



Multiple Myeloma - What are the novel new antibodies for MM Therapy

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TRANSCRIPT

Last year (2015) was a very exciting time. We had four new drugs approved for the treatment of myeloma. Two of those drugs were of an entirely new class of treatment called monoclonal antibodies. Monoclonal antibodies are constructed antibodies that can target unique proteins on the surfaces of plasma cells and in the process can help to eliminate those cells from the body.

One of these drugs, a drug called elotuzumab, targets a protein originally called CS1 but now renamed SLAMF7. This is highly expressed on plasma cells and does not have a lot of expression on other normal cells. This drug was used in combination with the drug revlimid and dexamethasone in relapsed patients and was shown to improve progression free survival and at least in the latest follow-up there seems to be a survival advantage for that three drug combination. The comparator was just standard Rev/Dex. On the basis of that, this antibody got approval by the FDA. It's in a lot of other trials now in a variety of scenarios. It's being studied in maintenance, it's being studied in initial therapy and it's being really used at almost every step of treatment for multiple myeloma, in an effort to learn how to use it best.

Another drug which is also very exciting is called Darzalex or daratumumab. This is an antibody targeting a protein called CD38. CD38 is highly expressed in plasma cells and myeloma cells, but it also has some other expression in other organs in the body. However this drug, as a single agent, was highly effective in the treatment of patients with relapsed

multiple myeloma. A single phase II study was done in which patients who had failed both a proteasome inhibitor and an immunomodulatory drug, so patients who had failed velcade and revlimid. Some of these patients had failed more than one of each of these. They're so-called quadrafractory patients. There's the double refractory and the quadrarefractory. But even among these patients who had failed multiple kinds of therapy, this drug had about a 30% response rate, which is a very high response rate in this very heavily pretreated group of patients. Many of these responses were durable for more than a year.

On the basis of this single study, the FDA approved daratumumab for the treatment of relapsed multiple myeloma in patients who'd had three or more lines of therapy or were double refractory. Again, this drug is being studied now in a variety of scenarios from initial therapy to maintenance therapy in an effort to learn how best to use this combination.