# Short-term and medium-term outcomes in patients over 70 diagnosed with oesophageal cancer

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## INTRODUCTION

The incidence of oesophageal cancer has increased over the last decade in the UK, with high incidence rates in the older age group. Surgery, with or without perioperative chemotherapy remains the gold standard for patients with potentially curable disease. At present, 41% of new cases of oesophageal cancer in the UK were diagnosed in patients aged 70 and over but only 10% underwent resection compared to 25% of those aged under 70. There are concerns advanced age may prejudice treatment decisions due to a perception of poorer outcomes in this cohort.

The aim of our review is to evaluate whether advanced age correlated with poorer outcomes in those undergoing planned curative treatment for oesophageal cancer.

## METHODS

A retrospective review of patients with oesophageal cancer who underwent treatment with curative intent between 2006 to 2016 in a single institution was performed. Patients were divided into two cohorts based on their age at the time of diagnosis, those who were older than 70 and those who were less than 70. Patients underwent a standardised staging protocol and were assigned to the treatment modality based on the stage of the disease by a multi-disciplinary team.

Oesophagectomy was performed using a transthoracic approach with two field lymphadenectomy and perioperative chemo (radio) therapy used in those patients with locally advanced disease who were fit enough.

## RESULTS

There were 553 patients in the <70 cohort of which 76% (423) were diagnosed with oesophageal adenocarcinoma. There were 241 patients in the 70 or greater cohort of which 68% (165) were diagnosed with oesophageal adenocarcinoma and 32% (76) with squamous cell carcinoma.

| | < 70 cohort (553) | > 70 cohort (241) |
|---|---|---|
| **Age median (range)** | 62 (22-69) | 74 (70-85) |
| **M:F** | 431:122 | 159:82 |

**Table 1: Demographics of the patient cohorts who underwent curative treatment for oesophageal cancer**

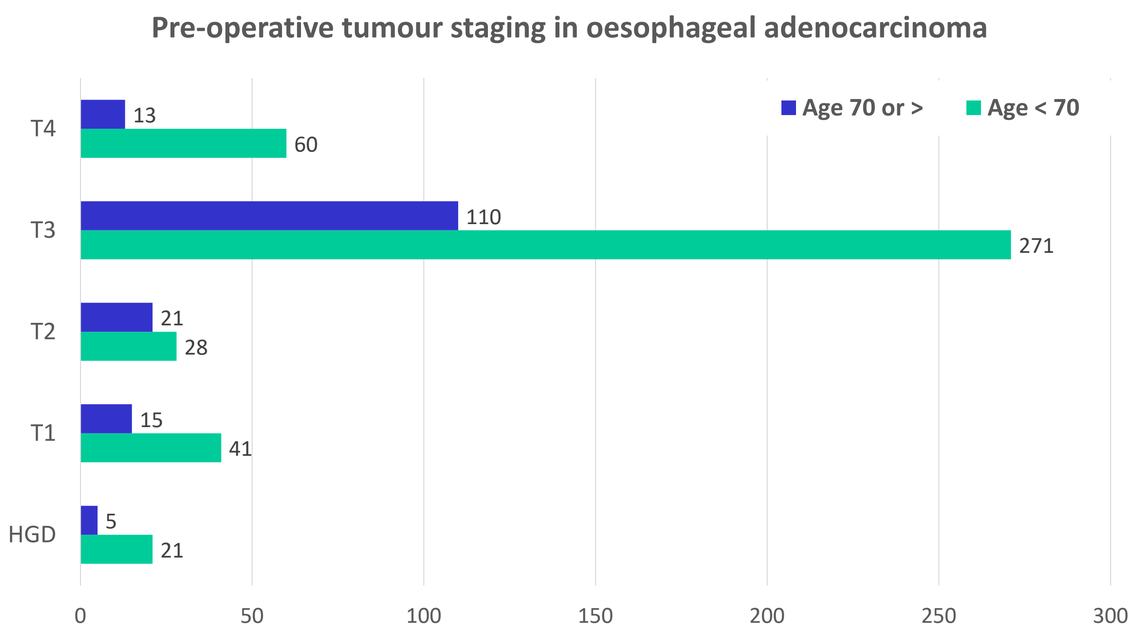


**Fig 1: Chart illustrating the stage of the primary tumour in patients undergoing curative treatment for oesophageal adenocarcinoma**

