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Managing Myeloma **recently spoke with Dr. Ola Landgren of Memorial Sloan Kettering Cancer Center in New York, New York, about the major clinical benefits of three- vs. two-drug regimens in multiple myeloma.**
[Editor's note: Dr. Landgren's transcript has been edited to improve readability]

I think that is a very important question that has immediate clinical implications. My answer is that I think across the board, looking through older studies that are recently presented and published, it seems that three drugs in the setting of newly-diagnosed patients with multiple myeloma deliver faster and deeper complete responses and overall responses as well, and that translates into longer progression-free and also overall survival. So, in my practice and at our institution, three drug combinations are really what we use as a standard of care. There are different opinions out there, and for transparency discussing back and forth, there are groups that argue that, for patients who have a cytogenetic standard risk, two drugs may be enough, while patients with high-risk disease would definitely have to be on a three-drug combination because the disease is more aggressive.

Our opinion and many other groups' opinions are actually the opposite. The patient with more of a standard risk are the ones who have the best responses - the deepest, fastest, and the longest responses - and also the longest progression-free and overall survival, if you use the best combinations of drugs that typically include three drugs. So, at our institution, we would use the three-drug combination for all patients, and we would use the cytogenetic and FISH-based panels more as prognostic indicators. We would not use them to scale back on therapy. Looking at the setting of relapsed disease very similarly to the newly-diagnosed patients, studies consistently show that the patients who have received three-drug combinations compared to two-drug combinations do much better, and it is true both in high-risk disease and in what people refer to as standard risk using FISH and cytogenetics. In fact, I would argue that if you look in the patients with a standard risk, that is where you have the longest additional benefit of a three-drug combination.

So again, at our institution, in my personal clinical practice, the three-drug combination is the new standard of care, and to push a little bit further and to look into the future, I do foresee that there will be a lot of development going beyond three drugs. I think we are going to end up using four drugs in many instances and it may be the standard of care for most patients in the future, but the future will tell. I think adding a monoclonal antibody to the drugs that we

currently have as three-drug combination is a very, very reasonable approach going forward. As I discussed during my presentation, I could see this could even potentially change the standard of care for the role, for example, of high-dose melphalan with stem cell support in newly-diagnosed patients: maybe a four-drug combination could be something that could lead to a delayed transplant approach. Of course, we need to see what studies deliver, and the proof is in the pudding as an exciting future, is it not? So with that, I would like to thank you so much for your attention and for participating in this program.

Please view Dr. Landgren's Practice Essential for additional information, Response Assessment in MM: Is Achieving Response Deeper than CR/sCR Important?