A young woman with familial adenomatosis polyposis presented with a history of pain and progressive enlargement of bilateral breast masses for a decade. She was diagnosed with left breast desmoid tumor via percutaneous biopsy and has since undergone multiple additional percutaneous breast biopsies and surgical

FIGURE 1. A, Postcontrast fat-suppressed axial T1-weighted magnetic resonance image showing the dominant heterogeneously enhancing right breast desmoid tumor (white arrow). Additional infiltrative desmoid tumors in the deep medial aspects of both breasts display pectoralis muscle invasion (orange arrows). B, Considerable disease progression was noted compared to this image obtained 19 months earlier (white arrow). C, Maximum intensity projection subtraction magnetic resonance image showing the extent of hypervascular bilateral desmoid tumors. D, Grayscale sonographic image showing the dominant right breast lesion as an irregular hypoechoic mass indistinguishable from malignant neoplasm.
excisional biopsies. She underwent multiple treatment regimens for recurrent bilateral breast desmoid tumors, including methotrexate/vinblastine, tamoxifen, doxorubicin, sunitinib, and pazopanib, with ultimate disease progression for all therapies. She subsequently enrolled in a clinical trial using a gamma secretase inhibitor (nirogacestat), with treatment response on imaging.

Gardner syndrome is a familial adenomatous polyposis variant that can present with extraintestinal tumors, including desmoid tumors. Desmoid tumors (fibromatoses) of the breast are rare, comprising less than 0.2% of all breast tumors, but pose challenges in diagnosis and management. Typical clinical presentation is a palpable breast mass indistinguishable from malignant neoplasm, which may occur sporadically, after trauma or surgery, or from genetic predispositions such as mutations in the adenomatous polyposis coli and β-catenin pathways. Imaging features mimic malignant tumors, with masses on mammography, ultrasound, and magnetic resonance imaging revealing irregular shapes/margins and infiltrative appearances that may necessitate biopsy (Figures 1 and 2). Complete surgical resection is the primary treatment, but can be difficult because of infiltrative growth and invasion of adjacent structures, with recurrence rates up to 29%. Treatment of recurrent desmoid tumors includes reexcision, radiation, and/or pharmacological therapies including nonsteroidal anti-inflammatory drugs, hormonal agents, and cytotoxic therapies. However, the rarity and heterogeneity of the disease process makes the treatment challenging.

**POTENTIAL COMPETING INTERESTS**
The authors report no competing interests.
Correspondence: Address to Santo Maimone, MD, Department of Diagnostic Radiology, Mayo Clinic, Davis Bldg 241 N, Jacksonville, FL 32224 (maimone.santo@mayo.edu).

ORCID
Santo Maimone: https://orcid.org/0000-0002-3115-0090