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# CANCER FACTS

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National Cancer Institute • National Institutes of Health  
Department of Health and Human Services

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## Antineoplastons

Antineoplastons are a group of synthetic compounds that were originally isolated from human blood and urine by Stanislaw Burzynski, M.D., Ph.D., in Houston, Texas.

Dr. Burzynski has used antineoplastons to treat patients with a variety of cancers. In 1991, the National Cancer Institute (NCI) conducted a review to evaluate the clinical responses in a group of patients treated with antineoplastons at the Burzynski Research Institute in Houston.

The medical records of seven brain tumor patients who were thought to have benefited from treatment with antineoplastons were reviewed by NCI. This did not constitute a clinical trial but, rather, was a retrospective review of medical records, called a “best case series.” The reviewers of this series found evidence of antitumor activity, and NCI proposed that formal clinical trials be conducted to further evaluate the response rate and toxicity of antineoplastons in adults with advanced brain tumors.

Investigators at several cancer centers developed protocols for two phase II clinical trials with review and input from NCI and Dr. Burzynski. These NCI-sponsored studies began in 1993 at the Memorial Sloan-Kettering Cancer Center, the Mayo Clinic, and the Warren Grant Magnuson Clinical Center at the National Institutes of Health. Patient enrollment in these studies was slow, and by August 1995 only nine patients had entered the trials. Attempts to reach a consensus on proposed changes to increase accrual could not be reached by Dr. Burzynski, NCI staff, and investigators, and on August 18, 1995, the studies were



closed prior to completion. A paper describing this research, "Phase II Study of Antineoplastons A10 (NSC 648539) and AS2-1 (NSC 620261) in Patients With Recurrent Glioma," appears in *Mayo Clinic Proceedings* 1999, 74:137–145. Because of the small number of patients in these trials, no definitive conclusions can be drawn about the effectiveness of treatment with antineoplastons.

At present, the Burzynski Research Institute is conducting trials using antineoplastons for a variety of cancers. Information about these trials is available from the Cancer Information Service or on the NCI's Cancer.gov Web site at [http://cancer.gov/clinical\\_trials](http://cancer.gov/clinical_trials) on the Internet.

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### **Sources of National Cancer Institute Information**

#### **Cancer Information Service**

Toll-free: 1–800–4–CANCER (1–800–422–6237)

TTY (for deaf and hard of hearing callers): 1–800–332–8615

#### **NCI Online**

##### ***Internet***

Use <http://cancer.gov> to reach the NCI's Web site.

##### ***LiveHelp***

Cancer Information Specialists offer online assistance through the *LiveHelp* link on the NCI's Web site.

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