

#1575 Mutational analysis versus ELISA for the detection of p53 gene abnormalities in ovarian carcinoma. Levesque, M.A., Lianidou, E.S., Angelopoulou, K., Yu, H., Genta, F., Durando, A., Massobrio, M., Bharaj, B., Diamandis, E.P., and Katsaros, D. *University of Toronto, Toronto, Canada M5G 1L5, University of Athens, Athens, Greece 15771, Diagnostic Systems Laboratories Inc., Webster, TX 77598, University of Turin, Turin, Italy 10126.*

p53 alteration, detected as mutation of the p53 gene or as accumulation of mutant p53 protein, is a common feature of ovarian carcinoma and may identify patients with unfavorable prognosis and resistance to chemotherapy. Tumor tissues from 55 patients with primary (grades 1 and 3) epithelial ovarian carcinoma were assessed for genetic p53 abnormalities by direct sequencing of exons 5 to 9 and for p53 protein overexpression by a sensitive ELISA employing DO-1 and CM-1 antibodies. Sixteen p53 mutations (29%), including 3 deletions causing frameshifts as well as one nonsense and 12 missense mutations, were found in all exons except exon 9. Overexpression of p53 protein was found in 15 cases (27%), 10 of which had missense mutations. The nonsense and frameshift mutations were p53-negative by ELISA. Both p53 mutation ($P=0.04$) and p53 protein overexpression ($P<0.01$) were associated with stage III disease, while p53 mu-