

# Looking at differences in stage and treatment of colorectal cancers across Italy: a EURO-CARE-5 high resolution study

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## ABSTRACT

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**Aims and background.** The high incidence and the estimate of a five-year relative survival of 59% for colorectal cancer in Italy were the main reasons to investigate the management of Italian patients with colorectal cancer diagnosed in the early 2000s.

**Methods.** Samples of adult ( $\geq 15$  years) patients diagnosed in 2003-2005 with a colorectal cancer were randomly selected in 8 Italian population-based cancer registries. The z test was used to evaluate differences in proportions of Dukes stage, patients with at least 12 examined lymph nodes, and of cases treated with curative surgery plus chemotherapy or plus radiotherapy and diagnosed with colon or rectal tumors, respectively. Logistic regression models were used to estimate odds ratios of receiving the selected treatment in each cancer registry, age group and stage category, by anatomical subsite.

**Results.** A total of 3,938 colorectal cancer patients were analyzed. About 40% of the cases were over 75 years of age at diagnosis and at Dukes A + B stages. Higher proportions of early stages were found in the northern cancer registries. High percentages of resection with a curative intent were observed in Reggio Emilia (northern Italy), in 15 to 74-year-old patients, and at Dukes B stage. At least 12 lymph nodes were more frequently examined in the north of the country. After adjusting for age and stage, no significant differences were seen in the odds ratios of receiving surgery plus chemotherapy between cancer registries, whereas surgery plus radiotherapy was more frequent in Napoli (southern Italy) and less frequent in Biella (northern Italy).

**Conclusions.** Some disparities in staging and treatment of colorectal cancer patients persist across Italy. National oncological plans still need to reduce inequalities in provision and access to proper care.

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**Key words:** colorectal cancer, EURO-CARE, Italy, standard care.

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