

## A Primer in Warfarin Use

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### Introduction

Warfarin is used in the prevention of a range of thrombotic conditions (table 1), however has the disadvantage of having a narrow therapeutic index as well as various drug-drug and drug-food interactions affecting its effect.

Initiation of therapy requires a thorough evaluation of risks versus benefits in addition to their ability to adhere to therapy. In the setting of stroke prevention, the CHADS<sub>2</sub> score can be used in risk evaluation. However, it should be considered that this decision should be made within a clinical setting, considering all relevant factors.

### Indications and Goals of Therapy

Effectively, guidelines indicate a therapeutic level with an INR between 2,0 to 3,0 for most clinical conditions, except for mechanical mitral valve replacement, which requires levels of 2,5 to 3,5 (table 1).

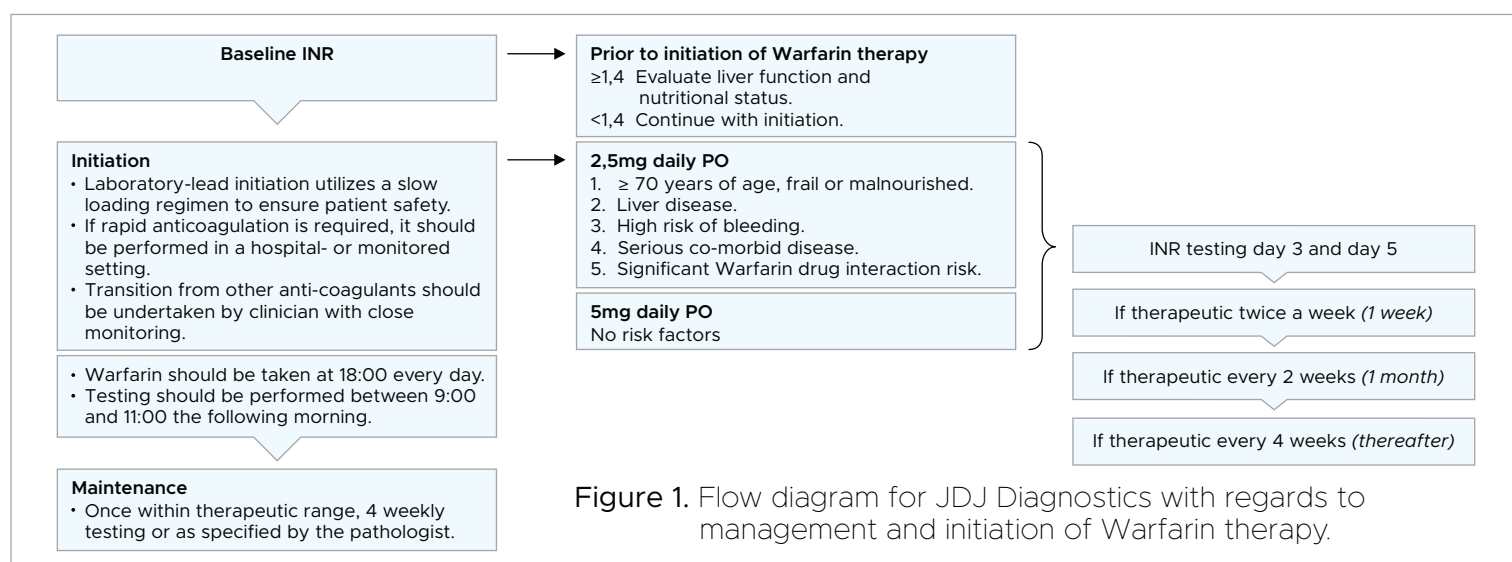
**Table 1.** Indications and target INR range for various clinical thrombotic conditions.

Indication	Target INR Range
Deep vein thrombosis or pulmonary embolism.	2,0 - 3,0
Atrial fibrillation or flutter.	2,0 - 3,0
Valvular heart disease.	
- Rheumatic mitral valve disease.	2,0 - 3,0
- Mechanical prosthetic heart valve.	
- Bileaflet or tilting-disc valve.	2,0 - 3,0
- Aortic position.	2,0 - 3,0
- Mitral position.	2,5 - 3,5
Bioprosthetic valves in mitral position.	2,0 - 3,0

\* As a matter of laboratory protocol, the requisition form needs to be completed with preferably both, but either the diagnosis or target INR range. A target of 2,0 - 3,0 will be assumed unless the indication for Warfarin was specifically stipulated to be for a Mitral valve replacement.

### Laboratory flow diagram for monitoring

Most patients will likely be referred already on the "Maintenance" phase of therapy and the protocol should be followed from this point on. However, if patients are being initiated on Warfarin, the flow diagram should be followed from the top (figure 1).



**Figure 1.** Flow diagram for JDJ Diagnostics with regards to management and initiation of Warfarin therapy.