Biomarker detects, regulates brain tumors

By Jonathan Jay Gibian

U.S. cancer researchers have identified a biomarker for brain tumors that also regulates the spread of intercranial tumors.

The Emory University scientists, in collaboration with researchers at the Dana Farber Cancer Institute, found the biomarker -- soluble attractin -- is elevated in the cerebrospinal fluid of patients with malignant astrocytoma, the most common form of brain tumors, and mediates glioma cell migration.

The biomarker is normally absent in the central nervous system and is undetectable in cerebral spinal fluid unless malignant astrocytomas are present in the CNS, the scientists said.

The discovery means physicians will have a new minimally invasive method to track the success of treatments, said Erwin Van Meir, professor of neurosurgery and lead author of the study.

He said the biomarkers, singly or in combination, will provide a fingerprint of the disease and be able, in the future, to better define the disease, suggest what kind of treatment to use and allow physicians to monitor how well the tumor responds to treatment.

The research is published in the November issue of the journal Clinical Cancer Research.