BLADDER CANCER 101:
BCAN RESOURCES TO REACH & TEACH ABOUT BLADDER CANCER

BCAN
Bladder Cancer Advocacy Network
Leading the way to awareness and a cure

BLADDER CANCER in 2018

81,190 diagnosed in 2018

600K + living with bladder cancer

6th most common cancer

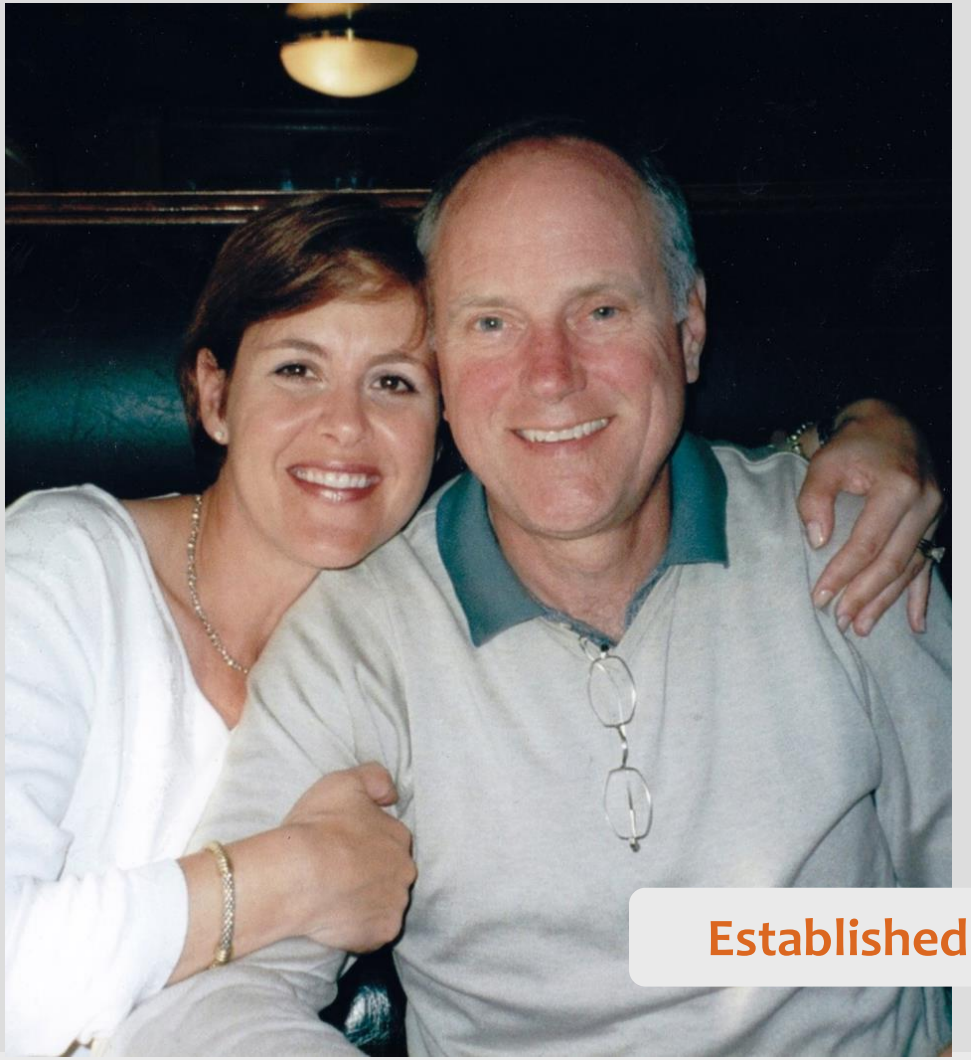
Bladder cancer affects approximately 2.7 million people globally

About 59% of bladder cancer cases occur in developed countries

	Developed	Developing	Developed	Developing
Incidence*	16.9	5.3	3.7	1.5
Mortality*	4.5	2.6	1.1	0.7

