**Introduction**

- **GemCis chemotherapy has been the first-line standard of care for advanced BTC worldwide for over a decade.**
- **As per initial interim results of TOPAZ-1 (NCT03875235), a statistically significant increase in OS was observed in participants treated with Durvalumab plus GemCis versus placebo plus GemCis.**
- **Based on the results of the TOPAZ-1 study, Durvalumab plus GemCis was recommended for the first-line treatment of advanced BTC.**

**Conclusions**

- Durvalumab is an immunomodulatory checkpoint inhibitor targeting programmed death ligand 1 (PD-L1) and PD-L2, and may have anti-tumor activity.
- **Patients have been treated with improved OS for anti-PD-L1 immunotherapy.**

**Previous results from this study can be found here:**
https://clinicaltrials.gov/ct2/show/NCT03875235

**Where can I access more information?**

- **OS hazard ratio (HR) was calculated using a Cox model.**
- **OS was calculated using the Kaplan-Meier method.**

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### Table 1. Incidence of immune-mediated adverse events (%) (n=338)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total (n=338)</th>
<th>Participants with at least one imAE (%)</th>
<th>Participants with resolved imAE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrenal insufficiency</td>
<td>2 (0.6)</td>
<td>2 (0.6)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Dermatitis/rash</td>
<td>29 (8.6)</td>
<td>20 (5.9)</td>
<td>8 (2.3)</td>
</tr>
<tr>
<td>Endocrine disorders</td>
<td>3 (0.9)</td>
<td>2 (0.6)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>29 (8.6)</td>
<td>20 (5.9)</td>
<td>8 (2.3)</td>
</tr>
<tr>
<td>Hematologic</td>
<td>13 (3.9)</td>
<td>11 (3.3)</td>
<td>9 (2.6)</td>
</tr>
<tr>
<td>Hypothalamopituitary</td>
<td>3 (0.9)</td>
<td>3 (0.9)</td>
<td>3 (0.8)</td>
</tr>
<tr>
<td>Immune-mediated arthritis</td>
<td>1 (0.3)</td>
<td>1 (0.3)</td>
<td>1 (0.3)</td>
</tr>
<tr>
<td>Neurological</td>
<td>7 (2.1)</td>
<td>6 (1.8)</td>
<td>3 (0.8)</td>
</tr>
<tr>
<td>Pulmonary</td>
<td>3 (0.9)</td>
<td>3 (0.9)</td>
<td>3 (0.8)</td>
</tr>
<tr>
<td>Renal</td>
<td>2 (0.6)</td>
<td>2 (0.6)</td>
<td>2 (0.6)</td>
</tr>
</tbody>
</table>

**Plain language summary**

**Why did we perform this research?**

The analysis described here was performed to assess side effects associated with the immunomodulatory checkpoint inhibitor Durvalumab in the TOPAZ-1 study: how often they occurred, their timing in relation to treatment and if they were associated with the length of time participants with BTC remained alive after being treated with Durvalumab plus GemCis anti-cancer therapy.

**How did we perform this research?**

Participants were treated with either Durvalumab plus GemCis or placebo plus GemCis. Side effects were categorised as being related to the immunomodulatory checkpoint inhibitor or not. They were counted and the time they began was recorded. The length of time participants remained alive was measured and linked to side effects associated with the immunomodulatory checkpoint inhibitor.

**What are the findings of this research?**

Side effects associated with the immunomodulatory checkpoint inhibitor were mild and did not lead to more participants stopping treatment. The timing of side effects associated with the immunomodulatory checkpoint inhibitor varied. Participants benefited from treatment with Durvalumab plus GemCis, regardless of whether or not they experienced side effects associated with the immunomodulatory checkpoint inhibitor.

**What are the implications of this research?**

This research, alongside other research in the TOPAZ-1 study, supports Durvalumab plus GemCis as a first treatment for advanced BTC.

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**References**