

Updated Analysis of a Phase 1, Open-Label Study of LCAR-B38M, a Chimeric Antigen Receptor T Cell Therapy Directed Against B-Cell Maturation Antigen, in Patients with Relapsed/Refractory Multiple Myeloma

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Hi, I am here at the American Society of Hematology 2018 Meeting in San Diego and what we have here is a lot of data on CAR T-cells and cellular therapy. We are presenting our bb21217, but the LCAR CD38M data is also being presented which we initially first heard about it at ASCO 1½ years back and subsequently, we have not seen longer-term follow up. But at this meeting, the investigators have updated their data and they have as many as 57 patients, so probably one of the largest experiences with CAR T-cells in multiple myeloma from a single center. What they are reporting is extremely high response rates, again, close to 80% of an overall response rate with this LCAR product. They have also reported very manageable toxicities. So CRS and neurotoxicity was seen in patients. CRS, certainly in 90% of patients, with most of it extremely well-managed. This follow-up has gone on for as long as about 24 months. In the responding patients they have seen a progression-free survival of close to 16 months, and those patients who actually achieved a complete response they have seen median progression-free survival of approximately 22 months. I think the few differences between what they have used with the bb2121 and the bb21217 as opposed to LCAR is that here are subtle differences in terms of what they have used for lymphodepletion. The LEGEND trial is largely used on the cyclophosphamide lymphodepletion, and the other thing to keep in mind is the fact that this patient population was a little more naïve in terms of what kinds of anti-myeloma therapies they have had previously. Specifically, the majority of them have been exposed to bortezomib and lenalidomide, a minority of the patients were in fact exposed to pomalidomide, and not as many patients were exposed to carfilzomib as well. I think one of the biggest distinguishing factors between this and some of the American dataset is the fact that these patients had not seen CD38 targeted agents. So certainly, a slightly different population in that this was on average a median of three lines of treatment, but otherwise, the clinical data is very much in keeping with what we have seen with bb2121. Hopefully now with bb21217. Really exciting that this strategy can be reproduced across the globe as well and obviously, it is a very encouraging strategy for our patients to look forward to.

Reference

Zhao W, Liu J, Wang B, et al. Updated Analysis of a Phase 1, Open-Label Study of LCAR-B38M, a Chimeric Antigen Receptor T Cell Therapy Directed Against B-Cell Maturation Antigen, in Patients with Relapsed/Refractory Multiple Myeloma. ASH 2018. Abstract 955.