*Per 100,000, American Cancer Society, Surveillance Research, 2015

BCAN BEGINNINGS – DIANE & JOHN QUALE



Established BCAN in 2005

BCAN
Bladder Cancer Advocacy Network

Leading the way to awareness and a cure

MISSION

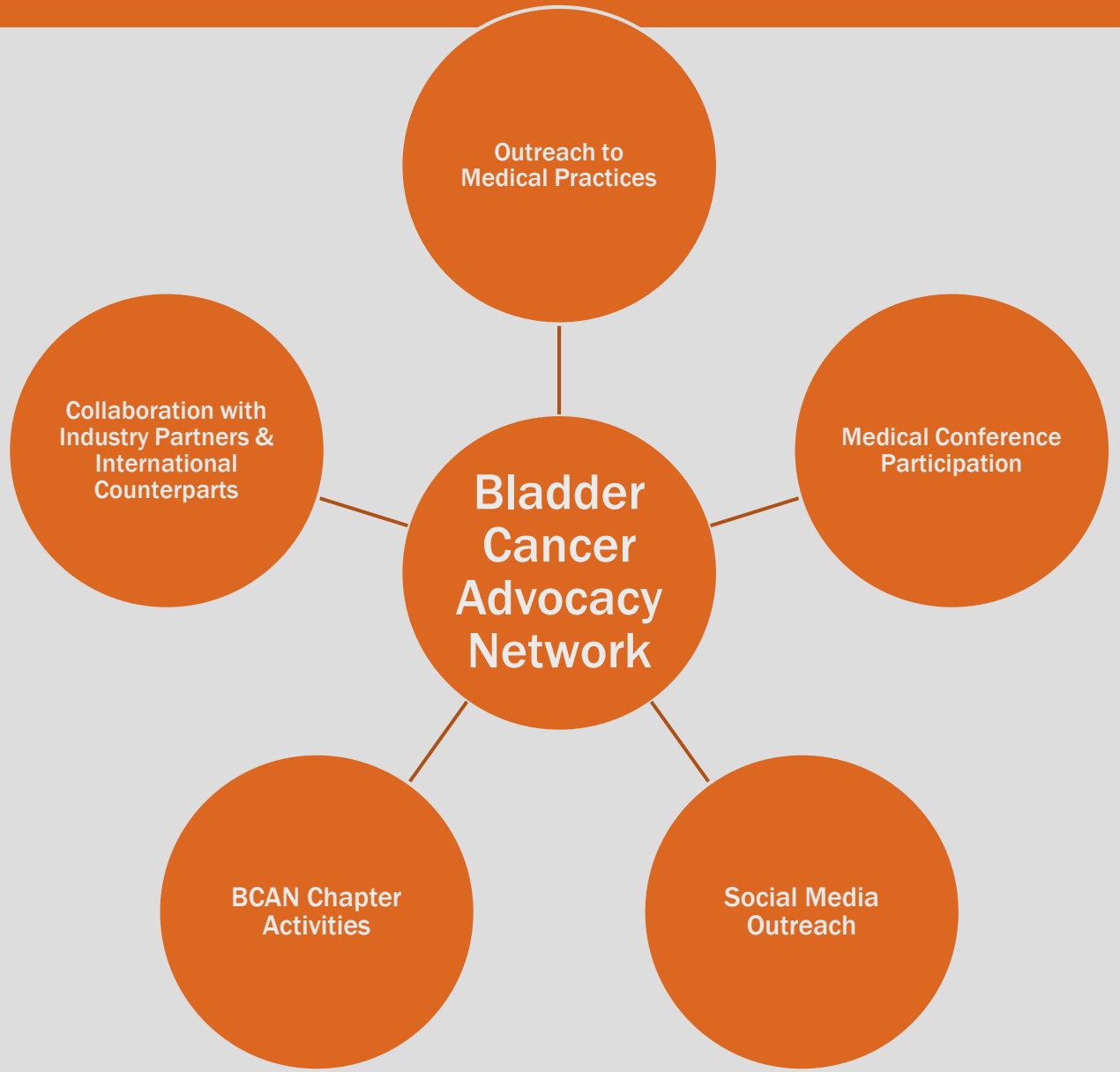
Raise Awareness

Advance Research

Provide Education and Support

AWARENESS AND ADVOCACY

2018 BCAN AWARENESS ACTIVITIES



2018 BCAN AWARENESS ACTIVITIES

May is Bladder Cancer Awareness Month!

THIS FALL, LEARN ABOUT THE SIGNS AND RISK FACTORS FOR BLADDER CANCER.

Share where you live, work, play and pray so others don't learn about bladder cancer when they are diagnosed.

https://www.bcan.org/signs-risk-factors/

2018 PUBLIC SERVICE ANNOUNCEMENT

For the 2018 Bladder Cancer Awareness Month PSA for distribution to media outlets as well as doctors offices nationwide.

