Dr. Talia Golan

"Research is inseparable from treatment of the patients, it's a building block since you cannot find a cure without a deep understanding of what the disease is made of, its origins, and why it becomes resistant to drugs."

Medical Director, Phase I Program and Sheba Pancreatic Cancer Center
Chaim Sheba Medical Centre

Dr. Talia Golan is a clinician-scientist currently conducting translational laboratory research while also serving as medical director of the Phase I Unit and the Pancreatic Cancer Center at Sheba Medical Center, Israel. Her clinical interest is in patients with pancreatic cancer. Dr. Golan's career goals include expertise in clinical medicine, translational laboratory research, and drug development. Dr. Golan is principal investigator on multiple early-phase trials on immune modulators. Her clinical and research expertise focuses on the understanding and treatment of hereditary pancreatic cancer. Dr. Golan is co-global principal investigator of the first biomarker-selected (BRCA) phase III clinical trial in pancreatic cancer, the POLO study.

Dr. Golan's translational research lab, established in 2011, is an integral part of the **Sheba Pancreatic Cancer Program (SPCC)**. Research in the lab focuses on improving the standard of care options for pancreatic cancer patients by both finding targeted treatments tailored for each patient based on his or her own genetic background and developing state of the art early detection methodology. Disease heterogeneity and late detection are still the main challenges of pancreatic cancer treatment. The early pancreatic cancer detection program, developed in collaboration with the MRI comprehensive methodology unit at Weizmann Institute and a registry for BRCA1/2 carriers, offers these individuals at increased risk comprehensive surveillance and MRI screening of the pancreas.

One of the most studied pancreatic cancer subtypes is in patients that carry mutations in the BRCA1/2 genes, representing approximately 6-7% of pancreatic cancer patients. These patients may respond to a specific, targeted therapy called PARP inhibitors (PARPi) and platinum-based chemotherapy. In fact, this is a biomarker-driven personalized therapy for pancreatic cancer currently in evaluation in a global phase III trial. Unfortunately, therapeutic resistance to this targeted treatment occurs in the majority of patients and this once promising treatment becomes ineffective.

The translational research lab focuses on investigating the differential responses to targeted treatment and deciphering the mechanism of resistance that evolves in most of the patients. Dr. Golan's team is aiming to find new therapeutic combinations that hold promise in being more effective for resistant pancreatic cancer in patients. They have established a pre-clinical model of metastatic pancreatic cancer (the most common type), from different patients at different

time during their disease (sensitive to treatment and at resistance). They are employing these models to screen various drug combinations that have the potential to further deepen and expand response and overcome resistance. The team aims to optimize the next line therapy for patients with resistant pancreatic cancer and set the stage for future, personalized therapy-based clinical trials.