Recent update in guidelines

BPH/LUTS

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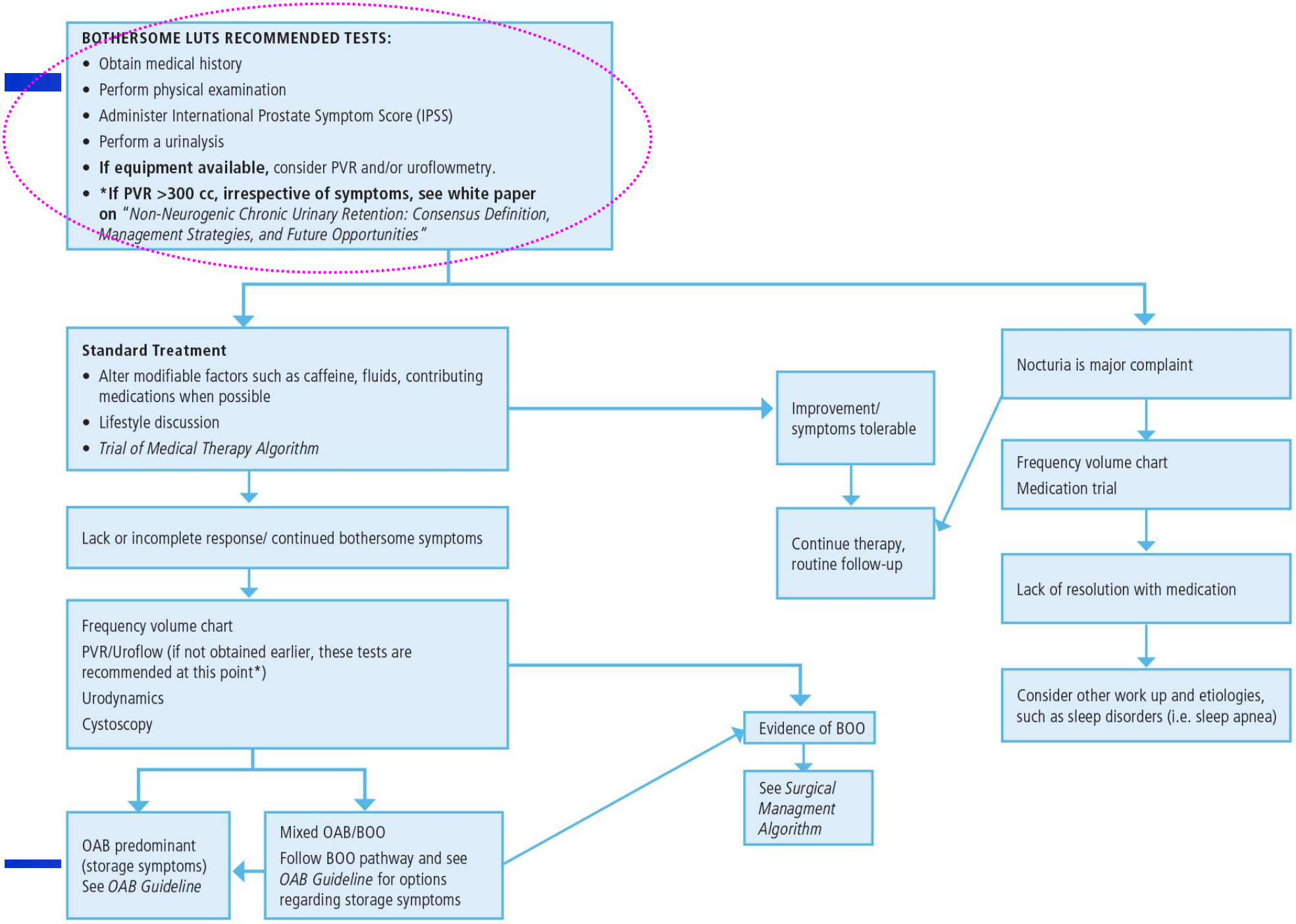
2021 AUA Guideline

Management of Benign Prostatic Hyperplasia

- **2020**
  - Surgical Management of Lower Urinary Tract Symptoms Attributed to Benign Prostatic Hyperplasia: AUA GUIDELINE

- **2021**
  - Management of Lower Urinary Tract Symptoms Attributed to Benign Prostatic Hyperplasia: AUA GUIDELINE

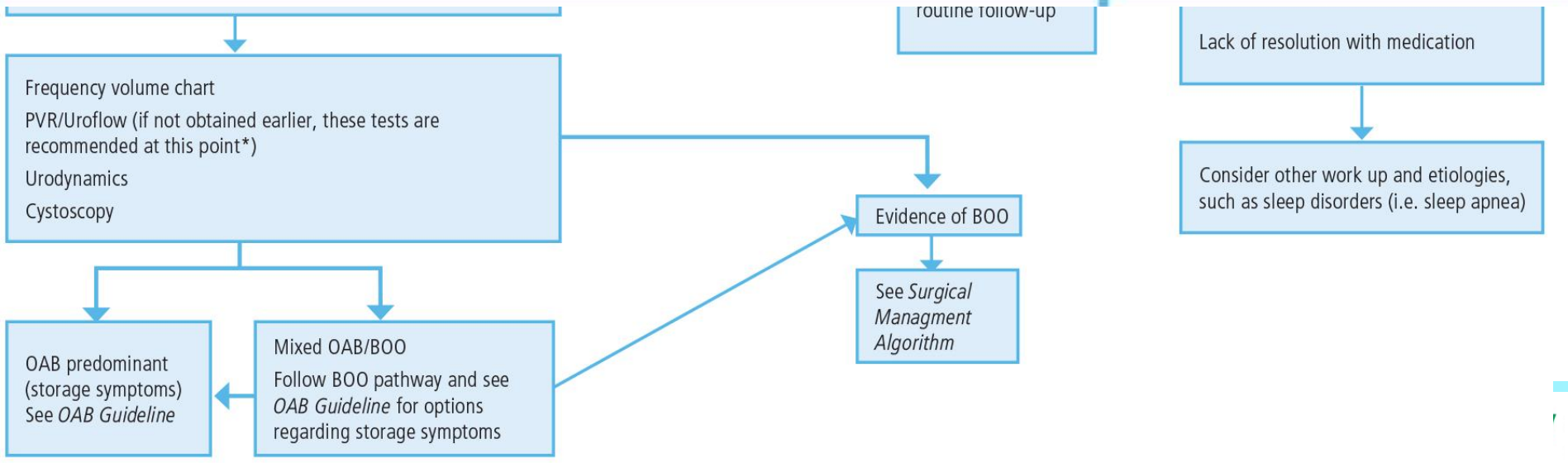
Basic Management of LUTS In Men



Basic Management of LUTS In Men

BOTHERSOME LUTS RECOMMENDED TESTS:

- Obtain medical history
- Perform physical examination
- Administer International Prostate Symptom Score (IPSS)
- Perform a urinalysis
- **If equipment available,** consider PVR and/or uroflowmetry.
- ***If PVR >300 cc, irrespective of symptoms, see white paper on** *"Non-Neurogenic Chronic Urinary Retention: Consensus Definition, Management Strategies, and Future Opportunities"*



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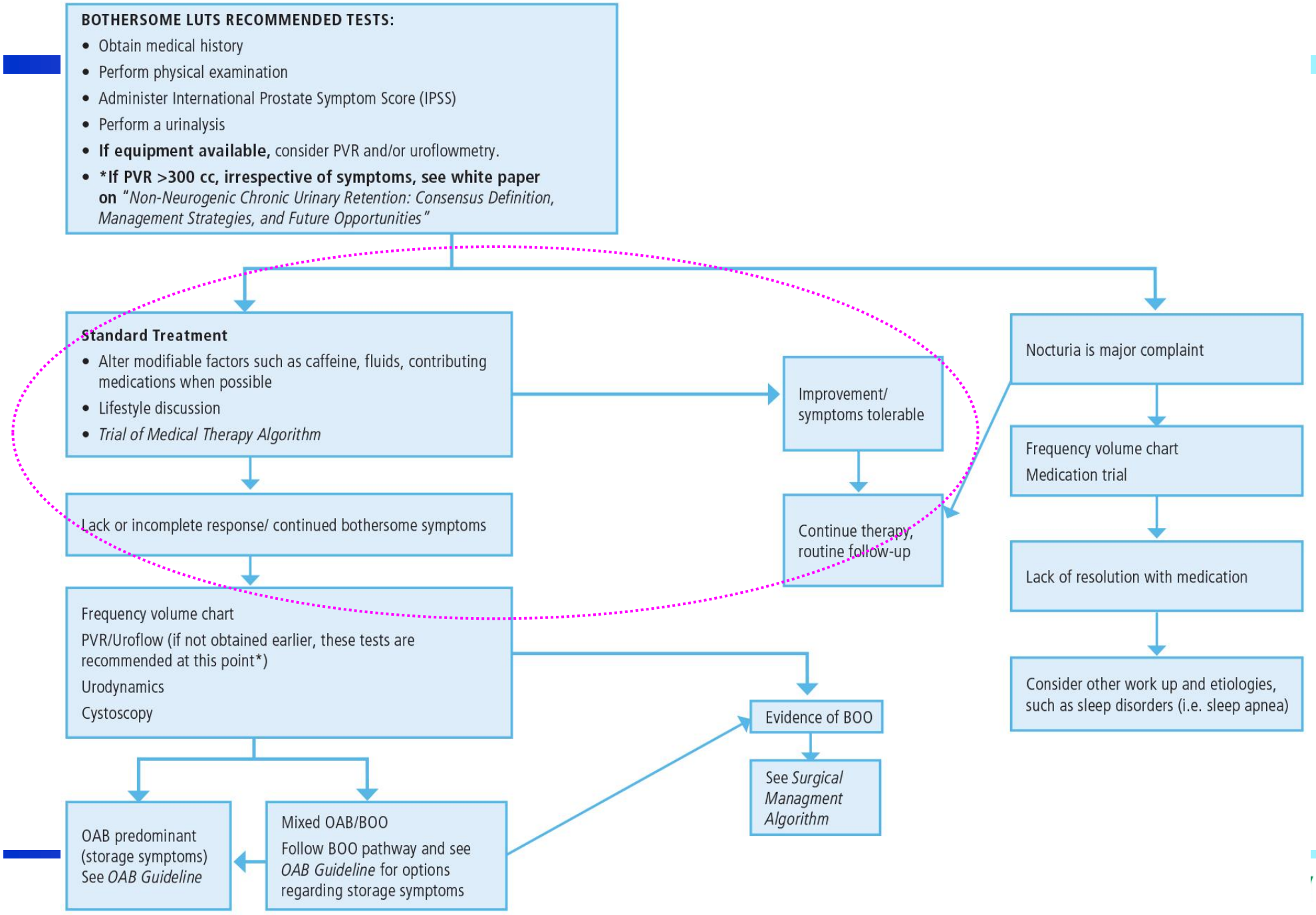

