New clinic sets sights on precursors of blood cancers

Each year, thousands of people learn—usually after a routine blood test—that they have a condition that may develop into a blood cancer such as leukemia or lymphoma. The news is often followed by an equally surprising addendum: The condition won’t be treated until it becomes a full-blown cancer.

The lack of treatments for such “precursor conditions” places patients in an awkward limbo: seemingly healthy but waiting for their disease to progress to the point where it’s treatable. Scientists have puzzled over why some people with these conditions go on to develop cancer quickly while others never do, and whether treatment could arrest the disease at the precursor stage.

Advances in genomic technology have given researchers the tools to study the switch from precursor condition to cancer in unprecedented detail. By understanding the fundamental changes that occur in cells’ DNA—and when those changes occur—investigators hope to break the process down to its key components and, ultimately, develop targeted therapies capable of halting the process.

To lead that effort at Dana-Farber/Brigham and Women’s Cancer Center (DF/BWCC), researchers have joined to create the Blood Cancer Prevention of Progression Clinic (BCPC), the first such facility in the United States. Comprised of experts in a variety of hematological (blood) disorders, the clinic has begun collecting tissue samples from patients with precursor conditions and from those with advanced disease. The samples will be analyzed to tease out genomic differences between early- and later-stage disorders, and identify which ones lead the march toward cancer.

“In cancer, we’re always looking to diagnose malignancies in their earliest stages, when they often can be treated successfully,” says Robert Soiffer, MD, chief of the Division of Hematologic Malignancies at DF/BWCC and co-principal investigator at the BCPC.

“In many hematologic malignancies and disorders, precursor conditions provide this kind of advance notice. The challenge now is to use this knowledge to our advantage—to learn how to ‘read’ the tissue of patients with precursor conditions to determine which cases are likely to advance and which can benefit from early treatment.”

Multiple guises

Precursor conditions take a variety of forms and go by many names. Early myelodysplastic syndrome, a disease in which the bone marrow fails to make enough healthy blood cells, is often a precursor of hematologic malignancies and disorders, precursor conditions provide this kind of advance notice. The challenge now is to use this knowledge to our advantage—to learn how to ‘read’ the tissue of patients with precursor conditions to determine which cases are likely to advance and which can benefit from early treatment.”

Hundreds gather to support young breast cancer patients

Bridget Slom is a perfect example. When she was diagnosed with stage IV cancer while 20 weeks pregnant, she never lived to see her second daughter, Chloe, who would survive and thrive, despite weighing just 1 pound 2 ounces at birth. Bridget Mooney Spence was just 21 when she was diagnosed with stage IV metastatic breast cancer, but she continued to live life and inspire those around her for nearly a decade until her death in 2013.

These are just two of the many young women diagnosed with cancer each year, a population often overlooked in the cancer community. More than 14,500 of these young women, like Mooney Spence, are diagnosed with breast cancer in the United States annually. Dana-Farber’s Young and Strong: Program for Young Women with Breast Cancer honored their memories, and all current and former breast cancer patients and survivors, at its first annual Celebrating
The Power of Friends was strong at the Friends of Dana-Farber Cancer Institute’s 39th annual meeting, where the Friends unveiled its new brand identity and announced its contribution of more than $3.1 million to the Institute in 2013-14. The Friends will allocate more than $760,000 to research and patient care programs at Dana-Farber in the coming year.

The Friends also announced its new co-president, Jen Cunningham Butler; three new members at large, Eileen Macelroy, Elaine Zouzas Thibault, and Lori Whelan; and a new governing director, Elaine Timetti. Cunningham Butler, who joins Debbie Malitzman to lead the Friends in the coming year, is the daughter of the Friends’ founding president, Sheila Driscoll Cunningham.

“The Friends play a role in everything that is done here; we truly make a difference,” said Marcii Noller, outgoing president, who introduced the Friends’ new logo and “Power of Friends” tagline, which represents the organization’s evolution and effort to attract the next generation of Friends’ members and leaders.

The majority of Friends’ funds come from annual events, including the annual spring gala, which raised nearly $283,000 in 2014. The Chef’s Cooking for Hope, Saks Key to the Cure in Boston, and Dancing for a Cure events, as well as proceeds from Friends’ Corner Gift Shop, general contributions, and membership dues, also contributed to the fundraising total.

“This year’s work and support have launched the careers of so many people who have made a difference here at Dana-Farber and for our patients,” said Institute President and CEO Edward J. Berne, MD, referencing the fellows the Friends fund each year. This year the organization is supporting Raj Gopal, MD, PhD, who studies cancer metabolism.

Board member Susan Mendoza Friedman, who organizes Dancing for a Cure’s annual holiday shows and Dance Marathon on Cape Cod, received the Sidney Farber Volunteer Award, named for the Institute’s late founder and made possible by the Rosen and Charles Simberg Oncology Leadership Fund. Friedman will direct the $10,000 award money to Joyce Liu, MD, of the Susan F. Smith Center for Women’s Cancers, and her research into drug combinations to treat women with recurrent ovarian cancer, a project also supported by an additional $20,000 of Friends funding.

“I support this project in memory of my dear friend, Karen Scheik, and the 14,000 other women who die of ovarian cancer each year,” Friedman said.

Barrett Rollins, MD, PhD, chief scientific officer, was also present to discuss Profile and the promise of precision cancer medicine for Dana-Farber patients, a project funded solely through philanthropy. “Your selfless dedication is really admirable, particularly your support of research,” remarked Rollins of Friends’ funding. “This is a very difficult time for research to be done in this country, and the support that you provide is absolutely invaluable.”

An Epic Journey

DFCI Partners eCare FAQs

A recent Partners eCare survey revealed that there are still a lot of questions around Partners eCare at Dana-Farber. Because it’s so vitally important that all faculty and staff understand the project and how it will change the way we do business, we’ve created a quick primer of the project’s key points.

Is Partners eCare the same as Epic?

You will hear this project referred to as both “Partners eCare” and “Epic.” Partners eCare is the name of the Integrated electronic health and administrative information system that will be implemented at DFCI on May 30, 2015. Epic Systems is the vendor providing the technology that drives the Partners eCare system. Epic software will replace most of the existing clinical and administrative systems at DFCI. Both terms refer to the same project.

Which systems will be replaced and which will stay the same?

What will training involve and who will it affect?

More than 3,500 DFCI faculty and staff will be affected by this implementation. To prepare, the Partners eCare team is coordinating extensive training sessions. Registration for these sessions will begin in December. Training will take place at 10 Brookline Place from March 30 – May 29, 2015. Completion of training and a basic competency test are mandatory. For required training hours and more information, visit the Training section of the Partners eCare page on DFCI Online.

At a minimum, the following groups will be provided with training on the new system:

- Physicians
- Registration staff
- Pharmacy staff
- Nursing staff
- Scheduling staff
- Imaging staff
- Clinical staff
- Support staff
- Billing staff
- Research staff
- Health Information Management staff

To learn more, visit the Partners eCare site on DFCI Online. If you still have questions, email PeC_DFCI@dfci.harvard.edu.

Get your flu shot by November 7

November 7 is the last day of Dana-Farber’s employee flu shot program, so be sure to get your vaccination this week. For more information, call Occupational Health Services at 617-632-3016.