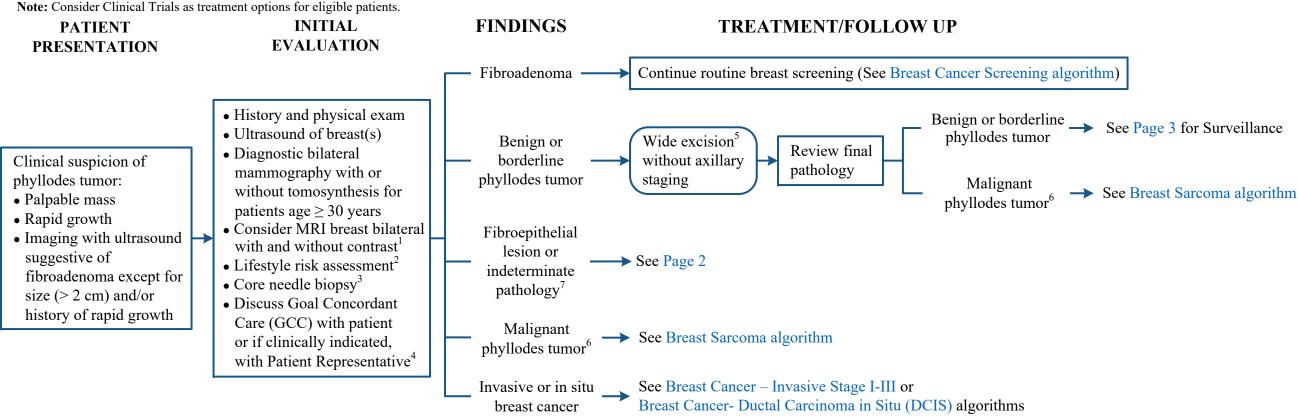
MDAnderson Phyllodes Tumor

Page 1 of 5

Making Cancer History®

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.



¹ MRI breast can be helpful when lesions are mammographically or sonographically occult and in patients with dense breast tissue. For patients unable to undergo MRI due to gadolinium hypersensitivity, implants, or claustrophobia, contrast-enhanced mammography and molecular breast imaging are viable alternative imaging options.

² See Physical Activity, Nutrition, Obesity Screening and Management, and Tobacco Cessation Treatment algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

³ Fine needle aspiration will not distinguish fibroadenoma from phyllodes tumor in most cases. In general, core needle biopsy is the preferred method for diagnostic biopsy.

⁴GCC should be initiated by the Primary Oncologist. If Primary Oncologist is unavailable, Primary Team/Attending Physician to initiate GCC discussion and notify Primary Oncologist. Patients, or if clinically indicated, the Patient Representative should be informed of therapeutic and/or palliative options. GCC discussion should be consistent, timely, and re-evaluated as clinically indicated. The Advance Care Planning (ACP) note should be used to document GCC discussion. Refer to GCC home page (for internal use only).

⁵ There is no high level evidence to support a margin width of at least 10 mm and an ideal margin width remains to be determined. Re-excision may need to be considered in relation to factors such as pathological features, tumor-to-breast size ratio, and cosmesis. For benign pathology, re-excision of a negative margin is not recommended regardless of margin width. See Suggested Readings for updated information.

Obtain molecular sequencing if patient is eligible for clinical trials. For patients with malignant phyllodes tumor or stromal overgrowth on pathology review, referral to a multidisciplinary sarcoma center is appropriate. Refer to Breast Sarcoma algorithm.

Recommend review by pathologist experienced in phyllodes tumor and to correlate with imaging findings and physical examination. Core biopsy may not provide definitive evaluation (tumor heterogeneity and inability to assess for infiltrating margins). Review at Sarcoma Soft Tissue Multidisciplinary Conference should be considered for large tumors (> 5 cm) for which preoperative therapies could be indicated pending pathologic diagnosis.