Watch the PSA on

https://www.bcan.org/press-media/

BCAN WALK TO END BLADDER CANCER

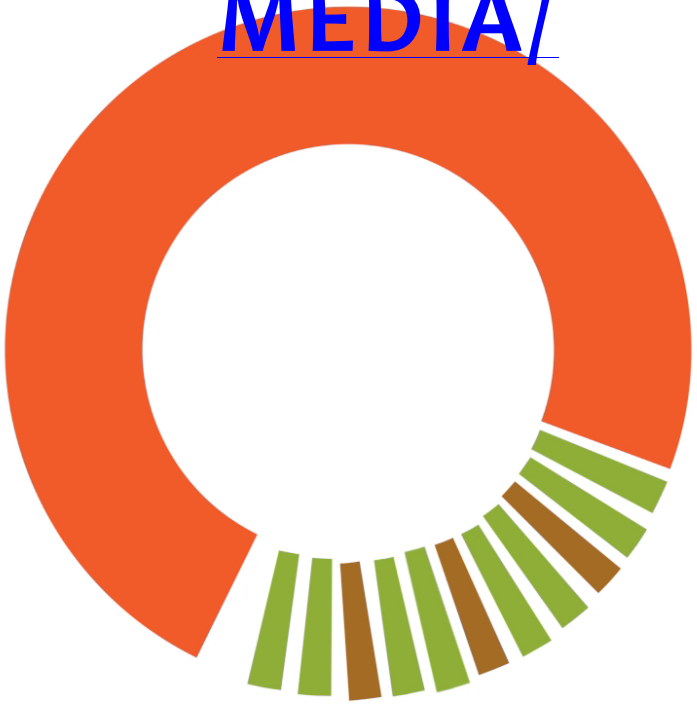
BCAN Walk to End Bladder Cancer events took place in 27 locations in 19 states in 2018.

- 306 Teams
- Over 3,000 participants
- Raised $743,000 to support BCAN's mission

2018 Washington DC

WALK TO END BLADDER CANCER RECAP VIDEO

WATCH NOW AT HTTPS://WWW.BCAN.ORG/PRESS-MEDIA/



Raising Awareness with International Counterparts

BCAN also partners with Bladder Cancer Canada and organizations in the UK (Fight Bladder Cancer) to recognize May as Bladder Cancer Awareness Month. Together, we sounded the global alarm about bladder cancer risks, signs and symptoms.

Now BCAN is working with international groups to start the **World Bladder Cancer Patient Coalition**

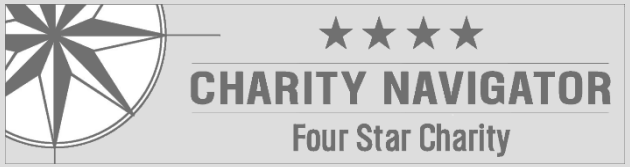
ADVOCACY

BCAN brings advocates to Capitol Hill in Washington DC and works with patient advocates to support Federal legislation.

Rally for Medical Research, September 2018

RESEARCH*

*Named one of America's 10 Best Medical Research Organizations by Charity Navigator!

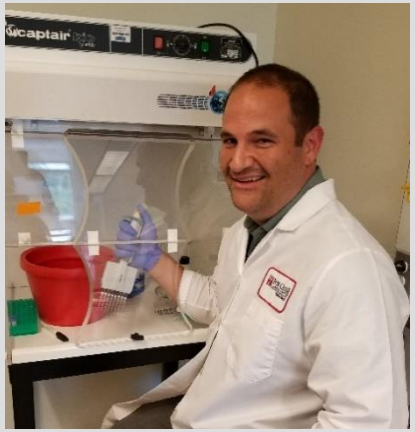


**BCAN was recognized for our commitment to funding cutting-edge research and finding breakthroughs for bladder cancer and we are dedicated to using donors funds wisely in our journey to find a cure.*

For more details visit https://www.bcan.org/bcan-named-one-of-charitynavigators-americas-10-best-medical-research-organizations/

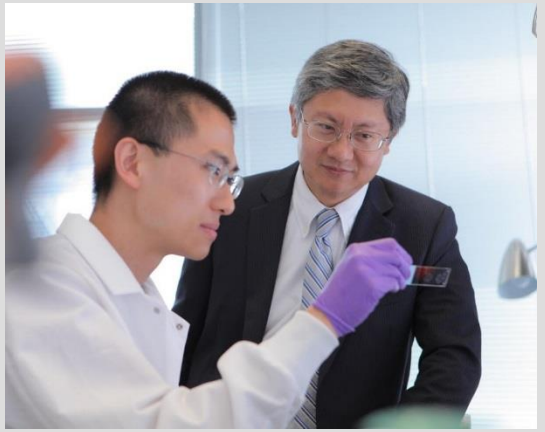
2018 Bladder Cancer Research Innovation Award and BCAN Young Investigator Awards

David Oh, MD, PhD
Univ. California, SF



Philip Abbosh, MD, PhD
Fox Chase Cancer Center

Eugene Lee, MD
University of Kansas



Michael M. Shen, PhD
Columbia University

https://www.bcan.org/research-grants/

SCIENTIFIC ADVISORY BOARD

66

Nationally Recognized Multidisciplinary Experts

BCAN has built a culture of collaboration and excitement around bladder cancer- a disease that was all too often ignored before BCAN came along. Thank you for all that you- and the amazing folks on your team- have done over the years and continue to do every day. I am so proud to be a part of this amazing organization.

