[Abstract 35]

PREDICTIVE FACTORS FOR RESPONSE TO RITUXIMAB IN WALDENSTROM'S MACROGLOBULINEMIA (WM)

M.A. Dimopoulos, K. Zervas, D. Gika, A. Zomas, M.C. Kyrtsonis, A. Anagnostopoulos, N. Anagnostopoulos, G. Pangalis. On behalf of the Greek Myeloma Study Group, Athens, GREECE.

Rituximab is an active agent for the treatment of WM. However many patients do not respond to this agent and several others develop secondary resistance. In order to identify clinical and laboratory parameters which could predict a higher likelihood for response we evaluated 54 patients who were treated with single-agent rituximab. Twenty-four (44%) patients achieved at least 50% reduction of serum monoclonal protein. Previously untreated and pretreated patients had the same probability for response. Low response rates were noted in patients with lambda light chain (13%), with serum monoclonal protein >40gr/L (13%) and with albumin 6000mgr/dL responded to rituximab. However Gertz et al did not observe a correlation between serum monoclonal protein levels and response to rituximab. Polymorphisms in FcγIIIA (CD16) receptor expression modulate human IgG1 binding and antibody dependent cell mediated cytotoxicity and may therefore impact responses to rituximab. In a recent analysis of 58 patients with WM, Treon et al identified a predictive role for FcγIIIA-158 polymorphisms and response to rituximab. More specifically, when valine was absent from FcγIIIA-158 the response rate to rituximab was only 9%. When at least one valine was present, the response rate ranged between 35% and 40%. We conclude that specific laboratory parameters may identify patients with WM who are more likely to benefit from rituximab. Further studies are needed not only to confirm these observations but also to clarify the mechanism of action of rituximab in WM.