MDAnderson Phyllodes Tumor

Page 2 of 5

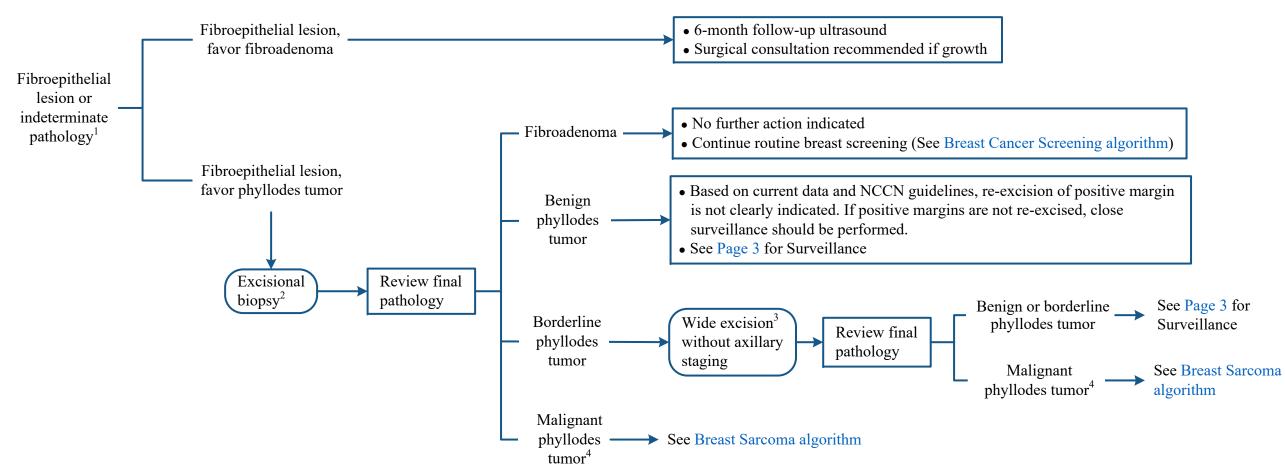
Making Cancer History®

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

Note: Consider Clinical Trials as treatment options for eligible patients.

FINDINGS

TREATMENT/FOLLOW UP



Recommend review by pathologist experienced in phyllodes tumor and to correlate with imaging findings and physical examination. Core biopsy may not provide definitive evaluation (tumor heterogeneity and inability to assess for infiltrating margins). Review at Sarcoma Soft Tissue Multidisciplinary Conference should be considered for large tumors (> 5 cm) for which preoperative therapies could be indicated pending pathologic diagnosis.

² Excisional biopsy includes complete mass removal, but without the intent of obtaining widely negative surgical margins

³ There is no high level evidence to support a margin width of at least 10 mm and an ideal margin width remains to be determined. Re-excision may need to be considered in relation to factors such as pathological features, tumor-to-breast size ratio, and cosmesis. For benign pathology, re-excision of a negative margin is not recommended regardless of margin width. See Suggested Readings for updated information.

⁴Obtain molecular sequencing if patient is eligible for clinical trials. For patients with malignant phyllodes tumor or stromal overgrowth on pathology review, referral to a multidisciplinary sarcoma center is appropriate. Refer to Breast Sarcoma algorithm.

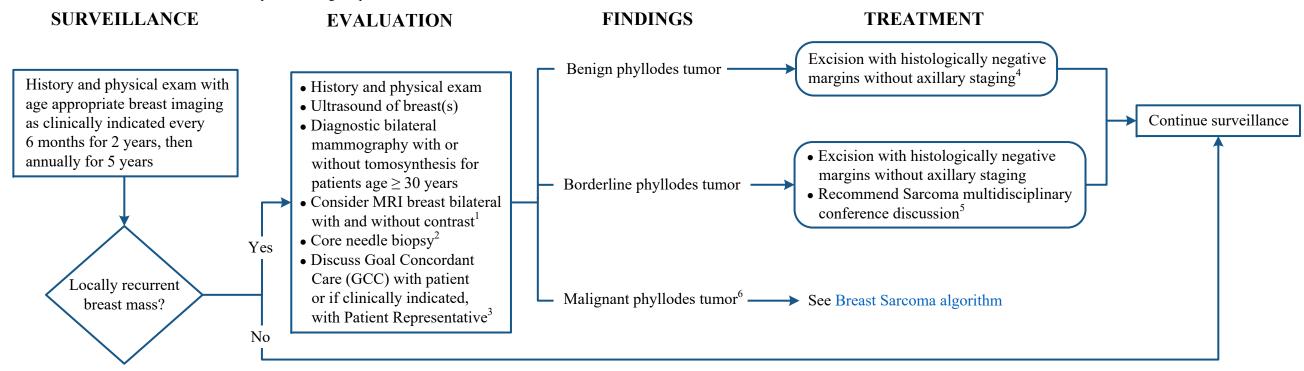
MDAnderson Phyllodes Tumor

Page 3 of 5

Making Cancer History®

Cancer Center Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

Note: Consider Clinical Trials as treatment options for eligible patients.



MRI breast can be helpful when lesions are mammographically or sonographically occult and in patients with dense breast tissue. For patients unable to undergo MRI due to gadolinium hypersensitivity, implants, or claustrophobia, contrast-enhanced mammography and molecular breast imaging are viable alternative imaging options.

² Fine needle aspiration will not distinguish fibroadenoma from phyllodes tumor in most cases. In general, core needle biopsy is the preferred method for diagnostic biopsy.

