

# fresh air

UPDATES ON PROGRESS IN  
OUR DRIVE TO END LUNG CANCER

Volume 6, Issue 2

FALL 2017

## IN THIS ISSUE

Two New Powerful Research Teams [page 1](#)

2017 Career Development Awardees [page 1](#)

Scientific and Clinical Roundtable Update [page 2](#)

A Unique Partnership with ALK Positive [page 3](#)

Dr. Drew Moghanaki Joins LUNGevity Foundation Scientific Advisory Board [page 3](#)

November is Lung Cancer Awareness Month [page 4](#)

HOPE Summit: “An amazing weekend of hope, knowledge, and community” [page 5](#)

Lemonade for LUNGevity [page 6](#)

Visualizing the Way to Improve Biopsies [page 7](#)

2017 Career Development Awardee Profiles [page 8](#)

Lung Cancer News [page 9](#)

Patient FoRCe Update [page 10](#)

2017 Spring and Summer Breathe Deep Event Photos [page 11](#)

Upcoming Breathe Deep Fall Events [back cover](#)

## LUNGevity FOUNDATION ANNOUNCES

# Two New Powerful Research Teams

On October 26, 2017, LUNGevity announced two new research team awards for the early detection and interception of lung cancer. These awards, a collaboration between LUNGevity Foundation, Stand Up To Cancer (SU2C), and the American Lung Association’s LUNG FORCE initiative, are the first-ever SU2C teams to be focused on cancer “interception” — catching the pre-cancerous cells and blocking them from turning into cancer cells — and total \$7 million over four years. Early detection of lung cancer is a highly complex problem, and the two research teams will be developing tools to find cancer at an early stage as well as the treatments to stop its progression. [continued on page 6](#)



Gathered for the announcement of the two SU2C-LUNGevity-American Lung Association interception team awards are: Back row, l-r: Harold Wimmer, ALA; Margaret Foti, AACR; Andrea Ferris, LUNGevity Foundation; James Gulley, NCI; Bree Turner, SU2C; William Nelson, SU2C; Sung Poblete, SU2C; and Kathleen Lobb, SU2C. Front row, l-r: Awardees Lecia Sequist, Massachusetts General Hospital; Maximilian Diehn, Stanford University; Avrum Spira, Boston University; and Steven Dubinett, UCLA.

## 2017 Career Development Awardees

LUNGevity Foundation is pleased to announce the three recipients of 2017 Career Development Awards (CDA) for translational lung cancer research, Drs. Mehmet Altan, Valsamo Anagnostou, and Zofia Piotrowska. These coveted awards fund critical lung cancer research projects and offer the recipients world-class mentorship by LUNGevity’s prestigious Scientific Advisory Board. [Read all about the awardees and their projects on page 8.](#)



*November is Lung Cancer Awareness Month, when we spread awareness and lung cancer facts and the progress being made to change outcomes. We're proud to help drive this continuing progress in how people are living with a lung cancer diagnosis.*

*We are excited to announce our two Lung Cancer Early Detection and Interception Awards in collaboration with Stand Up To Cancer and the American Lung Association's LUNG FORCE. The research teams aim to lower mortality rates through detection and intervention at the earliest stages of lung cancer, building on LUNGeivity's long-term focus on early detection.*

*We've funded a new cohort of Career Development Awardees, who are igniting lung cancer research with their fresh ideas, and expanded our Scientific Advisory Board..*

*Our national HOPE Summit brought together the largest group of lung cancer survivors to date, and included our first COPE Summit for caregivers. If you or a loved one is navigating a lung cancer diagnosis, we are here to help.*

*We are grateful for your support, without which none of these programs would be possible.*

Andrea E. Ferris

#### LUNGEVITY'S MISSION

**LUNGeivity Foundation is firmly committed to making an immediate impact on increasing quality of life and survivorship of people with lung cancer by accelerating research into early detection and more effective treatments, as well as by providing community, support, and education for all those affected by the disease.**

## Scientific and Clinical Roundtable Update

LUNGeivity Foundation is committed to making lung cancer clinical trials – research studies that evaluate the efficacy and safety of novel lung cancer treatments – more efficient and accessible to patients.

