Siklos (hydroxyurea)

NEW PRODUCT SLIDESHOW

MPR

Introduction

- **Brand name:** Siklos
- **Generic name:** Hydroxyurea
- **Pharmacological class:** Antimetabolite
- **Strength and Formulation:** 100mg, 1000mg+; tabs; +triple-scored
- **Manufacturer:** Medunik USA, Inc.
- **How supplied:** Tabs 100mg—60; 1000mg—30
- **Legal Classification:** Rx

Siklos


NDC 71770-100-60
Siklos® 100 mg
(hydroxyurea)
tablets
100 mg per tablet
ATTENTION PHARMACIST:
Each patient is required to receive the enclosed Medication Guide
60 tablets
100
addmedica
Siklos® 100 mg
(hydroxyurea)
tablets
100 mg per tablet
60 tablets

Indication

- To reduce the frequency of painful crises and to reduce the need for blood transfusions in patients with **sickle cell anemia** with recurrent moderate-to-severe painful crises

Dosage & Administration

- Base dose on ideal or actual weight, whichever is less
- If difficulty swallowing, may disperse tab in teaspoonful of water immediately before use
- **≥2yrs:** initially 20mg/kg/day as a single dose

Dosage & Administration

- May increase dose by **5mg/kg/day** every 8 weeks or if painful crisis occurs; give until mild myelosuppression (ANC 2000–4000/uL) is achieved, up to max 35mg/kg/day; increase dose only if blood counts are in an acceptable range; **do not increase dose** if myelosuppression occurs

Dosage & Administration

- If blood counts are considered **toxic**, discontinue until hematologic recovery, see full labeling for dosage adjustments
- **Renal impairment** (CrCl <60mL/min or ESRD): initially 10mg/kg/day; give dose following dialysis (monitor)

Considerations for Special Populations

- **Pregnancy:** Avoid; may cause fetal harm based on findings from animal studies
- **Nursing mothers:** Not recommended
- **Pediatric:** <2yrs: Not established
- **Hepatic impairment:** Monitor closely
- **Renal impairment:** See Dosing; monitor closely

Warnings/Precautions

- Risk of severe **myelosuppression**
- Monitor blood counts at baseline and every 2 weeks during therapy; interrupt or reduce dose if necessary; resume at lower dose
- Markedly depressed **bone marrow function**: do not initiate
- Monitor for secondary malignancies
- **Avoid** sun exposure

Warnings/Precautions

- **Macrocytosis** may mask folic acid deficiency; prophylactic folic acid is recommended
- Myeloproliferative disorders; reduce dose or discontinue if cutaneous vasculitic ulcerations occur
- Avoid in those with leg ulcers
- Obtain fetal hemoglobin (HbF) levels every 3–4 months; may be used to assess efficacy

Warnings/Precautions

- Embryo-fetal toxicity
- Females with reproductive potential and males (with female partners) should use **effective contraception** during and for ≥6 months after therapy
- Wear **disposable gloves** when handling tabs or bottle

Interactions

- **Avoid** concomitant didanosine, with or without stavudine, or other antiretrovirals (may cause pancreatitis [permanently discontinue if occurs], fatal hepatotoxicity, peripheral neuropathy)
- **Avoid** live vaccines
- Increased risk of vasculitic toxicities with interferon therapy
- May cause **falsely elevated results** in urea, uric acid, and lactic acid assays

Adverse Reactions

- Infections
- Leukopenia
- Thrombocytopenia
- Anemia
- Neutropenia
- Skin and subcutaneous disorders
- GI upset
- Vit D deficiency
- Headache
- Fever
- Secondary malignancies
- Vasculitic toxicities
- Macrocytosis

Mechanism of Action

- The known pharmacologic effects of hydroxyurea that may contribute to its beneficial effects in sickle cell anemia include:
  - Increasing hemoglobin F levels in red blood cells (RBCs)
  - Decreasing neutrophils
  - Increasing the water content of RBCs
  - Increasing deformability of sickled cells
  - Altering the adhesion of RBCs to endothelium

Clinical Studies

- Siklos was assessed in the open-label, single-arm European Sickle Cell Disease Cohort study (ESCORT HU) that enrolled 405 pediatric patients with sickle cell disease aged 2 to 18 years

Clinical Studies

- Evaluable patients had at least 12 months follow-up
- Median hemoglobin level at baseline was 8.2g/dL
- The median change was **0.5g/dL** in 63 patients at 6 months and **0.7g/dL** in 83 patients at 12 months after Siklos initiation

Clinical Studies

- Among patients not previously treated with hydroxyurea prior to enrollment and analyzable for efficacy (N=141), the percentage of patients with at least 1 vaso-occlusive episode, 1 episode of acute chest syndrome, 1 hospitalization due to SCD or 1 blood transfusion **decreased** after 12 months of treatment

New Product Monograph

- For more information view the product monograph available at:

https://www.empr.com/siklos/drug/34867/