



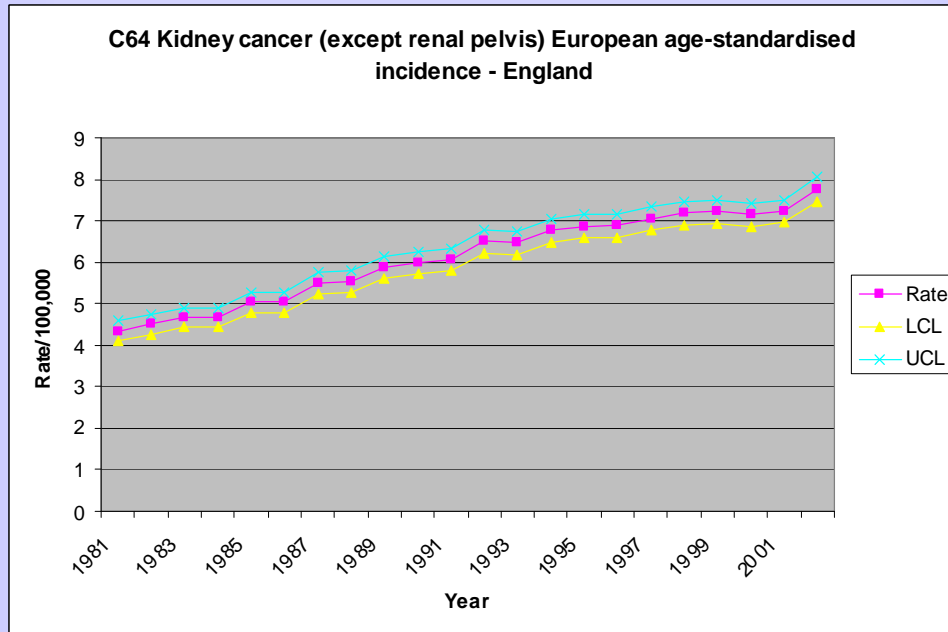
# **Incidence, Mortality and Survival in Kidney cancer in East Anglia**

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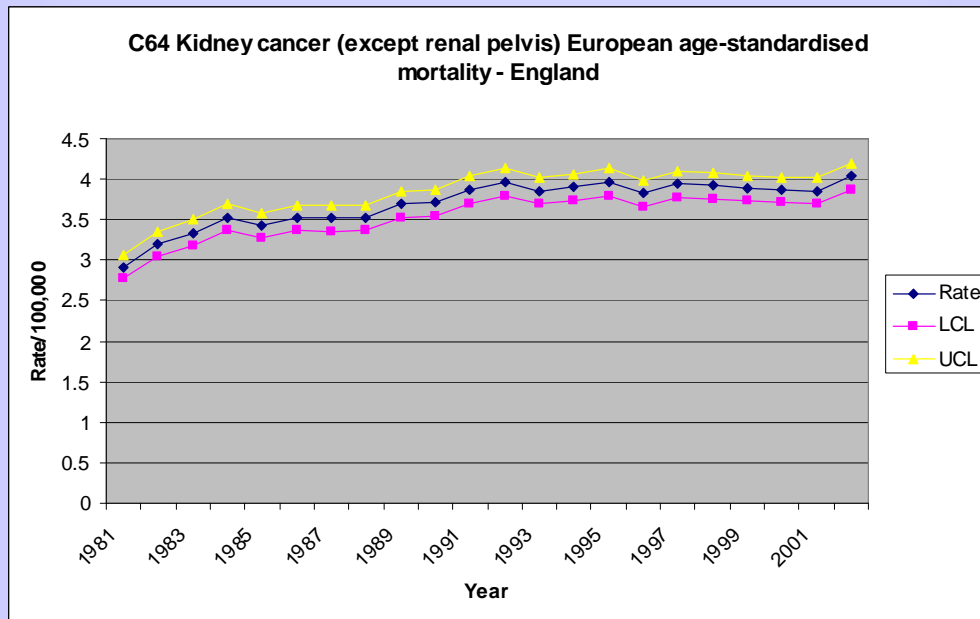
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Kidney cancer is relatively a rare cancer which shows rather unexpected trends in its epidemiology.

