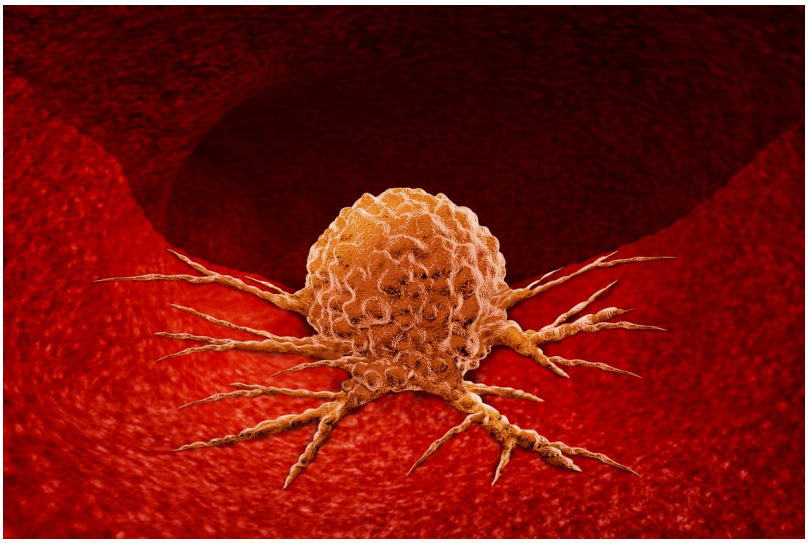

Preliminary results from an ongoing Phase 1/2 human trial indicate a new drug dubbed OMO-103 can safely and effectively inhibit the function of a gene known to drive the growth of many common forms of cancer. For decades scientists have known a specific gene, called MYC, plays a crucial role in the proliferation of cancer cells. The gene is often over expressed in a variety of different tumors, so it has been any ideal hypothetical target for novel cancer treatments.

But despite many attempts, MYC has earned a reputation as an " undruggable " target. The gene produces disordered proteins, making it difficult to develop therapeutic drugs that generally need to target fixed protein structures.

“MYC is one of the ‘most wanted’ targets in cancer because it plays a key role in driving and maintaining many common human cancers, such as breast, prostate, lung and ovarian cancer," explained Elena Garralda, one of the researchers working on the new clinical trial. "To date, no drug that inhibits MYC has been approved for clinical use.”

OMO-103 is a mini-protein designed to enter cells, penetrate the nucleus, and suppress activity of the MYC gene. The Phase 1 part of this ongoing clinical trial is primarily designed to establish the safety profile of OMO-103 in human subjects.

The preliminary results, revealed at a European medical conference and yet to be published in a peer-reviewed journal, report the effects of the new drug in 22 human patients. The trial participants had a variety of different solid tumors, and all had failed multiple pre-existing clinical treatments.

No serious adverse effects from the experimental drug were detected in the trial. One patient, given the highest dose tested, displayed an inflammatio

*__ https://newatlas.com/medical/phase1-results-myc-cancer-gene/?utm_source=New+Atlas+Subscribers&utm_campaign=633874ea2d-EMAIL_CAMPAIGN_2022_10_27_08_13&utm_medium=email&utm_term=0_65b67362bd-633874ea2d-90431105