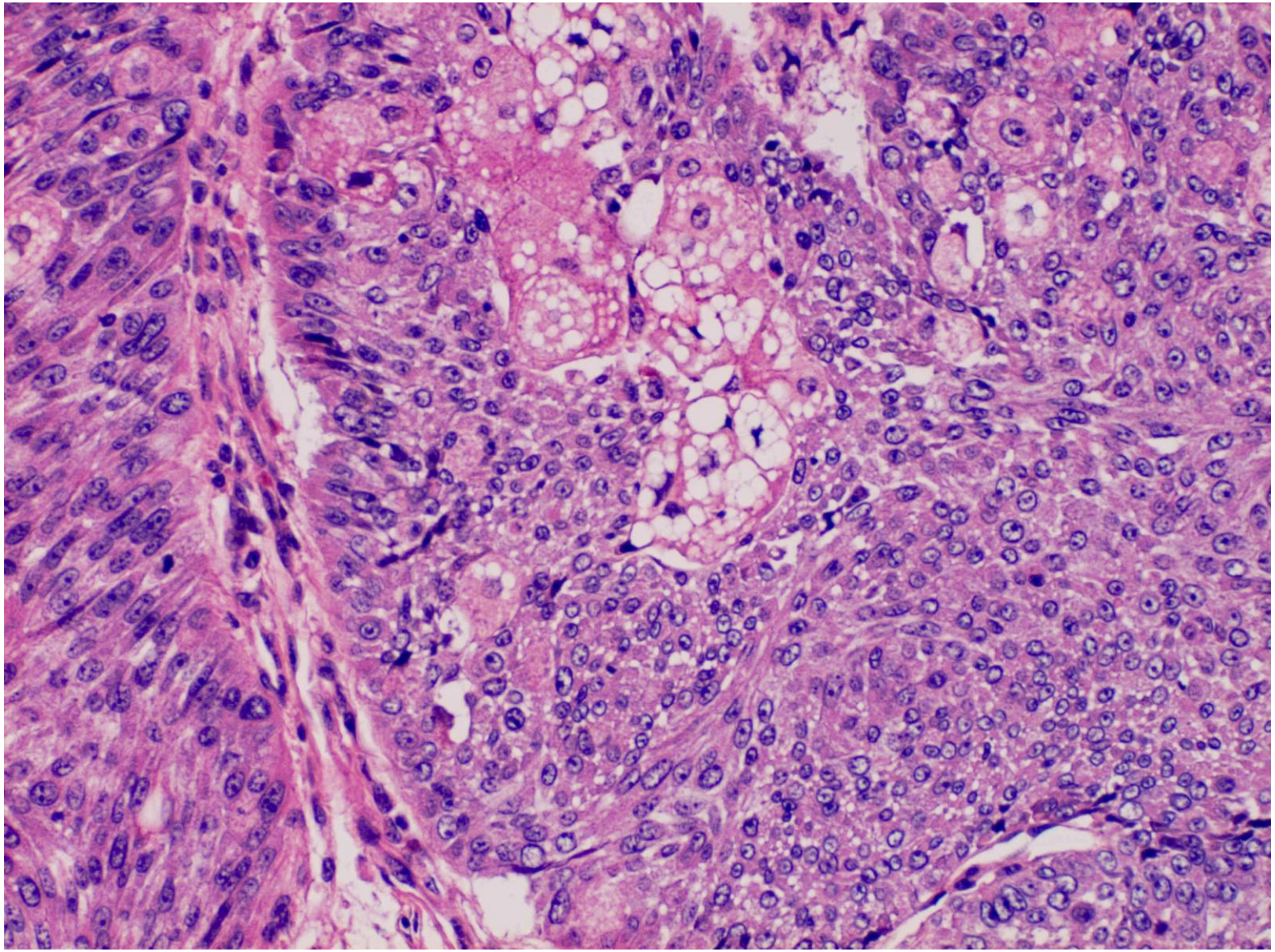
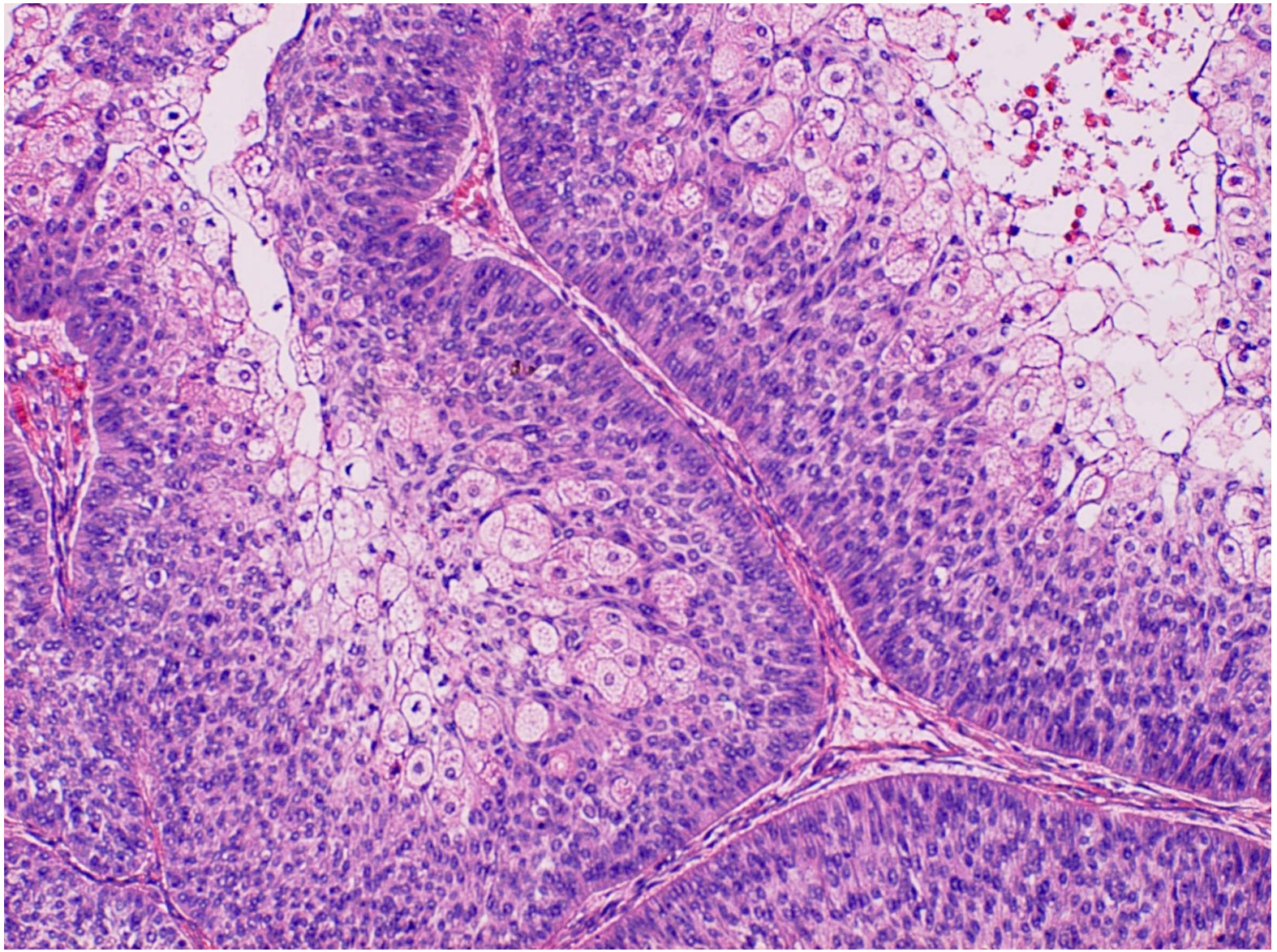
Sebaceous gland carcinoma, extraocular type

Sebaceous gland carcinoma (sebaceous carcinoma), a malignant neoplasm with sebaceous differentiation, is classified into periocular (meibomian: 75%) and extraocular (25%) types. It mostly occurs in elderly patients with an equal gender distribution, while the periocular type shows a female predominance. The primary treatment is surgical