

# Real-World Efficacy of CAR T-Cell Therapies: A HealthTree Cure Hub’s Study of Multiple Myeloma Patients

## BACKGROUND

Chimeric antigen receptor T-cell (CAR-T) therapy is a promising immunotherapy that is used in the treatment of patients with relapsed and refractory multiple myeloma (RRMM). The purpose of this study was to analyze real-world data (RWD) and assess the effectiveness of CAR T-cell therapies in patients with RRMM.

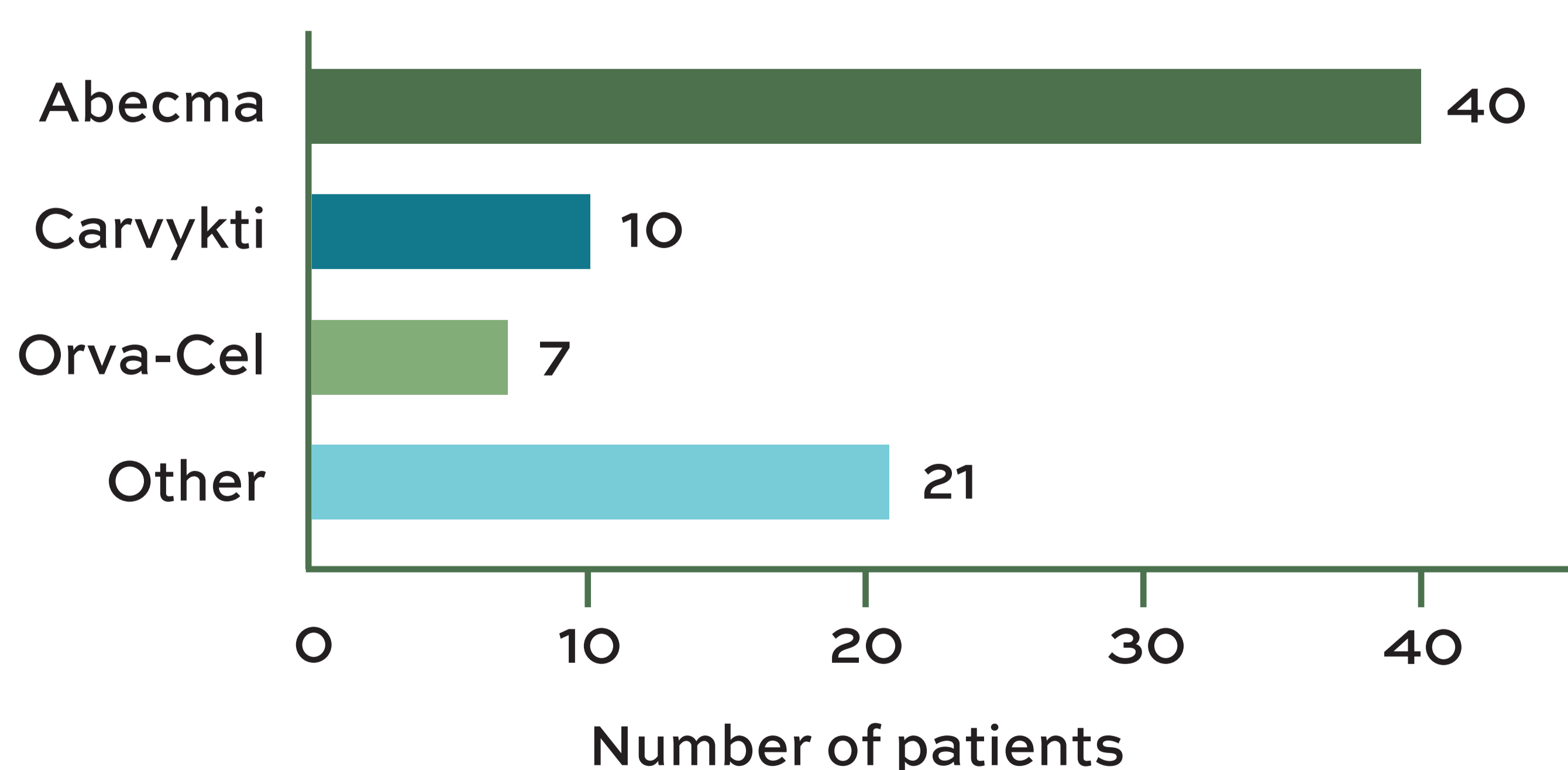
## METHODS

We utilized HealthTree Cure Hub for Multiple Myeloma, an online portal for patients with plasma cell dyscrasias to analyze RWD from 78 patients who either participated in CAR T-cell clinical trials or received this treatment as an approved intervention for multiple myeloma between the years 2017 and 2022. We assessed the effectiveness of CAR T-cell therapies (Abecma [ide-cel], Carvykti [cilta-cel], orva-cel, and other) by using Kaplan-Meier probability to examine event-free survival (EFS), progression-free survival (PFS), and overall survival (OS). EFS was determined by the start of a non-maintenance therapy and PFS was determined by using the IMWG progressive disease criteria.

