



*Fig. S2.* Lentigo maligna (LM) in the cheek area surrounded by benign lentigines (patient 8). (a) Lesion in Wood's light showing inaccurate lesion margins (arrow), (b) HIS abundance map detecting only the cranial part of the lesion as LM (arrow), (c) Sites of the punch biopsies, (d) Histological image (HE staining, magnification  $\times 20$ ) of biopsy No. 1 showing histological findings of LM: atypical melanocytes at the dermal-epidermal junction and intraepidermally. Solar elastosis is present. Histologically only the cranial part of the lesion (biopsy No. 1) was verified as LM and the caudal part (biopsy No. 2) was a benign lentigo. The wide excision of the lesion verified these results.