

# Trends in colorectal cancer survival – a study among Maltese patients diagnosed in 1995 to 2009

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## Aim

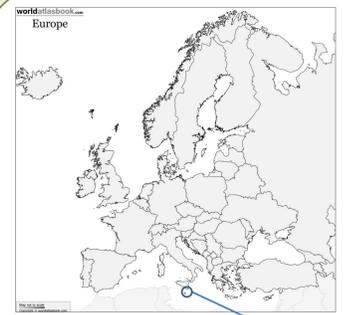
- Assess trends of colorectal cancer survival in Malta over a 15 year period by the demographic features of the population

## Population

- Maltese residents diagnosed with colorectal cancer from 1995 to 2009 and followed up to end 2010
- 2463 participants included in the study (97%)

## Method

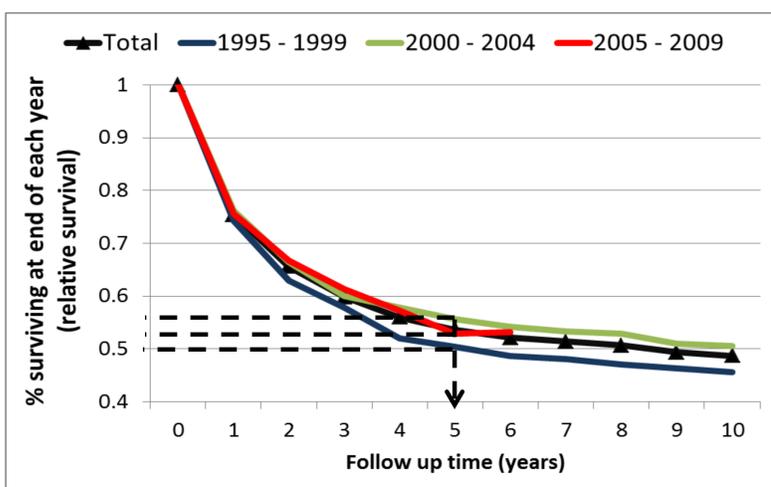
- Cohort method for five year relative survival using national cancer registry data and annual population life tables.
- Generalized linear models with a poisson distribution and link function were used to model the collapsed relative survival data<sup>2</sup>.
- Excess mortality risk ratios calculated as a function of follow up time, year of diagnosis, age at diagnosis, region of residence and gender.



In Europe; an estimated 446,800 cases of colorectal cancer are diagnosed yearly<sup>1</sup>.

One of the most common cancers among the elderly – it will remain a major public health concern as the population ages.

## Results



- Five year relative survival for all patients is 53.6% (95% CI 51.1 – 56.1).
- Risk ratios show a significant reduction of 17% in risk of mortality for patients diagnosed in 2005 – 2009 compared to those in 1995 – 1999 ( $p=0.024$ , 95% CI 0.71 – 0.98).

- In the first year of follow up patients aged 55 to 64 have a 1.57 ( $p=0.003$ , 95% CI 1.17 – 2.11) greater risk of death when compared to those aged less than 55 while those aged 75+ are 2.72 times more likely to die before the end of the first year of follow up ( $p<0.001$ , 95% CI; 2.05 – 3.6)
- Across all ages, risk of mortality is highest in the first year of follow up. Patients diagnosed at age 75+ who survive the first year after follow-up, can expect their relative excess risk of death to drop by 71% in the second year ( $p<0.001$ , 95% CI 0.20 – 0.42)

## Key Findings

Reduction in risk of mortality for patients diagnosed in 2005 – 2009 compared to 1995 – 1999

There are no differences by gender and region of residence.

Age at diagnosis and follow up time are significantly associated with excess risk of mortality.

## Conclusions

- While improvements have been made in survival over the past 15 years, a gap in survival for older and younger patients remains.
- Improving the knowledge of this target group to increase screening participation will help early diagnosis

## References

1. Ferlay J, Steliarova-Foucher E, Lortet-Tieulent J, et al. Cancer incidence and mortality patterns in Europe: estimates for 40 countries in 2012. European journal of cancer. 2013;49(6):1374-403.
2. Dickman PW, Sloggett A, Hills M, Hakulinen T. Regression models for relative survival. Stat Med. 2004 Jan 15;23(1):51-64.