

# Gender differences in survival among Teenagers and Young Adults (TYA) with Cancer in England

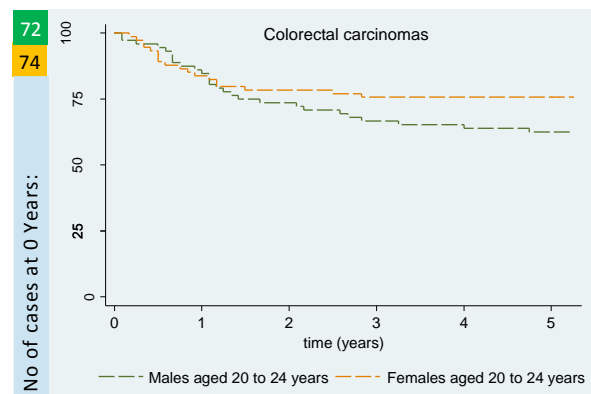
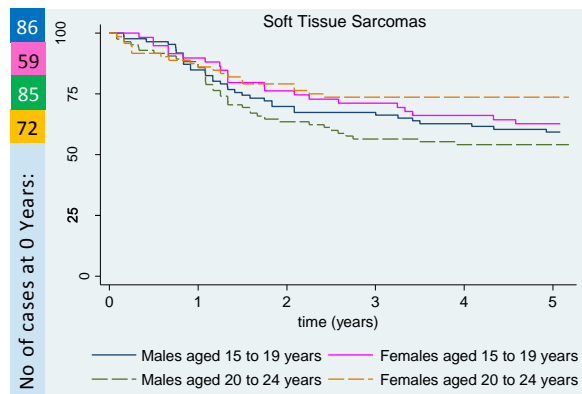
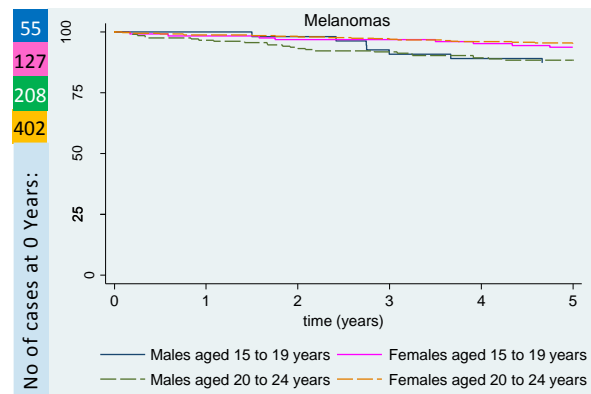
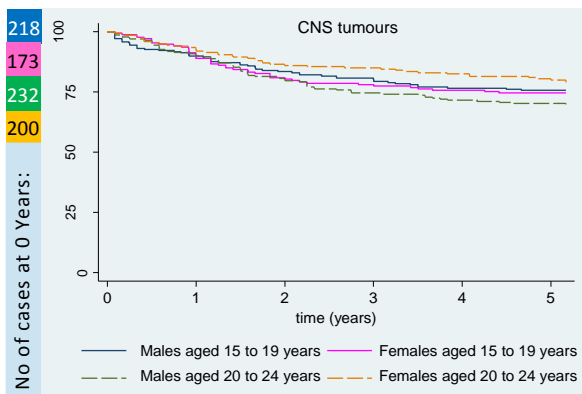
## NCIN Data Briefing

