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## Background

**Cytokine release syndrome (CRS)** is a common and life-threatening toxicity directly related to new targeted therapies for Onco-hematological diseases. Although the optimal therapy for CRS remains unknown, tocilizumab has demonstrated success.

## Materials & Methods

- ✓ Retrospective observational study in a single center.
- ✓ Onco-hematologic patients who received tocilizumab for CRS treatment from 2019 to 2021 were studied.
- ✓ **Effectiveness evaluation:** CRS resolution after tocilizumab treatment was evaluated.
- ✓ **CRS severity** based on the American Society for Transplantation and Cellular Therapies grading scale for CRS, was compared between the groups of patients with different onco-hematologic diagnosis and different targeted therapies.

## Aim and Objectives

To assess the effectiveness of tocilizumab in onco-hematological patients with CRS.

To analyze the relationship between CRS and targeted therapies.

### Abbreviations

HSTC: Hematopoietic Stem Cell Transplantation  
MM: Multiple Myeloma  
AML: Acute Myeloblastic Leukemia

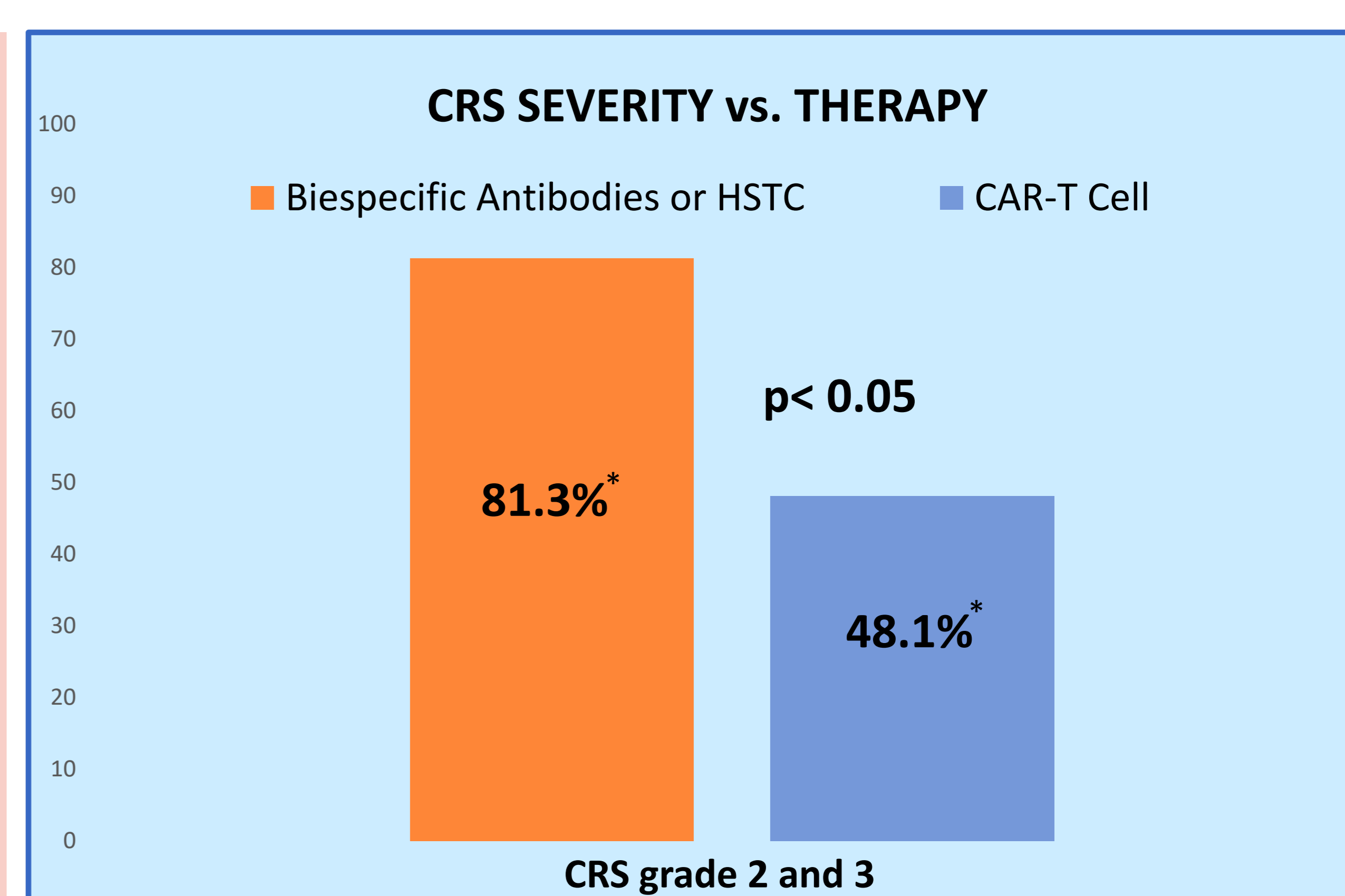
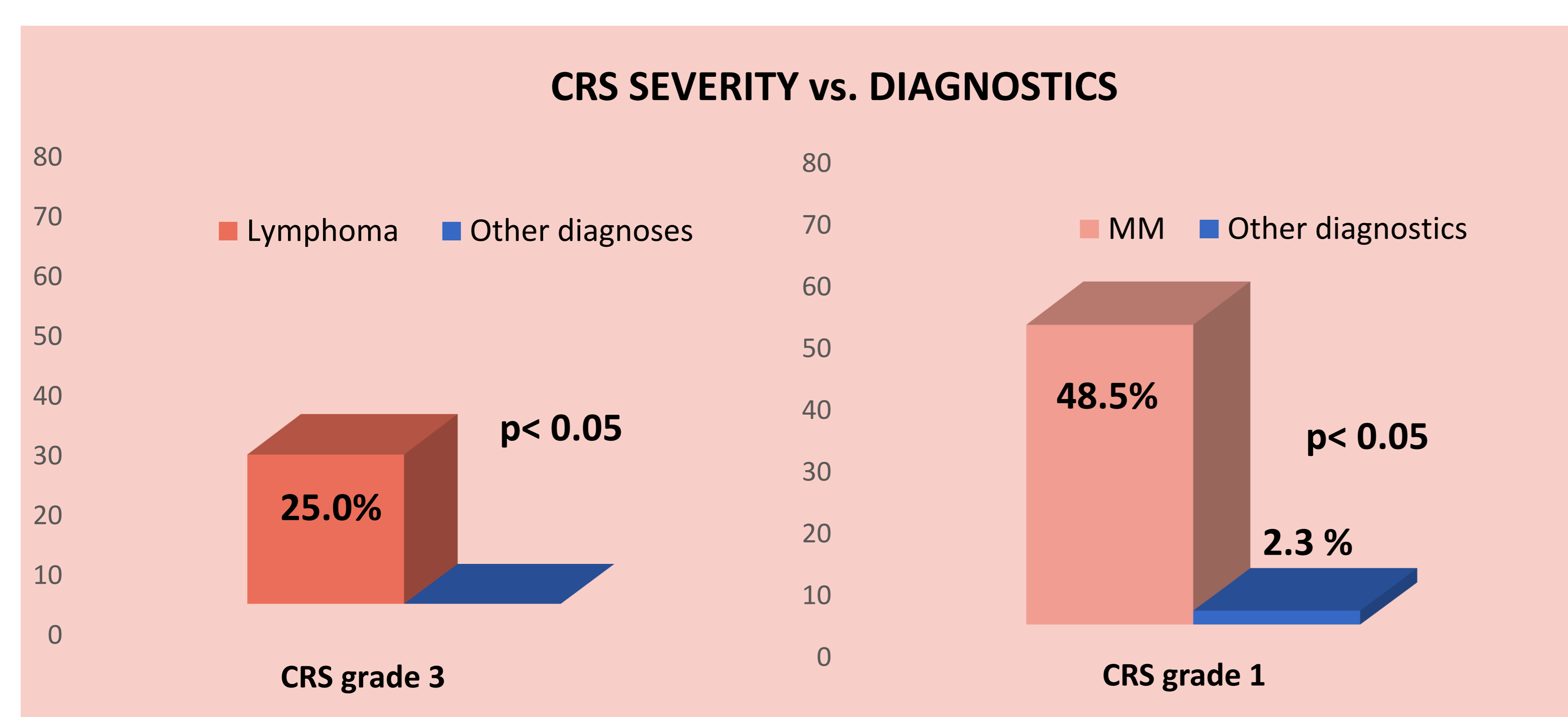
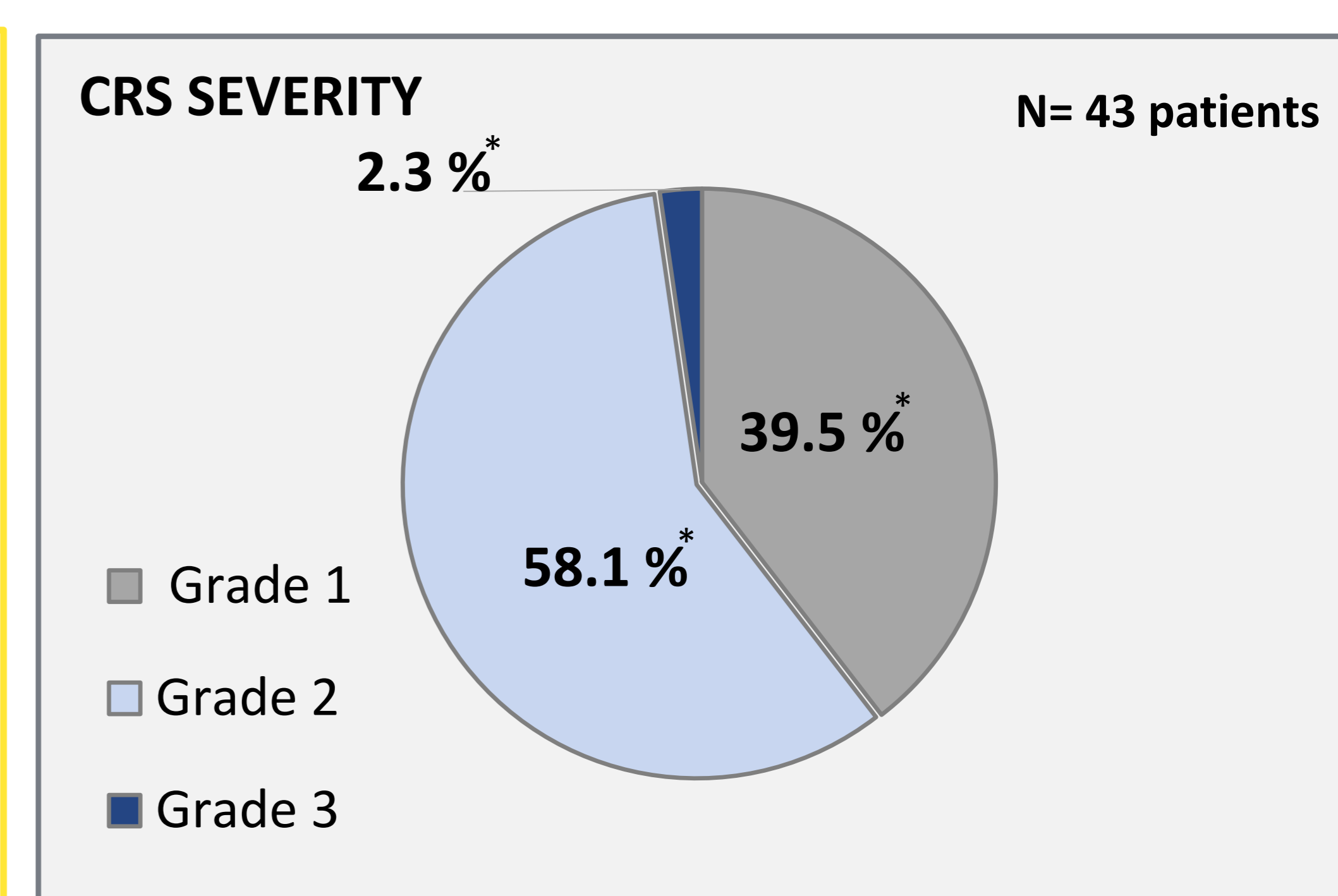
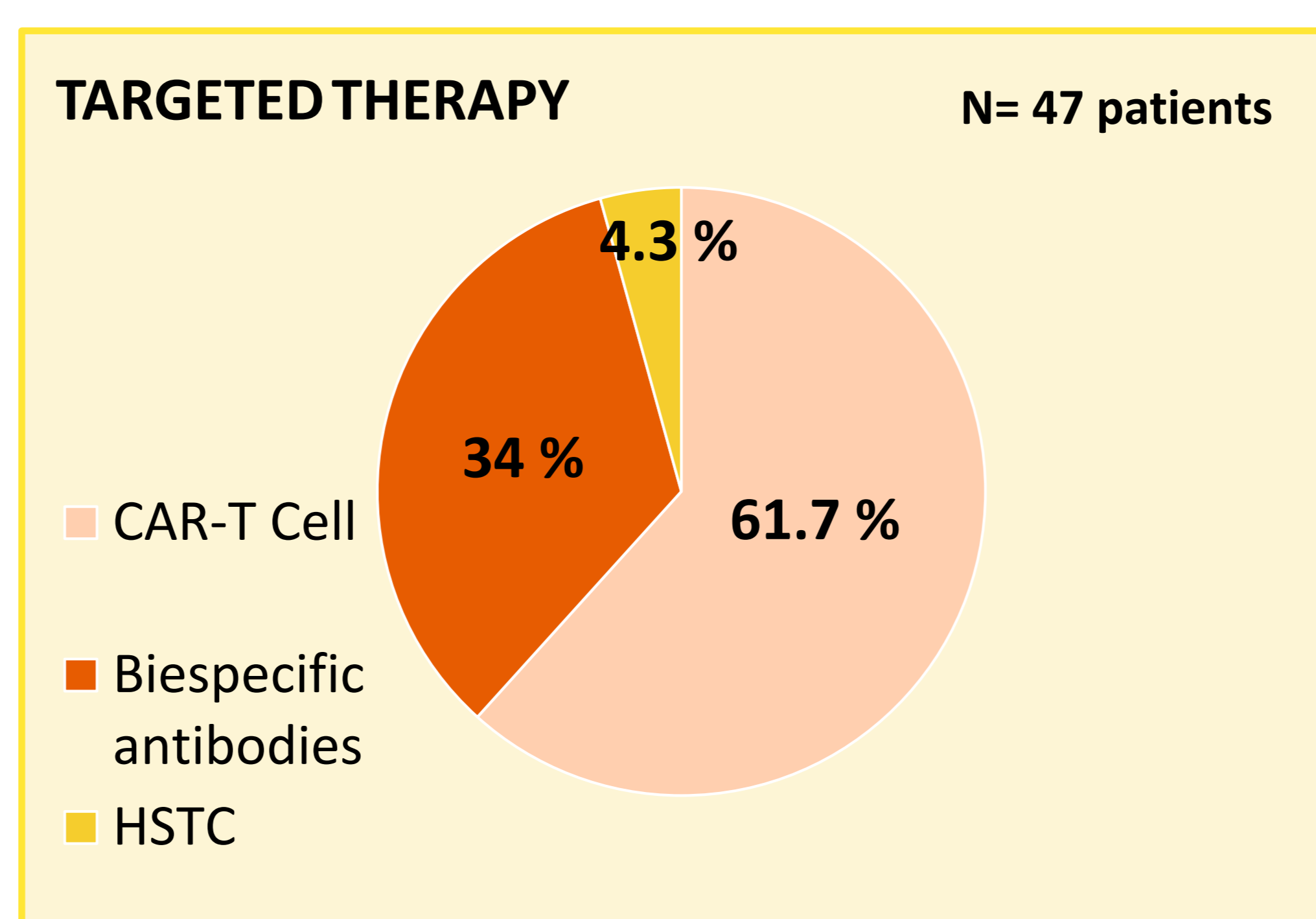
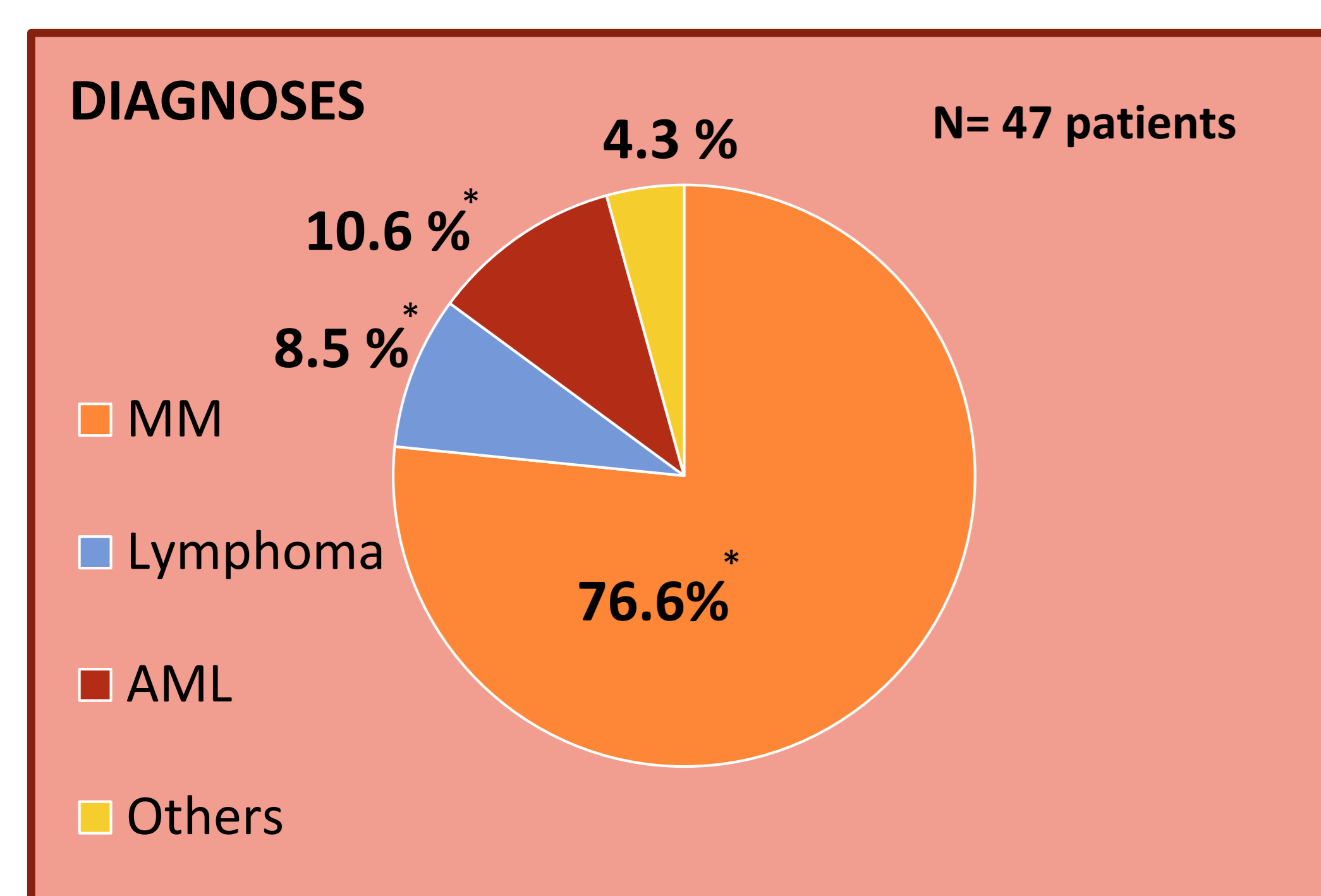
### Data collection (electronic medical records)

- Demographics
- Oncohematological diagnosis
- Targeted therapy
  - CAR-T Cell
  - Biespecific antibodies
  - HSTC
- CRS related symptoms: fever, hypotension, hypoxia
- Tocilizumab treatment

### Statistical analysis

Chi-square test  
SPSS 22.0 (SPSS Inc., Chicago, Illinois, USA).  
P-values < 0.05 (statistically significant).

## Results



\* The numerical results differ from the printed version and online version, but the main results do not alter the conclusions of the study

### TOCILIZUMAB TREATMENT AND EFFECTIVENESS EVALUATION

- ✓ Tocilizumab median dose was 8.0 (5.3-10.4) mg/kg
- ✓ Twelve patients (25.5%) required a second tocilizumab dose
- ✓ CRS resolved in 100% of patients

## Conclusions

- **Tocilizumab** is an effective treatment in CRS after new targeted therapies in onco-hematological patients.
- **Severity of CRS** seems to be higher in patients with diagnosis of lymphoma and in those treated with bispecific antibodies or HSCT.

## References

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