Breast Cancer in Transgender Individuals: More Research Needed

Written by The Life Science Feed Editorial Team · Published 17 June 2026 · Edited by William Lopes

> The understanding of breast cancer risk, screening, and management in transgender and gender-diverse individuals remains underdeveloped. Existing research often overlooks this population, leading to potential disparities in care. A comprehensive approach to breast cancer in this community requires further investigation to ensure equitable and effective clinical practice.

KEY TAKEAWAYS

- The Pivot: Current breast cancer research and clinical guidelines often lack specific considerations for transgender and gender-diverse individuals.
- The Data: No specific incidence or outcome data for breast cancer in transgender individuals was provided in the reviewed literature, underscoring the research gap.
- The Action: Clinicians should recognize the need for inclusive care strategies and advocate for more targeted research to inform screening and treatment protocols for transgender and gender-diverse patients.

Breast cancer care, from screening to survivorship, presents unique challenges within the LGBTQ+ community, particularly for transgender and gender-diverse individuals. The current body of literature on this specific demographic is limited, indicating a significant gap in understanding their specific needs and outcomes2.

Current Landscape and Research Gaps

Gender-affirming care, including genital gender-affirming surgery, is a rapidly evolving field. Healthcare providers, even those without prior experience in gender-affirming care, increasingly encounter transgender individuals in clinical practice. This necessitates a foundational understanding of gender-affirming procedures and individual needs among all healthcare professionals1. While genital gender-affirming surgery is shown to significantly improve the quality of life for transgender individuals by aligning physical characteristics with gender identity, offering substantial aesthetic and functional satisfaction, the implications for breast cancer risk and management are less clear1.

For transwomen, genital gender-affirming surgery enables them to wear underwear aligned with their gender identity and facilitates sexual function. For transmen, it provides a more masculine appearance in the groin area, allows for penetrative intercourse with a reconstructed penis (neophallus), and in some cases enables urination while standing when combined with urethral lengthening1. Despite these advancements in gender-affirming care, the specific considerations for breast cancer screening, diagnosis, and treatment in transgender individuals remain largely unaddressed in comprehensive reviews focusing on broader gender-affirming care practices1.

A review of breast cancer disparities in the LGBTQ+ community highlights the necessity of moving towards inclusive care from screening to survivorship2. This review points to the lack of specific data and tailored guidelines for transgender and gender-diverse individuals, which can lead to suboptimal care. The absence of targeted research means that clinicians often rely on guidelines developed for cisgender populations, which may not adequately address the unique physiological and social factors relevant to transgender patients2.

The current literature emphasizes the need for all healthcare providers to possess a foundational understanding of gender-affirming procedures and individual needs, particularly as gender-affirming care becomes more integrated into publicly funded healthcare systems, as seen in Nordic countries1. However, this foundational understanding must extend to specific disease management, such as breast cancer, to ensure that transgender and gender-diverse individuals receive equitable and evidence-based care2.

The clinical context for breast cancer in transgender individuals involves several unique factors. Transgender women (assigned male at birth) often undergo feminizing hormone therapy, which typically includes estrogen and anti-androgens. Estrogen exposure is a known risk factor for breast cancer in cisgender women, and its role in transgender women requires further investigation. The duration and cumulative dose of hormone therapy, as well as the specific types of hormones used, may influence breast tissue development and subsequent cancer risk. Conversely, transgender men (assigned female at birth) often receive masculinizing hormone therapy, primarily testosterone. Testosterone therapy may lead to atrophy of breast tissue, but the extent to which this reduces breast cancer risk, particularly in individuals who have not undergone mastectomy, is not fully understood. Furthermore, some transgender men may opt for chest masculinization surgery (mastectomy), which significantly reduces the amount of breast tissue at risk, but residual tissue can still develop cancer.

Epidemiological data on breast cancer incidence in transgender populations are scarce. Existing studies are often limited by small sample sizes, retrospective designs, and heterogeneous patient populations, making it challenging to draw definitive conclusions about population-level risk. The lack of standardized data collection regarding gender identity in cancer registries further complicates epidemiological research. This data gap impedes the development of accurate risk stratification models and evidence-based screening protocols tailored to transgender individuals.

