IL1: 招請講演 1

Dual Roles of Androgen Receptor Challenge the Androgen Deprivation Therapy of Prostate Cancer

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Prostate cancer is one of the major causes of cancer related death in the Western world. Androgen-deprivation therapy targeting to reduce androgen-androgen receptor signaling has been the norm of prostate cancer treatment. Despite early success to suppress prostate tumor growth, the therapy eventually fails despite the fact that the androgen receptor remains functional, leading to recurrent tumor growth in a hormone-refractory manner. Recent studies with various tissue-specific androgen receptor knockout mice have revealed that the androgen receptor in prostatic stroma and epithelium play opposite dual roles in prostate development, tissue homeostasis, and prostate cancer progression and metastasis. Thus, prostatic stromal androgen receptor functions as proliferation and metastasis stimulator, whereas the epithelial androgen receptor functions as a suppressor of prostate cancer growth and metastasis. The dual yet opposite functions of the stromal and epithelial androgen receptor pose a major challenge for androgen deprivation therapy to combat human prostatic cancer and should be taken into consideration when developing new androgen receptor-targeting therapies.