On October 5, 2017, LUNGeivity Foundation hosted its third Scientific and Clinical Research Roundtable, bringing together members of the US FDA, European regulatory agencies (EMA), clinicians, drug manufacturers, and patient groups. The roundtable provides a platform to discuss challenges and opportunities in designing and executing clinical trials that streamline clinical trials and provide access to new treatments as well as concrete action steps to move toward our goal.

The October meeting continued the focus on three major action areas identified during the two roundtables in 2016:

- Expanding the eligibility criteria of lung cancer trials to enable more people to participate
- Simplifying adverse-event reporting to help alleviate the burden on clinicians
- Conceptualizing a new way of creating a “control arm” of clinical trials.

LUNGeivity Foundation will continue to work with the FDA, EMA, clinicians, and industry partners to bring more treatment options to patients as quickly as possible.

#### BOARD OF DIRECTORS

**Alexander F. Stern,**  
Chairman

**Marc Swerdlow,**  
Vice Chairman and  
Treasurer

**Susan Bersh,** Secretary

**Peter Babej**

**Dennis Bookshester**

**Patrick Chen**

**Lynne Doughtie**

**Andrea E. Ferris**

**Chris Olivier**

**Charles M. Rudin, MD, PhD**

**Andrew Stern**

**Paul G. Stern**

#### SCIENTIFIC ADVISORY BOARD

**Scott J. Antonia, MD, PhD**  
Moffitt Cancer Center

**Philp D. Bonomi, MD**  
Rush University Medical  
Center

**Julie R. Brahmer, MD**  
The Sidney Kimmel  
Comprehensive Cancer  
Center at Johns Hopkins

**David P. Carbone, MD, PhD**  
The Ohio State University

**Suzanne E. Dahlberg, PhD**  
Dana-Farber Cancer Institute  
Harvard T.H. Chan School of  
Public Health

**Jessica S. Donington, MD,  
MSCr**  
NYU School of Medicine  
Bellevue Hospital

**Steven M. Dubinett, MD**  
David Geffen School of  
Medicine at UCLA

**Edward W. Gabrielson, MD**  
Johns Hopkins University  
School of Medicine

**Edward B. Garon, MD**  
David Geffen School of  
Medicine at UCLA  
Jonsson Comprehensive  
Cancer Center

**John V. Heymach, MD, PhD**  
The University of Texas  
MD Anderson Cancer Center

**Robert L. Keith, MD**  
University of Colorado Denver

**Pierre P. Massion, MD**  
Vanderbilt University  
Medical Center

**Drew Moghanaki, MD, PhD**  
Hunter Holmes McGuire VA  
Medical Center  
Virginia Commonwealth  
University

**Paul Paik, MD**  
Memorial Sloan Kettering  
Cancer Center

**Charles M. Rudin, MD, PhD**  
Memorial Sloan Kettering  
Cancer Center

**Lawrence H. Schwartz, MD**  
NewYork-Presbyterian  
Hospital/Columbia University  
Medical Center

**Lecia V. Sequist, MD, MPH**  
Harvard Medical School  
Massachusetts General  
Hospital – Center for  
Thoracic Surgery

**Alice T. Shaw, MD, PhD**  
Harvard Medical School  
Massachusetts General  
Hospital

**Steven J. Skates, PhD**  
Harvard Medical School  
Massachusetts General  
Hospital

**Avrum E. Spira, MD, MSCI**  
Boston University

**Anil Vachani, MD**  
University of Pennsylvania

# A Unique Partnership With ALK Positive

LUNgevity is joining forces with ALK Positive, a group of over 700 highly motivated and dedicated ALK-positive lung cancer patients and caregivers who want to drive change in the ALK-positive lung cancer space. The group is committed to raising funds for research that will have a direct impact on ALK-positive patient survivability. LUNgevity will use the same research application structure and rigorous scientific review process and management that is used for LUNgevity's own research award programs to ensure that the most impactful science is supported.



An ALK rearrangement is a fusion between two genes, ALK and another gene, which produces an abnormal ALK protein that causes cancer cells to grow and spread. Lung cancer patients who have this rearrangement are ALK-positive. There are currently several FDA-approved targeted therapies to treat ALK-positive lung cancer patients, but patients typically develop resistance to these after a while. The specific goal of ALK Positive is to support research that seeks to overcome or prevent the mechanisms of resistance that develop with all targeted therapies. By overcoming resistance, or preventing it in the first place, they hope to transform ALK-positive lung cancer into a chronic condition for all patients living with this disease.

