

Patients who had been registered with the UK Barrett's Oesophagus Registry from 9 UK centers who did not have prevalent adenocarcinoma (diagnosed at index endoscopy or within one year of the index endoscopy) and who had a minimum of one year of follow-up were included in the study cohort.

The influence of 7 covariates on an individual's risk of development of dysplasia and cancer were examined. These were: 1) date (year) at which surveillance biopsies were undertaken, 2) age of the patient at which surveillance endoscopy and biopsy were undertaken, 3) length of time during which the patient had been undergoing surveillance, 4) patient gender, 5) segment length, 6) histological findings at the most recent (previous) endoscopy and 7) histological findings at first and second endoscopies.

The associations of dysplasia/adenocarcinoma risk with age at surveillance, year of surveillance and duration of surveillance were examined.

The associations between these factors and risk of development of dysplasia or cancer were examined using binary logistic regression. The model was modified to exclude factors which did not reach statistical significance with removal of factors which showed no association with dysplasia or cancer risk. Due to the co-linearity of age, surveillance duration and year of surveillance, only the most closely-associated of these three variables was included in the final analyses.

Incidence calculations were undertaken using a patient-years at risk method and expressed as an annual percentage (cases per one hundred patient-years follow-up) and 95% confidence intervals were evaluated using an exact Poisson distribution. Logistic regression

to ascertain the magnitude of the effect of the covariates was undertaken. P values <0.05 were taken to be statistically significant.