DIFFERENCE GEL ELECTROPHORESIS (DIGE) OF SERUM FROM PATIENTS WITH GRADE IV ASTROCYTOMAS AND CONTROL SUBJECTS

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More than 60% of primary brain tumors are of glial origin, occurring at any age. Grade IV astrocytoma is the most malignant type and can quickly spread to other brain parts. The identification of new biomarker panels holds promise for early detection of this cancer being crucial for a successful treatment. Our aim was to use differential in gel electrophoresis (DIGE) to search for differences in protein expression level between seven control subjects and seven astrocytoma patients. The Ettan DIGE System and CyDye fluors were used to simultaneously separate three samples in each 2-D gel. The gels were scanned with the Typhoon™, and the DeCyder software used to locate putative biomarkers. The paired Student t test indicated 21 differentially expressed proteins ($p < 0.01$) that are being identified by mass spectrometry.

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