

## **Dr. Martin Schoen on Treatment Patterns & Survival in mHSPC**

**Becky Campbell** [00:00:00] Hi, my name is Becky Campbell, and I lead medical content here at PCF. I'm so excited to be joined today by Dr. Martin Schoen, who's a medical oncologist at the VA St. Louis Healthcare System and at Saint Louis University. He's also a PCF Young Investigator and is here to discuss some new findings from a study that was funded in part by his PCF Award. The study was published last month in the journal JAMA Network Open. Welcome Dr. Schoen and congratulations on this publication.

**Dr. Martin Schoen** [00:00:30] Well, thank you so much, Becky. Honored to be here to talk about the work that's been supported by PCF.

**Becky Campbell** [00:00:35] Wonderful. So, if you recall, we recorded a video about some research last year showing encouraging findings that over the past 20 years, patients with metastatic prostate cancer are actually living longer on average. And now you and your team have taken a closer look at some specific treatments used in metastatic prostate cancer and how those treatments are actually impacting length of life. And you have some really interesting results that are important for patient care. So, if you could start, please briefly tell us about the patients in this study and the questions that you wanted to answer.

**Dr. Martin Schoen** [00:01:13] Yes, definitely. Thank you. So, our goal is to try and explain how survival has been improving for patients with metastatic prostate cancer. And we looked at patients from 2013 to 2022 who were treated for metastatic prostate cancer with a variety of different therapies. The three categories of therapies were androgen deprivation therapy alone, which is things like Eligard, or Degarelix, or Orgovyx, or combination therapy with androgen deprivation plus one of the androgen receptor pathway inhibitors, which would be abiraterone, enzalutamide, darolutamide or apalutamide. Those are the pills that help control prostate cancer, or patients could also receive docetaxel, which is the IV chemotherapy. So, we really wanted to look at how survival has been changing over time and what is the rates of survival with these different therapies in order to understand the trends in what's going on and explain how things are improving.

**Becky Campbell** [00:02:17] Super. Well, thanks so much for that overview. And so just to make sure that our listeners really understand what you mean by combination therapy, because maybe some of them are on it or should be on it. Just explain a little bit how you defined combination therapy and why that's so important to keep in mind.

**Dr. Martin Schoen** [00:02:33] Yes, for many years, people with hormone-sensitive prostate cancer, which is the very initial stage of prostate cancer that has spread to lymph nodes or to bones, are treated only with androgen deprivation therapy, which is typically an injection. Eligard is one example, but there are other types of androgen-deprivation therapy. And that is considered a monotherapy, only one type of drug. But over the last several years, we have developed combination therapy, which is androgen deprivation therapy, the Eligard, plus a pill, such as Zytiga, Xtandi, Nubeqa. Those medicines are also combined with androgen deprivation therapies. That would be combination or getting the chemotherapy, otherwise known as Taxotere.

**Becky Campbell** [00:03:21] Super. Well, thanks for clarifying that. So, let's take a look at some of those results. I'm going to pop one of these figures on the screen. If you could tell us what is going on in this figure and what does this mean for patients?

**Dr. Martin Schoen** [00:03:35] Yes, and so what this is showing is that back in 2013, the dominant therapy that almost 100% of patients received was ADT monotherapy, the androgen deprivation alone, and that because of trials such as CHAARTED, there was an increase in docetaxel combination, so a combination of ADT plus chemotherapy in 2014, 2015, and 2016. That became a treatment that reached approximately 20%. But starting in 2017 with the approval of Zytiga, and then later Xtandi and other agents, there was increased use of the ARPI [androgen receptor pathway inhibitor] combinations. That's in the yellow line. And you can see that the yellow line really increased and became the most dominant treatment style or type over this period of time. And when you combine both the yellow line and the gray one, so the ARPIs and the docetaxel, those are both considered combinations. It was over 60% of patients were receiving combination therapy in the VA, this is all veterans, in 2022.

**Becky Campbell** [00:04:41] Great, well that sounds like encouraging news in that more patients are now receiving these guideline recommended therapies.

**Dr. Martin Schoen** [00:04:50] Yes, that's exactly right. We really feel that combination therapy is the default and should be the way to go, that really there should only be very few exceptions where people receive only one agent. Almost every patient with metastatic prostate cancer should be on combination therapy.

**Becky Campbell** [00:05:08] Perfect, thanks for clarifying. So given that we've defined these three different treatment regimens, we've seen how the use is changing over time. How do these treatment regimens impact patient length of life or survival?