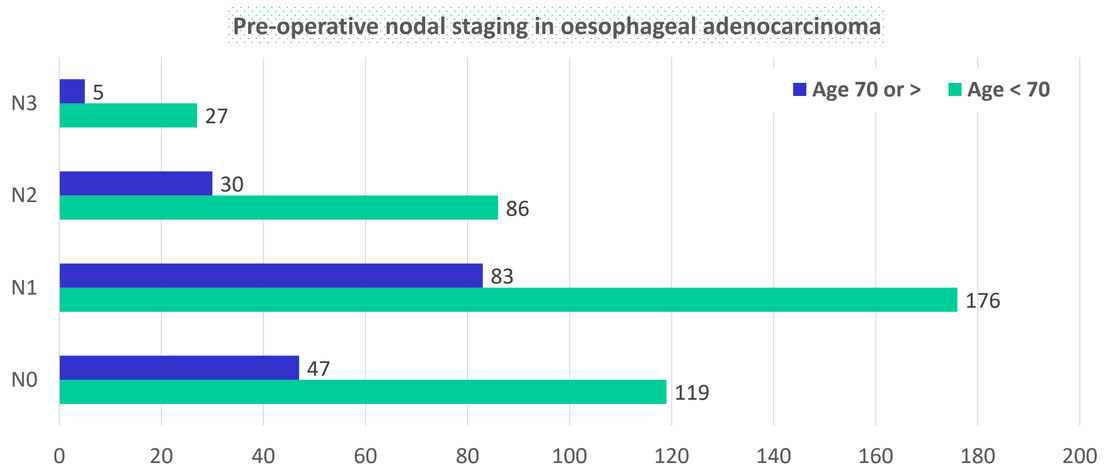


**Fig 2: Chart illustrating the nodal stage of the tumour in patients undergoing curative treatment for oesophageal adenocarcinoma**

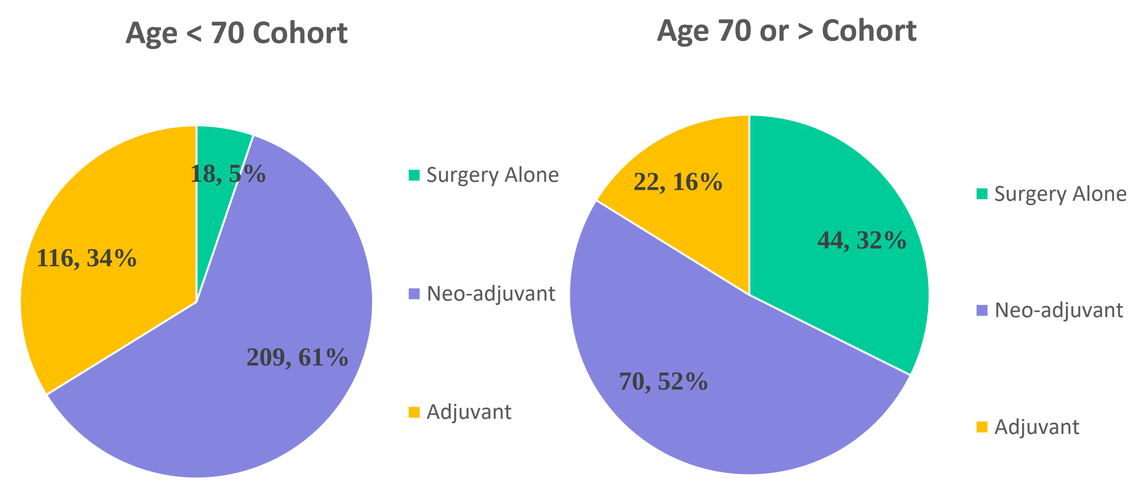


**Fig 3: Chart illustrating the treatment modality for patients who underwent curative treatment for locally advanced oesophageal adenocarcinoma**

