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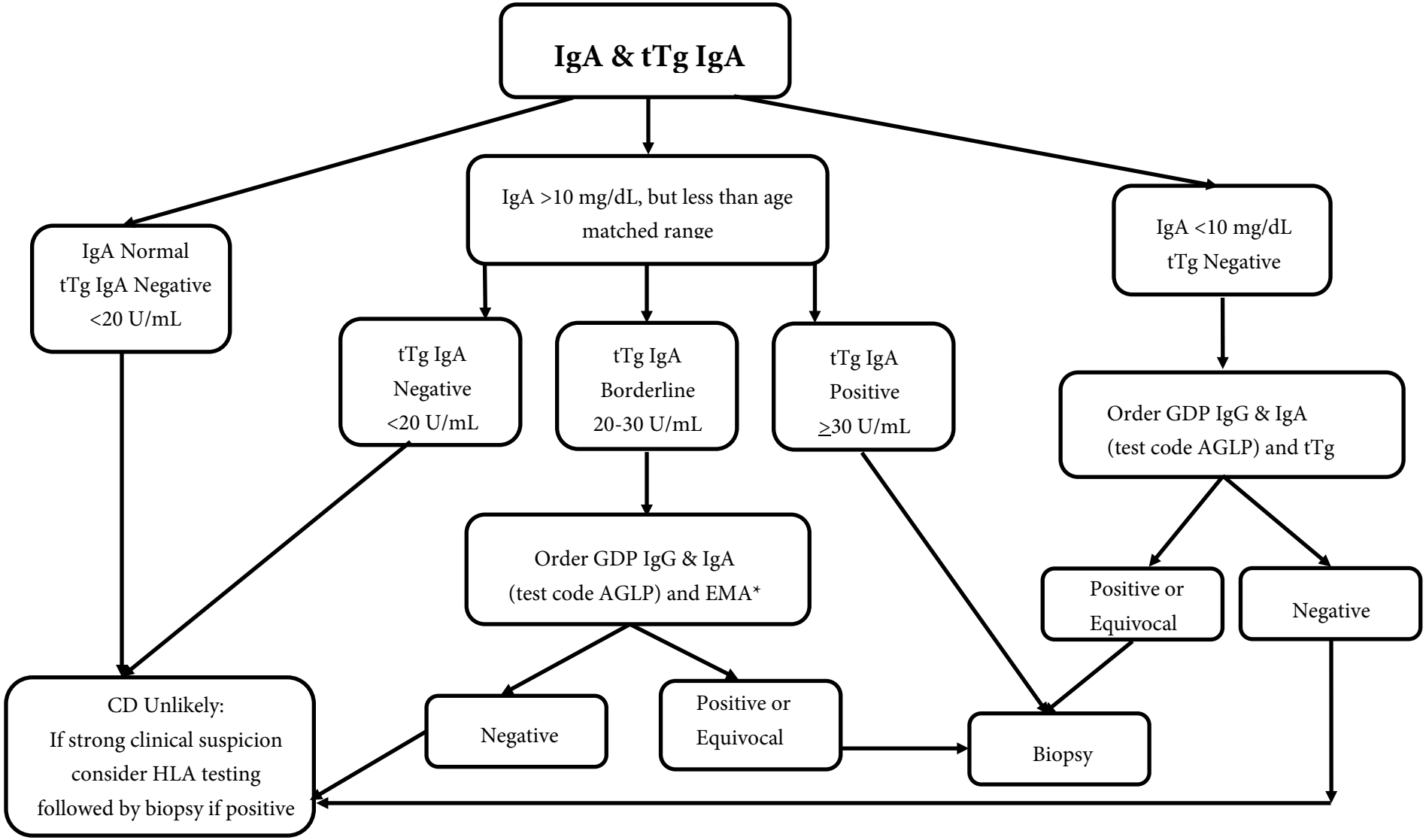
Recommendations for Celiac Disease Testing



Endomysial Antibody testing is no longer recommended as a screening test.

