

Patients with CLL were some of the very first patients we treated with CAR T-cell therapy here at the University of Pennsylvania back in 2010, Porter said.

– So, we have a long experience with these agents. We have follow-up now of over 13 years in some of our initial patients who were treated.

In March 2024, lisocabtagene maraleucel (liso-cel; Breyanzi) became the first CAR T-cell therapy to be approved by the FDA for the treatment of patients with CLL or small lymphocytic lymphoma, gaining approval in patients who received at least 2 prior lines of treatment, including a BTK inhibitor and a BCL-2 inhibitor. The approval was supported by findings from the phase 1/2 TRANSCEND CLL 004 study (NCT03331198) which showed patients treated with liso-cel (n = 65) achieved a complete response (CR) rate of 20% (95% CI, 11.1%-31.8%). Notably, the median duration of response (DOR) was not reached (NR; 95% CI, 15 months-NR) at the data cutoff; the 12- and 18-month DOR rates were 100% and 87.5% (95% CI, 38.7%-98.1%), respectively.

In an interview with OncLive®, Porter, the director of the Center for Cell Therapy and Transplant, as well as the Jodi Fisher Horowitz Professor in Leukemia Care Excellence at Penn Medicine in Philadelphia, Pennsylvania, discussed the highlights from a presentation he gave during the 2024 Vanderbilt Stem Cell Transplant and Cellular Therapy Symposium in May regarding the current standing of CAR T-cell therapy in the CLL treatment paradigm as well as the unmet needs and future research avenues in the space.

Here is an excerpt from the interview. You can read the full interview at OncLive.Com.

OncLive: What were some of the key data you presented that support the use of CAR T-cell therapies in CLL?

Porter: There have been a lot of data on using CAR T cells to treat patients with relapsed/refractory CLL. Some of the most important data are the poor outcomes that you see with these patients who receive conventional therapies. CAR T cells have the potential to be transformative.

There are data from clinical trials with CAR T-cell therapy showing a significant response rate in these patients, with a CR rate of approximately 30% to 60%. But I believe the most important data [are those that show] that although [this therapy] doesn't work for everybody,



when it works, it works extremely well. Many of the patients who achieve a CR have long-term CRs. That's critically important, particularly in a group of patients who otherwise have very few treatment options. Indeed, the accumulated data suggest that many of these patients who have achieved CR and who are ongoing in response for a number of years have likely been cured of their disease.

There are some other data which are a little bit newer and experimental combining CAR T cells with BTK inhibitors, such as ibrutinib (Imbruvica). My group and others have presented clinical trial data for patients who have been on ibrutinib who then receive CAR T cells and they suggest that response rates are significantly higher. There's a very high probability of achieving minimal residual disease (MRD) with that approach. Although the outcomes of using CAR T cells for patients with relapsed/refractory CLL are quite impressive, the outcomes may be even better in the future when combined with some newer therapies.



Metastaserad hormonkänslig prostatacancer (mHSPC). Högrisk icke-metastaserad kastrationsresistent prostatacancer (nmCRPC).

- * Hälsorelaterad livskvalitet (HRQoL)
- a. I SPARTAN-studien sågs inga skadliga effekter på den övergripande hälsorelaterade livskvaliteten (HRQoL) med tillägg av Erleada till ADT vid behandling av nmCRPC, och en liten men inte kliniskt betydelsefull skillnad i förändring från baseline till fördel för Erleada observerades i analysen avtotalpoäng och delskalor för FACT-P (*Functional Assessment of Cancer Therapy-Prostate*), medianuppföljningstid: 52,0 månader.¹² I TITAN (mHSPC) och SPARTAN (nmCRPC) associerades PSA ≤0,2 ng/ml till positiva patientrapporterade utfallsmått avseende tid till försämring av FACT-P totalpoäng (*Functional Assessment of Cancer Therapy-Prostate*); TITAN, HR = 0,54;95% KI: 0,38–0,76; SPARTAN, HR = 0,83; 95% KI: (0,62–1,10).⁴ I TITAN sågs även förbättringar avseende starkaste smärtintensitet (BPI-SF, HR = 0,76; 95% KI: 0,49–1,00) och starkaste trötthetsintensitet (BFI, HR = 0,76; 95% KI: 0,53–1,10).⁴
- b. Till exempel automatiska påminnelser, behandlingsdagsbok, samt involvering av familj, vårdare och sjukvårdspersonal.³

Referenser: 1. Erleada® (apalutamid) produktresumé 12/2023, fass.se. **2.** Saad F, *et al.* Lancet Oncol 2018; 19: 1404 –1416. **3.** Higano CS, Hafron J. *J Urol* 2023; 209: 485–493. **4.** Small EJ, *et al.* J Clin Oncol 40, 2022 (suppl 6; abstr 73) & Poster.