Poster Session (Poster presentations categorized by each organ)

**P2 – 11 – 2**  
**EFFICACY OF TUMOR-TARGETING SALMONELLA TYPHIMURIUM A1-R ON HIGHLY METASTATIC HUMAN Pancreatic Cancer in Nude Mice**

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**Background:** The aim of this study is to determine the efficacy of tumor-targeting *Salmonella typhimurium* A1-R (A1-R) on a pancreatic cancer patient-derived orthotopic xenografts (PDOX).

**Methods:** The PDOX model was originally established from a pancreatic cancer patient in SCID-NOD mice. The pancreatic cancer PDOX was subsequently transplanted by surgical orthotopic implantation (SOI) in transgenic nude red fluorescent protein (RFP) mice in order that the PDOX stably acquired red fluorescent protein (RFP)-expressing stroma for the purposes of imaging the tumor after passage to non-transgenic nude mice in order to visualize tumor growth and drug efficacy. The nude mice with human pancreatic PDOX were treated with A1-R or standard chemotherapy, including gemcitabine (GEM), which is first-line therapy for pancreatic cancer, for comparison of efficacy.

**Results:** A1-R treatment significantly reduced tumor weight, as well as tumor fluorescence area, compared to untreated control (p = 0.011), with comparable efficacy of GEM, CDDP and 5-FU. Histopathological response to treatment was defined according to Evan’s criteria and A1-R had increased efficacy compared to standard chemotherapy. The present report is the first to show that A1-R is effective against a very low-passage patient tumor, in this case, pancreatic cancer.

**Conclusion:** The data of the present report suggest A1-1 will have clinical activity in pancreatic cancer, a highly lethal and treatment-resistant disease and may be most effectively used in combination with other agents.