# Duzallo (lesinurad, allopurinol)



#### **NEW PRODUCT SLIDESHOW**



#### Introduction

- Brand name: Duzallo
- Generic name: Lesinurad, allopurinol
- Pharmacological class: URAT1 inhibitor + xanthine oxidase inhibitor
- Strength and Formulation: 200mg/200mg, 200mg/300mg; tabs
- Manufacturer: Ironwood Pharmaceuticals
- How supplied: Bottle—5, 30, 90
- Legal Classification: Rx

#### Duzallo



#### Indications

#### Hyperuricemia associated with gout in patients who have not achieved target serum uric acid levels with an appropriate daily dose of allopurinol alone

#### Limitation of use

#### Not for treatment of asymptomatic hyperuricemia

#### **Dosage & Administration**

- Take in the AM with food and water
- ≥18yrs: 1 tab daily
- Patients on daily allopurinol dose
  - 200mg: initially one 200mg/200mg tab daily
  - **300mg:** initially one 200mg/300mg tab daily
  - >300mg: initially one tab in place of an equal portion of the total daily allopurinol dose
  - <300mg (or <200mg with eCLCr <60mL/min): not recommended

## **Considerations for Special Populations**

- Pregnancy: Limited data to inform drugassociated risk
- Nursing mothers: Consider benefits with potential adverse effects
- Pediatric: <18yrs: not established</p>
- Elderly: No overall differences in safety or efficacy observed
- Renal impairment: See Contraindications
- Hepatic impairment: Severe impairment: not recommended

#### **Contraindications**

- Severe renal impairment (eCLCr <30mL/min)</li>
- End-stage renal disease (ESRD)
- Kidney transplant recipients or dialysis patients
- Tumor lysis syndrome or Lesch-Nyhan syndrome

#### **Warnings/Precautions**

- Risk of acute renal failure
- Assess renal function prior to initiation and periodically thereafter
- Renal impairment (eCLCr<45mL/min): do not initiate
- If eCLCr <60mL/min or with SCr elevations 1.5–2X pre-treatment value: monitor more frequently; if SCr >2X pre-treatment value: interrupt treatment

#### **Warnings/Precautions**

- Discontinue therapy if eCLCr is persistently <45mL/min</li>
- Maintain adequate hydration (2L of liquid per day)
- Give gout flare prophylaxis if patient not currently taking lesinurad
- Discontinue immediately if rash occurs

#### **Warnings/Precautions**

- Elevate liver function if anorexia, weight loss, or pruritus develops
- Pre-existing liver disease: perform LFTs periodically
- Females should use additional non-hormonal methods of contraception

#### Interactions

- Caution with concomitant moderate CYP2C9 inhibitors (eg, fluconazole, amiodarone) and in CYP2C9 poor metabolizers
- Antagonized by moderate CYP2C9 inducers (eg, rifampin, carbamazepine), aspirin
  >325mg/day
- Antagonizes CYP3A substrates (eg, sildenafil, amlodipine)

#### Interactions

- May affect sensitive CYP3A substrate (eg, HMG-CoA reductase inhibitors); monitor
- Concomitant epoxide hydrolase inhibitors (eg, valproic acid): not recommended
- May reduce efficacy of hormonal contraceptives
- Potentiates azathioprine and mercaptopurine toxicity; reduce dose of these by <sup>1</sup>/<sub>3</sub> to <sup>1</sup>/<sub>4</sub> of usual dose and monitor

#### Interactions

- Assess PT periodically with concomitant coumarin anticoagulants (eg, dicumarol, warfarin)
- May potentiate chlorpropamide, cyclosporine
- Increased rash with ampicillin, amoxicillin
- Monitor renal function with thiazides

### **Adverse Reactions**

- Headache
- Influenza
- Blood creatinine increased
- GERD
- Skin rash
- Renal events
- Gout flares
- Hepatotoxicity

- Cardiovascular events
- Drowsiness
- Bone marrow depression
- Severe hypersensitivity reactions (eg, eosinophilia, SJS, TEN)

#### **Mechanism of Action**

- Lesinurad reduces serum uric acid levels by inhibiting the function of transporter proteins involved in uric acid reabsorption in the kidney
- Allopurinol reduces production of uric acid by inhibiting the biochemical reactions immediately preceding its formation

 The efficacy of allopurinol + lesinurad has been demonstrated in 2 multicenter, randomized, double-blind, placebo-controlled, 12-month studies in adults with hyperuricemia and gout (Study 1 and 2)

- Patients were randomized to receive lesinurad 200mg, lesinurad 400mg, or placebo once daily in addition to their stable allopurinol dose (average 310mg dose)
- Efficacy was determined by:
  - Proportion of patients achieving target serum uric acid levels (<6mg/dL)</li>
  - Rate of gout flare

- Lesinurad 200mg in combination with allopurinol was superior to allopurinol alone in lowering serum uric acid to <6mg/dL at Month 6
  - Study 1 (N=603): 54% vs. 28% (difference 0.26, 95% CI: 0.17, 0.36)
  - Study 2 (N=610): 55% vs. 23% (difference 0.32, 95% CI: 0.23, 0.41)
- Effects were maintained throughout the 12month studies

 In Study 1 and 2, the rates of gout flare requiring treatment from Month 6 to 12 were not statistically different between lesinurad 200mg in combination with allopurinol vs. allopurinol alone

For more clinical trial data, see full labeling

#### **New Product Monograph**

#### For more information view the product monograph available at:

http://www.empr.com/duzallo/drug/34749/