Optum Rx®

Sohonos™ (palovarotene) – New orphan drug approval

- On August 16, 2023, Ipsen announced the FDA approval of Sohonos (palovarotene), for the reduction in volume of new heterotopic ossification in adults and pediatric patients aged 8 years and older for females and 10 years and older for males with fibrodysplasia ossificans progressiva (FOP).
- FOP is an ultra-rare bone disease characterized by abnormal bone formation. The disease affects an estimated 400 people in the U.S.
- Sohonos is the first drug approved for FOP. Sohonos is a retinoic acid receptor (RAR) agonist, with particular selectivity at the gamma subtype of RAR.
- The efficacy of Sohonos was established in PVO-1A-301, a single arm study in 97 patients with FOP. A natural history study (NHS) was used as an external control (N = 101). The primary endpoint was annualized volume of new heterotopic ossification (HO).
    - The mean annualized new HO was 9.4 cm^3/year in patients receiving the chronic/flare-up Sohonos treatment and 20.3 cm^3/year in untreated patients in the NHS. The treatment effect was about 10.9 cm^3/year (95% CI: -21.2, -0.6).
- Sohonos carries a boxed warning for embryo-fetal toxicity and premature epiphyseal closure in growing pediatric patients.
- Sohonos is contraindicated in the following patients:
    - During Pregnancy
    - A history of allergy or hypersensitivity to retinoids, or to any component of Sohonos
- Additional warnings and precautions for Sohonos include mucocutaneous adverse reactions, metabolic bone disorders, psychiatric disorders, and night blindness.
- The most common adverse reactions (≥ 10%) with Sohonos use were dry skin, lip dry, arthralgia, pruritis, pain in extremity, rash, alopecia, erythema, headache, back pain, skin exfoliation, nausea, musculoskeletal pain, myalgia, dry eye, hypersensitivity, peripheral edema, and fatigue.
- In adults and pediatric patients 14 years and older, the recommended Sohonos daily dosage is 5 mg daily. Daily dosing should be stopped when flare-up dosing begins. For flare-up dosing:
    - The recommended flare-up dosage is 20 mg daily for 4 weeks, followed by 10 mg daily for 8 weeks (for a total of 12 weeks of flare-up treatment), even if symptoms resolve earlier, then return to daily dosing of 5 mg.
    - If during the course of flare-up treatment, the patient experiences marked worsening of the original flare-up site or another flare-up at a new location, restart the 12-week flare-up dosing at 20 mg daily.
    - For flare-up symptoms that have not resolved at the end of the 12-week period, the 10 mg daily dosage may be extended in 4-week intervals and continued until the flare-up symptoms resolve. If new flare-up symptoms occur after the 5 mg daily dosing is resumed, flare-up dosing may be restarted.

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- The recommended Sohonos daily dosage for patients under 14 years of age is weight-based ranging from 2.5 mg to 5 mg daily. Daily dosing should be stopped when flare-up dosing begins. For flare-up dosing:
    - The recommended flare-up Sohonos dosage is weight-based. The initial flare-up dosage should be administered once daily for 4 weeks, then administer the lower flare-up dosage once daily for 8 weeks (for a total of 12 weeks of flare-up treatment), even if symptoms resolve earlier, then return to daily dosing.
    - If during the course of flare-up treatment, the patient experiences marked worsening of the original flare-up site or another flare-up at a new location, restart the 12-week flare-up dosing with the week 1 to 4 dose.
    - For flare-up symptoms that have not resolved at the end of the 12-week period, the week 5 to 12 flare-up dose may be extended in 4-week intervals and continued until the flare-up symptoms resolve. If new flare-up symptoms occur after daily dosing is resumed, flare-up dosing may be restarted.
    - Refer to the drug label for complete weight-based dosing recommendations.
- Ipsen plans to launch Sohonos immediately. Sohonos will be available as 1, 1.5, 2.5, 5, and 10 mg capsules.

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