# CLINICAL DECISION ANALYSIS

## Longterm Anticoagulation in patients with antiphospholipid antibody syndrome and the first episode of a DVT

**Objectives:**

To gain a basic understanding about clinical decision analyses; to assess the validity, results and applicability of a published clinical decision analysis; and to apply the findings to clinical practice.

**Assignment:**

1. Read the clinical scenario that follows.
2. Read the enclosed article about a decision analysis on long-term anticoagulation in patients with antiphospholipid antibody syndrome. With guidance from the Decision Analysis User's Guide critically appraise the decision analysis article using the accompanying worksheet.
3. Describe how you would manage this patient taking into account your review of the decision analysis article.
4. Finally, read page 1053 of the accompanying JAMA systematic review (section: Antithrombotic Treatment of APS; subsection: Venous Thromboembolism) and consider how this will change your management of the patient in the clinical scenario.

**Clinical Scenario:**

You, a rheumatologist/immunologist in training, see a 32 year old woman who had been diagnosed about three years ago to suffer from antiphospholipid syndrome after she had two spontaneous abortions. Five months ago she experienced a first episode of deep vein thrombosis in the calf and your colleague put her on warfarin targeted at an INR of 3, advised her to have her INR followed by her family doctor, and to return for re-assessment after half a year unless she experienced any complications or further thrombosis. Then they would decide on whether to stop anticoagulation or to proceed for longer. The woman returned a little earlier than planned, hoping that might discontinue warfarin earlier than planned as she disliked the regular blood tests and the restrictions in her diet. Uncertain about the best management strategies to offer this woman, you postpone the decision to an appointment for one more month and you schedule time for a thorough discussion of the various options and consequences.

When you raise the issue at an educational session later that day, each of your colleagues comes up with a different suggestion: prolong anticoagulation, but raise the dose; prolong anticoagulation at the current dose; stop anticoagulation altogether, as your patient had suffered a first episode only; or add aspirin to protect the arterial circulation. What a mess! Finally, one of your colleagues directs you to a clinical decision analysis she had recently come across which compared a number of treatment options in a model. You volunteer to bring the article to the next session. You search in PubMed (using the tems "Antiphospholipid Syndrome" AND "decision analysis") and find the article your colleague had mentioned.

**Enclosed Materials:**

1. McCaffery KJ, Jacklyn GL, Barratt A, Brodersen J, Glasziou P, Carter SM, Hicks NR, Howard K, Irwig L. Chapter 28.3 Moving from Evidence to Action: Recommendations about Screening. In Guyatt GH, Rennie D, Meade MO, Cook DJ, Editors. Users' Guides to the Medical Literature: A Manual for Evidence-Based Clinical Practice 3rd ed. New York, NY: McGraw-Hill; 2015.

2. Brunner HI, Chan WS, Ginsberg JS, Feldman BM. Long term anticoagulation is preferable for patients with antiphospholipid antibody syndrome. Result of a decision analysis. J Rheumatol. 2002 Mar;29(3):490-501

3. Lim W, Crowther M, Eikelboom J, Management of Antiphospholipid Antibody Syndrome. A systematic review. JAMA 2006; 295: 1050 – 1057

4. Worksheet for the evaluation of an article on clinical decision analysis.