

REFERENCES

- Mamas MA, Brown SA, Sun LY. Coronary artery disease in patients with cancer: It's always the small pieces that make the bigger picture. *Mayo Clin Proc.* 2020; 95(9): 1819–1821, doi: [10.1016/j.mayocp.2020.07.006](https://doi.org/10.1016/j.mayocp.2020.07.006), indexed in Pubmed: 32861320.
- Wang Z, Fan Z, Yang L, et al. Higher risk of cardiovascular mortality than cancer mortality among long-term cancer survivors. *Front Cardiovasc Med.* 2023; 10: 1014400, doi: [10.3389/fcvm.2023.1014400](https://doi.org/10.3389/fcvm.2023.1014400), indexed in Pubmed: 36760569.
- Cancer society. Cancer Treatment & Survivorship Facts & Figures 2019–2021; 2019.
- Statistics and graphs. Office of Cancer survivorship. National Cancer institute: Division of cancer control & population sciences. Nov 2022. <https://cancercontrol.cancer.gov/ocs/statistics#stats> (accessed: January 11, 2024).
- Koene RJ, Prizment AE, Blaes A, et al. Shared risk factors in cardiovascular disease and cancer. *Circulation.* 2016; 133(11): 1104–1114, doi: [10.1161/CIRCULATIONAHA.115.020406](https://doi.org/10.1161/CIRCULATIONAHA.115.020406), indexed in Pubmed: 26976915.
- Wolin KY, Carson K, Colditz GA. Obesity and cancer. *Oncologist.* 2010; 15(6): 556–565, doi: [10.1634/theoncologist.2009-0285](https://doi.org/10.1634/theoncologist.2009-0285), indexed in Pubmed: 20507889.
- Giovannucci E, Harlan DM, Archer MC, et al. Diabetes and cancer: a consensus report. *Diabetes Care.* 2010; 33(7): 1674–1685, doi: [10.2337/dc10-0666](https://doi.org/10.2337/dc10-0666), indexed in Pubmed: 20587728.
- Costa IB, Andrade FT, Carter D, et al. Challenges and management of acute coronary syndrome in cancer patients. *Front Cardiovasc Med.* 2021; 8: 590016, doi: [10.3389/fcvm.2021.590016](https://doi.org/10.3389/fcvm.2021.590016), indexed in Pubmed: 34179121.
- Grossman E, Messerli FH, Boyko V, et al. Is there an association between hypertension and cancer mortality? *Am J Med.* 2002; 112(6): 479–486, doi: [10.1016/s0002-9343\(02\)01049-5](https://doi.org/10.1016/s0002-9343(02)01049-5), indexed in Pubmed: 11959059.
- Lyon AR, Dent S, Stanway S, et al. Baseline cardiovascular risk assessment in cancer patients scheduled to receive cardiotoxic cancer therapies: a position statement and new risk assessment tools from the Cardio-Oncology Study Group of the Heart Failure Association of the European Society of Cardiology in collaboration with the International Cardio-Oncology Society. *Eur J Heart Fail.* 2020; 22(11): 1945–1960, doi: [10.1002/ehjhf.1920](https://doi.org/10.1002/ehjhf.1920), indexed in Pubmed: 32463967.
- Caine GJ, Stonelake PS, Lip GYH, et al. The hypercoagulable state of malignancy: pathogenesis and current debate. *Neoplasia.* 2002; 4(6): 465–473, doi: [10.1038/sj.neo.7900263](https://doi.org/10.1038/sj.neo.7900263), indexed in Pubmed: 12407439.
- Potts JE, Iliescu CA, Lopez Mattei JC, et al. Percutaneous coronary intervention in cancer patients: a report of the prevalence and outcomes in the United States. *Eur Heart J.* 2019; 40(22): 1790–1800, doi: [10.1093/eurheartj/ehy769](https://doi.org/10.1093/eurheartj/ehy769), indexed in Pubmed: 30500952.
