**Precision Medicine Podcast, Season 6 Episode 64**

**Advancing Prostate Cancer Care with Dr. William Oh: Precision Medicine, Diagnostics, and Advocacy (Part 2)**

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**Karan Cushman, Host:**

Welcome to Season Six of the Precision Medicine Podcast, sponsored by Trapelo. This is the podcast where experts come to discuss the problems oncologists, reference labs and payers face as precision medicine grows, and consider solutions for advancing the quality of patient-centered cancer care. Be sure to subscribe at PrecisionMedicinePodcast.com to get the latest episodes delivered straight to your inbox.

Welcome back to the Precision Medicine Podcast, I’m Karan Cushman, your host and producer and today we are continuing our deep dive focus in prostate cancer with our expert guest Dr. William Oh. He’s a medical oncologist specializing in genitourinary cancers and is Chair of the newly established American Cancer Society National Prostate Cancer Roundtable. He has also just returned to Yale Cancer Center and, not as an undergrad, but as director of precision medicine over there. So, thank you, Dr. Oh, for giving us so much time to end up with not one but two episodes on this topic. But before we pick up part two, I want to just be sure to invite you to tune into part one, there is so much going on in this field. We start with the year-over-year increase in prostate cancer which is between three and 5% depending on the stage, we talk about the work of the roundtable, screening guidelines including the new screening guidelines that have been released for Black men. There really is so much going on in the field of prostate cancer and precision medicine due to the heterogeneity of the disease and all of the advancements, I hope you’ll tune in and here’s part two.

The other complexity here in prostate cancer when it comes to diagnostic tools and tests, we’re not short on that, so you just brought up on urologists. So, you’ve got your primary care doctor then you’re seeing a urologist and, a lot of times, the urologist is really, in some ways, serving as that oncologist, if you will, because we’re first looking at it from a surgical perspective and they’re doing so much of the diagnostics that the patient gets pretty deep in before they’ve even really gotten a sense of ... Eventually, they get to a stage. But before they even thought about treatment, so much has already happened, and they’re so connected to a urologist, and I’ll get to that question in a minute. But where I was going with that is, for diagnosis, there are, as we talked about, the PSA test, obviously, digital rectal exams are a baseline. But then you get into MRIs, biopsies, PET scans, there’s so many different ways to go about a diagnosis.

So, I’m curious, what role do you think, not to get into all of that, but what role do you think precision diagnostics play? When do they come in the staging of prostate cancer? When should they be considered and what are maybe some of those newer technologies that are coming online that we’re excited about?

**Dr. William Oh:**

Yeah, no, I think, first of all, urologists are the gatekeepers because you can’t make a diagnosis of prostate cancer without a biopsy. But I do think, for people who are in this situation, I always think that expanding the points of view is really important. The best urologists understand this, they understand that, for example, radical prostatectomy is one option but there are other options for a man with prostate cancer including surveillance and including radiation, there’s so many advances in the treatment of prostate cancer which we’ll talk about in a minute. But getting to what I’ll call precision of diagnosis, I do put it into two categories. One is these imaging advances, and I’ll tell you, Karan, it’s transformed in just the past few years.

Just in the past year, we have an FDA-approved PET scan that is specific for prostate cancer, PSMA PET. So, in patients with intermediate or high-risk prostate cancer who are diagnosed, let’s say, with a high Gleason, slightly more aggressive or intermediately aggressive cancer, I’m ordering this PSMA PET scan, and I can see with a great deal of precision, much more than I used to, exactly where the cancer is. So, it has transformed my practice for giving advice to these patients. And MRI, in some situations, MRI clearly makes a PSA test much more valuable, and a biopsy is, generally speaking, should be guided by an MRI, that has become the standard of care in many top centers in the country. So, the imaging, looking at where the suspicion may be and guiding it with imaging has made the diagnosis and assessment of prostate cancer much more precise.

