PI: Teresa Salgado, MPharm, PhD
Academic Rank: Assistant Professor
Title: Preferences for Chemotherapy Discontinuation Due to Chemotherapy Induced Peripheral Neuropathy Among Patients with Metastatic Breast Cancer

Chemotherapy-induced peripheral neuropathy (CIPN) is a term used to describe damage to the nerves caused by chemotherapy. This damage can be mild in many cases but it could also be severe and long-lasting, thus severely affecting quality of life. To avoid the long-lasting effects of CIPN, patients and clinicians work together to determine if chemotherapy needs to be stopped. The factors affecting this decision may vary among different people and the importance that each person gives to the benefits and harms of continuing therapy, despite the risk of CIPN, is based on people's preferences. Unfortunately, there have not been previous studies focusing on this and clinicians are not aware of how patients prioritize treatment risks and benefits. Clinicians also lack guidance as to what CIPN specific information patients would like to know to help them make decisions regarding treatment discontinuation.

To that end, we propose a study with the following aims: 1) to develop an instrument – called best worst scaling (BWS) – to identify patient informational needs related to CIPN and to quantify the relative influence of different information topics on treatment alteration decisions; and 2) to develop an instrument – called a threshold technique – to quantify the maximum CIPN severity that patients are willing to tolerate in exchange for the benefit of progression free survival. We will involve both patients and clinicians in our study to better inform the development of these two instruments.

Our study population are women (≥18 years-old) with metastatic breast cancer who have experienced CIPN due to taxane therapy. We will recruit participants from an online patient advocacy platform. During the BWS technique, participants will look at a repeated subset of CIPN information topics and asked to identify the most and least important in each subset. During the threshold technique, patients will be presented with two risk/benefit clinical scenarios. In one of the clinical scenarios, the probability of experiencing severe CIPN will vary while all other attributes in the clinical scenario stay the same. This technique will give us the threshold at which patients would no longer accept additional CIPN risk in exchange for progression free survival.

Our study will provide us with a prioritized list of specific information that patients would like to have when making the decision to discontinue therapy due to CIPN. Additionally, our study will give us a better understanding of CIPN risk tolerance and patient preferences. This will help clinicians provide more personalized care to cancer patients.