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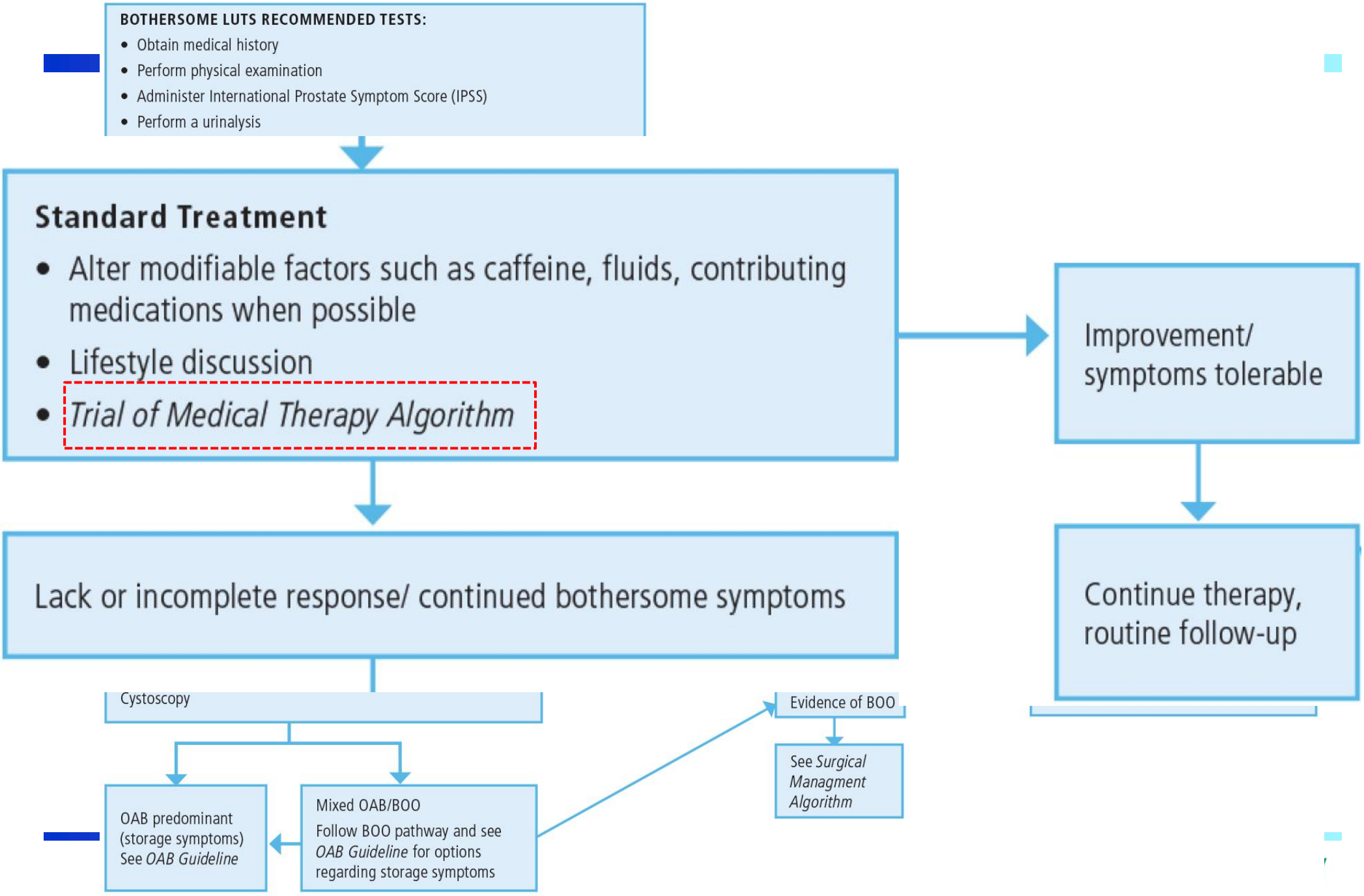

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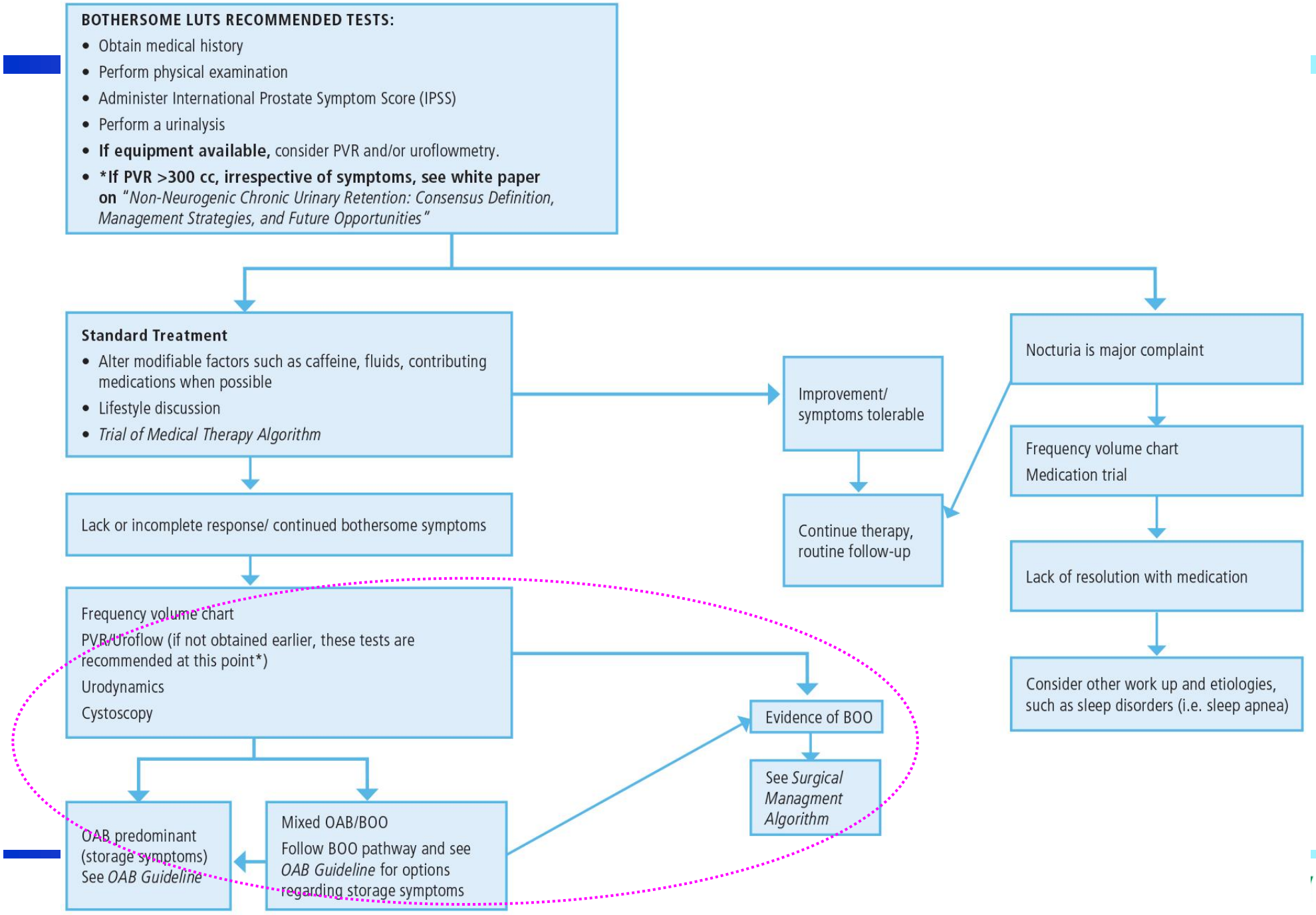