**This is the first time that ALK patients themselves will directly contribute to the direction of research that may, one day, save their lives, and we are honored to work with them to accomplish their goals.**

## Dr. Drew Moghanaki joins LUNgevity Foundation Scientific Advisory Board

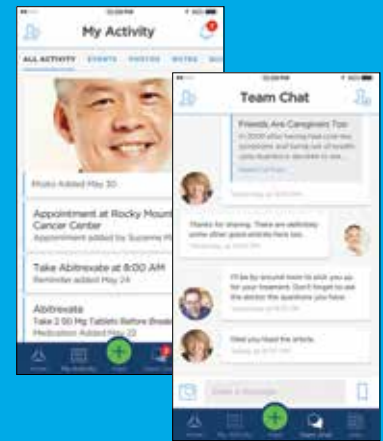


*Drew Moghanaki, MD, MPH*

LUNgevity Foundation is proud to announce that Drew Moghanaki, MD, MPH, has joined its distinguished Scientific Advisory Board. Dr. Moghanaki, Radiation Oncologist and Director of Clinical Radiation Oncology Research, Hunter Holmes McGuire Veterans Affairs Medical Center, Richmond, Virginia, brings expertise in radiation oncology and other key areas to LUNgevity's research program

Dr. Moghanaki has been instrumental in bringing more than \$34 million in funding to improve outcomes for lung cancer patients through a phase III lung cancer trial for veterans and a key VA partnership to increase access to lung cancer screening.

Dr. Moghanaki is also Associate Professor in the Department of Radiation Oncology at Virginia Commonwealth University, where he trains the next generation of doctors.



## Lung Cancer Navigator App

The Lung Cancer Navigator mobile app enables patients and their caregivers to track appointments, treatments, medications, questions, and notes at a single location and share the information with a network that they define and control.

**Download the FREE app today from the App Store or Google Play!**



LUNgevity Foundation is proud to announce that in June it was awarded the prestigious four-star rating from Charity Navigator, the nation's most trusted charity evaluator. A four-star rating is the highest possible score, earned only by charities that prove to be transparent, reliable, and fiscally responsible.

**As we work together to create a world where no one dies of lung cancer, donors can be confident that LUNgevity will be efficient, effective, and transparent stewards of their contributions.**

# November

is Lung Cancer Awareness Month

November is Lung Cancer Awareness Month, a time to educate the public about the disease and share stories of lung cancer patients, survivors, and their families. LUNgevity is spreading the word and we need YOU to help make a difference.

## Want to have an impact?

LUNgevity has lots of opportunities to get involved and effect change.

## TIPS FOR BEING A LUNG CANCER ADVOCATE

**1) GET SOCIAL!** We know you're out there making a difference! Post your personal story showing how you're having an impact on lung cancer outcomes on Facebook, Instagram, Pinterest, and Twitter. Did you create your own event to raise awareness and funds for lung cancer research? Are you handing out LUNgevity materials at a local health fair? Share LUNgevity posts with your network to spread the message, and use the hashtag #changelc.

**2) GET ACTIVE!** Join a Breathe Deep event near you and use our mobile tools to fundraise; request LUNgevity materials to hand out in your community.

**3) LEARN MORE!** Read LUNgevity online blogs, sign up for our newsletters on our homepage, then share with your network. Check out the website for updates and important information for patients and caregivers.

**4) JOIN THE SUPPORT COMMUNITY!** Find support, information, and resources through the online Survivor and Caregiver Resource Centers and Twitter chats; read our patient blogs; become a LUNgevity mentor today.

**There are so many ways to have an impact.  
Find out more at [www.LUNgevity.org](http://www.LUNgevity.org).**



## Join Team LUNgevity

AND SUPPORT LUNG CANCER RESEARCH

Are you already competing in an endurance event, or are you looking to sign up for one? Join the athletes of Team LUNgevity, who run, walk, bike, and swim in endurance events in the U.S. and around the world while raising research funding to help improve outcomes for lung cancer patients!



