## Recent advances in the treatment of gastrointestinal cancer

## Beatrice Brücher-Encke\* and Michael Stahl

Klinik für Internistische Onkologie/Hämatologie, Essen, Germany

\*Corresponding author Tel: +49 201 17424025. e-mail address: <u>b.bruecher-encke@kliniken-essen-mitte.de</u>

Within the last fifteen years we have made substantial progress in the treatment of patients with gastrointestinal cancer. This progress is based on new treatment strategies (multimodal therapy) and on our improved knowledge on the mechanisms of tumour growth and tumour resistance.

**Multimodal Therapy:** Tailoring individual treatment concepts by interdisciplinary grand rounds prior to any therapy is now standard of care in patients with localized tumours. This strategy has led to improved long-term survival rates in esophageal cancer (preoperative chemoradiation), gastric cancer (perioperative chemotherapy) and colorectal cancer (adjuvant chemotherapy or perioperative chemoradiation and chemotherapy)

**Molecular based systemic therapy:** Within the last years we were able to identify specific molecular characteristics of tumour cells of almost all tumour entities. Based on this knowledge specific tumour directed therapy (targeted therapy) has been investigated. A couple of new drugs has proven efficacy in gastrointestinal cancer by prospective randomized trials. EGF receptor antibodies proved to significantly prolong survival of patients with metastatic colorectal. New VEGF receptor inhibitors like Ramucirumab changed standard treatment in second line therapy of advanced gastroesophageal cancer. New immune checkpoint inhibitors (PD-1 or PDL-1 inhibitors) are able to overcome chemotherapy resistance with most interesting results shown in gastric cancer and colon cancer.

Nevertheless these modern and more effective therapies induce different side effects in our patients. Fortunately, side effects can be diminished by combining conventional and complementary medicine (integrative oncology). For instance, in our department acupuncture is offered to reduce chemotherapy induced polyneuropathy, nausea/vomiting and xerostomia. In addition we use herbal substances to treat obstipation, diarrhea and mucositis caused by chemotherapy. To evaluate the efficacy of mistletoe therapy for the treatment of fatigue, one of the most disabling symptoms for cancer patients, we are planning a prospective clinical trial.

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