1. **American Gastroenterological Association (AGA) Institute Medical Position Statement on the Diagnosis and Management of Celiac Disease.**
2. **North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) Clinical Practice Guideline Summary on Diagnosis and Treatment of Celiac Disease in Children.**
3. **National Institute of Health (NIH) Consensus Statement on Celiac Disease.**

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CSF Sample Collection Guideline

Subarachnoid Hemorrhage

- Tube 1 → Glucose (O.5mL); Protein (O.5mL); Cell Count [rbc] (O.5mL)
- Tube 2 → Culture w/Grams stain (2.0mL)
- Tube 3 → Extra for additional tests
- Tube 4 → Cell Count [wbc, rbc] (0.5ml)

Infectious Disease

- Tube 1 → Glucose (O.5mL); Protein (O.5mL)
- Tube 2 → Culture w/Grams stain (2.0mL); Culture AFB (5.0mL); India ink (1.0mL); Cryptococcal Ag (0.5mL); Culture, Fungal (0.5mL); VZV, PCR (0.5mL); EBV, PCR (0.5mL)
- Tube 3 → Cell Count [wbc, rbc] (0.5ml); Herpes Simplex, PCR (O.5mL); Enterovirus, PCR (O.5mL); CMV,PCR (O.5mL); VORL (0.2mL)
- Tube 4 → JC Virus, PCR (l.OmL); Arbovirus Ab (l.OmL); T. Whipplei (O.SmL); Mycobacterium Tuberculosis, PCR (1.0mL)

Neurologic Disease

- Tube 1 → Glucose (O.5mL); Protein (O.5mL)
- Tube 2 → Culture w/Grams stain (2.0mL)
- Tube 3 → Cell Count [wbc, rbc] (0.5ml)
- Tube 4 → HU Auto Ab (.lOmL); Yo Auto Ab (2.0mL; MS Screen (l.OmL); AlCE (O.SmL); •Lyme CSF/Serum Ratio (1.3mL); •CSF Electrophoresis (2.0ml)

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Hepatitis Testing Guidelines and Interpretations

Acute: jaundice, viral illness
Acute Hepatitis Panel (AHEP):
- HAV, IgM
- HBsAg, HBc Ab IgM
- HCV

Chronic: elevated transaminases
Hepatitis B Profile (HBP), Hepatitis C Antibody Profile (HCP)
- HBsAg, HBs Ab, HBcAb,Total, HBc Ab,IgM
- HCV

HAV		
HAV, total HAV, IgM	Negative Negative	Susceptible
HAV, total HAV, IgM	Positive Positive	Acute Infection
HAV, total HAV, IgM	Positive Negative	Immune

HBV		
HBsAg HBcAb HBsAb	Negative Negative Negative	Susceptible
HBsAg HBcAb HBsAb	Negative Positive Positive	Immune due to natural infection
HBsAg HBcAb HBsAb	Negative Negative Positive	Immune due to Hepatitis B vaccination
HBsAg HBcAb HBcAb, IgM HBsAb	Positive Positive Positive Negative	Acutely infected
HBsAg HBcAb HBcAb, IgM HbsAb	Positive Positive Negative Negative	Chronically infected
HBsAg HBcAb HBsAB	Negative Positive negative	Differential includes: • Resolved infection (most common) • False-positive HBcAb, thus susceptible • Low-level chronic infection • Resolving acute infection

HCV		
HCV Ab HCVLD	Negative Not indicated	Repeat screening test in 1 to 3 months for high-risk patients.
HCV Ab HCVLD	Positive Detected	Infection confirmed.
HCV Ab HCVLD	Positive Not detected	Differential includes: • false-reactive screen • resolved (past) infection

