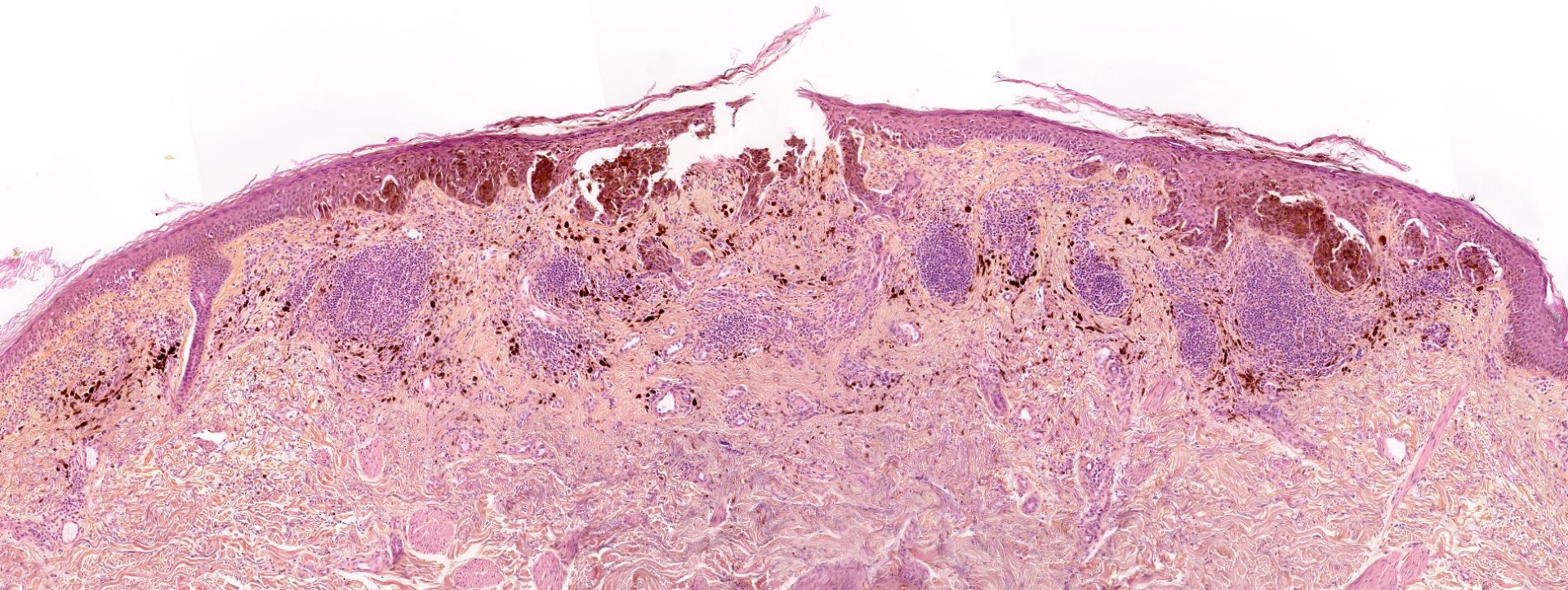


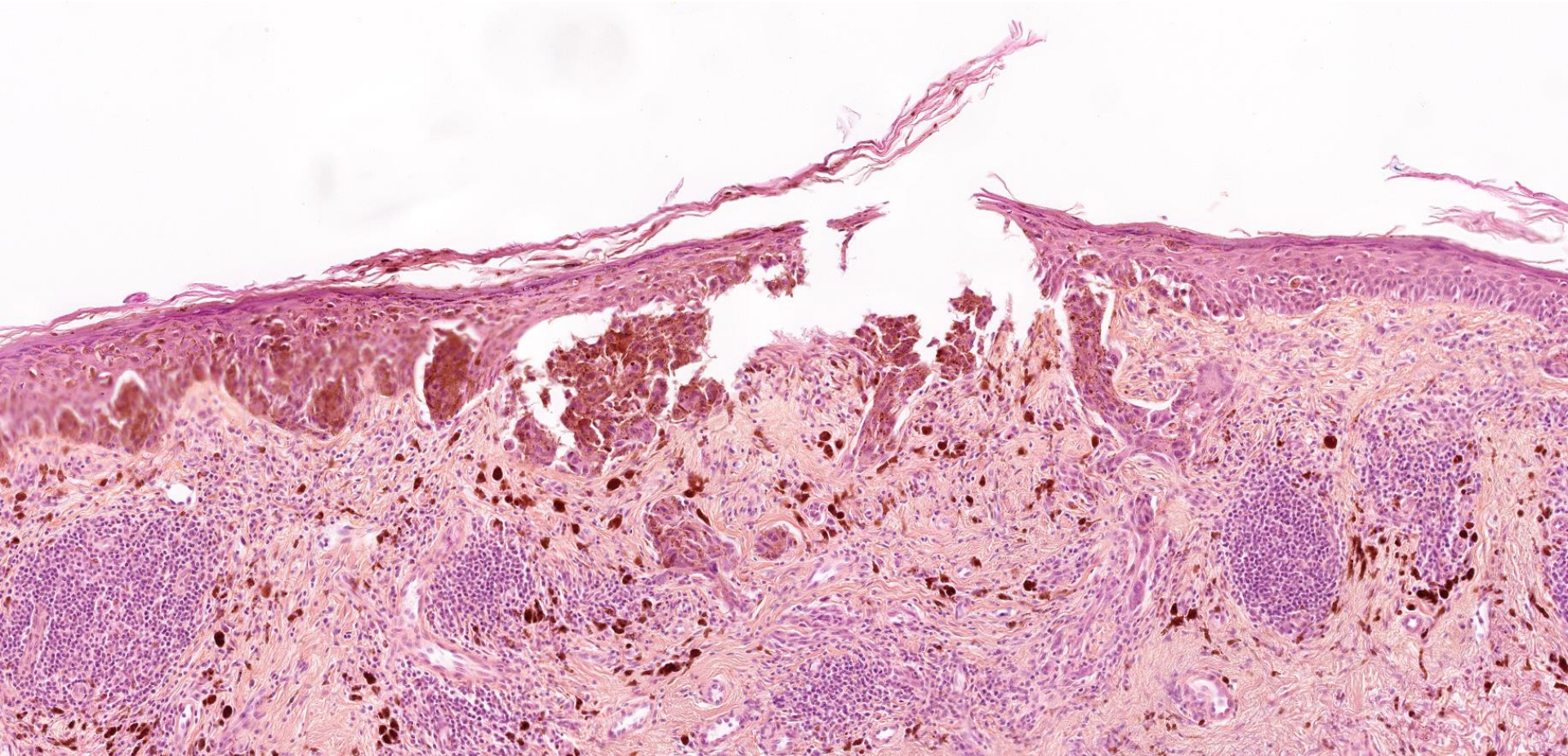
