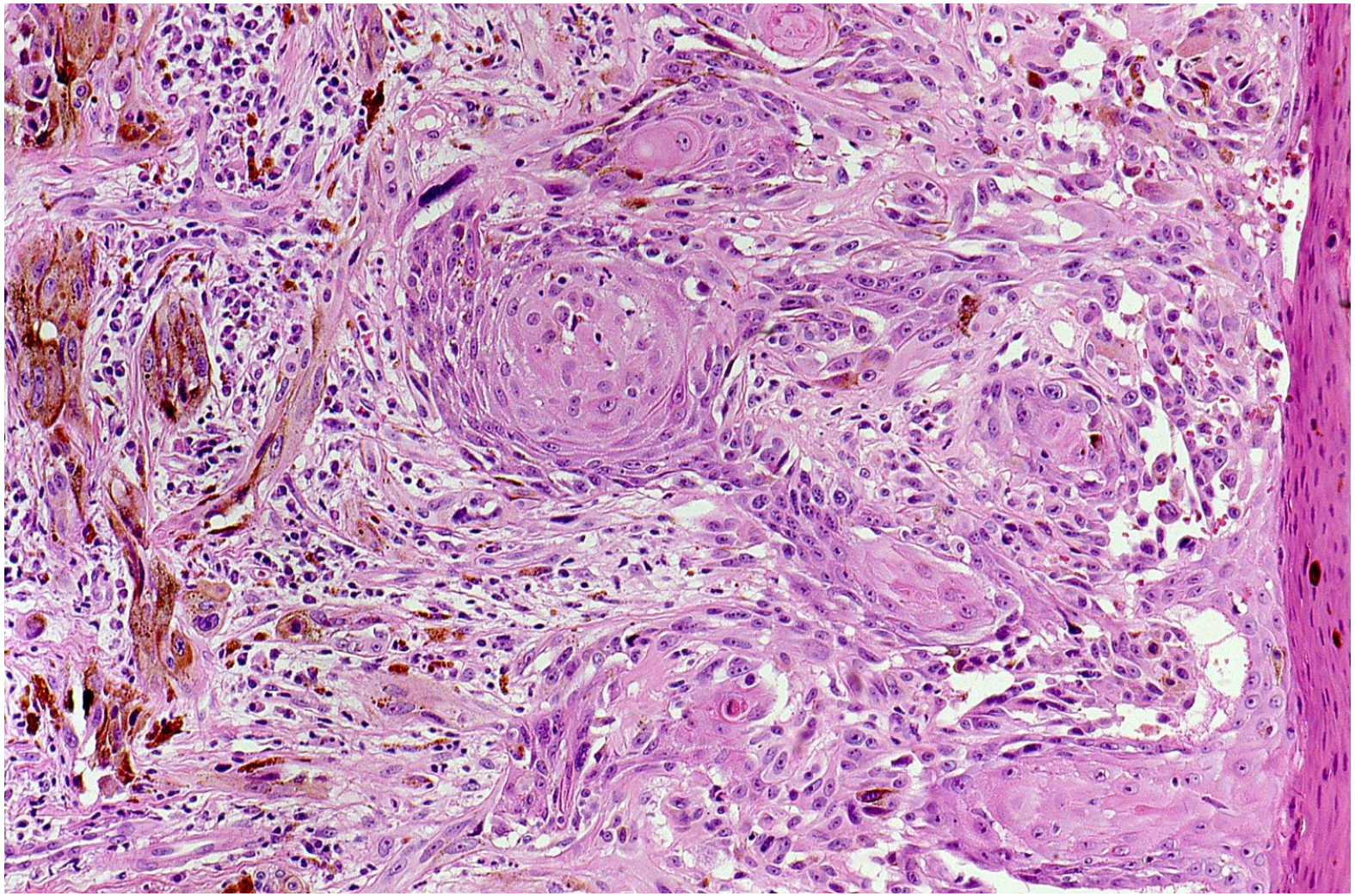
Lentigo maligna melanoma of the gum

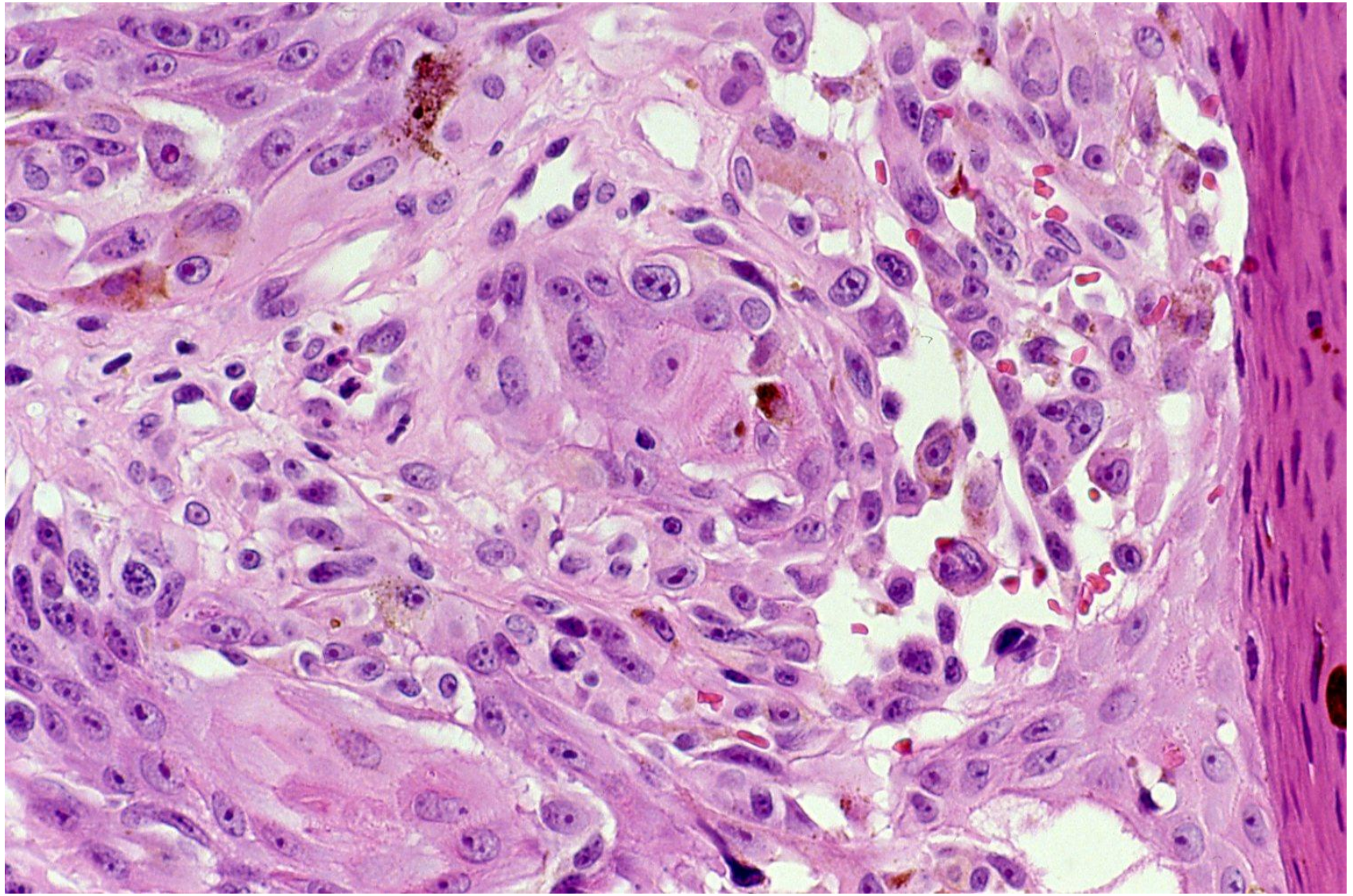
Lentigo maligna represents melanoma *in situ* with the potential for invasive growth as lentigo maligna melanoma. The lesions tend to occur after the age of 65 years on chronically sun-exposed areas. Mucosal occurrence is exceptional. Microscopically, proliferation of intraepidermal/intramucosal melanocytes exhibiting crowded growth along the basal epidermis. Pagetoid scatter (melanocytes above the basal layer) is associated. Irregularly distributed tumor cell nests occupy the elongated rete ridges, and underlying invasive component is observed. The melanoma cells express S-100 protein, HMB45, Melan A (MART-1), SOX10 and MiTF.

