

# ANTICOAGULATION FOR PROSTHETIC HEART VALVES MANAGEMENT GUIDELINES

## IHC CARDIOVASCULAR CLINICAL PROGRAM

April 27, 1999 *Draft*

### Treatment Principles

- The thromboembolic risk is greatest in the early postoperative period.
- The thromboembolic risk is greater for valves in the mitral position.
- Biological valves can be treated like native valves after 3 months (i.e. Coumadin does not need to be continued unless associated risk factors for thromboembolism, such as atrial fibrillation, previous thromboembolism, hypercoagulable condition, or LV dysfunction are present).
- The addition of low-dose aspirin (81 mg/day) further decreases the risk of thromboembolism and mortality from other cardiovascular causes; however, a slight increased risk of bleeding should be kept in mind.

### Comparison: ACC Guidelines for Valvular Heart Disease<sup>1</sup> & ACCP Consensus Conference<sup>2</sup>

INDICATION	INR Goal		Duration	
	ACC/AHA	ACCP	ACC/AHA	ACCP
<b>Mechanical AVR</b>				
Bileaflet or Medtronic & no RF*	2.0-3.0	2.0-3.0	lifetime	lifetime
Other disk or Starr-Edwards & no RF*	2.5-3.5	n/a	lifetime	lifetime
Any AVR with RF*	2.5-3.5	2.5-3.5	lifetime	lifetime
<b>Mechanical MVR</b>	2.5-3.5	2.5-3.5	lifetime	lifetime
<b>Bioprosthetic AVR</b>				
No RF*	2.5-3.5	2.0-3.0	3 months	3 months
With RF	2.0-3.0	2.0-3.0	lifetime	lifetime
<b>Bioprosthetic MVR</b>				
No RF*	2.5-3.5	2.0-3.0	3 months	3 months
With RF	2.5-3.5	2.0-3.0	lifetime	lifetime

\*RF = risk factors (atrial fibrillation, LV dysfunction, previous thromboembolism, hypercoagulable condition).

1. *Circulation*; Nov. 3, 1998: 1949-1984
2. *Chest*; Nov. 1998: 602S-610S

# **IHC PROSTHETIC VALVE ANTICOAGULATION** **TREATMENT RECOMMENDATIONS**

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- Unfractionated heparin (conservative protocol) or Lovenox (1 mg/kg sq bid) should be started as soon as the risk of increased surgical bleeding is reduced.
- Heparin or Lovenox can be stopped after 5 days of combined therapy with Coumadin **and** INR therapeutic for 2 consecutive days.
- Use Coumadin™ brand name only!
- For mechanical valves in mitral position, add enteric coated ASA 81 mg. to Coumadin, unless contraindicated
- After discharge, patient should have INR checked within 3 days and weekly until stable INR

<b>INDICATION</b>	<b>INR GOAL</b>	<b>DURATION</b>
Mechanical valve (AVR or MVR)**	target 3.0 (range 2.5-3.5)	lifetime
Bioprosthetic valve (AVR or MVR) & no RF*	target 3.0 (range 2.5-3.5)	3 months, then ASA
Bioprosthetic AVR with RF*	target 2.5 (range 2.0-3.0)	lifetime
Bioprosthetic MVR with RF*	target 3.0 (range 2.5-3.5)	lifetime

\*RF = risk factors (atrial fibrillation, LV dysfunction, previous thromboembolism, hypercoaguable condition).

\*\*Add enteric ASA 81 mg to Coumadin for mechanical MVR unless contraindicated