To see our endurance event options, including Team LUNgevity fundraising tips, visit: <https://www.lungevity.org/events/team-lungevity-endurance-events>

## Get help navigating your lung cancer diagnosis

- **Information** about lung cancer and treatment options
- Personalized **support** and counseling
- **Referrals** to financial assistance resources for needs including pain medication, homecare, childcare, medical supplies, transportation for treatment, and copayment assistance

**Call the toll-free Lung Cancer HELPLine at 844-360-LUNG (5864), 9:00 a.m.- 5:00 p.m. Eastern Time, Monday through Friday**

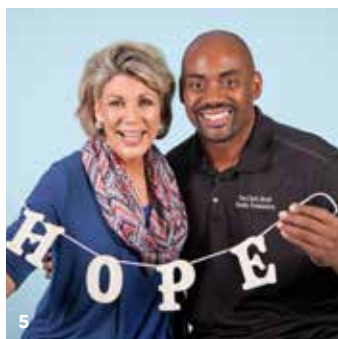
# “An amazing weekend of hope, knowledge, and community”

*This was the consensus among the lung cancer survivors, caregivers, and advocates who spent several spring days in Washington, DC, at LUNGevity’s 7th National HOPE Summit.*

LUNGevity’s National HOPE Summit continues to be the largest—and still growing (at 341, this year’s registrants topped last year’s by almost 20%)—national gathering of lung cancer survivors and caregivers in one location! LUNGevity was pleased to once again offer this educational conference, where attendees spent several very full days and evenings connecting with experts and each other to learn about progress in all aspects of lung cancer treatments, how to be advocates for themselves and others, and ways to best live with lung cancer. Participants also shared their own stories and built lasting networks of friendship and support. As one lung cancer survivor said, “This is a wonderful community of people and the support that we are able to share with each other is an amazing resource.”

**Registration is now open for the 2018 National HOPE Summit, which will take place April 27-29, 2018, at our new venue (because we’ve outgrown our old!), the Washington Marriott Georgetown in Washington, DC. For more information or to register for this or any of our regional HOPE summits, visit [www.LUNGevity.org/hope](http://www.LUNGevity.org/hope).**

**1) 10+-year survivors:** These twelve 10+-year lung cancer survivors are an inspiration! **2) Country music singer, cancer survivor, and keynote speaker Wade Hayes** brought the crowd to its feet twice: once after telling his own moving story about finding meaning in survivorship and again by performing his country hits. **3) Three hundred forty-one survivors, caregivers, and advocates** gathered for a group photo following one morning’s education sessions and expert panels. **4) Medical oncologist Jack West, MD; thoracic surgeon Raja Flores, MD; and radiation oncologist David Kozono, MD, PhD,** discussed progress in lung cancer treatment and answered attendees’ questions during one of the HOPE Summit’s panel sessions. **5) Lung cancer survivor Greta Kreuz and advocate Chris Draft** shared a message of hope. **6) Caregivers and healthcare experts** at the first-ever COPE Summit meetings discussed solutions to the many issues that lung cancer caregivers face.



# Lemonade for LUNgevity

Lung cancer survivor Amanda Nerstad's two young daughters, Isabella and Greta, had a terrific idea to add to the family's summer bucket list: a lemonade stand, whose proceeds would go to help people with lung cancer.



The Lemonade for LUNgevity stand was open for business on July 12 in Knoxville, Tennessee. The community came out in a big way, and those cups of refreshing lemonade added up! In the four hours that the stand was open, the grateful Nerstads raised \$3,179 plus an additional \$1,290 online for lung cancer research! Local TV coverage helped raise lung cancer awareness throughout the Knoxville area.

*Share your creative fundraising stories with us!*

## Two New Powerful Research Teams

*continued from page 1*

LUNgevity is the only lung cancer nonprofit with a programmatic research focus on early detection, because survival rates rise when lung cancer is detected while still localized.

**The SU2C-LUNgevity Foundation-American Lung Association Interception Dream Team** is funded for four years with \$5 million. Headed by LUNgevity Scientific Advisory Board (SAB) member Dr. Avrum Spira from Boston University, the team will develop non-invasive technologies, such as nasal swabs, blood tests, and radiological imaging, to confirm whether lung abnormalities found on chest imaging are benign lung disease or lung cancer. To prevent the cancer from coming back after patients have been successfully treated, the team will develop new blood tests that will help identify patients at the earliest stages of recurrence, so that timely interventions with novel treatments such as immunotherapies are possible.

