NBCC NATIONAL BREAST CANCER COALITION

ARTEMIS Project®

OVERVIEW

The National Breast Cancer Coalition (NBCC) created and leads the Artemis Project®, an innovative, mission-driven collaboration of advocates and scientists working together to answer questions vital to ending breast cancer. This unique initiative seeks meaningful solutions for individuals living with or at risk of breast cancer. The Artemis Project tackles two critical issues:

- **Primary Prevention — How can we stop breast cancer before it starts?**
- **Prevention of Metastasis — How can we prevent breast cancer from becoming lethal?**

A COLLABORATIVE APPROACH

The Artemis Project brings together scientists, clinicians, advocates, and other stakeholders in an NBCC infrastructure designed to foster rapid and impactful work. Since its launch in 2010, Artemis members work year-round, advancing ideas born from annual project meetings.

PRIMARY PREVENTION

The Artemis Project's first initiative is developing a safe, cost-effective vaccine to prevent all major subtypes of breast cancer. Artemis designed a vaccine that targets six tumor-specific proteins in breast cells and is on track for Phase I clinical trials in summer 2025.

NBCC continues to advance our preventive vaccine in partnership with the National Cancer Institute (NCI) PREVENT program. (Per its website, the NCI PREVENT Program supports the best in cancer prevention that focuses on unmet needs not adequately addressed by the private sector.) NBCC has filed a provisional patent for the vaccine to ensure global affordability and accessibility.

Artemis participants are also exploring other primary prevention strategies, such as the microbiome and risk stratification.

PREVENTION OF METASTASIS

The Artemis Project's metastasis prevention efforts focus on dormant disseminated tumor cells (DTCs), which can lead to distant recurrences decades after an initial diagnosis. Key questions include how to prevent these cells from "waking up" and causing recurrence—either by eliminating them or keeping them dormant.

Early Artemis research, supported by seed grants, has revealed mechanisms by which DTCs evade the immune system. Members are now investigating how to target these cells as well as additional strategies to prevent metastasis through novel approaches.

(Updated 11/24)