Jatin J. Shah, MD
Associate Professor
Department of Lymphoma/Myeloma
Division of Cancer Medicine
The University of Texas MD Anderson Cancer Center
Houston, Texas

How will the new diagnostic criteria impact when to initiate therapy?

Welcome to *Managing Myeloma*. My name is Jatin Shah. I am associate professor of medicine in the Department of Lymphoma and Myeloma at MD Anderson Cancer Center. I am the director of the myeloma clinical and translational research program and program director of clinical lymphoma and myeloma fellowship. I am frequently asked, “How will the new diagnostic criteria impact when to initiate therapy?” This is a very important question because of the change in the practice of managing patients with symptomatic myeloma. The new diagnostic criteria are very limited and identify less than 10% of patients with smoldering myeloma who we now should consider for early intervention. So, the vast majority of patients with smoldering myeloma would not be impacted and would not initiate therapy. It is those patients with these new myeloma-defining events, again reviewed, including clonal plasma cells greater than 60%, serum-free light chain ratio of equal to or greater than 100, or more than one MRI focal lesion (≥5 mm), and it is these patients that would meet these new diagnostic criteria that we can discuss starting therapy sooner. This is still a discussion to be had with patients. These are patients with these three myeloma-defining events who we can consider for initiation of early systemic therapy as opposed to watchful waiting. These patients, though they do not have symptomatic end-organ damage, have a likely chance of progressing to developing this end-organ damage or CRAB criteria in the next 2 to 3 years, and therefore, we have identified a subset of patients who are highly likely of undergoing early progression and therefore can have a discussion about early systemic therapy. Now, there are some controversy around this and there are some patients with an elevated serum-free light chain ratio that we may have been watching for the past 2 years, and so now for those patients who have already been carefully observed for the last 2 years or a prolonged period of time without development of progressive disease, it is important to have the conversation with the patient regarding the risks and benefits of therapy and also realizing that the serum-free light chain ratio can be quite volatile, and so therefore repeat measurements are important as opposed to making decisions based on a single free light ratio of 100 and above. The bone marrow plasmacytosis can be quite heterogeneous in patchy distribution, and therefore, it is important to have a good bone marrow sample to identify greater than 60% clonal plasma cells in the bone marrow. Nevertheless, the new diagnostic criteria do impact a subset of patients with smoldering myeloma where it is important to have a discussion about the risks, benefits, and alternatives of starting early therapy, and these are patients who are likely to progress to end-organ damage in the first 18 to 24 months.

I hope this is helpful in identifying when to use these new diagnostic criteria and how they will impact initiating therapy. Again, thank you for viewing this activity. For additional resources, please view the other educational activities on *ManagingMyeloma.com*.

Please view the *Updated Criteria for the Diagnosis of Multiple Myeloma*.