Case 3

61 year-old male with
lesion on right forearm

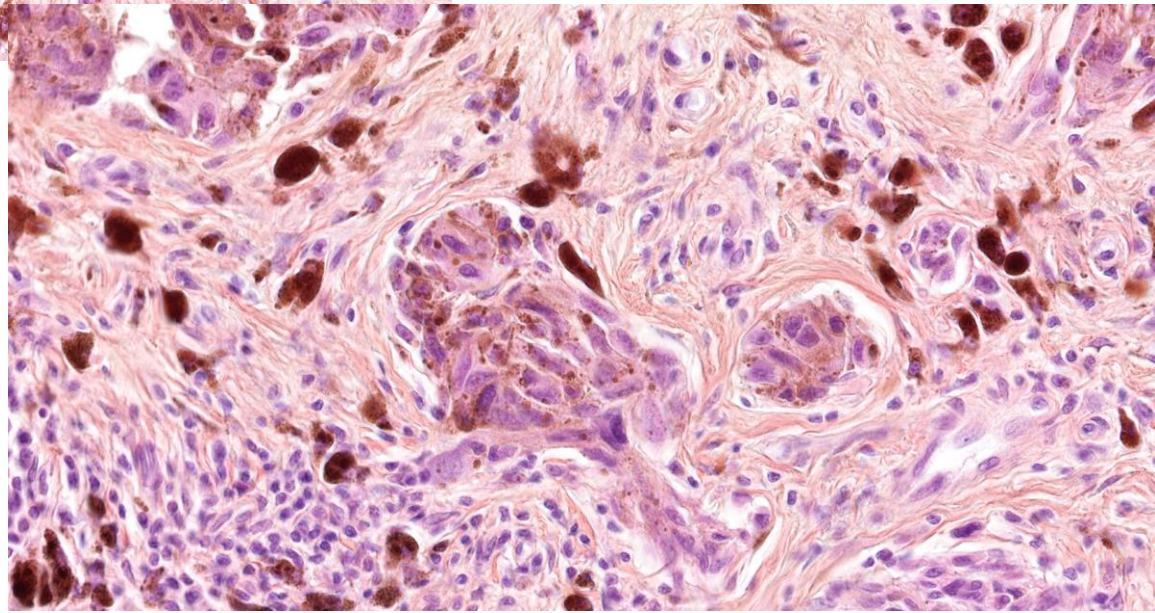
