

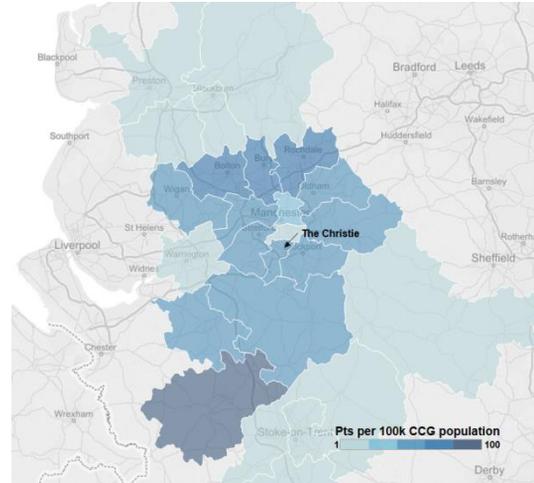


# Christie Clinical Outcomes

## Prostate Cancers

### North West England Incidence and Christie Patients

Approximately 5,000 new cases of prostate cancer are diagnosed each year in the North West of England<sup>1</sup> which represent approximately 105 new diagnosis per year per 100,000 population. In the Greater Manchester region there are approximately 101 new diagnoses per 100,000 population per year. Rates of prostate cancer in the North West are similar to those for England as a whole. Since January 2014, 2230 prostate patients have been newly referred to The Christie for treatment. Median age of prostate cancer patients referred here since January 2014 was 69 years (Fig. 1).



Map 1. Number of new Christie patients with prostate cancer in each clinical commissioning group (CCG) area per 100,000 population. Depth of colour is relative to the number of patients from the same CCG.

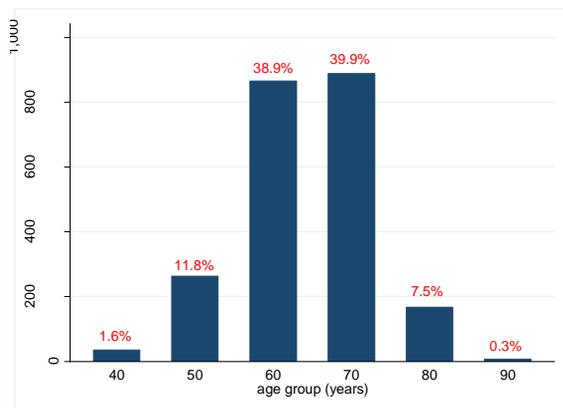


Fig. 1. Age distribution of prostate patients (2014-2015 new presentations). Numbers above bars are percentage of cases in each age group.

### Referrals to The Christie

Prostate cancer patients at The Christie are predominantly referred for primary treatment given either with curative intent (72% of referrals) or as palliative care (13%). The remainder of patients receive their primary treatment elsewhere and then are referred for secondary radical treatment or palliative care after their disease has progressed.

The majority (97%) 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.

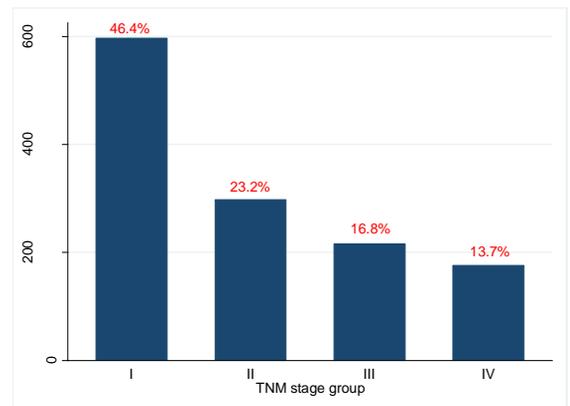


Fig. 2. Distribution of stage at diagnosis for new patients (2014-2015) referred to The Christie for primary treatment (based on patients for whom DS forms are available). Numbers above each bar are percentage of patients in each stage group.

### 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. Prostate cancers are staged using the UICC TNM Classification (version 7). The majority of Christie patients with prostate cancer who are referred for primary treatment present with stage I disease (Fig 2). Among those that are referred following treatment elsewhere, 60% have metastatic disease and receive palliative care.

<sup>1</sup> From PHE (North West Cancer Intelligence Service) Manchester 2013

## Performance Status and Comorbidities

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). Patients are also assessed for their comorbidity status. Comorbidities are diseases that a patient has, other than cancer, that can impact on treatment and outcome. Comorbidity status is measured on a scale of 1 (no comorbidity) to 4 (severe comorbidity). Among prostate cancer patients for whom data have been captured in this way, the majority have either no comorbidity or mild comorbidity and a performance status of 0 or 1 (Fig 3).

