

FLUTICASONE 100 MCG POWDER FOR INHALATION (DISKUS) , and puff inhaler, nasal spray

Class: Corticosteroid

Indications:

Inhalation (Diskus and puff inhaler): Maintenance treatment of asthma as prophylactic therapy; also indicated for patients requiring oral corticosteroid therapy for asthma to assist in total discontinuation or reduction of total oral dose

Nasal spray: Management of seasonal and perennial allergic rhinitis and nonallergic rhinitis

Available dosage form in the hospital:

-FLUTICASONE 100 MCG POWDER FOR INHALATION (DISKUS)

-FLUTICASONE 125MCG/PUFF INHALER

-FLUTICASONE 25 MCG POWDER FOR INHALATION

-FLUTICASONE 250 MCG POWDER FOR INHALATION [DISKUS]

-FLUTICASONE 50MCG POWDER FOR INHALATION

-FLUTICAZONE 0.05% W/W NASAL SPRAY

Dosage: Asthma: Inhalation, oral: **Note:** Titrate to the lowest effective dose once asthma stability is achieved.

-Flovent® HFA:

U.S. labeling: Dosing based on previous asthma therapy: **Note:** May increase dose after 2 weeks of therapy in patients who are not adequately controlled.

- Bronchodilator alone: Initial: 88 mcg twice daily; maximum: 440 mcg twice daily
- Inhaled corticosteroids: Initial: 88-220 mcg twice daily (initial dose >88 mcg twice daily may be considered in patients previously requiring higher doses of inhaled corticosteroids); maximum: 440 mcg twice daily
- Oral corticosteroids (OCS): Initial: 440 mcg twice daily; maximum: 880 mcg twice daily.

NIH Asthma Guidelines (NIH, 2007) (administer in divided doses twice daily):

“Low” dose: 88-264 mcg/day

“Medium” dose: >264-440 mcg/day

“High” dose: >440 mcg/day

Canadian labeling: **Note:** May increase dose after ~1 week of therapy in patients who are not adequately controlled.

- Mild asthma: 100-250 mcg twice daily
- Moderate asthma: 250-500 mcg twice daily
- Severe asthma: 500 mcg twice daily; may increase up to 1000 mcg twice daily in very severe patients (eg, patients using oral corticosteroids [OCS])

-Flovent® Diskus®:

U.S. labeling: Note: May increase dose after 2 weeks of therapy in patients who are not adequately controlled.

Dosing based on previous asthma therapy:

- Bronchodilator alone: Initial: 100 mcg twice daily; maximum: 500 mcg twice daily
- Inhaled corticosteroids: Initial: 100-250 mcg twice daily; maximum: 500 mcg twice daily; initial dose >100 mcg twice daily may be considered in patients with poorer asthma control or those previously requiring high ranges of inhaled corticosteroids
- Oral corticosteroids (OCS): Initial: 500-1000 mcg twice daily; maximum: 1000 mcg twice daily

NIH Asthma Guidelines (NIH, 2007) (administer in divided doses twice daily):

“Low” dose: 100-300 mcg/day

“Medium” dose: >300-500 mcg/day

“High” dose: >500 mcg/day

Canadian labeling: Note: May increase dose after ~1 week of therapy in patients who are not adequately controlled.

- Mild asthma: 100-250 mcg twice daily
- Moderate asthma: 250-500 mcg twice daily
- Severe asthma: 500 mcg twice daily; may increase up to 1000 mcg twice daily in very severe patients (eg, patients using oral corticosteroids [OCS])

-Conversion from oral systemic corticosteroids to orally inhaled corticosteroids: When converting from oral corticosteroids (OCS) to orally inhaled corticosteroids, initiate oral inhalation therapy in patients whose asthma is previously stabilized on OCS. Gradual OCS dose reductions should begin ~7 days after starting inhaled therapy. *U.S. labeling* recommends reducing prednisone dose no more rapidly than 2.5-5 mg/day (or equivalent of other OCS) weekly. The *Canadian labeling* recommends decreasing the daily dose of prednisone by 1 mg (or equivalent of other OCS) no more rapidly than weekly in adults who are closely monitored or every 10 days if not closely monitored. If adrenal insufficiency occurs, resume OCS therapy; initiate a more gradual withdrawal. When transitioning from systemic to inhaled corticosteroids, supplemental systemic corticosteroid therapy may be necessary during periods of stress or during severe asthma attacks.

Rhinitis:

- Intranasal:

-Flonase® (fluticasone propionate): Initial: 2 sprays (50 mcg/spray) per nostril once daily (200 mcg/day); alternatively, the same total daily dosage may be divided and given as 1 spray per nostril twice daily (200 mcg/day). After the first few days, dosage may be reduced to 1 spray per nostril once daily for maintenance therapy (100 mcg/day).

-Veramyst® (fluticasone furoate): Initial: 2 sprays (27.5 mcg/spray) per nostril once daily (110 mcg/day); once symptoms are controlled, may reduce dosage to 1 spray per nostril once daily (55 mcg/day) for maintenance therapy.

-Avamys® (fluticasone furoate) (Canadian availability; not available in the U.S.): 2 sprays (27.5 mcg/spray) in each nostril once daily (110 mcg/day). Total daily dosage should not exceed 2 sprays in each nostril (110 mcg)/day.

Geriatric

Refer to adult dosing.

Renal Impairment:

No dosage adjustment provided in manufacturer's labeling (has not been studied).

Hepatic Impairment:

No dosage adjustment provided in manufacturer's labeling (has not been studied); however, fluticasone is primarily cleared in the liver and plasma levels may be increased in patients with hepatic impairment. Use with caution; monitor.

Common side effect:

Inhalation:

- Central nervous system: Malaise/fatigue, headache
- Gastrointestinal: Oral candidiasis
- Neuromuscular & skeletal: Arthralgia/articular rheumatism, musculoskeletal pain
- Respiratory: Sinusitis/sinus infection, upper respiratory tract infection, throat irritation, nasal congestion/blockage, rhinitis

Nasal spray:

- Central nervous system: Headache

Pregnancy Risk Factor: C