excision. The extraocular type occurs on the head and neck mostly, then infrequently on the trunk, extremities, genitalia, and external auditory meatus. Microscopically, the sebaceous tumor forms sheets or lobules separated by fibrovascular stroma. Connection to the epidermis or follicular epithelium can be identified. Pagetoid extension may be seen particularly in the ocular type. Immunohistochemical markers include AR, adipophilin, EMA, CD15 (LeuM1) and BerEP4. p53 may be expressed in the nuclei. CEA and S-100 protein are negative.

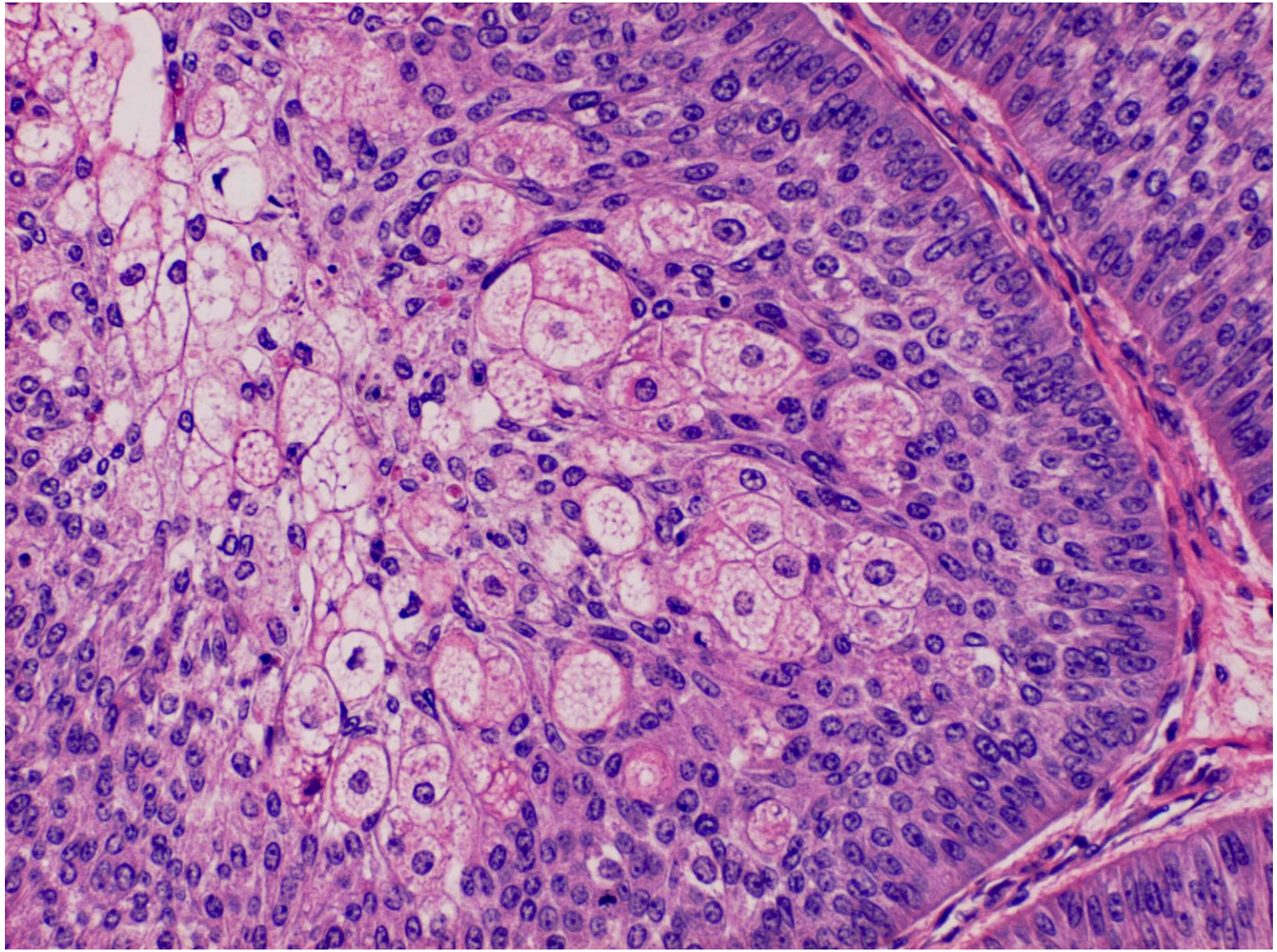
Ref.: Zada S, Lee BA. Sebaceous carcinoma. PathologyOutlines.com website. 2025. https://www.pathologyoutlines.com/topic/skintumornonmelanocyticsebaceouscarcinoma.html



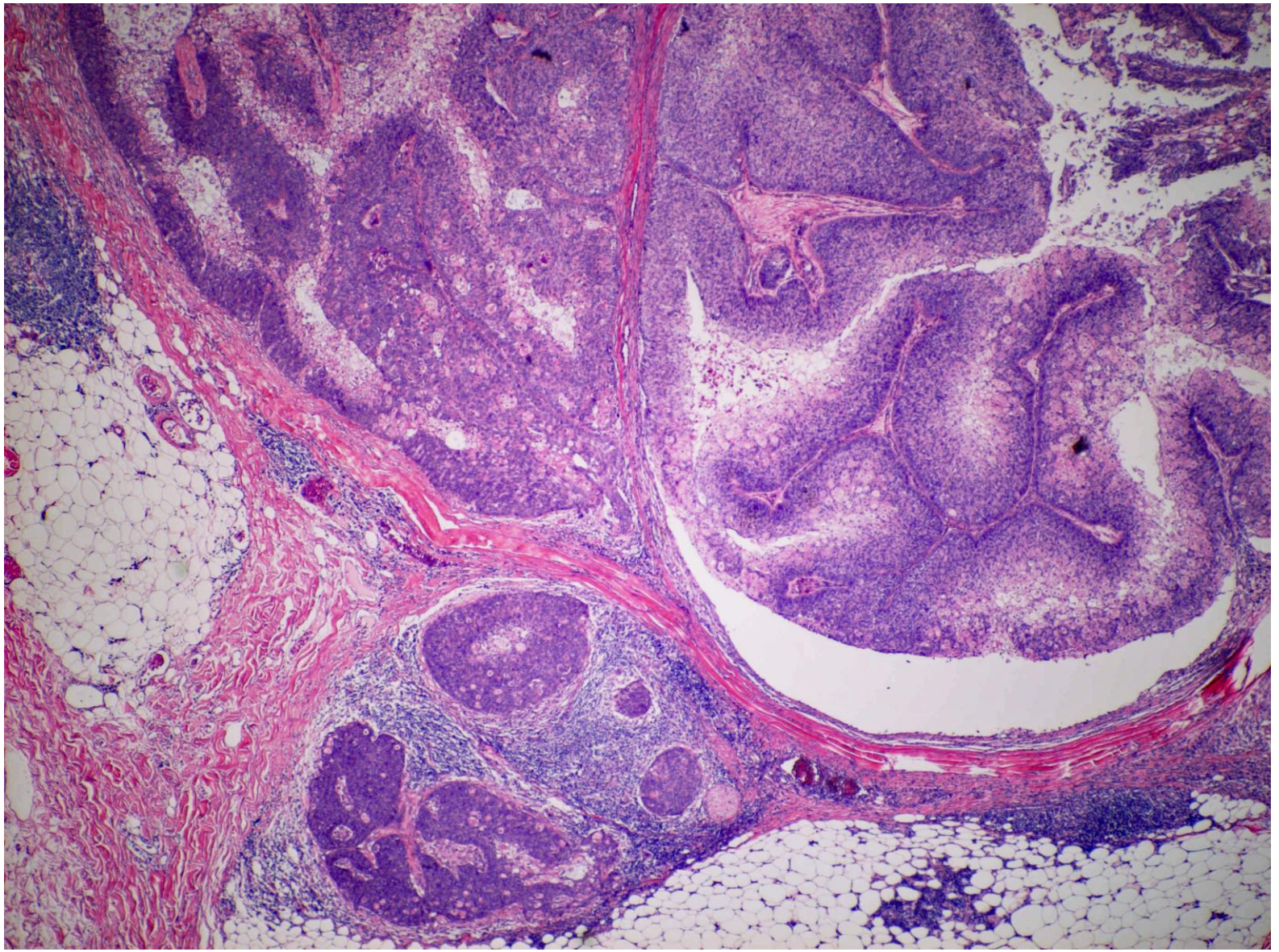
Sebaceous gland carcinoma in the back of a 76 y-o female patient. Sebaceous differentiation is seen in the center of the invasive cancer nest (H&E-1).



