Desmoplastic melanoma (DM) is a rare subtype of melanoma characterized by malignant spindle cells separated by prominent fibrocollagenous or fibromyxoid stroma. Primary melanomas may be entirely or almost entirely desmoplastic (“pure” DM) or exhibit a desmoplastic component admixed with a non-desmoplastic component (“mixed” DM).¹ In 2004, Busam et al reported a clinicopathologic study of DM patients in which subdividing the tumors into “pure” and “mixed” subtypes correlated with clinical outcome. In that study, the authors classified melanomas as “pure” DM if “the overwhelming majority (≥90%) of invasive tumor was desmoplastic”, or “mixed” DM if “typical features of DM were mixed with densely cellular tumor foci without fibrosis and desmoplasia” and the DM areas involved <90% and >10% of the invasive melanoma. Similar findings have since been reported by others.²⁻⁵ Improved disease-specific survival is seen in patients with “pure” DM, when compared with patients with “mixed” DM and those with melanomas lacking a desmoplastic component.²⁻⁵ Furthermore, regional nodal metastasis (including that detected by sentinel lymph node biopsy) is less common in patients presenting with clinically localized pure DM compared with those who had mixed DM or conventional melanomas.²⁻⁵

References:

1. Scolyer RA, Thompson JF. Desmoplastic melanoma: a heterogeneous entity in which subclassification as “pure” or “mixed” may have important prognostic significance. Ann Surg Oncol 2005;12:197-199.