

Newsletter of the Survivorship, Outcomes And Risk Program at MSKCC

Guidelines Discourage Routine Prostate Cancer Screening Physicians Advised to Discuss Benefits and Harms

In a provisional clinical opinion, the American Society of Clinical Oncology (ASCO) recommended that “physicians discuss with their patients whether PSA testing for prostate cancer screening is appropriate for them.” The opinion did not explicitly recommend against screening with the prostate-specific antigen (PSA) test for men with life expectancy greater than 10 years, but suggested that discussions address the benefits of screening as well as the harms. For men with a shorter life expectancy PSA screening is discouraged.

The new ASCO opinion, published in July and co-authored by SOAR Investigators **Ethan Basch** (Health Outcomes) and **Andrew Vickers** (Health Outcomes), was based on a systematic review of evidence available through March of this year. ASCO cited two large randomized trials as the primary basis for the opinion – the American PLCO trial and the European ERSPC trial – as these studies provided the highest quality evidence of benefits and harms. While only the ERSPC found a mortality benefit of screening, high rates of screening in the control arm of the PLCO raise uncertainty about the null finding in that study.

The ASCO opinion is the latest of several prostate cancer screening statements from expert groups in the US. In May the US Preventive Services Task Force (USPSTF) recommended against routine PSA screening, concluding that the harms of screening outweigh the benefits.

This statement ignited criticism of the task force’s evidence review and their interpretation of trial results. The recent

	PLCO Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial	ERSPC European Randomized Study of Screening for Prostate Cancer
N	76,685	182,160 / 162,388 age 55-69
Dates	1993-2001	1991-2003
Age range	55-74	50-74
Follow-up	13 years	11 years
Screening strategy	Annual PSA and DRE vs. “usual care”	PSA offered every 4 years vs. no screening
PSA threshold for positive screen	≥ 4.0 ng/mL	≥ 3.0 ng/mL
Results	No difference in PCSM. No interaction with age, pre-trial PSA or comorbidity.	No difference in PCSM in all enrolled men. Reduced PCSM in age 55-69 (rate ratio 0.79, 95%CI 0.68-0.91).
Major criticisms	Contamination of the control group. Low frequency of prostate cancer deaths in controls.	Follow-up not long enough. Low frequency of prostate cancer deaths in controls.

PCSM = Prostate cancer-specific mortality | DRE=Digital rectal exam

ASCO opinion echoes recommendations from other organizations which emphasize individualized decision making and discussion of the benefits and harms of screening.

Commenting on differences between the two recent recommendation statements, Andrew Vickers said in an email, “The USPSTF’s approach was...‘the system is broken, throw it away.’ ASCO

took the view that...the system is broken, but it can and should be fixed. USPSTF is right to say that a major harm of PSA testing is treatment of cancers that would never become aggressive. The ASCO statement includes reference to active surveillance, that many or most cancers detected by PSA do not need to be treated.”

Mark your calendar

- October 9** **SOAR Seminar**
4:00 PM
M-107
Robert Smith, PhD
Senior Director, Cancer Screening
American Cancer Society
- October 17-20** **Society for Medical Decision Making Annual Meeting**
Phoenix, Arizona
- October 23-25** **International Cancer Screening Network Biennial Meeting**
Sydney, Australia
- October 27-31** **American Public Health Association Annual Meeting & Expo**
San Francisco, California
- November 6-10** **American Society of Human Genetics Annual Meeting**
San Francisco, California
- November 11-15** **World Congress of Psycho-Oncology**
Brisbane, Australia

Prostate Cancer Screening Guidelines

United States Preventative Services Task Force (USPSTF)

Recommends against screening based on moderate or high certainty that this service has no net benefit or that the harms outweigh the benefits.

American Society of Clinical Oncology (ASCO)

Recommends that screening be discouraged in men with life expectancy < 10 years because harms outweigh potential benefits. Recommends discussion of benefits and harms in men with life expectancy ≥ 10 years.

American College of Physicians (ACP) / American Academy of Family Physicians (AAFP)

Recommends against screening in asymptomatic men because the harms outweigh the benefits.

National Comprehensive Cancer Network (NCCN)

Recommends baseline PSA at age 40 for men interested in screening. Recommends annual follow-up if PSA ≥ 1.0 ng/mL.

American Urological Association (AUA)

Recommends offering screening and risk assessment (baseline PSA) to men age 40 with life expectancy ≥ 10 years. Recommends individualized decision making after discussion of benefits and harms.

American Cancer Society (ACS)

Recommends that men make an informed decision with their health care provider about prostate cancer screening after getting information about uncertainties, risks, and potential benefits. The discussion about screening should take place at age 50 for men at average risk with life expectancy ≥ 10 years.

SOAR Grants

Investigators Successful Despite Challenging Funding Climate

Co-PI's **Hans Lilja** (Laboratory Medicine) and **Andrew Vickers** (Health Outcomes) were awarded an R01 from NCI for "Prospective Validation of a Multi-Marker Prostate Cancer Prediction Model." In the US almost one million biopsies for prostate cancer are conducted annually due to detection of elevated prostate-specific antigen (PSA) in the blood, but most men with elevated PSA do not have prostate cancer. Lilja, Vickers and their colleagues will evaluate a marker panel they developed for the prediction of prostate biopsy outcomes, including a prospective, multi-center study at the Mayo Clinic, UCSF and the Martini Clinic in Hamburg, Germany.

Jamie Ostroff, PI (Behavioral Science) was awarded a multiple PI R01 grant with NYU for "Implementing Tobacco Use Treatment Guidelines in Dental Public Health Clinics." Poor adherence with Public Health Service Guidelines for managing tobacco dependence has contributed to disparities in smoking prevalence and tobacco-related illness. Ostroff and her colleagues will address this research-to-practice gap by examining the effectiveness of three practical and highly replicable strategies for implementing evidence-based guidelines for the treatment of tobacco dependence in dental public health clinics.