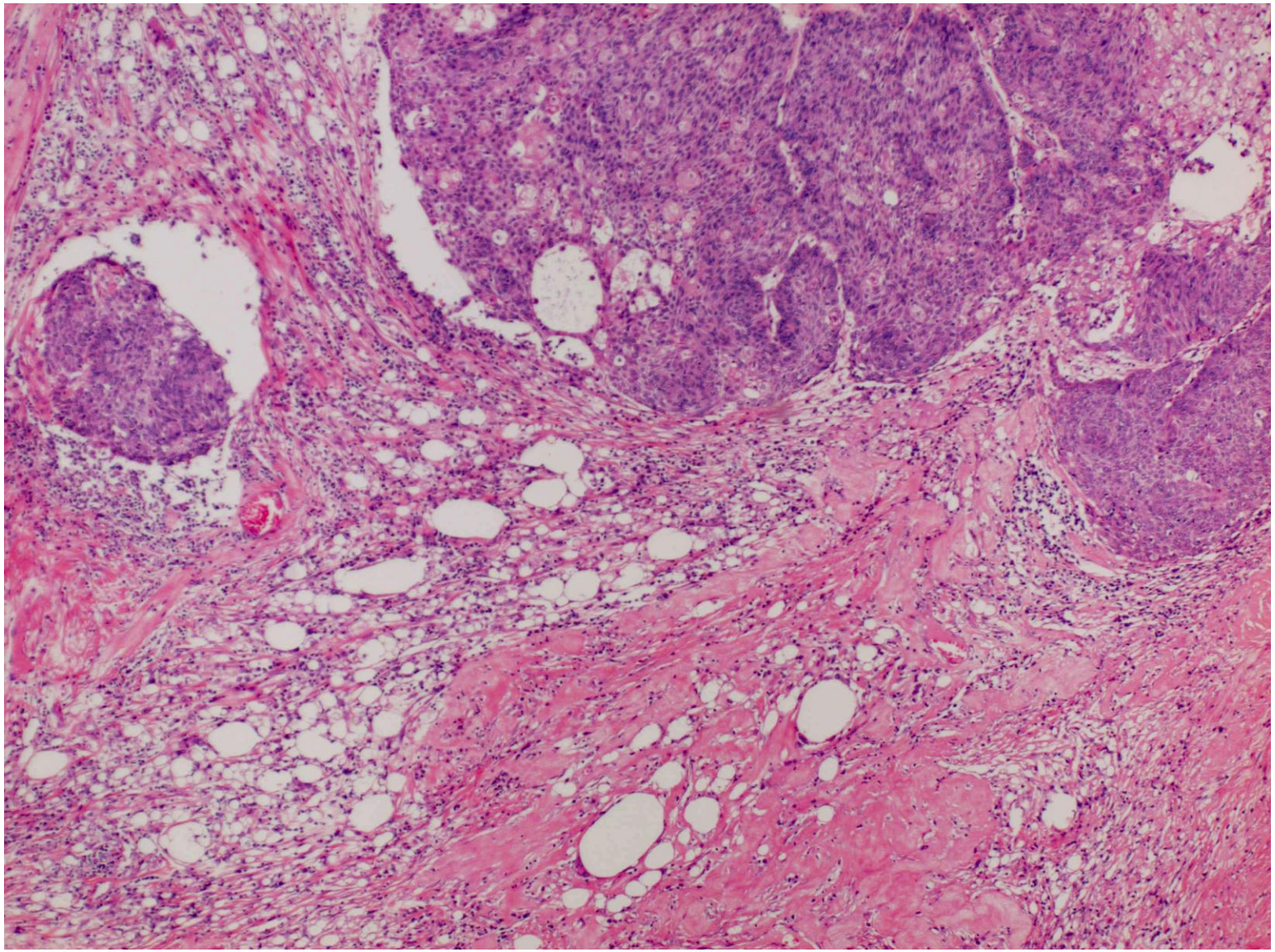
Sebaceous gland carcinoma in the back of a 76 y-o female patient. Sebaceous differentiation is seen in the center of the invasive cancer nests (H&E-2).



