

# ESTABLISHMENT AND CHARACTERIZATION OF A NEW HUMAN PANCREATIC CANCER CELL LINE CAPAN-26

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Pancreatic ductal adenocarcinoma (PDAC) is one of the deadliest forms of human cancer. It is basically resistant to all mainstream cancer treatment modalities, such as chemotherapy and radiotherapy, and a surgical resection is effective for only 15-25% of patients [1]. A key to a successful therapy could be individualized treatment, which employs new pancreatic cancer cell lines, derived from patient tissue. Such lines represent a clinically relevant *in vitro* model of a tumor and can be used for drug testing.

In this study we present a new pancreatic cancer cell line Capan-26, which was derived from PDAC tissue of a 65-year old female Lithuanian patient. We determined cell doubling time and showed expression of E-cadherin and two PDAC markers CEACAM6 and CA19-9 in 2D and 3D Capan-26 culture. *Ras* sequencing detected a point mutation E76→K76, which is claimed to be oncogenic in both *in vitro* and *in vivo* PDAC models [2]. We believe that Capan-26 will be a valuable tool for human PDAC studies in the future.

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[1] Goodman MD, Saif MW. Adjuvant therapy for pancreatic cancer. JOP : Journal of the pancreas. 2014; 15: 87-90

[2] Guo Z, Lu Y, Oakes S, Britton A, King T, Huang K, Tzenova V, Ferraro J, Apelian D, Franzusoff A. Trans-national patterns of pancreas cancer ras mutations and discovery of a new ras mutation with oncogenic synergy when found with ras codon 12 mutations. American Association for Cancer Research. 2008; 14.