

at 90% specificity. In the patients with stage I/II ovarian cancer, use of these two markers in combination results in a 21% increase in sensitivity (90% specificity), compared to CA125 alone. High serum hK10 was strongly associated with serous epithelial type, late stage, advanced grade, large residual tumor, suboptimal debulking and no response to chemotherapy (all P values <0.001). In univariate survival analysis, high serum hK10 is associated with increased risk for relapse and death (HR=2.59 and 3.15, respectively, P<0.003). This prognostic value remains significant for overall survival in the multivariate analysis. **Conclusions:** Serum hK10, in combination with CA125, can significantly improve the sensitivity and specificity of ovarian cancer diagnosis. High preoperative serum hK10 concentration is a strong and independent unfavorable prognostic marker for ovarian cancer.

P2-05

SERUM HUMAN KALLIKREIN 10: A NOVEL MARKER FOR DIAGNOSIS AND PROGNOSIS OF OVARIAN CANCER.

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Objectives: Human kallikrein 10 (hK10) is a secreted serine protease that is highly expressed in ovarian tissue. Our objective is to investigate the diagnostic and prognostic value of serum hK10 in ovarian cancer. **Methods:** Serum hK10 concentrations in 97 normal women, 141 patients with benign gynecologic diseases and 146 patients with ovarian cancer were quantified by immunoassay. **Results:** Normal serum hK10 ranged from 50-1,040 ng/L (mean=439 ng/L). hK10 concentration was significantly elevated in serum of pre-surgical ovarian cancer patients (range: 106-11,746 ng/L; mean=1,067 ng/L), but not in serum of patients with benign gynecologic diseases (range: 120-1,200 ng/L; mean=447 ng/L). When a cutoff of 700 ng/L was selected, the diagnostic sensitivity for ovarian cancer is 54% (specificity=90%). 35% CA125-negative ovarian cancer patients were hK10-positive