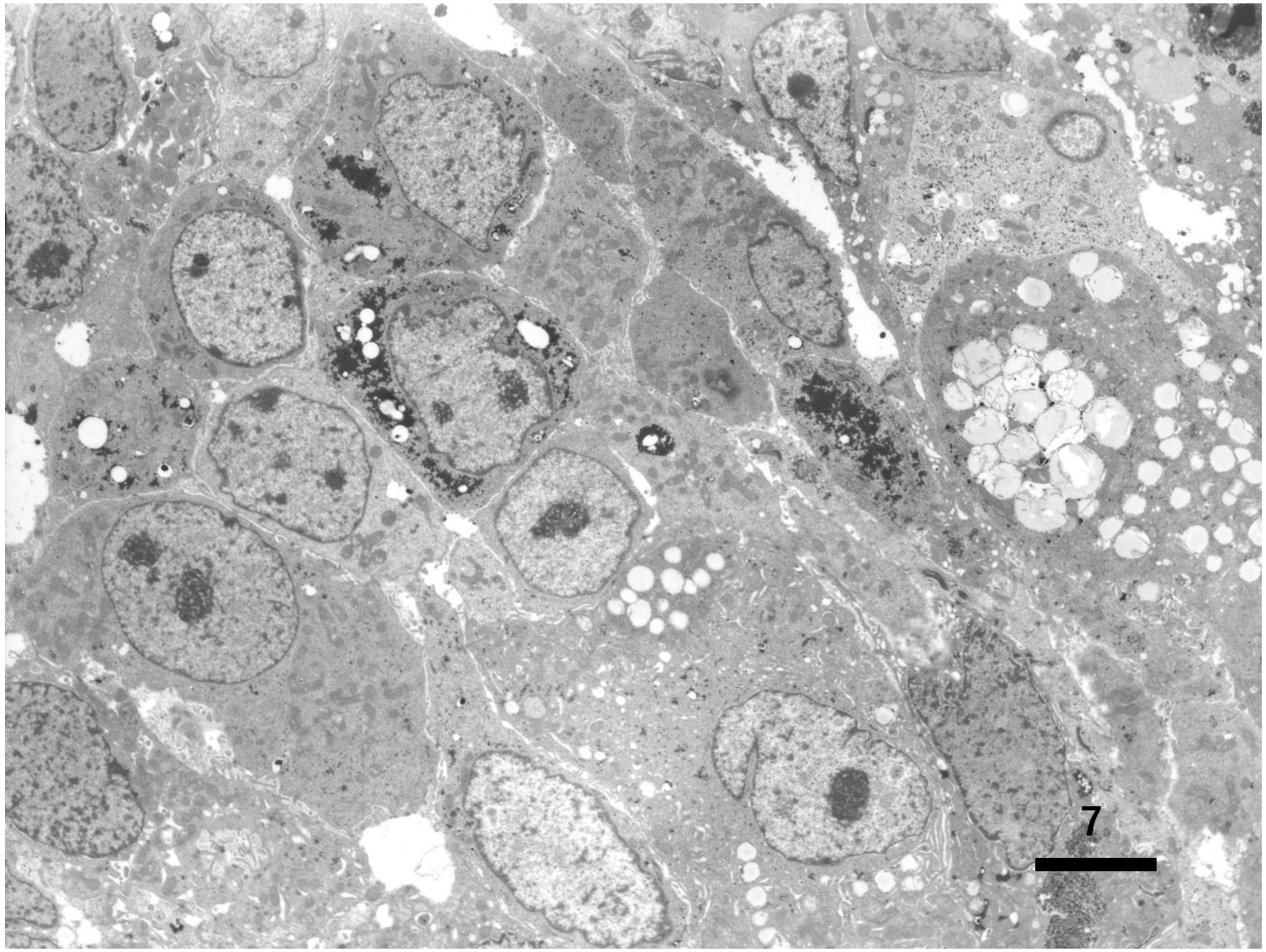
Sebaceous gland carcinoma in the back of a 76 y-o female patient. Sebaceous differentiation is seen in the center of the invasive cancer nests (H&E-3).



