# Treatment Developments and Ongoing Hodgkin Lymphoma Research

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**Beth Probert:**
So, Dr. Burke, we're going to just jump right in. What is the big news in Hodgkin lymphoma from ASH 2018?

**Dr. Burke:**
I would say to me in Hodgkin lymphoma ASH was a wee bit disappointing. There wasn't anything truly practice changing. If I had to pick a sort of one Hodgkin lymphoma trial that caught my attention, it was a trial conducted by the German group and they tested whether or not adding radiation therapy was essential for patients with the most favorable risk of Hodgkin lymphoma, so the early-stage favorable patients where historically the standard practice is to give them two rounds or two cycles of chemo and then radiation. So they tested whether or not the radiation was necessary.

So some of the patients got radiation and the others didn't. And they found that those patients who did not get radiation therapy had similar routes to relapse, and so the conclusion of the investigators was that adding the radiation therapy remains essential, that you can't drop the radiation, although there was a sort of vibrant discussion after the presentation where some in the room took a different view, and they said, well, actually, maybe it's okay if there's a little bit of a higher relapse risk because you save a lot of patients the toxicities of radiation therapy by not delivering it to so many people who don't need it and that maybe if patients do have a local relapse you can just give the radiation therapy later or give new therapies later and still achieve the same overall outcome, which is survival. So it was a debated conclusion, and that's the way it goes a lot in Hodgkin lymphoma when it comes to radiation therapy.

But that was probably for me the most interesting of the studies presented. There were a number of others, nothing that would dramatically change my practice tomorrow but some interesting stuff came out as well.

**Beth Probert:**
Well, that's very interesting, and it sounds like the debate, so to speak, about the radiation, is that something that they're going to continue to take a look at?

**Dr. Burke:**
Yeah. It's an ongoing debate in many areas. These studies seem to consistently show that when you leave out radiation therapy after chemo there is a slightly higher risk of relapse, but what we care about, which sounds like—everybody, you know, who hasn't been through this debate before would say, of course I want the radiation therapy, but we also know that radiation adds toxicities and may not lead to a better cure rate in all cases.

And so it's a commonly debated thing where do you accept a little bit of higher risk of relapse understanding that you're going to spare yourself some toxicities if you skip the radiation therapy, and if you're in that unfortunate few that does

relapse then you're going to have to do more, and that might be radiation therapy, it might be more chemo, it might be a stem cell transplant and novel therapies. So that's kind of the tradeoff that I—discussions that I have with my early?stage Hodgkin lymphoma patients on what their personal treatment course so going to be.

**Beth Probert:**
Well, and throughout the year we're going to really want to hear an update of where this debate goes. Very interesting. So you mentioned that there wasn't too much, but from that conference and/or in just the Hodgkin lymphoma community what can these patients look forward to as far as treatment in the coming year?

**Dr. Burke:**
I think the really hot topics in the field now are the two main new categories of drug and how to incorporate those best into existing treatment algorithms. So the two categories of drug I'm referring to are, number one, brentuximab vedotin (Adcetris), which is what's called an antibody-drug conjugate that is the Hodgkin lymphoma cancer cells. And then number two are the so-called checkpoint inhibitors that are stimulating the immune system to better attack and kill Hodgkin lymphoma cells.

Those are the two categories of drugs that over the last several years have been used sort of late as therapies for patients who've relapsed multiple times and really don't have much in the way of other choices and now are being sort of moved sooner into these treatment algorithms. So rather than save them for people after they've relapsed the big news earlier this year was that the addition of brentuximab vedotin to chemotherapy regimens improves so-called progression-free survival or keeps the lymphoma in remission for a long period of time when incorporated into a chemotherapy regimen. So that's one example of a practice?changing finding that's happened in the last year.

The big question—a lot of big questions are should that regimen be used for patients with early-stage disease. Right now it's only approved for advanced stage, three and four disease. Should it be used in elderly patients, and if so how can you best give it to elderly patients who have more trouble tolerating that more complex chemo program. And so that's really an area of active research right now.

And then should we be using these checkpoint inhibitors in combination with chemotherapy early, and that's going to be a subject of a large trial that'll take several years. So moving these highly effective treatments earlier in the course of disease is a big area of research that we're going to be hearing about in the next few years.

**Beth Probert:**
And that does sound really exciting, and I don't know if I'm really off base here, but it almost sounds like a little bit more personalized medication, like not a one-size-fits-all.

**Dr. Burke:**
Is it personalized? I'm not sure I would say it's personalized in that in personalized medicine for example we might take one Hodgkin lymphoma patient and say, okay, you have gene mutation A so I'm going to give you drug X, and for another Hodgkin lymphoma patient, you have gene mutation B and I'm going to give you drug Y instead. It's not really individualizing therapy quite so much, but these are really smarter drugs, I would say, than kind of conventional chemotherapy drugs. So they're just novel mechanisms of action than what we're used to with conventional chemotherapy. It's really using new strategies to be smarter about how we treat the disease.