5PSQ-017: IMMUNE-MEDIATED ADVERSE EFFECTS OF CHIMERIC ANTIGEN RECEPTOR T CELLS (CAR-T) THERAPY IN REAL LIFE POPULATION: WE CONTINUE TO LEARN

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AIM AND OBJECTIVE

1. Describing the immune-toxicity profile of CAR-T cell therapies in a cohort of real-life patients
2. Looking for possible risk factors related to current and previous treatments.

MATERIALS AND METHODS

Collection data

Infusion of commercial anti-CD19 CAR-T (axi-cel. tisa-cel)

Inclusion criteria

Descriptive variables of the patient. CRS and ICANS-type AEs. Treatments against them.

Collected data

Statistical analysis

RESULTS

Table 1. Patients stats.

<table>
<thead>
<tr>
<th>Age (years. average)</th>
<th>54.5 (57.3 lymph / 22.6 leuk) (19.5-79.7)</th>
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<tbody>
<tr>
<td>Sex (women. N %)</td>
<td>39 (44%)</td>
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<tr>
<td>Neoplasia</td>
<td>B Lymphoma 81 (92%)</td>
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<tr>
<td></td>
<td>Acute lymphoid leukemia 7 (8%)</td>
</tr>
<tr>
<td>Previous lines. no hematopoietic transplant (average)</td>
<td>2.5 (1-6)</td>
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<tr>
<td>CAR-T</td>
<td>Axi-cel (%) 50 (57%)</td>
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<tr>
<td></td>
<td>Tisa-cel (%) 38 (43%)</td>
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Risk factors. Logistic regression

CRS
No significant risk factors

ICANS
Previous tocilizumab (OR=6.72 p<0.05)
Axicabtagene ciloleucel (OR=4.46 p<0.05)
Previous CRS grade 2-4 (OR=4.45 p<0.05)

Proportion of CRS > proportion of ICANS
(diff=55.54%. p<0.00)

Probability of grade 2-4 ICANS > Probability of 2-4 CRS
(diff=20.09%. p<0.05).

CONCLUSION AND RELEVANCE

Our real-life study supported the conclusions of other authors.

- It was more likely to have suffered CRS than ICANS.
- ICANS was more likely to be more severe.
- Suffering ICANS seemed to be associated with previous tocilizumab use, axicabtagene ciloleucel and previous moderate-severe CRS.