

Thrombosis prophylaxis for mechanical heart valves

Updated: 2/24/2017

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Mechanical Heart Valves

	Warfarin Goal	Antiplatelet Use	Comments
Mechanical mitral valve	Target INR of 3.0 (2.5-3.5)	<ul style="list-style-type: none"> 81mg ASA for all patients with Mechanical mitral valves 	<ul style="list-style-type: none"> ACCP recommends holding ASA in those at high risk of bleeding.¹
Mechanical aortic valve (Low Risk) <ul style="list-style-type: none"> Bileaflet aortic valve AND No atrial fibrillation No prior thromboembolism No left ventricular dysfunction No thrombophilia 	Target INR of 2.5 (2.0-3.0)	<ul style="list-style-type: none"> 81mg ASA for patients with low bleeding risk 	<ul style="list-style-type: none"> AHA recommends aspirin for all patients²
Mechanical aortic valve (High Risk: any of the following)² <ul style="list-style-type: none"> Ball in Cage Tilting Disc valve Atrial fibrillation prior thromboembolism, left ventricular dysfunction Thrombophilia 	Target INR of 3.0 (2.5-3.5) ²	<ul style="list-style-type: none"> 81mg ASA for patients with low bleeding risk 	<ul style="list-style-type: none"> AHA recommends aspirin for all patients²
Dual mitral and aortic valve	Target INR of 3.0 (2.5-3.5) ¹	<ul style="list-style-type: none"> 81mg ASA for all patients with mechanical mitral valves 	<ul style="list-style-type: none"> ACCP recommends holding ASA in those at high risk of bleeding¹

Bioprosthetic Heart Valves

	Warfarin Goal	Antiplatelet Use	Comments
Bioprosthetic mitral valve	Target INR of 2.5 (2.0-3.0) for the first 3 months only	<ul style="list-style-type: none"> 81mg ASA for all patients after 3 months 	
Bioprosthetic aortic valve	Target INR of 2.5 (2.0-3.0) for the first 3 months only	<ul style="list-style-type: none"> 81 mg ASA for all patients after 3 months 	ACCP does not recommend warfarin for the first 3 months. AHA does ¹
Transcatheter aortic valve replacement (TAVR)	Not recommended for patients in sinus rhythm	<ul style="list-style-type: none"> Dual antiplatelet therapy Aspirin 81mg + Clopidogrel 300 mg loading dose followed by 75 mg daily, for 3 months ASA 81 mg after 3 months. 	<ul style="list-style-type: none"> For patients with SAPIEN valves 6months of DAPT is recommended³ For patients with atrial fibrillation avoid Triple therapy. Many do anticoagulation with either aspirin or clopidogrel monotherapy for 3 months followed but anticoagulation⁴

References

1. [Whitlock RP, Sun JC, Frenes SE, Rubens FD, Teoh KH, American College of Chest Physicians. Antithrombotic and thrombolytic therapy for valvular disease: Antithrombotic therapy and prevention of thrombosis, 9th ed: American college of chest physicians evidence-based clinical practice guidelines. Chest 2012;141\(2 Suppl\):e576S-600S.](#)
2. [Nishimura RA, Otto CM, Bonow RO, et al. 2014 AHA/ACC guideline for the management of patients with valvular heart disease: Executive summary: A report of the american college of Cardiology/American heart association task force on practice guidelines. Circulation 2014;129:2440-92](#)
3. <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cftopic/pma/pma.cfm?num=p100041> (Accessed on Feb 25th, 2016).
4. [Holmes DR, Jr., Mack MJ, Kaul S, et al. 2012 ACCF/AATS/SCAI/STS expert consensus document on transcatheter aortic valve replacement. J Am Coll Cardiol 2012;59:1200-1254. - See more at: http://www.acc.org/latest-in-cardiology/articles/2014/07/18/15/35/anticoagulation-in-tavr#sthash.9I3xE6rO.dpuf](#)

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