Pioglitazone Hydrochloride Tablets

【 **Ingredients** 】 The main ingredient of this product is pioglitazone hydrochloride, with the chemical name (±) 5- [4- [2- (5-ethyl-2-pyridine) ethoxy] benzyl] -2,4-thiazolidinedione hydrochloride.

【 **Description** 】 This product is in the form of flakes.

[Indications] For patients with type 2 diabetes (non insulin dependent diabetes, NIDDM), pioglitazone hydrochloride can be combined with diet control and physical exercise to improve blood sugar control. Pioglitazone hydrochloride can be used alone, but it can also be used in combination with sulfonylurea, metformin, or insulin when dietary control, physical exercise, and monotherapy cannot satisfactorily control blood sugar.

[Usage and Dosage] Piagliptone hydrochloride should be taken once a day, and medication is not related to food consumption. The treatment of diabetes should be individualized. The evaluation of therapeutic response using HbAIC is more ideal, and compared to using FBC alone, it is a better indicator for evaluating long-term blood glucose control. HbAIC reflects blood glucose levels over the past 2 to 3 months. In clinical application, we recommend that patients receive pioglitazone hydrochloride treatment for a sufficient duration (3 months) to evaluate

changes in HbAIC, unless blood sugar control deteriorates.

1. Monotherapy

When dietary control and physical exercise alone are insufficient to control blood sugar, monotherapy with pioglitazone hydrochloride can be administered, with an initial dose of 15 mg or 30 mg once a day. If the response to the initial dose is not satisfactory, the dosage can be increased until 45 milligrams per day. If the patient does not respond well to monotherapy, combination therapy should be considered.

2. Combination therapy

(1) Sulfonylurea: When used in combination with sulfonylurea drugs, the initial dose of pioglitazone hydrochloride can be 15 mg or 30 mg once a day. When starting treatment with pioglitazone hydrochloride, the dosage of sulfonylurea can be maintained unchanged. When patients experience hypoglycemia, the dosage of sulfonylurea should be reduced.

(2) Metformin: When used in combination with metformin, the initial dose of pioglitazone hydrochloride can be 15 mg or 30 mg once a day. When starting treatment with pioglitazone hydrochloride, the dosage of metformin can be maintained unchanged. Generally speaking, when used in combination with metformin, metformin does not require a decrease in dosage and does not cause hypoglycemia.

(3) Insulin: When used in combination with insulin, the initial dose of pioglitazone hydrochloride can be 15 mg or 30 mg once a day. When starting treatment with pioglitazone hydrochloride, insulin dosage can be maintained unchanged. For patients who use a combination of pioglitazone hydrochloride and insulin, insulin dosage can be reduced by 10% to 25% when hypoglycemia occurs or plasma glucose concentration drops below 100 milligrams per deciliter. Further personalized adjustments based on blood glucose results.

3. The maximum recommended dose of pioglitazone hydrochloride should not exceed 45 mg once per day, as medications exceeding this dose have not been clinically studied for placebo dose control. The combination therapy with a dose exceeding 30 milligrams has not yet undergone placebo-controlled clinical studies.

4. For patients with renal insufficiency, dosage does not need to be adjusted (see Pharmacokinetics, special population, renal insufficiency).

If the patient presents with clinical manifestations of active liver disease or elevated serum transaminase levels (ALT exceeding the normal upper limit by 2.5 times) before the start of treatment, pioglitazone hydrochloride treatment should not be initiated (refer to [Precautions], general effects on the liver and [Pharmacokinetics], specific populations, liver dysfunction). All patients should monitor liver enzymes before

starting treatment with pioglitazone hydrochloride, and also during treatment (refer to 【 Precautions 】, generally, the impact on the liver). At present, there is no data on the use of pioglitazone hydrochloride in patients under the age of 18, so it is not suitable for pediatric patients.

Currently, there is no data on the combination of pioglitazone hydrochloride and other thiazolidinedione drugs.

【 Adverse reactions 】 According to foreign literature reports: 1. When pioglitazone hydrochloride is used in combination with sulfonylurea (N=373), metformin (N=168), or insulin (N=379), the clinical types of adverse reactions are similar to those of monotherapy with pioglitazone hydrochloride. The only exception is that when used in combination with pancreatic islets, the incidence of edema increases (pioglitazone: 15%, placebo: 7%). The incidence of withdrawal from clinical trials due to adverse reactions (excluding hyperglycemia) was similar in the placebo group (2.8%) to the pioglitazone hydrochloride group (3.3%). When used in combination with sulfonylurea or insulin, some patients have experienced mild to moderate hypoglycemia. When used in combination with sulfonylurea drugs, the incidence of hypoglycemia was 1% in the placebo group and 2% in the pioglitazone hydrochloride group. When used in combination with insulin, the incidence of hypoglycemia was 5% in the placebo group, 8% in the 15 mg pioglitazone hydrochloride group,

and 15% in the 30 mg pioglitazone hydrochloride group (see [Precautions], general, hypoglycemia). A double-blind study conducted in the United States showed that during monotherapy, the incidence of anemia in patients treated with pioglitazone hydrochloride was 1.0%, while in patients treated with placebo it was 0.0%. When used in combination with insulin, the incidence of anemia was 1.6% in the pioglitazone hydrochloride group and 1.6% in patients treated with placebo. When used in combination with sulfonylurea, the incidence of anemia in the pioglitazone hydrochloride group was 0.3%, while in placebo treated patients it was 1.6%. When used in combination with metformin, the incidence of anemia was 1.2% in the pioglitazone hydrochloride group and 0.0% in patients treated with placebo. All clinical trials conducted in the United States have shown a higher incidence of edema in patients treated with pioglitazone hydrochloride compared to those treated with placebo. During monotherapy, 4.8% of patients with pioglitazone hydrochloride experienced edema, compared to 1.2% in the placebo group. When used in combination with insulin, the incidence of edema was highest (15.3% in the pioglitazone hydrochloride treatment group and 7.0% in the placebo group). All cases are only mild or moderate (see [Precautions], general, edema). Laboratory abnormality 1. Hematology: Piagliptone hydrochloride may cause a decrease in hemoglobin and hematocrit. In terms of all clinical studies, patients

treated with pioglitazone hydrochloride showed a mean decrease in hemoglobin by 2% to 4%. Generally speaking, such changes occur during the first 4 to 12 weeks of treatment and remain relatively stable thereafter. These changes may be related to the increase in plasma volume caused by pioglitazone hydrochloride, and have not yet been found to have significant clinical hematological significance. 2. Serum aminotransferase levels: In placebo-controlled clinical trials conducted in the United States, a total of 4 out of 1526 patients treated with pioglitazone hydrochloride (0.26%) and 2 out of 793 patients treated with placebo (0.25%), ALT&GE; Three times the normal upper limit. Among all clinical studies conducted in the United States, a total of 11 out of 2561 patients treated with pioglitazone hydrochloride (0.43%) had ALT&GE; Three times the normal upper limit. All patients with follow-up values show reversible elevation. In the population receiving pioglitazone hydrochloride treatment, the mean values of bilirubin, AST, ALT, alkaline phosphatase, and CCT at the last visit were lower than the baseline measurements. stay