

## **Quality evaluation of breast cancer screening canton Ticino in southern Switzerland through cancer registry data**

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### **Background and Introduction**

The breast cancer screening program of canton Ticino, southern Switzerland, is a public service offering every two years a free and quality-controlled screening mammography to all women aged 50-69 years and resident in the mentioned area (about 48 000 women). A specific regional law allocates the screening centre within the Ticino cancer registry, thus permitting data linkage for quality control issue of the screening program. The program activity started progressively in 2015 and 2016 represents the first year of full activity. Aim of the study is to present the results of quality indicators for the breast cancer screening program in canton Ticino in 2016.

### **Materials and Methods**

Quality indicators are calculated as proportion and they are compared with reference values of the European Guidelines for quality assurance in breast cancer screening and diagnosis (EU). Whenever possible data are compared with 2012 Swiss data (CH). Data collection is performed by trained data managers working on both screening and cancer registry database.

### **Results**

In 2016, 25 716 women are invited, 22 540 of them are eligible for a screening mammography and 13 558 perform a mammography. The corrected activity rate of the program is 60%. 92.8% of women receive the result within four working days from the date of the exam (EU: >90% within 10 days). 7.1% of cases are discussed in a Consensus Conference in case of discordance between first and second reading (EU: <7-15%). 14 women (0.1%) repeat the exam due to technical reasons (EU: <1-3%), while 530 women (3.9%) are recalled for additional investigations following a 'positive' result (EU: <3-7%; CH: 3.4-7.8%). The false positive rate is 3.2% (CH: 2.9-7.2%), while 97 women (7.2‰) have a diagnosis of invasive or in-situ breast cancer (CH: 4.9-6.5‰).

### **Conclusions**

The quality control for 2016 of the activity of the breast cancer screening program of canton Ticino shows encouraging results reflecting Swiss data and the recommendations of the European Guidelines.