Pancreatic Cancer Progress Report 2024

On April 13, 2024, the Hirshberg Foundation held the 18th Annual Symposium on Pancreatic Cancer. It was an honor to welcome Scientific Advisory Board member, Dr. Eileen O'Reilly to share a progress report on the state of pancreatic cancer research. Dr. O'Reilly is a professor of medicine at the Weill Cornell College of Medicine, a medical oncologist at Memorial Sloan Kettering Cancer Center, a principal investigator of multiple phase one, two, and three clinical trials for pancreatic cancer, and an international leader in finding ways to better treat this disease.

Dr. O'Reilly provides an overview of pancreatic ductal adenocarcinoma (PDAC), the current treatment landscape, and the shifting epidemiology of the disease. She focuses on the current and evolving treatments for advanced-stage pancreas cancer, DNA-damage-directed therapies, KRAS-directed therapies, and new emerging approaches.

A decade ago, the primary form of treatment for pancreatic cancer was limited to chemotherapy based on our understanding of the disease. Now, pancreas cancer is approached as a KRAS-altered disease, which provides a few more avenues for treatment. The current standard therapy includes three main chemotherapy options: mFOLFIRINOX, Gemcitabine with nab-paclitaxel, and NALIRIFOX. There is also emerging evidence for more use of maintenance therapy or a de-escalated chemotherapy. For certain patients, there is also the option for integration of local therapies such as radiation, surgery, or ablation.

One main area of research for pancreas cancer treatment is KRAS, as about 88 to 90% of people with pancreas cancer will have an

alteration in KRAS. KRAS, an important signaling pathway in pancreas cancer, is involved in the growth and metastatic potential of this disease, and it comes in various flavors. Most common in pancreas cancer is something called KRAS G12D, followed by G12V, followed by G12R. One KRAS alteration to highlight is G12C because current regulatory approvals and drugs are available for use in the clinic to treat the small subset of individuals with this specific mutation. Targeting KRAS directly or indirectly, tackling the protein, working on the gene itself, looking to different versions of the gene, and combining it with other things are avenues of current investigation for pancreatic cancer.

Genetic targeting, in terms of BRCA1, BRCA2, and PALB2, is another important topic for pancreatic cancer treatment. Although these cases comprise 5 to 8% of this disease, they're a very important subset that can benefit from specific treatments. These treatment options include platinum-based therapy and PARP inhibitors. Genetic targeting also influences future treatment directions, and some very interesting areas are being studied.

A great deal is happening around the globe to advance research and treatment options for pancreatic cancer. As Dr. O'Reilly said, "you'll see that there's real progress happening and we're just on the cusp of I think very important developments in this disease that hopefully will translate into improvements and outcomes for people." We thank Dr. O'Reilly for her presentation and look forward to sharing more as these treatment options develop.

Watch the <u>full presentation</u> →

Treatment Decisions: Questions to Ask Your Doctors

Ensuring your comfort with the cancer treatment you select is crucial. This process begins by engaging in open and candid discussions with your healthcare team. It's common to struggle with which questions to ask or to forget them during appointments. The following set of questions, originally featured in the NCCN Guidelines for Patients, aims to empower you with information. Whether you use these or create your own, gaining clarity on your treatment goals and expectations is essential.

Questions about cancer testing

- 1. What tests will I have?
- 2. Do the tests have any risks?
- 3. Do I need to do anything to prepare for testing?
- 4. Should I bring someone with me to the appointments?
- 5. Where do I go for testing and how long will it take?
- 6. If any of the tests hurt, what will you do to make me comfortable?
- 7. How soon will I know the results, and who will explain them to me?
- 8. How can I get a copy of the pathology report and other test results?
- 9. Is there an online portal with my test results?

Questions about treatment options

- 1. What are my treatment options?
- 2. Is a clinical trial an option for me?

- 3. What will happen if I do nothing?
- 4. Are you suggesting options other than what <u>NCCN</u> recommends? If yes, why?
- 5. How do my age, sex, overall health, and other factors affect my symptoms?
- 6. What if I am pregnant or planning to become pregnant?
- 7. Does any option offer a cure or long-term cancer control?
- 8. What are the side effects of the treatments?
- 9. How do I get a second opinion?
- 10. How long do I have to decide about treatment and is there a social worker or someone who can help me decide?

