Can of-CS and rVAR2 Methods Detect Early Stage Cancer?

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Cancer is a big problem for society, increases world-wide. Today there are many efficient cancer treatments, but one of the key problems is that cancer is often detected very late. The project aims to find a way of detecting cancer at an earlier stage than possible today. The first approach was to see if a chip can be developed, which measures at an early stage if cancer is developing in a patient. Target was antigen CD44. But since cancer often develops relatively slowly, with a few exceptions, it is not necessary to have a chip implanted in the body. But my theory/technology is now to perform flow cytometry with the of-CS binding protein VAR2CSA (rVAR2) that binds to nearly all types of cancer cells. rVAR2 has been used to detect of- CS and show that it is a more ideal universally-applicable target to detect cancer, since glycosylation of type CSA is present on many proteins and only found on cancer cells, except placenta cells. The hypothesis is therefore; "rVAR2 can be used to detect of-CS, providing an ideal universally- applicable target for detecting cancer as opposed to the antigen CD44, because glycosylation of type CSA is present on many proteins, and is only found in cancer cells, except placenta cells. Early detection of cancer with a patient using flow cytometry is therefore possible" I have also performed other interesting experiments, but since the results have not been published, I am unable to write about it, but can discuss it during my presentation of my project, and I also have a new perspective that I will talk about during my presentation. My method can be used with flow cytometry to detect early stage cancer with a patient. If successful, then it is possible to screen a patient for cancer by simply taking a blood test.

Awards Won: