

## What are the criteria for high-risk progression?

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Welcome to *Managing Myeloma*. I am Dr. Philip McCarthy. I am frequently asked, “What are the criteria for high-risk progression?” This is a two-fold question, with both issues relating to high-risk disease. In other words, what patients are going to likely have their disease come back early? As a correlate (they do not always go together), what patients will have a very fulminant or aggressive relapse?

First, which patients will relapse earlier? This question is a little easier. We are now able to begin to risk stratify based on LDH and degree of disease involvement by ISS; in other words, ISS staging by beta-2 microglobulin and albumin level. We have patients who have very high beta-2 microglobulin; those are considered ISS-3. In the past, we thought of these patients as very high-risk disease, but now, we can incorporate the LDH as well as karyotypic abnormalities, which allow us to be able to risk-stratify chromosome 14 and 17 abnormalities, which are considered high risk. We are better able to stratify patients from diagnosis concerning their prognosis, and this allows us to monitor patients carefully and also to develop newer strategies for long-term disease control.

Now, fulminant relapse is a more difficult: which patients will have an aggressive relapse? If a patient is not monitored carefully — in other words, they are not seen every 3 to 4 months — they are not having testing done and we don’t see them for a year. When they come back with high bulk disease, this is primarily because they were not monitored carefully. Alternatively, some patients who have high-risk disease will present with a slow relapse, but they will present early after induction therapy, and other patients will have high-risk progression; in other words, high-volume disease because they had high-risk features and sometimes they just were not monitored.

As such, high-risk progression is a two-fold situation: we want to make sure the patient is being properly monitored, as well as being appropriately staged and risk stratified at the time of diagnosis.