

44. Piśmiennictwo

- Hammer A. Ein Fall von thrombotischem Verschlusse einer der Kranzarterien des Herzens. *Wien Med Wschr.* 1878; 28: 97–102.
- Obraztsov VP, Straszkesko ND. Zur Kenntnis der Thrombose der Koronararterien des Herzens. *Z Klin Med.* 1910; 71: 116–132.
- Herrick JB. Clinical features of sudden obstruction of the coronary arteries. *JAMA.* 1912; 59(23): 2015–2022, doi: [10.1001/jama.1912.04270120001001](https://doi.org/10.1001/jama.1912.04270120001001).
- Friedberg CK, Horn H. Acute myocardial infarction not due to coronary artery occlusion. *JAMA.* 1939; 112(17): 1675–1679, doi: [10.1001/jama.1939.02800170021007](https://doi.org/10.1001/jama.1939.02800170021007).
- World Health Organization. Working Group on the Establishment of Ischemic Heart Disease Registers. Report of the Fifth Working Group. Copenhagen. In: Report No. Eur 8201 (5). Geneva: World Health Organization; 1971.
- Report of the Joint International Society and Federation of Cardiology/World Health Organization task force on standardization of clinical nomenclature. Nomenclature and criteria for diagnosis of ischemic heart disease. *Circulation.* 1979; 59(3): 607–609, indexed in Pubmed: [761341](https://pubmed.ncbi.nlm.nih.gov/761341/).
- Tunstall-Pedoe H, Kuulasmaa K, Amouyel P, et al. Myocardial infarction and coronary deaths in the World Health Organization MONICA Project. Registration procedures, event rates, and case-fatality rates in 38 populations from 21 countries in four continents. *Circulation.* 1994; 90(1): 583–612, indexed in Pubmed: [8026046](https://pubmed.ncbi.nlm.nih.gov/8026046/).
- Luepker RV, Apple FS, Christenson RH, et al. Case definitions for acute coronary heart disease in epidemiology and clinical research studies: A statement from the AHA Council on Epidemiology and Prevention; AHA Statistics Committee; World Heart Federation Council on Epidemiology and Prevention; the European Society of Cardiology Working Group on Epidemiology and Prevention; Centers for Disease Control and Prevention; and the National Heart, Lung, and Blood Institute. *Circulation.* 2003; 108(20): 2543–2549, doi: [10.1161/01.CIR.0000100560.46946.EA](https://doi.org/10.1161/01.CIR.0000100560.46946.EA), indexed in Pubmed: [14610011](https://pubmed.ncbi.nlm.nih.gov/14610011/).
- The Joint European Society of Cardiology/American College of Cardiology Committee. Myocardial infarction redefined — a consensus document of the Joint European Society of Cardiology/American College of Cardiology Committee for the Redefinition of Myocardial Infarction. *Eur Heart J.* 2000; 21(18): 1502–1513. *J Am Coll Cardiol* 2000; 36: 959–969.
- Thygesen K, Alpert J, White H. Joint ESC/ACC/AHA/WHF Task Force for the Redefinition of Myocardial Infarction. Universal Definition of Myocardial Infarction. *J Am Coll Cardiol.* 2007; 50(22): 2173–2195, doi: [10.1016/j.jacc.2007.09.011](https://doi.org/10.1016/j.jacc.2007.09.011).
- Mendis S, Thygesen K, Kuulasmaa K, et al. Writing group on behalf of the participating experts of the WHO consultation for revision of WHO definition of myocardial infarction: 2008-09 revision. *Int J Epidemiol.* 2011; 40(1): 139–146, doi: [10.1093/ije/dyq165](https://doi.org/10.1093/ije/dyq165), indexed in Pubmed: [20926369](https://pubmed.ncbi.nlm.nih.gov/20926369/).
- Thygesen K, Alpert JS, Jaffe AS, et al. Writing Group on the Joint ESC/ACC/AHA/WHF Task Force for the Universal Definition of Myocardial Infarction. Third universal definition of myocardial infarction. *Eur Heart J.* 2012; 33: 2551–2567; *Circulation* 2012;126:2020–2035; *J Am Coll Cardiol* 2012;60:1581–1598.
- Sarkisian L, Saaby L, Poulsen TS, et al. Clinical characteristics and outcomes of patients with myocardial infarction, myocardial injury, and nonelevated troponins. *Am J Med.* 2016; 129(4): 446.e5–446.e21, doi: [10.1016/j.amjmed.2015.11.006](https://doi.org/10.1016/j.amjmed.2015.11.006), indexed in Pubmed: [26593739](https://pubmed.ncbi.nlm.nih.gov/26593739/).
- Sarkisian L, Saaby L, Poulsen TS, et al. Prognostic impact of myocardial injury related to various cardiac and noncardiac conditions. *Am J Med.* 2016; 129(5): 506–514.e1, doi: [10.1016/j.amjmed.2015.12.009](https://doi.org/10.1016/j.amjmed.2015.12.009), indexed in Pubmed: [26763756](https://pubmed.ncbi.nlm.nih.gov/26763756/).
- Ooi DS, Isotalo PA, Veinot JP. Correlation of antemortem serum creatine kinase, creatine kinase-MB, troponin I, and troponin T with cardiac pathology. *Clin Chem.* 2000; 46(3): 338–344, indexed in Pubmed: [10702520](https://pubmed.ncbi.nlm.nih.gov/10702520/).
- Jennings RB, Ganote CE. Structural changes in myocardium during acute ischemia. *Circ Res.* 1974; 35 Suppl 3: 156–172, indexed in Pubmed: [4607107](https://pubmed.ncbi.nlm.nih.gov/4607107/).
- Virmani R, Forman MB, Kolodgie FD. Myocardial reperfusion injury. Histopathological effects of perfluorochemical. *Circulation.* 1990; 81(3 Suppl): IV57–IV68, indexed in Pubmed: [2407375](https://pubmed.ncbi.nlm.nih.gov/2407375/).
- Reimer KA, Jennings RB, Tatum AH. Pathobiology of acute myocardial ischemia: metabolic, functional and ultrastructural studies. *Am J Cardiol.* 1983; 52(2): 72A–81A, indexed in Pubmed: [6869259](https://pubmed.ncbi.nlm.nih.gov/6869259/).
- Ibáñez B, Heusch G, Ovize M, et al. Evolving therapies for myocardial ischemia/reperfusion injury. *J Am Coll Cardiol.* 2015; 65(14): 1454–1471, doi: [10.1016/j.jacc.2015.02.032](https://doi.org/10.1016/j.jacc.2015.02.032), indexed in Pubmed: [25857912](https://pubmed.ncbi.nlm.nih.gov/25857912/).
- Montecucco F, Carbone F, Schindler TH. Pathophysiology of ST-segment elevation myocardial infarction: novel mechanisms and treatments. *Eur Heart J.* 2016; 37(16): 1268–1283, doi: [10.1093/eurheartj/ehv592](https://doi.org/10.1093/eurheartj/ehv592), indexed in Pubmed: [26543047](https://pubmed.ncbi.nlm.nih.gov/26543047/).
- Thygesen K, Mair J, Katus H, et al. Study Group on Biomarkers in Cardiology of the ESC Working Group on Acute Cardiac Care. Recommendations for the use of cardiac troponin measurement in acute cardiac care. *Eur Heart J.* 2010; 31(18): 2197–2204, doi: [10.1093/eurheartj/ehq251](https://doi.org/10.1093/eurheartj/ehq251), indexed in Pubmed: [20685679](https://pubmed.ncbi.nlm.nih.gov/20685679/).
- Thygesen K, Mair J, Giannitsis E, et al. Study Group on Biomarkers in Cardiology of ESC Working Group on Acute Cardiac Care. How to use high-sensitivity cardiac troponins in acute cardiac care. *Eur Heart J.* 2012; 33(18): 2252–2257, doi: [10.1093/eurheartj/ehs154](https://doi.org/10.1093/eurheartj/ehs154), indexed in Pubmed: [22723599](https://pubmed.ncbi.nlm.nih.gov/22723599/).
- Rittoo D, Jones A, Lecky B, et al. Elevation of cardiac troponin T, but not cardiac troponin I, in patients with neuromuscular diseases: implications for the diagnosis of myocardial infarction. *J Am Coll Cardiol.* 2014; 63(22): 2411–2420, doi: [10.1016/j.jacc.2014.03.027](https://doi.org/10.1016/j.jacc.2014.03.027), indexed in Pubmed: [24747102](https://pubmed.ncbi.nlm.nih.gov/24747102/).
- Jaffe AS, Vasile VC, Milone M, et al. Diseased skeletal muscle: a noncardiac source of increased circulating concentrations of cardiac troponin T. *J Am Coll Cardiol.* 2011; 58(17): 1819–1824, doi: [10.1016/j.jacc.2011.08.026](https://doi.org/10.1016/j.jacc.2011.08.026), indexed in Pubmed: [21962825](https://pubmed.ncbi.nlm.nih.gov/21962825/).
- Wens SCA, Schaaf GJ, Michels M, et al. Elevated plasma cardiac troponin t levels caused by skeletal muscle damage in pompe disease. *Circ Cardiovasc Genet.* 2016; 9(1): 6–13, doi: [10.1161/CIRCGENETICS.115.001322](https://doi.org/10.1161/CIRCGENETICS.115.001322), indexed in Pubmed: [26787432](https://pubmed.ncbi.nlm.nih.gov/26787432/).
- Mair J, Lindahl B, Müller C, et al. What to do when you question cardiac troponin values. *Eur Heart J Acute Cardiovasc Care.* 2018; 7(6): 577–586, doi: [10.1177/2048872617708973](https://doi.org/10.1177/2048872617708973), indexed in Pubmed: [28485179](https://pubmed.ncbi.nlm.nih.gov/28485179/).
- Mair J, Lindahl B, Hammarsten O, et al. European Society of Cardiology (ESC) Study Group on Biomarkers in Cardiology of the Acute Cardiovascular Care Association (ACCA). How is cardiac troponin released from injured myocardium? *Eur Heart J Acute Cardiovasc Care.* 2018; 7(6): 553–560, doi: [10.1177/2048872617748553](https://doi.org/10.1177/2048872617748553), indexed in Pubmed: [29278915](https://pubmed.ncbi.nlm.nih.gov/29278915/).
