Pharma Group Company, Redwood City, CA

In addition to the 13 (2%) patients with AEs of hypomagnesemia, 4 (0.6%) participants had AEs of hypomagnesemia (Week 4: baseline serum Mg<1.4 mg/L, mean ± SD [lower limit of normal (LLOQ)] = 1.8 mg/L). For those with moderate/severe HK at baseline, the mean ± SD change in serum Mg from baseline to Week 4 in all studies was -0.1 ± 0.3 mg/L (OPAL-UK), -0.2 ± 0.3 mg/L (TOURMALINE). For those with mild HK at baseline, the mean ± SD change in serum Mg from baseline to Week 4 was -0.0 ± 0.0 mg/L (AMETHYST-DN), -0.0 ± 0.0 mg/L (AMETHYST-DN, final 8.4 g/day) or -0.0 ± 0.0 mg/L (OPAL-UK, AMETHYST-DN after 8 weeks, and TOURMALINE).

Patiromer has been rigorously evaluated in the clinical trial setting, with 3 randomized trials in the United States, Europe, and Japan: AMETHYST, OPAL, and TOURMALINE.1,2

We therefore examined the consistency of serum K+ lowering in these trials of patient treatment with HK.

3. STUDY DESIGNS AND PARTICIPANTS

To date, more than 45,000 patients have been treated with patiromer in the clinical practice setting, predominantly in participants with CKD and diabetes on RAAS inhibitor therapy.3

Efficacy data are also presented for the subgroup of study participants who initiated patiromer at doses ≤8.4 g/day (n=203) during the first 4 weeks of the studies.

As shown in Figure 3, the percentage of study participants in this range was similar in those with mild or moderate HK at baseline, and generally consistent across studies.

Table 2. Summary of safety across Week 4

| Bn | No. of patients (%) | Most common AEs (all mild or moderate)* | Group
| --- | --- | --- | --- |
| | | | Comorbidities
| | | | Diabetes
| | | | Hypertension
| | | | CNS
| | | | RAAS-related AEs leading to discontinuation of patiromer
| | | | Premedication laboratory values of interest
| | | | Serum K+<1.4 mg/dL
| | | | Serum Mg<3.0 mg/dL

Table 1. Baseline demographics and clinical characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>All patients (n=653)</th>
<th>AKI stage II, n (%):</th>
<th>n (%)</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years), mean (SD)</td>
<td>59 ± 13</td>
<td>59 ± 13</td>
<td>58 ± 13</td>
<td>59 ± 13</td>
</tr>
</tbody>
</table>
| Randomisation | 418/647 (65%) | 215 (33%) | 203 (31%) | 111 (17%)
| Gender, n (%) | Male | 444 (68%) | 223 (35%) | 216 (33%) | 95 (15%)
| | Female | 209 (32%) | 95 (15%) | 87 (13%) | 34 (5%)
| Race, n (%) | White | 628 (96%) | 305 (48%) | 306 (47%) | 157 (25%)
| | African-American | 15 (3%) | 6 (1%) | 7 (1%) | 2 (0%)
| | Asian | 3 (0%) | 1 (0%) | 2 (0%) | 0 (0%)
| | Other | 7 (1%) | 2 (0%) | 3 (0%) | 2 (0%)
| | Indian subcontinent | 4 (1%) | 2 (0%) | 2 (0%) | 0 (0%)
| | Hispanic | 4 (1%) | 2 (0%) | 2 (0%) | 0 (0%)
| | American Indian or Alaskan Native | 2 (0%) | 0 (0%) | 0 (0%) | 2 (0%)
| | Other | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%)
| | | 444 (68%) | 223 (35%) | 216 (33%) | 95 (15%)
| | | 209 (32%) | 95 (15%) | 87 (13%) | 34 (5%)
| | | 628 (96%) | 305 (48%) | 306 (47%) | 157 (25%)
| | | 15 (3%) | 6 (1%) | 7 (1%) | 2 (0%)
| | | 3 (0%) | 1 (0%) | 2 (0%) | 0 (0%)
| | | 7 (1%) | 2 (0%) | 3 (0%) | 2 (0%)
| | | 4 (1%) | 2 (0%) | 2 (0%) | 0 (0%)
| | | 2 (0%) | 0 (0%) | 0 (0%) | 2 (0%)
| | | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%)

6. DISCUSSION AND CONCLUSION

In all but 9 (1%) participants, serum Mg was below the lower limit of normal (1.8 mg/L). In 32 (5%) participants initiated on the 8.4 g/day starting dose, serum Mg at baseline was 1.0 ± 0.2 mg/L, which is not considered to be hypomagnesemic, but could be considered moderate HK.

References


Supported by Relypsa, Inc., a Vifor Pharma Group Company.