The second part is molecular testing and, actually, there’s probably a dozen companies now that have marketed tests that help to define the aggressiveness of cancer. It’s become the new biomarker; it’s become the new category for me when I counsel patients with newly diagnosed prostate cancer. So, what are the traditional things that we use? Well, we use PSA, we use your stage, where’s the cancer based on things like MRI and PSMA PET and then we use the grade of the cancer, the traditional Gleason score which is a scoring system that’s based on histology. But right now, there’s a fourth category which is molecular diagnostics for patients where what they want to do is very obvious and clear, I want this prostate out. Fifty-year-old man with an intermediate risk prostate cancer, they may or may not need that diagnostic testing but there’s a lot of men who walk in the door with a diagnosis of prostate cancer where they’re on the fence about what they should do. Should they get surgery? Should they get radiation? If they get radiation, do they need hormonal therapy or not? Do they have a cancer that they can do active surveillance on instead of treatment?

And in those situations, some of these molecular tests, I can list off list of examples, but those molecular tests are very critical to helping me give guidance and/or the urologist or others to give the patient advice about whether they’re, for example, a good candidate for surveillance versus definitive treatment. And it is very important and I think, unfortunately, it’s not universally deployed across the country and doctors may or may not always fully appreciate how that information can be used to help a patient make the right decision.

**Karan Cushman:**

Yeah. So, what we’re talking about is really comprehensive genomic profiling and it is an exciting place. How can a tumor profiling exercise, if you will, a test, influence treatment choices and that is the only way that patients get access to what we’re talking about today with regard to precision medicine treatments. When we look at comprehensive genomic profiling, to what degree do you feel like ... How far away are we from that becoming standard of care at some point for patients, those patients where it makes sense?

**Dr. William Oh:**

Well, it’s definitely the standard of care for advanced patients, it’s definitely the ... So, for a patient with newly diagnosed metastatic prostate cancer, they should also get comprehensive genomic profiling because, for example, as I mentioned earlier, it can identify patients who may be candidates for specific types of treatments like PARP inhibitors. There’s a small percentage of prostate cancer patients who are candidates for pembrolizumab and immunoncology drug if they have MSI high tumor. It’s small in prostate cancer, unfortunately, we’ve been left out of the immunotherapy boom but there are some patients who respond to that, and I think it’s really critical also for clinical trials. There’s so many new, I mentioned them, ADCs and RLTs, these are drugs that are targeted with and are considered much more precise ways of delivering cancer killing drugs, I call them smart bombs, they attach and deliver, and we’ve seen that in many diseases. In breast cancer, in colon cancer and bladder cancer, they become standards of care.

In prostate cancer, it’s that type of ADC or RLT. The best example is a drug called LU-177-PSMA and that drug is delivered to ... It’s a radioactive particle called LU-177 that’s delivered to PSMA, not PSA but PSMA. It’s a drug FDA approved that has improved survival and helped many of my patients. But earlier in the course of the patients, getting that genomic profiling will really help to understand who’s a candidate for some of these newer drugs that are coming down the road. The other tests that I was talking about in the earlier disease setting are also panel tests. They’re very easy to order and I think one reason why some doctors don’t order them is they’re intimidated by whether they can use the results appropriately. In the end, I think it’s really about many of them actually provide the information in a very red, yellow, green approach, is this a cancer that’s good or bad or something in between. And as I said, it really helps me to give advice above and beyond traditional factors like PSA or Gleason score.

**Karan Cushman:**

Dr. Oh, there is, as we’ve said, an enormous amount of complexity in what we’re talking about here today and we’re really trying to help patients, medical oncologists in the community maybe who are seeing lots of different types of cancers every day better navigate some of these things. And so, just at a high level, when we look at treatment of prostate cancer, traditionally there’s surgery as we’ve talked about, radiation, hormone therapy, chemotherapy and we’ve already started to talk about how is precision medicine changing the way that we approach treatment. But in particular, maybe if we just focused on that metastatic state, what are some of the most notable or promising targeted therapies in prostate cancer? And if you could just give a landscape from the PARP inhibitors to the androgen receptor inhibitors or immunotherapies, how do they target that specific genetic mutation or molecular pathway and improve outcomes for patients?

