Purpose or Objective: On behalf of the LPRO (National organisation for radiotherapy in the elderly): The incidence of cancer increases with age. Older cancer patients are often underrepresented in clinical trials. Reliable predicting tools for toxicity and compliance of radiotherapy are not yet available. The G8 is a screening tool developed for older cancer patients. The “Timed Get Up and Go Test” (TUGUT) is a validated test for quantifying the degree of mobility. In the current study we aim to quantify to which extend the G8 and the TUGUT are predictive for both radio(chemo)therapy compliance and acute toxicity of curative radiotherapy in elderly cancer patients.

Material and Methods: Patients were recruited in seven Dutch radiotherapy centers: if they were 65 years and older, had newly diagnosed breast/NSCLC/prostate/head and neck/ rectal and oesophageal cancer, were referred for radio(chemo)therapy with curative intent between April 2015 and the end of October 2015, and had no history of prior radiotherapy. The TUGUT test (normal 10 seconds, frail elderly: 11-20 seconds, and needs further evaluation: >20 seconds) and the G8 score (≤14 is indicative of frailty in older cancer patients) were performed before starting the radiotherapy. Compliance with radio- and or radio/chemotherapy and acute toxicity (< 3 months after ending the radiotherapy) were recorded.

Results: A total of 335 patients were included, of which 53% were male. The mean age was 72.8 and 4% were 85 year or older. WHO scores were 0 for 55%, 1 for 36%, 2 for 8%, 3 for 0.3% and unknown in 1%. Patients were motivated to participate, with a mean score of 9.1 and a median of 10, on a ten point scale. Forty-three percent of the patients were considered frail based on the G8 score and 18% based on the TUGUT test. There was an association between the G8 and the TUGUT, with every point increase of the G8 score 

Conclusion: We observed an association between the results from G8 and TUGUT. Associations between test results and toxicity and compliance will be presented.