

## Strong seasonality in the diagnosis of skin melanoma in Italy: the Italian Network of Cancer Registries (AIRTUM) study

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### ABSTRACT

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**Aim.** To evaluate seasonality in the diagnosis of cutaneous melanoma in Italy.

**Methods.** A total of 16,284 invasive (and 1,235 *in situ*) cutaneous melanomas incident from 1978 to 2002 in 14 cancer registries belonging to the Italian Network of Cancer Registries (AIRTUM) was analyzed. We used the Walter and Elwood test to evaluate seasonality. The monthly distribution of diagnosis was evaluated for sex, skin site, melanoma morphology and period of diagnosis.

**Results.** The overall monthly diagnosis of invasive melanoma showed a statistically significant excess around the month of June. The same pattern was present for males and females, across age-groups and periods of time. All skin sites showed a cycling trend, melanoma of the head and neck peaked around April, all the others peaked around June. As regards morphologic types, a cyclic trend was evident for superficial-spreading melanomas (peak around July), for not-specified melanomas (June) and for other histotypes (June). Diagnosis of *in situ* melanoma peaked in September.

**Conclusions.** The present study showed that also in Italy melanoma diagnosis has a seasonal trend, with the peak in early summer. It seemed that summer UV exposure, acting both as a late promoter of malignant melanoma development and also increasing the visibility of pigmented skin lesion, may be relevant to explain such a peak.

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**Key words:** diagnosis, melanoma, population-based, seasonality.

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