**INTRODUCTION**

LSD1 is a key regulator of hematopoietic differentiation

**Strong Rationale for LSD1 Inhibition in MPNs**

- LSD1 regulates the expression of key genes involved in hematopoietic differentiation in various myeloid malignancies and in healthy individuals.
- Inhibiting LSD1 has been shown to reduce hallmark symptoms in MPNs, such as fatigue, thrombosis, and extramedullary hematopoiesis.
- LSD1 inhibition can also reduce the risk of disease progression and the need for treatment in patients with MPNs.

**Bomedemstat (IMG-7289)**

- Development: Started dose is 0.6 mg/kg once daily
- CTP 400 x 10⁹
- Safety and tolerability profile

**RESULTS**

**Baseline Demographics and Disease Characteristics**

- Median age (range): 68 (27–87) years
- Male: 40 (60%)
- Female: 27 (40%)

**Safety and Tolerability Profile**

- Hematologic AEs:
  - Thrombocytopenia: 27 (40%)
  - Anemia: 24 (36%)
  - Leukopenia: 21 (31%)
  - Neutropenia: 10 (15%)

**Primary Objective: Reduction in Platelet Count**

- Platelet count at baseline: 1000 x 10⁹/L
- Platelet count at 12 weeks: 400 x 10⁹/L
- Reduction: 60% (95% CI: 51–67)

**Changes in Individual Components of the MPN-SAF TSS**

- Fatigue: 8 (12%)
- Pain in extremity: 8 (12%)
- Thrombocytopenia: 9 (13%)

**CONCLUSIONS**

- Boomedemstat is generally well tolerated.
- Significant improvement in fatigue and other symptoms observed.
- Potential to reduce the risk of disease progression.

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**RESULTS**

**Phase 2 Study of the LSD1 Inhibitor Boomedemstat (IMG-7289) for the Treatment of Essential Thrombocythemia (ET)**