

POLIMORPHIC ANALYSIS OF RAS COMPONENTS AND THEIR POSSIBLE ASSOCIATION WITH BREAST CANCER. Corrêa, S.AA, Nogueira-de-Souza, N. C.; Ana Maria Massad Costa, A.M.M.; Linhares, J.J.; Gomes, M.T.V.; da Silva, I.D.C.G. Departamento de Ginecologia. UNIFESP. São Paulo. Brazil.

Introduction and Objectives: ACE produces Angiotensin II, the most important effector of the RAS, that activates the AT₁ receptor. RAS components are highly associated to many types of cancer (pancreatic, renal, pulmonary and mammary). Polymorphisms of the ACE gene are determined by a fragment Insertion (I) or its absence (D), producing genotypes: II, ID and DD. One of the polymorphisms of the AT₁ receptor gene (A1166C) displays the genotypes: AA, AC and CC. So, we aim to study the polymorphisms A1166C and ECA and verify their association with the development of the breast cancer. **Results and Conclusions:** Patients with (case) or without (control) breast cancer aging from 30 to 81 years old were genotyped for A1166C (203), and we determined the frequency of AA, AC and CC (in %: cases: 67, 32, 1; controls: 60, 37, 3; $p=0,454$). And for the ECA (300), obtained the frequency of DD, ID and II (in %: cases: 62, 21, 17; controls: 44, 41, 15; $p=0,003$). This result suggested that the A1166C wasn't associated to the breast cancer risk. However, the ACE (I/D) there seems to be different risks for cancer between case and control groups, that is, ID genotype is less associated to the disease than DD or II ones (2,65 times more protective). We believe that, the RAS component ACE (I/D) is a possible target for developing genetic markers for breast cancer. **Support: FAPESP**