



Fall 2023

## **Basser Research Initiatives**

The Basser Center for BRCA continues to pride itself on being the first comprehensive center for the research, treatment, and prevention of BRCA-related cancers. We value your participation in our research initiatives and thank you for your dedication to making our progress possible. As the summer is winding down, the Basser Center team is excited to share our tremendous achievements and new opportunities.

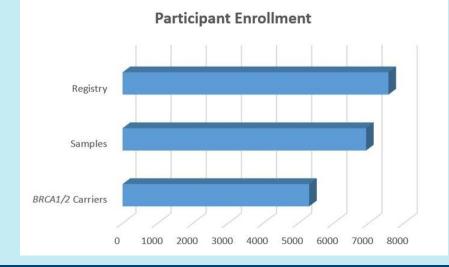
## Research Registry Enrollment Updates

# Research Registry: Identification and Analysis of Families with Genetic Susceptibility to Cancer

The Basser Center Investigators continue to study genetic sources of cancer risk. For over 20 years, researchers have enrolled participants with known or suspected risk into one of the largest registries (collection of families) with known or suspected risk in the world.

Our registry samples and clinical data have been used in over 100 studies, and have contributed valuable information on genetic risk factors for cancer. A number of research projects are also performed in collaboration with this registry including CIMBA investigators (Consortium of Investigators of Modifiers of *BRCA1/2*), and at other academic sites in the US and around the world. Research participants receive a numerical identification number that protects their privacy. Collaborating centers do not have access to personal identifiers.

There are currently **7,561** participants enrolled in the Research Registry, of which **6,925** have contributed DNA samples. Of these participants there are **5,306** confirmed *BRCA1* or *BRCA2* mutation carriers and their relatives.



# Research Registry Follow Up

Updates to personal and family history are crucial to keeping our Registry data robust.

We will reach out via email (preferred) or mail with a follow up survey.

Please take the time to complete this survey as your updates are important to keeping our Research Registry data current. We are extremely grateful for your contribution to this research! With your help, we can continue making progress in the area of genetics and cancer risk.

## The Latest News at Basser & The University of Pennslyvania

#### **Prevention Vaccine Trial Launched**

Can we stop cancer before it starts? That's part of the goal of cancer interception, which involves "catching" cancer cells as they begin to develop into pre-cancers or very early cancers, and halting or reversing that process. Susan Domchek, MD, executive director of the Basser Center, and her colleagues have taken the next step in that direction by administering our cancer prevention vaccine to healthy individuals with a BRCA mutation. This phase of the research will examine how well the vaccine stimulates the immune system in healthy people. This is an incredible milestone for this trial, bringing us one step closer to our ultimate goal of intercepting BRCA-related cancers altogether! Read more here.

## Basser's New Men & BRCA Program

The Men & BRCA program at the Basser Center for BRCA was built to propel research and education focusing on men with BRCA mutations. Kara Maxwell, MD, PhD, program director, and the leadership team of Bryson Katona, MD, PhD, Daniel Lee, MD, MS, and Vivek K. Narayan, MD, MS are working to help men with a BRCA gene mutation become aware of their cancer risk and feel empowered with knowledge in making informed decisions about their health. Watch new videos from our

clinical researchers and genetic counselors as they answer common questions about BRCA in Men here.

#### **PennChart Genomics Initiative**

The PennChart Genomics Initiative at the University of Pennsylvania is a multidisciplinary collaborative that has successfully linked orders and results from genetic testing laboratories with discrete genetic data in the electronic health record (EHR). Having results available and easy to find leads to better health care. Read how integrating genomic data into the EHR is key for optimally delivering genomic medicine here.

#### **OlympiA Trial**

The OlympiA trial demonstrates statistically significant improvement in overall survival with adjuvant olaparib compared with placebo for germline *BRCA1/2* pathogenic variant-associated early breast cancer. Read about this exciting randomized, double-blind trial here.

# Interception Clinical Trials - Now Enrolling

## **BRCA-P Trial**

We continue to enroll participants to our BRCA-P Trial. This study is being conducted to evaluate the reduction in the risk of any breast cancer (invasive or ductal carcinoma in situ [DCIS]) in women with germline *BRCA1* mutation who are treated with denosumab compared to placebo.

