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学位論文の題名	<p>Prognostic factors related to add-on dendritic cell vaccines on patients with inoperable pancreatic cancer receiving chemotherapy: a multicenter analysis</p> <p>(切除不能な進行膵臓癌に対する樹状細胞ワクチン療法の有用性と予後因子の検討)</p> <p>Cancer Immunol Immunother. 2014;63:797-806.</p>
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#### Purpose:

Pancreatic cancer was the fourth leading cause of death from cancer in the United States in 2010 and the fifth leading cause of death from cancer in Japan, and its incidence is still increasing. Dendritic cell (DC)-based cancer vaccine may hold significant impact on the survival of advanced pancreatic cancers; however, multiple variations among clinical studies, i.e. quality of cells, make it hard to detect its clinical benefit. We therefore statistically identified factors determining the clinical benefit from data of seven Japanese individual institutions that share the same DC preparation and treatment regimen.

#### Patients and Methods:

Among 354 patients who met inclusion criteria, 255 cases who received standard chemotherapy combined with peptide-pulsed DC vaccine were analyzed.

#### Results:

Mean survival time from diagnosis was 16.5 months (95%C.I.=14.4-18.5), and that from the first vaccination was 9.9 months (95%C.I.=8.0-12.9). Known prognostic 'baseline' factors related to advanced pancreatic cancer, namely ECOG-PS, peritoneal metastasis, liver metastasis, and prognostic nutrition index (PNI) were also representative in this study. Importantly, erythema reaction after vaccination was an independent and treatment-related predictive factor for better survival. Adjuvant use of OK432 might be important to show erythema reaction.

#### Conclusion:

This is the first to report a multicenter clinical study, suggesting the feasibility and possible clinical benefit of add-on DC vaccine on the patients with advanced pancreatic cancer who are undergoing chemotherapy. These findings seem reasonable and encouraging; however, because of the retrospective and exploratory nature of the present study, these findings need to be addressed in well-controlled prospective randomized trials.