**MOMENTUM: A Phase 3 Study of MIBL vs Danazol in Patients with Myelofibrosis Previously Treated with a JAKi who are Symptomatic and Anemic**

**Authors:**
- Sung-Soo Yoon
- Mark Kowalski
- Ruben A Mesa
- The Alfred Hospital and Monash University, Melbourne, Australia
- Leipzig University Hospital, Leipzig, Germany
- Department of Medicine and Center of Integrative Oncology, UCL, London, United Kingdom
- University of Geneva, Geneva, Switzerland
- Cancer Research and Treatment of Hematologic Malignancies, Kobe University Graduate School of Medicine, Kobe, Japan
- University of Texas Southwestern Medical Center, Dallas, Texas, USA
- National Cancer Institute, Bethesda, Maryland, USA
- University of California, San Francisco, CA, USA
- Stony Brook University, Stony Brook, NY, USA

**Table 1: Key eligibility criteria for MOMENTUM**

<table>
<thead>
<tr>
<th>Key inclusion criterion</th>
<th>Key exclusion criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age ≥ 18 years</td>
<td>Age &lt; 18 years</td>
</tr>
<tr>
<td>Confirmed diagnosis of MF (either MIBL or danazol) in accordance with the IAG/ACRF criteria</td>
<td>Prior momelotinib treatment at any time</td>
</tr>
<tr>
<td>Symptomatic, defined as a MFSAF TSS of ≥ 10 units</td>
<td>JAKi therapy within 2 weeks</td>
</tr>
<tr>
<td>Baseline splenomegaly, defined as having a palpable spleen length &gt; 20 cm</td>
<td>Uncontrolled cardiac arrhythmia within 6 months</td>
</tr>
</tbody>
</table>

**Primary Endpoint:**
- Use of the following treatments within the time periods noted, relative to randomization:
  - Prior momelotinib treatment at any time
  - JAKi therapy within 2 weeks
  - Active anti-MF therapy within 2 weeks
  - Potential CYP3A4 inducers within 1 week
  - Investigational agent within 4 weeks
  - ESA within 4 weeks
  - DAN within 3 months
  - Splenectomy within 3 months
  - Current treatment with simvastatin, lovastatin or pravastatin
  - History of prostate cancer (except for castration resistant disease) |

**Key Exploratory Endpoints:**
- Measures of rate and duration of MIBL safety assessments, survival analyses, change from baseline in FBCs, and plasma concentration of MIBL.

**Key Exploratory Endpoints:**
- Measures of rate and duration of MIBL safety assessments, survival analyses, change from baseline in FBCs, and plasma concentration of MIBL.

**Figure 1: MOMENTUM Study Design Schematic**

**Summary**
- Current study demonstrates the benefit of MIBL compared to danazol in patients with symptomatic and anemic myelofibrosis.
- MIBL demonstrates a statistically significant improvement in symptom response and splenic response rate compared to danazol.
- The study findings support the use of MIBL in the management of symptomatic and anemic myelofibrosis.

---

**Background**
- Randomization of MMB:DAN (n=180, 2:1) is stratified by baseline MFSAF Total Symptom Score (TSS), palpable spleen length, and baseline RBC units transfused in the 8-week period prior to randomization.
- MIBL was selected as the comparator given its use to ameliorate anemia in patients with MF (NCCN and ESMO guidelines).
- The study is designed to confirm and extend preliminary observations of the symptom benefit of MMB made in the SIMPLIFY-2 study.

**Study Rationale and Design**
- The primary endpoint of the study is the MFSAF TSS response rate at Week 24. The sample size provides a power of 99% to detect a clinically significant difference in TSS response.
- Secondary endpoints include Transfusion Independence rate and Splenic Response Rate (SRR).
- Key eligibility criteria are shown in Table 1, and key study endpoints in Table 2.