

## 2022 Targeted Therapies Patient Forum

## What is Oligoprogression?

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## TRANSCRIPT

We're going to talk about Oligo Progression. So, what is Oligo Progression? Well, Oligo Progression is a new concept. In medicine, we like to make things complicated. 'Oligo' means 'few' or little,' and 'progressive disease' is a disease that is growing after initial treatment. So, Oligo Progressive is when a few sites of the disease are growing after initial treatment.

This is a relatively new concept because before, we saw disease progression as a concept that was black or white. It was either disease progression or no disease progression. But now, we have this middle point called 'Oligo Progressive Disease,' which is a disease growing in a few sites of metastasis, in a patient that otherwise has stage four or widespread disease.

It's very important that we are conscious about the language that we use; the patients do not progress, their cancer progresses, because our patients are more than the disease, and the disease doesn't define them. So, this is Oligo Progression. There is no 'patient Oligo Progression,' it's the disease. And we need to make sure we use patient-inclusive language.

I use this diagram because it really helps understand several concepts, and they all start with the word 'Oligo,' which means 'few.' So, we have patients that have De Novo — it means, at the moment of diagnosis, they have Oligo Metastatic Disease, where the disease travels from the lung to another site, compared to other patients that may present with cancer in many, many organs.

We also have 'Oligo Persistent.' What is Oligo Persistent? It's when a patient has some disease in limited sites. When it's treated, only one or two sites remain. What we're talking about today is Oligo Progression, in which the patient has limited disease, receives treatment, and after a certain time, one or two sites of the disease grow while the rest of the disease is under control.



So, why do some patients have disease progression in many organs, while others only have disease progression in a limited number of organs? For instance, a patient that has a widespread disease, gets treated with TKIs or other targeted therapies, and then they have a good response for around six to nine months, and then a site in the liver or a site in the bone starts growing. So, that's Oligo Progression. The rest of the body is under control, but one or two sites are growing.

This is a complex concept that we're trying to understand why does it exist? There are several factors that affect Oligo Progression. One, we know that when we are targeting a specific mutation with these new drugs, cancer evolves and develops resistant mechanisms. That's one of the reasons we see Oligo Progression — because a part of cancer has developed a resistance mechanism to the targeted therapy.

Another factor is changes within the tumor microenvironment. We see this mostly in patients treated with immunotherapy or immune checkpoint inhibitors, like Pembrolizumab or Nivolumab.

There are also several hemodynamic factors. We see Oligo Progression more commonly in certain organs that have a high blood supply, like the liver. Many patients tend to have disease progression in highly vascularized organs, suggesting there's a pattern there.

Furthermore, areas that have been previously treated with radiation, ablation, or surgery are less likely to have disease progression compared to areas that have not.

And also, the unique disease characteristics. Lung cancer is no longer one disease; it's composed of many different types of mutations. We know that certain mutation-specific cancers like to go to certain organs more than others. One example is ALK-positive Non-Small Cell Lung Cancer, which has a preference for the brain.