Ref.-1: Gillam J, et al. Lentigo maligna melanoma. PathologyOutlines.com website.2025. https://www.pathologyoutlines.com/topic/skintumormelanocyticlentigomaligna.html

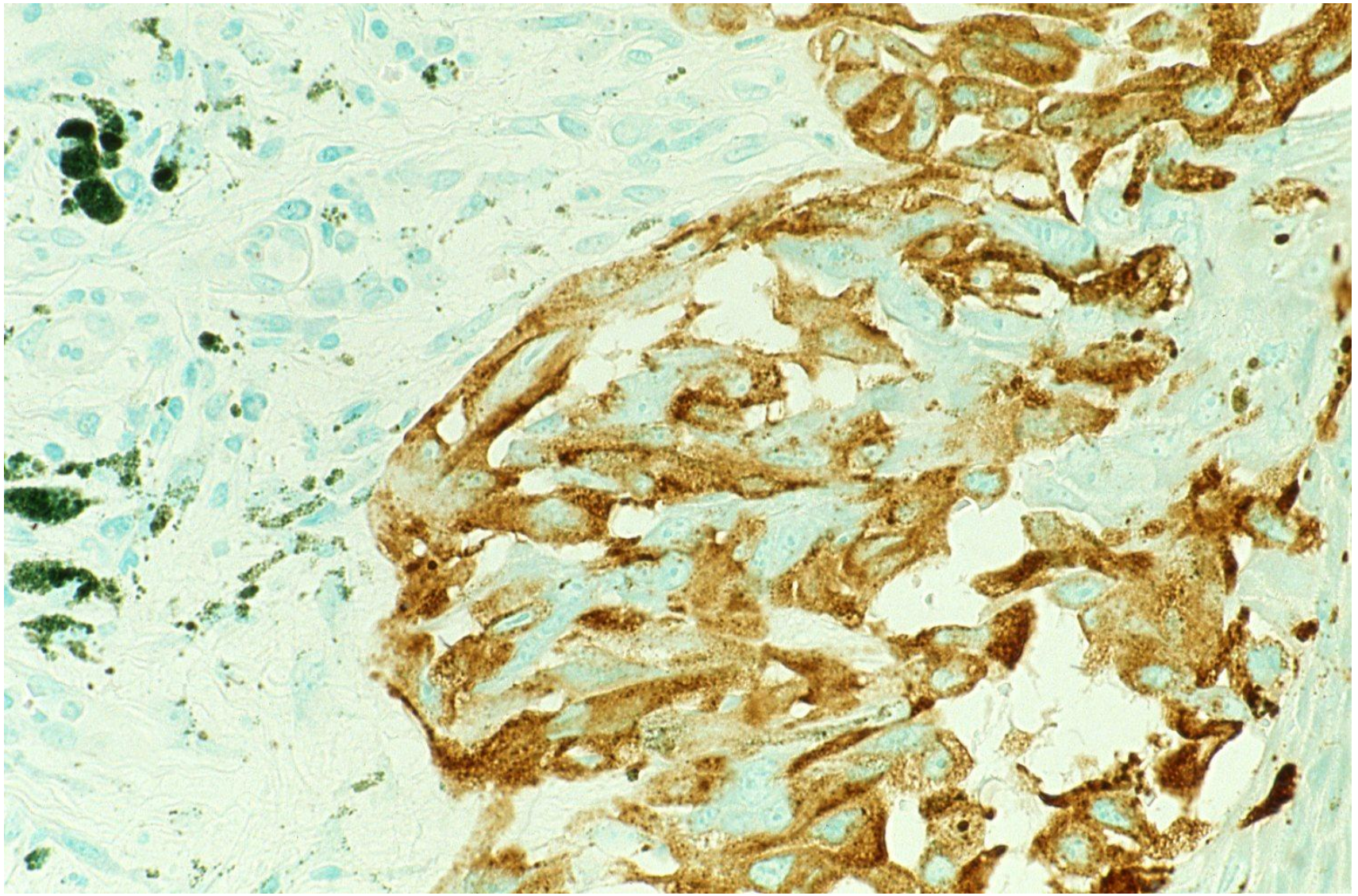
Ref.-2: Kroumpouzos G, et al. Lentigo maligna with spread onto oral mucosa. Arch Dermatol 2002; 138(9): 1216-1220. doi: 10.1001/archderm.138.9.1216