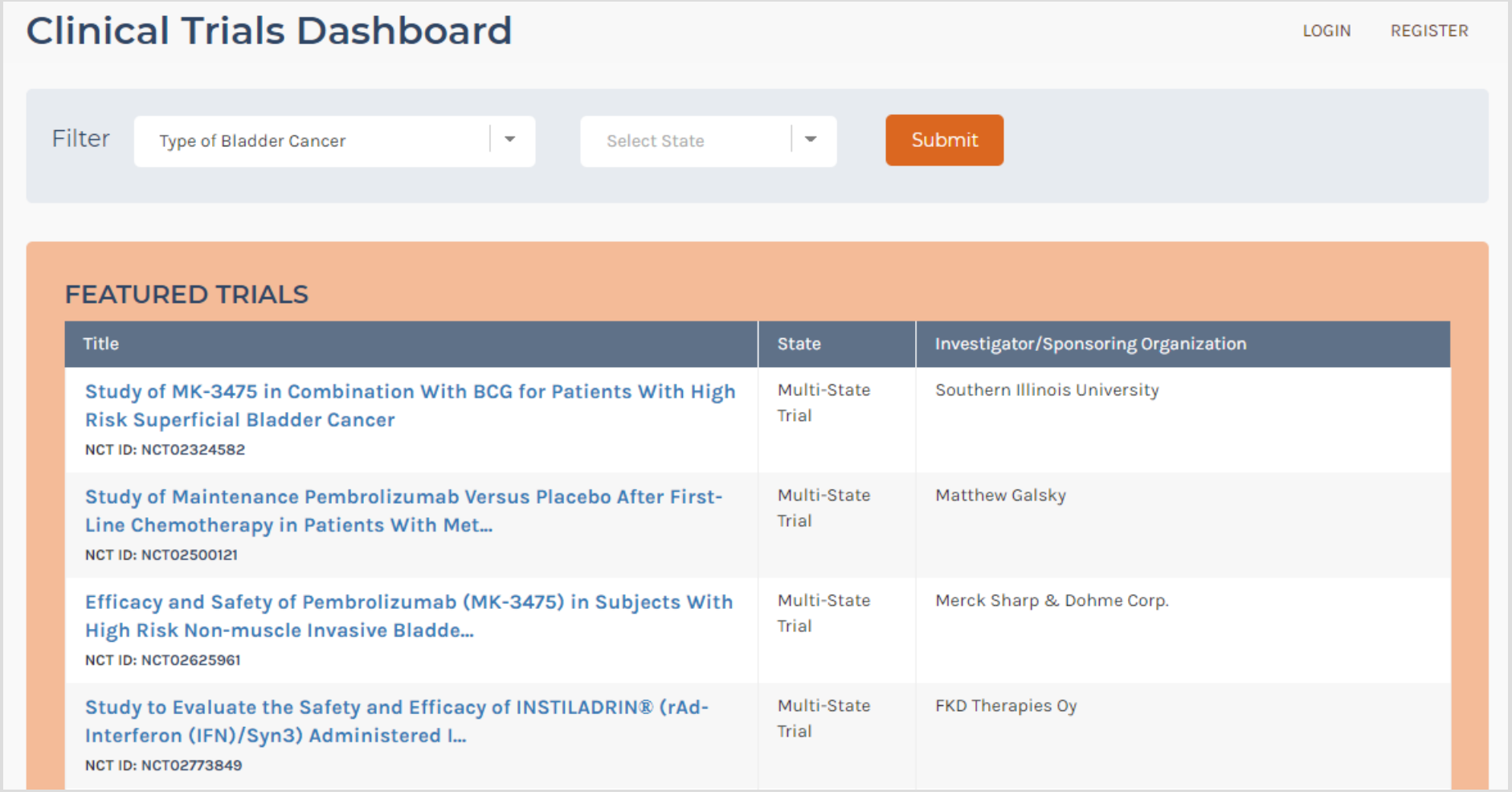
-Elizabeth R. Plimack, MD, MS
Chief, Division of Genitourinary Medical Oncology
Fox Chase Cancer Center

BLADDER CANCER THINK TANK – Scientific Meeting

Collaborating to move research forward.