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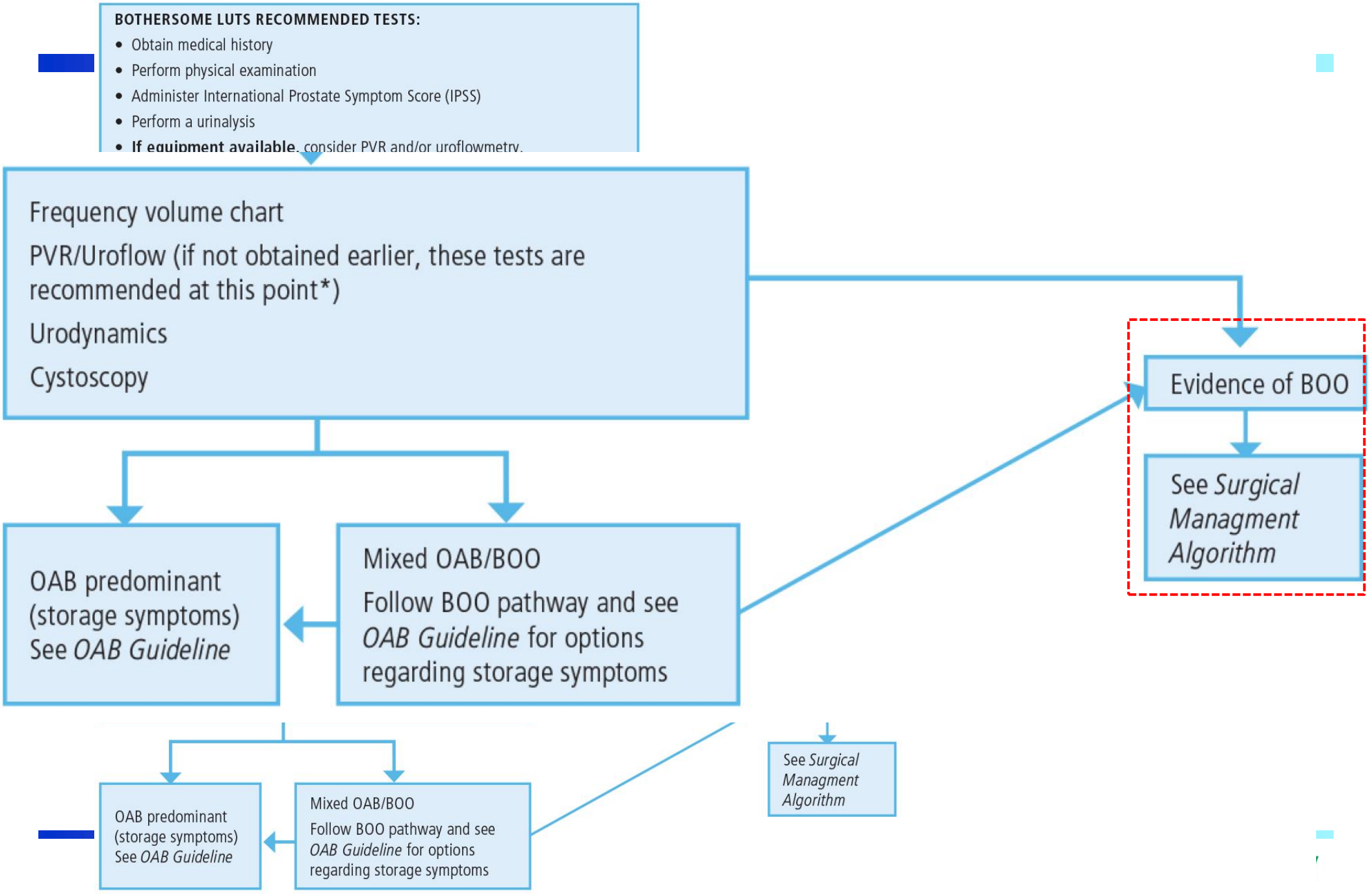

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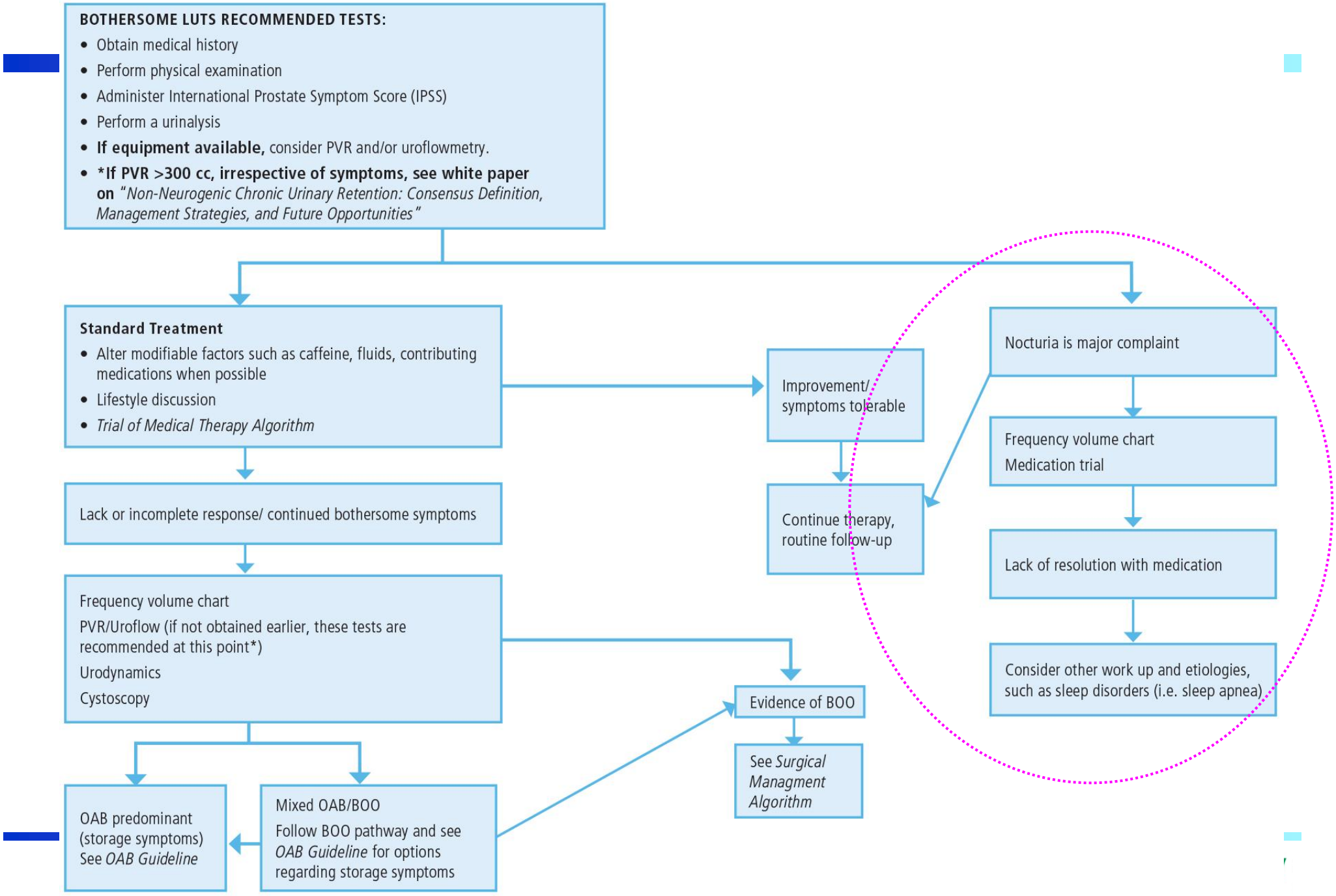