³ GCC should be initiated by the Primary Oncologist. If Primary Oncologist is unavailable, Primary Team/Attending Physician to initiate GCC discussion and notify Primary Oncologist. Patients, or if clinically indicated, the Patient Representative should be informed of therapeutic and/or palliative options. GCC discussion should be consistent, timely, and re-evaluated as clinically indicated. The Advance Care Planning (ACP) note should be used to document GCC discussion. Refer to GCC home page (for internal use only).

⁴ Based on current data and NCCN guidelines, re-excision of positive margin is not clearly indicated, but should be considered in the setting of recurrent disease

⁵ There is no prospective randomized data supporting the use of radiation treatment with phyllodes tumor. Radiation treatment can be considered in specific clinical scenarios where there is elevated risk of recurrence and should be discussed in a multidisciplinary context.

⁶ Obtain molecular sequencing if patient is eligible for clinical trials. For patients with malignant phyllodes tumor or stromal overgrowth on pathology review, referral to a multidisciplinary sarcoma center is appropriate. Refer to Breast Sarcoma algorithm.

MD Anderson Phyllodes Tumor

Page 4 of 5

Cancer Center

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

SUGGESTED READINGS

- Bartels, S. A. L., van Olmen, J. P., Scholten, A. N., Bekers, E. M., Drukker, C. A., Vrancken Peeters, M. T. F. D., & van Duijnhoven, F. H. (2024). Real-world data on malignant and borderline phyllodes tumors of the breast: A population-based study of all 921 cases in the Netherlands (1989-2020). *European Journal of Cancer*, 201, 113924. doi:10.1016/j.ejca.2024.113924
- Boland, P. A., Ali Beegan, A., Stokes, M., Kell, M. R., Barry, J. M., O'Brien, A., & Walsh, S. M. (2021). Management and outcomes of phyllodes tumours 10 year experience. *Breast Disease*, 10.3233/BD-201059. Advance online publication. doi:10.3233/BD-201059
- Del Calvo, H., Wu, Y., Lin, H. Y., Nassif, E. F., Zarzour, M. A., Guadagnolo, B. A., ... Lillemoe, H. A. (2024). Margin width and local recurrence in patients with phyllodes tumors of the breast. *Annals of Surgical Oncology*, 31(12), 8048–8056. doi:10.1245/s10434-024-15892-8
- Lu, Y., Chen, Y., Zhu, L., Cartwright, P., Song, E., Jacobs, L., & Chen, K. (2019). Local recurrence of benign, borderline, and malignant Phyllodes tumors of the breast: A systematic review and meta-analysis. *Annals of Surgical Oncology*, 26(5), 1263-1275. doi:10.1245/s10434-018-07134-5
- MD Anderson Institutional Policy #CLN1202 Advance Care Planning Policy. Advance Care Planning (ACP) Conversation Workflow (ATT1925)
- National Comprehensive Cancer Network. (2025). *Breast Cancer* (NCCN Guideline. Version 3.2025). Retrieved from https://www.nccn.org/professionals/physician_gls/pdf/breast.pdf
- Neron, M., Sajous, C., Thezenas, S., Piperno-Neumann, S., Reyal, F., Laé, M., ... French Sarcoma Group (GSF-GETO). (2020). Surgical margins and adjuvant therapies in malignant Phyllodes tumors of the breast: A multicenter retrospective study. *Annals of Surgical Oncology*, 27(6), 1818-1827. doi:10.1245/s10434-020-08217-y
- van Olmen, J. P., Beerthuizen, A. W. J., Bekers, E. M., Viegen, I., Drukker, C. A., Vrancken Peeters, M. T. F. D., Bartels, S. A. L., & van Duijnhoven, F. H. (2023). Management of benign phyllodes tumors: A dutch population-based retrospective cohort between 1989 and 2022. *Annals of Surgical Oncology*, 30(13), 8344-8352. doi:10.1245/s10434-023-14128-5
- Pezner, R. D., Schultheiss, T. E., & Paz, I. B. (2008). Malignant phyllodes tumor of the breast: Local control rates with surgery alone. *International Journal of Radiation Oncology, Biology, Physics*, 71(3), 710-713. doi:10.1016/j.ijrobp.2007.10.051
- Rosenberger, L. H., Thomas, S. M., Nimbkar, S. N., Hieken, T. J., Ludwig, K. K., Jacobs, L. K., ... Jakub, J. W. (2021). Contemporary multi-institutional cohort of 550 cases of Phyllodes tumors (2007-2017) demonstrates a need for more individualized margin guidelines. *Journal of Clinical Oncology: Official Journal of the American Society of Clinical Oncology*, 39(3), 178-189. doi:10.1200/JCO.20.02647
- Sars, C., Sackey, H., Frisell, J., Dickman, P. W., Karlsson, F., Kindts, I., ... Lindqvist, E. K. (2023). Current clinical practice in the management of phyllodes tumors of the breast: An international cross-sectional study among surgeons and oncologists. *Breast Cancer Research and Treatment*, 199(2), 293-304. doi:10.1007/s10549-023-06896-1
- Toussaint, A., Piaget-Rossel, R., Stormacq, C., Mathevet, P., Lepigeon, K., & Taffé, P. (2021). Width of margins in phyllodes tumors of the breast: The controversy drags on? -A systematic review and meta-analysis. *Breast Cancer Research and Treatment*, 185(1), 21-37. doi:10.1007/s10549-020-05924-8