**Dr. William Oh:**

Yeah. So, when we think about a drug like chemotherapy, we think it’s just killing fast-growing cancer cells. And chemotherapy does work in prostate cancer when the cancer is growing quickly, for example, in advanced castration-resistant prostate cancer. But we know that there’s specific molecular drivers in prostate cancer, the most well-known one is the BRCA mutations which are seen about 20% of the time in advanced prostate cancer. 20%, that’s a significant percentage of patients considering how many men have advanced metastatic disease. And those patients are clearly candidates for the class of drugs called PARP inhibitors because PARP inhibitors, like in breast cancer, like in ovarian cancer, can have very dramatic responses in these patients who harbor these mutations. If you don’t test for these mutations, you can’t give these patients these drugs, I obviously strongly encourage that these men all get tested.

Androgen receptor pathway inhibitors or RPs have been around now for about the last 10 to 15 years. In fact, they’ve actually been around for 70 years, I like to remind people that there have been two Nobel Prizes awarded for targeting androgen receptor. First, this guy Charles Huggins who identified that removing testosterone from the body, he did it with a bilateral orchiectomy, can actually induce remission in prostate cancer. Androgen receptors and blocking androgen receptors is targeted therapy, it just so happens that 95% of prostate cancers express androgen receptor. But eventually they figure out how to grow and these next generation of ARPIs like abiraterone, enzalutamide, apalutamide, darolutamide, these drugs have really changed the landscape for us, they can control these cancers for many more years and improve quality of life and reduce pain. And we’ve been using them now routinely and they are moving earlier and earlier into the course. We’re no longer waiting until the cancers become resistant, they’ve all become standard of care in the earliest of metastatic disease, so-called hormone-sensitive prostate cancer.

Immunotherapy remains a very small component of prostate cancer, unfortunately. There is an immunotherapy called sipuleucel-T that was approved, actually, 15 years ago and still available but pembrolizumab, which is the other approved immunotherapy, only helps about one or 2% of all prostate cancer patients.

**Karan Cushman:**

So, Dr. Oh, why do you think it is that prostate cancer has been left out of the immunotherapy boom?

**Dr. William Oh**:

Well, it was an irony because one of the first immunotherapy treatments for any cancer was actually approved in prostate cancer, something called sipuleucel-T or Provenge. But subsequent to that, it has been turned out to be a cold tumor. Prostate cancer is a cold tumor and what that means is that there’s not a lot of immune cells in a typical prostate cancer whether it’s localized or metastatic. And it may be because the cancers that are most responsive to immunotherapy drugs like pembrolizumab or nivolumab are the ones that are the most mutated. These are cancers like lung cancer, bladder cancer, melanoma and prostate cancers tend not to be very mutated and, thus, they’re thought not to be very good candidates for immunotherapy as of now.

But there’s a lot of work going on to try to turn a cold tumor which doesn’t have a lot of these immune cells infiltrating into the tumor site into hot tumors and there are various ways that people are thinking of how to do that including, for example, combining vaccines or creating additional types of what are called checkpoint inhibitors which really unleash the immune system within the cancer cells. So, there’s a lot of work but, so far, it’s true it’s been very disappointing that some of the immunotherapies that are so exciting in so many other diseases are not yet fully available to prostate cancer patients.

**Karan Cushman:**

Do you think that we will start to see in the near future more and more of a combination approach?

**Dr. William Oh:**

Yeah, I think that’s really the only way. There is about one or 2% of prostate cancers are candidates for pembrolizumab as a single agent and those are patients who have what are called TMB-high or MSI-high tumors. But that’s very rare, unfortunately, and not a lot of candidates with prostate cancer have that abnormality but they should be tested for it because, if you do, you actually have a very good chance of responding to pembrolizumab. But that said, I think you’re 100% right, I think the future is combinations of immunotherapy maybe with traditional treatments like the androgen receptor drugs like enzalutamide or abiraterone but, actually, it’s probably with things like cancer vaccines and other checkpoint inhibitors. So, I think we’re going to see more and more of those kinds of combinations especially as we learn more about the biology of prostate cancer.

