

[ABSTRACTS SELECTED FOR POSTER PRESENTATIONS](#)

[Pancreatic Cancer](#)

abstr 0918

Can CXC-Chemokines and Lipocalin 2 in Exocrine Pancreatic Secretions Distinguish Chronic Pancreatitis From Pancreatic Cancer?

N. Ochi¹, M. Raimondo², K. Gill², M.B. Wallace², T.A. Woodward², Y. Matsuo¹, S. Guha¹

¹Department of Gastroenterology, Hepatology, and Nutrition, The UT MD Anderson Cancer Center, Houston, TX; and ²Division of Gastroenterology and Hepatology, Mayo Clinic, Jacksonville, FL

Background: The ELR⁺ (Glu-Leu-Arg) CXC-chemokines, through their cognate receptor, CXCR2, promote angiogenesis in multiple solid tumors including pancreatic cancer (PC). Lipocalin 2 or neutrophil gelatinase associated lipocalin (NGAL) was recently shown as an early biomarker in PC. We hypothesized that their expression in secretin-stimulated exocrine pancreatic secretions (SSEPS) will be able to distinguish between control group (NL), chronic pancreatitis (CP), and PC.

Methods: Prospectively, patients with diagnosed CP or PC were enrolled in the study. Asymptomatic patients with no history of pancreatic disease and with at least one negative imaging test of the pancreas served as NL group. Every patient underwent upper endoscopy. Following intravenous secretin (16 µg) administration, SSEPS emptied into the duodenum were collected, snap-frozen in liquid nitrogen, and later blindly examined. CXC-chemokines including CXCL1, CXCL5, and CXCL8 and NGAL were analyzed by ELISA. Multiple comparisons were performed by non-repeated measures ANOVA followed by the SNK test.

Results: To date, we have enrolled 90 patients (NL = 29, CP = 17, and PC = 44). There were no significant differences among chemokines and NGAL levels between CP and PC. However, CXCL1, CXCL8, Σ (CXCL 1, 5, 8), and NGAL were significantly different between PC and NL ($P < .05$). CXCL5 was not significantly different among the groups examined.

Conclusions: We showed *for the first time* that CXC-chemokines and NGAL could be effectively measured in SSEPS of NL, CP, and PC. In this pilot prospective trial, CXCL1, CXCL8, Σ (CXCL 1, 5, 8),

International Society of Gastrointestinal Oncology
2009 Gastrointestinal Oncology Conference
October 1–3, 2009

ABSTRACTS SELECTED FOR POSTER PRESENTATIONS

and NGAL were helpful in discriminating the presence of PC from NL patients. However, none were able to discriminate CP from PC.