NOTE:
HAV: Hepatitis A
HBV: Hepatitis B
HBsAg: HBV surface antigen
HBcAb: HBV core antibody
HBsAB: HBV surface antibody
HCV: Hepatitis C
HCVLD: HCV viral load

References:

- "Interpretation of Hepatitis B Serologic Test Results" www.cdc.gov/hepatitis n.d., http://www.cdc.gov/hepatitis/HBV/PDFs/SerologicChartv8.pdf
- "Reference for Interpretation of Hepatitis C (HCV) Test Results" www.cdc.gov/hepatitis n.d., http://www.cdc.gov/hepatitis/HCV/PDFs/hcv_graph.pdf

Revision Date: 4-25-2013

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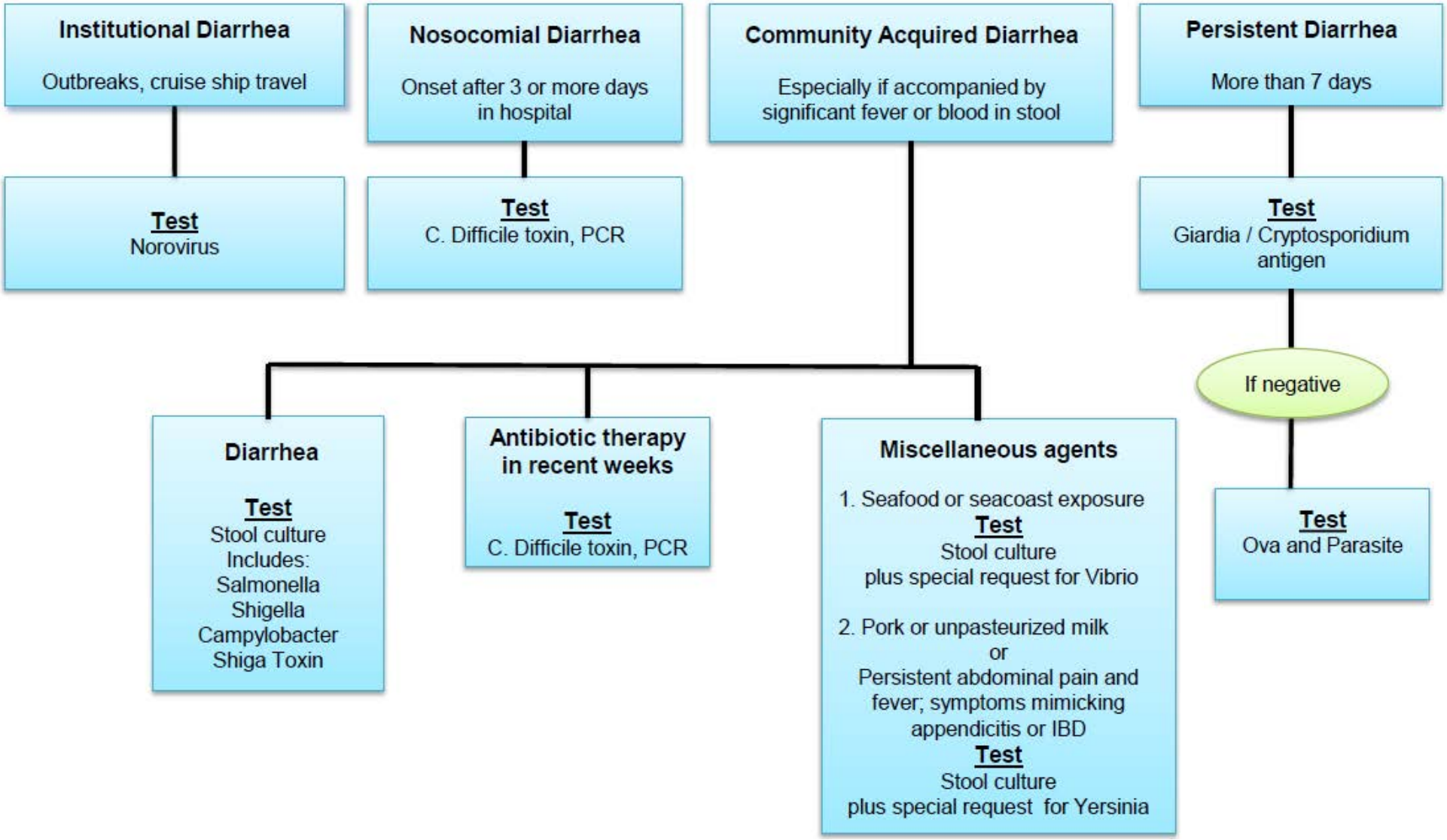
Infectious Diarrhea Testing Guidelines



