COMMENTARY
Secondary screening tests for prostate cancer: is more information better? Which test is best?

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Screening for prostate cancer remains controversial but is "Bread and Butter" for many urologists.[1] As a full time clinician, I see 5-15 new patients every week being referred from primary care or self-referred for "elevated PSA". These referrals come in all "shapes and sizes" from the young man with a high PSA and an abnormal DRE where the decision to move to a biopsy is a "no brainer" to the elderly man with a borderline PSA where the primary care doctor did not even do a DRE and my exam is squarely BPH. Our practice, like many others, now utilize "secondary screening tests" such as Prostate Health Index (PHI), 4K Score, or urine tests (such as Select MDx or the new Exo Dx prostate) to help us make smarter screening decisions to avoid over-detection without sacrificing the life-saving value of prostate cancer screening.[2-6]

Dr. Crawford and colleagues from University of Colorado have been on the forefront in this area for many years as have many other urology groups who have participated in Prostate Cancer Awareness Week (PCAW). The Colorado group and other groups, including our Duke program, have studied the PSA "Cut point" of 1.5 as a simple threshold where above was a risk factor for future prostate cancer.[7-9] The baseline PSA concept is a good one, in my opinion, and can help stratify men for their future risk or lack of risk for prostate cancer.[8] In this retrospective single center study, the authors look at separate cohorts of men where either Select MDx urine or 4K Score, or PHI was used to help determine a very low risk of intermediate grade prostate cancer for men having a total PSA of 1.5 or less.[10] Furthermore, for men with a PSA above 1.5 to 3.99, the risk of Gleason Grade Group 2 or higher (Gleason 3+4=7 or higher on biopsy) was 2%, 8% and 1% for low PHI, 4K Score, or Select MDx, respectively.

The limitation of this study is that it was not a head to head comparison. The study would have been scientifically more valuable if each patient had all three tests. However, this was not practically possible.

In current clinical practice, many questions remain about the value of these "secondary" tests to PSA screening. We do not know the cost-effectiveness of any or "which one is the best". Mp-MRI is now in the mix and it is unclear if imaging with MRI should replace or complement this secondary lab data.[11] I find many patients "want it all" before making a biopsy decision and even with compelling evidence from one or multiple tests or MRI, they are still reluctant to have a biopsy or even worse, are scheduled but do not show up for the biopsy! At Duke, we have access to PHI, 4K Score, Exo-Dx, and prostate MRI and there is considerable variability among our physician and advanced practice providers on use. We applaud the authors for publishing results that may help urologists make more informed decisions in this complex and still controversial area. □

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