Questions about what to expect

- 1. Does this hospital or cancer center offer the best treatment for me?
- 2. Do I have a choice of when to begin treatment?
- 3. How long will treatment last?
- 4. Whom should I contact with questions or concerns if the office is closed?
- 5. How will you know if treatment is working?
- 6. What are the chances of the cancer worsening or returning?
- 7. What follow up care is needed after treatment?
- 8. What happens if treatment stops working?

Questions about side effects

- 1. What are the possible complications and side effects of treatment?
- 2. Does the cancer itself cause any side effects?
- 3. Which side effects are most common and how long do they usually last?
- 4. Which side effects are serious or life-threatening?
- 5. Are there any long-term or permanent side effects?

- 6. What symptoms should I report right away and whom do I contact?
- 7. What can I do to prevent or relieve the side effects of treatment?
- 8. Do any medications worsen side effects?
- 9. Do any side effects lessen or worsen in severity overtime?
- 10. Will you stop or change treatment if there are serious side effects?

Questions about clinical trials

- 1. Do you recommend that I consider a clinical trial for treatment?
- 2. How do I find clinical trials in which I can participate?
- 3. What are the treatments used in the clinical trial?
- 4. Has the treatment been used for other types of cancer?
- 5. What are the risks and benefits of this treatment?
- 6. What side effects should I expect, and how will they be managed?
- 7. How long will I be in the clinical trial?
- 8. Will I be able to get other treatment if this doesn't work?
- 9. How will you know if the treatment is working?
- 10. Will the clinical trial cost me anything?

Questions about your care team's experience?

- 1. What is your experience, as well as your team's experience, with treating my type of cancer?
- 2. How many patients like me (of the same age, gender, race) have you treated?
- 3. Will you be consulting with experts to discuss my care?

Whom will you consult?

- 4. Is this treatment (or procedure) a major part of your practice? How often have you done this treatment (or procedure) in the last year?
- 5. How many of your patients have had complications? What were the complications?

Questions about supportive care?

- 1. What supportive care and services are available to me and my caregiver?
- 2. Are there any programs to help pay for out-of-pocket costs of cancer care?
- 3. Does this center provide transportation to and from appointments? What about childcare during health care appointments?
- 4. Is there help for basic needs like food and housing?
- 5. Where can I get legal advice? Is my job legally protected if I take a leave from work?
- 6. Who can help me cope with stress? Is there a support group that would be a good fit for me?
- 7. Who can advise me and my family about end-of life concerns?

We are here to help. For more support throughout your cancer journey, please contact us.

Agi Hirshberg: Our Lady of

Hope

PANCREAS SPOTLIGHT By Shweta Lavania

This article originally appeared in Pancreas, Volume 53, Number 6, July 2024. It can be downloaded at www.pancreasjournal.com

Selfless service in cancer research is the embodiment of compassion in action. It is through service that we truly connect with the world around us, leaving a legacy of love, generosity, and empathy. No one has understood this fact better than Agi Hirshberg. From finding inspiration through her tragic loss, Agi's unwavering commitment to the cause of supporting and advocating for Pancreatic Cancer patients is simply a tale of compassion, inspiration, and true labor of love. We, here at Pancreas are honored to celebrate the life and philanthropy of the remarkable Agi Hirshberg by featuring her in our inaugural Pancreas Spotlight series.

I spoke with Ms. Hirshberg on a sunny Fall afternoon to try and decode the secret sauce that flows through the veins of this impossibly sunny, vivacious, 78-year- (young!) old and came back inspired by her humility, her boundless optimism ("the cure is just so close now, I can feel it") and her love and support for the tiny but growing community of pancreatic cancer research that punches well above its weight in the fight for patients' lives!

