

MARKERS OF AGGRESSIVE BEHAVIOUR IN HEAD AND NECK TUMORS

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Head and neck squamous cell carcinoma (HNSCC) is an aggressive epithelial malignancy and one of the most common neoplasms in Brazil. The identification of aggressive and non-aggressive HNSCC subgroups remains a challenge because this tumor is biologically and clinicopathologically heterogeneous. In order to investigate markers of tumor aggressiveness in HNSCC, a consortium of more than 70 researchers from São Paulo State, Brazil (The Head and Neck Genome Project, GENCAPO), has been created in 2002, supported by FAPESP and Ludwig Institute for Cancer Research. Up to the moment, GENCAPO has collected samples and clinical and demographical data from 1227 patients and 990 controls. Combining genomic and proteomic techniques, differences in gene and protein expression profiles from HNSCC and apparently normal counterparts and their relations to clinical and laboratory parameters were investigated as well as genetic polymorphisms involved in tumor progression. Our results showed different gene and protein expression pattern and single nucleotide polymorphism frequencies between aggressive and non-aggressive tumors which may be used as a predictor of outcome and rational targets in HNSCC.