

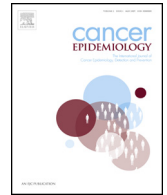


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# Trends in incidence of breast cancer among women under 40 in seven European countries: A GRELL cooperative study

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## ABSTRACT

Young women are not usually screened for breast cancer (BC). The trends in incidence in this population may better reflect changes in risk factors. However, studies on this subject are scarce and heterogeneous. The aim of this study was to describe the trends in incidence of BC in women under 40 from 1990 to 2008, using pooled European data. Thirty-seven European population-based cancer registries from Belgium, Bulgaria, France, Italy, Portugal, Spain and Switzerland participated in this study. World age-standardized incidence rates were first analyzed graphically and then using a Poisson regression model, in order to estimate average annual percent changes (AAPCs). The overall incidence rate of BC in the area covered increased linearly during the study period by 1.19% (0.93; 1.46) on average per year. This increase varied between countries from 0.20% (−0.53; 0.64) in Bulgaria to 2.68% (1.97; 3.40) in Portugal. In Italy, after a significant rise of 2.33% (1.14; 3.54) per year, BC incidence began decreasing in 2002 by −2.30% (−4.07; −0.50) yearly. The rise in incidence was greater for women under 35 and for ductal carcinomas. This increase can be due to a rise in risk factors and/or changes in diagnosis and surveillance practices, but we could not clearly distinguish between these two non-exclusive explanations.