How does one define high-risk smoldering or asymptomatic multiple myeloma?

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Hello, I am Dr. Sagar Lonial from the Winship Cancer Institute of Emory University in Atlanta, Georgia. A question that I am frequently asked is, “How does one define high-risk smoldering or asymptomatic multiple myeloma?” And the easiest way to put this definition together is really to look at the current ECOG/Mayo criteria that allows us to use easily accessible clinical information to make this diagnosis, and that is there are three criteria that we look at: 1) Does the patient have greater than 10% plasma cells? 2) Is the M-protein greater than 3 gm/dL? 3) Is the free light chain ratio greater than 8 or less than 0.125? If the answer to all three of those questions is ‘yes,’ then the patient fits into the high-risk smoldering myeloma category. If only two of those three are positive, then they fall into the intermediate-risk category, and if only one of those three is positive, they fall into the low-risk smoldering category. Now, it is important to realize that those three have different times to progression to symptomatic myeloma. The high risk has an average time of somewhere between 2 and 3 years of progressing to myeloma. The intermediate risk has an average time of between 3 and 5 years to progression to symptomatic myeloma, and the low risk has a very, very low risk of progression with the median not having been reached with a median followup of 10 years. So, using these three simple tests, one can identify the risk of progression of asymptomatic to symptomatic myeloma and help to make therapeutic decisions. Thank you.