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Multimodality imaging in the characterization and risk-stratification of cardiac disease and CRT recipients

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1. Left ventricular reverse remodelling and left ventricular functional improvement are greater among heart failure patients with left bundle branch block morphology and increasing QRS duration, who receive cardiac resynchronization therapy. (*Eur J Heart Fail* 2017;19:1145-1151; dit proefschrift)
2. Left ventricular mechanical dispersion may be valuable in identifying patients who remain at high mortality risk after cardiac resynchronization implantation. (*Heart Rhythm* 2018;15:1816-1822; dit proefschrift)
3. A lower global, left ventricular myocardial work efficiency before cardiac resynchronization therapy, is independently associated with improved long-term outcome. (*Eur Heart J Cardiovasc Imaging* 2019;20:1388-1394; dit proefschrift)
4. Moderate to severe functional mitral regurgitation which remains unchanged at six months after cardiac resynchronization therapy implantation is strongly associated with long-term mortality in patients with heart failure. (*Am J Cardiol* 2019;123:75-83; dit proefschrift)
5. Functional mitral regurgitation improvement is more common in cardiac resynchronization therapy recipients in sinus rhythm, versus those with atrial fibrillation, despite a similar degree of left ventricular remodeling. (*Heart Rhythm* 2018;15:1816-1822; dit proefschrift)
6. Decreased left ventricular, global longitudinal strain discriminates genotype-positive, phenotype-negative individuals from normal controls, which may permit early institution of therapy for genetic dilated cardiomyopathy. (*Eur Heart J Cardiovasc Imaging* 2019;20:694-699; dit proefschrift)
7. Because patients do not develop significant cardiac dysfunction-related symptoms during the early stage, dilated cardiomyopathy, life-threatening arrhythmias, and sudden cardiac death occur frequently due to the delayed detection and intervention in patients with Duchenne muscular dystrophy and Becker muscular dystrophy. (Zhang L, Liu Z, Hu KY et al. Early myocardial damage assessment in dystrophinopathies using $^{99}\text{Tc}^{\text{m}}$ -MIBI gated myocardial perfusion imaging. *Ther Clin Risk Manag* 2015;11:1819-1827)
8. Cardiovascular diseases are responsible for approximately 17 million deaths every year in the world, of which approximately 25% are due to sudden cardiac death. (Mendis SPP, Norrving B. Global atlas on cardiovascular disease prevention and control. Geneva: World Health Organization; 2011)
9. Cutting off fundamental, curiosity-driven science is like eating the seed corn. We may have a little more to eat next winter, but what will we plant so we and our children will have enough to get through the winters to come? *Carl Sagan* (Demon-Haunted World: Science As a Candle in the Dark. New York: Random House; 1995) Fundamental research is under pressure because of the perceived financial cost, but this is a short-sighted viewpoint.
10. Out of Africa, there is always something new. *Pliny the Elder* (The History of Animals, Book VII, Section 28). I trust that I have contributed something new, however modest, to the discipline of cardiology.