**Karan Cushman:**

Well, okay, so one last question here is, when you look at the current clinical trial and treatment landscape, what are you most excited about as a physician? And obviously, as a research scientist as well, what gets you excited?

**Dr. William Oh:**

Well, there’s a whole exploding field of what I would consider to be targeted treatments. And in my role as director of precision medicine for the Yale Cancer Center, it’s really about not being dumb, and I’m talking about the doctors, and just giving drugs like chemotherapy that wipe out any cancer cell or any cell that’s growing quickly that’s why, for example, people lose their hair or become anemic when they get chemotherapy because those are parts of your body that are growing quickly. It’s really about targeting more accurately and smartly and the best example of that is this drug LU-177-PSMA, which we’ve already talked about, which targets any PSMA producing cell and can actually deliver, for example, a killing agent, in this case, it’s a radioactive particle but what we’re going to see is other things that are going to be delivered.

For example, there’s a lot of excitement about PSMA directed immunotherapy so that we’re actually delivering a T-cell which is an immune cell that kills cancer cells directly to the PSMA expressing tumor cell. So, I think that approach, which is a more precise way to deliver treatment, whether it’s a radioactive particle, whether it’s a chemotherapy, whether it’s an immune cell, is going to be more and more available to prostate cancer patients. And we know that the companies that make these drugs are very, very interested in these various approaches to delivering smart bomb technology.

**Karan Cushman:**

And so, what about when it comes to the monitoring or active surveillance of patients? What are some of the ways that we’re using precision medicine in those cases and maybe some of the upcoming technologies, liquid biopsy being one, that’s moving into screening areas, if you will? There is a lot of different components at play but, if we look at the monitoring part of it, how is precision medicine playing a role in that part?

**Dr. William Oh:**

Well, prostate cancer is both blessed and cursed with a very cheap, quick blood test called PSA. It turns out that, as a screening test, PSA has a lot of controversy, but I order tons of PSAs because they actually are very valuable in monitoring patients but they’re very flawed. We do know that sometimes PSA misses what’s actually happening, for example, with cancers that don’t make a lot of PSA and those are sometimes some of the worst. They’re these poorly differentiated cancers that stop making PSA and become so-called neuroendocrine type cancers. PSMA PET has really changed the way we monitor men with prostate cancer especially with advanced disease. I mentioned earlier how I’m using it in newly diagnosed patients but, in men with progressive metastatic castration resistant prostate cancer, it’s really critical to do PSMA PET because there’s actually a targeted treatment that helps them if they in fact express PSMA and that’s this LU-177-PSMA treatment.

People are very interested in diagnostic tests like liquid biopsy and MRD but the challenge here is that prostate cancer is not a highly mutated cancer like lung cancer, for example. So, I do use liquid biopsies to understand the mutational landscape particularly because, prostate cancer, it’s very hard to biopsy these patients. Getting tissue is very difficult, they primarily have metastases in their bones and bones are well known not to be able to get high quality DNA, for example. So, liquid biopsies have become part of my armamentarium for monitoring and also for looking at the mutational landscape so that I can offer my patients targeted treatments and clinical trials.

**Karan Cushman:**

Well, let’s get to the shiny object in the room which is artificial intelligence and machine learning in precision medicine. How do you see that playing into many of the things that we’ve talked about today around the field of precision medicine? Medical images, genomic data processing, all of that data, helping to predict outcomes or suggest treatments, what role do you think it’s playing today and what would be your look ahead maybe five, 10 years from now?

**Dr. William Oh:**

Well, AI is already being used to help radiologists and pathologists and I think there’s interesting data coming around, really, whether we can get past the Gleason score. Gleason score is a pathologist reading an H&E slide and giving it a numerical score and we know historically that Gleason scores were not always concordant between different institutions. So, can a computer just read the slide itself, that’s where we may start to move towards. But I think the really exciting part to me is how AI and machine learning can solve a problem that we mentioned earlier which is just the vast amount of information that’s coming at doctors, oncologists day in, day out. Not just clinical trials, not just all the genomic information for an individual patient but even what drugs has this patient received, what’s their other characteristics that might play into how best to make a treatment decision for that person. I always tell people, as I get older, I worry that there’s only one central processing unit that’s making all these decisions, it’s my brain. It’s certainly not epic and I think the problem is the amount of information that a typical oncologist has to process to be able to make the best decision for his or her patient is just enormous, and a lot of things are falling through the cracks, we know that.

