Abstract:
Background: Blood transfusions are often used as a potential treatment for cancer-related fatigue in anaemic palliative care patients. However, evidence of benefit using validated outcomes measures is lacking.
Aim: The aim of this study was to test the feasibility of using two such tools; the Brief Fatigue Inventory and the FACT F-fatigue subscale, to measure change in fatigue following a blood transfusion.
Method: Anemic cancer patients receiving specialist palliative care and undergoing transfusion for fatigue completed the tools pre- and 3 days post-transfusion.
Results: Thirty patients with cancer-related fatigue who received a blood transfusion completed the study. Both measures were capable of detecting statistical and clinically significant change in fatigue following transfusion. Furthermore, the measures showed significant differences between patients that did, or did not, report an overall improvement in fatigue. Patients found the measures easy to complete with no preference for one over another. Future clinical trials of blood transfusion for the management of fatigue should incorporate these validated outcome measures.

Strengths:
• Multicentre, prospective study regarding feasibility of the use of these assessment tools to assess efficacy of transfusion for anemia-related fatigue.
• Patient subjective report rather than Post-transfusion Hemoglobin used as standard (which is reflective of clinical practice).

Weaknesses:
• Small pilot study (n=30) prior to a larger open label study which is planned.
• Not blinded or placebo-controlled (possibility of strong placebo response).

Applicability to Palliative Care:
While fatigue and anemia are both common in palliative patients, fatigue is usually multifactorial in origin. Also blood transfusions are relatively invasive and expensive for many of our patients. It may be useful, particularly in certain clinical situations, to have objective data from assessment tools to determine efficacy of blood transfusions and certainly it will be useful for further studies. On the other hand, if the results correlate well with patient’s subjective report, this will likely continue to be the standard for most patients in determining efficacy. Only one patient found the tools too arduous to complete. In further studies, it will be interesting to see if any clinical factors can be identified to predict who will respond to transfusions for anemia versus those would not respond (Hemoglobin has already been shown in previous studies of advanced cancer pts not to be a predictor).