



Christie Clinical Outcomes

Lower Gastro-intestinal Cancers

Christie Patients

Approximately 5000 new cases of lower gastro-intestinal (LGI) cancer are diagnosed each year in the North West of England¹, approximately 1500 in the Greater Manchester area². In 2014 1450 patients new LGI patients were referred to The Christie. Median age of LGI cancer patients in 2014 was 67 years (Fig. 1). Fifty-seven percent of LGI patients were male.

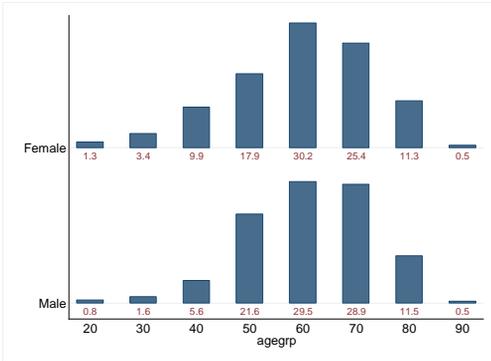


Fig. 1. Age distribution of LGI patients by gender (2014 new presentations). Numbers are percentage of cases in each age group for males and females.

Patient numbers by gender and diagnosis

For the purpose of this data summary we have grouped patient diagnosis into 4 groups, anal cancers, appendiceal cancers, colon cancers, and rectal cancers. Figure 2 shows the diagnoses for both males and females. There are proportionally more rectal cancers in males; there are twice as many male rectal cancer patients than females. In females there are proportionally more cancers of the appendix; the majority of appendiceal cancer patients are female. This pattern is similar to that seen in the general UK population.

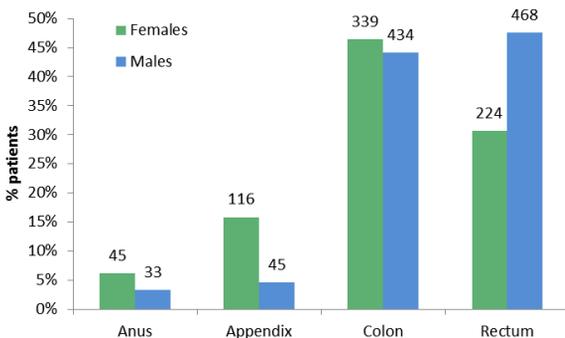
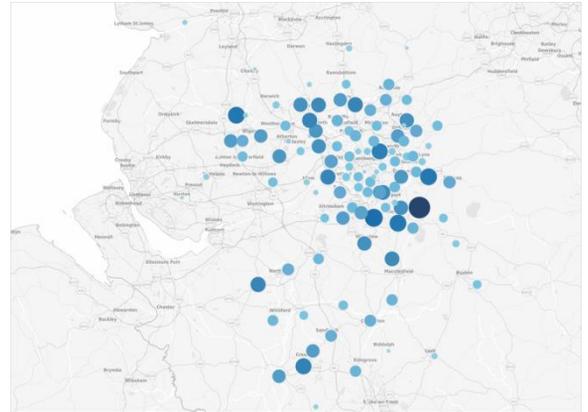


Fig. 2. Numbers and percent of new patients in each diagnosis group among males and females (2014). Numbers above each bar are the number of cases.



Map 1. Catchment area for 90% of Christie LGI patients (2014). Size and depth of colour is relative to the number of patients from the same area.

The majority of Christie patients are residents of the North West of England and in particular around the Greater Manchester region (Map 1). A small number of patients travel from outside the NW for treatment.

Diagnosis by Disease Stage

Disease stage describes the size and spread of cancer. Stage 0 and I are small cancers which have not spread, stage IV is where the cancer has spread to other parts of the body. The majority of Christie patients with rectal and colon cancers have either stage III or stage IV disease (Fig 3).

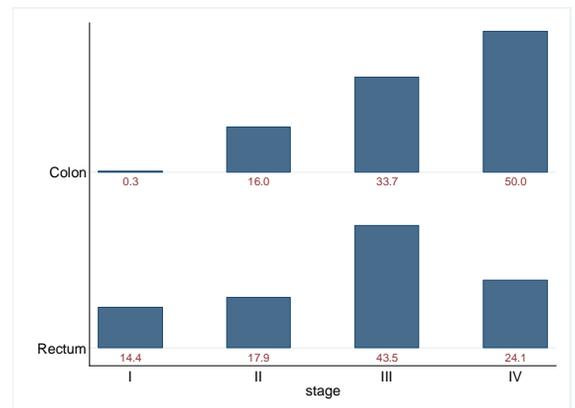


Fig. 3. Distribution of stage for patients with colon and rectal cancers (based on LGI patients for whom DS forms are available). Numbers are percent (%) of patients with each stage in each diagnosis group

¹ Includes data on cancers of the colon, rectum, recto-sigmoid junction, appendix, small intestine and anus. from Office for National Statistics Cancer registrations 2012

² North west cancer Intelligence Service <http://www.nwcis.nhs.uk/cancer-statistics/incidence-by-la.aspx>, excludes anal cancers and small bowel

Comorbidities

Comorbidities are diseases, other than cancer, that a patient has that can impact on treatment and outcome. All Christie patients are regularly assessed for comorbidities on a scale of no comorbidities to severe comorbidities and these data are now starting to be captured in a structured way using CWP DS forms. Among LGI cancer patients for whom data have been captured in this way, the majority have either no comorbidities (43%) or mild comorbidities (36%) (Fig. 4).