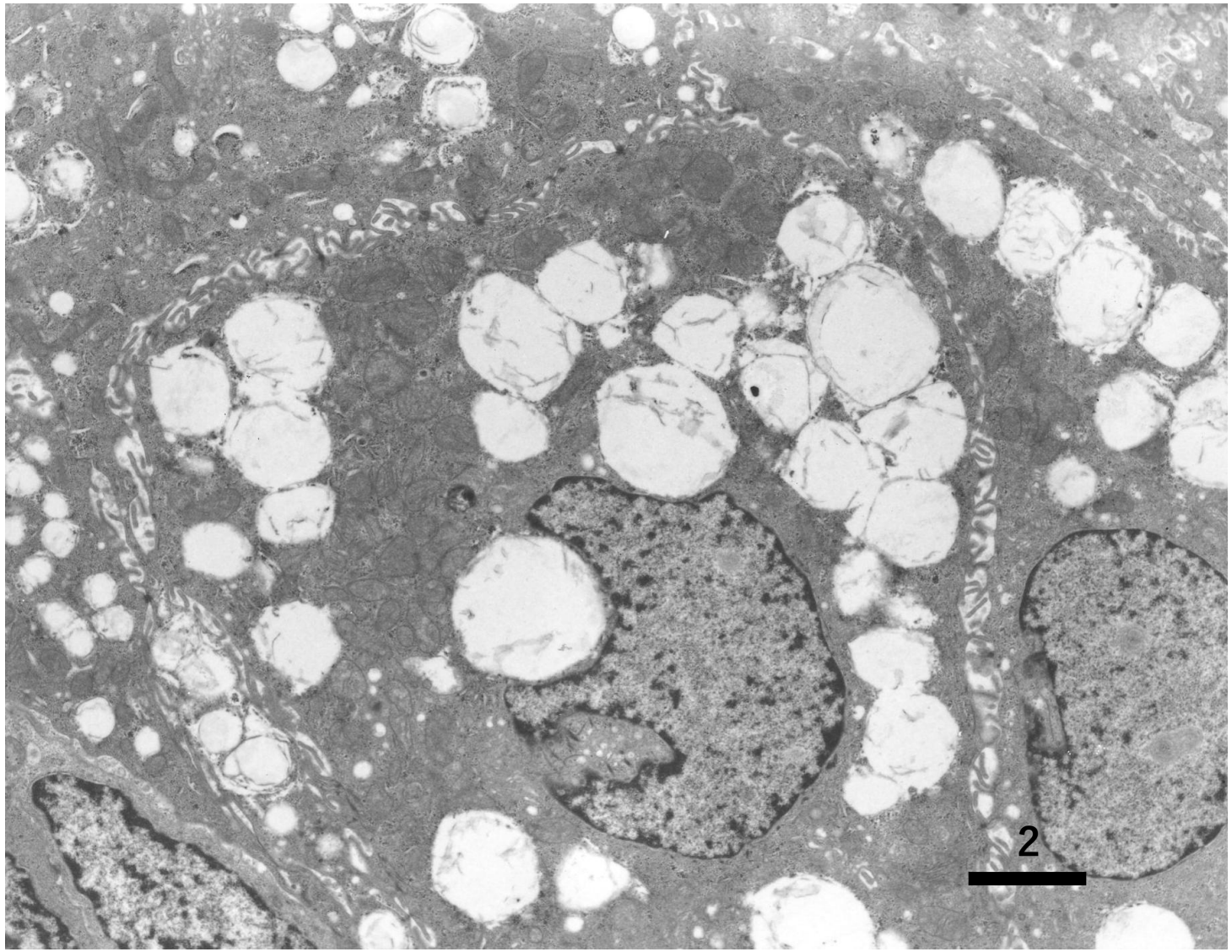
Sebaceous gland carcinoma in the back of a 76 y-o female patient. Papillary configurations are seen in invasive carcinoma with sebaceous differentiation (H&E-4).



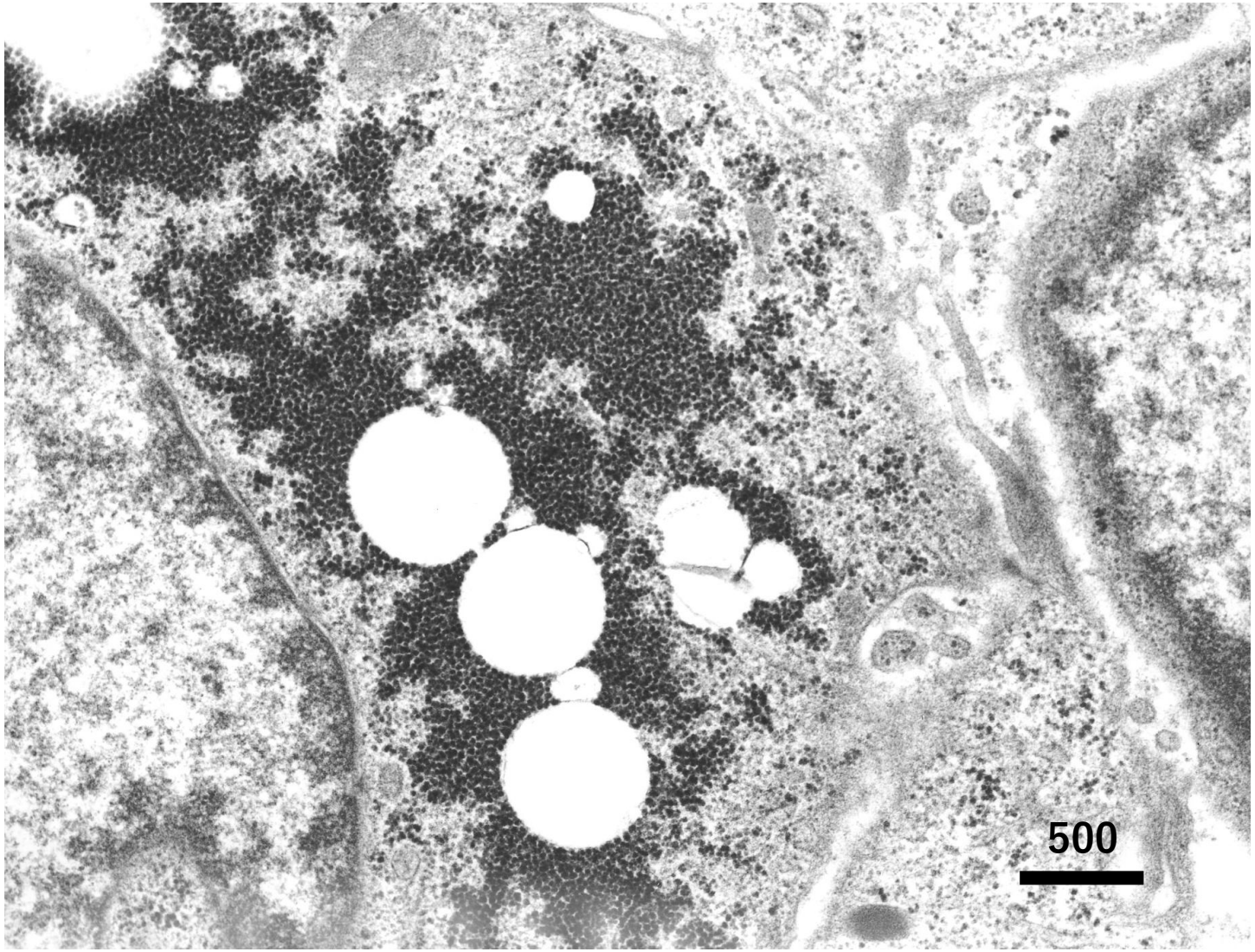
Sebaceous gland carcinoma in the back of a 76 y-o female patient. Underneath of