Opportunistic screening strategy for cutaneous melanoma does not change the incidence of nodular and thick lesions nor reduce mortality: a population-based descriptive study in the European region with the highest incidence Andrea Bordoni^a, Sandra Leoni-Parvex^b, Simona Peverelli^a, Paola Mazzola^a, Luca Mazzucchelli^b and Alessandra Spitale^a

The aim of the present population-based descriptive study was to evaluate the incidence and mortality trends for melanoma to gain insights on the effectiveness of opportunistic secondary prevention strategies. Data on all invasive cutaneous melanoma cases occurring between 1996 and 2011 were retrieved from the Ticino Cancer Registry, southern Switzerland. The European agestandardized incidence rates were computed by the period of diagnosis, Breslow thickness and histological types. Trends in incidence and mortality rates were measured as the annual per cent change (APC). A total of 1230 patients had a diagnosis of invasive cutaneous melanoma. Cases were categorized as follows: superficial spreading melanoma (55.7%), nodular melanoma (10.0%), lentigo maligna melanoma (5.5%), melanoma not otherwise specified (25.2%) and other types (3.6%). The incidence rate of invasive melanoma rose from 17.4 per 100 000 inhabitants in 1996-2003 to 20.6 in 2004-2011, with an overall APC of +2.1% [95% confidence interval (CI): -0.8%. +5.1%]. An increase in incidence was observed for superficial spreading melanoma (APC = + 2.9%; 95% CI: -1.1%, +7.0%) and thin melanomas (i.e. ≤ 1.00 mm) (APC = +3.4%; 95% CI: +0.2%, +6.7%), whereas we

detected a descriptive growing incidence of thick melanomas (APC= + 2.1%; 95% Cl: -1.4%, +5.8%). Mortality trend analysis revealed constant rates throughout the study period (APC= -1.0%; 95% Cl: -5.5%, +3.7%). This population-based study confirms that in a country with the highest incidence of cutaneous melanomas, that is, Switzerland, the opportunistic screening strategy does not change the incidence of thick melanomas nor the overall mortality. This study suggests there is still a need for public health efforts in primary and secondary prevention. *Melanoma Res* 23:402–407 © 2013 Wolters Kluwer Health | Lippincott Williams & Wilkins.

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