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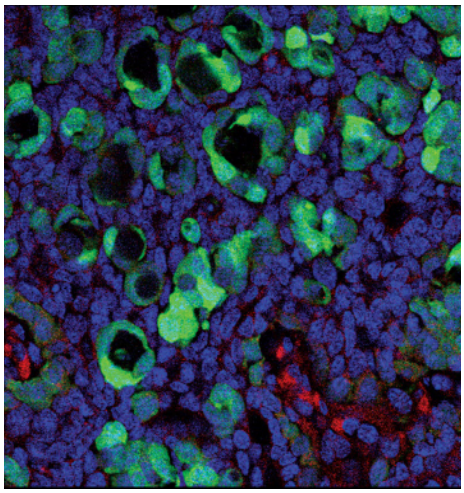

ADJUVANT FOR ANTICANCER TREATMENTS

Tumor Microenvironment Targets to Prevent Acquired Resistance

Brief Description of Technology

Identification of secreted proteins from the tumor stroma that promote tumor growth following exposure to a cytotoxic agent.

BUSINESS OPPORTUNITY
Exclusive license
Sponsored research

TECHNOLOGY TYPE
Oncology
Therapeutic
Target

STAGE OF DEVELOPMENT
Target identification

PATENT INFORMATION
US 20150309037

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Technology Overview

Acquired resistance to anticancer therapies is a substantial barrier to effectively treating malignant solid tumors. Most anticancer regimens deliver treatment at intervals to minimize damage and allow the recovery of vital neighboring normal cell types. However, these gaps between treatment cycles allow both tumor and microenvironment cells to recover, activate, and exploit survival mechanisms and resist subsequent therapeutic insults. Fred Hutch researchers have identified treatment-induced alterations in the tumor stroma that include the expression of a diverse spectrum of secreted cytokines and growth factors. WNT16B is activated in fibroblasts following anticancer therapies and promotes the survival of cancer cells after cytotoxic therapy. Targeting WNT16B and other damage-susceptible factors in conjunction with conventional cancer therapeutics may enhance overall treatment response.

Applications

- Adjuvant for anticancer treatments

Advantages

- Enhanced effectiveness of anticancer therapies
- Easily incorporated into existing treatment strategy

Market Overview

The cytotoxic drug market is expected to reach $18.7 billion by 2018. Along with surgery, cytotoxic drugs are the most common treatment for all cancers. There is a large range in the cost of individual cytotoxic agents due to differing treatment strategies. Preventing acquired resistance to cytotoxic drugs can help decrease the duration and dose needed for treatments.

Investigator Overview

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