



Lung Cancer Q&A: How Accurate Are Blood Biopsy Results?

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Andrew Schorr:

Here's one we got from Greta, "What percentage of blood biopsies are accurate?" She said, "I had one done and it showed I no longer had the BRAF mutation, but subsequent tissue biopsy showed I did still have it. So, how reliable are the liquid biopsies?" And I think you, Dr. Boyle, mentioned that a little bit.

Dr. Boyle:

Right.

Andrew Schorr:

So, this is a new area of pathology. In this area, how much can you rely on it?

Dr. Boyle:

Right. So, the positive results we are finding when you're testing with a reputable company they are—can be very reliable. Just as reliable as the tissue testing for the positive results. And there are some advantages even. Because in the body you might have a tumor on the lung that's a little bit different from the tumor that spread to the liver, whereas the blood is a big mixing bowl. And if you have some DNA sloughing off the two different tumors, that DNA is mixing in the blood. So, you're getting a more comprehensive look at the mutations in the blood.

One big, big disadvantage that's represented in this question is when you get a negative result. When you get a negative result like she got for her BRAF in the blood, it's really a non-informative result as opposed to a negative result that you can hang your hat on. Because you don't really know how much cell-free DNA is actually sloughing off the tumor and circulating in the blood. And so, if it's not in the blood, you might get a negative result when really, it's still BRAF positive in the tumor as she found when she had this tissue tested again.

Dr. Gray:

Positive.

Andrew Schorr:

But this is evolving, right? I mean we couldn't even talk about liquid biopsies not too long ago. So, the sophistication and the sort of getting down almost nano—the nano level, you're working on it, right?

Dr. Boyle:

And that's a utility that Jhanelle and I have talked about this so much with algorithms for how to really understand the results and use the results.

Dr. Gray:

Yes.

Dr. Boyle:

And this is something that—at Moffitt we know well about the negative results being more like non-informative results with the blood. And we find them very helpful when we interpret them appropriately.

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