Agi's inspiring life story which begins in 1946 has all the hallmarks of the upheaval of the Post World War era that forced her parents, Edmund, a Holocaust survivor, and Sarah Mandel, to leave Hungary and emigrate to the United States of America. Like all immigrants, America eventually embraced and assimilated this hardworking family with all its fervor and thus began little

Agi's journey to a life of hard work and boundless optimism towards a better destiny. From Miami to eventually Los Angeles, armed with limited English, Agi set out to complete her education eventually receiving her bachelor's degree at Woodbury University in Business and Design. A career in creative designs and marketing beckoned which eventually led to a chance encounter with a "handsome gentle giant", who went on to change the course of her life, both personally and professionally. In 1986 Agi met, fell in love and eventually married the love of her life, Ronald Hirshberg, a "retail genius". Together, they established a successful business by becoming the exclusive licensee for Adidas accessories, all over the world. Life was perfect until fate intervened. In 1997, Ron was diagnosed with Pancreatic Cancer which eventually led to his demise at the age of 54 after a hard-fought battle of 8 months and seven days. Those who are familiar with the ravages of this disease know the stealth nature by which it manifests in the form of innocuous symptoms which are often ignored until it is well too late to stage a successful therapeutic intervention. While losing one's beloved husband in the prime of his life might have broken the spirits of a lesser mortal. Agi Hirshberg found new strength and a clarity of purpose that led to the establishment of the Hirshberg Foundation for Pancreatic Cancer Research a mere 6 weeks after Ronalds's death.

One can say now, with hindsight, that the mission almost chose Agi way before she chose it herself. Her phenomenal instincts as an entrepreneur coupled with her unapparelled belief in the urgency of her mission led her to recruit and collaborate with some of the brightest minds in the field of Pancreatic cancer research to raise awareness, brainstorm new treatment guidelines and above all, place the needs of patients first and foremost, in any clinical and research scenario. Merely 6 months after Ron's untimely loss, the Hirshberg Foundation was up and running

at UCLA under the leadership of Dr. Howard Reber. Since its inception, the Hirshberg Foundation has touched the lives of countless patients by raising more than \$32 million in funding that is used for providing financial aid to patients, establishing the Seed grant program that provides critical funding to support medical research in pancreatic cancer, establish research institutions that focus on pancreatic cancer pathobiology and treatment, establishing tissue data banks to support research, provide support for inter-disciplinary cancer research to spur new innovations and support professional research organizations such as the American Pancreatic Association (APA), Japan Pancreas Society, and the European Pancreatic Club's Annual Meetings to name a few. One might assume that Agi's legacy as a champion of Pancreatic Research is all but assured and she may well afford to relax as the years go by. One couldn't be more wrong because the messianic zeal which fuels Agi is far from diminished, and she continues to criscross across the world marshaling her phenomenal resources to bring together new collaborators, supporting new researchers, and throwing fundraisers and spending time with pancreatic cancer patients and supporting them through the tough journey that defines their destiny from diagnosis to treatment and management of symptoms. She is ably supported in this mission by her daughter, Ms. Lisa Manheim, Director of the Hirshberg Foundation for Pancreatic Cancer Research, who shares her mother's boundless optimism and passion for pancreatic cancer patient advocacy and research. Ms. Manheim has taken over the rigors of the day- to-day operations of the foundation while Ms. Hirshberg continues to draw up ambitious plans and alliance to thwart the march of pancreatic cancer.

Agi Hirshberg is one rare human being who has turned her personal loss into a cause that transcends her own pain and provides support and meaning to countless pancreatic cancer patients all over the world. Thank you for being a true friend & cheerleader of the Pancreas & the Pancreatic Cancer community!

Below are some of the excerpts from our meet-up session:

What is your opinion about the status of research in the field and how close we are to finding a cure?

Agi: I almost think that with AI and all the new technology that we have now, we are as close as we can be to finding a cure. (On her optimist outlook) Listen, I live with the word "we are going to beat it (Cancer)! Hope springs eternal.

Did you ever envision that your life's work would ever involve establishing a foundation for the patient support, advocacy and fundraising for pancreatic cancer research?

Agi: Absolutely not! I am an immigrant, grew up in Hungary, arrived in US as an 11-year-old only child (tie breaker child!) with limited English. This humble start to life made me realize the importance of a strong work ethic and boundless optimism. After finishing my education, I started as a fashion designer and then I met the love of my life Ronnie and together we set up our business, I designed the Adidas products, and he built our global distribution business up and running and we were a successful team! Then Ronnie's loss spurred me to approach Dr. Howard Reber at UCLA, and the Hirshberg Foundation came to life, and we have never looked back!