- Doolub G, Mamas MA. Percutaneous coronary angioplasty in patients with cancer: Clinical challenges and management strategies. *J Pers Med.* 2022; 12(9): 1372, doi: [10.3390/jpm12091372](https://doi.org/10.3390/jpm12091372), indexed in Pubmed: 36143156.
- Yadav M, Génèreux P, Giustino G, et al. Effect of baseline thrombocytopenia on ischemic outcomes in patients with acute coronary syndromes who undergo percutaneous coronary intervention. *Can J Cardiol.* 2016; 32(2): 226–233, doi: [10.1016/j.cjca.2015.05.020](https://doi.org/10.1016/j.cjca.2015.05.020), indexed in Pubmed: 26341303.
- Johnstone C, Rich SE. Bleeding in cancer patients and its treatment: A review. *Ann Palliat Med.* 2018; 7(2): 265–273, doi: [10.21037/apm.2017.11.01](https://doi.org/10.21037/apm.2017.11.01), indexed in Pubmed: 29307210.
- Urban P, Mehran R, Collieran R, et al. Defining high bleeding risk in patients undergoing percutaneous coronary intervention: a consensus document from the Academic Research Consortium for High Bleeding Risk. *Eur Heart J.* 2019; 40(31): 2632–2653, doi: [10.1093/eurheartj/ehz372](https://doi.org/10.1093/eurheartj/ehz372), indexed in Pubmed: 31116395.
- Raposeiras-Roubin S, Abu-Assi E, Muñoz-Pousa I, et al. Usefulness of bleeding after acute coronary syndromes for unmasking silent cancer. *Am J Cardiol.* 2020; 125(12): 1801–1808, doi: [10.1016/j.amjcard.2020.03.023](https://doi.org/10.1016/j.amjcard.2020.03.023), indexed in Pubmed: 32307091.
- Kirresh A, White L, Mitchell A, et al. Radiation-induced coronary artery disease: a difficult clinical conundrum. *Clin Med (Lond).* 2022; 22(3): 251–256, doi: [10.7861/clinmed.2021-0600](https://doi.org/10.7861/clinmed.2021-0600), indexed in Pubmed: 35584837.
- Borges N, Kapadia S. Radiation-induced CAD: incidence, diagnosis, and management outcomes. *American College of Cardiology.* 2018. <https://www.acc.org/Latest-in-Cardiology/Articles/2018/05/24/01/44/Radiation-Induced-CAD> (accessed: January 11, 2024).
- Cuomo JR, Javaheri SP, Sharma GK, et al. How to prevent and manage radiation-induced coronary artery disease. *Heart.* 2018; 104(20): 1647–1653, doi: [10.1136/heartjnl-2017-312123](https://doi.org/10.1136/heartjnl-2017-312123), indexed in Pubmed: 29764968.
- Wu W, Masri A, Popovic ZB, et al. Long-term survival of patients with radiation heart disease undergoing cardiac surgery: a cohort study. *Circulation.* 2013; 127(14): 1476–1485, doi: [10.1161/CIRCULATIONAHA.113.001435](https://doi.org/10.1161/CIRCULATIONAHA.113.001435), indexed in Pubmed: 23569119.
- Reed GW, Rossi JE, Masri A, et al. Long-Term mortality in patients with radiation-associated coronary artery disease treated with percutaneous coronary intervention. *Circ Cardiovasc Interv.* 2016; 9(6): e003483, doi: [10.1161/CIRCINTERVENTIONS.115.003483](https://doi.org/10.1161/CIRCINTERVENTIONS.115.003483), indexed in Pubmed: 27313281.
- Lyon AR, López-Fernández T, Couch LS, et al. 2022 ESC Guidelines on cardio-oncology developed in collaboration with the European Hematology Association (EHA), the European Society for Therapeutic Radiology and Oncology (ESTRO) and the International Cardio-Oncology Society (IC-OS). *Eur Heart J.* 2022; 43(41): 4229–4361, doi: [10.1093/eurheartj/ehac244](https://doi.org/10.1093/eurheartj/ehac244), indexed in Pubmed: 36017568.
