



Cancer

VA has a broad array of research on cancers common in the Veteran population. These include diseases such as prostate, lung, colorectal, bladder, kidney, pancreatic, esophageal and breast cancer, as well as lymphomas and melanomas. VA researchers conduct lab experiments aimed at discovering the molecular and genetic mechanisms involved in cancer; epidemiologic studies looking at the causes of disease; clinical trials to evaluate new or existing drugs and other treatments; and studies focused on improving end-of-life care.

Examples of VA Research Advances

Natural compounds show promise in lab studies – In a recent study led by Dr. Sushanta Banerjee at the Kansas City (Mo.) VA, the compound crocetin—derived from the spice saffron, which has a long history of medicinal use in traditional cultures—was effective in thwarting tumor growth both in cell cultures and in mice that had been injected with human pancreatic cancer cells. In studies at the Birmingham (Ala.) VA lab of Dr. Santosh Katiyar, proanthocyanidins—antioxidants found in grape seeds, pine bark and other natural sources—halted the spread of lung cancer in cell cultures and mice. The experiments at both sites are among numerous VA research projects exploring the potential of natural compounds as cancer-fighters.

Improving physicians' empathy, communication – Researchers with VA and the University of Rochester found that in consultations with patients with lung cancer, physicians rarely responded empathetically to patients' concerns about mortality, symptoms or treatment options. The work was based on 20 recorded or transcribed visits. The findings jibe with those from past research involving oncologists, surgeons, and other doctors, and may help guide efforts to improve physician training.

Prostate cancer therapy being tested – A team with VA and the University of Iowa, led by Dr. David Lubaroff, is testing an experimental immunotherapy against prostate cancer. A phase 2 clinical trial now under way is enrolling men who have had their prostate removed or treated with intensive radiation, but whose cancer has spread in the body. The therapy works by introducing into the body a gene for prostate-specific antigen (PSA). The immune system responds by killing prostate cancer cells, which in these patients are the only cells making PSA.

Facts About Cancer

Cancer is a general term that includes more than 200 different diseases. In all forms of cancer, cells in the body grow and multiply abnormally, eventually taking over and destroying normal tissue. Many factors can combine to increase the risk of cancer. These range from family history and genetic makeup to poor diet and exposure to radiation, air pollution and other toxins. The three main types of cancer are leukemias and lymphomas, involving the blood and related tissues; carcinomas, which occur in the skin, glands, and certain organs; and sarcomas, which involve muscles and connective tissue. Common cancer symptoms include weight loss, fatigue, and pain.