## RESULTS

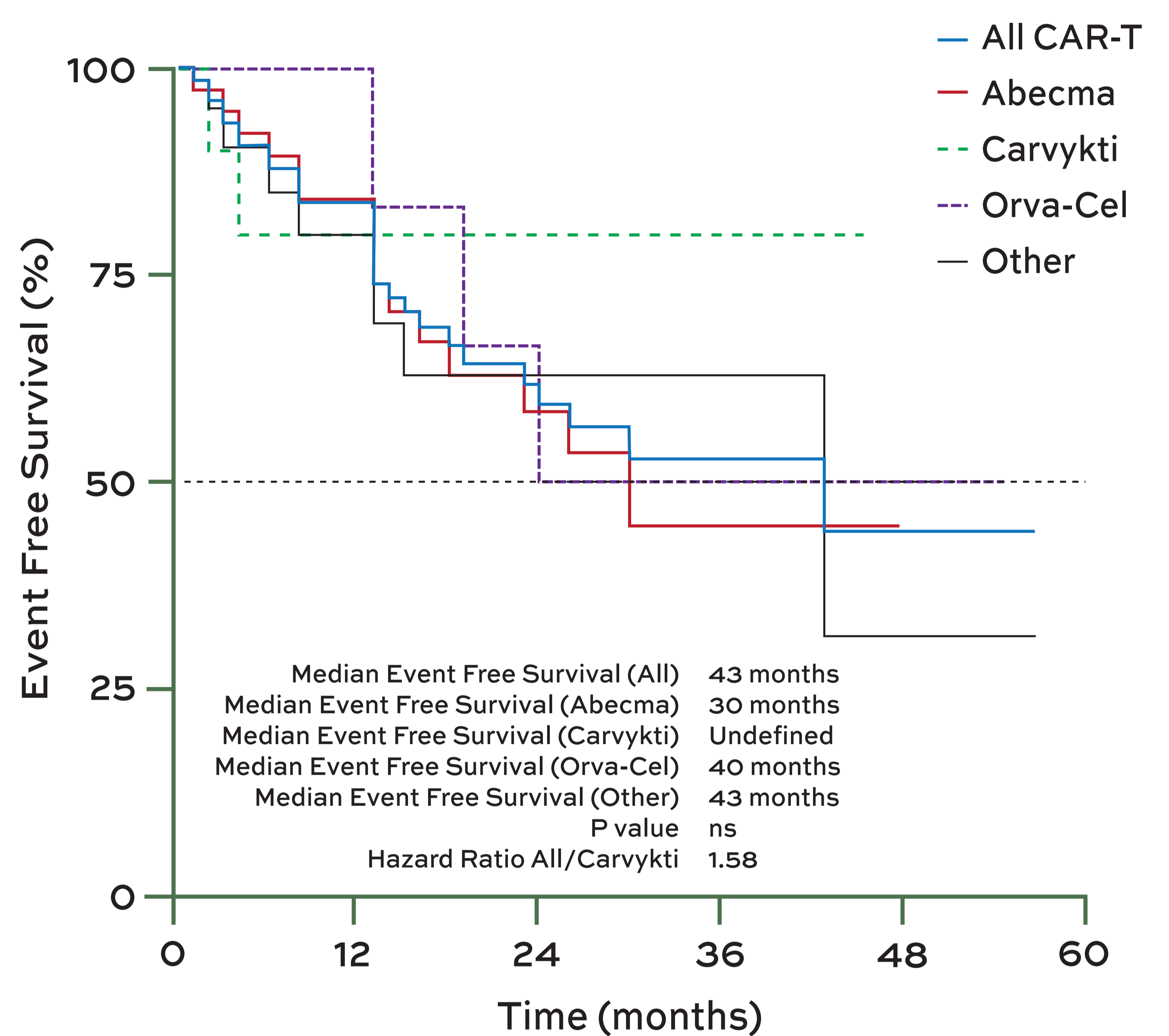
Our analysis of the 78 patients found an average age of  $63 \pm 9.5$  at the time of this analysis and an average age of  $61 \pm 9.5$  at the point of initiating CAR-T therapy. The patients had been treated with an average of  $6.5 \pm 3.4$  prior lines of therapy. Over half of patients (51%) were male, 76% were white, and 55% were non-Hispanic or Latino/a. Of the total 78 patients, 40 received Abecma (ide-cel) as their CAR T-cell therapy, 10 received Carvykti (cilta-cel), 7 received orva-cel, and 21 received other (an incidence of 3 or fewer).