### KEY MESSAGE:

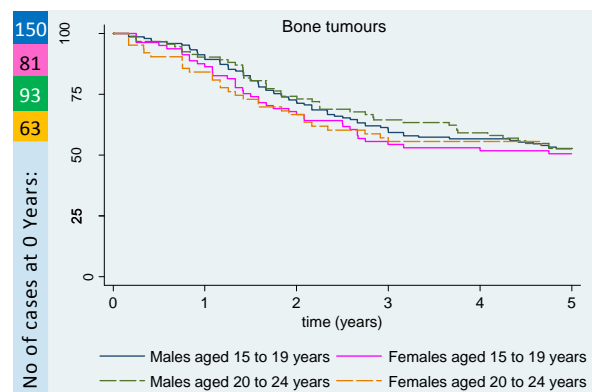
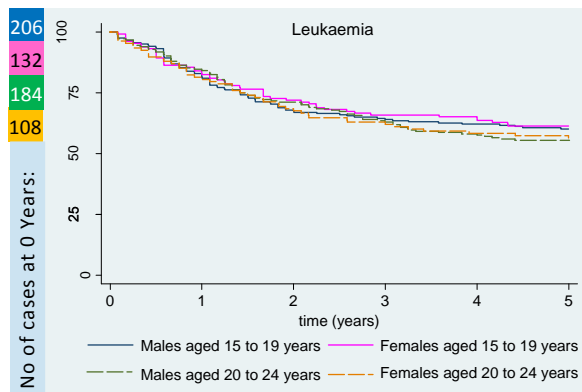
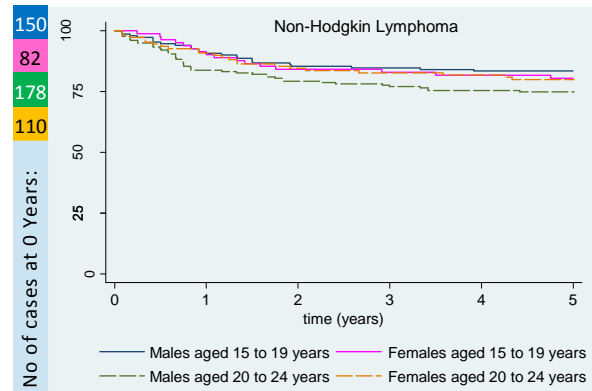
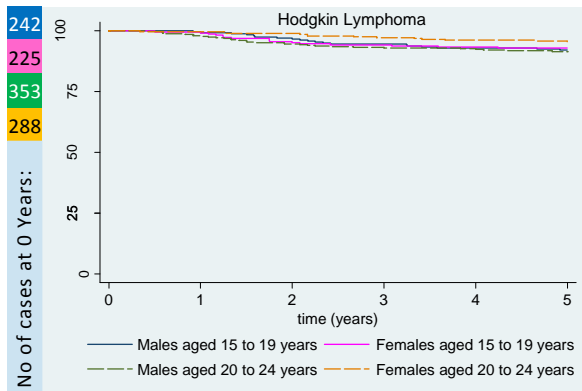
For several common cancers, five-year survival is lower for males than for females within the 20 to 24 year age group. These differences are not apparent in 15 to 19 year olds.

A comparison of survival rates for males and females aged 15 to 24 years for cancers of particular relevance to TYA

Using data for patients diagnosed between 2000 and 2004, extracted from the National Cancer Data Repository, we calculated 1, 2, 3, 4 and 5 year relative survival rates for males and females aged 15-19 and 20-24 years for England for the more common cancers in TYA based on diagnostic groups described by Birch et al (2002).



Females aged 20-24 had significantly better five-year survival rates than males for CNS tumours (80% v 71%:  $p = 0.02$ ), soft tissue sarcomas (STS) (74% v 54%:  $p = 0.01$ ) and melanoma (95% v 89%:  $p = 0.003$ ). Survival for females with colorectal cancer was considerably higher than for males, though this did not reach statistical significance (76% v 63%:  $p = 0.09$ ). Similar patterns were seen for both Hodgkin lymphoma (96% v 92%:  $p = 0.06$ ) and Non-Hodgkin lymphoma (80% v 75%:  $p = 0.3$ ). Most of these differences were present within two years of diagnosis. No statistically significant differences were found in the 15-19 age group, though females had 6% better survival for melanoma (94% v 88%:  $p = 0.17$ ). Five-year survival rates for leukaemia and bone tumours did not vary by gender.



All data shown here can be found at <http://www.nwcis.nhs.uk/tya/>.

### Conclusions and further work

Survival rates are higher for females than for males for many common cancers in 20-24 year olds. Possible explanations for this finding include

- Differences by gender in response to treatment
- Differences by gender in health related behaviours including those that result in delay in diagnosis and treatment
- For certain groups of cancer those types of cancer within the group that have a worse prognosis may be relatively more common in males

Further work will be needed to clarify the reasons for such differences, and if possible, determine how these could be decreased. NWCIS intends to compare cancer survival rates in males and females up to age 50.

#### FIND OUT MORE:

[North West Cancer Intelligence Service \(NWCIS\)](#)

NWCIS is the lead Cancer Registries for cancer in teenagers and young adults <http://www.nwcis.nhs.uk>

#### Other useful resources within the NCIN partnership:

Cancer Research UK CancerStats – Key facts and detailed statistics for health professionals

<http://info.cancerresearchuk.org/cancerstats/>

The National Cancer Intelligence Network is a UK-wide initiative, working to drive improvements in standards of cancer care and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research. Sitting within the National Cancer Research Institute (NCRI), the NCIN works closely with cancer services in England, Scotland, Wales and Northern Ireland. In England, the NCIN is part of the National Cancer Programme.