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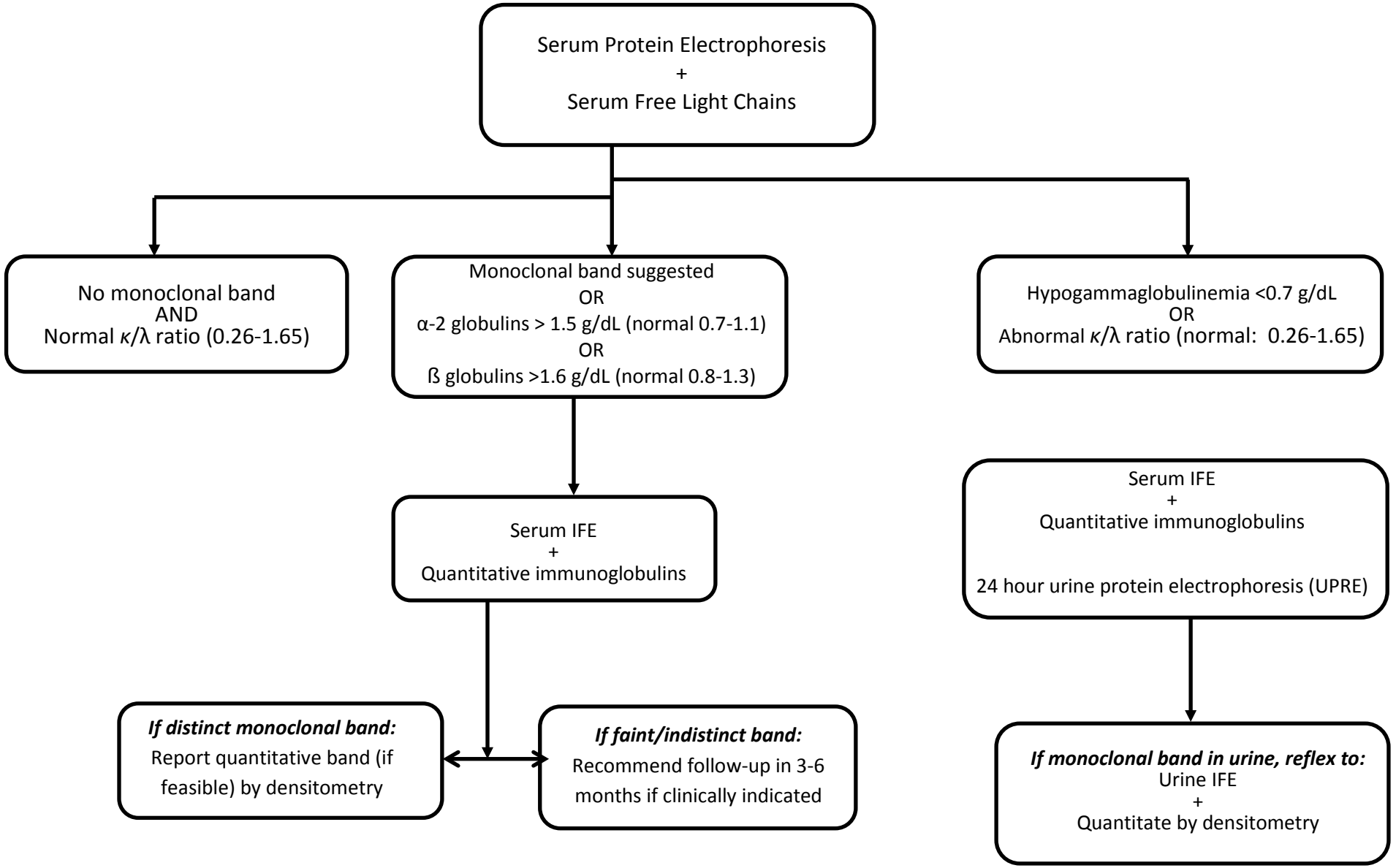
Monoclonal Gammopathy Screening Algorithm



