Cuvrior™ (trientine tetrahydrochloride) – New orphan drug approval

- On April 28, 2022, the FDA approved Orphalan's Cuvrior (trientine tetrahydrochloride), for the treatment of adult patients with stable Wilson's disease who are de-coppered and tolerant to penicillamine.

- A different formulation of trientine (trientine hydrochloride capsules) is available generically for treatment of Wilson's disease.

- The efficacy of Cuvrior was established in a randomized, active-controlled, non-inferiority study in 53 adult patients with Wilson's disease. At the start of the study, patients entered a 12-week baseline period and continued to receive their established total daily dosage of penicillamine. At week 12, patients were randomized to either remain on penicillamine or to switch to Cuvrior for the 24-week post-randomization period. The primary endpoint was the mean serum non-ceruloplasmin copper (NCC) level at 24 weeks post-randomization (week 36).

    - Mean serum NCC (mcg/L) was 46 and 56 for patients in the penicillamine and Cuvrior arms (treatment difference -9, 95% CI: -24, 6).

- In addition, the safety and effectiveness of Cuvrior in Wilson's disease is further supported by studies of another trientine product in patients intolerant to penicillamine.

- Warnings and precautions for Cuvrior include potential for worsening of clinical symptoms at initiation of therapy; copper deficiency; iron deficiency; and hypersensitivity reactions.

- The most common adverse reactions (> 5%) with Cuvrior use were abdominal pain, change of bowel habits, rash, alopecia, and mood swings.

- The recommended starting total daily dosage of Cuvrior in adult patients is 300 mg up to 3,000 mg taken orally in divided doses (two times daily). Refer to the drug label for the recommended starting total daily dosage of Cuvrior in adult patients switching from penicillamine to Cuvrior.

    - The total daily dosage of Cuvrior should be adjusted according to clinical assessment and laboratory monitoring of copper. The total daily dosage of Cuvrior should not exceed 3,000 mg.
    - Penicillamine should be discontinued before starting Cuvrior.
    - Cuvrior is not substitutable on a milligram-per-milligram basis with other trientine products.

- Orphalan's launch plans for Cuvrior are pending. Cuvrior will be available as a 300 mg tablet.