- Vestergaard KR, Jespersen CB, Arnadottir A, et al. Prevalence and significance of troponin elevations in patients without acute coronary disease. *Int J Cardiol.* 2016; 222: 819–825, doi: [10.1016/j.ijcard.2016.07.166](https://doi.org/10.1016/j.ijcard.2016.07.166), indexed in Pubmed: [27522381](https://pubmed.ncbi.nlm.nih.gov/27522381/).
- Schmid J, Liesinger L, Birner-Gruenberger R, et al. Elevated Cardiac Troponin T in Patients With Skeletal Myopathies. *J Am Coll Cardiol.* 2018; 71(14): 1540–1549, doi: [10.1016/j.jacc.2018.01.070](https://doi.org/10.1016/j.jacc.2018.01.070), indexed in Pubmed: [29622161](https://pubmed.ncbi.nlm.nih.gov/29622161/).
- Apple FS, Jaffe AS, Collinson P, et al. International Federation of Clinical Chemistry (IFCC) Task Force on Clinical Applications of Cardiac Bio-Markers. IFCC educational materials on selected analytical and clinical applications of high sensitivity cardiac troponin assays. *Clin Biochem.* 2015; 48(4-5): 201–203, doi: [10.1016/j.clinbiochem.2014.08.021](https://doi.org/10.1016/j.clinbiochem.2014.08.021), indexed in Pubmed: [25204966](https://pubmed.ncbi.nlm.nih.gov/25204966/).
- Goodman SG, Steg PG, Eagle KA, et al. GRACE Investigators. The diagnostic and prognostic impact of the redefinition of acute myocardial infarction: lessons from the Global Registry of Acute Coronary Events (GRACE). *Am Heart J.* 2006; 151(3): 654–660, doi: [10.1016/j.ahj.2005.05.014](https://doi.org/10.1016/j.ahj.2005.05.014), indexed in Pubmed: [16504627](https://pubmed.ncbi.nlm.nih.gov/16504627/).
- Weil BR, Suzuki G, Young RF, et al. Troponin Release and Reversible Left Ventricular Dysfunction After Transient Pressure Overload. *J Am Coll Cardiol.* 2018; 71(25): 2906–2916, doi: [10.1016/j.jacc.2018.04.029](https://doi.org/10.1016/j.jacc.2018.04.029), indexed in Pubmed: [29929614](https://pubmed.ncbi.nlm.nih.gov/29929614/).
- Turer AT, Addo TA, Martin JL, et al. Myocardial ischemia induced by rapid atrial pacing causes troponin T release detectable by a highly sensitive assay: insights from a coronary sinus sampling

- study. *J Am Coll Cardiol*. 2011; 57(24): 2398–2405, doi: [10.1016/j.jacc.2010.11.066](https://doi.org/10.1016/j.jacc.2010.11.066), indexed in Pubmed: [21658559](https://pubmed.ncbi.nlm.nih.gov/21658559/).
34. Siriwardena M, Campbell V, Richards AM, et al. Cardiac biomarker responses to dobutamine stress echocardiography in healthy volunteers and patients with coronary artery disease. *Clin Chem*. 2012; 58(10): 1492–1494, doi: [10.1373/clinchem.2012.187682](https://doi.org/10.1373/clinchem.2012.187682), indexed in Pubmed: [22896711](https://pubmed.ncbi.nlm.nih.gov/22896711/).
 35. White HD. Pathobiology of troponin elevations: do elevations occur with myocardial ischemia as well as necrosis? *J Am Coll Cardiol*. 2011; 57(24): 2406–2408, doi: [10.1016/j.jacc.2011.01.029](https://doi.org/10.1016/j.jacc.2011.01.029), indexed in Pubmed: [21658560](https://pubmed.ncbi.nlm.nih.gov/21658560/).
 36. Jaffe AS, Wu AHB. Troponin release — reversible or irreversible injury? Should we care? *Clin Chem*. 2012; 58(1): 148–150, doi: [10.1373/clinchem.2011.173070](https://doi.org/10.1373/clinchem.2011.173070), indexed in Pubmed: [22039010](https://pubmed.ncbi.nlm.nih.gov/22039010/).
 37. Eggers K, Lindahl B. Application of cardiac troponin in cardiovascular diseases other than acute coronary syndrome. *Clin Chem*. 2016; 63(1): 223–235, doi: [10.1373/clinchem.2016.261495](https://doi.org/10.1373/clinchem.2016.261495).
 38. Giannitsis E, Katus HA. Cardiac troponin level elevations not related to acute coronary syndromes. *Nat Rev Cardiol*. 2013; 10(11): 623–634, doi: [10.1038/nrcardio.2013.129](https://doi.org/10.1038/nrcardio.2013.129), indexed in Pubmed: [23979214](https://pubmed.ncbi.nlm.nih.gov/23979214/).
 39. Agewall S, Giannitsis E, Jernberg T, et al. Troponin elevation in coronary vs. non-coronary disease. *Eur Heart J*. 2011; 32(4): 404–411, doi: [10.1093/eurheartj/ehq456](https://doi.org/10.1093/eurheartj/ehq456), indexed in Pubmed: [21169615](https://pubmed.ncbi.nlm.nih.gov/21169615/).
 40. Kelley WE, Januzzi JL, Christenson RH. Increases of cardiac troponin in conditions other than acute coronary syndrome and heart failure. *Clin Chem*. 2009; 55(12): 2098–2112, doi: [10.1373/clinchem.2009.130799](https://doi.org/10.1373/clinchem.2009.130799), indexed in Pubmed: [19815610](https://pubmed.ncbi.nlm.nih.gov/19815610/).
 41. Jeremias A, Gibson CM. Narrative review: alternative causes for elevated cardiac troponin levels when acute coronary syndromes are excluded. *Ann Intern Med*. 2005; 142(9): 786–791, indexed in Pubmed: [15867411](https://pubmed.ncbi.nlm.nih.gov/15867411/).
 42. Weil BR, Young RF, Shen X, et al. Brief myocardial ischemia produces cardiac troponin i release and focal myocyte apoptosis in the absence of pathological infarction in swine. *JACC Basic Transl Sci*. 2017; 2(2): 105–114, doi: [10.1016/j.jacbs.2017.01.006](https://doi.org/10.1016/j.jacbs.2017.01.006), indexed in Pubmed: [28979949](https://pubmed.ncbi.nlm.nih.gov/28979949/).
 43. Braunwald E, Morrow DA. Unstable angina: is it time for a requiem? *Circulation*. 2013; 127(24): 2452–2457, doi: [10.1161/CIRCULATION-NAHA.113.001258](https://doi.org/10.1161/CIRCULATION-NAHA.113.001258), indexed in Pubmed: [23775194](https://pubmed.ncbi.nlm.nih.gov/23775194/).
 44. Bentzon JF, Otsuka F, Virmani R, et al. Mechanisms of plaque formation and rupture. *Circ Res*. 2014; 114(12): 1852–1866, doi: [10.1161/CIRCRESAHA.114.302721](https://doi.org/10.1161/CIRCRESAHA.114.302721), indexed in Pubmed: [24902970](https://pubmed.ncbi.nlm.nih.gov/24902970/).
 45. Falk E, Nakano M, Bentzon JF, et al. Update on acute coronary syndromes: the pathologists' view. *Eur Heart J*. 2013; 34(10): 719–728, doi: [10.1093/eurheartj/ehs411](https://doi.org/10.1093/eurheartj/ehs411), indexed in Pubmed: [23242196](https://pubmed.ncbi.nlm.nih.gov/23242196/).
 46. Ibanez B, James S, Agewall S, et al. ESC Scientific Document Group. 2017 ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation. *Eur Heart J*. 2018; 39(2): 119–177, doi: [10.1093/eurheartj/ehx393](https://doi.org/10.1093/eurheartj/ehx393), indexed in Pubmed: [28886621](https://pubmed.ncbi.nlm.nih.gov/28886621/).
 47. Roffi M, Patrono C, Collet JP, et al. Authors. 2015 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation: Task Force for the Management of Acute Coronary Syndromes in Patients Presenting without Persistent ST-Segment Elevation of the European Society of Cardiology (ESC). *Eur Heart J*. 2016; 37(3): 267–315, doi: [10.1093/eurheartj/ehv320](https://doi.org/10.1093/eurheartj/ehv320), indexed in Pubmed: [26320110](https://pubmed.ncbi.nlm.nih.gov/26320110/).
 48. Saaby L, Poulsen TS, Diederichsen AC, et al. Classification of myocardial infarction: frequency and features of type 2 myocardial infarction. *Am J Med*. 2013; 126(9): 789–797, doi: [10.1016/j.amjmed.2013.02.029](https://doi.org/10.1016/j.amjmed.2013.02.029), indexed in Pubmed: [23856021](https://pubmed.ncbi.nlm.nih.gov/23856021/).
 49. Cadiel G, Gonzalez-Del-Hoyo M, Carrasquer A, et al. Outcomes with type 2 myocardial infarction compared with non-ischaemic myocardial injury. *Heart*. 2017; 103(8): 616–622, doi: [10.1136/heartjnl-2016-310243](https://doi.org/10.1136/heartjnl-2016-310243), indexed in Pubmed: [27742797](https://pubmed.ncbi.nlm.nih.gov/27742797/).
 50. Baron T, Hambraeus K, Sundström J, et al. TOTAL-AMI study group. Type 2 myocardial infarction in clinical practice. *Heart*. 2015; 101(2): 101–106, doi: [10.1136/heartjnl-2014-306093](https://doi.org/10.1136/heartjnl-2014-306093), indexed in Pubmed: [25331532](https://pubmed.ncbi.nlm.nih.gov/25331532/).
 51. Shah ASV, McAllister DA, Mills R, et al. Sensitive troponin assay and the classification of myocardial infarction. *Am J Med*. 2015; 128(5): 493–501.e3, doi: [10.1016/j.amjmed.2014.10.056](https://doi.org/10.1016/j.amjmed.2014.10.056), indexed in Pubmed: [25436428](https://pubmed.ncbi.nlm.nih.gov/25436428/).
