Nature Reviews Clinical Oncology **10**, 666 (2013); published online 15 October 2013;
doi:10.1038/nrclinonc.2013.188;
doi:10.1038/nrclinonc.2013.189;
doi:10.1038/nrclinonc.2013.187

IN BRIEF

BREAST CANCER

Differential response of TNBC to neoadjuvant chemotherapy

Triple-negative breast cancer (TNBC) is a heterogeneous and aggressive subset of breast cancer. Recent work has shown that TNBC can be classified into seven subtypes based on mRNA gene expression profiles, although the clinical relevance of this classification remains unclear. Now, a study has revealed that the pathological complete response (pCR) rate after treatment with neoadjuvant chemotherapy varies significantly depending on the TNBC subtype. Analysis of data from 130 patients showed that TNBC was an independent predictor of pCR status, with the highest pCR rate associated with the basal-like 1 subtype and the lowest pCR rates associated with the basal-like 2 and luminal androgen receptor subtypes. These subtypes were better predictors of pCR status than the PAM50 intrinsic subtypes.

Original article Masuda, H. *et al.* Differential response to neoadjuvant chemotherapy among 7 triple-negative breast cancer molecular subtypes. *Clin. Cancer Res.* **19**, 5533–5540 (2013)

CHEMOTHERAPY

Potential of angiotensin inhibitor as cancer therapeutic

Drugs that target solid stress—the pressure from solid tissue components—could improve blood perfusion and drug delivery in tumours. A study has shown that losartan, an angiotensin II receptor antagonist, is able to reduce solid stress by inhibiting production of stromal collagen and hyaluronan, leading to increased vascular perfusion in tumours in mice. This effect was associated with decreased expression of profibrotic signals, TGF- β 1, CCN2 and ET-1, downstream of the angiotensin II receptor inhibition. *In vitro* data showed that losartan increased drug and oxygen delivery to tumours and *in vivo* data confirmed that the drug potentiated the effects of chemotherapy. This study indicates that angiotensin inhibitors, which have been used safely for decades to control hypertension, could be used in the treatment of cancer.

Original article Chauhan, V. P. *et al.* Angiotensin inhibition enhances drug delivery and potentiates chemotherapy by decompressing tumour blood vessels. *Nat. Commun.* doi:10.1038/ncomms3516

LUNG CANCER

DNA methylation prognostic biomarker for stage I NSCLC

Patients with non-small-cell lung cancer (NSCLC) have a poor prognosis and this disease continues to be the leading cause of cancer-related death. One important issue in NSCLC is the absence of validated prognostic biomarkers to identify patients with stage I disease who have a high risk of recurrence and who would, therefore, benefit from adjuvant chemotherapy. A study has now identified a DNA methylation signature that is associated with shorter relapse-free survival in patients with stage I NSCLC, which could be used as a prognostic biomarker in this group of patients. Using a DNA methylation microarray, the researchers examined tumoural DNA from 444 patients with NSCLC, including 237 stage I tumours. From this analysis, the hypermethylation of five genes (*HIST1H4F*, *PCDHGB6*, *NPBWR1*, *ALX1* and *HOXA9*) was found to be significantly associated with shorter relapse-free survival in stage I NSCLC.

Original article Sandoval, J. *et al.* A prognostic DNA methylation signature for stage I non-small-cell lung cancer. *J. Clin. Oncol.* doi:10.1200/JCO.2012.48.5516