# A Cure for Cancer?

*Abstract*—A new treatment has shown significant promise in treating cancer patients.

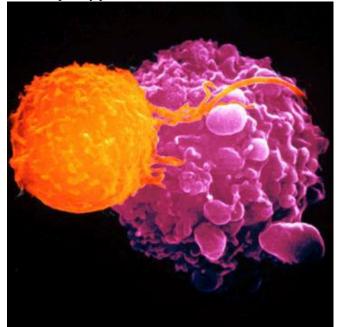
## I. INTRODUCTION

recent breakthrough made while working on a cure for mesothelioma. Currently undergoing trials at the Memorial Sloan-Kettering Cancer Center in New York, the WT1 vaccine GL-ONC1 has proven very effective at killing cancerous cells.

#### **II. METHODS**

Mesothelioma, and many other cancers, contains high concentrations of WT1. This is a protein that is found rarely in healthy cells, and in smaller amounts than in cancerous cells. A recently developed antibody, which is a modified Tcell (in orange below), has shown the ability to target and destroy cells with high concentrations of WT1. It is the first lab-developed antibody that is able to target cells based on what is inside them. This is a huge breakthrough for cancer treatment, as this could be targeted towards other proteins, assuming GL-ONC1 is successful in preliminary trials.

These modified cells, along with a combination of conventional drugs, chemo, and radiation therapy, will be used to hopefully push cancers back into submission.



## III. RESULTS

In tests in lab conditions, this cell has sought out and destroyed cancerous cells in test tubes, and has proven very adept at curing mice of cancer. However, preliminary human trials have just begun. Out of the five patients chosen to be the first to have this treatment administered, an incredible three have seen their cancer go into remission. All five patients were given very low chances of survival, but these cells have managed to remiss cancer in as little as eight days. Granted, this has been going on for only about a month, but the initial prognosis for this treatment is stellar. While mid- and long-term effects remain to be seen, the short term effects are promising.

### IV. DISCUSSION

Obviously the potential implications for this are huge. The doctors at the Memorial Sloan-Kettering Cancer Center seem to have stumbled upon a potential, if not cure for cancer, at least a very powerful weapon in the fight.



While long-term effects remain to be seen, assuming the treatment doesn't kill patients in a horribly unforeseen way, we might just live to see the day where cancer is no more fatal than the flu.

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