

Risk Factors for High Mammographic Breast Density

Most (60%) of the risk for developing high breast density is inherited but higher breast density can be caused by the following

- 1. family history of breast cancer¹
- 2. early (age 12-17) and/or prolonged use of OCP²
- 3. IVF treatments, particularly if over the age of 35³
- 4. HRT⁴
- 5. Had first child after the age of 30⁵

Stevens VJ, Robson AM, Lasser NL, Hylton NM.

6. Had no children⁶

¹ A clinical model for identifying the short-term risk of breast cancer.

Eriksson M, Czene K, Pawitan Y, Leifland K, Darabi H, Hall P. **Breast Cancer** Res. 2017 Mar 14;19(1):29. doi: 10.1186/s13058-017-0820-y.

² <u>Menstrual and reproductive characteristics and breast density in young women.</u>
Dorgan JF, Klifa C, Deshmukh S, Egleston BL, Shepherd JA, Kwiterovich PO Jr, Van Horn L, Snetselaar LG,

Cancer Causes Control. 2013 Nov;24(11):1973-83. doi: 10.1007/s10552-013-0273-2. Epub 2013 Aug 10.

³ Association of infertility and fertility treatment with mammographic density in a large screening-based cohort of women: a cross-sectional study.

Lundberg FE, Johansson AL, Rodriguez-Wallberg K, Brand JS, Czene K, Hall P, Iliadou AN. Breast Cancer Res. 2016 Apr 13;18(1):36. doi: 10.1186/s13058-016-0693-5.

⁴ <u>Mammographic Density Change With Estrogen and Progestin Therapy and Breast Cancer Risk.</u>

Byrne C, Ursin G, Martin CF, Peck JD, Cole EB, Zeng D, Kim E, Yaffe MD, Boyd NF, Heiss G, McTiernan A, Chlebowski RT, Lane DS, Manson JE, Wactawski-Wende J, Pisano ED. J Natl Cancer Inst. 2017 Sep 1;109(9). doi: 10.1093/jnci/djx001.

⁵ Menstrual and reproductive characteristics and breast density in young women.

Dorgan JF, Klifa C, Deshmukh S, Egleston BL, Shepherd JA, Kwiterovich PO Jr, Van Horn L, Snetselaar LG, Stevens VJ, Robson AM, Lasser NL, Hylton NM.

Cancer Causes Control. 2013 Nov;24(11):1973-83. doi: 10.1007/s10552-013-0273-2. Epub 2013 Aug 10.

⁶ Menstrual and reproductive characteristics and breast density in young women.

Dorgan JF, Klifa C, Deshmukh S, Egleston BL, Shepherd JA, Kwiterovich PO Jr, Van Horn L, Snetselaar LG, Stevens VJ, Robson AM, Lasser NL, Hylton NM.

Cancer Causes Control. 2013 Nov;24(11):1973-83. doi: 10.1007/s10552-013-0273-2. Epub 2013 Aug 10.



Management Guidelines

A woman should request a baseline mammogram to establish breast density level at 40 years of age if she has one or more of the risk factors above. The more risk factors, the greater the risk of having high mammographic breast density.

If she has four or more risk factors, having a mammogram at 35 is recommended, unless the woman is currently pregnant, breast feeding or trying to get pregnant.

After breast density is determined by a mammogram, enter patient information into the IBIS Breast Cancer Risk Evaluation Tool. If patient's lifetime risk of developing breast cancer is >20%, then refer to a specialist for potential prevention therapy and more intensive screening, which may include MRI.