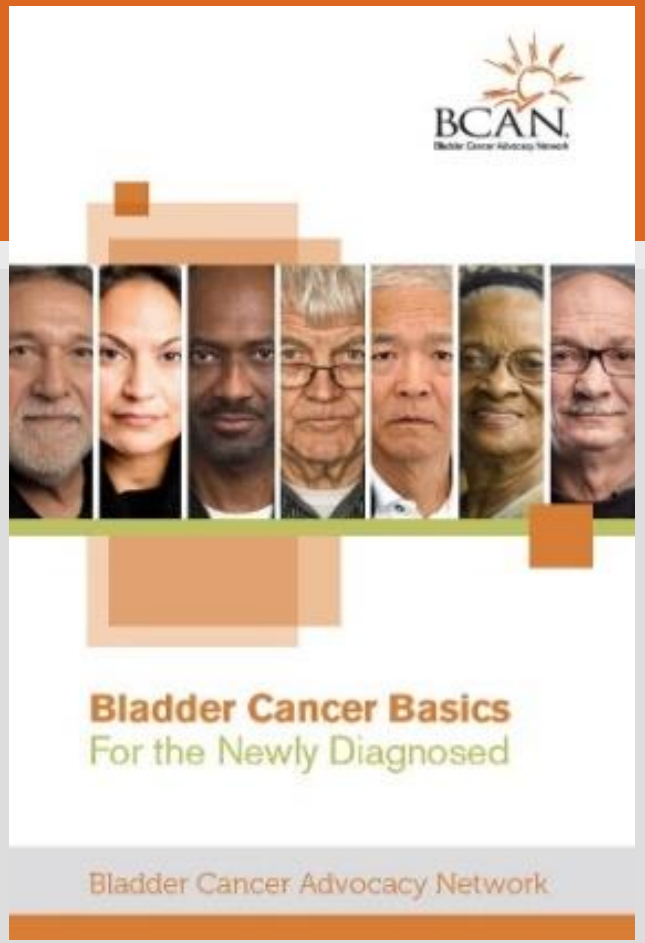
https://www.bcan.org/bladder-cancer-think-tank/

CLINICAL TRIALS DASHBOARD - HTTP://CLINICALTRIALS.BCAN.ORG/



EDUCATION

EDUCATION



Patient Handbook

"From the beginning, BCAN has always been focused on all of the survivors, not just the patient survivor, but also the caregivers, the partners, the family, and the friends."

– Rick Bangs, Patient Advocate

www.BCAN.org

EDUCATION - ONLINE

- Website
- Fact Sheets
- Expert Explanations
- Patient Insight Webinars
- Conversations

What you need, when you need it. 24/7

Multi-faceted resources

EDUCATION


BLADDER CANCER: GET THE FACTS

BCAN

Cancer Immunotherapy

ASK YOUR HEALTHCARE TEAM

TERMS TO KNOW

- Cystoscopy
- Transurethral Resection of Bladder Tumor (TURBT)
- Bacille Calmette-Guerin (BCG)
- Radical Cystectomy
- Ileal Conduit
- Indiana Pouch
- Neobladder
- Immunotherapy
- Palliative Care

"Bladder Cancer: Get the Facts" Tip Sheets

EDUCATION

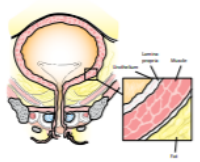
- Expert Explanations

Bladder Preservation with Combined Modality Therapy:

An Expert Explanation by Dr. William Shipley

Curing Patients with Invasive Bladder Cancer Without Surgical Removal of the Bladder

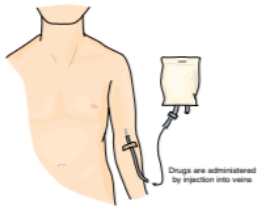
Introduction



Nearly 70 percent of patients diagnosed with bladder cancer have disease at a very early stage affecting only the bladder lining and not yet invading the muscular layer of the bladder wall. These patients are almost always managed by transurethral resection of bladder tumor (TURBT) perhaps with the addition of immunotherapy or chemotherapy instilled in the bladder to treat its inner surface.

The remaining 30 percent of bladder cancer patients have, at diagnosis, a more deeply, muscle-invasive cancer that needs more aggressive treatment for cure. This treatment may be the surgical removal of the bladder (called radical cystectomy), including a pelvic lymph node dissection, and reconstruction of a urine collecting pouch. The long-term outcomes of cystectomy, and its complications, are well documented. Between 40 and 60 percent of patients managed with radical cystectomy are still alive five years later.

For all the sites in the body where cancer may arise our modern therapies are increasingly looking towards eradicating the cancer while at the same time preserving the affected organ and giving the patient the best possible functional outcome and thus quality of life. This is achieved by the combination of lesser surgery, with radiation, and chemotherapy, all in lower doses than if used alone. **Modern Combined-Modality Therapy** (CMT) for bladder cancer follows just that pattern. It begins with an aggressive resection of the visible tumor then following it with Radiation Therapy (RT) given together with chemotherapy. The latter makes the remaining tumor more sensitive to the radiation. When patients are well selected for this approach it can offer equal cure rates to treating with a cystectomy while still preserving a functioning bladder. This approach is favored for patients who are strongly motivated to maintain their bladder or in patients who have so many other medical problems that a radical cystectomy is simply not a safe option.



Who is suitable for bladder preserving therapy by CMT and how are they to be followed?

