic retinopathy) should be controlled
	before initiation of administration. After initiation, levels of blood
	glucose, HbA1c, etc. should be measured periodically and
	conditions of patients be closely monitored including diabetic
	complications (such as diabetic retinopathy). Doses of antidiabetic
	drugs should be adjusted when required. If symptoms of diabetes

mellitus become apparent or exacerbated after initiation of administration, appropriate measures should be taken, such as dose reduction or temporal discontinuation of this drug. Patients with glucose intolerance or with risk factors of diabetes mellitus (such as obesity and a family history of diabetes mellitus) should be closely monitored. Diabetes mellitus may become apparent.)

Important Precautions (N/A)

Important Precautions

<Common to all indications>

Because growth hormone reduces insulin sensitivity, levels of blood glucose and HbA1c may rise with administration of this drug.

Levels of blood glucose, HbA1c, etc. should be measured periodically and if any abnormalities are observed, appropriate measures should be taken, such as dose reduction or temporal discontinuation of this drug. Particularly in patients with Turner's syndrome, patients may become complicated with reduced glucose tolerance. The clinical course of patients should be closely monitored..

<Adult growth hormone deficiency>

Levels of blood glucose and HbA1c may rise with administration of this drug. Blood glucose, HbA1c, urinary glucose, etc. should be measured periodically, and dose reduction or discontinuation of administration should be considered if any abnormalities are

<Adult growth hormone deficiency> (deleted)

observed.

Drug Interactions

Precautions for Co-Administration

Drugs	Signs, Symptoms,	Mechanism and Risk
	and Treatment	Factors
Insulin	Effects of insulin to	Growth hormone <u>has</u>
	lower blood glucose	anti-insulin-like
	may be attenuated.	effects.

Drug Interactions

Precautions for Co-Administration

	Signs, Symptoms,	Mechanism and Risk
Drugs	and Treatment	Factors
Antidiabetic drugs	Blood glucose levels	Growth hormone
(insulin preparations,	may rise with	reduces insulin
<u>biguanides,</u>	administration of this	sensitivity.
sulfonylureas, rapid-	drug. Levels of blood	
acting insulin	glucose, HbA1c, etc.	
secretion stimulators,	should be measured	
<u>α-glucosidase</u>	periodically and	
inhibitors,	doses of these drugs	
thiazolidines, DPP-4	should be adjusted.	
inhibitors, GLP-1		
receptor agonists,		
SGLT2 inhibitors,		
etc.)		

N/A: Not Applicable. No corresponding language is included in the current precautions.

Revision in line with the Instructions for Electronic Package Inserts of Prescription Drugs, etc. PSEHB Notification No. 0611-1 by the Director of Pharmaceutical Safety and Environmental Health Bureau, MHLW, dated June 11, 2021 (New instructions): Revised language is underlined.

Current	Revision
CONTRAINDICATIONS Patients with diabetes mellitus (Growth hormone has anti-insulin-like effects.)	2. CONTRAINDICATIONS (deleted)
8. IMPORTANT PRECAUTIONS (N/A)	8. IMPORTANT PRECAUTIONS <common all="" indications="" to=""> Because growth hormone reduces insulin sensitivity, levels of blood glucose and HbA1c may rise with administration of this drug. Levels of blood glucose, HbA1c, etc. should be measured periodically and if any abnormalities are observed, appropriate measures should be taken, such as dose reduction or temporal discontinuation of this drug. Particularly when associated with Turner's syndrome, patients may become complicated with reduced glucose tolerance. Conditions of patients should be closely monitored.</common>
<short associated="" closure="" epiphyseal="" stature="" syndrome="" turner's="" with="" without=""> Glucose tolerance should be carefully monitored through periodic testing of oral glucose tolerance, etc.</short>	(deleted)

<Adult growth hormone deficiency (only in severe cases)>
Levels of blood glucose and HbA1c may rise with administration of this drug. Blood glucose, HbA1c, or urinary glucose, etc. should be measured periodically and dose reduction or discontinuation of administration should be considered if any abnormalities are observed.

<Adult growth hormone deficiency (only in severe cases)> (deleted)

- 9. PRECAUTIONS CONCERNING PATIENTS WITH SPECIFIC BACKGROUNDS
- 9.1 Patients with Complication or History of Diseases, etc. (N/A)

9. PRECAUTIONS CONCERNING PATIENTS WITH SPECIFIC BACKGROUNDS

9.1 Patients with Complication or History of Diseases, etc.

Patients with diabetes mellitus, glucose intolerance, or risk factors of diabetes mellitus

In patients with diabetes mellitus, blood glucose (levels of blood glucose, HbA1c, etc.) and diabetic complications (such as diabetic retinopathy) should be controlled before initiation of administration.

After initiation, levels of blood glucose, HbA1c, etc. should be measured periodically and conditions of patients be closely monitored including diabetic complications (such as diabetic retinopathy). Doses of antidiabetic drugs should be adjusted when required. If symptoms of diabetes mellitus become apparent or exacerbated after initiation of administration, appropriate measures should be taken, such as dose reduction or temporal discontinuation of this drug.

mellitus (such as obesity and a family history of diabetes mellitus) should be closely monitored. Diabetes mellitus may become apparent.

10. INTERACTIONS

10.2 Precautions for Co-Administration

Drugo	Signs, Symptoms,	Mechanism and Risk
Drugs	and Treatment	Factors
Insulin	Effects of insulin to	Growth hormone <u>has</u>
	lower blood glucose	anti-insulin-like
	may be attenuated.	effects.

10. INTERACTIONS

10.2 Precautions for Co-Administration

Drugo	Signs, Symptoms,	Mechanism and Risk
Drugs	and Treatment	Factors
Antidiabetic drugs	Blood glucose levels	Growth hormone
(insulin preparations,	may rise with	reduces insulin
<u>biguanides,</u>	administration of this	sensitivity.
sulfonylureas, rapid-	drug. Levels of blood	
acting insulin	glucose, HbA1c, etc.	
secretion stimulators,	should be measured	
<u>α-glucosidase</u>	periodically and	
inhibitors,	doses of these drugs	
thiazolidines, DPP-4	should be adjusted.	
inhibitors, GLP-1		
receptor agonists,		
SGLT2 inhibitors,		
etc.)		

N/A: Not Applicable. No corresponding language is included in the current precautions.