

# Overcoming Barriers for Breast Cancer Detection in Women with High Breast Density [Letter]

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## Dear editor

The article titled “Awareness of Breast Cancer Risk Factors in Women with vs Without High Breast Density” by Endrikat et al<sup>1</sup> provides profound insights into the differences in cancer risk factor perception between women with high breast density (HBD) and those with non-high breast density. From a radiomedical perspective, this study not only highlights breast density as a core factor in assessing breast cancer risk but also lays a solid foundation for exploring new pathways and strategies for cancer screening and detection.

**What are the barriers to the widespread adoption of MRI screening for women with HBD?** Cost, availability, and patient compliance are potential factors. MRI machines are expensive, and the procedure itself can be time-consuming and uncomfortable for some patients. Moreover, not all healthcare providers have access to MRI machines, particularly in low-and middle-income countries.<sup>2</sup> To improve accessibility and affordability, policymakers and healthcare providers need to collaborate to develop cost-effective solutions and increase the availability of MRI machines in various settings. In addition to MRI, other imaging technologies, such as ultrasound and tomosynthesis, have shown promise in improving cancer detection in dense breasts. Ultrasound, in particular, is a cost-effective and widely used modality that can serve as an adjunct to mammography. However, it faces limitations in post-neoadjuvant therapy (NT) assessments due to breast density, lesion changes, and fibrosis. In contrast, Digital Breast Tomosynthesis (DBT) offers a promising alternative by addressing these challenges, particularly in scenarios where MRI is contraindicated or inaccessible, thereby enhancing the comprehensive evaluation of breast cancer response to therapy.<sup>3</sup>

## Future Directions and Strategies

To improve breast cancer detection rates in women with HBD, it is imperative to develop and validate comprehensive multimodal imaging protocols that seamlessly integrate various imaging technologies. These protocols should harness the strengths of mammography, ultrasound, tomosynthesis, and MRI, leveraging their unique capabilities in a synergistic manner to enhance diagnostic accuracy.<sup>4</sup> The cornerstone of these protocols lies in their ability to be tailored to individual patients' risk profiles and breast density, ensuring that each woman receives the most appropriate and effective screening regimen. This personalized approach not only optimizes cancer detection but also minimizes unnecessary procedures, reduces patient anxiety, and controls healthcare costs.

In addition to refining imaging protocols, a significant direction in this field is the need to address the access barriers that hinder some women with HBD from benefiting from advanced imaging technologies. Cost and availability are major hurdles that must be overcome to ensure equitable access to these life-saving tools. Policy changes play a crucial role in this endeavor. Expanding insurance coverage for MRI screening, for instance, can make this technology more accessible to a wider range of women. Simultaneously, investing in the development of cost-effective imaging solutions is essential to bring down the overall cost of screening without compromising on quality.<sup>5</sup>

In conclusion, integrated multimodal imaging tailored to individual needs, coupled with policy reforms to enhance access, will be key to advancing breast cancer detection and care for women with HBD.

## Disclosure

The authors declare no conflicts of interest in this communication.

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