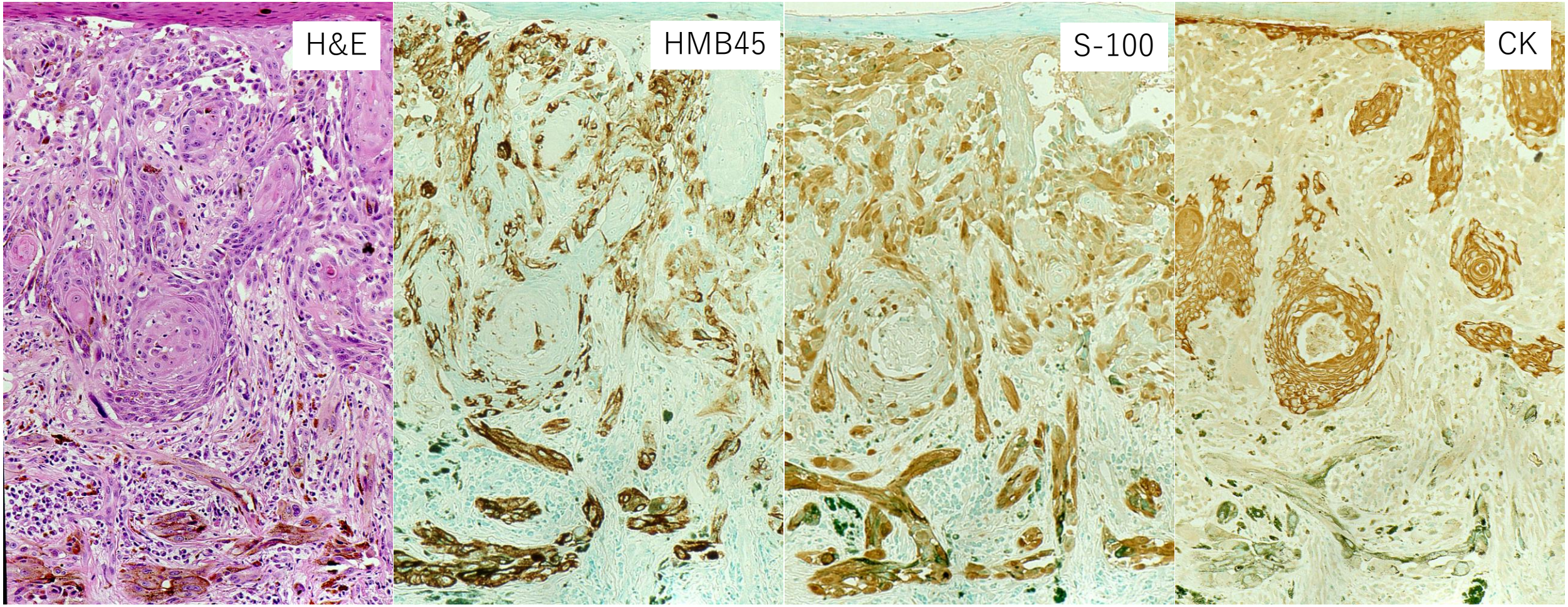
Lentigo maligna melanoma of the gum of a 43 y-o female patient. Intramucosal growth of melanoma cells are seen in the basal and parabasal layers, replacing the elongated rete ridges. Pagetoid suprabasal extension is associated. In the upper dermis, invasion of melanin-producing melanoma cells is observed (H&E-1).



Lentigo maligna melanoma of the gum of a 43 y-o female patient. Higher-powered view of the intramucosal growth of melanoma cells, some with melanin production, is shown. The melanoma cells grow along the basal and parabasal layers of the elongated rete ridges. Pagetoid suprabasal extension is associated (H&E-2).



Lentigo maligna melanoma of the gum of a 43 y-o female patient. Intramucosally growing melanoma cells are strongly immunoreactive for HMB45. Melanin pigment phagocytized by melanophages in the upper dermis reveals green-colored metachromasia (immunostaining for HMB45 with methylgreen nuclear staining).



Lentigo maligna melanoma of the gum of a 43 y-o female patient. Comparative presentation of H&E and immunostaining. The melanoma cells express HMB45 and S-100 protein. Cytokeratin (CK) is demonstrated with anti-keratin antiserum (wide spectrum). Massive intramucosal growth of the HMB45- and S-100 protein-immunoreactive melanoma cells is confirmed by the lack of CK-immunoreactive keratinocytes, The dermal invasive melanotic lesions demonstrated by immunostaining for HMB45 and S-100 protein are negative for CK.