Intestinal microbiota: A new force in cancer immunotherapy

Zhujiang Dai
Jingqiu Zhang
Qi Wu
Huiwen Fang
Chunfeng Shi
Zhen Li
Chaobiao Lin
Dong Tang
Daorong Wang

Video Byte

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Abstract

Immunotherapy is one of the most powerful weapons for fighting cancer. This approach re-activates the anti-tumor activity of compromised immune cells, but one glaring weakness is that it can over-activate the immune system, leading to adverse events that can range from mild headache to anaphylaxis. That has some researchers turning to the gut for solutions. The intestinal microbiome is a complex ecosystem that regulates our physiology and psychology, both in health and in diseases such as cancer. Growing evidence suggests that certain microbes could be harnessed to boost anti-cancer immunotherapies. These microbes could secrete molecules that promote the spread of immune cells that target tumors or enhance immune cells' ability to recognize cancer. Bolstered by recent advancements in sequencing techniques, microbiome research could be the perfect complement to cancer immunotherapy.