The second SU2C team, headed by LUNgevity SAB member Dr. Lecia Sequist from Massachusetts General Hospital, is the **SU2C-LUNgevity Foundation-American Lung Association Interception Translational Research Team**. Funded with \$2 million for one year, the team will develop the Lung Cancer Interception Assay (LCIA), which can be used in conjunction with low-dose CT scans. The LCIA is a simple blood-based assay that will examine multiple components of the cancer — such as circulating tumor cells and circulating tumor DNA — to get a comprehensive picture of the lung cancer. After completing pilot testing as part of this Translational Research Grant, the team plans to move the LCIA forward to larger, prospective clinical trials. The goal of the LCIA is to identify patients with early-stage lung cancer so that they can be offered curative treatment.



**Wawa organized Breathe for Kathy**, an event to raise awareness and funds for lung cancer research, in memory of their beloved co-worker and friend. The Wawa team competition and family fun day in Quakerstown, PA, raised over \$28,000 for LUNgevity. The Wawa event committee presented a check from the Wawa Foundation to Becky Bull, Chief Development Officer of LUNgevity. A special thank-you goes to the Wawa employees, family, and friends who attended the event.

## #GivingTuesday

First, there was Black Friday.  
Then came Cyber Monday.  
And now, #GivingTuesday!

Please mark your calendars for Tuesday, November 28, when LUNgevity Foundation joins this global day of giving that kicks off the charitable season. #GivingTuesday celebrates and supports giving and philanthropy during the season when many of our generous donors focus on their holiday and end-of-year giving.

Visit [www.LUNgevity.org](http://www.LUNgevity.org) on Tuesday, November 28, to make your donation!

# advances

## Visualizing the Way to Improve Biopsies



Lida Hariri, MD, PhD

As a pathologist specializing in lung disease at Massachusetts General Hospital, Dr. Lida Hariri analyzes lung biopsy samples and diagnoses patients. After years of doing this work, she started to notice a pattern. When lung CT scans showed lesions that were difficult to access or too small to biopsy well, many doctors tended to wait and see whether the lesion grew before doing the biopsy. In this way, they were saving patients the expense and discomfort of repeat biopsies and unnecessary surgeries. However, if the lesion was cancerous, watching and waiting could delay treatment and ultimately reduce survival time.

“My mentor and I had an ‘Ah ha!’ moment,” explains Dr. Hariri. “We realized that when lung cancer is caught early, patients can have nearly 90% survival rates. So we need to get better biopsy samples of small early-stage tumors. That got us thinking about what we could do to help.”

With her medical specialty in microscopy and her doctorate in biomedical engineering, Dr. Hariri was eager to find a solution. She worked closely with her mentor, Melissa Suter, PhD, at Massachusetts General Hospital, to implement a well-known technique called Optical Coherence Tomography (OCT) to help guide biopsies. OCT measures back-scattered light from tissues to create high-resolution images. Because the light is so gentle, OCT is routinely used for light-sensitive procedures, such as conserving valuable art pieces and visualizing patients’ retinas. Dr. Hariri and her mentor wanted to use it to visualize biopsy sites.

In preliminary studies, Dr. Hariri and her colleagues found that they could pass a tiny OCT probe through the biopsy needle to get a quick look at the surrounding tissue and assess needle placement to ensure an optimized biopsy sample. This method could potentially allow pathologists to consistently get the tissue they need for accurate diagnoses, even if the lesions are small

or difficult to access. In addition, this process could allow pathologists to be in the room during the biopsy and to study more of the patient’s tissue in real time without having to take additional samples.

But to really see the technique in action, clinical trials were needed to demonstrate that OCT actually could improve biopsy results. So, in 2016 Dr. Hariri applied for, and was awarded, a Career Development research grant from LUNGeVity Foundation to continue working to improve lung biopsy results using OCT.

“This is a phenomenal award,” she says. “It is great that there is an opportunity for junior investigators like me to get research funding that leads to lifelong careers as independent researchers specializing in lung disease. Plus, it is amazing to have access to LUNGeVity’s Scientific Advisory Board — a group of seasoned experts who are incredibly supportive and eager to see junior investigators, like me, develop successful research careers.”