Many factors play into the determining which patients with a muscle invading bladder cancer are suitable for CMT. Ideally these patients would have cancers with the usual urothelial histology (a small proportion have different appearance down the microscope). They would have clinical stage T2 to T3a disease, and the absence of hydronephrosis (the partial obstruction by the tumor of the ureter that transmits the urine from the kidney to the bladder). In addition, the best candidates are those with tumors small enough to have been visibly completely resected at TURBT. If a visibly complete resection is performed then the radiation and chemotherapy have only to mop up the remaining microscopic cells, a much easier prospect.

For patients who are candidates for bladder preservation, we recommend concurrent chemo-radiation follows the TURBT rather than just RT alone or chemotherapy alone. Chemotherapy that includes the drug cisplatin is preferred, although the combination of fluorouracil plus Mitomycin C is a good alternative, especially for patients whose kidneys do not work well enough for them to receive cisplatin chemotherapy.

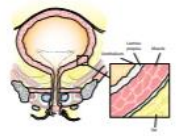
Radiation is given daily, 5 days per week, for up to 7 weeks. The side effects are principally of inflammation to the bladder and adjacent bowel (frequent urination and bowel movements) and usually subside once the radiation is complete.

Following treatment patients must be followed closely with cystoscopy surveillance to detect any cancer recurrence or development of a new primary tumor in the bladder or elsewhere within the urogenital tract (ureters, bladder, urethra).

Intravesical Immunotherapy with BCG

An Expert Explanation by Dr. Janet Kukreja and Dr. Ashish Kamat

Introduction



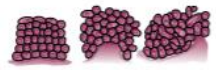
A large majority of patients who develop bladder cancer have what is known as 'non muscle invasive bladder cancer' or 'NMIBC'. This terminology comes from the fact that the tumor has not yet invaded into the true muscle layer of the bladder. When detected at this relatively early stage it is often possible, with the appropriate combination of treatments, to save the patient's bladder.

The first step is complete removal of all visible disease within the bladder. This is achieved with a transurethral resection of the tumor, also called TURBT. For some patients, this may require more than one surgery, especially if the tumor is high grade and involving more than the very first layer of the bladder. After this has been achieved and the bladder has healed, the appropriate treatment may be with intravesical instillation of Bacillus Calmette-Guerin or BCG. BCG is a form of the tuberculosis bacteria and originated as a vaccination against tuberculosis. After decades of detailed investigation including large trials in multiple countries that have tested BCG against various other agents, it currently remains the most effective therapy for NMIBC. However, as with any treatment, it works best when used appropriately – i.e for the right patient in the right manner.

It is instilled into the bladder with a urethral catheter (intravesical) in the office for several treatments. BCG works locally in the bladder to stimulate the body's own immune system to fight off the cancer cells in the bladder. Because it stimulates the immune system, it is considered an immunotherapy (as opposed to chemotherapy). It works to activate the body's immune system to kill cancer cells without harming the normal cells. In addition, BCG is instilled locally in the bladder cannot reach other cells in the body.

Who is eligibile for BCG?

Intravesical immunotherapy with BCG is effective if the tumor is non-muscle invasive. These tumors are often divided into risk groups (low-risk, intermediate-risk and high-risk) based on the risk of recurrence (the likelihood the tumor will return) and the risk of progression (the likelihood the tumor will get worse and potentially become invasive or spread). [1] There are various factors that your urologist will consider when making this risk assessment – such as on how big the tumor is, if it is a first time tumor or a tumor that has regrown, the length of time it took for the tumor to regrow, if the bladder cancer is pure urothelial cancer, as well as as the location of the tumor and the grade of the tumor.



In general, bladder cancer tumors can be low grade and high grade. Low grade cancers can recur often, but are less likely to progress. Thus the goal of therapy with these tumors is mainly to reduce the frequency of recurrence. The high grade tumors can progress and become muscle invasive or metastasize. In treating this type of tumor the goal is to not only prevent recurrence but especially to prevent progression.

Most patients with the intermediate-risk and high-risk non-muscle invasive bladder cancers will be candidates for immunotherapy with BCG. However, based on individualized risk assessment, other intravesical treatments or even bladder removal (cystectomy) may be recommended.

What are the benefits of BCG for patients?

