

#3195 INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN-3 (IGFBP-3) IS ASSOCIATED WITH FAVORABLE CLINICOPATHOLOGICAL FEATURES AND SURVIVAL IN PATIENTS WITH EPITHELIAL OVARIAN CANCER.

Dionyssios Katsaros, Herbert Yu, Stefano Fracchioli, Giovanni Richiardi, Saverio Danese, Franco Genta, Michael A Levesque, Javad M Khosravi, Anastasia Papanastasiou-Diamandi, Giorgio Gordini, Eleftherios P Diamandis, and Marco Massobrio, *Diagnostic System Lab, Toronto, Canada, Louisiana State Univ, Shreveport, LA, S Anna Hosp, Turin, Italy, Univ of Toronto, Toronto, Canada, and Univ of Turin, Turin, Italy*

Insulin-like growth factor binding protein-3 (IGFBP-3), a glycoprotein with specific binding affinity to insulin-like growth factors (IGFs), is able to suppress the mitogenic and anti-apoptotic actions of IGFs by blocking the interaction of IGFs with their receptor, IGF-IR. Ovarian cancer cells express IGFBP-3 as well as high levels of IGF-IR and IGF-I. To study the role of IGFBP-3 in ovarian cancer progression, we measured, by an immunoassay, IGFBP-3 concentrations in 147 ovarian cancer tissues and examined its associations with clinical and pathological features of the disease and patient survival. Non-parametric statistics and Cox regression survival analysis were used to determine the associations of IGFBP-3 with clinical and pathologic variables, as well as with patient survival. Although IGFBP-3 was not associated with response to chemotherapy, high IGFBP-3 levels were significantly associated with favorable prognostic features of the disease, including early stage ($p=0.048$), small size of residual tumor ($p=0.007$), and optimal debulking surgery outcome ($p=0.007$). Low IGFBP-3 was also associated with a significantly increased risk for disease progression (RR=1.92, $p=0.034$), and an inverse dose-response relationship between the level of IGFBP-3 and risk for disease progression was evident ($p=0.033$). The