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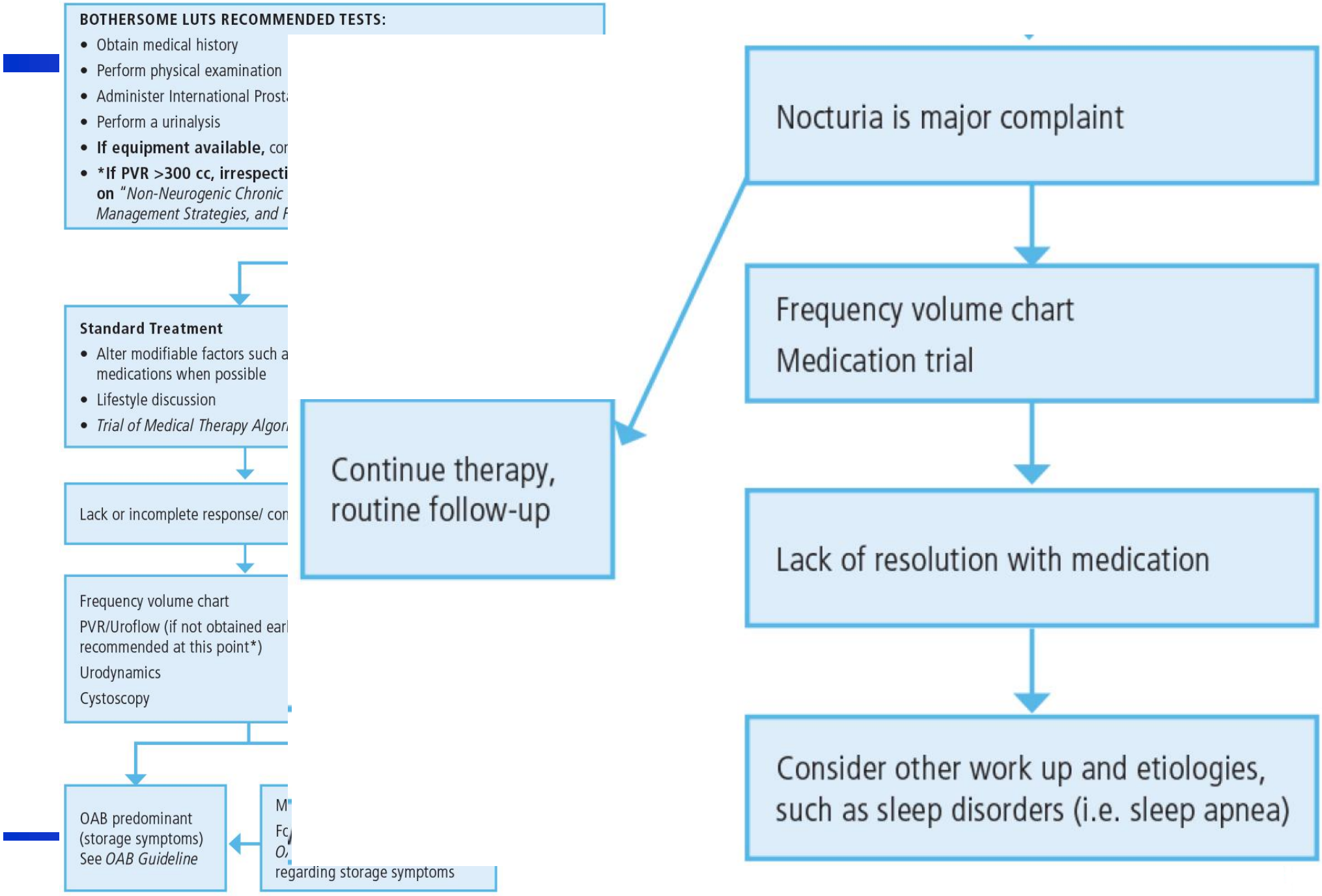


- **2020**
  - EVALUATION AND PREOPERATIVE TESTING (1-6)

- **2021**
  - EVALUATION (1-9)
    - Initial Evaluation (1,2)
    - Follow-up Evaluation (3,4)
    - Preoperative Testing (5-9)

- **2020**
  - 1. In the initial evaluation of patients presenting with bothersome LUTS possibly attributed to BPH, clinicians should take a medical history, conduct a physical examination, utilize the AUA Symptom Index (AUA-SI), and perform a urinalysis. (Clinical Principle)

- **2021**
  - **Initial evaluation**
    - 1. In the initial evaluation of patients presenting with bothersome LUTS possibly attributed to BPH, clinicians should obtain a medical history, conduct a physical examination, utilize the International Prostate Symptom Score (IPSS), and perform a urinalysis. (Clinical Principle)