For more information, contact <u>alexandra.torres@pennmedicine.upenn.edu</u>.

#### **BRCA Vaccine Trial**

In 2021, we opened a new research study to test an experimental vaccine to potentially prevent cancer for people with *BRCA1* or *BRCA2* mutations. This study will determine if the vaccine is safe (without significant side effects) and test a new way of administering vaccines. We are also looking to see if the vaccine activates the immune system. Thanks to participation in our research, both Cohorts (group) A1 and A2 have completed enrollment! We are currently enrolling into Cohort B and individuals are eligible if they are a carrier of a pathogenic or likely pathogenic mutation in *BRCA1* or *BRCA2* with no prior history of cancer. Females must be post-menopausal.

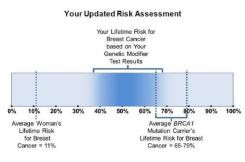
For more information, contact <u>alexandra.torres@pennmedicine.upenn.edu</u>.

Cohort/Arm	Target Enrollment (n)	Actual Enrollment (n)
Cohort A, Arm 1 (completed enrollment)	8	8
Cohort A, Arm 2 (completed enrollment)	8	3
Cohort B, Arm 1 (active/enrolling)	14	7
Cohort B, Arm 2 (not yet open to enrollment)	14	0

Read the Associated Press article highlighting the next big advance in cancer vaccine treatment that can shrink tumors and stop cancer from recurring <a href="here">here</a>.

## Responses to Genetic Risk Modifier Testing Among Women with BRCA1/2 Mutations

Because of the variability in cancer risk estimates among *BRCA1/2* carriers and the risks associated with surgery, a clinical genetic testing panel of genetic risk modifiers **may** provide more personal risk estimates. It would reduce some of the uncertainty surrounding cancer risk estimates and could help in decision-making regarding prophylactic mastectomy and other less invasive risk management strategies. However, it is



Women with a *BRCA1* mutation and your combination of genetic modifiers have an **estimated lifetime breast cancer risk of 51%** – but this risk could be **as low as 38% or as high as 69%**.

unclear how women will ultimately perceive or respond to such novel risk information. The goal of this study is to determine the impact of genetic risk modifier testing on *BRCA1/2* mutation carriers' decision-making about undergoing preventative surgery or pursuing cancer surveillance. 107 participants from Penn have enrolled; 76 have received results. Current accrual is just over 250 participants across multiple institutions.

This study is currently open for enrollment. For more information on this study, please contact <u>jabrower@pennmedicine.upenn.edu</u>.

Click the button below to view more information about open clinical trials and research opportunities at the Basser Center.

**Open Clinical Trials** 

Questions or comments? Email us at <u>basserresearch@pennmedicine.upenn.edu</u>. For more information on our research efforts and outreach activities visit our <u>website</u>.

# Stay Informed with the BRCAbeat

The *BRCAbeat* is the Basser Center's e-newsletter that highlights Basser Center and BRCA news. Subscribe below for The Basser Center for BRCA's monthly newsletter.

**Subscribe Here** 

**DONATE** 

**BRCA RESOURCES** 

**CONTACT BASSER** 













 $basser.org \mid basserinfo@pennmedicine.uphs.upenn.edu$ 

#### Share this email:







Manage your preferences | Opt out using TrueRemove® Got this as a forward? Sign up to receive our future emails. View this email online.

3535 Market Street Suite 750 Philadelphia, PA | 19104 US

This email was sent to .

Continue receiving our emails, add us to your address book.

The information contained in this e-mail message is intended only for the personal and confidential use of the recipient(s) named above. If the reader of this message is not the intended recipient or an agent responsible for delivering it to the intended recipient, you are hereby notified that you have received this document in error and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you have received this communication in error, please notify the Office of Development and Alumni Relations immediately by email, and delete the original message. For Information on the Privacy Policy of the University of Pennsylvania please click here.

Subscribe to our email list.