

# Mannan-conjugated birch pollen allergoids reduce the combined symptom and medication score in birch pollen allergic patients already in the first treatment year and further decreases with prolonged treatment duration

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## Rationale

The success of allergen immunotherapy for the treatment of allergic rhinoconjunctivitis is most evident during the respective pollen season. Here, we evaluated the combined symptom and medication score (CSMS) from 3 studies in patients with allergic rhinoconjunctivitis treated with mannan-conjugated birch pollen allergoids (T502).

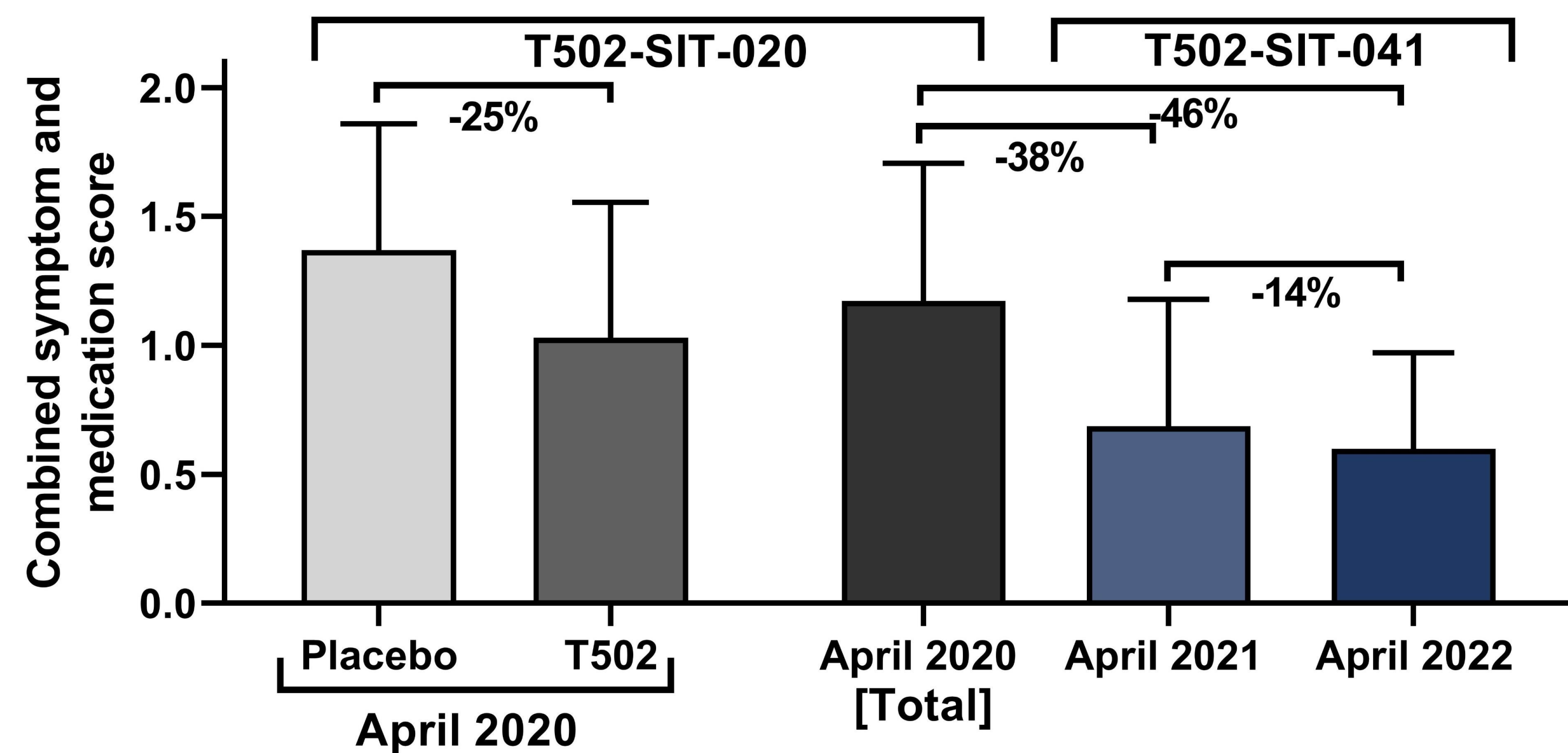
## Methods

Patients were treated with 10 000 mTU/mL T502 (5 pre-seasonal injections) in 2 DBPC trials. In the open-label follow-up study, a part of the patients was further treated with T502 (treatment year 1/year 2-3: placebo/10 000, or 10 000/10 000 mTU/mL). During the birch pollen seasons 2020, 2021 and 2022, the CSMS of the patients was recorded. Quality of life was assessed with the RQLQ before and at the peak birch pollen season.

