



BLOOD BASED BIOMARKERS TO PREDICT RECURRENCE IN OVARIAN CANCER

RESEARCH PROJECT – Support Opportunity

THE NEED

Ovarian cancer is one of the most lethal female cancers with 239,000 new cases worldwide in 2012. It is estimated that 1,580 Australian women will be diagnosed with ovarian cancer in 2017. In the majority of patients, the disease has already spread at the time of diagnosis and despite treatment including surgery and chemotherapy, most women will relapse and ultimately die of their disease. More than half (57%) of women with ovarian cancer are no longer living 5 years after their diagnosis and we need to change this.

Recent evidence suggests that ovarian cancer survival is closely related to our immune systems. The immune system can attack malignant cells that it recognises as 'foreign' and there is a clear relationship between a declining anti-tumour immune response and ovarian cancer recurrence. However, a lack of understanding of how the immune system mediates these processes has limited the development of effective ovarian cancer therapies.

SUPPORT OPPORTUNITY

The Project is innovative due to a current lack of tests or 'markers' to predict ovarian cancer recurrence. Given the key role of the immune system in ovarian cancer, identification of immune-related markers that predict clinical outcomes and reveal new immunotherapeutic approaches could promote long-term remission in these patients. Our study will focus on proteins called 'tumour-antigen associated autoantibodies' (TAAs) and 'cytokines' that are made by our immune systems to fight ovarian cancer.

Our aim is to identify alterations in TAAs and cytokines from blood samples of patients with matched primary and recurrent ovarian cancers. WIRF is now seeking support for its researchers to conduct a preliminary study to generate a list of TAAs and cytokines associated with ovarian cancer recurrence.

THE IMPACT

The results of the Foundation's initial studies may lead to improved prediction of relapse in those women diagnosed with ovarian cancer. The results may lead to specific ovarian cancer treatments called monoclonal antibodies, which mimic the immune system's own TAAs, and to the development of vaccine therapies for ovarian cancer. This has the potential to change practice and to improve outcomes for the hundreds of thousands of women worldwide who are diagnosed with ovarian cancer every year.

SUPPORT OPTIONS

Led by scientist Dr Yu Yu, and Drs Paul Cohen and Tarek Meniawy, the 'Blood Based Biomarkers to Predict Recurrence in Ovarian Cancer' Project is seeking a total of \$180,000 to deliver its three stages:

Stage One (\$30,000): To help support the initial study to generate a list of TAAs associated with recurrent ovarian cancer.

Stage Two (\$50,000): To help support future validation studies to determine the role of TAAs in predicting recurrent disease

Stage Three (\$150,000): To help support studies of TAA candidates as monoclonal antibody therapies and to develop novel ovarian cancer vaccine therapies.

CONTACT

Deb Attard Portuges
Chief Operations Director

Women and Infants Research Foundation
Phone: 0411 844 181
deb@wirf.com.au
www.wirf.com.au