- Mohamed MO, Van Spall HGC, Kontopantelis E, et al. Effect of primary percutaneous coronary intervention on in-hospital outcomes among active cancer patients presenting with ST-elevation myocardial infarction: a propensity score matching analysis. *Eur Heart J Acute Cardiovasc Care.* 2021; 10(8): 829–839, doi: [10.1093/ehjacc/zaaa032](https://doi.org/10.1093/ehjacc/zaaa032), indexed in Pubmed: 33587752.
- Balanescu DV, Donisan T, Deswal A, et al. Acute myocardial infarction in a high-risk cancer population: Outcomes following conservative versus invasive management. *Int J Cardiol.* 2020; 313: 1–8, doi: [10.1016/j.ijcard.2020.04.050](https://doi.org/10.1016/j.ijcard.2020.04.050), indexed in Pubmed: 32320781.
- Bharadwaj A, Potts J, Mohamed MO, et al. Acute myocardial infarction treatments and outcomes in 6.5 million patients with a current or historical diagnosis of cancer in the USA. *Eur Heart J.* 2020; 41(23): 2183–2193, doi: [10.1093/eurheartj/ehz851](https://doi.org/10.1093/eurheartj/ehz851), indexed in Pubmed: 31800032.
- Guddati AK, Joy PS, Kumar G. Analysis of outcomes of percutaneous coronary intervention in metastatic cancer patients with acute coronary syndrome over a 10-year period. *J Cancer Res Clin Oncol.* 2016; 142(2): 471–479, doi: [10.1007/s00432-015-2056-5](https://doi.org/10.1007/s00432-015-2056-5), indexed in Pubmed: 26498773.
- Beltrame JF. Assessing patients with myocardial infarction and nonobstructed coronary arteries (MINOCA). *J Intern Med.* 2013; 273(2): 182–185, doi: [10.1111/j.1365-2796.2012.02591.x](https://doi.org/10.1111/j.1365-2796.2012.02591.x), indexed in Pubmed: 22998397.
- Agewall S, Beltrame JF, Reynolds HR, et al. 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.
- Stepien K, Nowak K, Szlosarczyk B, et al. Clinical characteristics and long-term outcomes of MINOCA accompanied by active cancer: A retrospective insight into a Cardio-Oncology Center Registry. *Front Cardiovasc Med.* 2022; 9: 785246, doi: [10.3389/fcvm.2022.785246](https://doi.org/10.3389/fcvm.2022.785246), indexed in Pubmed: 35669480.
- Zaghlol R, Dey A, Barac A. Takotsubo and cancer: Takotsubo cardiomyopathy in the era of emerging cancer therapies. *Eur Heart J.* 2020; 41(48): 4547–4549, doi: [10.1093/eurheartj/ehaa175](https://doi.org/10.1093/eurheartj/ehaa175).
- Sattler K, El-Battrawy I, Gietzen T, et al. Prevalence of cancer in Takotsubo cardiomyopathy: Short and long-term outcome. *Int J Cardiol.* 2017; 238(7): 159–165, doi: [10.1016/j.ijcard.2017.02.093](https://doi.org/10.1016/j.ijcard.2017.02.093), indexed in Pubmed: 28318661.
- Zaghlol R, Kashyap K, Al-Shbool G, et al. Usefulness of malignancy as a predictor of worse in-hospital outcomes in patients with takotsubo cardiomyopathy. *Am J Cardiol.* 2019; 123(6): 995–1001, doi: [10.1016/j.amjcard.2018.11.054](https://doi.org/10.1016/j.amjcard.2018.11.054), indexed in Pubmed: 30595393.
- El-Battrawy I, Santoro F, Stiermaier T, et al. Prevalence and long-term prognostic impact of malignancy in patients with Takotsubo syndrome. *Eur J Heart Fail.* 2018; 20(4): 816–818, doi: [10.1002/ehjhf.868](https://doi.org/10.1002/ehjhf.868), indexed in Pubmed: 28849607.