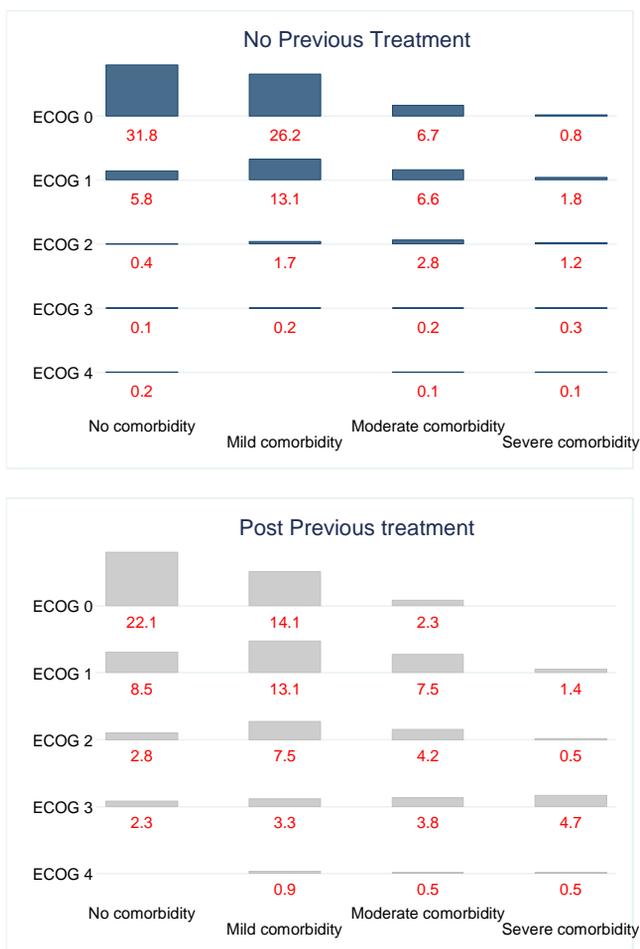


Fig. 3. Comorbidity and performance status for prostate cancer patients referred since January 2014 (based on DS forms) by treatment status at time of referral.

## Survival Outcomes

One year survival from date of diagnosis for cancers of the prostate in England is estimated to be 93.6%. In the North West of England one year survival was estimated at 96%<sup>1</sup>. Five year survival in the North West for men diagnosed in 2004-2006 was 84%. This is comparable to 84% five year survival for England as a whole.

Survival is dependent on stage of disease at diagnosis and the patient's performance status (their general health and fitness). These factors should be taken into account when interpreting outcomes. One year prostate cancer survival by stage in England ranges from 100% for stage I disease to 87% for stage IV cancer (based on patients diagnosed in 2012).

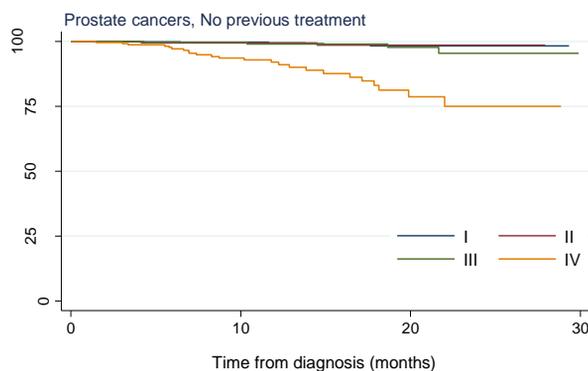


Fig. 4. Survival estimates for prostate cancer patients referred to The Christie with no previous treatment 2013 – 2014 by stage at diagnosis (based on patients with DS forms only - follow up to end of March 2015).

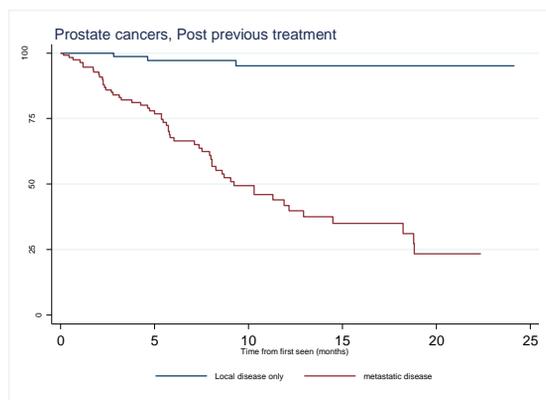


Fig.5. Survival estimates for prostate cancers patients referred to The Christie with local disease or metastatic disease after treatment elsewhere. Survival is estimated from time first seen at The Christie (2013-2014) (based on patients with DS forms only) with follow up to March 2015)

One year survival for prostate cancer for all patients presenting to The Christie for primary treatment is estimated to be 98% (95% CIs 97% - 99%) with one year survival ranging from 99% (95% CIs 98% - 100%) for stage I disease to 91% (95% CIs 85% - 95%) for patients with stage IV disease (Fig 4). For patients who present to the Christie after receiving treatment elsewhere, we are interested in survival from their first referral date (Fig 5). One year survival from date first seen for these patients is estimated to be 94% (95% CIs 83% - 98%) for patients with local disease (no metastases) and 36% (95% CIs 25% - 48%) for patients with metastatic disease.