Diacomit® (stiripentol) – New orphan drug approval

- On August 20, 2018, the FDA approved Biocodex's Diacomit (stiripentol) for the treatment of seizures associated with Dravet Syndrome (DS) in patients 2 years of age and older taking Onfi® (clobazam).
    - There are no clinical data to support the use of Diacomit as monotherapy in DS.
- DS is a rare, severe form of epilepsy that develops within the first year of life. It is associated with a 15-20% mortality rate due to SUDEP (Sudden Unexpected Death in Epilepsy), prolonged seizures, seizure-related accidents, and infections. It is estimated that DS affects 1:15,700 infants born in the U.S.
- The efficacy of Diacomit for the treatment of DS was demonstrated in two clinical studies in patients with DS who were inadequately controlled on clobazam and valproate. Patients were randomized to receive Diacomit or placebo, in addition to their treatment with clobazam and valproate. The primary endpoint was responder rate [> 50% decrease in the frequency (per 30 days) of generalized clonic or tonic-clonic seizures during the treatment period vs. baseline].
    - In study 1, 71% of the patients treated with Diacomit were responders vs. 5% in the placebo group ($p < 0.0001$).
    - In study 2, 67% of the patients treated with Diacomit were responders vs. 9.1% in the placebo group ($p = 0.0094$).
- Warnings and precautions of Diacomit include somnolence, decreased appetite and decreased weight, neutropenia and thrombocytopenia, withdrawal symptoms, risks in patients with phenylketonuria, and suicidal behavior and ideation.
- The most common adverse reactions (≥ 10% and > placebo) with Diacomit use were somnolence, decreased appetite, agitation, ataxia, decreased weight, hypotonia, nausea, tremor, dysarthria, and insomnia.
- The recommended oral dosage of Diacomit is 50 mg/kg/day, divided in 2 or 3 doses.
    - Hematologic testing should be obtained prior to starting treatment with Diacomit.
    - Capsules must be swallowed whole with a glass of water during a meal.
    - Powder for suspension should be mixed in a glass of water and should be taken immediately after mixing during a meal.
    - If Diacomit treatment is discontinued, the drug should be withdrawn gradually to minimize risk of increased seizure frequency and status epilepticus.
- Biocodex's launch plans for Diacomit are pending. Diacomit will be available as 250 mg and 500 mg capsules and powder for oral suspension.