2. NON-TECHNICAL ABSTRACT:

We propose to study the safety and biological effects of combination chemotherapy with modified adenovirus to treat breast cancer patients with skin lesions. There is not a standard therapy which reliably cures patients with skin metastases. Studies in animals suggest that this modified adenovirus can cause tumors to shrink when used alone or in conjunction with chemotherapy. The adenovirus has had the gene for a protein called p53 inserted into it. p53 is found in normal cells and helps cells decide to die in response to stresses, such as chemotherapy. Many tumors have an abnormal p53 gene which makes them less responsive to chemotherapy. Injection of Ad-p53, the modified adenovirus to be studied, seeks to enhance tumor cell death when treated with chemotherapy. We will also evaluate the side effects of this therapy, the ability of this adenovirus to infect other parts of the body and the amount of cell death induced by chemotherapy alone or with Ad-p53 injection.