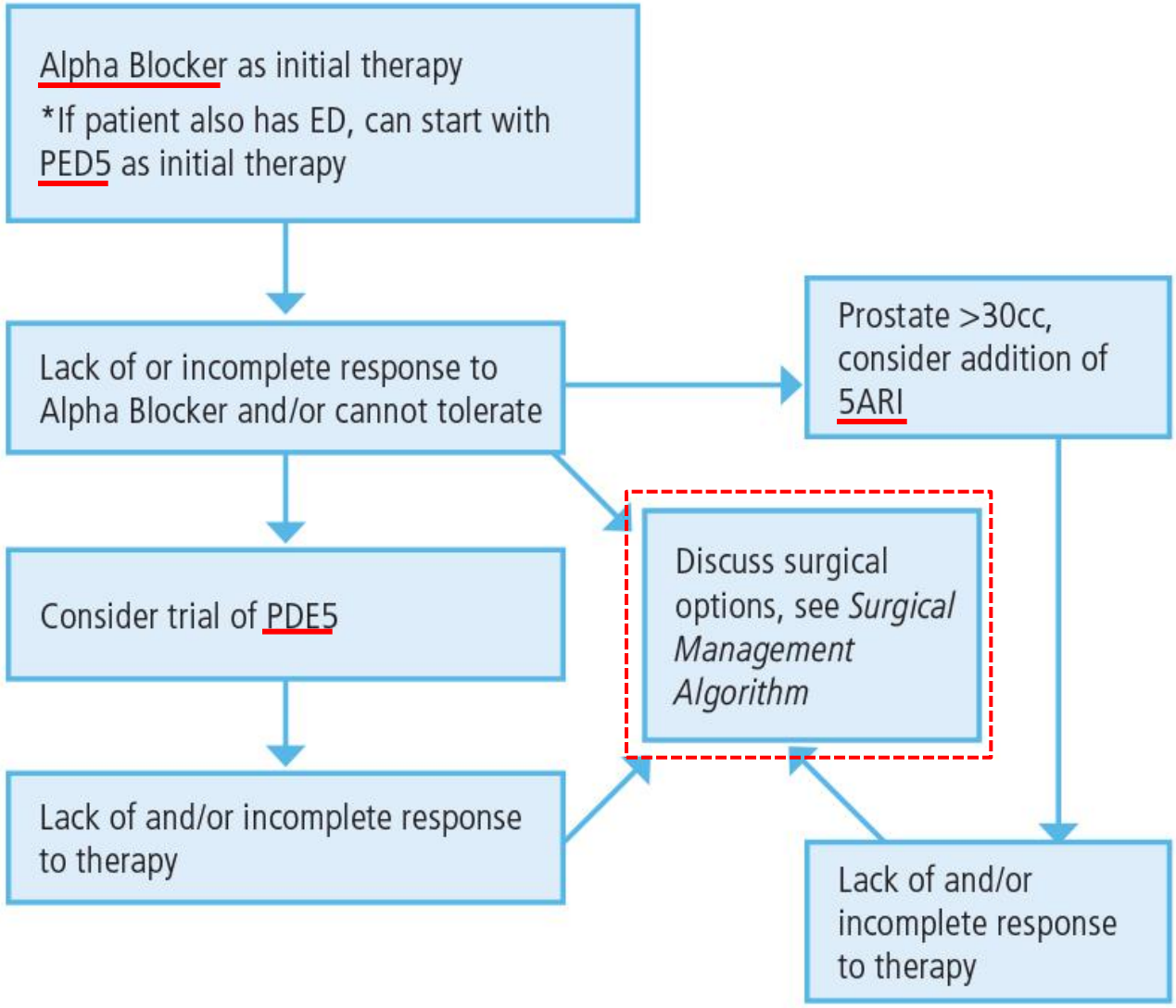
    - 2. Patients should be counselled on options for intervention, which can include behavioral/lifestyle modifications, medical therapy and/or referral for discussion of procedural options. (Expert Opinion)

- **2021**
  - **Follow-up Evaluation**
    - 3. Patients should be evaluated by their providers 4-12 weeks after initiating treatment (provided adverse events do not require earlier consultation) to assess response to therapy. Revaluation should include the IPSS. Further evaluation may include a post-void residual (PVR) and uroflowmetry. (Clinical Principle)

    - 4. Patients with bothersome LUTS/BPH who elect initial medical management and do not have symptom improvement and/or experience intolerable side effects should undergo further evaluation and consideration of change in medical management or surgical intervention. (Expert Opinion)

  - **MEDICAL THERPAY (10-24)**

Trial of Medical Therapy Algorithm



For mixed OAB/BOO symptoms, see above and refer to OAB Guidelines (i.e. anticholinergic and B3 agonist therapy)

Medical Therapy

- **Alpha Blockers (10-12)**
  - **Treatment option**
    - alfuzosin, doxazosin, silodosin, tamsulosin, or terazosin.
    - (Moderate Recommendation; Evidence Level: Grade A)
  - **The choice of alpha blocker should be based on**
    - patient age and comorbidities
    - different adverse event profiles (eg, ejaculatory dysfunction, changes in blood pressure)
    - (Moderate Recommendation; Evidence Level: Grade A)
  - **Intraoperative Floppy Iris Syndrome**
    - When initiating alpha blocker therapy, patients with planned cataract surgery should be informed of the associated risks and be advised to discuss these risks with their ophthalmologists. (Expert Opinion)

Medical Therapy

- **5- Alpha Reductase inhibitor (13-16)**
  - 5-ARI monotherapy should be used as a treatment option in patients with
    - prostate volume of >30cc, PSA > 1.5ng/dL, or palpable prostate enlargement on DRE.
    - (Moderate Recommendation; Evidence Level: Grade B)
  - 5-ARIs alone or in combination with alpha blockers are recommended
    - to prevent progression of LUTS/BPH
    - to reduce the risks of urinary retention
    - to reduce need for future prostate-related surgery
    - (Strong Recommendation; Evidence Level: Grade A)

Medical Therapy

- **5- Alpha Reductase inhibitor (13-16)**
  - Before starting a 5-ARI, clinicians should inform
    - risks of sexual side effects
    - certain uncommon physical side effects
    - low risk of prostate cancer
    - (Moderate Recommendation; Evidence Level: Grade C)
  - Clinicians may consider 5-ARIs as a treatment option
    - to reduce intraoperative bleeding and peri- or postoperative need for blood transfusion after TURP or other surgical intervention for BPH.
    - (Expert Opinion)

