

**Afternoon session 2: Cancer site-specific analyses****14:45 - INTERVAL CANCERS IN A FOBT-BASED COLORECTAL CANCER POPULATION SCREENING PROGRAMME: IMPLICATIONS FOR TUMOUR SITE AND GENDER.**

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**Objectives**

The Scottish Bowel Cancer Screening Programme, based on biennial guaiac faecal occult blood testing (gFOBT) between ages 50 and 74, defines interval cancers as those diagnosed within two years of a negative gFOBT. The majority of interval cancers are probably cancers missed by the screening test either at an invasive or non-invasive (adenoma) stage. Thus, the interval cancer rate is an important performance indicator of a population-based screening programme. Stage, gender and anatomical site distribution, all-cause and cancer-specific survival were compared amongst interval cancers, screen-detected cancers and cancers found in the unscreened population.

**Methods**

Screening records from the three rounds of the screening pilot were linked with confirmed colorectal cancer records (Scottish Cancer Registry). The time between final screening test result and date of diagnosis was used to categorise the cancers. Survival times were calculated for all individuals with colorectal cancers diagnosed within the time periods of the three rounds of the demonstration pilot (follow up to 31st December 2009).

**Results**

In the population with a final screening test result, the percentage of diagnosed cancers that were interval cancers increased in each round of the demonstration pilot. Stage distribution for the screen-detected cancers was significantly more favourable than in either the interval cancers or non-screened cancers in all three rounds. Comparing interval cancers and non-screened cancers, stage distribution was more favourable in the interval cancers only in Round 1. The proportion of cancers diagnosed in females in the screen-detected group was significantly lower than that seen in both the interval and non-screened groups.

**Conclusions**

The interval cancer rate increased steadily from Round 1 to Round 3 but the absolute number of interval cancers varied very little and was in keeping with previous reports. gFOBT tends to underdiagnose cancers in women and may also tend to miss right-sided and rectal cancers.