



# The Role of Genetic Profiling and Immunotherapy in Treating Prostate Cancer

**Tomasz Beer, MD, FACP**

Deputy Director, OHSU Knight Cancer Institute  
Oregon Health & Science University

Please remember the opinions expressed on Patient Power are not necessarily the views of our sponsors, contributors, partners or Patient Power. Our discussions are not a substitute for seeking medical advice or care from your own doctor. That's how you'll get care that's most appropriate for you.

**Jeff Folloder:**

I've got a question for you here. It says, "I have been fighting PCA for more than 21 years. What is the first step I should take to determine whether my genetic makeup could benefit from immunotherapy?"

**Dr. Beer:**

Well, let me expand on that question a little bit, perhaps. So, one of the things that we've learned in the last two or three years is that in men with advanced metastatic prostate cancers, as many as 12 or 13 percent of those men have inherited mutations that are related to the risk of developing prostate cancer.

And, that may, in fact, be important to breast cancer and other cancer types, so we're increasingly moving towards recommending a basic genetic test for inherited cancer risk. We have an assay called the Inherited Cancer Panel, which looks at the various mutations. So, someone who has advanced metastatic prostate cancer may consider getting that kind of testing both for themselves and for their family and has about a 1 in 9 chance of finding something.

Now, for the specific question that this audience member asked, what I was referring to is this strange-sounding thing called microsatellite instability, which is a relatively uncommon genetic abnormality in the cancer itself. It's not inherited. And, one would have to get a piece of the cancer and do what's called an MSI assay and see if it's present. It's pretty rare in prostate cancer. It may be 1, 2, 3, 4 percent of men with advanced metastatic disease. If that abnormality is present, then certain types of immunotherapy have a much better chance of working.

Please remember the opinions expressed on Patient Power are not necessarily the views of our sponsors, contributors, partners or Patient Power. Our discussions are not a substitute for seeking medical advice or care from your own doctor. That's how you'll get care that's most appropriate for you.