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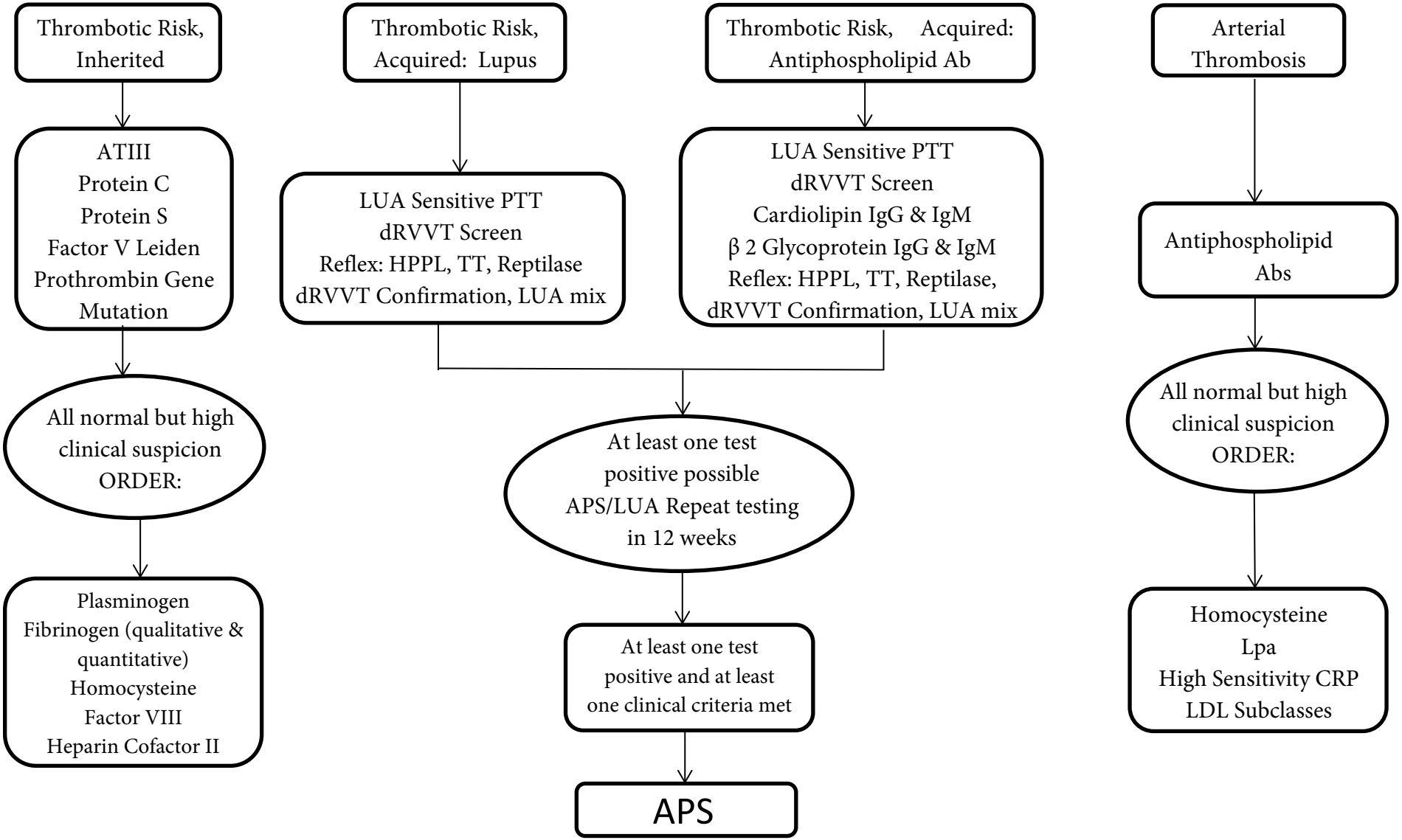
Thrombotic Risk: Guidelines For Testing