Dr. Hariri’s clinical trials are already in the works. If the studies continue to go well, Dr. Hariri hopes that OCT-assisted biopsies may eventually be used in hospitals across the country.

*“It would be amazing if OCT-assisted biopsies could help patients get diagnosed earlier. Early diagnoses would be tremendous for patients: when lung cancer is caught early, patients have a much higher chance of beating the disease, and that is something worth working toward.”*

LIDA HARIRI, MD, PHD

# LUNGeivity 2017 Career Development Awardees

LUNGeivity created the Career Development Awards program to identify outstanding scientists early in their careers and to encourage their continued development in the field of lung cancer research to grow a strong pipeline of dedicated lung cancer researchers. The 2017 cohort of scientists is studying:

- How to predict which patients are most likely to develop serious side effects from some types of immunotherapy
- Why some patients become resistant to immunotherapy and how to help them overcome the resistance
- Why a subset of lung cancer patients develop resistance to a third-generation EGFR-blocking tyrosine kinase inhibitor drug and whether a new combination of drugs may help patients who develop this resistance



**MEHMET ALTAN, MD**

The University of Texas  
MD Anderson Cancer Center

*Identification of predictive markers of toxicity to immunotherapy*

Currently, three immune checkpoint inhibitors are approved by the FDA for the treatment of advanced-stage non-small cell lung cancer (NSCLC) patients. However, these checkpoint inhibitors only benefit a fraction of these patients, and efforts are now focused on combination treatment strategies to increase responses. Recently, the FDA approved an immunotherapy-chemotherapy combination regimen for a subset of metastatic non-small cell lung cancer patients. Immune checkpoint inhibitors have a unique side-effect profile because of their ability to cause inflammatory tissue damage. These side effects are called immune-related adverse events (irAE). Unlike the anticipated side effects of chemotherapy, radiation therapy, and targeted therapies, the onset, duration, and severity of side effects of immune checkpoint inhibitors can be unpredictable. Therefore, irAEs require different side-effect management strategies, which also limits the use of immunotherapy. Dr. Altan is studying how we can predict which patients will develop irAEs so that the right treatment can be selected for individual patients and symptom management can become proactive. Using blood samples from patients who are on a combination immunotherapy clinical trial, Dr. Altan will identify which immune cells and other immune factors such as auto-antibodies contribute to irAEs, with the ultimate goal of developing an irAE prediction signature.



**VALSAMO ANAGNOSTOU, MD, PHD**

Johns Hopkins University

*Dynamics of neoantigen landscape during immunotherapy in lung cancer*

The lung cancer treatment landscape is rapidly evolving with the advent of immunotherapy. Now, checkpoint inhibitors, a type of immunotherapy, are available in the first-line and second-line settings for certain subsets of non-small cell lung cancer patients. Unfortunately, the cancer can develop resistance to immunotherapy and come back. The success of prolonged response to immunotherapy is therefore dependent on identifying which NSCLC patients are most likely to respond to immunotherapy. Previous research from Dr. Anagnostou has identified a key connection between the genetic make-up of the lung cancer and how it responds to immunotherapy. With her LUNGeivity Career Development Award, Dr. Anagnostou is using a comprehensive approach (genomics and immune cell assays) to identify these mechanisms of resistance to checkpoint inhibitors. Through a clinical trial already running at her institution, Dr. Anagnostou is testing tumor samples from patients both before they were started on immunotherapy and after recurrence. Along with this pre- and post-immunotherapy comparison using lung tissue, she is also looking for mechanisms of resistance from the blood of lung cancer patients through a liquid biopsy approach.