35. Agewall S, Beltrame JF, Reynolds HR, et al. 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.
36. Dastidar AG, Baritussio A, De Garate E, et al. Prognostic role of CMR and conventional risk factors in myocardial infarction with nonobstructed coronary arteries. *JACC Cardiovasc Imaging*. 2019; 12(10): 1973–1982, doi: [10.1016/j.jcmg.2018.12.023](https://doi.org/10.1016/j.jcmg.2018.12.023), indexed in Pubmed: 30772224.
37. Ferrante G, Rao SV, Jüni P, et al. Radial versus femoral access for coronary interventions across the entire spectrum of patients with coronary artery disease: a meta-analysis of randomized trials. *JACC Cardiovasc Interv*. 2016; 9(14): 1419–1434, doi: [10.1016/j.jcin.2016.04.014](https://doi.org/10.1016/j.jcin.2016.04.014), indexed in Pubmed: 27372195.
38. Gargiulo G, Giacoppo D, Jolly SS, et al. Effects on mortality and major bleeding of radial versus femoral artery access for coronary angiography or percutaneous coronary intervention: meta-analysis of individual patient data from 7 multicenter randomized clinical trials. *Circulation*. 2022; 146(18): 1329–1343, doi: [10.1161/CIRCULATIONAHA.122.061527](https://doi.org/10.1161/CIRCULATIONAHA.122.061527), indexed in Pubmed: 36036610.
39. Valgimigli M, Saia F, Guastaroba P, et al. Transradial versus transfemoral intervention for acute myocardial infarction: a propensity score-adjusted and -matched analysis from the REAL (Registro regionale Angioplastiche dell'Emilia-Romagna) multicenter registry. *JACC Cardiovasc Interv*. 2012; 5(1): 23–35, doi: [10.1016/j.jcin.2011.08.018](https://doi.org/10.1016/j.jcin.2011.08.018), indexed in Pubmed: 22230147.
40. Seto AH, Roberts JS, Abu-Fadel MS, et al. Real-time ultrasound guidance facilitates transradial access: RAUST (Radial Artery access with Ultrasound Trial). *JACC Cardiovasc Interv*. 2015; 8(2): 283–291, doi: [10.1016/j.jcin.2014.05.036](https://doi.org/10.1016/j.jcin.2014.05.036), indexed in Pubmed: 25596790.
41. Munoz-Gonzalez, E. et al. PCI in patients with cancer. *Cardiac Interventions Today*. <https://citoday.com/articles/2019-jan-feb/pci-in-patient-s-with-cancer> (accessed: February 25, 2024).
42. Mehta SR, Wood DA, Storey RF, et al. Complete revascularization with multivessel PCI for myocardial infarction. *N Engl J Med*. 2019; 381(15): 1411–1421, doi: [10.1056/nejmoa1907775](https://doi.org/10.1056/nejmoa1907775), indexed in Pubmed: 31475795.
43. Kim JW, Dayah TJ, Javadi A, et al. Reclassification of treatment strategy with fractional flow reserve in cancer patients with coronary artery disease. *Medicina (Kaunas)*. 2022; 58(7): 884, doi: [10.3390/medicina58070884](https://doi.org/10.3390/medicina58070884), indexed in Pubmed: 35888603.
44. Donisan T, Dayah T, Balanescu D, et al. Clinical outcomes after fractional flow reserve-guided treatment of oncology patients. *J Clin Oncol*. 2018; 36(Suppl 15): e22106, doi: [10.1200/jco.2018.36.15_suppl.e22106](https://doi.org/10.1200/jco.2018.36.15_suppl.e22106).
45. Madder RD, Seth M, Sukul D, et al. Rates of intracoronary imaging optimization in contemporary percutaneous coronary intervention: a report from the BMC2 registry. *Circ Cardiovasc Interv*. 2022; 15(10): e012182, doi: [10.1161/CIRCINTERVENTIONS.122.012182](https://doi.org/10.1161/CIRCINTERVENTIONS.122.012182), indexed in Pubmed: 36256694.