 52. Gupta S, Vaidya SR, Arora S, et al. Type 2 versus type 1 myocardial infarction: a comparison of clinical characteristics and outcomes with a meta-analysis of observational studies. *Cardiovasc Diagn Ther*. 2017; 7(4): 348–358, doi: [10.21037/cdt.2017.03.21](https://doi.org/10.21037/cdt.2017.03.21), indexed in Pubmed: [28890871](https://pubmed.ncbi.nlm.nih.gov/28890871/).
 53. Sandoval Y, Thygesen K. Myocardial infarction type 2 and myocardial injury. *Clin Chem*. 2017; 63(1): 101–107, doi: [10.1373/clinchem.2016.255521](https://doi.org/10.1373/clinchem.2016.255521), indexed in Pubmed: [28062614](https://pubmed.ncbi.nlm.nih.gov/28062614/).
 54. Saaby L, Poulsen TS, Diederichsen AC, et al. Mortality rate in type 2 myocardial infarction: observations from an unselected hospital cohort. *Am J Med*. 2014; 127(4): 295–302, doi: [10.1016/j.amjmed.2013.12.020](https://doi.org/10.1016/j.amjmed.2013.12.020), indexed in Pubmed: [24457000](https://pubmed.ncbi.nlm.nih.gov/24457000/).
 55. Lambrecht S, Sarkisian L, Saaby L, et al. Different causes of death in patients with myocardial infarction type 1, type 2, and myocardial injury. *Am J Med*. 2018; 131(5): 548–554, doi: [10.1016/j.amjmed.2017.11.043](https://doi.org/10.1016/j.amjmed.2017.11.043), indexed in Pubmed: [29274756](https://pubmed.ncbi.nlm.nih.gov/29274756/).
 56. Chapman AR, Shah ASV, Lee KK, et al. Long-term outcomes in patients with type 2 myocardial infarction and myocardial injury. *Circulation*. 2018; 137(12): 1236–1245, doi: [10.1161/CIRCULATION-NAHA.117.031806](https://doi.org/10.1161/CIRCULATION-NAHA.117.031806), indexed in Pubmed: [29150426](https://pubmed.ncbi.nlm.nih.gov/29150426/).
 57. Neumann JT, Sörensen NA, Rübtsamen N, et al. Discrimination of patients with type 2 myocardial infarction. *Eur Heart J*. 2017; 38(47): 3514–3520, doi: [10.1093/eurheartj/ehx457](https://doi.org/10.1093/eurheartj/ehx457), indexed in Pubmed: [29020401](https://pubmed.ncbi.nlm.nih.gov/29020401/).
 58. Saw J, Mancini GB, Humphries KH. Contemporary Review on Spontaneous Coronary Artery Dissection. *J Am Coll Cardiol*. 2016; 68(3): 297–312, doi: [10.1016/j.jacc.2016.05.034](https://doi.org/10.1016/j.jacc.2016.05.034), indexed in Pubmed: [27417009](https://pubmed.ncbi.nlm.nih.gov/27417009/).
 59. Januzzi JL, Sandoval Y. The many faces of type 2 myocardial infarction. *J Am Coll Cardiol*. 2017; 70(13): 1569–1572, doi: [10.1016/j.jacc.2017.07.784](https://doi.org/10.1016/j.jacc.2017.07.784), indexed in Pubmed: [28935033](https://pubmed.ncbi.nlm.nih.gov/28935033/).
 60. Jangaard N, Sarkisian L, Saaby L, et al. Incidence, frequency, and clinical characteristics of type 3 myocardial infarction in clinical practice. *Am J Med*. 2017; 130(7): 862.e9–862.e14, doi: [10.1016/j.amjmed.2016.12.034](https://doi.org/10.1016/j.amjmed.2016.12.034), indexed in Pubmed: [28159605](https://pubmed.ncbi.nlm.nih.gov/28159605/).
 61. Selvanayagam JB, Petersen SE, Francis JM, et al. Effects of off-pump versus on-pump coronary surgery on reversible and irreversible myocardial injury: a randomized trial using cardiovascular magnetic resonance imaging and biochemical markers. *Circulation*. 2004; 109(3): 345–350, doi: [10.1161/01.CIR.0000109489.71945.BD](https://doi.org/10.1161/01.CIR.0000109489.71945.BD), indexed in Pubmed: [14732755](https://pubmed.ncbi.nlm.nih.gov/14732755/).
 62. Selvanayagam JB, Porto I, Channon K, et al. Troponin elevation after percutaneous coronary intervention directly represents the extent of irreversible myocardial injury: insights from cardiovascular magnetic resonance imaging. *Circulation*. 2005; 111(8): 1027–1032, doi: [10.1161/01.CIR.0000156328.28485.AD](https://doi.org/10.1161/01.CIR.0000156328.28485.AD), indexed in Pubmed: [15723982](https://pubmed.ncbi.nlm.nih.gov/15723982/).
 63. Rahimi K, Banning AP, Cheng ASH, et al. Prognostic value of coronary revascularisation-related myocardial injury: a cardiac magnetic resonance imaging study. *Heart*. 2009; 95(23): 1937–1943, doi: [10.1136/hrt.2009.173302](https://doi.org/10.1136/hrt.2009.173302), indexed in Pubmed: [19687014](https://pubmed.ncbi.nlm.nih.gov/19687014/).
 64. Tricoci P. Consensus or controversy?: evolution of criteria for myocardial infarction after percutaneous coronary intervention. *Clin Chem*. 2017; 63(1): 82–90, doi: [10.1373/clinchem.2016.255208](https://doi.org/10.1373/clinchem.2016.255208).
 65. Ndrepepa G, Colletan R, Braun S, et al. High-Sensitivity troponin T and mortality after elective percutaneous coronary intervention. *J Am Coll Cardiol*. 2016; 68(21): 2259–2268, doi: [10.1016/j.jacc.2016.08.059](https://doi.org/10.1016/j.jacc.2016.08.059), indexed in Pubmed: [27884243](https://pubmed.ncbi.nlm.nih.gov/27884243/).
 66. Zeitouni M, Silvain J, Guedeney P, et al. ACTION Study Group. Periprocedural myocardial infarction and injury in elective coronary stenting. *Eur Heart J*. 2018; 39(13): 1100–1109, doi: [10.1093/eurheartj/ehx799](https://doi.org/10.1093/eurheartj/ehx799), indexed in Pubmed: [29365133](https://pubmed.ncbi.nlm.nih.gov/29365133/).
 67. Thygesen K, Jaffe AS. The prognostic impact of periprocedural myocardial infarction and injury. *Eur Heart J*. 2018; 39(13): 1110–1112, doi: [10.1093/eurheartj/ehy089](https://doi.org/10.1093/eurheartj/ehy089), indexed in Pubmed: [29529182](https://pubmed.ncbi.nlm.nih.gov/29529182/).
 68. Garcia-Garcia HM, McFadden EP, Farb A, et al. Standardized endpoint definitions for coronary intervention trials: The Academic Research Consortium-2 Consensus Document. *Eur Heart J*. 2018; 39: 2192–2207. *Circulation* 2018; 137: 2635–2650.
 69. Pegg TJ, Maunsell Z, Karamitsos TD, et al. Utility of cardiac biomarkers for the diagnosis of type V myocardial infarction after coronary artery bypass grafting: insights from serial cardiac MRI. *Heart*. 2011; 97(10): 810–816, doi: [10.1136/hrt.2010.213462](https://doi.org/10.1136/hrt.2010.213462), indexed in Pubmed: [21378388](https://pubmed.ncbi.nlm.nih.gov/21378388/).

70. Jørgensen PH, Nybo M, Jensen MK, et al. Optimal cut-off value for cardiac troponin I in ruling out Type 5 myocardial infarction. *Interact Cardiovasc Thorac Surg*. 2014; 18(5): 544–550, doi: [10.1093/icvts/ivt558](https://doi.org/10.1093/icvts/ivt558), indexed in Pubmed: [24468543](https://pubmed.ncbi.nlm.nih.gov/24468543/).
71. Wang TKm, Stewart RAh, Ramanathan T, et al. Diagnosis of MI after CABG with high-sensitivity troponin T and new ECG or echocardiogram changes: relationship with mortality and validation of the universal definition of MI. *Eur Heart J Acute Cardiovasc Care*. 2013; 2(4): 323–333, doi: [10.1177/2048872613496941](https://doi.org/10.1177/2048872613496941), indexed in Pubmed: [24338291](https://pubmed.ncbi.nlm.nih.gov/24338291/).
72. Thielmann M, Sharma V, Al-Attar N, et al. ESC Joint Working Groups on Cardiovascular Surgery and the Cellular Biology of the Heart Position Paper: Perioperative myocardial injury and infarction in patients undergoing coronary artery bypass graft surgery. *Eur Heart J*. 2017; 38(31): 2392–2411, doi: [10.1093/eurheartj/ehx383](https://doi.org/10.1093/eurheartj/ehx383), indexed in Pubmed: [28821170](https://pubmed.ncbi.nlm.nih.gov/28821170/).
73. Moussa ID, Klein LW, Shah B, et al. Consideration of a new definition of clinically relevant myocardial infarction after coronary revascularization: An expert consensus document from the Society for Cardiovascular Angiography and Interventions (SCAI). *J Am Coll Cardiol*. 2013; 62: 1563–1570.
74. Apple FS, Murakami MM. Cardiac troponin and creatine kinase MB monitoring during in-hospital myocardial reinfarction. *Clin Chem*. 2005; 51(2): 460–463, doi: [10.1373/clinchem.2004.042887](https://doi.org/10.1373/clinchem.2004.042887), indexed in Pubmed: [15563477](https://pubmed.ncbi.nlm.nih.gov/15563477/).
75. Sinning JM, Hammerstingl C, Schueler R, et al. The prognostic value of acute and chronic troponin elevation after transcatheter aortic valve implantation. *EuroIntervention*. 2016; 11(13): 1522–1529, doi: [10.4244/EIJY15M02_02](https://doi.org/10.4244/EIJY15M02_02), indexed in Pubmed: [25671517](https://pubmed.ncbi.nlm.nih.gov/25671517/).
76. Wang T, Stewart R, Ramanathan T, et al. Diagnosis of myocardial infarction and prognostic utility of high-sensitivity troponin T after isolated aortic valve replacement. *Clin Trials Regul Sci Cardiol*. 2016; 16: 1–5, doi: [10.1016/j.ctrsc.2016.01.003](https://doi.org/10.1016/j.ctrsc.2016.01.003).
