

Dr Sampson: You also volunteered to do a **spinal tap** today.

Karen: Yes.

Dr Sanjay Gupta: This is Karen Vaneman, she's **bracing for** another painful procedure. You see, she's got cancer, brain cancer, a killer tumor called glioblastoma.

Glioblastoma, known as GBM, this is typically thought of as the worst type of tumor, why?

Dr Allan Friedman: All because left untreated, the patient **succumbs to** the disease very quickly.

Gupta: Even with aggressive treatment, average **survival** is **barely** a year. Chemotherapy, radiation, all the usual treatments **hardly** slow it down.

Karen: Oh, good to meet you.

Gupta: How are you?

Karen: I'm fine thank you.

Gupta: But here at the Preston Robert Tisch Brain Tumor Center, Karen found hope in an experimental vaccine. When people hear the word vaccine, they think this is something to prevent disease.

Dr Sampson: Right.

Gupta: That's not what's happening here exactly.

Dr Sampson: No, it's not.

Gupta: Dr John Sampson helped develop the vaccine.

Dr John Sampson: Essentially, all the cells in our body have a **fingerprint**, the fingerprints on your cells are different from the fingerprints on my cells but the immune system can recognize the differences in those fingerprints.

Gupta: The vaccine has a futuristic name, it's called CDX 110. It uses the body's own immune system to attack tumor cells. It won't work on every GBM patient, just the 40% or so whose tumors make one particular protein. In those patients it **goes off** like a smart bomb.

Dr John Sampson: So unlike chemotherapy which really hurts all the cells in the body or radiation, the immune system can be absolutely precise and so we get a very tumor specific attack with very low toxicity.

Gupta: Which means the patients don't get as sick.

Now, Karen gets a **shot**, a painful one every month but look at the results. We were able to pay her another visit, a four-year later. Remember most patients don't even live that long.

Karen: As long as the vaccine works, then I'll be getting the monthly shots. And when it doesn't work then I'm in trouble.

Gupta: What can we say about this vaccine now, in terms of educating a patient about it, what do you tell them in terms of what it promises?

Dr Sampson: We're always careful not to overpromise what something can **deliver** and this is still in an experimental stage. But patients are living two to three times longer with the vaccine than we would have expected.

Gupta: As much as six years in some cases, with no signs of returning cancer.

We know that Duke has been doing this for about six years and gotten the results that you just heard about but the real key now is to try to duplicate and replicate these same results across the country in many different hospitals and that's what's underway right now, about 100 patients around the country sort of participating in those trials right now. The real question that people want to answer is can you treat this type of tumor, this deadly tumor more **safely** and more **effectively** than we do now? And when those results come to us, we will certainly bring them to you. Back to you for now.

Vocabulary:

- **a spinal tap** = a lumbar puncture
- **brace for** = se préparer à
- **succumb to** = succomber à
- **survival** = survie
- **barely, hardly** = à peine
- **a fingerprint** = une empreinte
- **go off** = exploser
- **a shot** = une injection
- **deliver** = obtenir des résultats
- **safely** = without danger
- **effectively** = with efficacy

Translation. (the solutions are below)

1. Le patient reçoit une injection tous les mois et doit subir une ponction lombaire au moins une fois par an.
2. Grâce au vaccin, le taux de survie est passé d'à peine un an à près de six années.
3. Cette thérapie est toujours au stade expérimental, mais les essais sont encourageant en terme d'efficacité et d'innocuité.
4. Je vais prendre vos empreintes pour faire votre carte d'identité.
5. L'objectif de ce vaccin n'est pas de prévenir la maladie. C'est de permettre de prolonger la vie des malades.

Solution:

1. The patient gets an injection every month must undergo a spinal tap at least once a year.
2. Thanks to the vaccine, the survival rate has gone from barely a year to almost six years.
3. This treatment is still experimental but the trials are promising in terms of efficacy and safety.
4. I am going to take your fingerprints to do your ID.
5. The aim of this vaccine is not to prevent the disease. It is to allow to prolong patients' lives.