**SPEAKER:** When we decide to use ECP as our second-line therapy for any type of graft versus host disease that we want to treat, there are different practical aspects to take into account.

So first of all, we need to make sure that the patient has, actually, a disease that we believe is going to respond to ECP. And as I said, this is usually chronic graft host disease of the skin, sclerodermatous forms, to a certain extent lichenoid forms, oral GVHD, chronic GVHD, liver GVHD, lung GVHD.

So once we know that there is an indication, we need to make sure that the patient is not leukopenic. That means that we will have a buffy coat, or enough white cells, to treat this patient. Because basically, what we do with extracorporeal photopheresis of freezes is to treat the buffy coat component of the blood by mixing it with 8-methoxypsoralen, a photosensitizer, and then exposing these psoralen-treated cells to UVA, ultraviolet A radiation.

So if we have a patient that is very leukopenic-- and I will tell you what, in my opinion, very leukopenic is-- it is very difficult to form a buffy coat that we can treat through ECP. I arbitrarily use 1500 WBCs, white blood cells, as my threshold. So anyone that has less leukocytes than that, truly, I don't think we can effectively photoactivate and treat a buffy coat with that white blood cell number. So that's one consideration.

The second consideration is that we need to have a hematocrit that is adequate to allow for the machine to separate the blood into its components. And that is usually about 28%. And the third one is a platelet count that will not put the patient in a situation of bleeding. As you know, in photopheresis, we have to use anticoagulants. I usually almost always use ACD-A. Although this is not the FDA-approved anticoagulant-- this would be heparin-- I think ACD-A has in my experience been safer with patients that have thrombocytopenia, which is a lot of the patients with chronic graft versus host disease.

So because of the presence of anticoagulant in the system, we need to make sure that we have a platelet count that is not too low. We use 30,000 per cubic millimeter platelets as the threshold. Sometimes we have to transfuse the patient prior to the procedure, and this is done quite often.

So once we evaluate the patient, and we have all these things in order, we are ready to proceed, provided we have good venous access. I would tell you that approximately a third of patients can do without a central line. And I'm talking about chronic graft versus host disease and acute graft versus host disease. But in the rest, we need to use a central venous catheter.