Medical Therapy

- **Phosphodiesterase-5 Inhibitor (17)**
  - For patients with LUTS/BPH irrespective of comorbid erectile dysfunction
    - 5mg daily tadalafil should be discussed as a treatment option.
    - (Moderate Recommendation; Evidence Level: Grade B)

Medical Therapy

- **Combination Therapy (18-21)**
  - **5-ARI + alpha blocker**
    - only to patients with LUTS associated with prostate volume >30cc, a PSA >1.5ng/dL, or palpable prostate enlargement on DRE.
    - (Strong Recommendation; Evidence Level: Grade A)
  - **Anticholinergic agents or Beta-3-agonists + alpha blocker**
    - to patients with moderate to severe predominant storage LUTS.
    - (Conditional Recommendation; Evidence Level: Grade C)
  - **Low-dose daily 5mg tadalafil + alpha blockers**
    - Clinicians should not offer the combination treatment as it offers no advantages in symptom improvement over either agent alone.
    - (Moderate Recommendation; Evidence Level: Grade C)

Medical Therapy

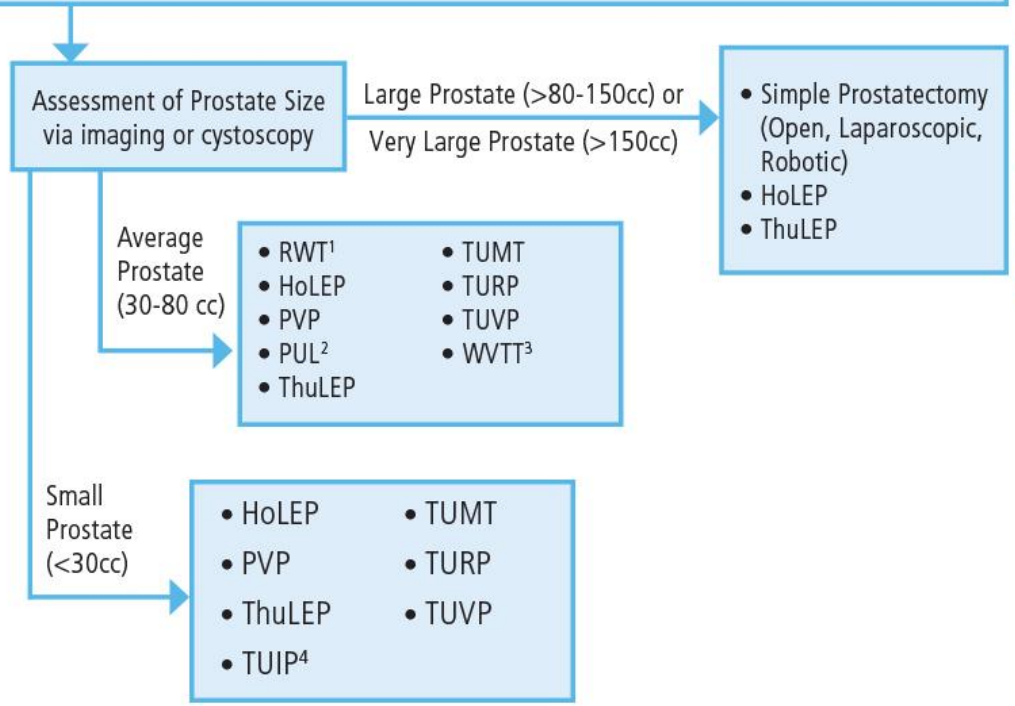
- **Acute Urinary Retention (AUR) Outcomes (22-24)**
  - Physicians should prescribe an oral alpha blocker prior to a voiding trial to treat patients with AUR related to BPH. (Moderate Recommendation; Evidence Level: Grade B).
  - Patients newly treated for AUR with alpha blockers should complete at least three days of medical therapy prior to attempting trial without a catheter (TWOC). (Expert Opinion)
  - Clinicians should inform patients who pass a successful TWOC for AUR from BPH that they remain at increased risk for recurrent urinary retention. (Moderate Recommendation; Evidence Level: Grade C).

- **2020**
  - SURGICAL THERAPY (7-24)

- **2021**
  - SURGICAL THERAPY (25-43)

Surgical Management of Lower Urinary Tract Symptoms Attributed to Benign Prostatic Hyperplasia

SURGICAL THERAPY



Patients concerned with preservation of erectile and ejaculatory function may be offered PUL or WVTT as data indicate that both therapies provide a greater likelihood of preservation of sexual function.

MEDICALLY COMPLICATED PATIENTS

In patients who are at higher risk of bleeding, such as those on anticoagulation drugs, therapies with a lower need for blood transfusion, such as HoLEP, PVP, and ThuLEP, should be considered. For additional information on the use of anticoagulation and antiplatelet therapy in surgical patients, refer to the ICUD/AUA review on Anticoagulation and Antiplatelet Therapy in Urologic Practice.