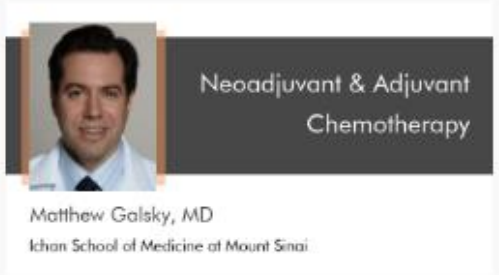
BCG is relatively non-invasive and used to directly treat the bladder lining. BCG intravesical treatment for non-muscle invasive bladder cancer is the most effective treatment that exists for reducing the recurrence and progression of bladder tumors. [1] In patients who respond appropriately, BCG can be a life-saving treatment that reduces death from bladder cancer. Over half of patients have a complete response to BCG

Patient Insight Webinars

Environmental & Occupational Risk Factors

Advanced/Metastatic Bladder Cancer Clinical Trials

Muscle Invasive Bladder Cancer Clinical Trials



Neoadjuvant & Adjuvant Chemotherapy

Risks & Warning Signs

Pathology Driving Decisions

Bacillus Calmette–Guérin (BCG)

Precision Medicine

Non-Muscle Invasive Bladder Cancer Clinical Trials

EDUCATION

Conversations | Let's Talk about Bladder Cancer

with Diane Zipursky Quale

- Sexuality after Bladder Cancer
- Biomarkers
- Personalized Medicine and Immunotherapy
- The Multidisciplinary Approach
- Spotlight on Recurrence
- Spotlight on BCG