And so, I think, to me, five or 10 years from now, what we’re going to have is oncologists who are getting the advantage of algorithms that help them to make the best choice for their patients because it’s going to aggregate a lot of this information in ways where the doctor can say, “Oh, I like this idea that I’ll use drug X or drug Y or, oh, I need to order this molecular test because it hasn’t been ordered.” And I think it’s going to be an assistive device, that’s how it has to be. I don’t want it, computers and robots, to take over my central role which is to really advise the patient and to take care of the patient. We can continue to be caregivers, but we might want ... Just like in every other aspect of our lives. Cars are amazing to drive, look how much information is in your car, it’s just crazy but we’re still the drivers. Do they have robotic drivers? Yeah, and they sometimes do some things that are not really ideal for the pedestrian on the street. Will it get better over time? I think all of this will get better over time, but I think the key to remember is always that the patient’s at the center of all of this technology whether it’s a better PET scan or whether it’s AI and ML.

**Karan Cushman:**

Well, I love that. I think that’s a really good reminder for everyone that, no matter how much we use technology and lean on technology and advancements in these areas, it’s still that human-to-human interaction that makes the difference. So, we opened part one by recognizing some of the sensitivities for men diagnosed with prostate cancer as they consider treatment options and make those overall health and lifestyle choices. We’ve talked about the complexity, enormous complexity of the disease on many levels and, again, the importance of communication which I think really might be the single most important or powerful takeaway here in helping a patient choose the right treatment path.

So, with that in mind, in that spirit, you were part of a group authored editorial, I think, that came out maybe October published in Science Direct titled What’s in a Name, Why Words Matter in Advanced Prostate Cancer. And here, you authors are proposing the adoption of new terminology that enhances patient-centered care and minimizes confusion. Can you tell us a little bit more about that article and what your hope is in those conversations between patients and physicians?

**Dr. William Oh:**

Yeah, thank you for asking about it. The purpose was really twofold, one was to use language that was clear and sensitive so that patients and physicians could communicate with each other about the disease because prostate cancer we know is a very complicated disease that goes through different disease states. But the other is that there are just so many terms that it’s not clear to people what we’re talking about. And there’s a lot of reasons why people come up with different terms, they think they’re being more accurate, there may be regulatory reasons for drugs to be approved in certain settings, et cetera but, when you have too many terms, people stop really being able to understand what we’re talking about. So, we really felt it was important on both levels, both the sensitivity of the language so that it’s clear but also really something that makes patients not feel negatively towards what is already a very negative experience that is dealing with cancer.

**Karan Cushman:**

Thank you. And so, terms like the word castration, you’re pivoting into a different nomenclature there that, I think, back to the sensitivity but more so the accuracy of that terminology. How does that term perhaps pivot to something new that is sensitive but also more accurate in helping a patient understand what disease set they have in prostate cancer and how it’s going to be impacted by the various therapies?

**Dr. William Oh:**

Yeah. So, when I started in this field, Karan, we talked about newly diagnosed metastatic prostate cancer, and we called it hormone-sensitive prostate cancer. And when a patient progressed on hormonal therapy, what we call androgen deprivation therapy, we called that hormone refractory prostate cancer. This is, when, 20 plus years ago. And it was pointed out that the word hormone refractory or hormone resistant was not true, the patients were not resistant to refractory to hormones, they just were refractory to the first hormones. So, around that time, when I first started in this field, several investigators proposed the term castration resistant which was more granular is probably the best word. It just described what happened, that the patient was on a castrating therapy and what that means is they either had their testicles surgically removed or they were on an injection, a drug like leuprolide, where their testosterone was lowered.

