Risk Categories

Women 1 age 35 and greater, AND one of the following:
- History of lobular carcinoma in situ (LCIS)
- Atypical hyperplasia (AH) (ductal and lobular)
- Gail model 5 year breast cancer risk greater than or equal to 1.7%
- Tyrer-Cuzick model 10 year breast cancer risk greater than or equal to 5%
- Prior Thoracic XRT at age 10-30 years old 2
  AND
- Life expectancy greater than or equal to 10 years
  AND
- No contraindications 3 to risk reduction therapy

1 Patients without breast prophylactic mastectomy (BPM)
2 Limited data regarding risk reduction therapies in women with prior thoracic XRT.
3 Prior history of a thromboembolic event is an absolute contraindication. Adequately treated endometrial hyperplasia or early-stage endometrial cancer is not a contraindication to the use of tamoxifen.
4 Lower risk of uterine cancer but less long-term benefit
5 Limited data regarding AIs in women with proliferative breast lesions
6 Off-label (Not FDA approved)
7 Tables that can be used to determine women for whom the benefits outweigh the risks can be found at Freedman AN, et al. (2011). Benefit/risk assessment for breast cancer chemoprevention with raloxifene or tamoxifen for women age 50 years or older. J Clin Oncol; 29:2327-2333.

Pre-menopausal

Does patient meet criteria?

Yes

Post-menopausal

- LCIS
- AH

Lifetime risk greater than or equal to 20% by Gail or Tyrer-Cuzick models
OR
- Prior Thoracic XRT at age 10-30 years old 2

Lifetime risk less than 20% by Gail or Tyrer-Cuzick models

No

Patient not a candidate for risk reduction treatment

Assess balance of benefits and harms 7:
- Tamoxifen
- Raloxifene 4
- Aromatase Inhibitors (AI) 6
  (Exemestane and Anastrozole)

Tamoxifen

Pre-menopausal

- LCIS
- AH

Lifetime risk greater than or equal to 20% by Gail or Tyrer-Cuzick models
OR
- Prior Thoracic XRT at age 10-30 years old 2

Lifetime risk less than 20% by Gail or Tyrer-Cuzick models

No

Patient not a candidate for risk reduction treatment

Tamoxifen
This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers.

SUGGESTED READINGS


This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers.

DEVELOPMENT CREDITS

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

Banu Arun, MD
Thereese Bevers, MD
Abenaa Brewster, MD
Powel Brown, MD, PhD
Elise Cook, MD
Robin Coyne, APRN, FNP-BC
Joyce Duins, DrPH, APRN, FNP-BC
Suzanne Day, APRN, FNP-BC
Ernest Hawk, MD
Tiffany Jackson, APRN, FNP-BC
Marita Lazzaro, APRN, ANP-BC
Jennifer Litton, MD
Ana Nelson, APRN, FNP-BC
Lonzetta Newman, MD
Tilu Ninan, APRN, ANP-BC
Priya Thomas, MD

T Development Lead