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In the area of prognostic markers in AML, what do community providers need to know to be up-to-date in treating this disease?

Welcome to Managing AML. I am Dr. Brian Druker. I am frequently asked, “The identification of prognostic markers is one of the most exciting areas in AML, what do community providers need to know to be up-to-date in treating this disease?” I think, as anybody who treats patients with AML knows, we understand an enormous amount about the prognostic factors of AML, and this dates back to cytogenetics that we have done for decades. If you think about one of the rare but most treatable, the 15;17 chromosome translocation, that now patients with that subtype, the PML-RAR (acute promyelocytic leukemia) can be managed with the combination of retinoic acid and arsenic trioxide. We moved in that subtype to an essentially chemotherapy-free regimen.

We also know that there are other subtypes – for example, the CBF mutated or NPM1 mutated – and that those are patients who actually have a very good prognosis and might be eligible just for chemotherapy followed by consolidation treatments. Whereas, other prognostic factors – for example, FLT3 mutated patients, patients with a complex karyotype, patients with p53 mutants – have a much poorer prognosis. In those patients, if they are eligible for a bone marrow transplant, those will be patients who we want to move after remission induction therapy to bone marrow transplant from either a related or unrelated donor. The reality is we know an enormous amount about the prognostic features in patients with AML, and there is actually quite a bit we can do about it with the current level of information. I would encourage physicians in the community, in addition to doing just the routine cytogenetics, to be thinking about doing the panels that are going to allow you to look at factors like FLT3, IDH mutations, p53 mutations, as well as the NPM1 and CBF rearrangements, because it does allow stratifications of our patients and should allow for improved outcomes.

I appreciate you recognizing the importance of these prognostic factors, and I want to thank you for viewing this activity.