46. Munoz-Gonzalez E, Poulin MF, Goel M, et al. PCI in patients with cancer: Approaches for successfully treating this challenging patient population when invasive coronary procedures are needed. *Cardiac Interventions Today*. 2019.
47. de la Torre Hernandez JM, Hernandez FH, Alfonso F, et al. Prospective application of pre-defined intravascular ultrasound criteria for assessment of intermediate left main coronary artery lesions. *J Am Coll Cardiol*. 2011; 58(4): 351–358, doi: [10.1016/j.jacc.2011.02.064](https://doi.org/10.1016/j.jacc.2011.02.064), indexed in Pubmed: 21757111.
48. Richards G, Johnson T. A vision of percutaneous coronary revascularisation in 2021: How to take advantage of intra-coronary imaging to perform more effective PCI. *JRSM Cardiovasc Dis*. 2021; 10: 20480040211049978, doi: [10.1177/20480040211049978](https://doi.org/10.1177/20480040211049978), indexed in Pubmed: 35186282.
49. Räber L, Mintz GS, Koskinas KC, et al. Clinical use of intracoronary imaging. Part 1: guidance and optimization of coronary interventions. An expert consensus document of the European Association of Percutaneous Cardiovascular Interventions. *Eur Heart J*. 2018; 39(35): 3281–3300, doi: [10.1093/eurheartj/ehy285](https://doi.org/10.1093/eurheartj/ehy285), indexed in Pubmed: 29790954.
50. Johnson TW, Räber L, Di Mario C, et al. Clinical use of intracoronary imaging. Part 2: acute coronary syndromes, ambiguous coronary angiography findings, and guiding interventional decision-making: an expert consensus document of the European Association of Percutaneous Cardiovascular Interventions. *Eur Heart J*. 2019; 40(31): 2566–2584, doi: [10.1093/eurheartj/ehz332](https://doi.org/10.1093/eurheartj/ehz332), indexed in Pubmed: 31112213.
51. Lotfi A, Jeremias A, Fearon WF, et al. Expert consensus statement on the use of fractional flow reserve, intravascular ultrasound, and optical coherence tomography: a consensus statement of the Society of Cardiovascular Angiography and Interventions. *Catheter Cardiovasc Interv*. 2014; 83(4): 509–518, doi: [10.1002/ccd.25222](https://doi.org/10.1002/ccd.25222), indexed in Pubmed: 24227282.
52. Iliescu CA, Cilingiroglu M, Giza DE, et al. „Bringing on the light” in a complex clinical scenario: Optical coherence tomography-guided discontinuation of antiplatelet therapy in cancer patients with coronary artery disease (PROTECT-OCT registry). *Am Heart J*. 2017; 194: 83–91, doi: [10.1016/j.ahj.2017.08.015](https://doi.org/10.1016/j.ahj.2017.08.015), indexed in Pubmed: 29223438.
53. Valgimigli M, Patialiakas A, Thury A, et al. Zotarolimus-eluting versus bare-metal stents in uncertain drug-eluting stent candidates. *J Am Coll Cardiol*. 2015; 65(8): 805–815, doi: [10.1016/j.jacc.2014.11.053](https://doi.org/10.1016/j.jacc.2014.11.053).
54. Ariotti S, Adamo M, Costa F, et al. Is bare-metal stent implantation still justifiable in high bleeding risk patients undergoing percutaneous coronary intervention?: a pre-specified analysis from the ZEUS trial. *JACC Cardiovasc Interv*. 2016; 9(5): 426–436, doi: [10.1016/j.jcin.2015.11.015](https://doi.org/10.1016/j.jcin.2015.11.015), indexed in Pubmed: 26965932.
55. Urban P, Meredith IT, Abizaid A, et al. Polymer-free drug-coated coronary stents in patients at high bleeding risk. *N Engl J Med*. 2015; 373(21): 2038–2047, doi: [10.1056/NEJMoa1503943](https://doi.org/10.1056/NEJMoa1503943), indexed in Pubmed: 26466021.