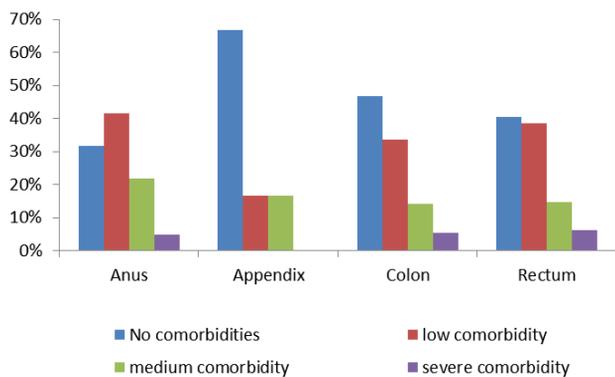


Fig. 4. Comorbidities among new LGI patients in 2014 (based on LGI patients for whom DS forms are available)

Survival Outcomes

One year survival from diagnosis for cancers of the colon in England is 76.2% for men and 72.8% for women. In the Greater Manchester and Cheshire region in 2010 one year survival was estimated at 74.1% for men and 72.0% for women¹. Five year survival in the Greater Manchester area for men and women diagnosed in 2006 was 52.2% and 49.6% respectively. This compares to 53.1% and 52.4% for England as a whole. However survival outcomes are dependent on stage of disease and the patient's performance status (their general health and fitness) and these factors should be taken into account when interpreting outcomes.

All Christie patients are assessed for performance status (ECOG) using a scale of 0 (patient is fully active) to 4 (completely disabled by poor health). Approximately 80% of new LGI cancer patients in 2014 had a performance status of 0 or 1 (Fig 5) although there appears to be some variation between diagnoses; 33% of appendiceal cancer patients are performance status 3 (capable of only limited selfcare).

One year survival for cancer of the colon among patients presenting to The Christie (2013-2014) is estimated to be 81% (95% CI 77% - 84%). For cancers of the rectum this is estimated to be 88% (95% CI 85% - 91%) (Fig 6). Survival estimates vary by stage of disease and disease site (Fig 7).

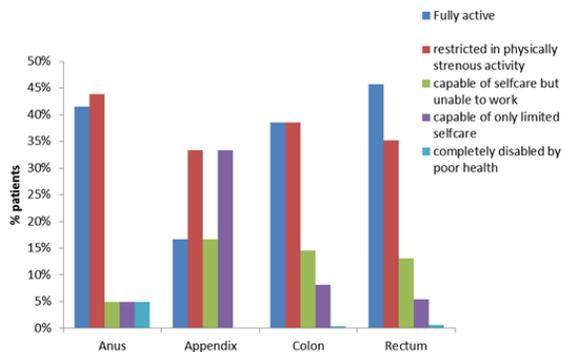


Fig. 5. Performance status among new LGI patients in 2014 (based on LGI patients for whom DS forms are available)

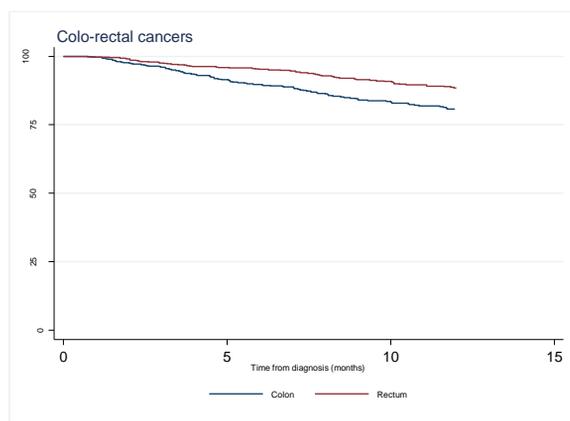


Fig. 6. Survival estimates for rectal and colon cancers for patients referred to The Christie for treatment 2013 - 2014 (based on patients with DS forms only - follow up to March 2015).

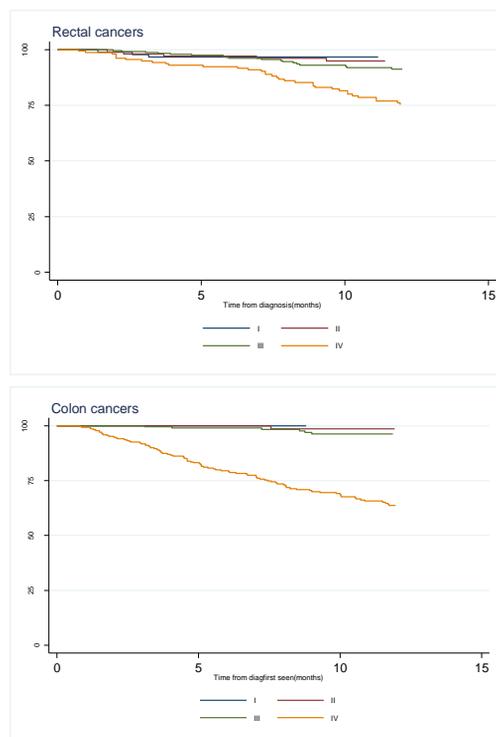


Fig. 7. Survival estimates for rectal and colon cancers for patients treated at The Christie, diagnosed 2013-2014 by stage (based on patients with DS forms only - follow up to March 2015)