MPN News From ASH 2016: An Update From Dr. Claire Harrison

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Mary Windishar:
Hi and welcome to the American Society of Hematology's annual conference 2016 here in San Diego. I'm Mary Windishar, and with me here is Dr. Claire Harrison. We're glad you're here. Where are you from?

Dr. Harrison:
So I'm from somewhere quite far from here, as you know, eight time zones difference. So I work in Guy's and St Thomas' which is a big pair of very old established hospitals in the center of London in the United Kingdom.

Mary Windishar:
Well, we're really glad to have you here. What have you found this year to be exciting at the conference?

Dr. Harrison:
So, well, actually it's always an incredibly exciting conference, isn't it? It's got a huge buzz about it. I would say that for the last few years the myeloproliferative neoplasms aspects of ASH have been incredibly exciting, and with new discoveries, so the CALR mutation, new drugs, etc. I think this year we're more a phase of kind of consolidating our knowledge, lots of information about next-generation sequencing, impact of molecular assessments.

I think the big things for me at ASH this year are the two randomized studies with interferon versus hydroxyurea (Hydrea), which is, you know, this long unanswered questions. I remembered as I've been doing these discussions with Patient Power over the years we've kind of had this discussion, which is better, do we know, how will we know, so this time we will see the results or the interim results from 112, which is an MPD-RC study, and then the PROUD-PV study which is a study just in PV patients with a different type of interferon compared to hydroxyurea.

Now, the intricacies of study design are really important here because the PROUD-PV study is a noninferiority study, so the aim is to show that interferon is safe and effective. And my understanding is that that is exactly what this study shows.

On the other hand, the MPD-RC 112 study, which is a different type of interferon, was really set up to show ideally superiority for one agent or the other. What we'll see at this study is just an interim analysis, but it's got some really interesting results.

So, first of all, the challenge in delivering a study across many different centers, across the world, this kind of unity of clinicians and centers. But secondly we learned that Hydrea can also deliver molecular responses and can also deliver

bone marrow responses, so that leaves us with a bit of a question mark in the field now about relative efficacy still of these two agents.

Other data that's coming at this meeting…

Mary Windishar:
Well, let's stop for just a second because that is good news. How does it affect a patient? When they go see their doctor, what should they ask for?

Dr. Harrison:
Well, as I see a new patient with polycythemia vera or essential thrombocythemia effectively in my practice if I think they need a treatment beyond aspirin, what I would generally do is say to them there are these drugs, these are the pros and cons of each drug. And then I would say to them, now we've completed a couple of studies, and we'll still assessing the results of one of them. And effectively we believe these drugs are roughly equally effective in terms of delivering what we want for patients with these conditions.

And what we want is normalization of the blood count, safety, probably in the opposite order, but we already knew they were safe drugs, and then ability to suppress blood clotting or bleeding events. Now, the blood clotting and bleeding events are uncommon in patients on treatment, so we may well need to watch for a bit longer to see an answer. But I think it's incredibly reassuring that we're asking questions, gathering data, and so far the two strategies for treatment look really equivalent.

So patients often wonder, am I making the right decision, am I making the wrong decision, is this drug, particularly interferon—some people are really, really keen on that drug—you know, I should be able to take that drug, because it's definitely better. Well, actually this data suggests that really the two therapies are really quite equivalent.

Mary Windishar:
That's great. So you were going to tell us more exciting things you found here today.

Dr. Harrison:
Yes. So always plenty of exciting things. And actually just to stray off-topic, the Ham-Wasserman Lecture, which is a big academic lecture given to someone who has really contributed a lot in the field, is relevant for MPN patients. It wasn't on MPN, but it was actually about testing for susceptibility to clotting and what we understand about preventing clotting and the use of aspirin and heparin (Heparin Sodium) as other anticlotting agents.

So that was really very interesting to me, very dynamic, understanding what the risks are for patients who have already had a blood clot, what the best agent is. And it really made me think about my practice and what drugs I offer to what patients and when I do additional tests. So that was very stimulating to me learning outside of the field.

Other interesting data that comes at this meeting is with regard to interferon. So my great friend and colleague, Professor Kalashan from Paris presented data on what happens to patients who stop taking interferon, so over time some patients are able to take a lower and lower dose. What happens if we stop it? And his data was really very interesting showing that actually many patients can remain without an event off-drug for a long time.

Other data…

Mary Windishar:
What about your data because you're also presenting. We cannot have any modesty here.

Dr. Harrison:
We're presenting a number of different bits of data here. So I think the most powerful data is first of all the data from what's called the MPN landmark study. So maybe your listeners are aware that in America a study was done questioning patients with MPN and their clinicians looking at expectations of treatment, aspirations, etc., and we've recently completed a similar study in Europe, Japan, Canada and Australia looking at about 700 patients.

We found similar—that patients, not surprisingly, are similar with regard to their symptom profile, their concerns, how their expectations match up across the globe. That's all really good.

What we also collected, though, in our study was the impact of having an MPN, what we call the socioeconomic impact. So that means what was the effect on the family? What was the effect on the carer? What's the effect on the patient's ability to work? And so quite striking was the finding that around 20 percent of patients had actually reduced their hours, a further 10 percent had given up work, and another 10 percent had actually taken on a different job as a consequence of having this disease or this group of diseases.

So that's a really very powerful statement as to the impact of these diseases on people's lives and the wider impact upon their family, and so something that we—should really be spurring us on to try to find a better therapy and a better cure. So for me that was—had a really big impact.

We also reported differently a study using the JAK inhibitor ruxolitinib (Jakafi) in patients with essential thrombocythemia. This is the first randomized study of the drug in this field, and we showed again that the drug is just as safe and effective as standard therapies in achieving control of the blood count, better symptom control. And we looked in great detail at the molecular, what's happening to mutations, and found that patients treated with ruxolitinib could get molecular responses—so disappearance of the mutation. Whether that's a good thing or a bad thing actually we're not quite sure, so you have to watch this space to find out a little bit more about that.

But this is important because as you know around one in three patients with ET have a mutation in the calreticulin gene, and this was the first finding that ruxolitinib could reduce the amount of abnormal calreticulin gene. So that amongst many things I think are very exciting at this very busy meeting.

Mary Windishar:
Well, congratulations on that work. And in the past, we've asked you to predict what's going to happen in the future. So you've said that this year is sort of a reconciling, hope—many things have come to fruition. What do you think will happen next year?

Dr. Harrison:
Well, to some extent it's such an exciting, fast-paced field I think that we're likely to learn a bit more about the genetic landscape of these diseases. There's a lot of focus right now on the so-called triple-negative patients, patients that lack a mutation in one of three genes, and I expect there will be more information about those patients and about what's happening to them.

This is particularly important for patients with myelofibrosis, because patients who are so-called triple-negative appear to have a much more aggressive disease. So there's an urgent need to understand why is that, what's happening and what is there to target.

I also expect that we will have known a bit more about newer drugs and their combinations next year at ASH.

Mary Windishar:
Wow. Well, let's make a date to meet next year, find out what's going on. Until then, thank you so much, Dr. Harrison.

Thank you for joining us. From ASH, I'm Mary Windishar.