56. Windecker S, Latib A, Kedhi E, et al. Polymer-based or polymer-free stents in patients at high bleeding risk. *N Engl J Med*. 2020; 382(13): 1208–1218, doi: [10.1056/nejmoa1910021](https://doi.org/10.1056/nejmoa1910021), indexed in Pubmed: 32050061.
57. Mehran R, Baber U, Sharma SK, et al. Ticagrelor with or without aspirin in high-risk patients after PCI. *N Engl J Med*. 2019; 381(21): 2032–2042, doi: [10.1056/NEJMoa1908419](https://doi.org/10.1056/NEJMoa1908419), indexed in Pubmed: 31556978.
58. Jeger RV, Eccleshall S, Wan Ahmad WA, et al. Drug-coated balloons for coronary artery disease: Third report of the international DBC consensus group. *JACC Cardiovasc Interv*. 2020; 13(12): 1391–1402, doi: [10.1016/j.jcin.2020.02.043](https://doi.org/10.1016/j.jcin.2020.02.043), indexed in Pubmed: 32473887.
59. Latib A, Colombo A, Castriota F, et al. A randomized multicenter study comparing a paclitaxel drug-eluting balloon with a paclitaxel-eluting stent in small coronary vessels: the BELLO (Balloon Elution and Late Loss Optimization) study. *J Am Coll Cardiol*. 2012; 60(24): 2473–2480, doi: [10.1016/j.jacc.2012.09.020](https://doi.org/10.1016/j.jacc.2012.09.020), indexed in Pubmed: 23158530.
60. Mathey DG, Wendig I, Boxberger M, et al. Treatment of bifurcation lesions with a drug-eluting balloon: the PEPCAD V (Paclitaxel Eluting PTCA Balloon in Coronary Artery Disease) trial. *EuroIntervention*. 2011; 7 Suppl K: K61–K65, doi: [10.4244/EIJV7SKA11](https://doi.org/10.4244/EIJV7SKA11), indexed in Pubmed: 22027730.
61. Scheller B, Ohlow MA, Ewen S, et al. Bare metal or drug-eluting stent versus drug-coated balloon in non-ST-elevation myocardial infarction: the randomised PEPCAD NSTEMI trial. *EuroIntervention*. 2020; 15(17): 1527–1533, doi: [10.4244/EIJ-D-19-00723](https://doi.org/10.4244/EIJ-D-19-00723), indexed in Pubmed: 31659986.
62. Valgimigli M, Smits PC, Frigoli E, et al. Duration of antiplatelet therapy after complex percutaneous coronary intervention in patients at high bleeding risk: a MASTER DAPT trial sub-analysis. *Eur Heart J*. 2022; 43(33): 3100–3114, doi: [10.1093/eurheartj/ehac284](https://doi.org/10.1093/eurheartj/ehac284), indexed in Pubmed: 35580836.
63. Watanabe H, Domei T, Morimoto T, et al. Effect of 1-month dual antiplatelet therapy followed by clopidogrel vs 12-month dual antiplatelet therapy on cardiovascular and bleeding events in patients receiving PCI: the STOPDAPT-2 randomized clinical trial. *JAMA*. 2019; 321(24): 2414–2427, doi: [10.1001/jama.2019.8145](https://doi.org/10.1001/jama.2019.8145), indexed in Pubmed: 31237644.
64. Byrne RA, Rossello X, Coughlan JJ, et al. 2023 ESC Guidelines for the management of acute coronary syndromes: developed by the task force on the management of acute coronary syndromes of the European Society of Cardiology (ESC). *Eur Heart J*. 2023; 44(38): 3720–3826, doi: [10.1093/eurheartj/ehad191](https://doi.org/10.1093/eurheartj/ehad191), indexed in Pubmed: 37622654.
65. Leszek P, Klotzka A, Bartuś S, et al. A practical approach to the 2022 ESC cardio-oncology guidelines: Comments by a team of experts - cardiologists and oncologists. *Kardiol Pol*. 2023; 81(10): 1047–1063, doi: [10.33963/v.kp.96840](https://doi.org/10.33963/v.kp.96840), indexed in Pubmed: 37660389.