New Research Demonstrates Insights Into Prostate Cancer Identification, Management

CHICAGO, May 3, 2019 /PRNewswire/ -- Prostate cancer diagnosis and treatment is an ever-changing field, with new research showcasing different ways to identify and manage patients with this disease. Three new abstracts – highlighting how beta blockers may impact prostate cancer risk, the advantages and disadvantages of using magnetic resonance imaging (MRI) to monitor men on active surveillance protocols and the combined role of the Prostate Health Index (PHI) with MRI in prostate cancer detection – will be presented to the media at the 2019 AUA Annual Meeting in Chicago. This special session for press will be moderated by Dr. Sam Chang on Friday, May 3, 2019 at 10 a.m. Dr. Chang is the Patricia and Rodes Hart Endowed Chair of Urologic Surgery at Vanderbilt University Medical Center in Nashville.

Abstracts presented include:

Publication # MP33-06
Atenolol Reduces Incident Low And Intermediate Risk Prostate Cancer

Oral beta blocker medications are commonly prescribed for the treatment of a variety of conditions, including high blood pressure and migraines. In this study, researchers conducted a retrospective review of more than 4,182 men who had undergone a biopsy for prostate cancer, including a cohort of 669 men who had taken a beta blocker medication – either atenolol (Tenormin), metoprolol (Lopressor/Toprol XL) or carvedilol (Coreg) – within one year of their biopsy to determine whether an association exists between these medications and incident prostate cancer on biopsy.

Key findings include:

- Atenolol was associated with a reduction in incident intermediate risk prostate cancer of approximately 50 percent compared to men not taking a beta blocker.
- Researchers also identified a significant reduction in incident low-risk disease on biopsy in men taking atenolol.

Publication # MP15-08
Assessment of MRI Performance in the Canary Prostate Active Surveillance Study (PASS)

In recent years, multiparametric MRI (mpMRI) has emerged as a tool to aid in the detection of prostate cancer. Additionally, it is also being used during follow-up for men on active surveillance protocols. This multi-institutional study examined the effectiveness of mpMRI, compared to systematic biopsy, to detect Gleason Grade (GG) 2 or greater in a cohort of 325 men on active surveillance who underwent a biopsy within one year of having a mpMRI.

Key findings include:

- The negative predictive value of MRI for GG2 or greater cancers was 76 percent, with a false positive rate of 49 percent.
- In a sensitivity analysis of 287 MRI in 270 men with GG1 cancer prior to imaging, biopsy reclassification to GG2 was observed in 21 percent of men with negative MRI and 35 percent of men with positive MRI.
- Systemic biopsy performed higher than targeted biopsies in identifying higher GG, suggesting that systematic biopsies should not be omitted in the setting of positive or negative MRI.
Multiparametric MRI (mpMRI) and the Prostate Health Index assay (PHI), a blood test used to identify prostate cancer and predict likelihood of disease progression, are growing in their use as tools to detect prostate cancer and improve accuracy of prostate biopsies. In this study of 289 men, using findings from the prospective UK PHI in Refining MRI (PRIM) study, researchers explored whether the PHI test could be used to refine the use of mpMRI in prostate cancer diagnosis. Key findings include:

- PHI was an independent predictor of a positive mpMRI, and outperformed both mpMRI and PSA density in predicting significant cancer detection.
- The combination of mpMRI and PHI had the highest predictive value for a significant cancer. Using an initial threshold PHI of 30 as a cut-point for referrals and biopsying only men with a positive mpMRI would have saved 23 percent of mpMRI and biopsies, while only missing a small percentage of significant cancers (6 percent).

"The field of prostate cancer diagnosis and management is ever-changing, and these studies mark potentially important steps forward in our research," Dr. Chang said. "Although none of the current testing options are perfect, a combination of MRI and markers, like the Prostate Health Index, may represent the best approach to maximize the identification of clinically significant cancer and reduce the number of biopsies."

**About the American Urological Association:** Founded in 1902 and headquartered near Baltimore, Maryland, the American Urological Association is a leading advocate for the specialty of urology, and has more than 22,000 members throughout the world. The AUA is a premier urologic association, providing invaluable support to the urologic community as it pursues its mission of fostering the highest standards of urologic care through education, research and the formulation of health policy.

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