Objective: The aim of this study was to investigate the role of biomagnetic activity measurements in detecting prostate malignancies, in differentiating cancerous from benign prostate lesions and in generally improving our understanding of prostate cancer biology. Methods: Magnetic recordings were obtained from 47 patients with palpable prostate lesions. Twenty-four had prostate carcinoma and 23 benign prostatic hyperplasia (BPH). Results: The magnetic field recorded in the 2-7Hz frequency range was of high amplitude in most (95%) malignant lesions (248±82 Ft/√Hz) and of low amplitude in most (95%) benign ones (166±31 Ft/√Hz). These findings displayed significant difference (p=0.0021). Conclusions: Prostate cancer emits higher biomagnetic activity than BPH. This finding confirms the higher angiogenic activity of prostate cancer. The use of this method is safe and seems promising.

Keywords
Prostate cancer, Biomagnetic activity, SQUID