PATIENT SUPPORT

BCAN Chapters

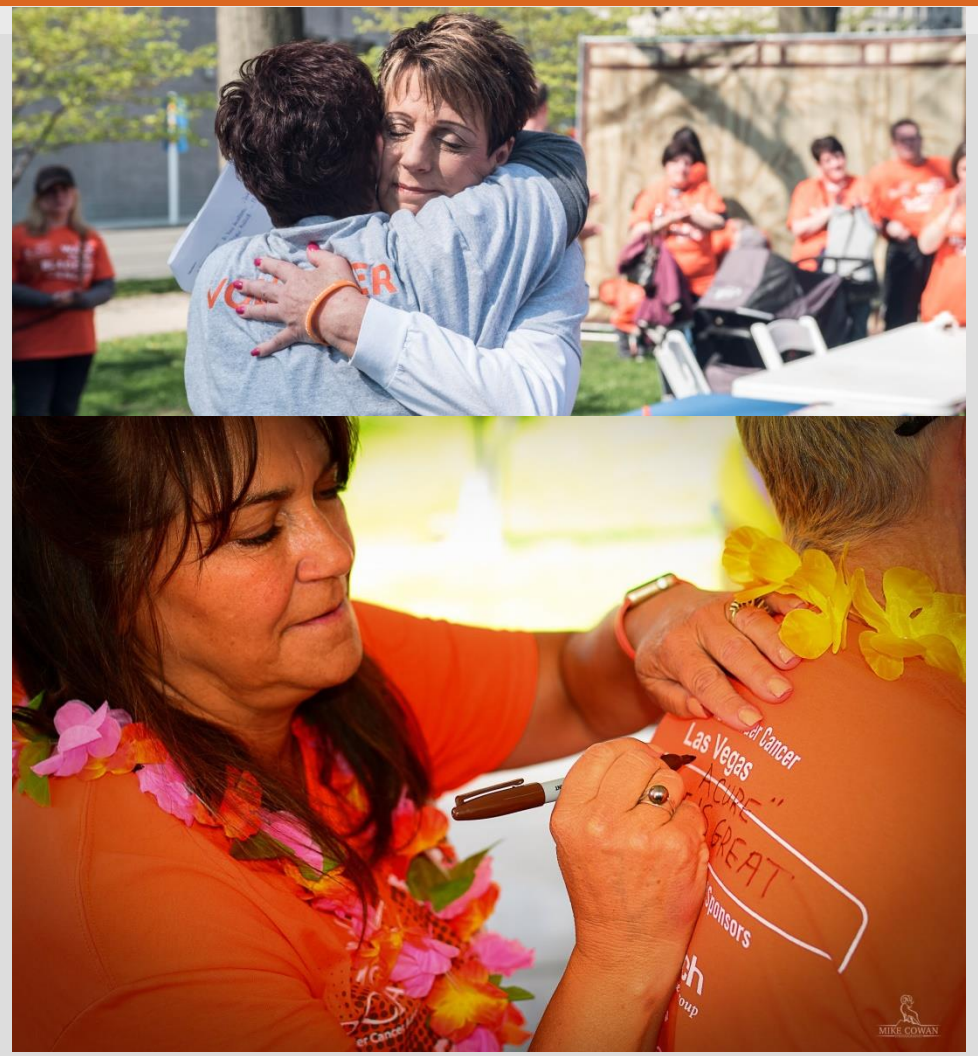
Online Support Community

Survivor 2 Survivor

BCAN Connections

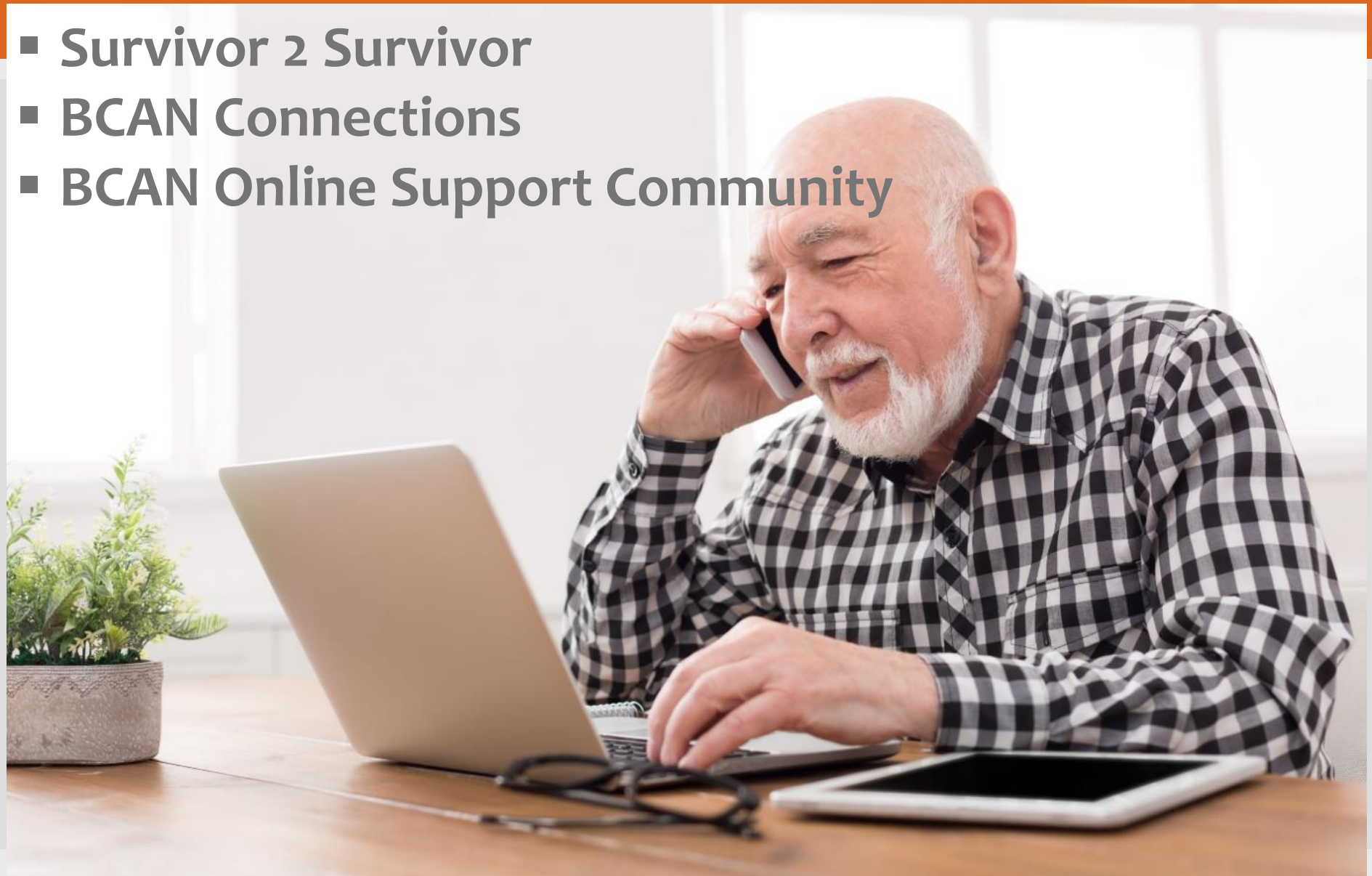
BCAN CHAPTERS

- Albany, NY
- Corpus Christi, TX
- Chattanooga, TN
- Las Vegas, NV
- New Jersey
- NC Coastal Chapter
- North Carolina Triangle
- Richmond, VA
- Pennsylvania
- San Diego, CA



SUPPORT

- Survivor 2 Survivor
- BCAN Connections
- BCAN Online Support Community



QUESTIONS?

BCAN®

Bladder Cancer Advocacy Network

Leading the way to awareness and a cure

ANSWERS! Visit WWW.BCAN.ORG

BCAN®

Bladder Cancer Advocacy Network

Leading the way to awareness and a cure

ONE MORE THING.
Your thoughts and opinions matter!

GET FREE BCAN SWAG! #BCANorange!

- Important feedback – evaluation form
- Strengthen the community – get to know each other in *person.* What's your "Inspire" handle?
- Forms in your packets – turn them in at the end of the Summit and pick your swag!

Your Support is Critical to Our Success

Thank you for helping us in our mission to increase public awareness, advance bladder cancer research, and provide education and support services for the bladder cancer community.

#BCANSummit18