**TSUMURA Maoto Extract Granules for Ethical Use**

**Composition**

|-----------------------|---------------------------------|-----------------------|-------------------|

7.5 g of TSUMURA Maoto extract granules (hereafter TJ-27) contains 1.75 g of a dried extract of the following mixed crude drugs.
- JP Apricot Kernel …………………… 5.0 g
- JP Ephedra Herb …………………… 5.0 g
- JP Cinnamon Bark …………………… 4.0 g
- JP Glycyrrhiza …………………… 1.5 g
- (JP: The Japanese Pharmacopoeia)

**Description**

- Dosage form: Granules
- Color: Light yellow-brown
- Smell: Characteristic smell
- Taste: Slightly sweet and astringent
- ID code: TSUMURA/27

**INDICATIONS**

TJ-27 is indicated for the relief of the following symptoms of those patients with rigors, fever, headache, low-back pain, and skin without a sticky feeling:
- Common cold, influenza (in the initial phase), rheumatoid arthritis, asthma, nasal obstruction in suckling infants, and suckling difficulties

**DOSAGE AND ADMINISTRATION**

The usual adult dose is 7.5 g/day orally in 2 or 3 divided doses before or between meals. The dosage may be adjusted according to the patient's age and body weight, and symptoms.

**PRECAUTIONS**

1. **Careful administration (TJ-27 should be administered with care in the following patients.)**

   (1) Patients in a period of weakness after disease or with greatly declined constitution [Adverse reactions are likely to occur, and the symptoms may be aggravated.]

   (2) Patients with an extremely weak gastrointestinal tract [Anorexia, epigastric distress, nausea, vomiting, etc. may occur.]

   (3) Patients with anorexia, nausea or vomiting [These symptoms may be aggravated.]

   (4) Patients showing a remarkable tendency of sweating [Excess sweating and/or generalized weakness may occur.]

   (5) Patients with cardiovascular disorders including angina pectoris and myocardial infarction, etc. or those with a history of such disorders.

   (6) Patients with severe hypertension

   (7) Patients with severe renal dysfunction

   (8) Patients with dysuria

   (9) Patients with hyperthyroidism

   [(5)-(9): These disease and symptoms may be aggravated.]

2. **Important Precautions**

   (1) When TJ-27 is used, the patient’s “SHO” (constitution/symptoms) should be taken into account. The patient’s progress should be carefully monitored, and if no improvement in symptoms/findings is observed, continuous treatment should be avoided.

   (2) Since TJ-27 contains Glycyrrhiza, careful attention should be paid to the serum potassium level, blood pressure, etc., and if any abnormality is observed, administration should be discontinued.

   (3) When TJ-27 is coadministered with other Kampo-preparations (Japanese traditional herbal medicines), etc., attention should be paid to the duplication of the contained crude drugs.

SHO: The term “SHO” refers to a particular pathological status of a patient evaluated by the Kampo diagnosis, and is patterned according to the patient’s constitution, symptoms, etc. Kampo-preparations (Japanese traditional herbal medicines) should be used after confirmation that it is suitable for the identified “SHO” of the patient.
3. Drug Interactions
Precautions for coadministration (TJ-27 should be administered with care when coadministered with the following drugs.)

<table>
<thead>
<tr>
<th>Drugs</th>
<th>Signs, Symptoms, and Treatment</th>
<th>Mechanism and Risk Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Preparations containing Ephedra Herb</td>
<td>Insomnia, excessive sweating, tachycardia, palpitation, general weakness, mental excitation, etc. are likely to occur. In such cases, this product should be administered with care by measures such as reducing the dosage.</td>
<td>An enhancement of the sympathetic nerve-stimulating action has been suggested.</td>
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<tr>
<td>(2) Preparations containing ephedrine-related compounds</td>
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<td>(3) Monoamine oxidase (MAO) inhibitors</td>
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<td>(4) Thyroxine preparations</td>
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<td>(5) Catecholamine preparations</td>
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<td>(6) Xanthine preparations</td>
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<tr>
<td>(1) Preparations containing Glycyrrhiza</td>
<td>Pseudoaldosteronism is likely to occur. Besides, myopathy is likely to occur as a result of hypokalemia. (Refer to the section “Clinically significant adverse reactions.”)</td>
<td>Since glycyrrhizinic acid has an accelerating action on the potassium excretion at the renal tubules, an acceleration of decrease in the serum potassium level has been suggested.</td>
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<tr>
<td>(2) Preparations containing glycyrrhizinic acid or glycyrrhizines</td>
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</table>

4. Adverse Reactions
TJ-27 has not been investigated (drug use investigations, etc.) to determine the incidence of adverse reactions. Therefore, the incidence of adverse reactions is not known.

(1) Clinically significant adverse reactions
1) Pseudoaldosteronism: Pseudoaldosteronism such as hypokalemia, increased blood pressure, retention of sodium/body fluid, edema, increased body weight, etc. may occur. The patient should be carefully monitored (measurement of serum potassium level, etc.), and if any abnormality is observed, administration should be discontinued and appropriate measures such as administration of potassium preparations should be taken.
2) Myopathy: Myopathy may occur as a result of hypokalemia. The patient should be carefully monitored, and if any abnormality such as weakness, convulsion/paralysis of limbs, etc. are observed, administration should be discontinued and appropriate measures such as administration of potassium preparations should be taken.

(2) Other adverse reactions

<table>
<thead>
<tr>
<th>Incidence unknown</th>
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<tbody>
<tr>
<td>Hyper敏感ivity</td>
</tr>
<tr>
<td>Autonomic</td>
</tr>
<tr>
<td>Hepatic</td>
</tr>
<tr>
<td>Gastrointestinal</td>
</tr>
<tr>
<td>Urinary</td>
</tr>
</tbody>
</table>

Note 1) If such symptoms are observed, administration should be discontinued.

5. Use in the Elderly
Because elderly patients often have reduced physiological function, careful supervision and measures such as reducing the dose are recommended.

6. Use during Pregnancy, Delivery or Lactation
The safety of TJ-27 in pregnant women has not been established. Therefore, TJ-27 should be used in pregnant women, women who may possibly be pregnant only if the expected therapeutic benefits outweigh the possible risks associated with treatment.

7. Pediatric Use
The safety of TJ-27 in children has not been established. [Insufficient clinical data]

PHARMACOLOGY
1. Anti-inflammatory actions
Oral administration of Maoto to rats passively sensitized with anti-ovalbumin IgE serum inhibited passive cutaneous anaphylaxis (PCA) for 48 hours.

2. Action mechanism
Maoto shows pharmacological effects via the following actions:
- Actions on fever
  - In cultivated rabbit astrocytes, short-term (10 min.) treatment with Maoto inhibited the synthesis of prostaglandin E2 by bradykinin, but treatment for many hours (18 hr) increased it.
  - In rat C6 glioma cells, Maoto inhibited the release of prostaglandin E2 by a calcium ionophore, A23187 (in vitro).

PACKAGING
- Bottles of 500 g
  - 2.5 g × 42 packets
  - 2.5 g × 189 packets

REFERENCES
REQUEST FOR LITERATURE SHOULD BE MADE TO:
Consumer Information Services Center
Tsumura & Co.
2-17-11 Akasaka, Minato-ku, Tokyo 107-8521, Japan
TEL:0120-329970  FAX:03-5574-6610

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Tsumura & Co.
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