For someone who has spent 26 years working with pancreatic cancer patients and their loved ones, supporting them, and giving their suffering a voice and positive direction to inspire changes, please share some of your favorite memories of interactions.

Agi: I must tell you that while I am truly proud of all the

efforts and resources that we (Hirshberg Foundation) have provided to the Basic and Clinical research community, what I am really focused on is providing support to the patients. I am proud of the network of support and services that we can call upon all over the country, best centers, best physicians, and staff to refer these patients for treatment and help them in every possible way as they battle this dreaded disease. Providing these patients with all the support and help remains my primary focus to date. To celebrate their courage and to inspire other patients and survivors, I host Agi's Backyard Barbecue (see pictures), an annual get together where in 60-80 patients, their loved ones come over and share their stories. Every year it so happens that we have newly diagnosed patients that sit on one side and on the other side we get patients who are thriving even after 7,18 and even 23 years post cancer diagnosis! This allows the "newbies" and the "veterans" to share their experiences and support one another and celebrate life. I can tell you no one wants to go home by the end of the night! That sort of energy is infectious and inspires me to do what I do.

Lastly, Tell us your secret Agi? At 78, you look like you've cracked the code to a life well lived!

Agi: You can't help but become sisters and brothers with the patient, so the emotion is always with the patient and that they have the long life. What else could I say? I am an eternal optimist, and I am sure that the cure is just out there, all we got to do is keep going. We can beat CANCER!

Messages of Hope for Cancer Survivors

June is National Cancer Survivor's Month and we are happy to share these heartfelt messages with all those facing cancer. All month long we celebrate survivorship and honor those in treatment as we work towards a cancer-free future.

Share your message of hope here. Together, let's provide support, hope and love with all those facing pancreatic cancer!

I am an 8 + year survivor of pancreatic cancer. I was diagnosed in 2012 and had a distal pancreatectomy in September, followed by chemo for six months. I am happy and blessed to say I am still here, cancer free, and thriving! There is hope and you can survive too!

Barbara

Be well informed but don't let anyone take away your hope. Hope gives us the power to endure what we think we can't, to heal. Remember to enjoy life, enjoy the little things. Be your own best advocate and keep fighting. It's ok to have bad days, to feel like you want to quit, but remember what or who you are fighting for and continue. Even the strongest of us get tired and need to lean on someone else for a bit, or have someone give us a hug and say it's okay.

Roberta

Thank you to all the researchers, the clinical trials, the

doctors, pharmacists, scientists, oncologists and nurses working to cure pancreatic cancer patients each day.

George

The greatest gift I have received from my recent stage IV pancreatic cancer diagnosis is the deeper appreciation of each day of life and the deeper connections I have with each person, object and experience in my life. It is the gratitude and connections that give me strength and purpose to get through each step of this journey. Life is so much more beautiful when I focus on the wonderful things I have and not on what I don't have.

I am so thankful for the treatment options available for me, only made possible by incredible foundations such as the wonderful team at Hirshberg Foundation, generous donations from supporters and believers in the amazing scientists and doctors working hard to give us reasons for greater hope each day.

Esther

I remember hearing that the tumor on my husband's pancreas could be cancer and that the 5-year survival rate less than 5%. Boom! He was 50, and our kids were still too young. When I told my hubby's brother that the survival rate was only 5% (and I was shaking) he said this to me,

"So, why can't he be in the 5%?" HOPE. Those words let light in and we began the fight! We formed our team of family, medical experts, support people and HOPE was restored. That was 11 years ago. He was in that 5%!

In this pancreatic cancer journey, it's hard and scary and so

sad. But I KNOW that hardwork is happening and progress is happening and numbers are changing in a better direction. I KNOW that there is HOPE to increase them further. I KNOW! And so does my husband! Eleven years, what a gift! So thankful and full of gratitude and HOPE.

Cyndy

We are all individuals. Focus on surviving and positive energy instead of looking at stats or educating yourself on survival. Educate yourself in health and what that means instead. Maybe explore Ayurveda or cannabis if you are looking for gentle plant medicine. I was diagnosed in 2010 and I am a survivor.

