Primary Care Provider Input On Personalized Breast Cancer Screening Recommendations in WISDOM 1.0: A Nationwide Risk-Based Breast Cancer Screening Trial

Naeim[1], A. Stanton[1], K. Sepucha[2], S. Vangala[1], A. Petruse[1], L. Madlensky[3], A. S. Fiscalini[4], L. J. Esserman[4], M. Eklund[5], K. Ross[4], D. Goodman-Gruen[5], J. Tice[4], E. Ziv[4], Y.Shieh[6], L. van 't Veer[4], A. Kaster[7], A. M. Blanco[1], O. I. Olopade[8], M. Scheuner[4], B. Tong[4], L. Sabacan[4], J. Atamer[4], H. Harvey[7], R. A. Hiatt[4], A. D. Borowsky[9], J. Esserman[4], H. Anton-Culver[5], A. LaCroix[3], H. L. Park[5], B. A. Parker[3], R. Lancaster[10], WISDOM Investigators and Advocate Partners, N. Wenger[1]

1 – UCLA; 2- Mass General; 3- UCSD; 4- UCSF, 5- Karolinska Institute; 5- UCI; 6- Cornell; 7- Sanford; 8- U of Chicago; 9-UCD; 10 – U of Alabama

San Antonio Breast Cancer Symposium
December 9-12, 2025

Introduction

The Women Informed to Screen Depending on Measures of risk (WISDOM) Study 1.0 (2016-2023; NCT02620852)[1-9] is testing a novel, risk-based approach to breast cancer screening compared to annual mammography.

WISDOM[1-9], a large-scale screening trial, enrolled women ages 40-74 with no personal history of breast cancer or DCIS using a randomized, preference tolerant trial design, reflecting the heterogeneity of the U.S. population.

The goal of this analysis is to evaluate whether women discussed WISDOM screening recommendations with their primary care provider, factors associated with discussion, and whether primary care providers (PCPs) agreed or disagreed with the screening recommendation.

Methods and Materials

We analyzed participant-reported responses among the first 15,000 WISDOM participants who completed patient-centered outcomes surveys at baseline, at the time they received their screening recommendation, and at first annual follow-up.

The annual survey asked about discussing the trial screening assignment with their PCPS and the reaction of their PCPs to the screening assignment (Likert 5 scale from Strongly Disagreed to Strongly Agreed).

These items were compared between the randomized arms (annual versus personal risk-based) and across the study breast cancer screening assignments (every 6 months with MRI, Yearly with Risk-Reduction, Yearly, Two Years, Delayed Screening until the Age of 50).

Results

Participants in the risk-based screening arm were significantly more likely to report discussing the screening recommendation with their PCP (35.6%, 2708/7610) compared to those in the annual arm (19.0%, 1308/6888; p < 0.001) - see **Figure 1**.

PCPs agreement with the screening recommendation also varied by arm. In the annual group, 75.7% of participants reported their PCPs agreed or strongly agreed with the recommendation and only 2.4% disagreed, while in the risk-based group, 58.6% agreed and 16% - see **Figure 2**.

Among participants in the risk-based arm, discussion rates with PCPs and level of PCPs' agreement differed by screening recommendation. The highest rate of discussion occurred in those assigned to 6 months with MRI (71.1%), followed by Yearly with risk-reduction (50.3%), Two Years (34.6%), Yearly (29.6%) and Delayed (32.4%) disagreed - see **Figure 3**.

Disagreement was highest in those identified at lowest risk, Delayed Screening (24.2%) and those with the Two Year (16.1%). Disagreement was lowest with the higher screening recommendations of Yearly (1%) with Risk Reduction and 6 Month with MRI (5.6% - see **Figure 4**.

Figure 1.

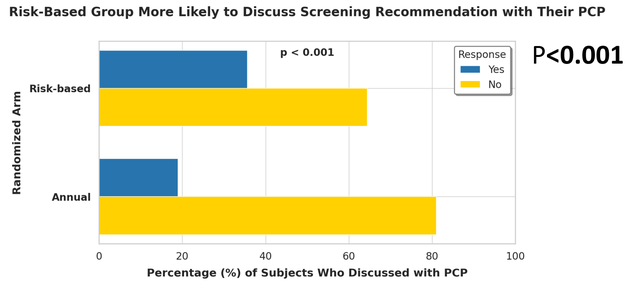


Figure 2.