77. Devereaux PJ, Xavier D, Pogue J, et al. POISE (PeriOperative ISchemic Evaluation) Investigators. Characteristics and short-term prognosis of perioperative myocardial infarction in patients undergoing noncardiac surgery: a cohort study. *Ann Intern Med*. 2011; 154(8): 523–528, doi: [10.7326/0003-4819-154-8-201104190-00003](https://doi.org/10.7326/0003-4819-154-8-201104190-00003), indexed in Pubmed: [21502650](https://pubmed.ncbi.nlm.nih.gov/21502650/).
78. The Vascular Events in Noncardiac Surgery Patients Cohort Evaluation (VISION) Study Investigators. Association between postoperative troponin levels and 30-day mortality among patients undergoing noncardiac surgery. *JAMA*. 2012; 307: 2295–2304.
79. Nagele P, Brown F, Gage BF, et al. High-sensitivity cardiac troponin T in prediction and diagnosis of myocardial infarction and long-term mortality after noncardiac surgery. *Am Heart J*. 2013; 166(2): 325–332, doi: [10.1016/j.ahj.2013.04.018](https://doi.org/10.1016/j.ahj.2013.04.018), indexed in Pubmed: [23895816](https://pubmed.ncbi.nlm.nih.gov/23895816/).
80. Weber M, Luchner A, Manfred S, et al. Incremental value of high-sensitive troponin T in addition to the revised cardiac index for perioperative risk stratification in non-cardiac surgery. *Eur Heart J*. 2013; 34: 853–862.
81. Kavsak PA, Walsh M, Srinathan S, et al. High sensitivity troponin T concentrations in patients undergoing noncardiac surgery: a prospective cohort study. *Clin Biochem*. 2011; 44(12): 1021–1024, doi: [10.1016/j.clinbiochem.2011.05.017](https://doi.org/10.1016/j.clinbiochem.2011.05.017), indexed in Pubmed: [21640092](https://pubmed.ncbi.nlm.nih.gov/21640092/).
82. Devereaux PJ, Biccard BM, Sigamani A, et al. Association of Postoperative High-Sensitivity Troponin Levels With Myocardial Injury and 30-Day Mortality Among Patients Undergoing Noncardiac Surgery. *JAMA*. 2017; 317(16): 1642–1651, doi: [10.1001/jama.2017.4360](https://doi.org/10.1001/jama.2017.4360), indexed in Pubmed: [28444280](https://pubmed.ncbi.nlm.nih.gov/28444280/).
83. Puelacher C, Lurati Buse G, Seeberger D, et al. BASEL-PMI Investigators. Perioperative Myocardial Injury After Noncardiac Surgery: Incidence, Mortality, and Characterization. *Circulation*. 2018; 137(12): 1221–1232, doi: [10.1161/CIRCULATIONAHA.117.030114](https://doi.org/10.1161/CIRCULATIONAHA.117.030114), indexed in Pubmed: [29203498](https://pubmed.ncbi.nlm.nih.gov/29203498/).
84. Duvall WL, Sealove B, Pungoti C, et al. Angiographic investigation of the pathophysiology of perioperative myocardial infarction. *Catheter Cardiovasc Interv*. 2012; 80(5): 768–776, doi: [10.1002/ccd.23446](https://doi.org/10.1002/ccd.23446), indexed in Pubmed: [22419582](https://pubmed.ncbi.nlm.nih.gov/22419582/).
85. Landesberg G, Beattie WS, Mosseri M, et al. Perioperative myocardial infarction. *Circulation*. 2009; 119(22): 2936–2944, doi: [10.1161/CIRCULATIONAHA.108.828228](https://doi.org/10.1161/CIRCULATIONAHA.108.828228), indexed in Pubmed: [19506125](https://pubmed.ncbi.nlm.nih.gov/19506125/).
86. Hanson I, Kahn J, Dixon S, et al. Angiographic and clinical characteristics of type 1 versus type 2 perioperative myocardial infarction. *Catheter Cardiovasc Interv*. 2013; 82(4): 622–628, doi: [10.1002/ccd.24626](https://doi.org/10.1002/ccd.24626), indexed in Pubmed: [22926992](https://pubmed.ncbi.nlm.nih.gov/22926992/).
87. Gualandro DM, Campos CA, Calderaro D, et al. Coronary plaque rupture in patients with myocardial infarction after noncardiac surgery: frequent and dangerous. *Atherosclerosis*. 2012; 222(1): 191–195, doi: [10.1016/j.atherosclerosis.2012.02.021](https://doi.org/10.1016/j.atherosclerosis.2012.02.021), indexed in Pubmed: [22410124](https://pubmed.ncbi.nlm.nih.gov/22410124/).
88. Kociol RD, Pang PS, Gheorghiane M, et al. Troponin elevation in heart failure prevalence, mechanisms, and clinical implications. *J Am Coll Cardiol*. 2010; 56(14): 1071–1078, doi: [10.1016/j.jacc.2010.06.016](https://doi.org/10.1016/j.jacc.2010.06.016), indexed in Pubmed: [20863950](https://pubmed.ncbi.nlm.nih.gov/20863950/).
89. Januzzi JL, Filippatos G, Nieminen M, et al. Troponin elevation in patients with heart failure: on behalf of the third Universal Definition of Myocardial Infarction Global Task Force: Heart Failure Section. *Eur Heart J*. 2012; 33(18): 2265–2271, doi: [10.1093/eurheartj/ehs191](https://doi.org/10.1093/eurheartj/ehs191), indexed in Pubmed: [22745356](https://pubmed.ncbi.nlm.nih.gov/22745356/).
90. Lyon AR, Bossone E, Schneider B, et al. Current state of knowledge on Takotsubo syndrome: a Position Statement from the Taskforce on Takotsubo Syndrome of the Heart Failure Association of the European Society of Cardiology. *Eur J Heart Fail*. 2016; 18(1): 8–27, doi: [10.1002/ejhf.424](https://doi.org/10.1002/ejhf.424), indexed in Pubmed: [26548803](https://pubmed.ncbi.nlm.nih.gov/26548803/).
91. Templin C, Ghadri J, Diekmann J, et al. Clinical features and outcomes of takotsubo (stress) cardiomyopathy. *N Engl J Med*. 2015; 373(10): 929–938, doi: [10.1056/nejmoa1406761](https://doi.org/10.1056/nejmoa1406761).
92. Medeiros K, O'Connor MJ, Baicu CF, et al. Systolic and diastolic mechanics in stress cardiomyopathy. *Circulation*. 2014; 129(16): 1659–1667, doi: [10.1161/CIRCULATIONAHA.113.002781](https://doi.org/10.1161/CIRCULATIONAHA.113.002781), indexed in Pubmed: [24503950](https://pubmed.ncbi.nlm.nih.gov/24503950/).
93. Sharkey SW, Lesser JR, Zenovich AG, et al. Acute and reversible cardiomyopathy provoked by stress in women from the United States. *Circulation*. 2005; 111(4): 472–479, doi: [10.1161/01.CIR.0000153801.51470.EB](https://doi.org/10.1161/01.CIR.0000153801.51470.EB), indexed in Pubmed: [15687136](https://pubmed.ncbi.nlm.nih.gov/15687136/).
94. Redfors B, Råmunddal T, Shao Y, et al. Takotsubo triggered by acute myocardial infarction: a common but overlooked syndrome? *J Geriatr Cardiol*. 2014; 11(2): 171–173, doi: [10.3969/j.issn.1671-5411.2014.02.001](https://doi.org/10.3969/j.issn.1671-5411.2014.02.001), indexed in Pubmed: [25009569](https://pubmed.ncbi.nlm.nih.gov/25009569/).
95. Agewall S, Beltrame JF, Reynolds HR, et al. WG on Cardiovascular Pharmacotherapy. ESC working group position paper on myocardial infarction with non-obstructive coronary arteries. *Eur Heart J*. 2017; 38(3): 143–153, doi: [10.1093/eurheartj/ehw149](https://doi.org/10.1093/eurheartj/ehw149), indexed in Pubmed: [28158518](https://pubmed.ncbi.nlm.nih.gov/28158518/).
96. Lindahl B, Baron T, Erlinge D, et al. Medical therapy for secondary prevention and long-term outcome in patients with myocardial infarction with nonobstructive coronary artery disease. *Circulation*. 2017; 135(16): 1481–1489, doi: [10.1161/CIRCULATIONAHA.116.026336](https://doi.org/10.1161/CIRCULATIONAHA.116.026336), indexed in Pubmed: [28179398](https://pubmed.ncbi.nlm.nih.gov/28179398/).
97. Pasupathy S, Air T, Dreyer RP, et al. Systematic review of patients presenting with suspected myocardial infarction and nonobstructive coronary arteries. *Circulation*. 2015; 131(10): 861–870, doi: [10.1161/CIRCULATIONAHA.114.011201](https://doi.org/10.1161/CIRCULATIONAHA.114.011201), indexed in Pubmed: [25587100](https://pubmed.ncbi.nlm.nih.gov/25587100/).
98. Smilowitz NR, Mahajan AM, Roe MT, et al. Mortality of Myocardial Infarction by Sex, Age, and Obstructive Coronary Artery Disease Status in the ACTION Registry-GWTG (Acute Coronary Treatment and Intervention Outcomes Network Registry-Get With the Guidelines). *Circ Cardiovasc Qual Outcomes*. 2017; 10(12): e003443, doi: [10.1161/CIRCOUTCOMES.116.003443](https://doi.org/10.1161/CIRCOUTCOMES.116.003443), indexed in Pubmed: [29246884](https://pubmed.ncbi.nlm.nih.gov/29246884/).
99. Jacobs LH, van de Kerkhof J, Mingels AM, et al. Haemodialysis patients longitudinally assessed by highly sensitive cardiac troponin T and commercial cardiac troponin T and cardiac troponin I assays. *Ann Clin Biochem*. 2009; 46(Pt 4): 283–290, doi: [10.1258/acb.2009.008197](https://doi.org/10.1258/acb.2009.008197), indexed in Pubmed: [19454537](https://pubmed.ncbi.nlm.nih.gov/19454537/).