Christina

I am a 16 year survivor, Blessed Be! My motto was "leave no stone unturned." I did everything the doctor told me to do, and everything meditative and spiritual my heart and hospice counselor suggested. Hospice was so supportive. I exercised and walked daily and ate healthy as much as I could. It was so long ago and I'm so healthy now, I can only thank heaven. I tell everyone who is interested about my story because there IS hope and there ARE angels.

Julie

Hang in there! Every new day brings a chance for hope, more treatments and cures. Thank you to the Hirshberg Foundation for all the information and support, you are so helpful and inspiring! Appreciate it all!

Joanne

Each morning is a new day- live, love, experience...cherish each moment!

Kevin

Hang in there, be strong, have resilience. You are not alone, relatives, patients and the pancreatic cancer community is here to support you.

Ana

Happy National Cancer Survivors Day! I would just like to celebrate all cancer survivors perseverance, strength, passion and enthusiasm in each day, your spirit inspires all of us! It's been an honor being able to support this amazing foundation and be around such a great atmosphere of people!

Brandon

I am a 1 year Pancreatic Cancer survivor! My journey has had so many different emotions of fear, tears, pain, the unknown, but most importantly HOPE! Knowing that my medical teams and organizations like Hirshberg are doing everything they can to keep this mean cancer away and that research continues to progress gives me hope that I will continue to live a beautiful life, cancer free! I will win and beat this cancer! I am Dawnie Strong!!!

Dawnie

I am a 7 1/2 year pancreatic cancer survivor! A positive attitude is key to your recovery with the love and support of those around you.

Barbara

I was diagnosed with pancreatic cancer in the year 2000. A state-of-the-art clinical trial saved my life. Twenty years later the treatments and therapies have advanced to such an extent that the protocol I received is seldom used. The past two decades of breathtaking research can truly bring hope to you who have been recently diagnosed.

Helping hands and hearts are waiting to help you. Be strong and know that you are not alone!

Lee

Never give up hope! There is ALWAYS reason to believe!

Margie

To all those fighting and surviving every day...this is a new day. We have significantly progressed in the search for a cure. Don't give up hope and keep fighting because there are people you don't even know praying for you, and prayer is enormous! God Bless you and keep you healthy. You were given this life because you are strong enough to live it!!!

Noël

We will never give up! You deserve to be celebrated every day!

Lisa

What a beautiful thing it is, to be able to stand tall and say; " I survived"

Rocio

Wishing you years of health, happiness and a cancer-free future spent with loved ones!

Sarah

With love and encouragement to all who are working and educating themselves about pancreatic cancer and everything being done to support those who are affected by pancreatic cancer. We need this now and on into future when there will finally be a cure! Never give up!!

Kelley

You are examples of strength and we honor you for that!

Matt

I am doing very well after my Whipple in April of 2020. New

survivors should hold on to hope, no matter what happens. I am working with research doctors to update protocols by educating both patients and doctors to signs, symptoms and risks of this cancer. Early detection is the goal! Please support my efforts by letting the associations associated with pancreatic cancer know you agree that this is important for future survivors. God bless you all!

Laura

I am a 23+ years survivor of pancreatic cancer. I was diagnosed and had the Whipple surgery in January, 1998, followed by chemo and radiation therapy. I am happy to say that I am still here, cancer free, being checked by my original surgeon and oncologist at least once a year with scans and blood tests. So far, so good!!!

Ruth

Wishing everyone suffering from this horrible cancer the very best and always look at what options are available to you. I am so very thankful to have some more time and hoping it stays away. Glad I had doctors that were looking out for me and offered me options for the liver metastasis. Thankful for all the researchers and doctors and caregivers who are there for us.

Kay

Celebrate National Research Month in May

In recognition of National Research Month, we're shining a light on extraordinary scientific advances gaining momentum in pancreatic cancer. To date, the Hirshberg Foundation has funded over 120 Seed Grant projects leading to significant NIH funding, clinical trials, and improved patient outcomes. Groundbreaking ideas are coming to fruition, including the use of artificial intelligence to analyze CT scans for pancreatic cancer patients and an mRNA vaccine in the pipeline to prevent disease recurrence. The greater pancreatic cancer research community remains committed to discovering answers and we are watching them turn an exciting corner.

