

Current and Future Percutaneous Strategies for the

Treatment of Acute and Chronic Heart Failure

Table 1 of the Supplementary Material.

Suggested Indications for Percutaneous Mechanical Circulatory Support

Indication*	Comments
Complication of AMI	Acute mitral regurgitation, severe acute LV
	depression, cardiogenic shock due to RV AMI
Severe heart failure in the setting of	Exacerbations of chronic systolic heart
nonischemic cardiomyopathy	failure
	Acute reversible cardiomyopathies such as
	myocarditis, Tako-tsubo cardiomyopathy,
	peripartum cardiomyopathy
Acute cardiac allograft failure	Primary allograft failure
Posttransplant RV failure	Provides time for the donor RV to recover
	function if there is recipient pulmonary
	hypertension
Patients slow to wean from cardiopulmonary	Percutaneous systems rarely used in this
bypass following heart surgery	setting
Refractory arrhythmias	MCS devices independent of cardiac rhythm

Prophylactic use for high-risk PCI	In patients with severe LV dysfunction and
	complex coronary artery disease
High-risk or complex ablation of ventricular	Allow the patient to remain in VT longer
tachycardia	during arrhythmia mapping
High-risk percutaneous valve interventions	New potential use

AMI, acute myocardial infarction; LV, left ventricle; MCS, mechanical circulatory support; PCI, percutaneous coronary intervention; RV, right ventricle; VT. ventricular tachycardia.

^{*}Modified from Rihal CS, Naidu SS, Givertz MM, et al. 2015 SCAI/ACC/HFSA/STS Clinical Expert Consensus Statement on the Use of Percutaneous Mechanical Circulatory Support Devices in Cardiovascular Care (Endorsed by the American Heart Association, the Cardiological Society of India, and *Sociedad Latino Americana de Cardiologia Intervencion*; Affirmation of Value by the Canadian Association of Interventional Cardiology–*Association Canadienne de Cardiologie d'intervention*). *Catheter Cardiovasc Interv*. 2015;85:175–196.