100. Unger ED, Dubin RF, Deo R, et al. Association of chronic kidney disease with abnormal cardiac mechanics and adverse outcomes in patients with heart failure and preserved ejection fraction. *Eur J Heart Fail*. 2016; 18(1): 103–112, doi: [10.1002/ejhf.445](https://doi.org/10.1002/ejhf.445), indexed in Pubmed: [26635076](https://pubmed.ncbi.nlm.nih.gov/26635076/).
101. Twerenbold R, Wildi K, Jaeger C, et al. Optimal cutoff levels of more sensitive cardiac troponin assays for the early diagnosis of myocardial infarction in patients with renal dysfunction. *Circulation*. 2015; 131(23): 2041–2050, doi: [10.1161/CIRCULATIONAHA.114.014245](https://doi.org/10.1161/CIRCULATIONAHA.114.014245), indexed in Pubmed: [25948542](https://pubmed.ncbi.nlm.nih.gov/25948542/).

102. deFilippi C, Seliger SL, Kelley W, et al. Interpreting cardiac troponin results from high-sensitivity assays in chronic kidney disease without acute coronary syndrome. *Clin Chem*. 2012; 58(9): 1342–1351, doi: [10.1373/clinchem.2012.185322](https://doi.org/10.1373/clinchem.2012.185322), indexed in Pubmed: [22791885](https://pubmed.ncbi.nlm.nih.gov/22791885/).
103. Michos ED, Wilson LM, Yeh HC, et al. Prognostic value of cardiac troponin in patients with chronic kidney disease without suspected acute coronary syndrome: a systematic review and meta-analysis. *Ann Intern Med*. 2014; 161(7): 491–501, doi: [10.7326/M14-0743](https://doi.org/10.7326/M14-0743), indexed in Pubmed: [25111499](https://pubmed.ncbi.nlm.nih.gov/25111499/).
104. Parikh RH, Seliger SL, deFilippi CR. Use and interpretation of high sensitivity cardiac troponins in patients with chronic kidney disease with and without acute myocardial infarction. *Clin Biochem*. 2015; 48(4-5): 247–253, doi: [10.1016/j.clinbiochem.2015.01.004](https://doi.org/10.1016/j.clinbiochem.2015.01.004), indexed in Pubmed: [25617663](https://pubmed.ncbi.nlm.nih.gov/25617663/).
105. Fridén V, Starnberg K, Muslimovic A, et al. Clearance of cardiac troponin T with and without kidney function. *Clin Biochem*. 2017; 50(9): 468–474, doi: [10.1016/j.clinbiochem.2017.02.007](https://doi.org/10.1016/j.clinbiochem.2017.02.007), indexed in Pubmed: [28193484](https://pubmed.ncbi.nlm.nih.gov/28193484/).
106. Stacy SR, Suarez-Cuervo C, Berger Z, et al. Role of troponin in patients with chronic kidney disease and suspected acute coronary syndrome: a systematic review. *Ann Intern Med*. 2014; 161(7): 502–512, doi: [10.7326/M14-0746](https://doi.org/10.7326/M14-0746), indexed in Pubmed: [25111593](https://pubmed.ncbi.nlm.nih.gov/25111593/).
107. Guest TM, Ramanathan AV, Tuteur PG, et al. Myocardial injury in critically ill patients. A frequently unrecognized complication. *JAMA*. 1995; 273(24): 1945–1949, indexed in Pubmed: [7783306](https://pubmed.ncbi.nlm.nih.gov/7783306/).
108. Babuin L, Vasile VC, Rio Perez JA, et al. Elevated cardiac troponin is an independent risk factor for short- and long-term mortality in medical intensive care unit patients. *Crit Care Med*. 2008; 36(3): 759–765, doi: [10.1097/CCM.0B013E318164E2E4](https://doi.org/10.1097/CCM.0B013E318164E2E4), indexed in Pubmed: [18209672](https://pubmed.ncbi.nlm.nih.gov/18209672/).
109. Landesberg G, Vesselov Y, Einav S, et al. Myocardial ischemia, cardiac troponin, and long-term survival of high-cardiac risk critically ill intensive care unit patients. *Crit Care Med*. 2005; 33(6): 1281–1287, indexed in Pubmed: [15942345](https://pubmed.ncbi.nlm.nih.gov/15942345/).
110. Thygesen K, Alpert JS, Jaffe AS, et al. Diagnostic application of the universal definition of myocardial infarction in the intensive care unit. *Curr Opin Crit Care*. 2008; 14(5): 543–548, doi: [10.1097/MCC.0b013e32830d34b9](https://doi.org/10.1097/MCC.0b013e32830d34b9), indexed in Pubmed: [18787447](https://pubmed.ncbi.nlm.nih.gov/18787447/).
111. Vatner SF, Baig H, Manders WT, et al. Effects of coronary artery reperfusion on myocardial infarct size calculated from creatine kinase. *J Clin Invest*. 1978; 61(4): 1048–1056, doi: [10.1172/JCI109004](https://doi.org/10.1172/JCI109004), indexed in Pubmed: [659577](https://pubmed.ncbi.nlm.nih.gov/659577/).
112. Starnberg K, Jeppsson A, Lindahl B, et al. Revision of the troponin T release mechanism from damaged human myocardium. *Clin Chem*. 2014; 60(8): 1098–1104, doi: [10.1373/clinchem.2013.217943](https://doi.org/10.1373/clinchem.2013.217943), indexed in Pubmed: [24842954](https://pubmed.ncbi.nlm.nih.gov/24842954/).
113. Jaffe AS, Moeckel M, Giannitsis E, et al. In search for the Holy Grail: suggestions for studies to define delta changes to diagnose or exclude acute myocardial infarction: a position paper from the study group on biomarkers of the Acute Cardiovascular Care Association. *Eur Heart J Acute Cardiovasc Care*. 2014; 3(4): 313–316, doi: [10.1177/2048872614541906](https://doi.org/10.1177/2048872614541906), indexed in Pubmed: [25009249](https://pubmed.ncbi.nlm.nih.gov/25009249/).
114. Reichlin T, Irfan A, Twerenbold R, et al. Utility of absolute and relative changes in cardiac troponin concentrations in the early diagnosis of acute myocardial infarction. *Circulation*. 2011; 124(2): 136–145, doi: [10.1161/CIRCULATIONAHA.111.023937](https://doi.org/10.1161/CIRCULATIONAHA.111.023937), indexed in Pubmed: [21709058](https://pubmed.ncbi.nlm.nih.gov/21709058/).
115. Mueller M, Biener M, Vafaie M, et al. Absolute and relative kinetic changes of high-sensitivity cardiac troponin T in acute coronary syndrome and in patients with increased troponin in the absence of acute coronary syndrome. *Clin Chem*. 2012; 58(1): 209–218, doi: [10.1373/clinchem.2011.171827](https://doi.org/10.1373/clinchem.2011.171827), indexed in Pubmed: [22134520](https://pubmed.ncbi.nlm.nih.gov/22134520/).
116. Keller T, Zeller T, Ojeda F, et al. Serial changes in highly sensitive troponin I assay and early diagnosis of myocardial infarction. *JAMA*. 2011; 306(24): 2684–2693, doi: [10.1001/jama.2011.1896](https://doi.org/10.1001/jama.2011.1896), indexed in Pubmed: [22203537](https://pubmed.ncbi.nlm.nih.gov/22203537/).
117. Jaffe AS, Apple FS, Morrow DA, et al. Being rational about (im) precision: a statement from the Biochemistry Subcommittee of the Joint European Society of Cardiology/American College of Cardiology Foundation/American Heart Association/World Heart Federation Task Force for the definition of myocardial infarction. *Clin Chem*. 2010; 56(6): 941–943, doi: [10.1373/clinchem.2010.143958](https://doi.org/10.1373/clinchem.2010.143958), indexed in Pubmed: [20360122](https://pubmed.ncbi.nlm.nih.gov/20360122/).
118. Sandoval Y, Apple FS. The global need to define normality: the 99th percentile value of cardiac troponin. *Clin Chem*. 2014; 60(3): 455–462, doi: [10.1373/clinchem.2013.211706](https://doi.org/10.1373/clinchem.2013.211706), indexed in Pubmed: [24115136](https://pubmed.ncbi.nlm.nih.gov/24115136/).
119. Apple FS, Sandoval Y, Jaffe AS, et al. IFCC Task Force on Clinical Applications of Cardiac Bio-Markers. Cardiac Troponin Assays: Guide to Understanding Analytical Characteristics and Their Impact on Clinical Care. *Clin Chem*. 2017; 63(1): 73–81, doi: [10.1373/clinchem.2016.255109](https://doi.org/10.1373/clinchem.2016.255109), indexed in Pubmed: [28062612](https://pubmed.ncbi.nlm.nih.gov/28062612/).
120. Giannitsis E, Kurz K, Hallermayer K, et al. Analytical validation of a high-sensitivity cardiac troponin T assay. *Clin Chem*. 2010; 56(2): 254–261, doi: [10.1373/clinchem.2009.132654](https://doi.org/10.1373/clinchem.2009.132654), indexed in Pubmed: [19959623](https://pubmed.ncbi.nlm.nih.gov/19959623/).
121. Frankensteiner L, Wu AHB, Hallermayer K, et al. Biological variation and reference change value of high-sensitivity troponin T in healthy individuals during short and intermediate follow-up periods. *Clin Chem*. 2011; 57(7): 1068–1071, doi: [10.1373/clinchem.2010.158964](https://doi.org/10.1373/clinchem.2010.158964), indexed in Pubmed: [21519037](https://pubmed.ncbi.nlm.nih.gov/21519037/).
122. Apple FS, Ler R, Murakami MM. Determination of 19 cardiac troponin I and T assay 99th percentile values from a common presumably healthy population. *Clin Chem*. 2012; 58(11): 1574–1581, doi: [10.1373/clinchem.2012.192716](https://doi.org/10.1373/clinchem.2012.192716), indexed in Pubmed: [22983113](https://pubmed.ncbi.nlm.nih.gov/22983113/).
123. Wu AHB, Christenson RH, Greene DN, et al. Clinical Laboratory Practice Recommendations for the Use of Cardiac Troponin in Acute Coronary Syndrome: Expert Opinion from the Academy of the American Association for Clinical Chemistry and the Task Force on Clinical Applications of Cardiac Bio-Markers of the International Federation of Clinical Chemistry and Laboratory Medicine. *Clin Chem*. 2018; 64(4): 645–655, doi: [10.1373/clinchem.2017.277186](https://doi.org/10.1373/clinchem.2017.277186), indexed in Pubmed: [29343532](https://pubmed.ncbi.nlm.nih.gov/29343532/).
