**FIGURE 1: INITIAL SCREENING FOR PROSTATE CANCER**

**Screening Discussion:**
**Shared Decision-making**
1. Involvement of patient and clinician
2. Sharing of information from patient and clinician
3. Consensus building through expression of preference from patient and clinician
4. Agreement by both patient and clinician on decision

**Age to Initiate PSA Screening**
- Average prostate cancer risk: Initiate PSA at 45-50 years
- Elevated prostate cancer risk: Initiate PSA at 40-45 years

**PSA Test**
PSA velocity should not be sole indication for biomarker, imaging or biopsy

**Screening Interval**
- Resume screening every 2-4 years (ages 50-69), OR
- Personalize screening interval based on risk, OR
- Discontinue screening

**Confirmatory PSA**

**Decision to proceed with PSA-based screening**

**Decision to continue screening**

**DEFINITIONS**
Elevated risk groups: Black ancestry, germline mutations, strong family history of breast/ovarian cancer, strong family history of prostate cancer OR indicated by risk calculator and SDM.

Elevated PSA: Based on laboratory, prostate size, or age-based normative values.

**ABBREVIATIONS**
AIP: atypical intraductal proliferation; ASAP: atypical small acinar proliferation; DRE: digital rectal exam; HGPIN: high-grade prostatic intraepithelial neoplasia; MRI: magnetic resonance imaging; PSA: prostate specific antigen.
Risk Assessment
Risk calculators may be used to determine risk including information on PSA, %free PSA, age, race, family history

Pre-biopsy Discussion: Shared Decision-making
In addition to SDM principles, clinicians should discuss 1) risk of identifying cancer with a sufficiently low risk of mortality that could safely be monitored rather than treated; 2) potential role for supplementary testing with biomarkers or prostate MRI

Adjunctive Biomarker
Biomarker testing may be used for further risk stratification if it would influence the decision on whether to proceed with a biopsy

Prostate MRI
MRI is optional for initial biopsy; PI-RADS should be used for reporting MRI findings

Initial Prostate Biopsy (Transrectal or Transperineal approach)
- Systematic biopsy

PI-RADS 1-2/No MRI
Decision to not proceed with biopsy

PI-RADS 3 or higher
Initial Prostate Biopsy (Transrectal or Transperineal approach)
- Targeted biopsy: At least 2 cores per target +/
- Systematic biopsy: Systematic biopsy is optional

Biopsy Discussion: Shared Decision-making
Clinicians should discuss biopsy results with patients and reassess risk of undetected or future development of GG2+ prostate cancer; Additional evaluation may be indicated for multifocal HGPIN/ASAP/AIP; Focal HGPIN should not prompt an immediate repeat biopsy

Positive finding
Proceed to Biopsy Discussion: Shared Decision-making

Prostate cancer detected
Proceed to AUA Clinically Localized Prostate Cancer Guideline

Proceed to FIGURE 3: AFTER A NEGATIVE BIOLOGY

Patient Presents with Elevated PSA/Risk

Proceed back to FIGURE 1: SCREENING INTERVAL

Decision to not proceed with biopsy

Proceed to AUA Clinically Localized Prostate Cancer Guideline
**FIGURE 3: AFTER A NEGATIVE BIOPSY**

**Patients with Prior Negative Biopsy**
Screening should not be discontinued based solely on a negative prostate biopsy.

**Screening Interval**
- Resume screening every 2-4 years (ages 50-69), OR
- Personalize screening interval based on risk, OR
- Discontinue screening

**Risk Re-assessment**
Risk calculators may be used to determine risk including information on PSA, %free PSA, PSA density, age, race, family history, prior biopsy, prior MRI (if previously performed); PSA alone should not be used to decide on a repeat biopsy.

**Adjunctive Biomarker**
Biomarker testing should not be used reflexively after a negative biopsy BUT may be used for further risk stratification if it would influence the decision on whether to proceed with another biopsy.

**Prostate MRI**
MRI is recommended for repeat biopsy if no previous MRI was completed.

**Repeat Prostate Biopsy**
(Transrectal or Transperineal approach)
- **Positive finding***
  - Targeted biopsy: At least 2 cores per target +/-
  - Systematic biopsy: Systematic biopsy is optional

**Repeat Prostate Biopsy**
(Transrectal or Transperineal approach)
- PI-RADS 3 or higher
  - Systematic biopsy is optional
- PI-RADS 1-2/No MRI
  - Systematic biopsy is optional in patients with prior negative biopsy and negative MRI

**Elevated risk**
Proceed to AUA Clinically Localized Prostate Cancer Guideline

**Low to average risk**
Proceed back to Figure 3 Recommended Screening Interval

**Biopsy Discussion:**
Shared Decision-making
Clinicians should discuss biopsy results with patients and reassess risk of undetected or future development of GG2+ prostate cancer; Additional evaluation may be indicated for multifocal HGPIN/ASAP/AIP; Focal HGPIN should not prompt an immediate repeat biopsy.

* = if adjunctive biomarker is positive but MRI only shows PI-RADS 1 to 2, then should proceed with systematic biopsy.