On behalf of MDxHealth, I respectfully request the NCCN Prostate Cancer Early Detection Panel to review the enclosed data supporting inclusion of SelectMDx for Prostate Cancer test in the Prostate Cancer Early Detection Guidelines. SelectMDx is a reverse transcription PCR (RT-PCR) assay that measures the mRNA expression levels of the DLX1 and HOXC6 genes, which are associated with high-grade (Gleason score (GS) ≥ 7) prostate cancer. The two gene risk score combining mRNA expression levels along with traditional clinical risk factors is able to detect high-grade, clinically significant PCa (csPCa) accurately with an AUC of 0.89.

**Specific Changes:** Recommend inclusion of the SelectMDx test within the evaluation of and indications for biopsy.

**FDA Clearance:** SelectMDx is performed at MDxHealth’s CLIA and ISO certified, CAP Accredited Laboratory in accordance with indications for use. FDA Clearance is not required for the SelectMDx for Prostate Cancer test.

**Rationale:** In multiple clinical trials, SelectMDx was shown to improve the identification men at increased risk for clinically significant cancer, while providing a negative predictive value (NPV) of 98% for csPCa. SelectMDx significantly outperformed the Prostate Cancer Prevention Trial Risk Calculator (PCPT RC 2.0), as well as PCA3, in identifying men with high-grade cancer, with an AUC of 0.89, versus 0.77 and 0.68 for PCPT and PCA3, respectively. Therefore, SelectMDx can help optimize biopsy decision making for the diagnosis of high-grade PCa while reducing the number of unnecessary prostate biopsies and potential overtreatment. Based on the recent Van Neste et al study (Eur Uro 2016), SelectMDx could reduce unnecessary biopsies by 42%.

The following articles are submitted in support of this proposed change:

7. Alinezhad et al; Validation of Novel Biomarkers for Prostate Cancer Progression by the Combination of Bioinformatics, Clinical and Functional Studies. *PLOS ONE.* May 19, 2016.

Sincerely,

Laura Caba
Vice President, Medical Affairs
MDxHealth
15279 Alton Parkway Suite 100
Irvine, CA 92618
Phone: (503) 805-6100