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## What are the appropriate treatments for elderly, or older, patients with Hodgkin lymphoma?

Hello, my name is Dr. Andy Evens, I am professor of medicine at Tufts University School of Medicine, chief of the Division of Hematology/Oncology, and director of the Lymphoma Program at the Tufts Cancer Center. I am often asked what are the appropriate treatments for elderly patients with Hodgkin lymphoma or older patients with Hodgkin's lymphoma, most commonly defined as age 60 and above? And I think there is not one perfect recipe or treatment. It is one that there should be always extreme sensitivity to treatment-related toxicity, whether it is general toxicity such as neutropenia and sepsis, or drug-specific toxicity, whether Adriamycin-related heart failure, or especially and most prominently to me, bleomycin-related lung toxicity, which we know one of the largest risk factors causing bleomycin lung toxicity is age, and I think part of that also is renal function. It is excreted through the kidney, so younger patients with renal dysfunction, there should be some close observation, but obviously, older patients by definition have a decreased creatinine clearance. I often will use a bleomycin-sparing regimen, certainly for patients over 70, and if I use it, extremely carefully between ages 60 and 70. So what are non-bleomycin regimens? There is actually data, small phase II data using good old-fashioned CHOP and also ABVD without the bleomycin, and those have been off of a clinical trial, two of the regimens I have used. Now, I have talked to other colleagues and polled across the country, and there are some, Dr. Joseph Connors at Vancouver, Dr. James Armitage at Nebraska, who will use bleomycin but do it very carefully. Dr. Armitage, I know, will follow a PFT with DLCO every cycle, and it is one that they have to be followed closely because if a patient, thankfully, not all patients but anywhere from a quarter to a third of patients, if it is just used and not followed closely will develop bleomycin lung toxicity over the age of 60 But if you follow it closely, I know Joe Connor uses symptoms. At a hint of a cough, he will drop the bleomycin and/or if there is a decline in the DLCO, and so with very careful management, that would be an option. And there are some other regimens, nonbleomycin, the German Hodgkin Study Group recently published a phase II trial using PVAG with gemcitabine as part of it, and there is VEPEMB regimen recently published



phase II trial over 100 patients from the United Kingdom Group, Steven Proctor and colleagues. A VEPEMB regimen still has bleomycin, and there still was a treatment-related mortality of around 8-9% in that, and again so, very careful I would say also if you are going to use bleomycin, there needs to be caution with growth factor, there is data that growth factor can increase the incidence thinking by pulmonary neutrophils and free radicals, so there should be some caution towards that end. And lastly clinical trials, there are a couple of new clinical trials out there incorporating brentuximab vedotin for specifically untreated older patients with Hodgkin's lymphoma, either as a single agent or sequentially with chemotherapy.