### Type of CAR T-cell therapy received

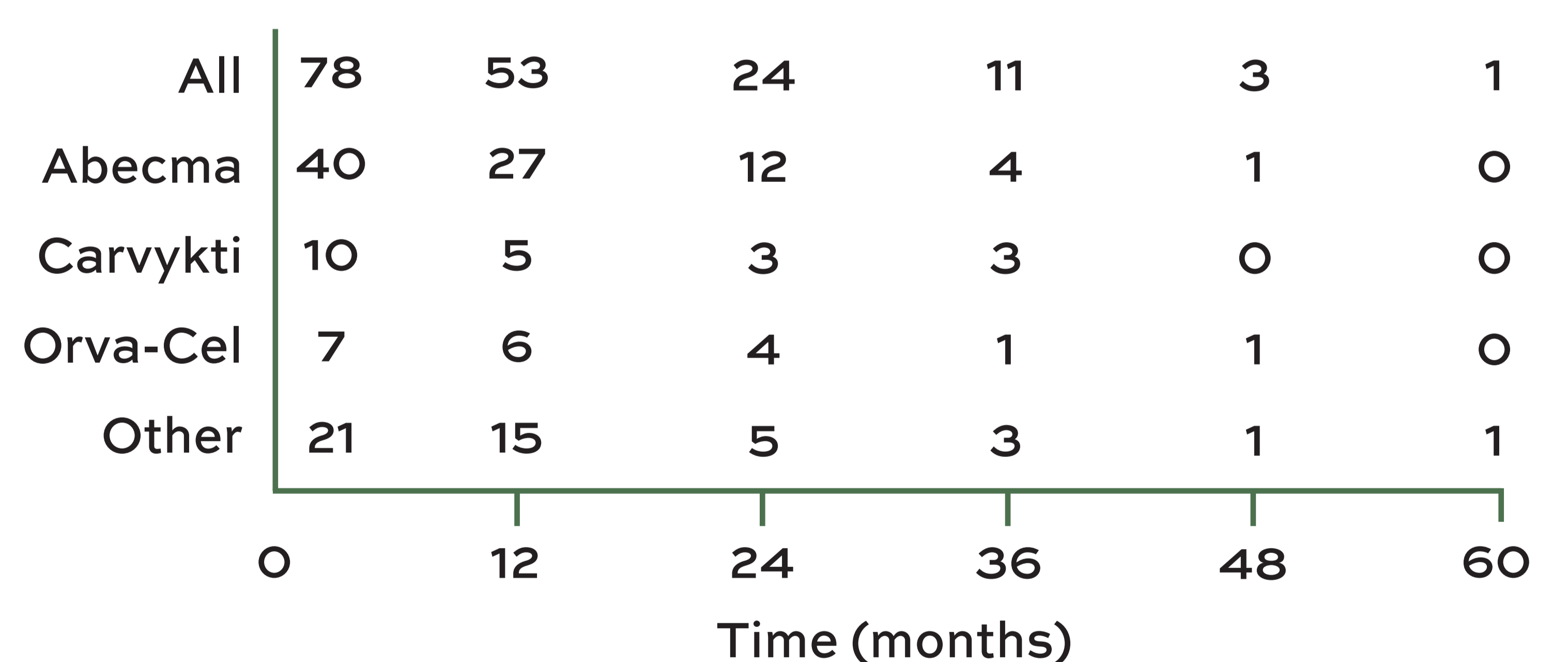


The median EFS was 30 months for Abecma (ide-cel), 30 months for orva-cel, 43 months for other, and undefined for Carvykti (cilta-cel). The median PFS and OS was undefined for all CAR T-cell therapies. Additionally, our analysis of EFS, PFS, and OS found no significant difference between the four CAR T-cell therapies.

### All HealthTree CAR-T patients (Abecma vs. Carvykti vs. Other): Event Free Survival at 5 years



### Number at risk



## CONCLUSIONS

Our evaluation of real-world data suggests CAR T-cell therapy is a promising treatment strategy for RRMM regardless of therapy. The findings underscore the advantages of utilizing RWD through digital platforms such as HealthTree Cure Hub. This methodology offers a powerful tool to continually assess the impact of emerging therapeutics within the multiple myeloma patient population.