But we know that the word castration, unfortunately, has a lot of very negative connotations culturally, historically and men just do not like that word. And there was a debate at around that time about whether that’s what we should be calling it. But suffice to say, in the scientific literature, it stuck, and people started using it to describe this disease state when somebody’s on androgen deprivation therapy and their cancer starts to progress and that is what we call those treatments and that is what we call that disease state. But we felt like it was really important right now in 2024 to really try to come up with, A, a common nomenclature to describe these disease states and then, B, maybe try to really get rid of that word castration. So, we proposed that, many people already use this term, hormone sensitive prostate cancer. That means, when the cancer first presents and you haven’t started on ADT as yet, that you’re likely to respond and that many people do in fact already call it hormone sensitive but there are alternative terms. There are doctors who call it castration sensitive which doubles the pain of using that word.

So, we proposed that we stick with one term, hormone sensitive prostate cancer and, if it’s metastatic, call it metastatic HSPC. But the other term, castration resistant prostate cancer which is more deeply ingrained is one that we proposed a new term, we call it ARPC or androgen deprivation resistant prostate cancer. And androgen deprivation resistant is equal to castration, that’s exactly what we do when we give a hormone shot or many people in this country do not receive the surgical castration but, in many parts of the world, they actually do, they’re the equivalent treatment which is to lower testosterone. But rather than use that word, we’re, again, trying to be very descriptive. Now, whether it will stick or not, I’m not sure. I hope it does, I hope people start to consider this, but I do think we have to be sensitive to patients and also be accurate in what we’re describing as a disease state.

**Karan Cushman:**

Well, I, as a communication professional, appreciate the effort and the appropriateness there. And I’m with you, I hope it does stick not just because the term raises hairs, so to speak, there’s that emotion when you hear that term. But in what you just described, it’s also not fully an accurate term to use, it is using the androgen components that are more of the scientific terms rather than an action, if you will.

Well, one last question, Dr. Oh. Just for a minute, I wanted to go back to part one where I touched on our recent episode with our friends at the American Cancer Society and a different extension over there at the Cancer Action Network who are working to pass legislation across the US that expands insurance coverage of biomarker testing. We know there are gaps in testing whether it’s related to insurance coverage or maybe perhaps just lack of awareness on the provider or patient’s part that they are candidates for biomarker testing. How important, as we think about AI, technology, how important is it that we offer physicians those clinical decision support tools right in the workflow in real time that gives them a view on appropriate biomarkers, appropriate therapies and wow, even maybe a health plan policy point of view? How important is that and is that the future?

**Dr. William Oh:**

I had to renew my board certification a few years ago and, the first time I did it 20 years earlier, there were very few choices for cancer patients. The second time I renewed it 10 years after that, there were more, and I had to study all these diseases that I don’t normally take care of because I’m a highly focused specialist treating primarily GU cancers. This last time, it was just the explosion of treatments and knowledge and biomarkers and drugs and all these things that the average oncologist has to be aware of just boggled my mind and I didn’t quite understand how doctors can do that. And I think the challenge is that there’s so much information coming that I’m a big fan of the idea that tools to help doctors make those decisions better need to be available and they are becoming available. And I think that, really, we as a profession have to avail ourselves with this because, if we don’t, the amount of information that an average doctor of any type, particularly of oncologists, have to use to make a decision for their patients is just becoming overwhelming.

And of course, there are guidelines, NCCN is a commonly used one but, if you look at an average NCCN guideline for even one disease, they’re very, very complex and doctors are very busy. So, the only way I think that physicians, especially oncologists, can incorporate all of the biomarkers, all of the genetics, all of the clinical data and clinical trials is to use tools that help them to make better decisions for their patients. I don’t think it’s going to replace us, at least not near future, I hope not because I think we bring the total picture into it, the patient, the humanity but I do think doctors need help to really synthesize all that information to ways that help them make the best, fastest decision for their patients.