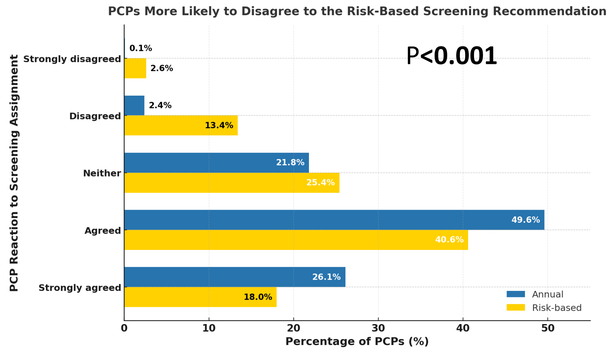


Figure 3.

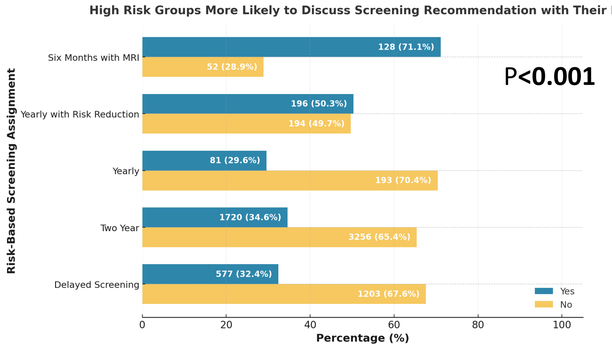
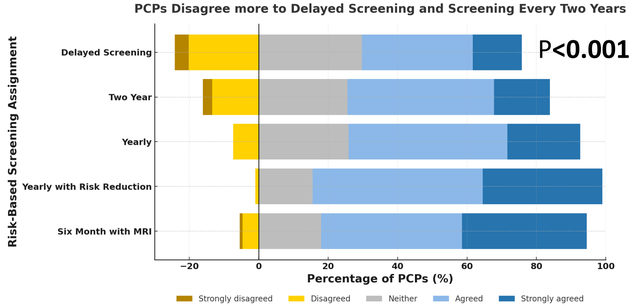


Figure 4.



Discussion/Conclusion

Women often discuss breast cancer screening recommendations with their primary care providers, particularly risk-based recommendations. Data from WISDOM 1.0 show PCPs had stronger agreement with more frequent screening recommendations and stronger disagreement with less frequent intervals. These findings suggest that education to increase primary care physician familiarity with risk-based screening approaches may enhance the implementation and acceptance of risk-based strategies in clinical practice.

Contact

Arash Naeim, MD PhD
David Geffen School of Medicine At UCLA
Email: anaeim@mednet.ucla.edu
Phone: (310) 794-8118

Selected WISDOM Study Publications

1. *Integrating breast cancer polygenic risk scores at scale in the WISDOM Study: a national randomized personalized screening trial* (*Genome Med.* 2025;17(1):97. PMID: 40877879); 2. *Validation study of risk-reduction activities after personalized breast cancer education tool in the WISDOM Study* (*NPJ Breast Cancer.* 2024;10(1):90. PMID: 39397069); 3. *Early ascertainment of breast cancer diagnoses comparing self-reported questionnaires and electronic health record data warehouse: The WISDOM Study* (*JCO Clin Cancer Inform.* 2023;7:e2300019. PMID: 37607323); 4. *Validation study on risk-reduction activities after exposure to a personalized breast cancer risk-assessment education tool in high-risk women in the WISDOM Study* (*Res Sq* [Preprint] 2023 May 10. PMID: 37214889); 5. *The WISDOM Study: a new approach to screening can and should be tested* (*Breast Cancer Res Treat.* 2021;189(3):593–598. PMID: 34529196); 6. *The WISDOM Personalized Breast Cancer Screening Trial: simulation study to assess potential bias and analytic approaches* (*JNCI Cancer* . 2019;2(4):pky067. PMID: 31360882); 7. *Breast cancer screening in the precision medicine era: risk-based screening in a population-based trial* (*J Natl Cancer Inst.* 2017;109(5). PMID: 28130475); 8. *The WISDOM Study: breaking the deadlock in the breast cancer screening debate* (*NPJ Breast Cancer.* 2017;3:34. PMID: 28944288); 9. *Development and pilot of an online, personalized risk assessment tool for a breast cancer precision medicine trial* (*NPJ Breast Cancer.* 2021;7(1):78. PMID: 34140528).

This presentation is the intellectual property of the author/presenter. Contact them at anaeim@mednet.ucla.edu for permission to reprint and/or distribute.

© Poster Template by Genigraphics® 1.800.790.4001 www.genigraphics.com