Co-PI's **Tari King** (Surgery) and **Colin Begg** (Biostatistics) were awarded a Susan G. Komen grant for "A Clonality Analysis of Lobular Carcinoma in Situ (LCIS)." Using modern genetic fingerprinting techniques, King and Begg will analyze a collection of frozen tissue samples with LCIS lesions and cells of invasive tumors to determine whether both tumors originate from the same cell that initiated the cancer. Results will inform the use of cancer prevention approaches in women diagnosed with LCIS.

Lisa Diamond, PI (Immigrant Health and Cancer Disparities), has been awarded an R21 grant from NCI for "The Impact of Physician Non-English Language Proficiency Level on Cancer Screening." Diamond and her colleagues will study the self-assessment of non-English language proficiency levels in primary care clinicians and the impact of clinician non-English language proficiency on their patients' cancer screening rates.

Mary McCabe, co-PI (Survivorship), was awarded an R25 grant from NCI to establish a nurse training program in survivorship at MSKCC and at City of Hope Cancer Center (Los Angeles). The program will teach nurses about the importance of treatment summaries and survivor care plans. Nurses will learn how to provide cancer survivors with the tools and resources necessary to care for themselves after cancer treatment.

SOAR Honors

Jonine Bernstein (Epidemiology) started a 5-year term on the NCI Board of Scientific Counselors—Clinical Sciences and Epidemiology.

Kevin Oeffinger (Survivorship) was elected to the American Cancer Society Board of Directors.

Mary McCabe (Survivorship) was appointed Chair of the Survivorship Committee for the American Society of Clinical Oncology.

Peter Bach (Health Outcomes) was named the 11th Annual Lorraine and Ralph Lubin Distinguished Visiting Professor at Weill Cornell Medical College.



Sigrid Carlsson is a physician scientist from Sweden in her second year of a research fellowship in the Department of Epidemiology and Biostatistics. She recently spoke with the SOAR Newsletter about her research in prostate cancer.

Q: Why did you want to come to MSK for a fellowship?

A: I had the pleasure of being invited to come to MSK after completing my PhD to conduct research with Hans Lilja, who I worked with in Sweden, and Andrew Vickers, two of the key opinion leaders in early detection of prostate cancer. Plus, MSK is known as a center of excellence for prostate cancer research.

Q: What are you studying here?

A: I'm working on a decision aid for men considering screening for prostate cancer. The information in the decision aid incorporates the pros and cons to screening as identified in the Goteborg and PLCO trials. Along with assessing incidence and mortality rates, this tool will also address risk of side effects from treatment. In collaboration with other investigators, mainly urologists, at this institution, I'm involved with numerous other projects including studying suicide risk after a diagnosis of prostate cancer.

Q: Is prostate cancer screening perceived differently in Sweden than in the US?

A: Yes. In Sweden there is no screening tradition despite Sweden having one of the highest mortality rates of prostate cancer in Europe. Screening has not been found to be cost-effective there. Swedish guidelines say that a well-informed man in the 'screening age' who requests the PSA test cannot be denied, but population-based screening is not encouraged.

Q: Why is the prostate cancer mortality rate so high in Sweden?

A: It might have something to do with lack of sun exposure/vitamin D or the high milk consumption rate. Or maybe that we eat Swedish meatballs a lot. I'm joking! We're not sure of why the rates are so much higher. The proportion of men who die of prostate cancer is considerably higher in Sweden than in the U.S. It may also reflect the earlier and more widespread use of PSA screening and curative treatment in the U.S. But the trends for screening in Sweden are changing. More men are now requesting PSA.

Q: What are your thoughts on the screening discrepancies?

A: My concerns are not about if we should screen but how best to screen.

Q: Why is your research important?

A: This research will hopefully add some piece of knowledge about PSA screening that is lacking, especially regarding the benefits and harms of screening. There needs to be a risk-stratified approach to screening.

Q: What do you miss about living in Sweden?

A: I miss my family so much. I have a little nephew who I Skype every Sunday and am always surprised by how much he has changed in such a short time. I also really miss nature. I grew up in a village of 300 people and lots of open land - New York is a change. I really enjoy being able to spend time in Central Park though.

Q: What else have you enjoyed about living in New York City?

A: I love work and the smart, interesting people I get to work with. Also I've been amazed that so much is open 24 hours and you can get mani & pedi everywhere.

Q: One last but important question. Are Swedish fish the candy actually Swedish?

A: No they are not. In fact, we have our own tasty version of Swedish fish. You must try my favorite candy, salted licorice.

Did you know?

Ann Zauber has baked more than **100** poundcakes for the PCPR/SOAR seminar series.

Q&A

Sigrid Carlsson

SOAR NEWS

EDITORIAL STAFF

Elena Elkin, PhD / Center for Health Policy & Outcomes, Department of Epidemiology & Biostatistics

Paige Nobles, MA / Center for Health Policy & Outcomes, Department of Epidemiology & Biostatistics

Yvonne Bombard, PhD / Center for Health Policy & Outcomes, Department of Epidemiology & Biostatistics

Saidah Henderson, MA / Department of Psychiatry & Behavioral Sciences

Nidha Mubdi, MPH / Department of Pediatrics

Meghan Woods, MPH / Department of Epidemiology & Biostatistics

SOAR Seminar on Survivorship

Claire Snyder of the Johns Hopkins Schools of Medicine and Public Health presented her research on the needs of cancer survivors and their physicians, September 11th.



Photo by Richard DeWitt