## The Clinicopathological Features and Prognosis of Pancreatic Ductal Adenocarcinoma with Concurrent Carcinoma *in Situ*

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## **Abstract**

**Background/Objectives:** The prognosis of pancreatic cancer is poor. Although some case reports have revealed that the prognosis of pancreatic ductal adenocarcinoma (PDAC) with carcinoma *in situ* (CIS) is better than that of PDAC without CIS, this finding has not been fully validated. Therefore, this retrospective study investigated the prognosis of PDAC with CIS (CIS+ PDAC) at our institution.

**Methods:** Of the 267 patients with PDAC (January 1981-December 2011), we retrospectively analyzed the clinicopathological data of eight patients with CIS<sup>+</sup> PDAC. We compared the prognosis of these patients 8 with that of 79 patients with PDAC without CIS (CIS<sup>-</sup> PDAC).

**Results:** The overall survival of CIS<sup>+</sup> PDAC patients was significantly higher than that of CIS<sup>-</sup> PDAC patients (P=0.0068). Patients with CIS<sup>+</sup> PDAC had multiple favorable prognostic factors, including well differentiated adenocarcinoma (P=0.0267), smaller tumor sizes (P=0.0299) and R0 surgery (P=0.0005). Furthermore, the incidences of retroperitoneum tissue invasion and lymph node metastasis were lower in CIS<sup>+</sup> PDAC than in CIS<sup>-</sup> PDAC. A multivariate analysis revealed that CIS was an independent prognostic factor.

**Conclusions:** CIS+ PDAC is associated with a significantly better prognosis than CIS- PDAC.

Key words: pancreatic ductal adenocarcinoma, pancreatic cancer, carcinoma in situ, prognosis