EFFICACY AND SAFETY OF NILUTAMIDE IN METASTATIC PROSTATE CANCER PATIENTS WHO UNDERWENT ORCHIECTOMY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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INTRODUCTION
Prostate cancer (PCa) is the sixth primary cause of cancer death and the second most common cancer in men across the world. The incidence of PCa has increased 6-fold since 1980, with 1.4 million new cases and 300,000 deaths estimated in 2015.

OBJECTIVE
To evaluate the efficacy and safety of nilutamide in metastatic prostate cancer patients who underwent orchectomy.

MATERIALS AND METHODS
Literature searches were conducted in MEDLINE, Embase, the Cochrane Library, and clinicaltrials.gov. All randomized controlled trials (RCTs) comparing nilutamide versus placebo in metastatic stages of prostate cancer patients who underwent orchectomy were included.

RESULTS
A total of 912 patients received nilutamide followed by orchiectomy, and a total of 943 patients received orchiectomy or other agents. The combination of nilutamide with orchiectomy has been shown to be significantly effective when compared with orchiectomy and placebo in the management of mPCa.

DISCUSSION
Despite advances in the treatment of mPCa, most patients have a poor prognosis. Since many patients may not prefer, or are not candidates for aggressive treatment regimens, efforts should be put to identify efficacious but less toxic chemotherapeutic regimens. Nilutamide is a high-affinity non-steroidal anti-androgen which acts on the androgen receptors ligand binding and blocks the transcription of androgen response elements.

CONCLUSIONS
Nilutamide in combination with orchectomy shows significant improvement in OS, PFS, response rate and clinical benefit when compared to orchectomy with placebo in patients with mPCa.