

BroadcastMed | Breakthroughs in the Treatments for Melanoma

RICHARD JOSEPH: The therapies for melanoma have had a lot of breakthroughs in the last couple of years, and we, at Mayo Clinic, have been a part of that. The first big breakthrough is a novel targeted agent that inhibits a specific mutation in melanoma called the B-Raf protein. The treatment is designed to only target patients with this mutation, and has shown very good results in shrinking tumors in over 50% of patients, with pretty minor side effects when we compare them to traditional chemotherapies.

The other two breakthroughs are two new immune therapies that have come to the market. The first one is called ipilimumab, or YERVOY, which has been approved since 2011. And this drug, what it does is unleashes the breaks of the immune system, and allows the immune system to be revved up and fight the melanoma. This drug has been approved and shown to improve the survival in patients with melanoma when compared to a placebo.

The next immune therapy, that is even more exciting and interesting, but still at the earlier stages-- and we have the clinical trial at Mayo-- is another drug that targets PD-1. And that's another part of the immune pathway. This therapy blocks the ability of the immune system to turn itself off, which the tumor is quite capable of doing, is turning itself off. We don't want that to happen.

So giving this drug keeps the immune system active on the melanoma. It has shown really nice and very high response rates, but not only the response rates being high, the duration of response has been very long.

And finally, the drug is extremely well tolerated. And this, I think, will be one of the major breakthroughs in cancer, maybe the biggest breakthrough in the last 10 to 20 years.