mometasone (inhalation)  (moe-met-a-sone)

Asmanex Twisthaler

**Classification**
Therapeutic: anti-inflammatories, anti-inflammatories (steroidal)
Pharmacologic: corticosteroids (inhalation)

**Pregnancy Category C**

**Indications**
Maintenance treatment of asthma as prophylactic therapy. May decrease the need for or eliminate use of systemic corticosteroids in patients with asthma.

**Action**
Potent, locally acting anti-inflammatory and immune modifier. Therapeutic Effects: Decreased frequency and severity of asthma attacks. Improves asthma symptoms.

**Pharmacokinetics**
Absorption: 1%; action is primarily local after inhalation. Distribution: 10–25% is deposited in airways if a spacer device is not used. All cross the placenta and enter breast milk in small amounts. Metabolism and Excretion: Metabolized by the liver (primarily by CYP3A4) after absorption from lungs; 75% excreted in feces. Half-life: 5 hr.

**TIME/ACTION PROFILE (improvement in symptoms)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
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<tbody>
<tr>
<td>Inhalation</td>
<td>within 24 hr</td>
<td>1–4 wk†</td>
<td>unknown</td>
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</table>

†Improvement in pulmonary function; airway responsiveness may take longer

**Contraindications/Precautions**
Contraindicated in: Hypersensitivity or intolerance to drug or milk proteins; Acute attack of asthma or status asthmaticus
Use Cautiously in: Active untreated infections; Diabetes or glaucoma; Underlying immunosuppression (due to disease or concurrent therapy); Systemic corticosteroid therapy (should not be abruptly discontinued when inhalation therapy is started; additional corticosteroids needed in stress or trauma).

**Adverse Reactions/Side Effects**
CNS: headache, agitation, depression, dizziness, fatigue, insomnia, restlessness.
EENT: dysphonia, hoarseness, otitis, nasal congestion, pharyngitis, sinusitis.
Resp: bronchospasm, cough, wheezing.
GI: diarrhea, dry mouth, dyspepsia, esophageal candidiasis, taste disturbances.
Endo: adrenal suppression (threshold, long-term therapy only); growth (children); bone mineral density.
MS: back pain. Misc: hypersensitivity reactions including ANAPHYLAXIS,urticaria, angioedema, extrusion, and intramuscular, cutaneous, subcutaneous.

**Interactions**
Drug-Drug: Ketoconazole may q levels.

**Route/Dosage**

**Inhaln (Adults and Children ≥12 yr):**
- Previously on bronchodilators or other inhaled corticosteroids—220 mcg (1 inhalation) once daily, up to 440 mcg/day as a single dose or 2 divided doses.
- Previously on oral corticosteroids—440 mcg (2 inhalations) twice daily (not to exceed 880 mcg/day).

**Inhaln (Children 4–11 yr):**
- 110 mcg once daily in evening (not to exceed 110 mcg/day).

**NURSING IMPLICATIONS**

**Assessment**
- Monitor respiratory status and lung sounds. Assess pulmonary function tests periodically during and for several months after a transfer from systemic to inhalation corticosteroids.
- Assess patients changing from systemic corticosteroids to inhalation corticosteroids for signs of adrenal insufficiency (anorexia, nausea, weakness, fatigue, hypotension, hypothermia) during initial therapy and periods of stress. If these signs appear, consult health care professional immediately; condition may be life-threatening.
- Monitor for withdrawal symptoms (joint or muscular pain, lassitude, depression) during withdrawal from oral corticosteroids.
- Monitor for withdrawal symptoms (joint or muscular pain, lassitude, depression) during withdrawal from oral corticosteroids.
Monitor growth rate in children receiving chronic therapy; use lowest possible dose.

May cause decreased bone mineral density during prolonged therapy. Monitor patients with increased risk (prolonged immobilization, family history of osteoporosis, post-menopausal status, tobacco use, advanced age, poor nutrition, chronic use of drugs that can reduce bone mass [anticonvulsants, oral corticosteroids]) for fractures.

Monitor for signs and symptoms of hypersensitivity reactions (rash, pruritus, swelling of face and neck, dyspnea) periodically during therapy.

Lab Test Considerations: Periodic adrenal function tests may be ordered to assess degree of hypothalamic-pituitary-adrenal (HPA) axis suppression in chronic therapy. Children and patients using higher than recommended doses are at highest risk for HPA suppression.

May cause q serum and urine glucose concentrations if significant absorption occurs.

Potential Nursing Diagnoses
Ineffective airway clearance (Indications)
Risk for infection (Side Effects)
Deficient knowledge, related to medication regimen (Patient/Family Teaching)

Implementation
After the desired clinical effect has been obtained, attempts should be made to decrease dose to lowest amount required to control symptoms. Gradually decrease dose every 2–4 wk as long as desired effect is maintained. If symptoms return, dose may briefly return to starting dose.

Inhaler:
Allow at least 1 min between inhalations.

Patient/Family Teaching
Advise patient to take medication as directed. Take missed doses as soon as remembered unless almost time for next dose. Instruct patient to read the Patient Information and Instructions for use before using and with each Rx refill, in case of new information. Advise patient not to discontinue medication without consulting health care professional; gradual decrease is required.

Advise patients using inhalation corticosteroids and bronchodilator to use bronchodilator first and to allow 5 min to elapse before administering the corticosteroid, unless otherwise directed by health care professional.

Advise patient that inhalation corticosteroids should not be used to treat an acute asthma attack, but should be continued even if other inhalation agents are used.

Patients using inhalation corticosteroids to control asthma may require systemic corticosteroids for acute attacks. Advise patient to use regular peak flow monitoring to determine respiratory status.

Caution patients to avoid smoking, known allergens, and other respiratory irritants.

Advise patient to notify health care professional if sore throat or sore mouth occurs.

Advise patient to stop using medication and notify health care professional immediately if signs and symptoms of hypersensitivity reactions occur.

Advise female patients to notify health care professional if pregnancy is planned or suspected or if breast feeding.

Instruct patient whose systemic corticosteroids have been recently reduced or withdrawn to carry a warning card indicating the need for supplemental systemic corticosteroids in event of stress or severe asthma attack unresponsive to bronchodilators.

Asmanex Twisthaler: Advise patient to move cap while device is in upright position. To administer dose, exhale fully, then place mouthpiece between lips and inhale deeply and forcefully. Remove device from mouth and hold breath for 10 sec before exhaling (do not exhale into mouthpiece). Wipe the mouthpiece dry if necessary, and replace the cap on the device. Allow mouth with water. Advise patient to discard mouthpiece 45 days from opening or when dose counter reads “00”, whichever comes first.

Evaluat/Desired Outcomes
Management of the symptoms of chronic asthma.

Why was this drug prescribed for your patient?