

Extracapsular lymph node spread was strongly associated with poor overall survival ($P < 0.001$) and disease free survival ($P < 0.001$).

Conclusion: The results of this study seem to confirm the role of extracapsular spread as a negative prognostic factor of patients with gastric cancer, by means of statistical analysis. Our results suggest that extracapsular spread is more sensitive than the total number of metastatic lymph nodes to identify classes of patients with similar life expectancy.

In conclusion, randomized multicenter studies are needed in the future to confirm these preliminary results; possibly including extracapsular spread in a more complete and accurate staging system, in order to reduce differences between the groups, trying to find the best treatment option and identify the correct prognosis for patients with gastric cancer and to compare results worldwide.

04 SCIENTIFIC POSTER ABSTRACT Effect of one year adjuvant imatinib on gastric stromal tumors

A. Bensalem¹, K. Bouzid². ¹Medical Oncology, CHU, Mentouri's University, Constantine, Algeria, ²Medical Oncology, CPMC, Algiers, Algeria

Goals: Though recurrence is high, local excision is the preferred approach for dealing with gastric stromal tumors. Achieving negative margins is mandatory, sometimes requiring subtotal gastrectomy. Adjuvant imatinib is essential for advanced cases and prolonging survival.

Methods: The study included 12 patients (7 males, 5 females, median age 46 years) presenting with gastrointestinal stromal tumors (GISTs). The schedule was imatinib (400 mg/day) for 1 year after surgery, in adjuvant setting. Clinical and radiological evaluation was at 4 months of treatment.

Results: All patients had abdominal discomfort, while 50% had epigastric pain, and 10% had hematemesia, in the beginning of the treatment.

Conclusion: Imatinib has an acceptable safety profile and can be considered as an adjuvant and why not as a neoadjuvant therapy in GISTs. More clinical data are needed to confirm this hypothesis.

05 SCIENTIFIC POSTER ABSTRACT Methylation of MLH1, MGMT, DAPK genes in the cancerous and adjacent non-cancerous stomach tissues

R. Kupcinskaitė-Noreikiene¹, E. Juozaitė¹, S. Grižas², R. Markelis³, L. Venclauskas², V. Baltrėnas³, L. Sakavicius², I. Semakina³, R. Venclovaite², J. Skieveciene². ¹Oncology Institute, Lithuanian University of Health Sciences (LUHS), Kaunas, Lithuania, ²Lithuanian University of Health Sciences, Lithuania, ³Lithuanian University of Health Sciences Hospital Kaunas Clinics, Lithuania

Goals: To assess the profile of the expression of methylated genes in the cancerous tissue and adjacent non-cancerous stomach tissues.

Methods: Genetic analysis of the cancerous and non-cancerous tissues (assessed by pathologist) sampled 2 cm away from the edge of the tumor was accomplished. Samples were acquired from patients who underwent surgeries for gastric cancer in LUHS Oncology Institute during 2009–2011 and who agreed to participate in the study. DNA extraction was accomplished according to protocol using commercial set, DNA was converted according to instructions provided by manufacturer using bisulfite kit. Bisulfite DNA was amplified during methylation-specific PCR by using gene-specific primers for methylated and non-methylated alleles. PCR products were separated using agarose gel electrophoresis and were visualized in ultraviolet illuminator after staining with ethidium bromide. Statistical analysis was performed using SPSS software.

Results: Results of our research have shown that the methylation of MLH1 gene occurrence rate is 66.6% (24 from 36) in cancerous tissue, and 58.3% (21/36) in adjacent non-cancerous tissue; the rates of DAPK were 9.7% (3/31) and 29% (9/31) respectively, and for MGMT rates were 7.1% (2/28) and 10.7% (3/28) respectively. A strong relationship between the expressions of gene methylation in cancerous and adjacent non-cancerous tissue was determined ($MLH1 \chi^2 = 4.6$; $p = 0.031$), ($MGMT \chi^2 = 17.9$; $p < 0.0001$). No statistically significant relationship between the expressions of methylation of DAPK was found ($\chi^2 = 2.28$; $p = 0.131$).

Conclusion: A strong relationship between the expressions of gene methylation in cancerous and adjacent non-cancerous tissue was determined (MLH1, MGMT). No statistically significant relationship between the expressions of methylation of gene DAPK was found.