124. Collinson PO, Heung YM, Gaze D, et al. Influence of population selection on the 99th percentile reference value for cardiac troponin assays. *Clin Chem*. 2012; 58(1): 219–225, doi: [10.1373/clinchem.2011.171082](https://doi.org/10.1373/clinchem.2011.171082), indexed in Pubmed: [22100808](https://pubmed.ncbi.nlm.nih.gov/22100808/).
125. McKie PM, Heublein DM, Scott CG, et al. Defining high-sensitivity cardiac troponin concentrations in the community. *Clin Chem*. 2013; 59(7): 1099–1107, doi: [10.1373/clinchem.2012.198614](https://doi.org/10.1373/clinchem.2012.198614), indexed in Pubmed: [23592511](https://pubmed.ncbi.nlm.nih.gov/23592511/).
126. Olivieri F, Galeazzi R, Giavarina D, et al. Aged-related increase of high sensitive Troponin T and its implication in acute myocardial infarction diagnosis of elderly patients. *Mech Ageing Dev*. 2012; 133(5): 300–305, doi: [10.1016/j.mad.2012.03.005](https://doi.org/10.1016/j.mad.2012.03.005), indexed in Pubmed: [22446505](https://pubmed.ncbi.nlm.nih.gov/22446505/).
127. Reiter M, Twerenbold R, Reichlin T, et al. Early diagnosis of acute myocardial infarction in the elderly using more sensitive cardiac troponin assays. *Eur Heart J*. 2011; 32(11): 1379–1389, doi: [10.1093/eurheartj/ehr033](https://doi.org/10.1093/eurheartj/ehr033).
128. Shah ASV, Griffiths M, Lee KK, et al. High sensitivity cardiac troponin and the under-diagnosis of myocardial infarction in women: prospective cohort study. *BMJ*. 2015; 350: g7873, indexed in Pubmed: [25609052](https://pubmed.ncbi.nlm.nih.gov/25609052/).
129. Eggers KM, Johnston N, James S, et al. Cardiac troponin I levels in patients with non-ST-elevation acute coronary syndrome—the importance of gender. *Am Heart J*. 2014; 168(3): 317–324.e1, doi: [10.1016/j.ahj.2014.06.006](https://doi.org/10.1016/j.ahj.2014.06.006), indexed in Pubmed: [25173543](https://pubmed.ncbi.nlm.nih.gov/25173543/).
130. Balmelli C, Meune C, Twerenbold R, et al. Comparison of the performances of cardiac troponins, including sensitive assays, and copeptin in the diagnostic of acute myocardial infarction and long-term prognosis between women and men. *Am Heart J*. 2013; 166(1): 30–37, doi: [10.1016/j.ahj.2013.03.014](https://doi.org/10.1016/j.ahj.2013.03.014), indexed in Pubmed: [23816018](https://pubmed.ncbi.nlm.nih.gov/23816018/).
131. Bjurman C, Larsson M, Johanson P, et al. Small changes in troponin T levels are common in patients with non-ST-segment elevation myocardial infarction and are linked to higher mortality. *J Am Coll Cardiol*. 2013; 62(14): 1231–1238, doi: [10.1016/j.jacc.2013.06.050](https://doi.org/10.1016/j.jacc.2013.06.050), indexed in Pubmed: [23933541](https://pubmed.ncbi.nlm.nih.gov/23933541/).
132. D'Souza M, Sarkisian L, Saaby L, et al. Diagnosis of unstable angina pectoris has declined markedly with the advent of more sensitive troponin assays. *Am J Med*. 2015; 128(8): 852–860, doi: [10.1016/j.amjmed.2015.01.044](https://doi.org/10.1016/j.amjmed.2015.01.044), indexed in Pubmed: [25820165](https://pubmed.ncbi.nlm.nih.gov/25820165/).
133. Reichlin T, Twerenbold R, Reiter M, et al. Introduction of high-sensitivity troponin assays: impact on myocardial infarction incidence and prognosis. *Am J Med*. 2012; 125(12): 1205–1213.e1, doi: [10.1016/j.amjmed.2012.07.015](https://doi.org/10.1016/j.amjmed.2012.07.015), indexed in Pubmed: [23164485](https://pubmed.ncbi.nlm.nih.gov/23164485/).

134. Sandoval Y, Apple FS, Smith SW. High-sensitivity cardiac troponin assays and unstable angina. *Eur Heart J Acute Cardiovasc Care*. 2018; 7(2): 120–128, doi: [10.1177/2048872616658591](https://doi.org/10.1177/2048872616658591), indexed in Pubmed: [27388716](https://pubmed.ncbi.nlm.nih.gov/27388716/).
135. Morrow DA. Clinician's Guide to Early Rule-Out Strategies With High-Sensitivity Cardiac Troponin. *Circulation*. 2017; 135(17): 1612–1616, doi: [10.1161/CIRCULATIONAHA.117.026717](https://doi.org/10.1161/CIRCULATIONAHA.117.026717), indexed in Pubmed: [28438803](https://pubmed.ncbi.nlm.nih.gov/28438803/).
136. Twerenbold R, Boeddinghaus J, Nestelberger T, et al. Clinical effect of sex-specific cutoff values of high-sensitivity cardiac troponin T in suspected myocardial infarction. *JAMA Cardiol*. 2016; 1(8): 912–920, doi: [10.1001/jamacardio.2016.2882](https://doi.org/10.1001/jamacardio.2016.2882), indexed in Pubmed: [27653005](https://pubmed.ncbi.nlm.nih.gov/27653005/).
137. Cullen L, Mueller C, Parsonage WA, et al. Validation of high-sensitivity troponin I in a 2-hour diagnostic strategy to assess 30-day outcomes in emergency department patients with possible acute coronary syndrome. *J Am Coll Cardiol*. 2013; 62(14): 1242–1249, doi: [10.1016/j.jacc.2013.02.078](https://doi.org/10.1016/j.jacc.2013.02.078), indexed in Pubmed: [23583250](https://pubmed.ncbi.nlm.nih.gov/23583250/).
138. Pickering JW, Than MP, Cullen L, et al. Rapid rule-out of acute myocardial infarction with a single high-sensitivity cardiac troponin T measurement below the limit of detection: a collaborative meta-analysis. *Ann Intern Med*. 2017; 166(10): 715–724, doi: [10.7326/M16-2562](https://doi.org/10.7326/M16-2562), indexed in Pubmed: [28418520](https://pubmed.ncbi.nlm.nih.gov/28418520/).
139. Mueller C, Giannitsis E, Möckel M, et al. Biomarker Study Group of the ESC Acute Cardiovascular Care Association. Rapid rule out of acute myocardial infarction: novel biomarker-based strategies. *Eur Heart J Acute Cardiovasc Care*. 2017; 6(3): 218–222, doi: [10.1177/2048872616653229](https://doi.org/10.1177/2048872616653229), indexed in Pubmed: [27370210](https://pubmed.ncbi.nlm.nih.gov/27370210/).
140. Boeddinghaus J, Nestelberger T, Twerenbold R, et al. Direct comparison of 4 very early rule-out strategies for acute myocardial infarction using high-sensitivity cardiac troponin I. *Circulation*. 2017; 135(17): 1597–1611, doi: [10.1161/CIRCULATIONAHA.116.025661](https://doi.org/10.1161/CIRCULATIONAHA.116.025661), indexed in Pubmed: [28283497](https://pubmed.ncbi.nlm.nih.gov/28283497/).
141. Möckel M, Giannitsis E, Mueller C, et al. Biomarker Study Group of the European Society of Cardiology Acute Cardiovascular Care Association. Rule-in of acute myocardial infarction: Focus on troponin. *Eur Heart J Acute Cardiovasc Care*. 2017; 6: 212–217.
142. Jaffe AS, White H. Ruling-In myocardial injury and ruling-out myocardial infarction with the european society of cardiology 1-hour algorithm. *Circulation*. 2016; 134(20): 1542–1545, doi: [10.1161/CIRCULATIONAHA.116.024687](https://doi.org/10.1161/CIRCULATIONAHA.116.024687), indexed in Pubmed: [27754880](https://pubmed.ncbi.nlm.nih.gov/27754880/).
143. Sandoval Y, Herzog CA, Love SA, et al. Prognostic value of serial changes in high-sensitivity cardiac troponin I and T over 3 months using reference change values in hemodialysis patients. *Clin Chem*. 2016; 62(4): 631–638, doi: [10.1373/clinchem.2015.251835](https://doi.org/10.1373/clinchem.2015.251835), indexed in Pubmed: [26847217](https://pubmed.ncbi.nlm.nih.gov/26847217/).
144. deFilippi C, Herzog C. Interpreting Cardiac Biomarkers in the Setting of Chronic Kidney Disease. *Clin Chem*. 2016; 63(1): 59–65, doi: [10.1373/clinchem.2016.254748](https://doi.org/10.1373/clinchem.2016.254748).
145. Neeland IJ, Drazner MH, Berry JD, et al. Biomarkers of chronic cardiac injury and hemodynamic stress identify a malignant phenotype of left ventricular hypertrophy in the general population. *J Am Coll Cardiol*. 2013; 61(2): 187–195, doi: [10.1016/j.jacc.2012.10.012](https://doi.org/10.1016/j.jacc.2012.10.012), indexed in Pubmed: [23219305](https://pubmed.ncbi.nlm.nih.gov/23219305/).
146. Biener M, Mueller M, Vafaie M, et al. Diagnostic performance of rising, falling, or rising and falling kinetic changes of high-sensitivity cardiac troponin T in an unselected emergency department population. *Eur Heart J Acute Cardiovasc Care*. 2013; 2(4): 314–322, doi: [10.1177/2048872613498517](https://doi.org/10.1177/2048872613498517), indexed in Pubmed: [24338290](https://pubmed.ncbi.nlm.nih.gov/24338290/).
147. Amsterdam E, Wenger N, Brindis R, et al. 2014 AHA/ACC Guideline for the Management of Patients With Non-ST-Elevation Acute Coronary Syndromes. *J Am Coll Cardiol*. 2014; 64(24): e139–e228, doi: [10.1016/j.jacc.2014.09.017](https://doi.org/10.1016/j.jacc.2014.09.017).