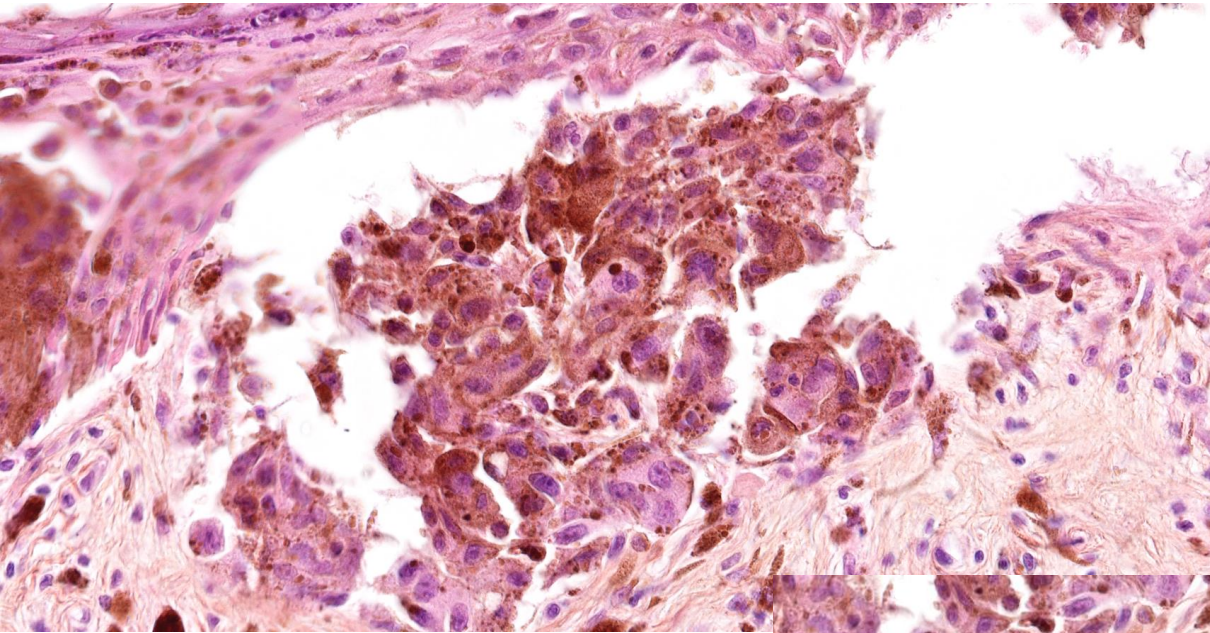
Histopathological Features