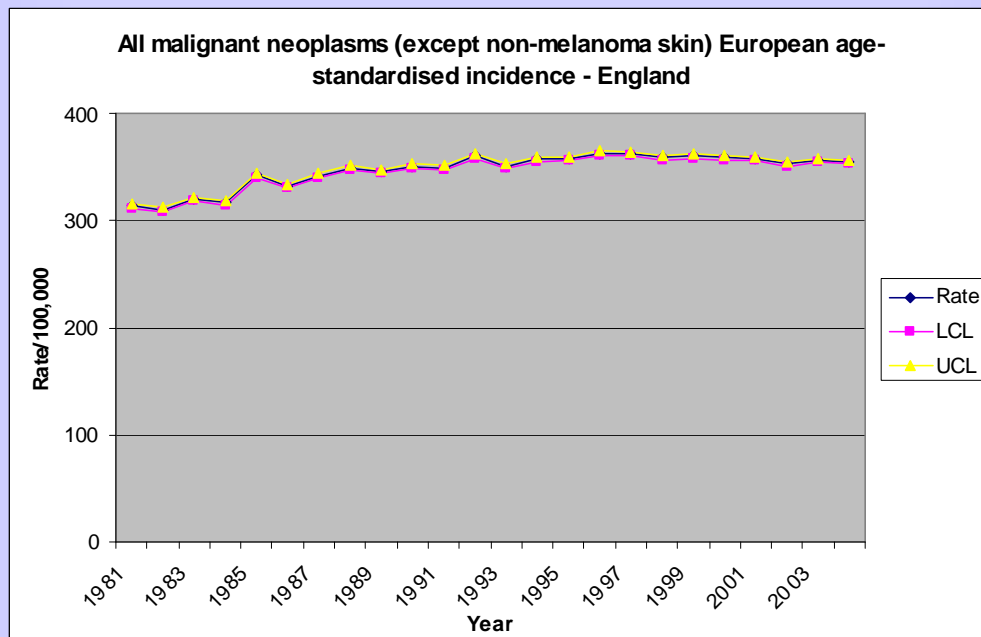


The age standardised incidence rate for kidney cancer in England has almost doubled over the past 20 years. We do not have exact figures for the number of cases as the analysis database only covers around 75% of England, but the number of cases has risen from around 2,300 in 1981 to around 4,700 in 2002

