

- [53] STEVENSON W G, HERNANDEZ A F, CARSON P E, et al. Indications for cardiac resynchronization therapy: 2011 update from the Heart Failure Society of America Guideline Committee [J]. *J Card Fail*, 2012, 18 (2) : 94–106. DOI: 10.1061/j.cardfail, 2011.12.004.
- [54] BAX J J, ABRAHAM T, BAROLD S S, et al. Cardiac resynchronization therapy: Part 1—issues before device implantation [J]. *J Am Coll Cardiol*, 2005, 46 (12) : 2153–2167. DOI: 10.1061/j.jacc.2005.09.019.
- [55] CHUNG E S, LEON A R, TAVAZZI L, et al. Results of the Predictors of Response to CRT (PROSPECT) trial [J]. *Circulation*, 2008, 117 (20) : 2608–2616. DOI: 10.1161/CIRCULATIONAHA.107.743120.
- [56] STEFFEL J, ROBERSON M, SINGH J P, et al. The effect of QRS duration on cardiac resynchronization therapy in patients with a narrow QRS complex: a subgroup analysis of the EchoCRT trial [J]. *Eur Heart J*, 2015, 36 (30) : 1983–1989. DOI: 10.1093/eurheartj/ehv242.
- [57] ROSE E A, GELIJNS A C, MOSKOWITZ A J, et al. Long-term use of a left ventricular assist device for end-stage heart failure [J]. *N Engl J Med*, 2001, 345 (20) : 1435–1443. DOI: 10.1056/NEJMoal012175.
- [58] YANG F, KORMOS R L, ANTAKI J F. High-speed visualization of disturbed pathlines in axial flow ventricular assist device under pulsatile conditions [J]. *J Thorac Cardiovasc Surg*, 2015, 150 (4) : 938–944. DOI: 10.1016/j.jtevs.2015.06.049.
- [59] ESTEP J D, STARLING R C, HORSTMANSHOF D A, et al. Risk Assessment and Comparative Effectiveness of Left Ventricular Assist Device and Medical Management in Ambulatory Heart Failure Patients: Results From the ROADMAP Study [J]. *J Am Coll Cardiol*, 2015, 66 (16) : 1747–1761. DOI: 10.1016/j.jacc.2015.07.075.
- [60] KIRKLIN J K, NAFTEL D C, PAGANI F D, et al. Sixth INTERMACS annual report: a 10, 000-patient database [J]. *J Heart Lung Transplant*, 2014, 33 (6) : 555–564. DOI: 10.1016/j.healun.2014.04.010.
- [61] YUAN N, ARNAOUTAKIS G J, GEORGE T J, et al. The spectrum of complications following left ventricular assist device placement [J]. *J Card Surg*, 2012, 27 (5) : 630–638. DOI: 10.1111/j.1540-8191, 2012.01504.x.
- [62] CORNWELL W K 3rd, TARUMI T, AENGEVAEREN V L, et al. Effect of pulsatile and nonpulsatile flow on cerebral perfusion in patients with left ventricular assist devices [J]. *J Heart Lung Transplant*, 2014, 33 (11) : 1295–1303. DOI: 10.1016/j.healun, 2014.08.013.
- [63] ABRAHAM W T, STOUGH W G, PIÑA I L, et al. Trials of implantable monitoring devices in heart failure: which design is optimal ? [J]. *Nat Rev Cardiol*, 2014, 11 (10) : 576–585. DOI: 10.1038/nrcardio.2014.114.
- [64] CONRAADS V M, SPRUIT M A, BRAUNSCHWEIG F, et al. Physical activity measured with implanted devices predicts patient outcome in chronic heart failure [J]. *Circ Heart Failure*, 2014, 7 (2) : 279–287. DOI: 10.1161/CIRCHEARTFAILURE.113.000883.
- [65] ADAMSON P B, SMITH A L, ABRAHAM W T, et al. Continuous autonomic assessment in patients with symptomatic heart failure: prognostic value of heart rate variability measured by an implanted cardiac resynchronization device [J]. *Circulation*, 2004, 110 (16) : 2389–2394. DOI: 10.1161/01.CIR.0000139841.42454.78.
- [66] CATANZARITI D, LUNATI M, LANDOLINA M, et al. Monitoring intrathoracic impedance with an implantable defibrillator reduces hospitalizations in patients with heart failure [J]. *Pacing Clin Electrophysiol*, 2009, 32 (3) : 363–370. DOI: 10.1111/j.1540-8159.2008.02245.x.
- [67] WHELLAN D J, OUSDIGIAN K T, AL-KHATIB S M, et al. Combined heart failure device diagnostics identify patients at higher risk of subsequent heart failure hospitalizations: results from PARTNERS HF (Program to Access and Review Trending Information and Evaluate Correlation to Symptoms in Patients with Heart Failure) study [J]. *J Am Coll Cardiol*, 2010, 55 (17) : 1803–1810. DOI: 10.1061/j.jacc.2009.11.089.
- [68] SMALL R S, WHELLAN D J, BOYLE A, et al. Implantable device diagnostics on day of discharge identify heart failure patients at increased risk for early readmission for heart failure [J]. *Eur J Heart Fail*, 2014, 16 (4) : 419–425. DOI: 10.1002/ejhf.48.
- [69] ABRAHAM W T, ADAMSON P B, BOURGE R C, et al. Wireless pulmonary artery haemodynamic monitoring in chronic heart failure: a randomized controlled trial [J]. *Lancet*, 2011, 377 (9766) : 658–666. DOI: 10.1061/S0140-6736 (11) 60101-3.
- [70] GWATHMEY J K, YEREVANIAN A, HAJJAR R J. Targeting sarcoplasmic reticulum calcium ATPase by gene therapy [J]. *Hum Gene Ther*, 2013, 24 (11) : 937–947. DOI: 10.1089/hum.2013.2512.
- [71] CHAUDHRI B B, DEL MONTE F, HARDING S E, et al. Gene transfer in cardiac myocytes [J]. *Surg Clin North Am*, 2004, 84 (1) : 141–159, ix-x. DOI: 10.1016/S0039-6109 (03) 00209-3.
- [72] DEL MONTE F, WILLIAMS E, LEBECHE D, et al. Improvement in survival and cardiac metabolism after gene transfer of sarcoplasmic reticulum Ca²⁺-ATPase in a rat model of heart failure [J]. *Circulation*, 2001, 104 (12) : 1424–1429. DOI: 10.1161/hc3601.095574.
- [73] BYRNE M J, POWER J M, PREVOLOS A, et al. Recirculating cardiac delivery of AAV2/ISERCA2a improves myocardial function in an experimental model of heart failure in large animals [J]. *Gene Ther*, 2008, 15 (23) : 1550–1557. DOI: 10.1038/gt.2008.120.
- [74] KAWASE Y, LY H Q, PRUNIER F, et al. Reversal of cardiac dysfunction after long-term expression of SERCA 2a by gene transfer in a pre-clinical model of heart failure [J]. *J Am Coll Cardiol*, 2008, 51 (11) : 1112–1119. DOI: 10.1016/j.jacc.2007.12.014.