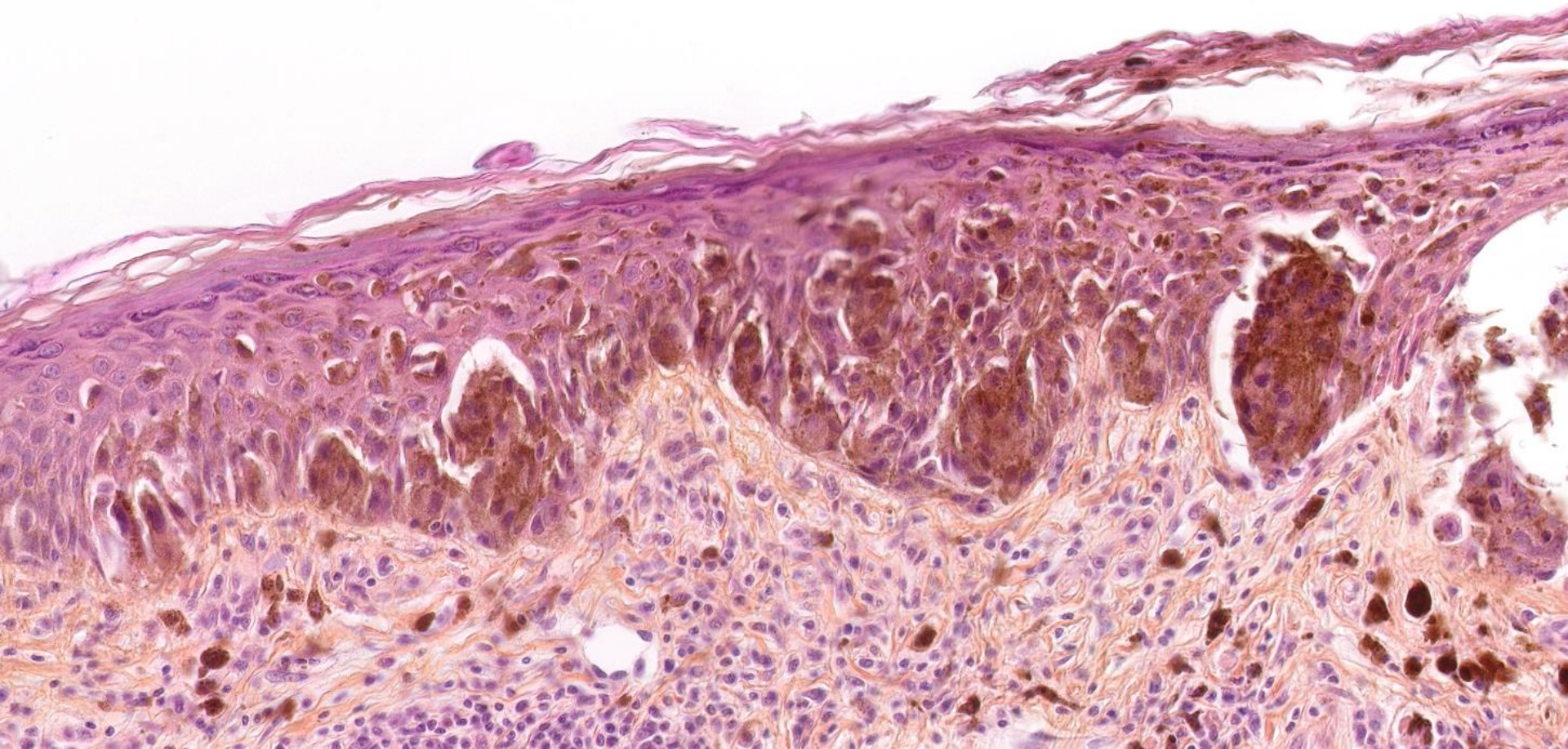
Histopathological Features



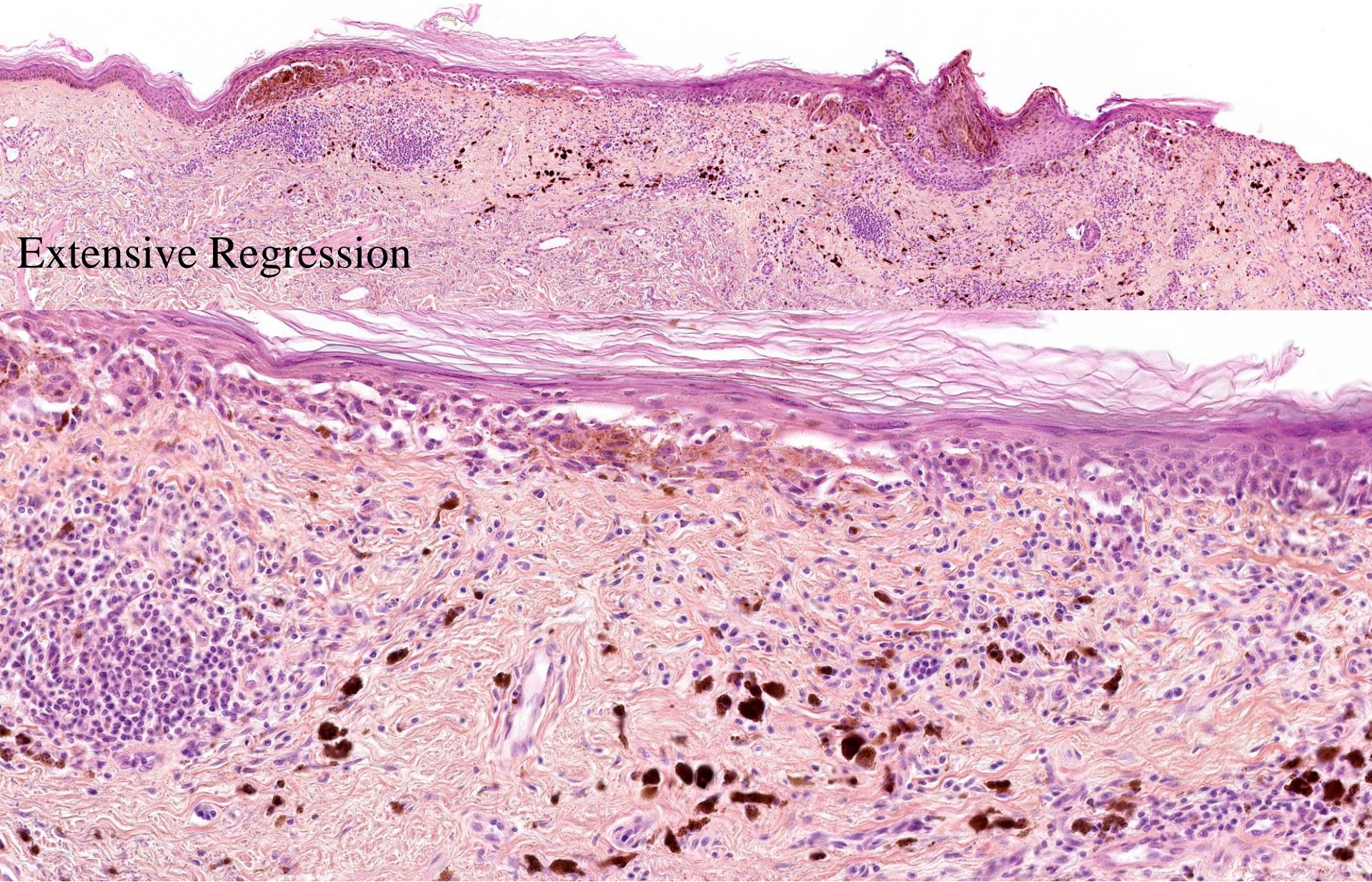
Histopathological Features



Histopathological Features

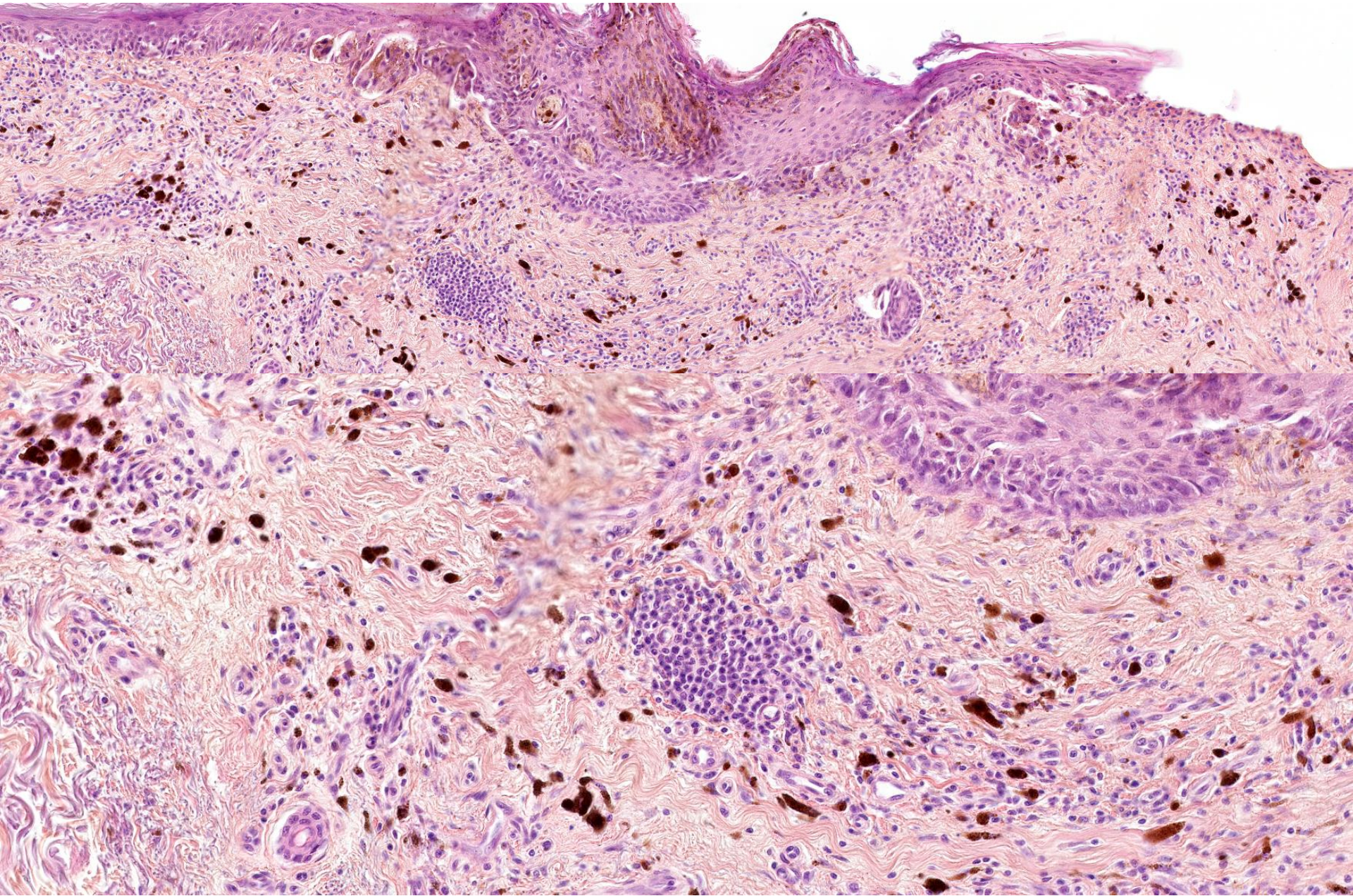


Histopathological Features



Extensive Regression

Histopathological Features



Histopathological Features

- 6 mm diameter
- Asymmetrical
- Pagetoid spread, extensive
- Irregular, discohesive junctional nesting
- Dermal-epidermal cleavage
- Extensive effacement of epidermis
- Atypical pigmented spindle and epithelioid melanocytes
- Breslow 0.5 mm
- Level II
- No vertical growth phase*
- No ulceration*
- Host response with regression*
- No mitoses*
- Marked solar elastosis

1. What is the most likely diagnosis?

