# US ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC) CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP) FISCAL YEAR 2024 (FY24) BREAST CANCER RESEARCH PROGRAM (BCRP)

#### **DESCRIPTION OF REVIEW PROCEDURES**

The FY24 BCRP called for applications in response to program announcements (PAs) for three award mechanisms released in March 2024:

- Breakthrough Award Levels 1 and 2
- Expansion Award
- Transformative Breast Cancer Consortium Development Award

The BCRP received applications for these three PAs in May 2024, and they underwent peer review in July and August 2024. The BCRP conducted programmatic review in September 2024.

In response to the Breakthrough Award Levels 1 and 2 PA, the BCRP received 490 compliant applications representing 681 potential awards and recommended funding 14 applications (representing 20 potential awards, 2.9%) for a total of \$21.9 million (M).

In response to the Expansion Award PA, the BCRP received 54 compliant applications and recommended funding seven applications (13.0%) for a total of \$8.4M.

In response to the Transformative Breast Cancer Consortium Development Award PA, the BCRP received two compliant applications and recommended funding one application (50.0%) for a total of \$0.2M.

Table 1 shows submission and award data summarized for the FY24 BCRP.

Table 1. Submission/Award Data for the FY24 BCRP\*

Mechanism	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
Breakthrough Award Levels 1 and 2	490	$14^{\dagger} (2.9\%)$	\$21.9M
Expansion Award	54	7 (13.0%)	\$8.4M
Transformative Breast Cancer Consortium Development Award	2	1 (50.0%)	\$0.2M
Total	546	22 (4.0%)	\$30.5M

<sup>\*</sup>These data reflect funding recommendations only. Pending FY24 award negotiations, final numbers will be available after September 30, 2025.

<sup>&</sup>lt;sup>†</sup>Fourteen projects recommended for funding representing 20 potential awards.

#### THE TWO-TIER REVIEW SYSTEM

The USAMRDC developed a review model based on recommendations of the National Academy of Sciences report *Strategies for Managing the Breast Cancer Research Program: A Report to the Army Medical Research and Development Command.* The report recommended a two-tier review process that reflects not only the traditional strengths of existing peer review systems but is also tailored to accommodate program goals. The Command adheres to this proven approach for evaluating competitive applications. An application must be favorably reviewed by both levels of the two-tier review system to be funded.

## THE FIRST TIER—Scientific Peer Review

The BCRP conducted peer review of Breakthrough Award Levels 1 and 2, Expansion Award and Transformative Breast Cancer Consortium Development Award applications in July and August 2024 utilizing 27 panels of researchers, clinicians and consumer advocates. The panel members based their evaluations on the criteria specified in the PAs.

Each peer review panel included a Chair, an average of six scientific reviewers, an average of two consumer reviewers, and a nonvoting Scientific Review Officer. The panelists' primary responsibility was to review the technical merit of each application based upon the evaluation criteria specified in the relevant PA.

#### **Individual Peer Review Panels**

The Chair for each panel presided over the deliberations. The panels discussed each application individually. The Chair called on the assigned reviewers for an assessment of the merits of each application using the evaluation criteria published in the appropriate PA. Following a panel discussion, the Chair summarized the strengths and weaknesses of each application, and the panel members then rated the applications confidentially.

## **Application Scoring**

Evaluation Criteria Scores: Panel members rated each application based on the peer review evaluation criteria published in the appropriate PA. The panel members used a scale of 10 to 1, with 10 representing the highest merit and 1 the lowest merit, using whole numbers only. The purpose of obtaining the criteria ratings was to (1) place emphasis on the published evaluation criteria and provide guidance to reviewers in determining an appropriate overall score and (2) provide the applicant, the Programmatic Panel and the Command with an informed measure of the quality regarding the strengths and weaknesses of each application. The evaluation criteria scores were not averaged or mathematically manipulated in any manner to connect them to the global or percentile scores.

*Overall Score:* To obtain an overall score, panel members used a range of 1.0 to 5.0 (1.0 representing the highest merit and 5.0 the lowest merit), with scoring permitted in 0.1 increments. The BCRP averaged the panel member scores and rounded them to arrive at a two-digit number (1.2, 1.9, 2.7, etc.) that corresponds to the following adjectival equivalents used to

guide reviewers: Outstanding (1.0–1.5), Excellent (1.6–2.0), Good (2.1–2.5), Fair (2.6–3.5) and Deficient (3.6–5.0).

Summary Statements: The Scientific Review Officer on each panel was responsible for preparing a Summary Statement reporting the results of the peer review for each application. The Summary Statements included the evaluation criteria and overall scores, peer reviewers' written comments, and the essence of panel discussions. The BCRP staff used this document to report the peer review results to the Programmatic Panel. In accordance with USAMRDC policy, Summary Statements are available to each applicant after completion of the review process.

## **THE SECOND TIER—Programmatic Review**

The FY24 Programmatic Panel and ad hoc reviewers conducted programmatic review in September 2024. The panel and ad hoc reviewers included a diverse group of basic and clinical scientists and consumer advocates, each of whom contributed special expertise or interest in breast cancer. Programmatic review is a comparison-based process that considers scientific evaluations across all disciplines and specialty areas. Programmatic Panel members do not automatically recommend funding applications that received high scores in the technical merit review process; rather, they closely examine the eligible applications to allocate as wisely as possible the limited funds available.

The programmatic review criteria published in the Breakthrough Award Levels 1 and 2 PA were as follows: ratings and evaluations of the peer reviewers; adherence to the intent of the award mechanism; program portfolio composition; relative impact; and relative innovation (Breakthrough Award Level 1 only).

The programmatic review criteria published in the Expansion Award PA were as follows: ratings and evaluations of the peer reviewers; adherence to the intent of the award mechanism; program portfolio composition; relative accomplishments and outcomes from the original BCRP-funded award; and relative impact.

The programmatic review criteria published in the Transformative Breast Cancer Consortium Development Award PA were as follows: ratings and evaluations of the peer reviewers; adherence to the intent of the award mechanism; program portfolio composition; and relative impact.

After programmatic review, the BCRP sent the applications recommended for funding to the Commanding General, USAMRDC, for approval.