the invasive cancer cells with sebaceous differentiation, xanthogranulomatous reaction is observed (H&E-5).



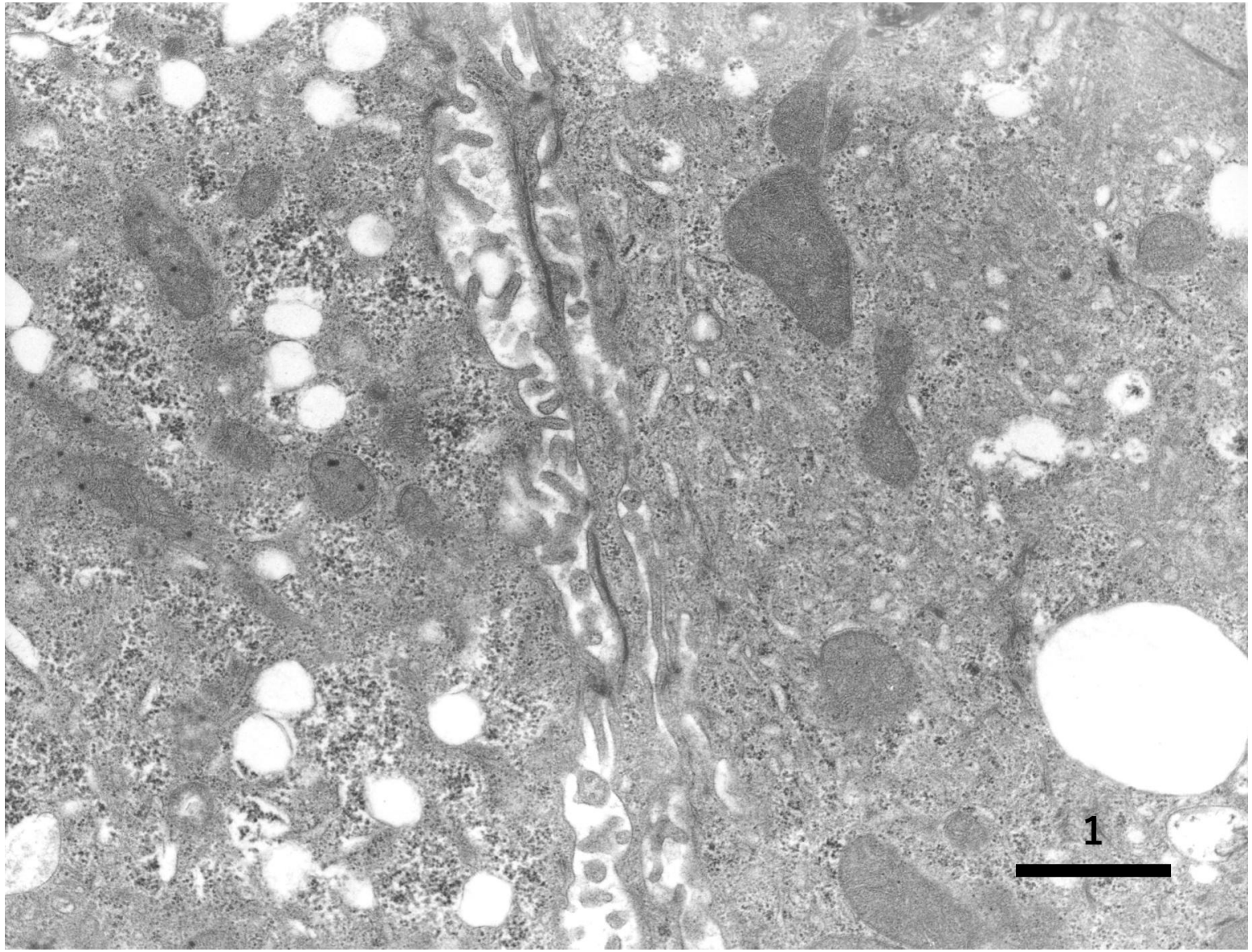
Ultrastructure of sebaceous gland carcinoma in the back of a 76 y-o female patient. Fat vacuoles and glycogen particles are clustered in the cytoplasm of the cancer cells (TEM-1).