This month and throughout the year, we look forward to sharing news from our <u>UCLA laboratories</u>, <u>Seed Grant projects</u>, and updates directly from the headlines. Your generous support has allowed us to increase our research efforts worldwide and we look forward to announcing the results of their efforts!

ACTIVITY SUMMARY REPORT

The UCLA Activity Summary Report includes a comprehensive overview of advancements in research and patient care. From <u>66 open clinical trials</u> to individual Seed Grant updates, and news from the <u>Agi Hirshberg Center for Pancreatic Diseases</u> — the latest report details this progress over the past year.

Read the Report

RESEARCH LABORATORIES

The Hirshberg Foundation's UCLA laboratories have propelled research forward in the global medical community. The collaboration between the <u>Hirshberg Translation Laboratory</u> and the <u>Sahin-Toth Laboratory</u> is central to our work on campus as they make great strides forward.

Learn More

NCCN GUIDELINES

The Hirshberg Foundation is a sponsor of the <u>NCCN Guidelines for Patients: Pancreatic Cancer</u>. These extensive guidelines include clinical trials and studies, care options, treatment protocols, and much more.

Learn More

ARTIFICIAL INTELLIGENCE

At the latest APA meeting, lectures were led by researchers from Mayo Clinic, Cedars Sinai, and MD Anderson Cancer Center each discussing innovation in the AI space as it relates to early detection and diagnostic tests. <u>Take a look at our APA Video on AI</u>, a symposium funded by the Hirshberg Foundation.

With your support, we are empowering the medical community to pursue groundbreaking research and initiatives that make an impact across the globe.

What is Type 3c Diabetes?

Type 3c diabetes develops when the pancreas is damaged in ways that affect its ability to produce insulin. Conditions such as chronic pancreatitis, cystic fibrosis, and pancreas surgery, either complete or partial removal (pancreatectomy), can lead to pancreas damage that causes diabetes. Type 3c diabetes (also known as pancreatogenic diabetes) is diabetes that comes secondary to pancreas diseases, involving the exocrine and digestive functions of the pancreas.

Diabetes is a health condition that occurs when blood sugar, or glucose levels in the blood, are too high. This develops when the pancreas doesn't make any or enough insulin (a hormone), or the body doesn't respond to insulin properly and glucose levels rise in the blood.

The pancreas has two main functions in the body:

Exocrine function: Produces enzymes including amylase, proteases, and lipase that assist with the digestion of carbohydrates, proteins, and fats.

Endocrine function: Sends out hormones (mainly insulin and glucagon) that control the amount of sugar in the bloodstream.

Pancreas damage that leads to type 3c diabetes may also affect the pancreas's ability to produce the enzymes that help with digestion and absorption of nutrients. This condition is called exocrine pancreatic insufficiency (EPI).

The difference between the various types of diabetes is what causes them. Type 1 diabetes is an autoimmune disease in which the immune system attacks and destroys insulin-producing cells in the pancreas for unknown reasons. Individuals with type 1 always need insulin to manage the condition. Type 2 diabetes

develops when the body doesn't make enough insulin and/or the body's cells don't respond normally to the insulin (insulin resistance). Individuals with type 2 diabetes may manage the condition with lifestyle changes, oral medication and/or insulin. Type 3c diabetes results from damage to the pancreas that isn't autoimmune in nature. People with type 3c often also lack the ability to produce enough enzymes their pancreas makes for digestion and absorption of nutrients. In this form of diabetes, the amount of insulin being made by the pancreas can vary. Some individuals will need to take oral diabetes medications while others may also need insulin to manage the condition.

The worldwide prevalence of type 3c diabetes is unknown. It is often misdiagnosed and under recognized because there is not a universally accepted diagnostic criteria. The management of type 3c diabetes depends on the level of damage and what caused the damage to the pancreas but may include oral medications, insulin injections, and diet and lifestyle modifications.

If you or a loved one thinks you have type 3c diabetes, please speak with your healthcare team. We are here to help.