Out of 74 patients, six patients withdrew consent, 11 patients confirmed disease progression during treatment and 57 patients completed CRT followed by systemic chemotherapy. One-year DFS rate was 62.1%. Fifty-two patients (70.3%) were diagnosed with recurrence. Most of the recurrences were systemic disease (49 patients, 66.2% of all patients). Median DFS was 17.4 months and median OS was 33.6 months in all patients. The stage (73.3% in IIA, 55.6% in IIB, $p < 0.001$) and the nodal status (71.0% in N0, 55.6% in N1, $p=0.01$) at the time of diagnosis were significantly related with DFS. Toxicities were generally tolerable, 53 events of grade 3 or 4 hematologic toxicity were reported and four patients experienced febrile neutropenia.

Conclusions: Adjuvant GEM-CDDP chemotherapy followed by GEM-RT and maintenance GEM showed promising efficacy and good tolerability in curatively resected pancreatic cancer.

V-3

Long-term Results of Surgical Resection Following Pre-operative Chemoradiation in Patients with Pancreatic Cancer

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Objective: We investigated long-term results of surgical resection following pre-operative chemoradiation (pre-CRT) for patients with pancreatic cancer that extended beyond the pancreas.

Methods: This study is consisted of 87 pancreatic cancer patients between 2000-2005. Of 35 patients who underwent pre-CRT, 27 patients underwent surgical resection (pre-CRT group). Among the other 52 patients, 41 patients who underwent surgical resection were classified as surgery-alone group. All patients were followed up for at least 65 months or until death, and underwent no adjuvant therapy.

Results: A lower frequency of lymph node metastasis was observed in pre-CRT group, relative to surgery-alone group ($p < 0.05$). The frequency of residual tumor grading in pre-CRT group was significantly different from that in surgery-alone group (R0/1/2%: 52/15/33 vs 22/51/27, $p=0.004$). The actual survival curve of pre-op CRT group comprising of resected patients only had a favorable tendency, relative to surgery-alone group ($p=0.053$). When patients who underwent curative resection (R0/1) were abstracted from all patients, there was a significant difference in the actual survival curve between pre-op CRT and surgery-alone groups (1, 3, and 5y; 89, 56, and 44% in pre-op CRT vs 80, 33, and 10% in surgery-alone groups, $p=0.0228$). A significant difference of disease-free survival curve was found between two groups (disease-free survival rates at 1 year, 3 y, and 5 y; 61, 44, and 39% in pre-op CRT vs 57, 10, and 7% in surgery-alone groups, $p=0.024$). The rate of local recurrence in pre-CRT group was significantly less than in surgery-alone (11% vs 47%, $p=0.0024$).

Conclusion: It is possible that long-term survival rate after curative resection following pre-CRT is improved in patients with pancreatic cancer that extended beyond the pancreas.

V-4

Potential Contribution of Preoperative Neoajuvant Concurrent Chemoradiation Therapy on Margin-negative Pancreatectomy in Borderline Resectable Pancreatic Cancer; YUHS Experiences

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Background: Only margin-negative pancreatectomy can provide the chance for the cure in pancreatic cancer. Borderline resectable pancreatic cancer (BRPCa) has risks of incomplete palliative resection to ruin oncologic outcomes.

Materials and Methods: From Jan 1999 to December 2010, among 202 patients underwent pan-

createctomy for pancreatic cancer, we retrospectively reviewed 32 patients with BRPCa who underwent pancreatectomy following preoperative neoadjuvant chemoradiation therapy (CCRT (+)/Px group). Resectable pancreatic cancer (RPCa) patients with pancreatectomy without CCRT (CCRT (-)/Px group, n=104) were compared to evaluate the oncologic outcomes of patients with BRPCa in CCRT (+)/Px group.

Results: Preoperatively determined BRPCa resulted in frequent margin positive resection comparing to initially RPCa when pancreatectomy was performed without CCRT (P=0.009). 16 patients (56.2%) showed more than 50% of significant pathologic response to CCRT. The degree of pathologic responses apparently showed positive relation between final pT stage (p=0.075). When comparing with patients in CCRT(-)/Px, more frequent vascular resection($p<0.001$), transfusion(p=0.076), and operation time were observed in CCRT(+)/Px group. However, similar R0 resection rate(p=0.272), lower pT stage ($p<0.001$), smaller number of metastastic lymph node (p=0.002), and lower incidence of lymph node metastasis (0.032) were noted in CCRT(+)/Px group. Therefore, overall disease-specific survival was shown to be similar between CCRT(-)/ Px and CCRT(+)/Px group (median survival, 30.5 months (95%CI; 23.6-37.4) vs. 26.3 months (95% CI;15.9-36.7), p=0.709). No statistical differences in cancer recurrence risks were also noted between two groups (p=0.505).

Conclusion: Margin-negative resection is very critical in treating pancreatic cancer. Pancreatectomy following preoperative neoadjuvant CCRT can be potential strategy for obtaining negative resection margin in BRPCa patients.

V-5

Clinicopathologic Features and Outcomes after Surgery for Pancreatic Adenosquamous Carcinoma

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Background: Pancreatic adenosquamous carcinoma (ASC) is a rare pancreatic malignancy subtype. This study was conducted to investigate the clinicopathologic features and outcome of pancreatic ASC patients after resection.

Methods: Medical records of patients who underwent surgical resection for pancreatic malignancy from January 2000 to December 2010 at Samsung Medical Center were retrospectively reviewed. Clinicopathologic features and survival rates were analyzed.

Results: Fifteen patients with pancreatic ASC and 350 patients with pancreatic ductal adenocarcinoma (DAC) were identified. Demographics were similar between subtypes ($p>0.05$). And, tumor stage was also similar. R0 resetion rates in pancreatic ASC and DAC were 86.7% and 89.1% (p=0.674). Overall 1-year survival in pancreatic ASC and DAC was 35.9% and 39.0%. And, no significant difference in disease-free survival rates was found pancreatic ASC and DAC after R0 resection (p=0.071).

Conclusions: The pancreatic ASC has a clinical feature similar to that of DAC. And R0 resection of the pancreatic ASC might result in disease-free survival rates that are comparable with pancreatic DAC.

V-6

Chyle Leakage after Pancreaticoduodectomy

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Research Purpose: Chyle leakage is a rare complication after pancreaticoduodectomy. The aim of this study was to evaluate incidence, management, and risk factors of chyle leakage after pancreaticoduodectomy.

Materials and Methods: Between 2002 and 2010, 220 consecutive patients underwent pancreaticoduodectomy at a single institution. Data on demographics, operative records, chyle leakage were collected. The management of chyle leakage was reviewed.

Results: Of 220 patients undergoing pancreaticoduodectomy, 122 patients were supported with total parenteral nutrition and 98 patients were provided with early enteral nutrition. Sixteen patients (7.3%) developed chyle leakage. All of these 16 patients were supported with early enteral nutrition. None of patients