Testing is not recommended:
- During an acute thrombotic episode.
- While patient is on anti-coagulant therapy; order testing 2-4 weeks after discontinuation of anticoagulant therapy.
- For patients with DIC or HIT.



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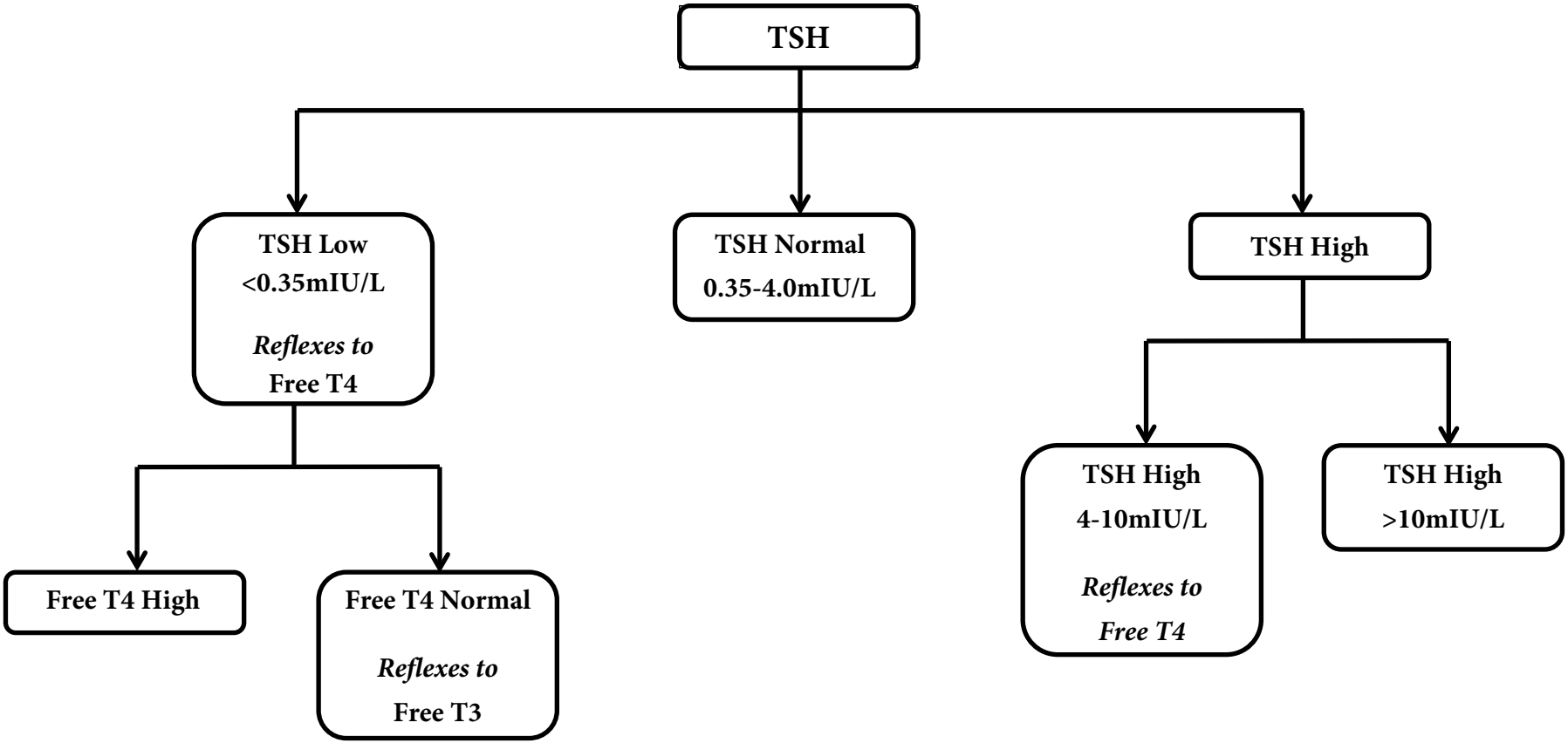
Thyroid Function Screening Algorithm