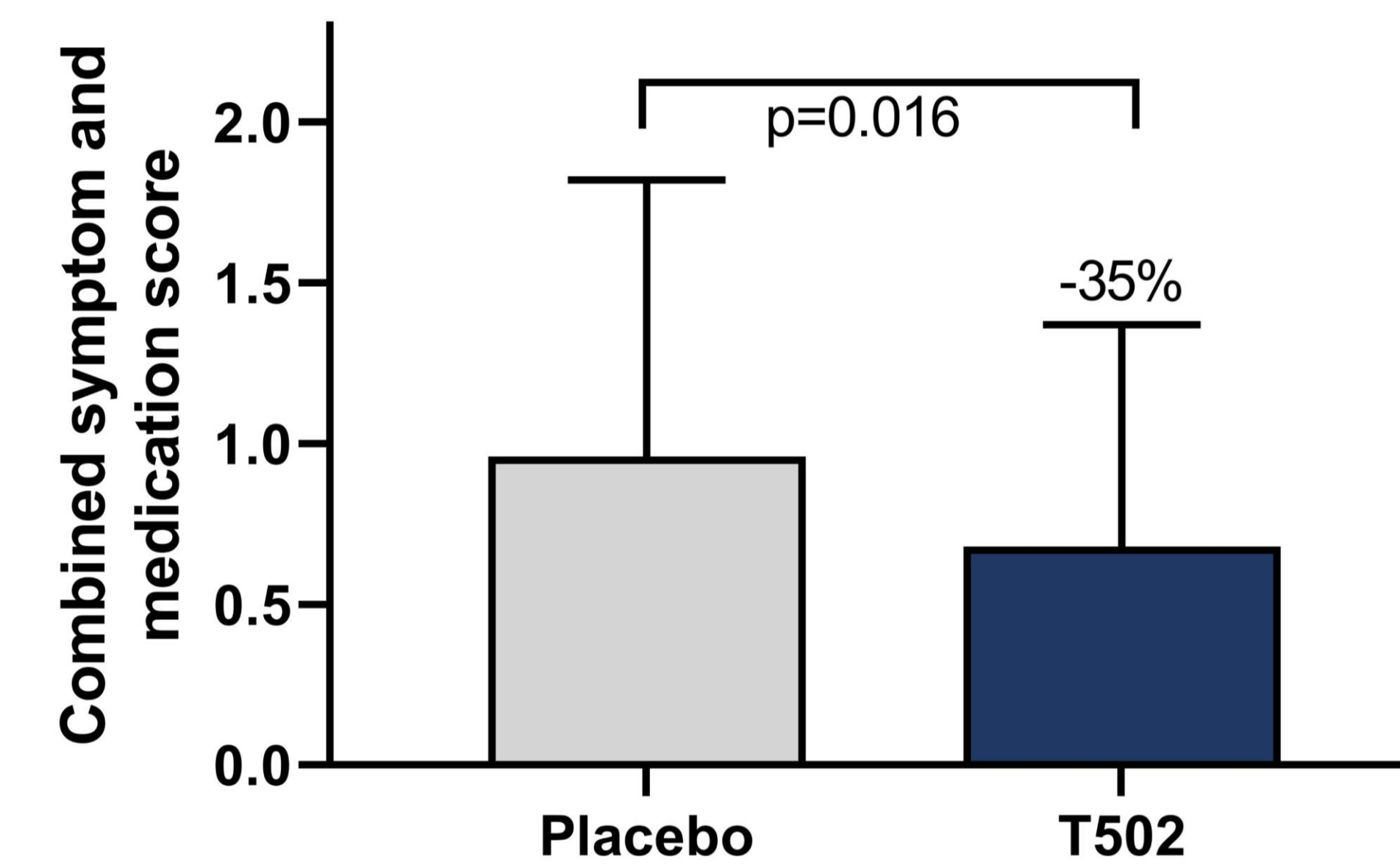
## Conclusions

Already after the first year of treatment, T502 significantly reduced symptoms caused by birch pollen and thus the intake of anti-allergic medication. This effect was further enhanced in years 2 and 3.