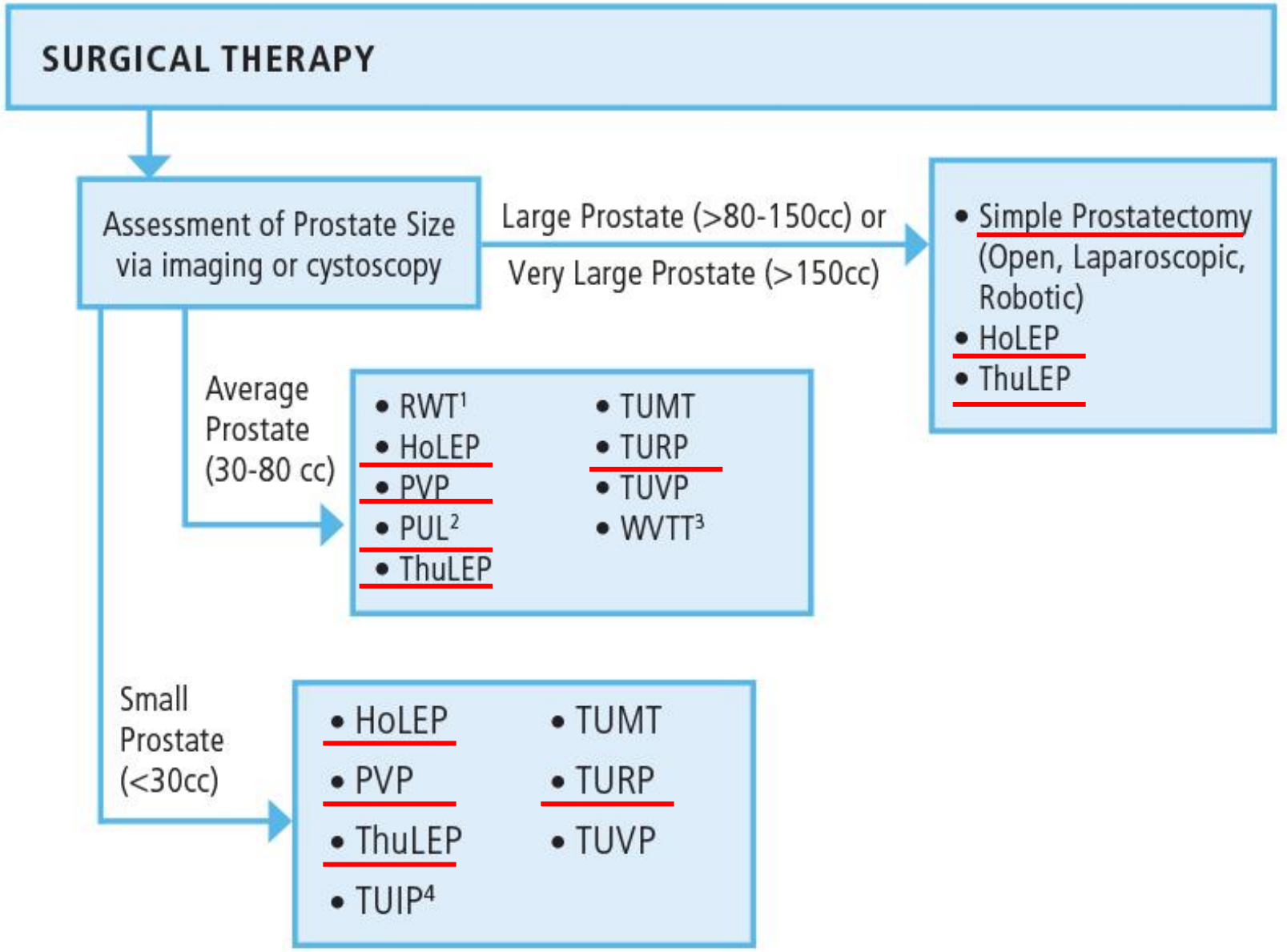
Based on the evidence reports of the current guidelines, the following criteria are recommended when utilizing these approaches:

[1] RWT: prostate volume 30-80cc.

[2] PUL: absence of obstructing midline prostate tissue and prostate volume 30-80cc.

[3] WVTT: prostate volume 30-80cc.

[4] TUIP: prostate volume ≤30cc.



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[4] TUIP: prostate volume ≤30cc.

Surgical Therapy

- Specific gravity of the prostate is 1.05 g/mL
  - the units **gram** and **milliliter** and **cc** can be used interchangeably.

- The Panel proposes consideration of the following categorical size descriptions when planning treatment: small (<30 g), average (30-80 g), large (>80 to 150 g), and very large (>150 g).
  - but do not necessarily imply lack of efficacy in prostates outside the recommended ranges.

- Randomized trials for some devices enrolled men with prostates within specific size ranges.
  - However, the Panel recognizes that these devices do not necessarily lack efficacy in prostates below or above the size ranges stipulated in the Statements.

Simple prostatectomy

- **2020**
  - 11. Clinicians should consider open, laparoscopic or robotic assisted prostatectomy, depending on their expertise with these techniques, for patients with large prostates. (Moderate Recommendation; Evidence Level: Grade C)

- **2021**
  - 29. Open, laparoscopic, or robotic assisted prostatectomy should be considered as treatment options by clinicians, depending on their expertise with these techniques, only in patients with large to very large prostates. (Moderate Recommendation; Evidence Level: Grade C)

Prostatic Urethral Lift (PUL)

- **2020**
  - 15. PUL may be offered as an option for patients with LUTS attributed to BPH provided prostate volume <80g and verified absence of an obstructive middle lobe. (Moderate Recommendation; Evidence Level: Grade C)

- **2021**
  - 33. PUL should be considered as a treatment option for patients with LUTS/BPH provided prostate volume 30-80cc and verified absence of an obstructive middle lobe. (Moderate Recommendation; Evidence Level: Grade C)

Water Vapor Thermal Therapy (WVTT)

- **2020**
  - 18. Water vapor thermal therapy may be offered to patients with LUTS attributed to BPH provided prostate volume <80g; however. (Moderate Recommendation; Evidence Level: Grade C)

- **2021**
  - 36. WVTT should be considered as a treatment option for patients with LUTS/BPH provided prostate volume 30-80cc. (Moderate Recommendation; Evidence Level: Grade C)

Aquablation >>> RWT

- **2020**
  - Aquablation
    - 22. Aquablation may be offered to patients with LUTS attributed to BPH provided prostate volume >30/<80g. (Conditional Recommendation; Evidence Level: Grade C)

- **2021**
  - Robotic Waterjet Treatment (RWT)
    - 40. Robotic waterjet treatment (RWT) may be offered as a treatment option to patients with LUTS/BPH provided prostate volume 30-80cc. (Conditional Recommendation; Evidence Level: Grade C)

Hematuria

- **2021**
  - 42. After exclusion of other causes of hematuria, 5-ARIs may be an appropriate and effective treatment alternative in men with refractory hematuria presumably due to prostatic bleeding. (Expert Opinion)

2022 EAU Guideline

Management of Non-neurogenic Male LUTS

Summary of Changes

- Addition of section 5(Disease menagement). 2(Pharmacological treatment). 7(Combination therapies). 3(α1-blockers + Beta-3 agonist), resulting in a new summary of evidence and recommendation:

Summary of evidence	LE
Combination treatment with α1-blockers and mirabegron results in a slight decrease of number of voids and urgency episodes per day compared with α1-blockers.	1b
Adverse events of both drug classes are seen with combined treatment using α1-blockers and mirabegron	1b

Recommendation	Strength rating
Use combination treatment of a α1-blocker with mirabegron in patients with persistent storage LUTS after treatment with α1-blockers monotherapy.	Weak


Thank you!