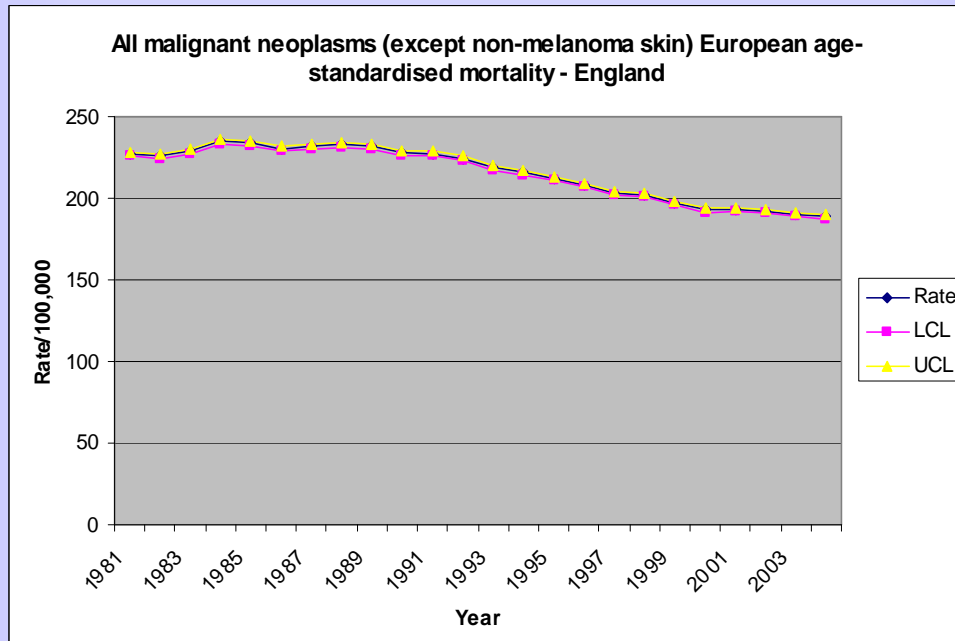


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The age standardised mortality rate has also risen , but not by quite as much. Similarly, we do not have exact figures for the number of deaths, but I estimate this to have risen from around 1,600 in 1981 to around 2,600 in 2002

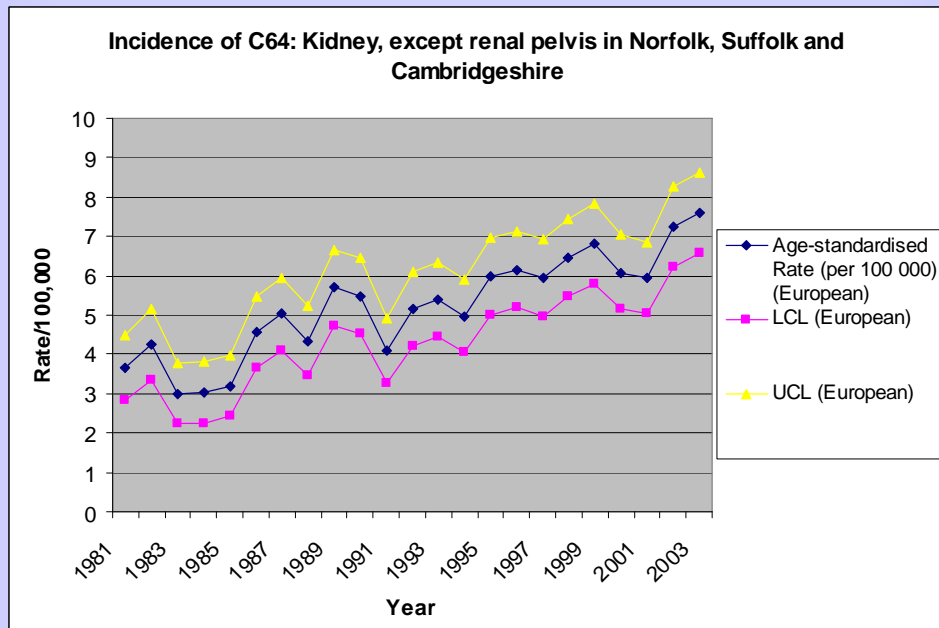


The trends in kidney cancer are different from those in all malignant neoplasms, where rates have risen by less than 15% over the same period. Kidney cancer is not very common, but has risen from just over 1% of all cancers to more than 2%.



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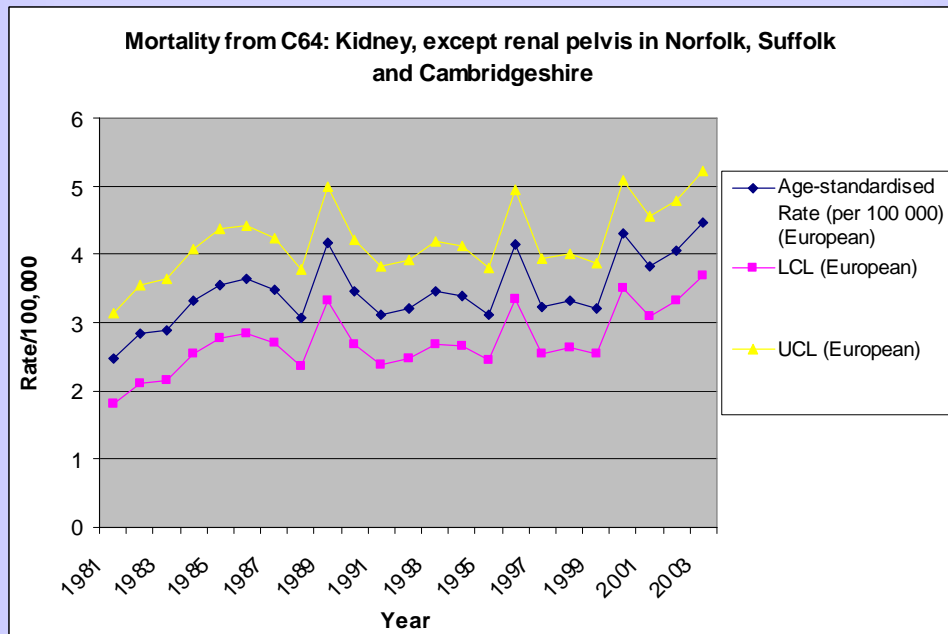
and the age standardised mortality rate for all malignant neoplasms has fallen by around 20% in the same period.