148. Bagai A, Jollis J, Dauerman H, et al. Emergency department bypass for ST-segment-elevation myocardial infarction patients identified with a prehospital electrocardiogram. *Circulation*. 2013; 128(4): 352–359, doi: [10.1161/circulationaha.113.002339](https://doi.org/10.1161/circulationaha.113.002339).
149. Scirica B, Morrow D, Budaj A, et al. Ischemia detected on continuous electrocardiography after acute coronary syndrome. *J Am Coll Cardiol*. 2009; 53(16): 1411–1421, doi: [10.1016/j.jacc.2008.12.053](https://doi.org/10.1016/j.jacc.2008.12.053).
150. Wang K, Asinger RW, Marriott HJL. ST-segment elevation in conditions other than acute myocardial infarction. *N Engl J Med*. 2003; 349(22): 2128–2135, doi: [10.1056/NEJMra022580](https://doi.org/10.1056/NEJMra022580), indexed in Pubmed: [14645641](https://pubmed.ncbi.nlm.nih.gov/14645641/).
151. de Winter RJ, Verouden NJW, Wellens HJJ, et al. A new ECG sign of proximal LAD occlusion. *N Engl J Med*. 2008; 359(19): 2071–2073, doi: [10.1056/NEJMc0804737](https://doi.org/10.1056/NEJMc0804737), indexed in Pubmed: [18987380](https://pubmed.ncbi.nlm.nih.gov/18987380/).
152. de Winter RW, Adams R, Verouden NJW, et al. Precordial junctional ST-segment depression with tall symmetric T-waves signifying proximal LAD occlusion, case reports of STEMI equivalence. *J Electrocardiol*. 2016; 49(1): 76–80, doi: [10.1016/j.jelectrocard.2015.10.005](https://doi.org/10.1016/j.jelectrocard.2015.10.005), indexed in Pubmed: [26560436](https://pubmed.ncbi.nlm.nih.gov/26560436/).
153. de Zwaan C, Bär F, Wellens H. Characteristic electrocardiographic pattern indicating a critical stenosis high in left anterior descending coronary artery in patients admitted because of impending myocardial infarction. *Am Heart J*. 1982; 103(4): 730–736, doi: [10.1016/0002-8703\(82\)90480-x](https://doi.org/10.1016/0002-8703(82)90480-x).
154. Wong CK, Gao W, Stewart RAH, et al. HERO-2 Investigators. aVR ST elevation: an important but neglected sign in ST elevation acute myocardial infarction. *Eur Heart J*. 2010; 31(15): 1845–1853, doi: [10.1093/eurheartj/ehq161](https://doi.org/10.1093/eurheartj/ehq161), indexed in Pubmed: [20513728](https://pubmed.ncbi.nlm.nih.gov/20513728/).
155. Matetzky S, Freimark D, Feinberg MS, et al. Acute myocardial infarction with isolated ST-segment elevation in posterior chest leads V7-9: “Hidden” ST-segment elevations revealing acute posterior infarction. *J Am Coll Cardiol*. 1999; 34(3): 748–753, indexed in Pubmed: [10483956](https://pubmed.ncbi.nlm.nih.gov/10483956/).
156. Wong CK, White HD. Patients with circumflex occlusions miss out on reperfusion: how to recognize and manage them. *Curr Opin Cardiol*. 2012; 27(4): 327–330, doi: [10.1097/HCO.0b013e32835482b7](https://doi.org/10.1097/HCO.0b013e32835482b7), indexed in Pubmed: [22565144](https://pubmed.ncbi.nlm.nih.gov/22565144/).
157. Lopez-Sendon J, Coma-Canella I, Alcasena S, et al. Electrocardiographic findings in acute right ventricular infarction: sensitivity and specificity of electrocardiographic alterations in right precordial leads V4R, V3R, V1, V2, and V3. *J Am Coll Cardiol*. 1985; 6(6): 1273–1279, indexed in Pubmed: [4067105](https://pubmed.ncbi.nlm.nih.gov/4067105/).
158. Deluigi CC, Ong P, Hill S, et al. ECG findings in comparison to cardiovascular MR imaging in viral myocarditis. *Int J Cardiol*. 2013; 165(1): 100–106, doi: [10.1016/j.ijcard.2011.07.090](https://doi.org/10.1016/j.ijcard.2011.07.090), indexed in Pubmed: [21885134](https://pubmed.ncbi.nlm.nih.gov/21885134/).
159. Biagini E, Pazzi C, Olivetto I, et al. Usefulness of electrocardiographic patterns at presentation to predict long-term risk of cardiac death in patients with hypertrophic cardiomyopathy. *Am J Cardiol*. 2016; 118(3): 432–439, doi: [10.1016/j.amjcard.2016.05.023](https://doi.org/10.1016/j.amjcard.2016.05.023), indexed in Pubmed: [27289293](https://pubmed.ncbi.nlm.nih.gov/27289293/).
160. Guerra F, Rrapaj E, Pongetti G, et al. Differences and similarities of repolarization patterns during hospitalization for takotsubo cardiomyopathy and acute coronary syndrome. *Am J Cardiol*. 2013; 112(11): 1720–1724, doi: [10.1016/j.amjcard.2013.07.036](https://doi.org/10.1016/j.amjcard.2013.07.036), indexed in Pubmed: [24012034](https://pubmed.ncbi.nlm.nih.gov/24012034/).
161. Savage RM, Wagner GS, Ideker RE, et al. Correlation of postmortem anatomic findings with electrocardiographic changes in patients with myocardial infarction: retrospective study of patients with typical anterior and posterior infarcts. *Circulation*. 1977; 55(2): 279–285, indexed in Pubmed: [832343](https://pubmed.ncbi.nlm.nih.gov/832343/).
162. Horan LG, Flowers NC, Johnson JC. Significance of the diagnostic Q wave of myocardial infarction. *Circulation*. 1971; 43(3): 428–436, indexed in Pubmed: [5544988](https://pubmed.ncbi.nlm.nih.gov/5544988/).
163. Chaitman BR, Hardison RM, Adler D, et al. Bypass Angioplasty Revascularization Investigation 2 Diabetes (BARI 2D) Study Group. The Bypass Angioplasty Revascularization Investigation 2 Diabetes randomized trial of different treatment strategies in type 2 diabetes mellitus with stable ischemic heart disease: impact of treatment strategy on cardiac mortality and myocardial infarction. *Circulation*. 2009; 120(25): 2529–2540, doi: [10.1161/CIRCULATIONAHA.109.913111](https://doi.org/10.1161/CIRCULATIONAHA.109.913111), indexed in Pubmed: [19920001](https://pubmed.ncbi.nlm.nih.gov/19920001/).
164. Burgess DC, Hunt D, Zannino D, et al. Incidence and predictors of silent myocardial infarction in type 2 diabetes and the effect of fenofibrate: an analysis from the Fenofibrate Intervention and Event Lowering in Diabetes (FIELD) study. *Eur Heart J*. 2010; 31(1): 92–99, doi: [10.1093/eurheartj/ehp377](https://doi.org/10.1093/eurheartj/ehp377), indexed in Pubmed: [19797259](https://pubmed.ncbi.nlm.nih.gov/19797259/).
165. Kwong RY, Sattar H, Wu H, et al. Incidence and prognostic implication of unrecognized myocardial scar characterized by cardiac magnetic resonance in diabetic patients without clinical evidence of myocardial infarction. *Circulation*. 2008; 118(10): 1011–1020, doi: [10.1161/CIRCULATIONAHA.107.727826](https://doi.org/10.1161/CIRCULATIONAHA.107.727826), indexed in Pubmed: [18725488](https://pubmed.ncbi.nlm.nih.gov/18725488/).
166. Sgarbossa EB, Pinski SL, Barbagelata A, et al. Electrocardiographic diagnosis of evolving acute myocardial infarction in the presence of left bundle-branch block. GUSTO-1 (Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Co-

- ronary Arteries) Investigators. *N Engl J Med.* 1996; 334(8): 481–487, doi: [10.1056/NEJM19960223340801](https://doi.org/10.1056/NEJM19960223340801), indexed in Pubmed: 8559200.
167. Cai Q, Mehta N, Sgarbossa EB, et al. The left bundle-branch block puzzle in the 2013 ST-elevation myocardial infarction guideline: from falsely declaring emergency to denying reperfusion in a high-risk population. Are the Sgarbossa Criteria ready for prime time? *Am Heart J.* 2013; 166(3): 409–413, doi: [10.1016/j.ahj.2013.03.032](https://doi.org/10.1016/j.ahj.2013.03.032), indexed in Pubmed: 24016487.
 168. Widimsky P, Rohác F, Stásek J, et al. Primary angioplasty in acute myocardial infarction with right bundle branch block: should new onset right bundle branch block be added to future guidelines as an indication for reperfusion therapy? *Eur Heart J.* 2012; 33(1): 86–95, doi: [10.1093/eurheartj/ehr291](https://doi.org/10.1093/eurheartj/ehr291), indexed in Pubmed: 21890488.
 169. Brandt RR, Hammill SC, Higano ST. Electrocardiographic diagnosis of acute myocardial infarction during ventricular pacing. *Circulation.* 1998; 97(22): 2274–2275, indexed in Pubmed: 9631878.
 170. Pradhan R, Chaudhary A, Donato AA. Predictive accuracy of ST depression during rapid atrial fibrillation on the presence of obstructive coronary artery disease. *Am J Emerg Med.* 2012; 30(7): 1042–1047, doi: [10.1016/j.ajem.2011.06.027](https://doi.org/10.1016/j.ajem.2011.06.027), indexed in Pubmed: 21855255.
 171. Androulakis A, Aznaouridis KA, Aggeli CJ, et al. Transient ST-segment depression during paroxysms of atrial fibrillation in otherwise normal individuals: relation with underlying coronary artery disease. *J Am Coll Cardiol.* 2007; 50(19): 1909–1911, doi: [10.1016/j.jacc.2007.08.005](https://doi.org/10.1016/j.jacc.2007.08.005), indexed in Pubmed: 17980260.
 172. Vakil K, Gandhi S, Abidi KS, et al. Deep T-wave inversions: Cardiac ischemia or memory? *J Cardiovasc Dis.* 2014; 2: 116–119.
