

Study: Tumors inhibit immune system

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Seattle scientists have shown that tumors can manipulate the immune system to stop it from attacking cancer cells, said a study published in *Nature Immunology*.

Tumors produce abnormal proteins that cause normally helpful immune cells to inhibit attempts by the immune system to attack the cancer, instead of aiding the mobilization of the immune systems defenses.

The study by Seattle's Fred Hutchinson Cancer Research Center found one of these proteins changes the role of otherwise helpful immune cells, called T helper cells, which in the early stages of the disease play a key role in the body's efforts to destroy cancer cells.

In response to the tumor-derived soluble form of the protein, the cells divide and take on a suppressor role, reducing the anti-cancer potency of the immune system, the report said, but exactly how the T helper cells become suppressor cells is not yet known.

Lead researcher Dr. Thomas Spies said, "If one could prevent a tumor from producing the soluble protein it could be beneficial in terms of helping sustain the immune system's normal capacity to mount an anti-tumor response," the BBC reported Monday.

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