Oesophageal Cancer

06 SCIENTIFIC POSTER ABSTRACT Postoperative chemotherapy and disease-free survival in esophageal and gastric adenocarcinoma

T. Alcindor¹, L. Ferri², S. Ades³, M. Thirlwell¹. ¹Oncology and Medicine, McGill University Health Centre, Montreal, Canada, ²Surgery and Oncology, McGill University Health Centre, Montreal, Canada, ³Vermont Cancer Center, Burlington, United States of America

Goals: Perioperative chemotherapy is used in the management of esophageal and gastric adenocarcinoma. Randomized studies have shown that it improves disease-free and overall survival in comparison with surgery alone. However, because of toxicity, inconvenience, or surgical complications, many patients do not receive the postoperative part of treatment. We have previously reported the efficacy and safety data of a phase II trial of docetaxel/cisplatin/5-FU perioperative chemotherapy. The current study specifically examines the impact of postoperative chemotherapy on disease-free survival.

Methods: From May 2007 to September 2009, we enrolled 43 patients with operable adenocarcinoma of the esophagus or stomach on a phase II clinical trial. Patients were to receive 3 cycles of chemotherapy (docetaxel/cisplatin/5-FU) before and after surgical resection. We performed a retrospective analysis to compare disease-free survivals between Group A (at least 1 postop cycle given) and Group B (no postop chemotherapy given). The log-rank test was used for univariate analysis, and the Cox regression model for multivariate analysis. P value is double sided. Median follow-up is 808 days, disease-free survival calculated from time of surgery.

Results: Surgery was not performed in 2 subjects (disease progression in one, and withdrawal of consent, for the other). One patient was excluded from analysis as her tumor was a neuroendocrine tumor. Grade 3/4 toxicity was observed in 47% of patients before surgery. Of 40 patients, 29 received postoperative chemotherapy (3 cycles/2 cycles/1 cycle: 24/26/29), and 11 did not (personal preference 4, postoperative complications 2, other reasons 5). Only 56% of study subjects completed the 6 cycles of chemotherapy planned in the protocol. After a median follow-up of 808 days, the median survival of patients in Group B is 455 days, while it has not been reached in Group A ($p = 0.076$). Similar results were found by multivariate analysis, after adjustment for radiological, pathologic and metabolic response to preoperative chemotherapy.

Conclusion: Previous episodes of severe toxicity and occurrence of surgical complications probably contribute to relatively low rates of chemotherapy completion in the postoperative period. The small number of patients in this trial and a retrospective analysis do not allow us to draw definitive conclusions about the impact of postoperative chemotherapy on the risk of recurrence in patients with esophageal and gastric adenocarcinoma treated with a perioperative chemotherapy protocol. However, our results show a strong trend in improvement of disease-free survival in favor of postoperative chemotherapy, suggesting that, outside of a clinical trial, this part of therapy should not be discarded.

Colorectal Cancer

07 SCIENTIFIC POSTER ABSTRACT Serum trypsin as a new biomarker in colorectal cancer patients

M. Ammendola¹, R. Patruno², E. Ruggieri², M. Coviello³, V. Di Lecce², A. Vacca⁴, R. Sacco¹, S. Montemurro², C.D. Gadaleta⁵, G. Ranieri⁵. ¹Chair of General Surgery, Magna Graecia University, Catanzaro, Italy, ²National Cancer Institute Giovanni Paolo II, Surgery Unit, Bari, Italy, ³Department of Experimental Oncology, National Cancer Institute Giovanni Paolo II, Bari, Italy, ⁴Department of Internal Medicine and Infectious Diseases, University of Bari, Bari, Italy, ⁵Interventional Radiology Unit with Integrated Section of Medical Oncology, National Cancer Institute Giovanni Paolo II, Bari, Italy

Goals: Data from experimental tumour models suggest that mast cells (MCs) accumulate near tumour cells before the onset of angiogenesis and that they are required for the macroscopic expansion and metastatic spread of primary tumour cells. Trypsin is a serin protease stored in mast cell granules that plays a role in tumour angiogenesis. Mast cells (MCs) can release trypsin following c-Kit receptor activation. On the other hand colorectal cancer (CRC) is a well-established angiogenesis dependent tumour and anti-angiogenic based therapy is a standard treatment in metastatic CRC. This preliminary study aims to assess trypsin serum levels in 54 CRC patients before and after radical surgery resection.

Methods: In this study patients with stage B and C CRC (according to Astler and Coller staging system) were selected. Samples of blood were taken from CRC patients between 7 and 9 a.m. 1 day before and 1 day after