 173. Stillman AE, Oudkerk M, Bluemke D, et al. Assessment of acute myocardial infarction: current status and recommendations from the North American society for Cardiovascular Imaging and the European Society of Cardiac Radiology. *Int J Cardiovasc Imaging.* 2011; 27(1): 7–24, doi: [10.1007/s10554-010-9714-0](https://doi.org/10.1007/s10554-010-9714-0), indexed in Pubmed: 20972835.
 174. Scirica BM. Acute coronary syndrome: emerging tools for diagnosis and risk assessment. *J Am Coll Cardiol.* 2010; 55(14): 1403–1415, doi: [10.1016/j.jacc.2009.09.071](https://doi.org/10.1016/j.jacc.2009.09.071), indexed in Pubmed: 20359589.
 175. Kontos MC, Diercks DB, Kirk JD. Emergency department and office-based evaluation of patients with chest pain. *Mayo Clin Proc.* 2010; 85(3): 284–299, doi: [10.4065/mcp.2009.0560](https://doi.org/10.4065/mcp.2009.0560), indexed in Pubmed: 20194155.
 176. Lewis WR. Echocardiography in the evaluation of patients in chest pain units. *Cardiol Clin.* 2005; 23(4): 531–9, vii, doi: [10.1016/j.ccl.2005.08.009](https://doi.org/10.1016/j.ccl.2005.08.009), indexed in Pubmed: 16278122.
 177. Flachskampf FA, Schmid M, Rost C, et al. Cardiac imaging after myocardial infarction. *Eur Heart J.* 2011; 32(3): 272–283, doi: [10.1093/eurheartj/ehq446](https://doi.org/10.1093/eurheartj/ehq446), indexed in Pubmed: 21163851.
 178. Zamorano J, Wallbridge DR, Ge J, et al. Non-invasive assessment of cardiac physiology by tissue Doppler echocardiography. A comparison with invasive haemodynamics. *Eur Heart J.* 1997; 18(2): 330–339, indexed in Pubmed: 9043850.
 179. Kaul S, Miller JG, Grayburn PA, et al. A suggested roadmap for cardiovascular ultrasound research for the future. *J Am Soc Echocardiogr.* 2011; 24(4): 455–464, doi: [10.1016/j.echo.2011.02.017](https://doi.org/10.1016/j.echo.2011.02.017), indexed in Pubmed: 21440216.
 180. O'Connor MK, Hammell T, Gibbons RJ. In vitro validation of a simple tomographic technique for estimation of percentage myocardium at risk using methoxyisobutyl isonitrite technetium 99m (sestamibi). *Eur J Nucl Med.* 1990; 17(1-2): 69–76, indexed in Pubmed: 2150647.
 181. Carrió I, Cowie MR, Yamazaki J, et al. Cardiac sympathetic imaging with mIBG in heart failure. *JACC Cardiovasc Imaging.* 2010; 3(1): 92–100, doi: [10.1016/j.jcmg.2009.07.014](https://doi.org/10.1016/j.jcmg.2009.07.014), indexed in Pubmed: 20129538.
 182. Nahrendorf M, Sosnovik DE, French BA, et al. Multimodality cardiovascular molecular imaging, Part II. *Circ Cardiovasc Imaging.* 2009; 2(1): 56–70, doi: [10.1161/CIRCIMAGING.108.839092](https://doi.org/10.1161/CIRCIMAGING.108.839092), indexed in Pubmed: 19808565.
 183. Kramer CM, Sinusas AJ, Sosnovik DE, et al. Multimodality imaging of myocardial injury and remodeling. *J Nucl Med.* 2010; 51 Suppl 1: 107S–121S, doi: [10.2967/jnumed.109.068221](https://doi.org/10.2967/jnumed.109.068221), indexed in Pubmed: 20395347.
 184. Taegtmeier H. Tracing cardiac metabolism in vivo: one substrate at a time. *J Nucl Med.* 2010; 51 Suppl 1: 80S–87S, doi: [10.2967/jnumed.109.068205](https://doi.org/10.2967/jnumed.109.068205), indexed in Pubmed: 20395343.
 185. Kim H, Farzaneh-Far A, Kim R. Cardiovascular Magnetic Resonance in Patients With Myocardial Infarction. *J Am Coll Cardio.* 2009; 55(1): 1–16, doi: [10.1016/j.jacc.2009.06.059](https://doi.org/10.1016/j.jacc.2009.06.059).
 186. Beek AM, Rossum ACv. Cardiovascular magnetic resonance imaging in patients with acute myocardial infarction. *Heart.* 2010; 96(3): 237–243, doi: [10.1136/hrt.2009.172296](https://doi.org/10.1136/hrt.2009.172296).
 187. Locca D, Bucciarelli-Ducci C, Ferrante G, et al. New universal definition of myocardial infarction applicable after complex percutaneous coronary interventions? *JACC Cardiovasc Interv.* 2010; 3(9): 950–958, doi: [10.1016/j.jcin.2010.06.015](https://doi.org/10.1016/j.jcin.2010.06.015), indexed in Pubmed: 20850095.
 188. Schuleri KH, George RT, Lardo AC. Assessment of coronary blood flow with computed tomography and magnetic resonance imaging. *J Nucl Cardiol.* 2010; 17(4): 582–590, doi: [10.1007/s12350-010-9257-8](https://doi.org/10.1007/s12350-010-9257-8), indexed in Pubmed: 20585916.
 189. Dedic A, Lubbers MM, Schaap J, et al. Coronary CT angiography for suspected ACS in the era of high-sensitivity troponins: randomized multicenter study. *J Am Coll Cardiol.* 2016; 67(1): 16–26, doi: [10.1016/j.jacc.2015.10.045](https://doi.org/10.1016/j.jacc.2015.10.045), indexed in Pubmed: 26764061.
 190. Eitel I, de Waha S, Wöhrle J, et al. Comprehensive prognosis assessment by CMR imaging after ST-segment elevation myocardial infarction. *J Am Coll Cardiol.* 2014; 64(12): 1217–1226, doi: [10.1016/j.jacc.2014.06.1194](https://doi.org/10.1016/j.jacc.2014.06.1194), indexed in Pubmed: 25236513.
 191. Hoffmann U, Truong QA, Schoenfeld DA, et al. ROMICAT-II Investigators. Coronary CT angiography versus standard evaluation in acute chest pain. *N Engl J Med.* 2012; 367(4): 299–308, doi: [10.1056/NEJMoa1201161](https://doi.org/10.1056/NEJMoa1201161), indexed in Pubmed: 22830462.
 192. Puchner SB, Liu T, Mayrhofer T, et al. High-risk plaque detected on coronary CT angiography predicts acute coronary syndromes independent of significant stenosis in acute chest pain: results from the ROMICAT-II trial. *J Am Coll Cardiol.* 2014; 64(7): 684–692, doi: [10.1016/j.jacc.2014.05.039](https://doi.org/10.1016/j.jacc.2014.05.039), indexed in Pubmed: 25125300.
 193. Ferencik M, Liu T, Mayrhofer T, et al. hs-Troponin I followed by CT angiography improves acute coronary syndrome risk stratification accuracy and work-up in acute chest pain patients: results from ROMICAT II trial. *JACC Cardiovasc Imaging.* 2015; 8(11): 1272–1281, doi: [10.1016/j.jcmg.2015.06.016](https://doi.org/10.1016/j.jcmg.2015.06.016), indexed in Pubmed: 26476506.
 194. Amsterdam EA, Kirk JD, Bluemke DA, et al. Testing of low-risk patients presenting to the emergency department with chest pain: a scientific statement from the American Heart Association. *Circulation.* 2010; 122(17): 1756–1776, doi: [10.1161/CIR.0b013e3181ec61df](https://doi.org/10.1161/CIR.0b013e3181ec61df), indexed in Pubmed: 20660809.
 195. European Medicines Agency/Committee for Medicinal Products for Human Use (CHMP). Reflection paper on assessment of cardiovascular safety profile of medical products. EMA/CHMP/50549/2015. http://www.ema.europa.eu/docs/en_GB/document_library/Scientific_guideline/2016/03/WC500203804.pdf (25 Feb 2016).
 196. Hicks KA, Mahaffey KW, Mehran R, et al. Standardized Data Collection for Cardiovascular Trials Initiative (SCTI). 2017 Cardiovascular and stroke endpoint definitions for clinical trials. *Circulation.* 2018; 137: 961–972. *J Am Coll Cardiol* 2018;71:1021–1034.
 197. Leening MJG, Elias-Smale SE, Felix JF, et al. Unrecognised myocardial infarction and long-term risk of heart failure in the elderly: the Rotterdam Study. *Heart.* 2010; 96(18): 1458–1462, doi: [10.1136/hrt.2009.191742](https://doi.org/10.1136/hrt.2009.191742), indexed in Pubmed: 20483894.
 198. Karnegis JN, Matts J, Tuna N. Development and evolution of electrocardiographic Minnesota Q-QS codes in patients with acute myocardial infarction. *Am Heart J.* 1985; 110(2): 452–459, indexed in Pubmed: 4025120.
 199. Goyal A, Gluckman TJ, Tchong JE. What's in a Name? The New ICD-10 (10th Revision of the International Statistical Classification of Diseases and Related Health Problems) Codes and Type 2 Myocardial Infarction. *Circulation.* 2017; 136(13): 1180–1182, doi: [10.1161/CIRCULATIONAHA.117.030347](https://doi.org/10.1161/CIRCULATIONAHA.117.030347), indexed in Pubmed: 28947477.
 200. Rosamond WD, Chambless LE, Heiss G, et al. Twenty-two-year trends in incidence of myocardial infarction, coronary heart disease mortality, and case fatality in 4 US communities, 1987–2008. *Circulation.* 2012; 125(15): 1848–1857, doi: [10.1161/CIRCULATIONAHA.111.047480](https://doi.org/10.1161/CIRCULATIONAHA.111.047480), indexed in Pubmed: 22420957.
 201. Luepker RV, Duval S, Jacobs DR, et al. The effect of changing diagnostic algorithms on acute myocardial infarction rates. *Ann Epidemiol.* 2011; 21(11): 824–829, doi: [10.1016/j.annepidem.2011.08.005](https://doi.org/10.1016/j.annepidem.2011.08.005), indexed in Pubmed: 21982485.