**Karan Cushman:**

So true. Well, that’s a plug for our, I think, next episode after this series will be a recast and a relook at AI and precision medicine. Well, Dr. Oh, when you’re not thinking about prostate cancer and precision medicine and Yale, what are you doing with your time? Eating pizza?

**Dr. William Oh:**

Pizza in New Haven and New York, they’re both the best.

**Karan Cushman:**

Right?

**Dr. William Oh:**

Yes, I don’t want to get in the middle of that battle. I love spending time with my family, I like to travel, I like to watch movies, I like to read. You need that downtime then that revs me up to come the next day and continue to work in my day job.

**Karan Cushman:**

That’s awesome. If folks want to follow you, find more of your articles, not that most of what we talk today about is pretty easy to find, but where are you most active maybe on social media? LinkedIn?

**Dr. William Oh:**

Yeah, I’m mostly on LinkedIn right now. I try to post articles and comments that I think are really the most important and relevant. Yes, please follow me there.

**Karan Cushman:**

Awesome. Well, Dr. William Oh, Director of Precision Medicine at Yale Cancer Center and Chair of the American Cancer Society’s National Prostate Cancer Roundtable, I can’t thank you enough for spending so much time with me and our listeners today, it’s so valuable. This is really our first deep dive episode on prostate cancer, and I know it won’t be our last and I really appreciate your time today.

**Dr. William Oh:**

Well, thank you, Karan, it was really a pleasure.

**About Our Guest**

**Dr. William Oh**

Dr. William K. Oh is Professor of Medicine in the Division of Medical Oncology and Director of Precision Medicine for Yale Cancer Center. He also serves as Medical Director of Smilow Cancer Hospital at Greenwich Hospital.

As Director of Precision Medicine for Yale Cancer Center and Smilow Cancer Hospital, he is focused on building a cohesive program in precision medicine, integrating basic and translational science, clinical trials, and Smilow Cancer Hospital’s Precision Medicine Tumor Board. He is committed to increasing the routine use of molecular and genetic testing for all patients with cancer, a goal he has been committed to throughout his career.

Dr. Oh is a genitourinary oncologist with decades of experience caring for patients with prostate cancer. Before his appointment at Yale, Dr. Oh served as the Chief Medical Officer and Executive Vice President of the Prostate Cancer Foundation, where he focused on barriers to the delivery of care for prostate cancer nationally. Dr. Oh led an expert panel that synthesized the evidence and published guidelines for prostate cancer screening for Black men in the US, which was published in 2024 in NEJM Evidence. He was also Chief Medical Officer of Sema4, a publicly traded genomics and health intelligence company that developed AI tools to help doctors make better clinical decisions for patients.

From 2009-2020, Dr. Oh was System Chief of Hematology and Medical Oncology at Mount Sinai Health System as well as Deputy Director of the Tisch Cancer Institute from 2017-2020. Prior to joining Mount Sinai, Dr. Oh advanced from Instructor to Associate Professor of Medicine at Harvard Medical School and was Clinical Director of the Lank Center for Genitourinary Oncology at Dana Farber Cancer Institute.

Dr. Oh also serves as Chair of the American Cancer Society’s National Prostate Cancer Roundtable, as a member of the Board of Trustees and Chair of the Medical Advisory Council for the Chemotherapy+ Foundation. He has participated on grant review committees for multiple National Institutes of Health, National Cancer Institute, and Foundation grants, and has served on guidelines panels for the American Urological Association and American Society of Clinical Oncology. He has participated on multiple journal editorial boards. Dr. Oh has published nearly 400 peer-reviewed publications and book chapters in genitourinary oncology and is a frequently invited lecturer at national and international meetings. He is an inductee of American Society for Clinical Investigation and has been continuously selected as a Top Doctor in New York Magazine, Castle Connolly, Best Doctors and Super Doctors from 2010 to 2024. He was recently honored as a Top AAPI Doctor in 2023 and 2024.

Dr. Oh completed his undergraduate degree at Yale University, received his medical degree from New York University School of Medicine, and did his internship and residency at Brigham and Women’s Hospital before his clinical fellowship in medical oncology at Dana-Farber Cancer Institute.

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