MD Anderson Phyllodes Tumor

Page 5 of 5

Cancer Center

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

DEVELOPMENT CREDITS

This practice algorithm is based on majority expert opinion of the Breast Center providers at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

Core Development Team Leads

Ashleigh Guadagnolo, MD, MPH (Radiation Oncology)
Kelly K. Hunt, MD (Breast Surgical Oncology)
Henry M. Kuerer MD, PhD (Breast Surgical Oncology)
Heather Lillemoe, MD (Breast and Sarcoma Surgical Oncology)
Melissa P. Mitchell, MD, PhD (Breast Radiation Oncology)

Workgroup Members

Constance Albarracin, MD, PhD (Anatomical Pathology) Dejka M. Araujo, MD (Sarcoma Medical Oncology)

Elsa Arribas, MD (Breast Imaging)

Banu K. Arun, MD (Breast Medical Oncology)

Robert C. Bast Jr., MD (Experimental Therapeutics)

Robert S. Benjamin, MD (Sarcoma Medical Oncology)

Therese Bevers, MD (Cancer Prevention)

Andrew J. Bishop, MD (Radiation Oncology)

Abenaa Brewster, MD (Clinical Cancer Prevention)

Aman U. Buzdar, MD (Breast Medical Oncology)

Abigail S. Caudle, MD (Breast Surgical Oncology)

Sarah M. DeSnyder, MD (Breast Surgical Oncology)

Mark J. Dryden, MD (Breast Imaging)

Olga N. Fleckenstein, BS

Sharon H. Giordano, MD (Health Svcs Research – Clinical)

Karen Hoffman, MD (Breast Radiation Oncology)

Gabriel N. Hortobagyi, MD (Breast Medical Oncology)

Rosa F. Hwang, MD (Breast Surgical Oncology)

Nuhad K. Ibrahim, MD (Breast Medical Oncology)

Kimberly B. Koenig, MD (Breast Medical Oncology)

Savitri Krishnamurthy, MD (Anatomical Pathology)

Deanna L. Lane, MD (Breast Imaging)

Huong Carisa Le-Petross, MD (Breast Imaging)

Jennifer Litton, MD (Breast Medical Oncology)

Anthony Lucci, MD (Breast Surgical Oncology)

Joseph A. Ludwig, MD (Sarcoma Medical Oncology)

Funda Meric-Bernstam, MD (Invest. Cancer Therapeutics)

Lavinia P. Middleton, MD (Anatomical Pathology)

Tamara Miner Haygood, MD, PhD (Musculoskeletal Imaging)

Shreyaskumar Patel, MD (Sarcoma Medical Oncology)

George H. Perkins, MD (Breast Radiation Oncology)

Vinod Ravi, MD (Sarcoma Medical Oncology)

Erika Resetkova, MD, PhD (Anatomical Pathology)

Merrick I. Ross, MD (Surgical Oncology)

Aysegul A. Sahin, MD (Anatomical Pathology)

Lumarie Santiago, MD (Breast Imaging)

Simona F. Shaitelman, MD (Breast Radiation Oncology)

Benjamin Smith, MD (Breast Radiation Oncology)

Eric A. Strom, MD (Breast Radiation Oncology)

W. Fraser Symmans, MD (Anatomical Pathology)

Nina Tamirisa, MD (Breast Surgical Oncology)

Vicente Valero, MD (Breast Medical Oncology)

Mary Lou Warren, DNP, APRN, CNS-CC⁴

Gary J. Whitman, MD (Breast Imaging)

Wendy Woodward, MD, PhD (Radiation Oncology)

Wei Yang, MD (Breast Imaging)

Alison K. Yoder, MD (Radiation Oncology)

Wendong Yu, MD, PhD (Anatomical Pathology)

^{*}Clinical Effectiveness Development Team