**ZOFIA PIOTROWSKA, MD**

Massachusetts General Hospital

*Overcoming heterogeneity and resistance in EGFR-mutant NSCLC*

Targeted therapies are the standard of care for non-small cell lung cancer patients whose tumors test positive for a targetable driver mutation. Mutations in the EGFR gene are considered driver mutations and can be found in 10%-35% of patients with non-small cell lung cancer. After diagnosis, patients whose tumors test positive for this gene mutation are treated with first-generation EGFR tyrosine kinase inhibitors. However, 50%-60% of EGFR-positive NSCLC patients become resistant to these drugs through the development of another mutation in the EGFR gene — the T790M mutation. We now have third-generation EGFR inhibitors in the clinic that target the T790M mutation. Unfortunately, cancer cells have learned how to outsmart third-generation inhibitors. Dr. Piotrowska is studying how lung cancer cells become resistant to third-generation EGFR inhibitors such as osimertinib. She will be using a simple blood test to identify how lung cancer cells evolve in response to osimertinib and outsmart it, specifically, how tumor heterogeneity (different cells in a tumor) contributes to resistance. She will also be studying a novel drug combination in a clinical trial that is predicted to work in patients who have developed the T790M mutation.



# Lung Cancer News

## NEWS FROM TWO MAJOR FALL 2017 ONCOLOGY CONFERENCES

The September **European Society for Medical Oncology (ESMO) 2017 Annual Meeting** in Madrid brought together 24,000 attendees, including cancer researchers, clinicians, and patient advocates. Several major highlights for the lung cancer community include:

**IMMUNOTHERAPY:** Durvalumab, a type of immunotherapy called a checkpoint inhibitor, shows benefit in locally advanced, unresectable stage III non-small-cell lung cancer (NSCLC) patients. About a third of NSCLC patients are diagnosed with stage III disease and receive a combination of chemotherapy and radiation therapy. However, the cancer may come back. Treatment with durvalumab after chemo-radiation dramatically delays the recurrence of the cancer. This is the first use of immunotherapy for stage III patients.

**TARGETED THERAPY:** Osimertinib, a third-generation EGFR tyrosine kinase inhibitor, is currently approved for use in the second-line setting for those patients who have progressed on afatinib, gefitinib, or erlotinib. New data demonstrate that osimertinib may be more effective than erlotinib or gefitinib in the first-line setting, suggesting that osimertinib may become a new standard of care for patients whose tumors test positive for an EGFR mutation — particularly in patients with brain metastasis.

Brain metastasis is a common occurrence in ALK-positive lung cancer, too. Data from two separate studies show that a new ALK inhibitor, alectinib, can penetrate the blood-brain barrier, control brain metastases, and delay the development of new brain metastases in ALK-positive lung cancer patients.

### **FOLLOW-UP FOR EARLY-STAGE NSCLC**

**PATIENTS AFTER SURGERY:** Current guidelines suggest that early-stage NSCLC patients who have undergone surgery receive computerized tomography (CT) scans every three to six months for at least two years after surgery. However, a recent study suggests that such an aggressive follow-up may not be necessary, especially during the first two years.

The October **International Association for the Study of Lung Cancer (IASLC) 18th World Conference on Lung Cancer (WCLC)** in Yokohama, Japan, was the world's largest meeting dedicated to lung cancer and other thoracic malignancies, with more than 7,000 attendees from more than 100 countries.

This WCLC was a special one for LUNgevity. Scientific Advisory Board member Dr. Philip Bonomi and his team from the Rush Medical Center received one of five IASLC Foundation's first-ever Cancer Care Team Awards for multidisciplinary cancer care teams across the globe who go above and beyond to provide the highest-quality patient care. Multidisciplinary clinical care includes physicians from multiple specialties attending to the needs of lung cancer patients, and leads to improved patient outcomes due to knowledge-sharing between physicians and better understanding of the different needs of lung cancer patients. Congratulations, Dr. Bonomi!



*Rush cancer care team members Philip Bonomi, MD, (left) and Mary Ellen Hand, RN, BSN, (right) chat with lung cancer survivor Jill Feldman after receiving their Cancer Care Team Award.*

# Patient FoRCe Update

Launched in April 2017, LUNGevity's Patient Focused-Research Center (Patient FoRCe) seeks to uncover gaps in information, misperceptions about patient attitudes, and areas of unmet need. We then incorporate the lung cancer patients' preferences and experiences into the development of relevant policy, treatments, and research protocols.

Patient FoRCe just concluded two important projects addressing specific needs of lung cancer patients, and is working on Phase II of another, along with additional projects.