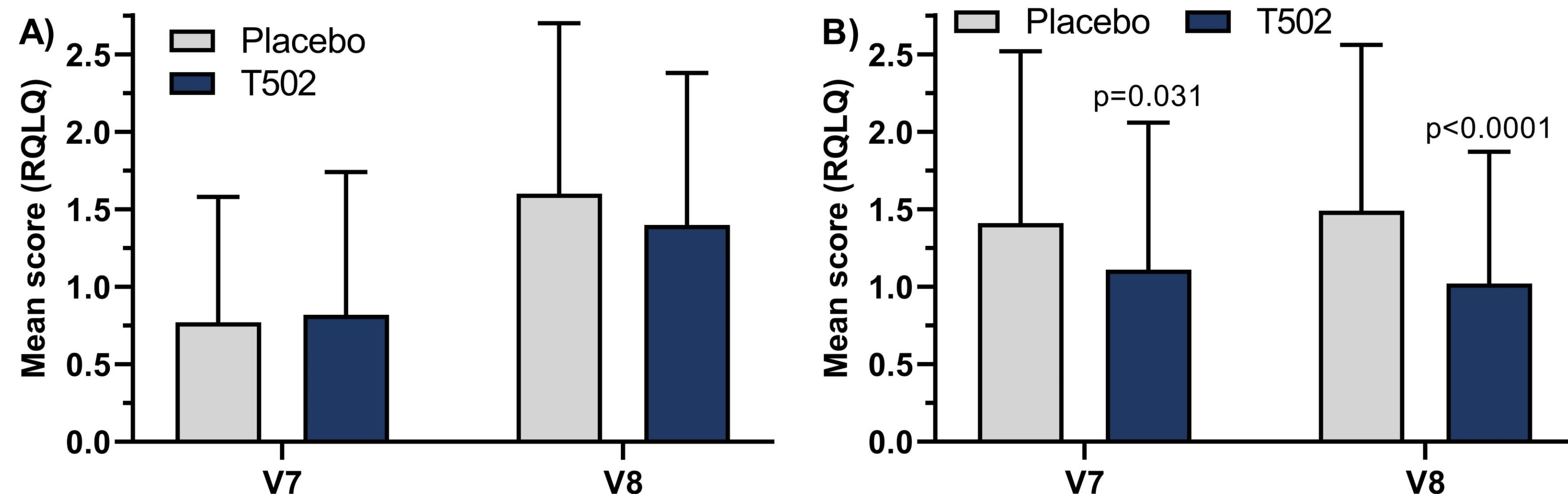
## Results



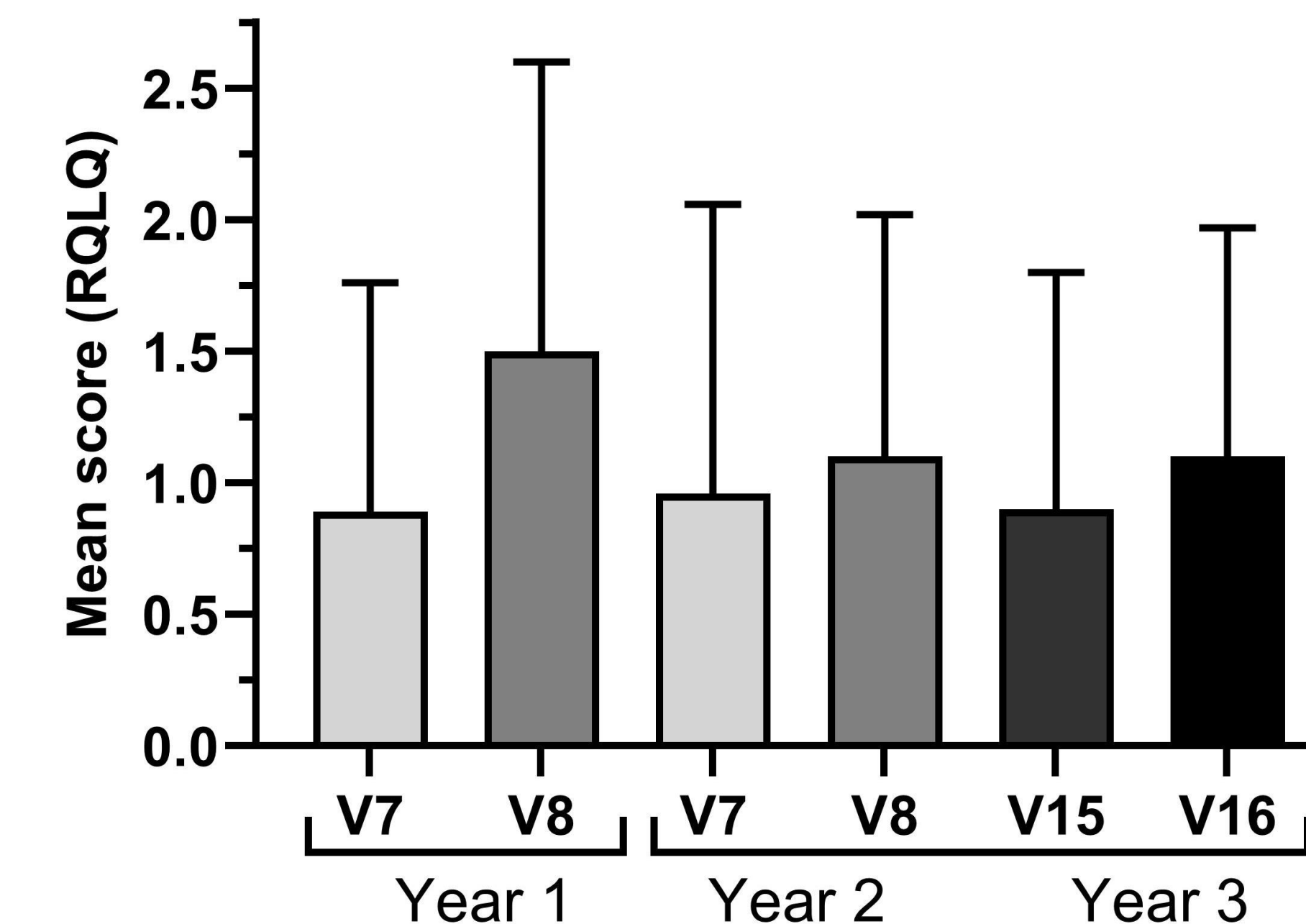
**Figure 1:** The medians of the CSMS according to EAACI (Pfaar et al., 2014) from the studies T502-SIT-020 (grey) and the still running open follow-up study T502-SIT-041 (blue). Data is expressed as median CSMS + interquartile range.



**Figure 2:** In the second DBPC (2022) trial, the CSMS was modified and antihistamine eye drops were used instead of corticosteroid tablets. Treatment with 10 000 mTU/mL T502 significantly reduced the median CSMS in comparison to placebo. Data is expressed as median CSMS + Interquartile range.



**Figure 3:** A) Study T502-SIT-020 (2020), B) Study T502-SIT-045 (2022). V7 was conducted before the birch pollen season, V8 was conducted during the peak of the birch pollen season. Data is expressed as mean RQLQ score + SD.



**Figure 4:** RQLQ scores in the course of 3 subsequent years, comprising the pooled data of the T502-SIT-020 study (Year 1) and the T502-SIT-041 study (Year 2 and Year 3). V7 and V15 were conducted before the birch pollen season and V8 and V16 were done during the peak of the birch pollen season. Data is expressed as mean RQLQ score + SD.