Appendix B: Care Pathway I – Patients with Signs and Symptoms of Suspected Prostate Cancer

Asymptomatic patients presenting with PSA elevated above age-adjusted reference range

- Consider DRE after discussion of harms and benefits

Patients with LUTS (Voiding symptoms: poor stream, hesitancy, urgency, frequency, intermittent flow, and straining to pass urine)

- Signs/symptoms of acute prostatitis? (e.g., dysuria, hematuria, pelvic/groin pain, fever/chills)
  - Yes: Antibiotics contraindicated and may be detrimental (e.g., biopsy infection, C. difficile, antibiotic resistance)
    - DRE for all patients.
    - PSA for all patients.
  - No: PSA not indicated prior to treatment.
    - Manage as clinically appropriate.
      - If symptoms resolve, discuss role of DRE/PSA as per asymptomatic patients.
      - If symptoms do not resolve, refer as clinically appropriate.

- Prostate hard or irregular on DRE?
  - Yes: Prostate hard or irregular on DRE?
    - Yes: Repeat PSA above age-adjusted* reference range?
      - Yes: Consider other causes of elevated PSA. Repeat PSA at 4-12 weeks.
      - No: Refer to urology.
    - No: PSA elevated above age-adjusted reference range?
      - Yes: Repeat PSA above age-adjusted* reference range?
        - Yes: Refer to urology.
        - No: When DRE and PSA are normal, prostate cancer is unlikely. Evaluate for other causes and treat as appropriate. Repeat PSA/DRE in less than 2 years is not indicated.
      - No: PSA elevated above age-adjusted reference range?
        - Yes: Consider other causes of elevated PSA. Repeat PSA at 4-12 weeks.
        - No: When DRE and PSA are normal, prostate cancer is unlikely. Evaluate for other causes and treat as appropriate. Repeat PSA/DRE in less than 2 years is not indicated.

* Age-based PSA Reference Ranges:
  - 0-49 yrs: 0-2.50 μg/L
  - 50-59 yrs: 0-3.50 μg/L
  - 60-69 yrs: 0-4.50 μg/L
  - ≥70 yrs: 0-6.50 μg/L

Other Causes of Elevated PSA
  - Urinary retention
  - Prostatitis
  - Benign prostatic hyperplasia (BPH)
  - Bladder catheterization/instrumentation
  - PSA levels are not significantly altered after cycling, intercourse, or digital rectal exam.

Note: For men taking 5-alpha reductase inhibitors (i.e., finasteride & dutasteride), PSA will drop by approximately 50%. For accurate interpretation relative to lab-reported aged-based ranges, adjust the reported result by a factor of 2.

Abbreviations: BPH - benign prostatic hyperplasia; DRE - digital rectal exam; PSA - prostate specific antigen.