Zahit RA<sup>1</sup>, Parks RM<sup>2</sup>, Howard P<sup>1</sup>, Blake H<sup>1</sup>, and Cheung KL<sup>1,3</sup> (2018). Baseline quality of life evaluation in older women with primary operable breast cancer and its relationship with different treatments. Journal of Clinical Oncology, 36.Journal of Clinical Oncology: Vol 36, No 15\_suppl. http://ascopubs.org/doi/abs/10.1200/JCO.2018.36.15\_suppl.e12601

<sup>1</sup>University of Nottingham; <sup>2</sup>Nottingham University Hospitals NHS Trust; <sup>3</sup>Royal Derby Hospital

## e12601

**Background:** Breast cancer is common among older women. The experience may be perceived differently by them when compared to their younger counterparts, due to different concerns related to quality of life (QoL) issues. This may impact on treatment options. This study aimed to evaluate the differences between baseline QoL of older women with primary breast cancer undergoing surgery and non-operative treatment i.e. PET.

**Methods:** As part of a wider study on older patients with primary operable breast cancer, baseline QoL was measured using the European Organisation for Research and Treatment of Cancer (EORTC) QoL questionnaire (QLQ-C30), and breast cancer component (QLQ-BR23). Treatment decision was made by the clinical team independent of the study and was not guided by QoL assessment. Comparison was made between scores for the QOL questionnaires (53 questions with a total of 23 components) and whether the patient had surgery or nonsurgery using the t-test for normally distributed data or otherwise the Mann-Whitney test.

**Results:** A total of 76 women (surgery n = 51, PET n = 25) were recruited from three different centres. The mean age was 78 years (range 68-93, SD = 6.01). When compared to patients treated by surgery, patients started on PET were more likely to have the following at baseline:

- more trouble doing strenuous activities (p = 0.010)
- greater trouble taking a long (p = 0.000) or short (p = 0.000) walk
- increased need to stay in bed or a chair during the day (p = 0.001)

- feeling more tense (p = 0.050) and worry (p = 0.002)
- greater pain in the arm or shoulder (p = 0.012)
- greater difficulty with raising or moving arm sideways (p = 0.020)
- greater pain in the area of affected breast (p = 0.009)

Binary logistic regression showed that a greater feeling of worry was an independent predictor of treatment undertaken (p = 0.047).

**Conclusions:** Older women undergoing different treatments for a newly diagnosed primary breast cancer appear to have different baseline QoL characteristics. Further understanding may inform the use of different support measures. The study is ongoing.