Rami S. Komrokji, MD
Professor of Medicine and Oncologic Sciences
University of South Florida College of Medicine
Vice Chair, Malignant Hematology Department
Moffitt Cancer Center
Tampa, Florida

As a community practitioner, what key factors do I need to remember in determining treatment options for my patients?

Hi, I'm Dr. Rami Komrokji, and I'm here today to discuss the recent progress made in anemia management and lower-risk MDS. I'm frequently asked, as a community practitioner what key factors do I need to remember in determining treatment options for my patients? I think that's a key question, obviously. I think it all starts with first establishing the diagnosis. I think we always should spend some time making the right diagnosis. In many of the cases, it is straightforward, but there are subtle findings that sometimes make a difference in establishing the diagnosis. There have been studies looking at 20% discrepancies in diagnosing MDS, realizing that MDS is a spectrum of disease. I think it's always important to make sure that we have the right diagnosis and get all the elements needed to establish the diagnosis and the risk stratification, including obtaining cytogenetics. Nowadays, molecular data had become standard, obtaining a myeloid panel by next-generation sequencing, excluding other abnormalities that could mimic MDS like B12 deficiency, copper deficiency in certain circumstances; then risk-stratification for the patients actually, assuring that the patients are lower risk. Once we established that, I think the other key factor is basically determining what is the goal of treatment. In the majority of the patients, we are treating anemia, that's the key driver. In some other patients, rarely, we would be treating for thrombocytopenia, and less commonly and very, very rare to be treating just for isolated neutropenia. However, to keep in mind that the thrombocytopenia and neutropenia may dictate the choice of treatment for treating anemia. Once we set the goals and the goals I think in lower-risk MDS are to alleviate those cytopenias, improve patient's counts, render them transfusion independent, and improve their quality of life. We often get asked the question, do we impact the survival? It may not be direct impact on the survival, but obviously, there is so much interaction in MDS patients who tend to be older, having concomitant comorbidities between their cytopenias and other comorbidities. For example, patients with coronary artery disease, if their hemoglobin is 7, there is no doubt that that can increase risk of patients being symptomatic from coronary artery disease or experiencing myocardial infarction. And if we improve cytopenias, we may improve that. It's indirect improvement probably for the survival. When we looked at patients with lower-risk MDS, it's still unfortunately around 25% of those patients die within a couple of years, again, probably mainly from this interaction or exacerbation of the comorbidities. If patients are asymptomatic with their cytopenias and their quality of life is intact, there is no evidence that earlier treatment will make a difference. It's absolutely okay to observe those patients. If patients are symptomatic with their anemia or often when they are starting to head for transfusion dependency, then we start the treatment.

As I mentioned, some key factors to ask is when are we going to start with the treatment? What are the chances of those patients responding to erythroid-stimulating agents? If yes, we start with erythroid-stimulating agents. That's basically based on the endogenous serum EPO level and the transfusion dependency. If patients are resistant or after failure of ESA, the other key points to ask, are patients with deletion 5q abnormality, those patients lenalidomide is the standard of care. Are those patients having ring sideroblasts or SF3B1 mutation? I think now we have luspatercept approved by the FDA and becoming the standard of care for those patients. If patients have concomitant neutropenia or thrombocytopenia, hypomethylating agents can be an option. In younger patients less than age of 60 early in the disease that are not having a transfusion dependent, ATG cyclosporine can be an option. Some institutions will use ATG cyclosporine, namely in patients with hypoplastic or hypocellular MDS. If patients only have anemia and none of those key points that we discussed, lenalidomide plus/minus erythroid-stimulating agents can be an option for patients with isolated anemia. So I think, go through establishing the diagnosis, risk-stratify the patient, set the objectives, and now we go through those key points of trying to collect data on patient symptoms, quality of life, transfusion burden, presence of deletion 5q, presence of ring sideroblasts, and decide on tailoring the treatment accordingly for patients.