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For the local area, the age standardised incidence rate has again almost doubled, but here the graphs are less smooth, due to there being smaller numbers in the data.

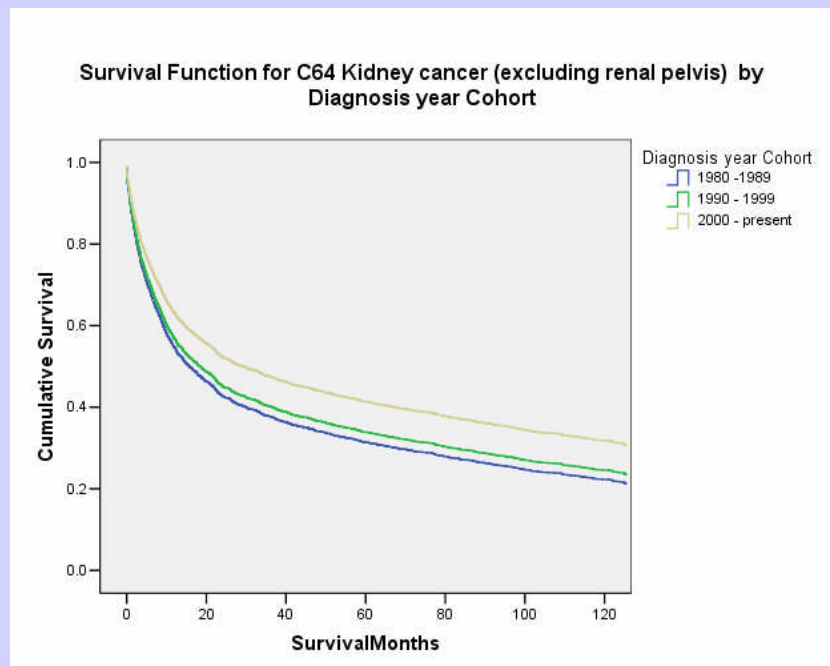
This is now the Eastern Cancer Registration and Information Centre's own data and the actual number of cases has risen from 81 to 229 over this period.



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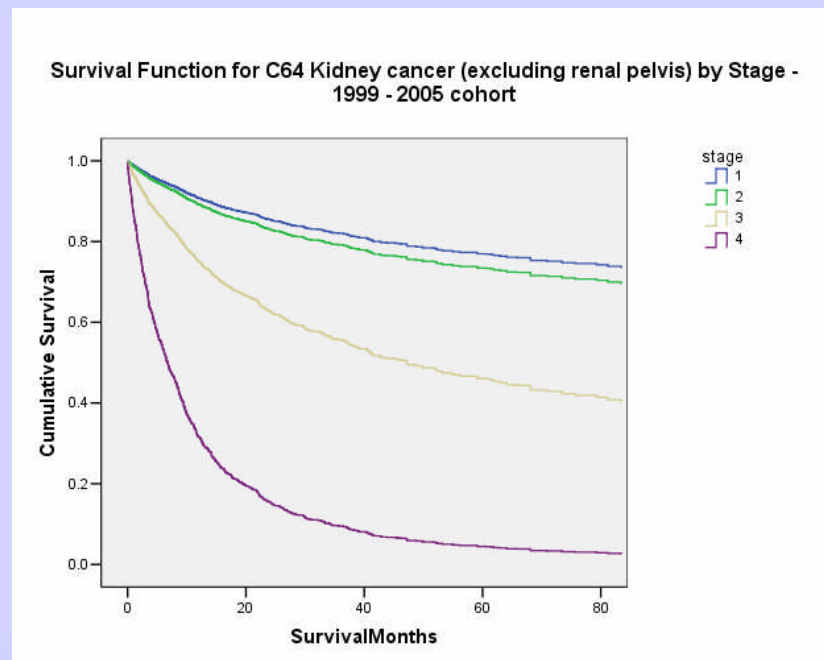
Again , mortality rates have also risen quite markedly.