Of the 208 patients who underwent curative treatment for squamous cell carcinoma, 71% (94) had neo-adjuvant treatment and surgery in the < 70 cohort versus 54% (41) in the > 70 cohort.

The median hospital stay in the < 70 cohort was 15 days compared to 18 days in the > 70 cohort, p-value = 0.02. Morbidity was graded based on the accordion classification. In the < 70 cohort, 14% of the patients had a complication graded 3 or > compared to 20% of patients in the 70 or > cohort, p-value = 0.37. In hospital mortality in the < 70 cohort was 1% compared to 2.4% in the 70 or > cohort, p value =

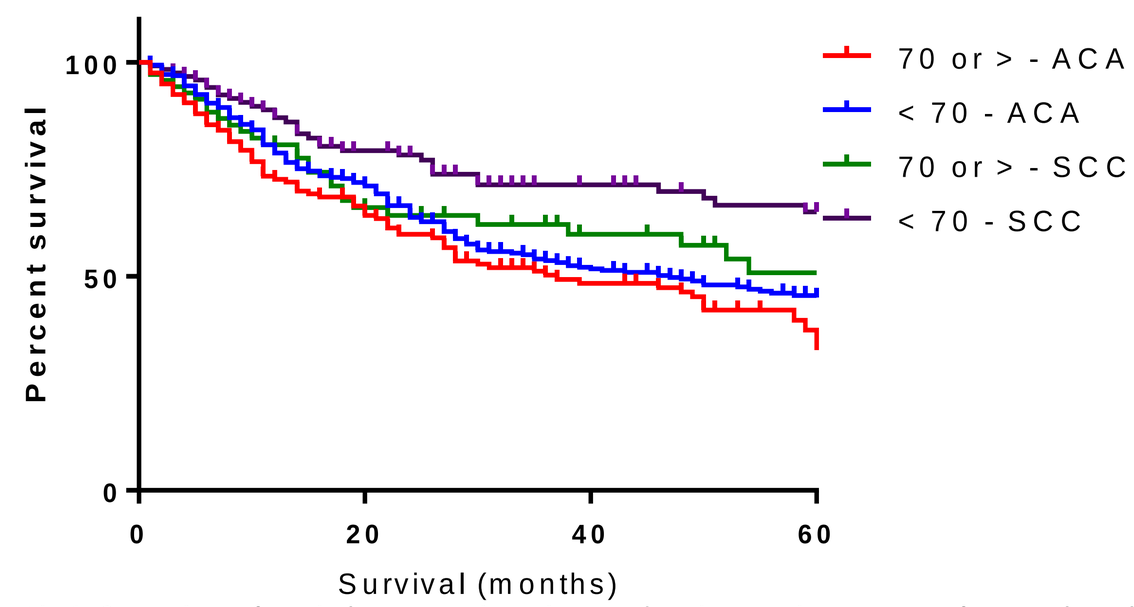


**Fig 4: Comparison of survival outcomes in patients undergoing curative treatment for oesophageal cancer**

The overall 5 year survival in the < 70 cohort for patients who underwent curative treatment for adenocarcinoma was 45%, median survival 47 months compared to 35%, median survival 37 months in the 70 or > cohort.

## CONCLUSIONS

These results demonstrate that patients over 70 can be treated successfully with minimal additional risk to morbidity and mortality. However, these patients are more likely to be denied neoadjuvant treatment which has a negative impact on their long term survival.

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