**CLINICAL TRIALS FOR ME:** Clinical trials continue to remain a vital source of novel therapies for lung cancer patients. Of the 1,549 interventional clinical trials for lung cancer that are open or actively recruiting, 175 trials are open to patients who have not received prior treatment (first-line trials). To understand real and perceived barriers to clinical trial participation from the patient and caregiver perspective, Patient FoRCe fielded a comprehensive survey and found that:

- The majority of the patients (or caregivers who responded on behalf of their patients) are eager to participate in clinical trials to have access to life-saving therapies
- However, even for those patients who have previously participated in clinical trials, financial and logistical barriers to participation persist
- Patients and caregivers would most like to receive information about clinical trials from patient advocacy groups and doctors, respectively

LUNGevity Foundation is working to develop patient-focused solutions to these barriers.

**STAGE III NSCLC EDUCATION NEEDS:** About a third of non-small cell lung cancer patients present with stage III lung cancer that cannot be surgically treated. This unique group of patients typically receive a combination of chemo-radiation that has

a unique side-effect profile. To understand the unmet needs of this understudied patient community, Patient FoRCe conducted in-depth interviews with stage III NSCLC patients and found that:

- There is a clear lack of information and education specific to stage III lung cancer patients
- Stage III patients are looking for information that can help them manage their disease, lead a healthy lifestyle (including tips on how to manage co-morbidities), and stay up to date with the latest developments in treatment for stage III patients

Based on these findings, LUNGevity Foundation is developing education materials that cater to the needs of stage III NSCLC patients.

**PROJECT TRANSFORM:** LUNGevity is in midst of Phase II of Project Transform — a nationwide, large-scale patient preference study aimed at understanding what lung cancer patients truly want from their treatment, e.g., better quality of life versus longer length of life. We are using an innovative participatory model of patient engagement to hold the study. In this model, a team of lung cancer survivors — the Patient Action Committee — are engaging with unreached populations of lung cancer patients, such as the financially-, linguistically-, and geographically-isolated patient community, to gather information that better represents the lung cancer population.

**For more information on Project Transform, please visit: <https://www.lungevity.org/research/patient-focused-research-center-patient-force/deriving-patient-preferences-project>**

*Patient FoRCe is changing the paradigm in lung cancer from assumptions being made about patient preferences to evidence-based conclusions about what patients value.*



Thank you to the walkers, runners, and volunteers who participated in 2017 Spring and Summer Breathe Deep events!



2017 Breathe Deep events pictured here

1) Cleveland, OH	7) Salt Lake City, UT
2) Kingston, PA	8) Atlanta, GA
3) Columbia, MD	9) Deerfield, IL
4) South Lyon, MI	10) Birmingham, MI
5) Toledo, OH	11) Seattle, WA
6) Naperville, IL	12) Greensburg, PA



228 South Wabash Avenue, Suite 700  
Chicago, IL 60604  
312.407.6100

## JOIN US AT THESE FUN AND INSPIRING LUNGevity FALL EVENTS

<b>November 4</b>	Breathe Deep Boca Raton	Boca Raton, FL
<b>November 4</b>	Breathe Deep Cincinnati	Cincinnati, OH
<b>November 4</b>	Breathe Deep Boston	Somerville, MA
<b>November 4</b>	Breathe Deep South Jersey	Pennsauken, NJ
<b>November 4</b>	Breathe Deep San Diego	San Diego, CA
<b>November 4</b>	Breathe Deep Fort Myers	Fort Myers, FL
<b>November 5</b>	Breathe Deep DC	Washington, DC
<b>November 5</b>	Breathe Deep Kansas City	Kansas City, MO
<b>November 11</b>	Breathe Deep Busse Woods	Busse Woods, IL
<b>November 18</b>	Breathe Deep DFW	Dallas, TX
<b>November 18</b>	Breathe Deep Stache & Lash	Nashville, TN

For additional information about events near you, visit [www.LUNGevity.org/events](http://www.LUNGevity.org/events)



**CHICAGO OFFICE** 228 S. Wabash Ave., Suite 700, Chicago, IL 60604 **PHONE** 312.407.6100  
**BETHESDA OFFICE** 6917 Arlington Rd., Suite 352, Bethesda, MD 20814 **PHONE** 240.454.3100  
**WEBSITE** [www.LUNGevity.org](http://www.LUNGevity.org) **EMAIL** [Info@LUNGevity.org](mailto:Info@LUNGevity.org)