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von Willebrand Disease Testing Guideline

- Ob/Gyn ACOG Practice Bulletin #128 July 2012.
- Bleeding Assessment Tool Condensed Version O'Brien SH, Hematology 2012;152-156

Genetic

- Usually autosomal dominant
- Some subtypes recessive

Acquired

- Autoimmune disease (SLE, Hashimoto's)
- Monoclonal Gammopathy
- Aortic valve stenosis
- LVAD
- Hypothyroidism
- Medications such as valproic acid
- Others

Indications for Testing

- Follow up unexplained abnormal PTT
- Epistaxis
- Abnormal uterine bleeding, menstrual, post-partum or family history of
- Abnormal bleeding after surgery or dental extractions
- Family history of vWd and /or clinical suspicion
- Abnormal bruising

Initial Testing

- CBC to assess for anemia and platelets
- PT/PTT
- Reflex mixing studies

Specimen Handling

Specimen needs to arrive in the lab promptly to ensure accurate results

vWD Testing

- Von Willebrand Antigen (44-160%)
- Von Willebrand Activity (Ristocetin Cofactor) (50-150%)
- Factor VIII Activity (50-150%)

	vWD	"Low vWD"
VwF:Ag	<30 IU/dL	30-50 IU/dL
Vwf:RCo	<30 IU/dL	30-50 IU/dL
Factor VIII	↓ or Normal	Normal

*Adapted from National Heart & Lung Blood Institute

Test	Type 1	Type 2A	Type 2B	Type 2N	Type 3
VWF:Ag	↓	↓	±↓	Normal or ↓	Absent
VWF:RCo	↓	↓↓↓	↓ or ↓↓	Normal or ↓	Absent
Factor VIII	Normal or ±↓	Normal or ±↓	Normal or ±↓	↓↓	↓↓↓

Confirmation and Subtyping

- vWF multimeric panel
- RWF:Rco ratio to vWF Ag
- Ristocetin induced platelet aggregation (RIPA)
- vWF VIII binding

Caution in Interpretation

Increased Values may be due to:

- Stress (children in response to phlebotomy)
- Exercise
- Infection/Inflammation
- Post-operative
- Age
- Hormonal therapy and/or pregnancy

Decreased Values may be due to:

- Blood type O

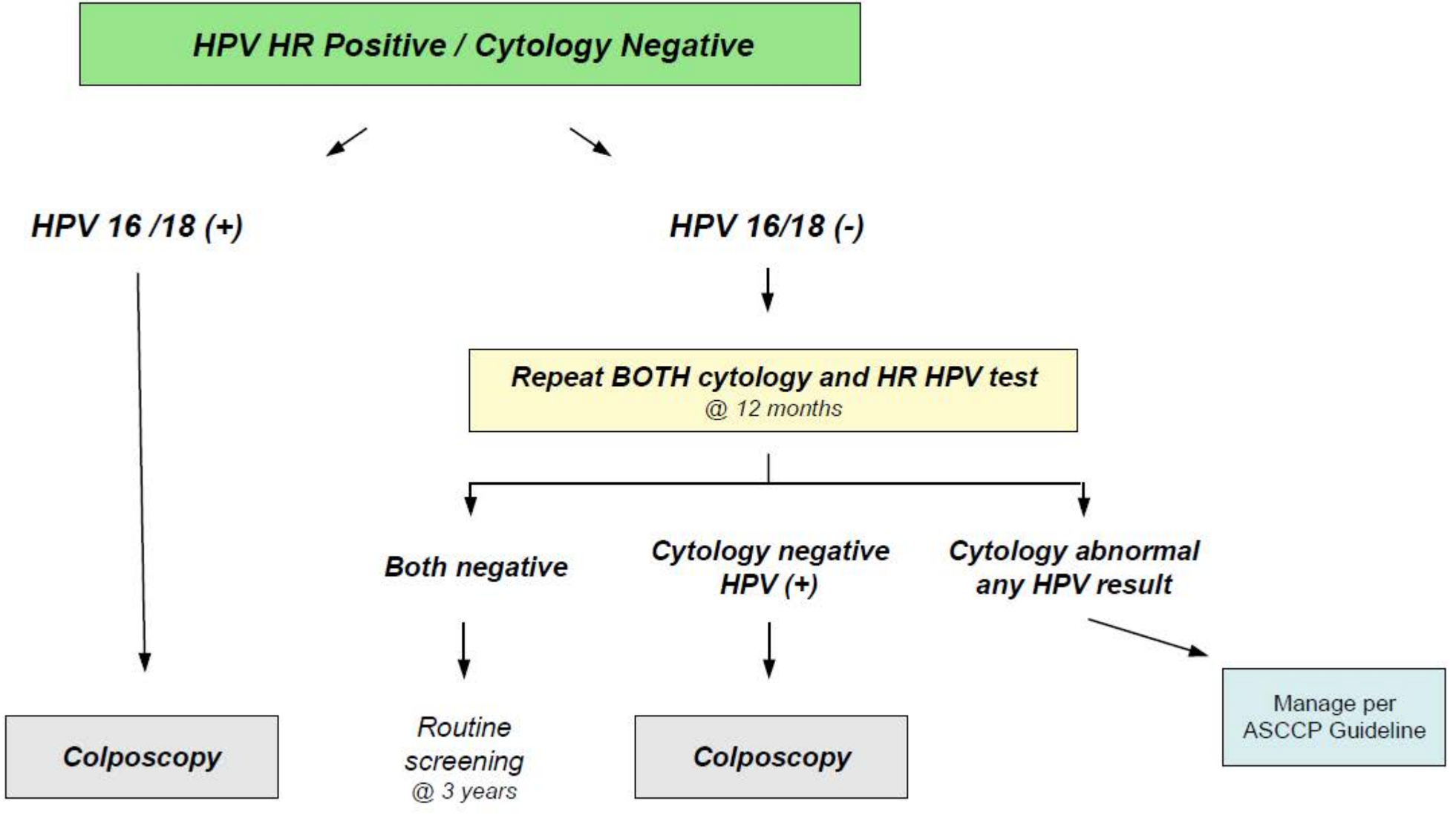
Repeat in 1-3 months because of fluctuations (children may require more than one repeat)
Rule out other causes of bleeding such as qualitative platelet or vascular dysfunction

References:

1. vonWillebrand Disease: Advances in Pathogenic Understanding, Diagnosis and Therapy Blood, 28 November 2013. vol 123 #23
2. Up To Date
3. ARUP Labs
4. Diagnostica Stago

Revised: 7-30-2014

Use of HPV Genotyping to Manage HPV HR * Positive / Cytology Negative Women 30 Years and Older



* Test that detects any of the 14 high-risk (oncogenic) types of HPV