Meta-analysis of digital dermoscopy follow-up of melanocytic skin lesions: a study on behalf of the International Dermoscopy Society

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Abstract
It has been demonstrated that dermoscopic monitoring of melanocytic lesions allows for the recognition of melanoma in early stages while minimizing the excision of benign lesions. However, it is still pending to determine the real impact of digital follow-up in the clinical management of pigmented lesions. To assess the evidence of follow-up of melanocytic skin lesions with digital dermoscopy in the management of individuals at risk for melanoma by performing a meta-analysis. Medline database was screened, no limits in terms of date or language were applied. Original studies were selected when the following criteria were met: performed in clinical setting with clinical and dermoscopic evaluation made by physicians, data regarding population characteristics included, follow-up strategy used described. Fourteen of 145 retrieved references were retained. Included studies account for a total of 5787 patients (mean 445 per study) and 52 739 lesions monitored (mean per study 4057; range 272–11 396) with a mean of 12 lesions monitored per patient; a total of 4388 lesions (8.3%) were excised. The mean length of follow-up was 30 months. A mean of <1 lesion was excised per patient along the surveillance period. The number needed to monitor (NNM) ranged from 31 to 1008 (mean: 348) among eligible studies. For every additional month of monitoring, 1 additional melanoma was detected. Using digital dermoscopy follow-up, the proportion of in situ melanoma and thin melanomas are higher than expected in general population. Chances to detect a melanoma during surveillance increase as the length of follow-up extends.

Conflict of interest
None reported.

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