SPEAKER: So I believe that there is a lot of Phase II data to support the use of extracorporeal photopheresis, ECP. And actually, this data is as solid as Phase II data can be. Of course, the design in most of these studies has not been optimal, but we cannot dismiss the data that supports its use, and particularly in skin disease, in oral and sometimes eye disease, chronic graft versus host disease and also visceral chronic graft versus host disease, such as lung and liver graft veruss host disease.

So the problematic point here is that there is not enough randomized data. And there are a lot of reasons for that. We did say that there is one randomized study that used photopheresis for chronic graft versus host disease of the skin by Flowers and collaborators, and this was in the steroid refractory setting. This study did not meet their primary endpoint, but they showed an advantage to the use of ECP.

There is another study that is randomized that was presented by Amin Alousi and collaborators at the meeting in 2015 but in this case the study was a randomized study for frontline therapy of acute graft versus host disease. It was a study with a Bayesian design, and it treated randomized patients with acute graft versus host disease to receive corticosteroids or corticosteroids plus photopheresis. And actually, the photopheresis group showed some advantage in terms of efficacy, particularly in skin disease, and also a steroid sparing effect.

So those are the two randomized studies with photopheresis, one in chronic GVHD, one in acute GVHD. I think that what we need now is more randomized data. And this data is likely not to be placebo-controlled, because so far, in my experience, nobody wants to support a study with sham pheresis. It is costly. It is difficult to perform logistically.

And in some cases, depending on the design of the study, it may not be an acceptable option from an ethical perspective. But that's another thing that makes an optimal study complicated. How do you compare this to a placebo group-- which, in this case, it would be a sham photopheresis?

So if we have that data, and actually prospective data that uses the NIH consensus criteria for grading chronic GHVD-- most of the data that I mentioned does not use the NIH consensus criteria, because it did not exist at the time they were published. And that's the case for my studies, too.

So actually, that's another important aspect of it, the metrics. The metrics have changed over the last several years. And then studies, especially randomized, that use the NIH consensus criteria may be more informative and may be more helpful in defining the role of ECP as an effective treatment strategy for graft versus host disease.