The actual number of deaths has risen from 57 to 143 over this period



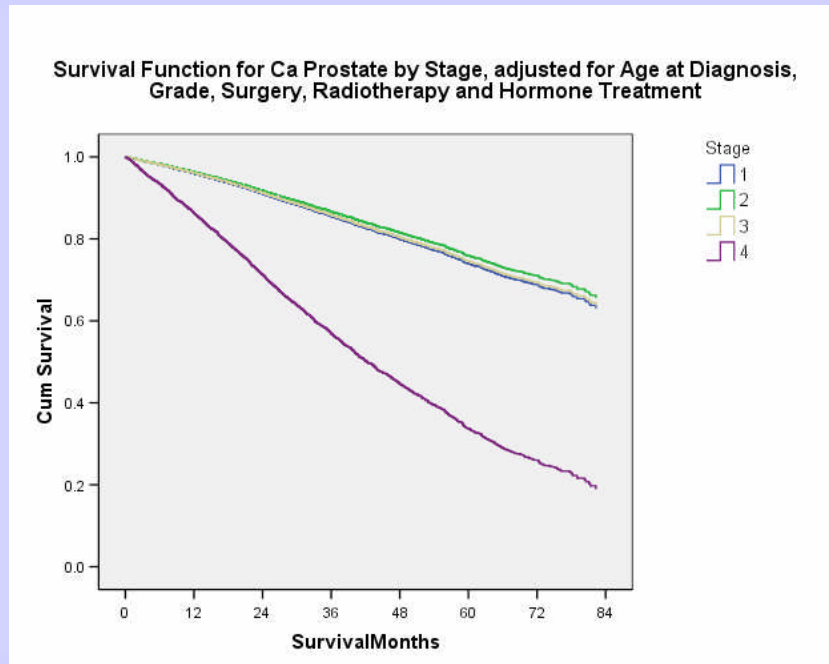
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Another type of analysis that can be performed on registry data is survival analysis. Here it shows the proportion of patients surviving over a six year period from diagnosis. Survival has improved over time, particularly in the most recent cohort. Survival rates in kidney cancer show quite an interesting profile, in that some early-stage cancers can be completely cured by removal of the affected kidney. This can be seen in that the graph appears to be tailing off at a level above zero.



9

Here the survival is shown by stage at diagnosis. As would be expected, the earlier the stage of diagnosis, the better the prognosis, with stage one and two cancers tailing off at a level of around 75% long-term survival.



One might infer from this that it is always best to “catch” all cancers at the earliest possible stage. This is not always so – in the case of prostate cancer survival of stages 1-3 is identical and probably not very different from the overall population – the slope is rather steeper here as these tend to be older people with higher death rates from all causes.



## Conclusions on Kidney cancer epidemiology

- Kidney cancer incidence and mortality has risen more than most other cancers over the past 25 years
- Survival has improved, particularly in recent years
- Are these changes solely due to better and earlier diagnosis or are other factors involved?

Smoking is a definite risk factor; some studies have shown that obesity and/or high fat diets, cadmium and asbestos exposure may be involved.

But none of these seem to be enough to account for these changes – should more research or surveillance be done?