

When Your Biopsy Shows No Cancer: What to Consider

Phillip Koo, MD [00:00:00] Hi, this is Phillip Koo from the Prostate Cancer Foundation. So today we're gonna be talking about what happens when you have an abnormal PSA, you get a biopsy and the biopsy comes back negative. This presents a lot of different potential scenarios that I think we should address. And to walk us through that scenario is Dr. Jim Hu who's Professor of Urology from the Weill Cornell Medical Center. So, thank you very much for joining us, Dr. Hu.

Jim Hu, MD, MPH [00:00:23] Thanks, Phillip, delighted to be here.

[00:00:25] So we know certain patients have an abnormal PSA. You know, you do the traditional workup, they get a biopsy, and many of them, or not many, but some of them will come back with a negative biopsy saying they do not have cancer. So how should that be interpreted?

Jim Hu, MD, MPH [00:00:42] Sure, absolutely. I think one thing to keep in mind first, I think patients should feel great. It's a negative biopsy. I think as a specialist, I would ask the question, was the biopsy done with an MRI beforehand as that's in the professional guidelines, there's strong evidence that should be done. However, we know on a national level, it's still more often than not that there is a non-MRI targeted biopsy, right? Or some would say a blind biopsy. And so just going back to review how the biopsy was done. Whether an MRI was incorporated, the technique for the biopsy I think is important, but I think the other thing for the patient to be aware of is that most biopsies are negative, right? Like if you say, well, what's the positivity on a prostate biopsy, probably only 30 or 40%.

Phillip Koo, MD [00:01:26] So you have those patients where they get the results. Clearly, you're saying they should be happy, rejoice in that. But doesn't mean they should just fall off the radar. So, what recommendations do you give to follow up on those types of patients?

Jim Hu, MD, MPH [00:01:40] Absolutely, I think one would just go back to annual PSA testing, usually done by the primary care doctor. If that particular patient's already seeing a urologist for other issues, then of course that's done annually with the urologist.

Phillip Koo, MD [00:01:52] So are there scenarios in which you have a prostate MRI that might come back a [PI-RADS] 4 or 5, where there's a higher likelihood of cancer, and then the biopsy comes back negative? How often do you see that type of scenario?

Jim Hu, MD, MPH [00:02:04] Absolutely. So, it's important to understand that, let's say with a score of 4, 50% of the time the prostate biopsy does come back negative or doesn't have clinically significant cancer. Even a five, it's about 20, 25%. And so, but the question does arise, is there the potential for sampling error, right? Because we know even in expert hands with a targeted biopsy, your biopsy, the intention to hit a target could be off about three millimeters. And a prostate biopsy only samples about 1% of prostate. And so, I think most guidelines would say. If the PSA continues to be elevated, repeat that MRI in a year, particularly with PI-RADs 4s and 5s. Sometimes it may look the same, it may look more suspicious, the PSA goes up, these are other reasons to repeat that biopsy to make sure that there wasn't sampling error.

Phillip Koo, MD [00:02:47] Alright, so if there is some sort of discordance, it does sort of put you on a different path and might make you be a little bit more aggressive on how you follow up.

Jim Hu, MD, MPH [00:02:57] Absolutely. And other secondary biomarkers like the 4K score can come into play that gives you a percent chance of prostate cancer. ExoDx is urine based looking at RNA and microvesicles. So, you can also use those biomarkers to further risk-stratify to see if that agrees or disagrees. You know, how concordant is that with the, for example, PSA, PSA density, or MRI?

Phillip Koo, MD [00:03:19] So it's interesting, you know, in a couple conversations we've had about this, you mentioned the importance of prostate MRI. And one thing we know is that prostate MRI, when it's interpreted by a radiologist, can be looked at and assessed and evaluated with differing results. What advice do you have for patients to best reconcile that type of potential discrepancy?

Jim Hu, MD, MPH [00:03:39] Absolutely, I think a lot of patients, particularly those who are very sophisticated, will get a copy of their MRI, and when they seek a second opinion, they'll bring that MRI with them. And sometimes we'll find that when our expert radiologists take a look at that MRI, that they'll feel that there were, you know, there may have been too much rectal gas, or someone has an artificial hip that can give artifact and therefore not give the best reading. And so, to your point, it's just important to get a second-opinion radiology interpretation, because there's also technical factors like how the pulse sequences are run that can affect the quality of the interpretation.

Phillip Koo, MD [00:04:12] So this is wonderful news, I think clearly a negative biopsy is something that's much better than having a positive biopsy, but still some factors to consider with regards to how best to be followed.

Jim Hu, MD, MPH [00:04:26] Absolutely, I think, you know, does that negative biopsy take place for someone in their 40s that has a lot of, for example, a runway ahead of them in terms of the potential to develop prostate cancer versus a negative prostate biopsy for someone than their early 70s? I think you know obviously competing risks for death come into play, and that may determine how aggressively we talked about like a year later if it's a PI-RADs 4 or 5, do we re-biopsy or you know think about the competing risk as someone gets old?

Phillip Koo, MD [00:04:55] Well, that's great. Thank you very much for sharing these insights.

Jim Hu, MD, MPH [00:04:57] Sure, thank you, Phil.