Nature Reviews Urology~11, 364~(2014); ~published online~24~June~2014;

doi:10.1038/nrurol.2014.152;

doi:10.1038/nrurol.2014.153;

doi:10.1038/nrurol.2014.154;

doi:10.1038/nrurol.2014.155

IN BRIEF

FROM ASCO—PROSTATE CANCER

Upfront docetaxel with hormone therapy improves survival

Updated analysis of the ECOG E3805 trial was presented at the ASCO annual meeting, demonstrating the benefits of administering docetaxel chemotherapy alongside androgen deprivation therapy (ADT) to men with newly metastasized (hormone-sensitive) prostate cancer. Median overall survival was significantly longer in the 397 men who received both docetaxel and ADT than the 393 men who received ADT alone (57.6 versus 44.0 months; HR 0.60; P=0.0006). Improvements in PSA response and median time to progression were also reported.

Original article Sweeney, C. et al. Impact on overall survival (OS) with chemohormonal therapy versus hormonal therapy for hormone-sensitive newly metastatic prostate cancer (mPrCa): An ECOG-led phase III randomized trial [abstract]. J. Clin. Oncol. 32 (Suppl.), LBA2 (2014)

FROM ASCO—BLADDER CANCER

Promising results for immunotherapy drug

Anti-PD-L1 antibody MPDL3280A is well-tolerated and associated with clinical activity in patients with metastatic bladder cancer, according to the results of a phase I study presented at ASCO. The objective response rate in 20 evaluable patients, measured using RECIST criteria, was 50% (one complete response, nine partial responses), with a median time to response of 43 days. Patients who progressed had higher levels of IL8 and CCL2 in their tumours prior to treatment.

Original article Powles, T. et al. Inhibition of PD-L1 by MPDL3280A and clinical activity in pts with metastatic urothelial bladder cancer (UBC) [abstract]. J. Clin. Oncol. 32 (Suppl.), 5011 (2014)

FROM ASCO—PROSTATE CANCER

Docetaxel and abiraterone combination therapy

The results of a phase 1b study, presented at ASCO, demonstrate a promising response rate to combined docetaxel—abiraterone treatment. 22 men with untreated metastatic castration-resistant prostate cancer were recruited to receive both agents, with subcohorts receiving different dose combinations. Of 21 evaluable patients, 18 men demonstrated a \geq 50% decrease in PSA at median follow-up of 11.8 months. 14 men had a \geq 90% response.

Original article Tagawa, S.T. *et al.* Phase 1b study of abiraterone acetate (AA) and docetaxel (D) in patients (pts) with metastatic castration-resistant prostate cancer (mCRPC) [abstract]. *J. Clin. Oncol.* **32** (Suppl.), 5025 (2014)

FROM ASCO—BLADDER CANCER

Predicting response to neoadjuvant chemotherapy

A team of US researchers has identified genetic alterations that can predict response of muscle-invasive bladder cancer to neoadjuvant accelerated methotrexate, vinblastine, doxorubicin and cisplatin (AMVAC). 14 of 36 patients who received neoadjuvant AMVAC were found to have a complete response on cystectomy. Next-generation sequencing of pre-treatment tumour specimens demonstrated that 13 of these patients harboured mutations in at least one of three genes associated with DNA repair: *ATM*, *RB1* or *FANCC*.

Original article Plimack, E. R. et al. Next-generation sequencing to identify molecular alterations in DNA repair and chromatin maintenance genes associated with pathologic complete response (pTO) to neoadjuvant accelerated methotrexate, vinblastine, doxorubicin, and cisplatin (AMVAC) in muscle-invasive bladder cancer (MIBC) [abstract]. J. Clin. Oncol. 32 (Suppl.), 4538 (2014)