

Could DNA microcircles help with catching cancer early?

Cancer can have vast physical impacts on a person, particularly at its later stages. Advanced forms of cancer often make working an impossibility and sometimes leave a person facing a terrifying reality that their lifespan may be significantly shortened.

One would hope that when a person is in the scary and harrowing battle against advanced cancer, they wouldn't also have to face financial difficulties. Unfortunately, some cancer sufferers do due to the medical bills and loss of work that can come from cancer. For cancer sufferers who meet the benefits eligibility requirements, SSD benefits can sometimes help cut down on the financial pressure they are facing.

One thing that can sometimes help reduce a cancer's impacts is the cancer getting caught early so a person has a chance to receive treatment for the cancer before it has the chance to develop into a more advanced stage. Unfortunately, given the currently available cancer diagnosis tools, early detection of cancer often isn't a very easy thing.

That's what makes a recent [study](#) notable. The study indicates that a type of customized genetic construct could possibly help with the early detection of cancer.

The constructs are DNA microcircles. The microcircles are designed to force tumors to produce a protein, called SEAP, that tumors don't normally produce. Thus, the hope is that if you put these microcircles into an organism, you could tell whether or not the organism has cancer by whether SEAP starts showing up in the organism's blood.

The study involved injecting mice with the DNA microcircles and then testing their blood. Some of the mice had tumors,

while others did not. In the blood tests, the researchers did not find SEAP in the samples of the tumor-free rats, but did find SEAP in the samples of the rats that had tumors. This indicates that DNA microcircles could potentially have cancer-detecting applications.

Researchers hope that a diagnostic test for cancer using pills with the microcircles and blood tests could ultimately be developed for humans and that such a test could help with the early detection of a variety of different types of cancer. Of course, one of the things that would need to be determined before such a test could be developed is whether the microcircles would even work in humans the way they did in mice.