Cancer Science-2013

OMICS Group Conferences
Accelerating Scientific Discovery

3rd World Congress on
Cancer Science & Therapy

October 21-23, 2013 DoubleTree by Hilton Hotel San Francisco Airport, USA

Stromal androgen receptor in prostate cancer

Peng Lee,
New York University Langone Medical Center, USA

Abstract

The androgen receptor (AR) in stromal cells significantly contributes to the development and growth of prostate during fetal and pubertal stages as well as during prostate tumorigenesis and progression. During prostate carcinogenesis and progression, the stromal cells begin to lose AR expression as early as in in-situ cancer of the prostate, high grade prostatic intraepithelial neoplasia (HGPIN). The extent of loss of stromal AR is directly proportional to the degree of differentiation and progression of prostate cancer. Co-culture studies suggested that stromal AR inhibits the growth of malignant epithelial cells, possibly through expression of certain paracrine factors in the presence of androgens. This functional reversal ofstromal AR, from growth promotion at fetal prostate development stage to growth inhibition in cancer, explains to some extent the reason that loss of AR expression in stromal cells is important for prostate cancer progression during androgen ablation treatment. From a translational perspective, it creates the need to re-identify current treatment options and opens a new direction for therapeutic interventions, especially in advanced prostate cancer.

Biography

Dr. Lee is Professor in the Department of Pathology and Urology at NYUSOM and Director of Molecular Pathology at New York Harbor Healthcare System and co-Director of Genetic Program, Center of Excellence of NYU Urological Disease. He obtained his MD degree from Peking University SOM and PhD from SUNY Downstate Medical Center. Dr. Lee was trained as a postdoctoral fellow with Dr. Robert Roeder at the Rockefeller University. Following his residency in Pathology at NYUSOM, he completed a Surgical/Oncologic Pathology fellowship at the M. D. Anderson Cancer Center. He is a specialized in Surgical, Oncologic, Genitourinary and Molecular Pathology