Managing Myeloma

Initial Results from a Phase 1 Clinical Study of bb21217, a Next-Generation Anti BCMA CAR T Therapy

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Hi, I'm here at the American Society of Hematology ASH 2018 in San Diego and I am very excited to present some of our data on CAR T-cells. This time, we are talking about bb21217 which is kind of a next-generation cause, you all have heard about the bb2121 data which was presented at ASCO and Nina Shah is going to be presenting the 21217 data this afternoon.

The big difference between 2121 and 21217 is the way we actually treat these CARs ex vivo and the idea here is that they are exposed to a PI3-kinase inhibitor called bb007. The rationale of the hypothesis for exposing these CARs ex vivo to the PI3-kinase inhibitor is to try and get more of a memory-like phenotype and to try and see whether or not we can improve persistence off these CARs. These have been modified in the way of being treated slightly differently from the previous CARs which we have used. What Nina will be presenting later on this afternoon is an update on 12 patients who were treated with bb21217. The protocol was pretty similar to what we have done previously. This is a Phase I dose escalation design of the trial. We started off with a 150 million cells in these patients and they got the same kind of lymphodepletion including cyclophosphamide and fludarabine followed by infusion of these manipulated CARs. We are seeing responses which are very similar to what we saw with the bb2121compound. We are seeing close to a little higher than 80% of an overall response rate. Remember, this is very early data and we are still waiting on duration of response, whether or not this is going to hold true with respect to our hypothesis is something we have to wait on. I think time will tell whether we see more persistence and whether or not that persistence can translate into an improvement in both duration of response as well as progression-free survival.

The other encouraging piece out here was that we did not see anything different in terms of a toxicity signal. The toxicity signal was very similar to the bb2121. We did see CRS and neurotoxicity, but the grades were very similar to what was seen in 2121 with about 60% to 70% of people seeing CRS, most of it being grade 1 and 2 with a few patients seeing grade 3 CRS. As far as neurotoxicity is concerned, again, very manageable neurotoxicity with one patient seen where we saw grade 4 neurotoxicity which is recovered. This is an ongoing trial. We have patients who continue being followed in remission on this and we also have evidence of MRD negative disease in this patient population. We are looking forward to seeing whether or not it really does go in keeping with our hypothesis of increased persistence and improvement in duration of response in this patient population.

Reference

Shah N, Alsina M, Siegel D, et al. Initial Results from a Phase 1 Clinical Study of bb21217, a Next-Generation Anti Bcma CAR T Therapy. ASH 2018. Abstract 488.