The value of prospective surveillance for those at risk of Cancer Related Lymphoedema (CRL)

Keywords: Prospective Surveillance | Cancer Related Lymphoedema (CRL) | Value

Goals and Objectives

1. Examine the **Value** of prospective surveillance for those at risk of cancer-related lymphoedema of malignancies in an Irish setting.

2. Highlight the incidence and prevalence of subclinical and subsequent clinical Cancer Related Lymphoedema (CRL) in patients undergoing treatment for a variety malignancies in an Irish setting.

3. Develop evidence-based resources for cancer patients in Ireland to help with improving treatment related outcomes and supporting the cancer survivor.

Study Design

This will be a mixed-methods, prospective study based on quantitative and qualitative research, evaluating the impact of prospective surveillance and early intervention for lymphoedema on quality of life and well-being for those at risk. Qualitative data will be analysed using a thematic analysis approach. NVivo Software will be employed.

Methods

a. Baseline circumferential measurements, range of motion (ROM) and Bio-Impedance Spectroscopy (BIS) using a SOZO BIS device. These will be recorded prior to the first therapeutic intervention for cancer (surgery or pre-operative chemotherapy) and repeated at each quarterly visit up to a period of 24 months.

b. Participants will be recruited through the Oncology Services of the Bon Secours Hospital & radio-oncololgy Cork University Hospital. Eligible participants will be given written information and will sign a consent form with a study investigator once they have had an opportunity to discuss the study fully and agree to take part (patient information leaflets and consent forms will form part of the ethics approval process).

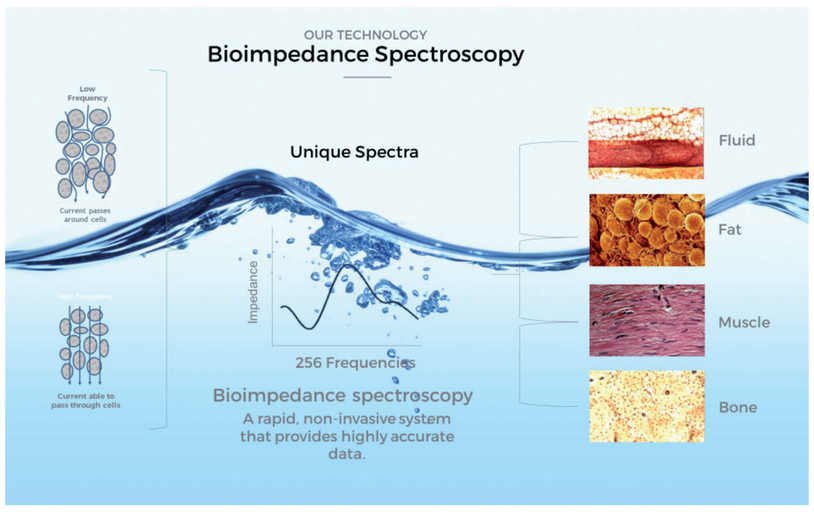
c. Self-reported quality of life by patients with cancer is extremely important, in line with promoting patient participation in care. This study will use the core quality of life questionnaire of the European Organisation for Research and Treatment of Cancer (EORTC), the EORTC QLQ-C30. In addition, we shall also use the validated EQ-5D-5L and the Herth Hope Index.

d. Education on early detection of lymphoedema and risk reduction techniques will be provided to all patients on first post-operative BIS scan at the Lymph Clinic; centre of excellence for lymphoedema. Subsequent quarterly scans and measurements will be undertaken at same centre and will remain a point of contact for all patients enrolled in the study.

Proposed Outcome

Our study's findings will be used to support the *HSE Model of Care for Ireland* that promotes the prospective model as an evidenced based resource (EBR) for all cancer patients at risk of lymphoedema and uniquely investigate the subjective value of same to the patient.

This study findings have the potential to change clinical practice in lymphoedema services in Ireland in line with international best practice. Inclusion of patient reported quality of life measures ensure that we have a patient centred approach to improve their cancer journey experience.



Bioimpedance spectroscopy (BIS) can be used to compare impedance of a low-level electrical current in the upper and/or lower limbs to create a lymphoedema index known as the L-Dex ratio.

Industry partners: ImpediMed | Breakthrough Cancer Research (BCR) (Funding)

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