- a. Severely atypical pigmented spindle cell nevus/tumor
- b. Melanoma pT1a with regression
- c. Dysplastic nevus, previously treated
- d. Other melanocytic lesion

2. What would you do next?

- a. Verify all clinical information available.
- b. Telephone the dermatologist who took the specimen.
- c. Telephone your mother for advice.
- d. Discuss the case with a colleague.

2. What would you do next?

- a. **Verify all clinical information available.**
- b. **Telephone the dermatologist who took the biopsy.**
- c. **Telephone your mother for advice.**
- d. **Discuss the case with a colleague.**

Clinical Information

- Clinical history:
 - Patient has > 100 nevi on body
 - History of extensive sun exposure
 - Germline mutation: CDKN2a
- Dermatologist said lesion has
 - Diameter of 7 x 6 mm
 - Asymmetry
 - Notched borders
 - Variegated and multiple colors
- Dermatologist's clinical diagnosis: melanoma

2. What studies would you perform?

- a. PRAME
- b. p16
- c. Melan-A
- d. All of the above
- e. None of the above

2. What IHC studies would you perform?

- a. PRAME
- b. p16
- c. Melan-A
- d. All of the above**
- e. None of the above

Clinical Course

- Wide excision
- Lymph node metastases and
- Cerebral metastases in the next year
- Death at two years follow up

1. What is the most likely diagnosis?

- a. Severely atypical pigmented spindle cell nevus/tumor
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1. What is the most likely diagnosis?