Limitations and Future Directions

The available research, while acknowledging the importance of gender-affirming care, does not provide specific data on breast cancer incidence, prevalence, or treatment outcomes in transgender and gender-diverse populations1,2. This lack of specific data represents a significant limitation in developing evidence-based guidelines for breast cancer screening and management in this community. Future research must focus on collecting comprehensive data on breast cancer risk factors, screening efficacy, and treatment responses in transgender individuals, considering factors such as hormone therapy duration and type, and prior surgeries2. Such research is essential to move towards truly inclusive breast cancer care. A deeper discussion of limitations also includes the methodological challenges of conducting research in this population, such as recruitment difficulties due to privacy concerns, the relatively small size of the transgender population, and the variability in gender-affirming medical interventions. Prospective cohort studies with long-term follow-up are needed to accurately assess breast cancer risk and outcomes. Additionally, research should explore the psychosocial barriers to care, including discrimination and lack of provider knowledge, which can impact screening adherence and timely diagnosis in transgender individuals.

CLINICAL IMPLICATIONS

The current state of breast cancer research for transgender and gender-diverse individuals is a glaring omission in medical literature. Clinicians are left navigating a critical area of patient care with insufficient evidence, often forced to extrapolate from data on cisgender populations. This is not merely an academic oversight; it directly impacts patient outcomes, potentially delaying diagnosis or leading to inappropriate screening protocols. The medical community must recognize that 'gender-affirming care' extends beyond surgical procedures to encompass comprehensive, evidence-based disease management for all conditions, including cancer.

For patients, this research gap translates into uncertainty and potential health disparities. Transgender individuals already face systemic barriers to healthcare access and often experience medical mistrust. The absence of tailored breast cancer guidelines exacerbates these issues, placing an undue burden on patients to advocate for their specific needs in a system ill-equipped to address them. Pharmaceutical companies and research institutions have a responsibility to fund and conduct studies that specifically include transgender and gender-diverse populations, moving beyond the current generalized approaches.

The lack of specific data also presents a challenge for guideline bodies. Without robust evidence, developing clear, actionable recommendations for breast cancer screening and treatment in transgender individuals is difficult. This is not an excuse for inaction, however. Professional organizations should prioritize commissioning systematic reviews and funding primary research to fill these gaps. Until then, clinicians must exercise heightened awareness, engage in shared decision-making with their transgender patients, and advocate for individualized care plans, acknowledging the limitations of current evidence.

EDITORIAL & AI STANDARDS

AI tools are used to structure and summarise evidence from peer-reviewed primary sources. Articles that carry a signed Editor's take have been read in full by William Lopes. The others are not individually read by an editor, so check the cited source before relying on a figure.

REFERENCES

1. 1. Mikkola A, Gran I, Sollie M. Gender-affirming genital surgery in the Nordic countries: Narrative review of current practices and challenges. Scand J Surg. 2026;115(1):1-8. doi:10.1177/14574969241109842

2. 2. Cohen LN, Bobholz F, Cortina CS. Breast Cancer Disparities in the LGBTQ + Community: How to Move Towards Inclusive Care from Screening to Survivorship. Curr Breast Cancer Rep. 2025;17(1):1-7. doi:10.1007/s12609-025-00583-x

LICENCE & RIGHTS

© 2026 The Life Science Feed. All rights reserved. This content is produced for medical education purposes. It may not be reproduced, distributed, or transmitted without prior written permission from The Life Science Feed.

MEDICAL DISCLAIMER

This content is intended for healthcare professionals only and does not constitute medical advice. Clinical decisions must be made by qualified practitioners based on individual patient circumstances.

FOLLOW THE LIFE SCIENCE FEED

Instagram @lifesciencefeed **LinkedIn** linkedin.com/company/thelifesciencefeed

thelifesciencefeed.com