Emicizumab in Obese Adults with Hemophilia A – Pooled Data from Three Phase III Studies (HAVEN 1, 3 and 4)

In this post hoc analysis of the HAVEN 1, 3 and 4 trials, ARBs and emicizumab trough concentrations were compared between PwHA with BMI 230 kg/m² and <30 kg/m².

- PwHA from the HAVEN 1, 2 and 4 trials (Figure 1) who were ≥19 years of age, with or without FVIII inhibitors, had received emicizumab prophylaxis for ≥24 weeks, and had baseline BMI data available were included.
- ARBs for treated bleeds were summarized at baseline BMI ≥30 kg/m² and ≥<30 kg/m² and diverging regimens at ≤72 weeks.
- Sensitivity analyses were conducted using negative binomial regression with adjustments for baseline BMI ≥30 and ≥<30 kg/m², baseline weight, and dosing regimen.
- Measured emicizumab trough plasma concentrations were measured at pre-defined intervals according to the approved dosing regimen.
- Informed consent and ethics committee approval were obtained for all of the HAVEN studies.

A total of 260 PwHA were included in the analysis.

- At data cut-off on 15 May 2020, 44 (16.9%) and 216 (83.1%) adult PwHA with a BMI ≥30 kg/m² and ≥<30 kg/m², respectively, were included (Table 1), with 93 and 523.3 patient-years of emicizumab exposure, respectively.

Table 1. Baseline characteristics

<table>
<thead>
<tr>
<th></th>
<th>BMI ≥30 kg/m²</th>
<th>BMI 30-&lt;30 kg/m²</th>
<th>Total BMI ≥30 kg/m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age (years), range</td>
<td>41.8 (18–77)</td>
<td>38.4 (16–71)</td>
<td>40 (16–77)</td>
</tr>
<tr>
<td>Mean weight (kg), range</td>
<td>105 (60–181)</td>
<td>90 (68–130)</td>
<td>94.5 (60–181)</td>
</tr>
<tr>
<td>Mean BMI (kg/m²), range</td>
<td>35.1 (24–56)</td>
<td>26.1 (16–47)</td>
<td>30.1 (24–56)</td>
</tr>
</tbody>
</table>

Conclusions

ASRs for treated bleeds were similar in obese and non-obese PwHA in the HAVEN 1, 3 and 4 studies, with no notable differences in the three dosing regimens overall.

Efficacious trough concentrations of emicizumab were maintained across the three dosing regimens overall.

- Mean emicizumab trough concentrations were ≥30 µg/mL, with no notable difference between BMI groups (Figure 2).
- Comparisons between groups are limited by the low number of participants with a BMI ≥30 kg/m².

Figure 2. Emicizumab trough plasma concentrations during maintenance dosing

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Disclosures

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