

TABLE 1

Estimated rates of thromboembolism and risk reduction with anticoagulation

Indication	Rate without therapy (%)	Risk reduction with therapy (%)
Acute VTE*		
Month 1	40	80
Months 2 and 3	10	80
Recurrent VTE*†	15‡	80
Nonvalvular AF	4.5‡	66
Nonvalvular AF and previous embolism	12‡	66
Mechanical heart valve	8‡	75
Acute arterial embolism		
Month 1	15	66

VTE = venous thromboembolism; AF = atrial fibrillation

* Surgery-associated increase in risk of VTE (estimated to be 100-fold) is not included in these rates.

† Refers to patients whose last episode of VTE occurred more than 3 months before evaluation but who require long-term anticoagulation because of high risk of recurrence.

‡ Annual rate.

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TABLE 2

Which patients on warfarin should receive heparin bridging before surgery?

High risk for thromboembolism: bridging advised

Known hypercoagulable state as documented by a thromboembolic event and one of the following:

- Protein C deficiency
- Protein S deficiency
- Antithrombin III deficiency
- Homozygous factor V Leiden mutation
- Antiphospholipid-antibody syndrome

Hypercoagulable state suggested by recurrent (two or more) arterial or idiopathic venous thromboembolic events*

Venous or arterial thromboembolism in prior 1-3 months

Rheumatic atrial fibrillation

Acute intracardiac thrombus visualized by echocardiogram

Atrial fibrillation plus mechanical heart valve in any position

Older mechanical valve model (single-disk or ball-in-cage) in mitral position

Recently placed mechanical valve (< 3 months)

Atrial fibrillation with history of cardioembolism

Intermediate risk for thromboembolism: bridging on a case-by-case basis

Cerebrovascular disease with multiple (two or more) strokes or transient ischemic attacks without risk factors for cardiac embolism

Newer mechanical valve model (eg, St. Jude) in mitral position

Older mechanical valve model in aortic position

Atrial fibrillation without a history of cardiac embolism but with multiple risks for cardiac embolism†

Venous thromboembolism > 3-6 months ago‡

Low risk for thromboembolism: bridging not advised

One remote venous thromboembolism (> 6 months ago)‡

Intrinsic cerebrovascular disease (eg, carotid atherosclerosis) without recurrent strokes or transient ischemic attacks

Atrial fibrillation without multiple risks for cardiac embolism

Newer-model prosthetic valve in aortic position

* Not including primary atherosclerotic events, such as stroke or myocardial infarction due to cerebrovascular or coronary disease.

† For example, ejection fraction < 40%, diabetes, hypertension, nonrheumatic valvular heart disease, transmural myocardial infarction within preceding month.

‡ For patients with a history of venous thromboembolism undergoing major surgery, consideration can be given to postoperative bridging therapy only (without preoperative bridging).

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