**Dr. Martin Schoen** [00:05:20] Exactly right. And so, we knew from clinical trials, such as LATITUDE, CHAARTED, or TITAN, that survival was improved in the clinical trial. But we never knew if it actually improved patients in the real world, in real life. Because sometimes patients in clinical trials are different. Maybe they're younger, fitter, or they have more resources. But we showed in veterans, which is typically a hard-to-treat population, that then these veterans were older and had more comorbidities, that even in those patients, combination therapy was associated with longer survival. And that also explains why survival is increasing in the population, or at least hints at why survival is improving for this deadly disease.

**Becky Campbell** [00:06:03] That's so interesting. So, thinking about the different combination regimens, we saw in the previous slide that most patients were treated with that ARPI combination, like the Xtandi combination, and a smaller number were treated with the docetaxel chemotherapy combination. When you compared those two regimens what did you find in terms of survival?

**Dr. Martin Schoen** [00:06:25] Yeah, so we actually did not find an overall survival difference between the docetaxel and the ARPI combination, such as Zytiga or Xtandi. But we did find a difference in time to progression or progression-free survival in that group. We found that patients who were treated with ARPIs had a longer time to progression, but it didn't affect survival. What commonly happened is that patients who received the chemotherapy up front, then received an ARPI later. And so therefore, overall survival was not changed. But the time to progression and when people progress, it can be painful, you can have you know, break bones or have other problems, that time to progression was longer with the ARPI therapies. And that's why we think it's really the treatment of choice for many patients and became the dominant treatment during this period of time.

**Becky Campbell** [00:07:19] So what does that say about docetaxel chemotherapy? Does that still have a role in managing patients who have metastatic prostate cancer?

**Dr. Martin Schoen** [00:07:28] I think it does. And especially now that we've learned after 2022 that docetaxel when combined with the ARPI therapies such as with darolutamide or Nubeqa in the triplet combination or with Zytiga or abiraterone. That triple combination has even longer survival. So, in some patients, especially with high-volume disease who are younger and fitter, I think a combination of all three is appropriate. But for many patients, especially patients who are older, I think that the two-drug combination is probably a standard of care and that some people might benefit from the triplet, but I think that that is sort of less understood in the real world.

**Becky Campbell** [00:08:10] Okay. Thank you for clarifying. I think that will be very helpful for patients who are wondering what, you know, regimen might be best for them. So, you mentioned earlier that this study was done all in VA data, veterans' data, where you practice. Many of our viewers probably are receiving care outside the VA. Can we apply this data to patients who are not being treated in the VA system?

**Dr. Martin Schoen** [00:08:33] I think we can. I think, you know, we have a population of veterans that is relatively similar to other populations that have been studied in Medicare, as well as in other population cohort registries, such as SEER, or in the Flatiron database. I feel that the age and the comorbidities of the population is relatively similar, and so I think that that data is coming out, and that I feel like that we should actually trust that the VA data does reflect general population

**Becky Campbell** [00:09:06] Wonderful, that's good to know. So just as we wrap up here, I wanted to say congratulations on receiving your PCF Young Investigator Award in 2022. What was the role of PCF in funding this work?

**Dr. Martin Schoen** [00:09:19] Yeah, so PCF was the predominant funder, you know, it was unknown whether or not the combination therapy you know was associated with a longer survival in the real world and that was a key question that was part of my proposal that PCF wanted to know because we want to know that things that are you know found in research trials and laboratories are translating into actual improvements in quality of life in your average patients and so I really thank the support of PCF and donors who were you know willing to fund this to really show that this is translating and improving the lives of patients with prostate cancer.

**Becky Campbell** [00:09:55] Good, well we're always thrilled to have examples where there's funding from a donor or donors, and it goes to an amazing investigator like yourself, and then it translates into findings that we can all understand and talk about in conversations such as these. So, congratulations on the publication. So last, what should patients who might be viewing this today take away from this study? What should they go and ask their doctor at their next visit?

**Dr. Martin Schoen** [00:10:17] Yeah, definitely. I think that patients who have metastatic prostate cancer that has spread to the bones or other locations, they should really ask themselves, is combination therapy right for me? And really, some of them might even be eligible for that triple combination. And that if, especially if things are maybe not going as well for them, and they might only be taking such medicines, such as Eligard, just an injection, that they would ask their physician, is a combination appropriate? Is it better to

augment the response and hopefully will it benefit me in the long-term, both first for progression, time to relapse, as well as survival.

**Becky Campbell** [00:11:03] Good, well, thank you so much, Dr. Schoen. Congratulations on the work and we appreciate your time in discussing your results with us today.

**Dr. Martin Schoen** [00:11:09] Great. Thank you so much.