Tibsovo® (ivosidenib) – Expanded indication

- On May 2, 2019, Agios Pharmaceuticals announced the FDA approval of Tibsovo (ivosidenib), for the treatment of newly-diagnosed acute myeloid leukemia (AML) with a susceptible isocitrate dehydrogenase-1 (IDH1) mutation as detected by an FDA-approved test in adult patients who are ≥ 75 years old or who have comorbidities that preclude use of intensive induction chemotherapy.
    - Previously, Tibsovo was only approved for the treatment of adult patients with relapsed or refractory AML with a susceptible IDH1 mutation.
- AML is a cancer of the blood and bone marrow marked by rapid disease progression and is the most common acute leukemia affecting adults with approximately 20,000 new cases estimated in the U.S. each year. AML patients are typically older or have comorbidities that preclude the use of intensive chemotherapy. The five-year survival rate is approximately 28%.
    - For 6 to 10% of AML patients, the mutated IDH1 enzyme blocks normal blood stem cell differentiation, contributing to the genesis of acute leukemia. IDH1 mutations have been associated with negative prognosis in AML.
- The approval of Tibsovo's expanded indication was based on an open-label, single-arm study in 28 adult patients with newly-diagnosed AML with an IDH1 mutation. Efficacy was established on the basis of the rate of complete remission (CR) or complete remission with partial hematologic recovery (CRh), the duration of CR+CRh, and the rate of conversion from transfusion dependence to transfusion independence.
    - The CR and CRh rates were 28.6% (95% CI: 13.2, 48.7) and 14.3% (95% CI: 4.0, 32.7), respectively.
    - The CR+CRh rate was 42.9% (95% CI: 24.5, 62.8). The median duration of CR+CRh was not estimable.
    - Among the 17 patients who were dependent on red blood cell (RBC) and/or platelet transfusions at baseline, 7 (41.2%) became independent of RBC and platelet transfusions during any 56-day post-baseline period.
    - Of the 11 patients who were independent of both RBC and platelet transfusions at baseline, 6 (54.5%) remained transfusion independent during any 56-day post-baseline period.
- The recommended dose of Tibsovo for treatment of AML is 500 mg taken orally once daily until disease progression or unacceptable toxicity. For patients without disease progression or unacceptable toxicity, treat for a minimum of 6 months to allow time for clinical response.
    - Patients should be selected for the treatment of AML with Tibsovo based on the presence of IDH1 mutations in the blood or bone marrow. Patients without IDH1 mutations at diagnosis should be retested at relapse because a mutation in IDH1 may emerge during treatment and at relapse.