in this issue

epidermal growth factor receptor as a therapeutic target in triple-negative breast cancer

Basal-like breast cancers are generally negative for expression of estrogen and progesterone receptors and HER-2 (triple-negative breast cancer [TNBC]) and express basal markers, such as cytokeratins 5/6 and epidermal growth factor receptor (EGFR). At present, no targeted therapy has proven benefit in TNBC, although targets are being sought. However, EGFR messenger RNA is detected more frequently and at higher levels in basal-like breast cancers, and in a tissue microarray study, EGFR expression has been observed in 54% of cases positive for basal cytokeratins. Moreover, EGFR expression was associated with poor survival, independent of nodal status and size. In this issue, Corkery et al. [pp. 862–867] report the results of a study that aimed to consider the activity of EGFR antagonists alone and in combination with chemotherapy, in TNBC cell lines. These authors report that although the TNBC cells are less sensitive to EGFR inhibition than the HER-2-positive cell lines, gefitinib enhanced response to chemotherapy. They indicate that gefitinib combined with carboplatin and docetaxel warrants further investigation in TNBC.

docetaxel plus gemcitabine versus docetaxel in second-line treatment of non-small-cell lung cancer

Docetaxel alone is the current standard as second-line chemotherapy for advanced non-small-cell lung cancer (NSCLC). The recommended regimen, docetaxel 75 mg/m² given i.v. every 3 weeks, as second-line therapy has been associated with median survival times of 5.7–7.5 months and is also associated with better quality-of-life outcomes compared with best supportive care. Docetaxel monotherapy for recurrent NSCLC after platinum-based chemotherapy has several limitations, including low response rates (7%–11%), brief duration of disease control, and minimal survival advantage. Docetaxel and gemcitabine have distinct mechanisms of action and nonoverlapping toxic effects except for neutropenia. Many studies of docetaxel plus gemcitabine have been conducted in the first-line and second-line settings. In this issue, Takeda et al. [pp. 835–841] report the results of a phase III trial that aimed to evaluate whether a combination of docetaxel and gemcitabine provides better survival than docetaxel alone in patients with previously treated NSCLC. These authors conclude that docetaxel alone remains the standard second-line treatment of NSCLC.

KRAS mutations and EGF61A>G polymorphism and the effect of cetuximab and irinotecan in metastatic colorectal cancer

Data from an increasing number of retrospective trials have indicated that response to EGFR inhibitor cetuximab seems confined to KRAS wild-type tumors. Focus has been drawn to single-nucleotide polymorphisms (SNPs) related to EGFR signaling. The EGF61A>G SNP (rs4444903) located in the EGF 5′-untranslated region influences EGF gene expression and holds predictive information. In this issue, Garm Spindler et al. [pp. 879–884] report the results of a study that aimed to investigate the predictive and prognostic value of KRAS status combined with three different EGFR-related SNPs in patients with metastatic colorectal cancer treated with cetuximab and irinotecan. Further, methodological aspects of KRAS testing were investigated by comparing two different methods for analysis and finally the KRAS status in primary colorectal tumor and corresponding distant metastases. These authors report a clear correlation between KRAS status in primary tumors and metastasis. Moreover, the EGF61A>G polymorphism was related to clinical outcome.

preventing anxiety or depressive disorders in cancer patients

While most cancer patients report distress within the first year of diagnosis, 25%–40% develop anxiety or depressive disorders which impair quality of life for patients and their families. Psychological interventions have been developed to reduce symptoms of anxiety and depression by improving coping but the evidence for their efficacy is still not robust. In this issue, Piteachly et al. [pp. 928–934] report the results of a randomized study that aimed to test whether a brief psychological intervention could prevent anxiety or depressive disorders among newly diagnosed cancer patients. Patients free of anxiety or depressive disorder were randomly assigned to receive immediate intervention (start of cancer treatment), delayed intervention (8 weeks after starting treatment) or usual care. They were stratified according to risk of developing anxiety or depressive disorders. These authors report that in high-risk patients, those who received the intervention were less likely to develop an anxiety or depressive disorder compared with those who received usual care [odds ratio (OR) = 0.54, 95% confidence interval (CI) 0.29–1.00, P = 0.050]. In low-risk patients, there was no difference (OR = 1.50, 95% CI 0.51–4.43, P = 0.47).