ABSTRACT

- Immunotherapy related abnormal thyroid function is common; it was reported in 6-18% of patients in a variety of the Checkmate and Keynote studies.
- Clinical relevance is unclear.
- The ASCO recommends treatment for TSH levels above 10 mUI/L for at least 4 weeks but it's unclear if abnormal TSH measurements will ultimately result in clinical thyroid dysfunction.

RESULTS

- 156/373 patients had some level of TSH abnormality.
- 10/156 required treatment within one month of initial abnormal TSH.

<table>
<thead>
<tr>
<th>REAGENT</th>
<th>Grade 1</th>
<th>Grade 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atezolizumab</td>
<td>73.9%</td>
<td>21.7%</td>
</tr>
<tr>
<td>Nivolumab</td>
<td>56.4%</td>
<td>32.1%</td>
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<tr>
<td>Pembrolizumab</td>
<td>76.4%</td>
<td>21.8%</td>
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</tbody>
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DISCUSSION

- More people than expected had some TSH abnormality, but the majority were transient and did not require chronic treatment with levothyroxine.
- Continuing to assess TSH throughout clinical practice will allow physicians to delineate between transient abnormalities and true abnormalities requiring treatment.

MATERIALS & METHODS

- Retrospectively collected data for 373 patients who received immunotherapy from April 2015 through August 2019.
- Using the common terminology criteria for adverse events, we recorded the first technical event of abnormal TSH.
- We tried to assess how common abnormal thyroid function is in real-world clinical practice and the clinical significance.
- It is unclear if the abnormal lab value will portend worsening or if it might self-resolve.

REFERENCES