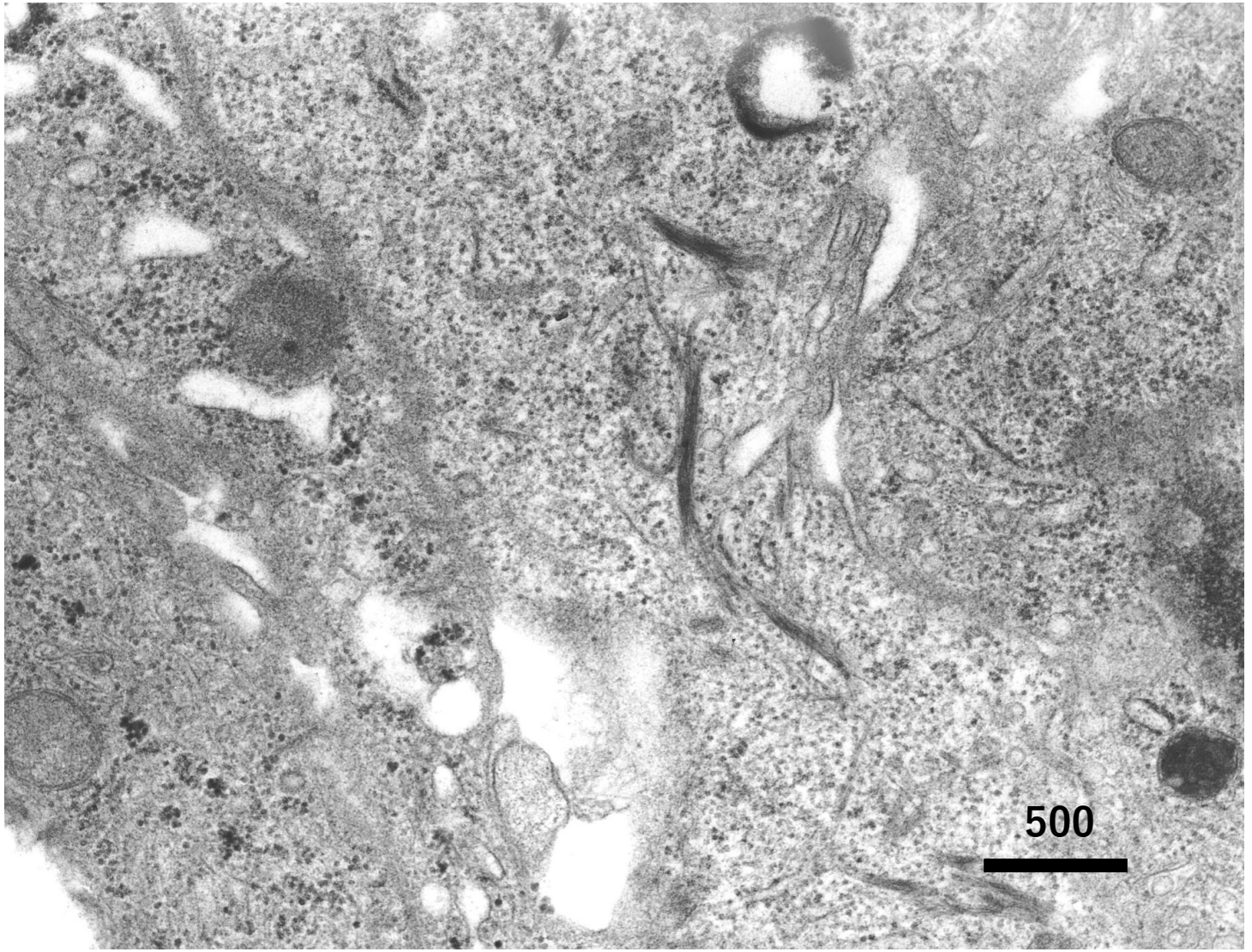
Ultrastructure of sebaceous gland carcinoma in the back of a 76 y-o female patient. Fat vacuoles measuring around 2-3 μm are clustered in the cytoplasm of the cancer cells (TEM-2).



Ultrastructure of sebaceous gland carcinoma in the back of a 76 y-o female patient. Fat vacuoles and glycogen particles are clustered in the cytoplasm of the cancer cell (TEM-3).



Ultrastructure of sebaceous gland carcinoma in the back of a 76 y-o female patient. Fat vacuoles are scattered in the cytoplasm of the cancer cells. Desmosomal junctions are observed (TEM-4).



Ultrastructure of sebaceous gland carcinoma in the back of a 76 y-o female patient. Tonofilaments are noted in the cytoplasm of the cancer cell. Glycogen particles are scattered (TEM-5).