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pT1a Melanoma Risk Factors

- Vertical growth phase (or anatomic level III and greater)
- Ulceration (upstaging to pT1b)
- Dermal mitotic activity
- Extensive regression, generally $> 50\%$ of melanoma**
- Angiotropism
- Lymphovascular invasion

Histological Characteristics of Metastasizing Thin Melanomas

A Case-Control Study of 43 Cases

Joan Guitart, MD; Lori Lowe, MD; Michael Piepkorn, MD, PhD; Victor G. Prieto, MD, PhD;
Michael S. Rabkin, MD, PhD; Salve G. Ronan, MD†; Christopher R. Shea, MD; Victor A. Tron, MD;
Wain White, MD; Raymond L. Barnhill, MD

Arch Dermatol 2002

Extensive Regression ($\geq 50\%$ of Tumor)

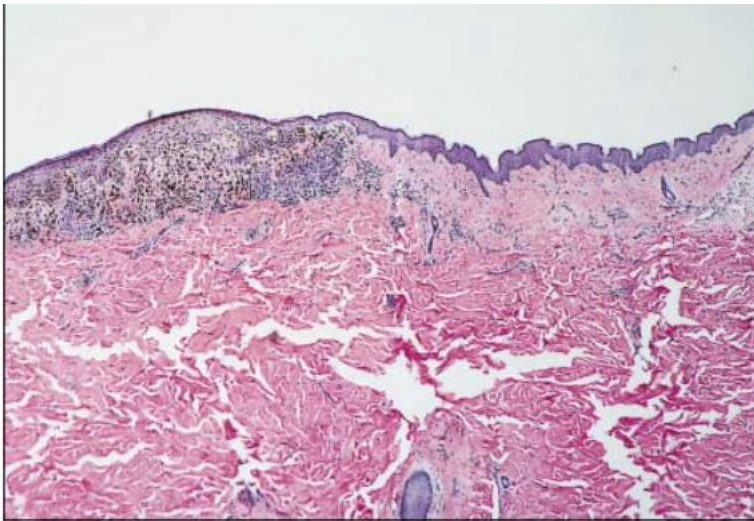


Figure 3. Low-power view of a metastasizing thin melanoma showing extensive areas of regression and melanoderma (hematoxylin-eosin, original magnification $\times 50$).

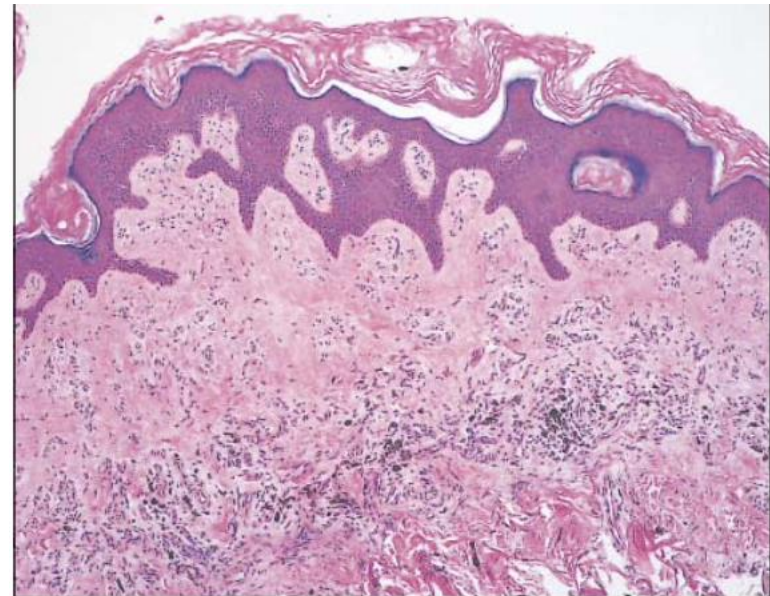


Figure 5. Expansion of the papillary dermis in an area of extensive regression and fibrosis with scattered lymphocytes and melanophages (hematoxylin-eosin, original magnification $\times 50$).

Metastasizing pT1a and pT1b Melanomas without risk factors

- Potential sampling error
- Presence of melanoma at another site
- Angiotropism/lymphovascular invasion.
- The biology of melanoma has not been completely elucidated.