various malignancies, its role in gallbladder carcinoma (GBC) remains undiscovered.
Methods: We studied SDF-1α protein expression in 72 specimens of GBC using immunohistochemistry, and analyzed the clinicopathological features and clinical outcomes. GBC cell lines, SNU-308 and JCRB1033, were studied *in vitro* and *in vivo*. Specific depletion or overexpression of CXCR4, which is a receptor for SDF-1α, in GBC cell lines was achieved by expression of a small interfering RNA (siRNA) against CXCR4 and lentivirus-mediated transduction, respectively.
Results: We observed the constitutive expression of SDF-1α in patients with gallbladder carcinoma (GBC) and recognized inverse correlation between the level of SDF-1α expression and their overall survival. In addition, SDF-1α expression was significantly associated with high histologic grade and lymph node involvement. Multivariate analyses showed that SDF-1α expression (HR, 8.252; 95% CI, 1.116–61.043; $P = 0.039$) and lymphatic invasion (HR, 10.346; 95% CI, 1.304–82.080; $P = 0.027$) were independent risk factors for overall survival. Furthermore, we demonstrated functional involvement of SDF-1α and its receptor CXCR4 in the growth, motility, invasiveness, and adhesiveness of GBC cells. Stable depletion of CXCR4 even with SDF-1α stimulation led to a significant decrease in GBC cell proliferation, migration, and invasion while overexpression of CXCR4 with SDF-1α stimulation showed enhanced these cellular activities and increased intracellular signaling through ERK, AKT and FAK. In a GBC xenograft nude mouse model, SDF-1α overexpression stimulated tumorigenicity of GBC cells.
Conclusions: These results indicate that GBC cells express both SDF-1α and its receptor by tumour itself and SDF-1α may have a role in GBC progression through an autocrine mechanism. Thus, targeting SDF-1α and its receptors may provide a novel therapeutic strategy for GBC treatment.

6513 POSTER

Reporting Patient Characteristics and Stratification Factors in Randomized Trials of Systemic Chemotherapy for Advanced Gastric Cancer

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Background: There is no consensus on what patient characteristics are most suitable to report or be used as stratification factors in clinical trials for advanced gastric cancer (AGC), to our knowledge.
Patients and Methods: We conducted a comprehensive review of published randomized trials for AGC to examine the patient characteristics that were reported.
Results: Among the 67 analyzed trials, age, gender, performance status, proportion of measurable disease, and previous gastrectomy were frequently reported (>69%). Histology, number of disease sites, and adjuvant treatment were reported in less than 50% of trials. Although the reporting of second-line chemotherapy has increased in recent trials, it remains at less than 50%. Notably, recent trials have tended to include patients with better performance status and less locally advanced disease, with Asian trials more frequently including patients with more diffuse histology and less locally advanced disease or liver metastasis than non-Asian trials. Stratification was conducted in approximately 60% of trials using quite variable stratifying factors.
Conclusion: Inconsistency exists in the reporting of patient characteristics, the characteristics themselves, and use of stratification factors in clinical trials for AGC. A consensus set of important patient characteristics and strata may be necessary to conduct and interpret quality, randomized studies.

6514 POSTER

Genetic Polymorphism of IGF1 Predicts Recurrence in Patients With Gastric Cancer Who Have Undergone Curative Gastrectomy

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Background: To our knowledge, no reports have evaluated the effects of genetic polymorphisms of IGF1 on clinical outcomes of gastric cancer patients.
Methods: We retrospectively analyzed the impact of IGF1 polymorphisms on recurrence-free survival (RFS) in 430 patients with gastric cancer who underwent curative gastrectomy between 2001 and 2005 in our institution.
Results: Among the 430 gastric cancer patients, 345 were pathological stage I or II, while 85 were stage III or IV. The median 5-year RFS rate was 85.3% (95% confidence interval, 81.4–88.5). In a multivariate Cox model (adjusted for age, gender, histology, pathological stage, adjuvant chemotherapy, and history of diabetes), two IGF1 polymorphisms, rs1520220 and rs2195239, were significantly associated with RFS (HR 0.60, 95% CI, 0.40–0.91; and HR 0.60, 95% CI, 0.41–0.89, respectively, in a per-allele model). When stratified by stage (I-II vs. III-IV), rs1520220 in particular was associated with RFS in patients with stage III-IV disease, with a P value for interaction of 0.01.
Conclusion: Our findings indicate that genetic polymorphisms of IGF1 may have a substantial effect on recurrence for gastric cancer patients who have undergone curative gastrectomy. This information may help identify population subgroups that could benefit from IGF-1 targeting agents.

6515 POSTER

Application of the Trifunctional Antibody Catumaxomab as Part of a Multimodal Approach in Resectable Gastric Cancer is Feasible and Promotes the Development of Tumour-specific Immune Responses

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Background: Although perioperative chemotherapy (CT) is beneficial in gastric cancer (GC), a significant number of patients will eventually relapse. The trifunctional antibody (Ab) catumaxomab targets (1) the epithelial cell adhesion molecule (EpCAM) on malignant cells, (2) CD3 on T cells, and (3) triggers Ag-presenting cells via their Fcγ-receptor. While catumaxomab has been approved for the treatment of malignant ascites, it has not been investigated in a perioperative setting and the immune mechanisms behind its clinical effects have not conclusively been elucidated.
Methods: In a phase II study, patients with operable GC received neoadjuvant platinum-based CT followed by 10 μg of catumaxomab intraoperatively and 4 consecutive doses (10–20–50–150 μg) applied intraperitoneally in the adjuvant setting. Primary safety endpoint was the rate of predefined postoperative complications. Efficacy endpoints included disease-free (DFS) and overall survival. The immunomodulatory effect of catumaxomab was investigated before surgery, after application of the first dose, and 1 month post treatment.
Results: 54 patients completed ⩾1 cycle of CT, surgery and ⩾1 catumaxomab dose. Most of these patients (N = 30; 56%) received all five catumaxomab infusions. The primary endpoint was met as predefined postoperative complications were reported for only 18 patients (33%; 95% CI: 21−48%) which was below the predefined maximum tolerable rate of 62%. Most frequent complications were pulmonary infection, anastomosis insufficiency and abscess. Immunomonitoring of 6 selected patients revealed a transient decrease in peripheral CD4+ T cells with an effector and T-helper (Th)-1 phenotype directly after Ab application. All patients investigated evidenced pre-existing EpCAM-specific CD4+ and/or CD8+ T cells. While these T cells disappeared from the peripheral blood (PB) immediately after Ab exposure, we detected increased numbers of peripheral EpCAM-specific cells 4 weeks after catumaxomab treatment. During a 1-year follow-up, 13/49 evaluable pts (27%) relapsed, 2 of whom died. DFS was 74% (95% CI: 61−86%).
Conclusions: Catumaxomab as part of a multimodal therapy is a feasible option for primarily resectable GC. The 1-year follow-up efficacy data suggest a beneficial effect on DFS. Catumaxomab might exert its clinical effects i.e. by causing a redistribution of effector and Th1-type cells from the PB into peripheral tissues and expanding pre-existing EpCAM-specific T cells.

6516 POSTER

Management of Stage 4 Metastatic Neuroendocrine Disease − Outcomes and Cost-effectiveness

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Background: Management of hepatic neuroendocrine metastases remains controversial. Surgery with curative intent aims to resect all pre-operatively identifiable disease, whilst cytoreductive surgery for symptom control is appropriate when 90% of tumour burden can be removed. Radiological and symptomatic recurrence rates remain high. This study aimed to