

## References

1. Tolbod L.P. & Gormsen L.C. (2021). Routine clinical use of <sup>15</sup>O-water cardiac PET: Initial experience with a novel automated solution. European Heart Journal - Cardiovascular Imaging 2021 Volume 22, Supplement
2.
  - 2.1 Harms, H.J., et al., Comparison of clinical non-commercial tools for automated quantification of myocardial blood flow using oxygen-15-labelled water PET/CT. Eur Heart J Cardiovasc Imaging, 2014. 15(4): p. 431-41.
  - 2.2 Danad, I., et al., Impact of anatomical and functional severity of coronary atherosclerotic plaques on the transmural perfusion gradient: a [<sup>15</sup>O]H<sub>2</sub>O PET study. Eur Heart J, 2014. 35(31): p. 2094-105.
  - 2.3 van Diemen, P.A., et al., Defining the prognostic value of [<sup>15</sup>O]H<sub>2</sub>O positron emission tomography-derived myocardial ischaemic burden. Eur Heart J Cardiovasc Imaging, 2021. 22(6): p. 638-646.
  - 2.4 Jukema, R., et al., Warranty period of coronary computed tomography angiography and [<sup>15</sup>O]H<sub>2</sub>O positron emission tomography in symptomatic patients. Eur Heart J Cardiovasc Imaging, 2023. 24(3): p. 304-311.
  - 2.5 Nordstrom, J., et al., Influence of image reconstruction on quantitative cardiac (<sup>15</sup>O)-water positron emission tomography. J Nucl Cardiol, 2022.
  - 2.6 Nordstrom, J., et al., Effect of PET-CT misalignment on the quantitative accuracy of cardiac (<sup>15</sup>O)-water PET. J Nucl Cardiol, 2022. 29(3): p. 1119-1128.
  - 2.7 Nordstrom, J., et al., Influence of patient motion on quantitative accuracy in cardiac (<sup>15</sup>O)-water positron emission tomography. J Nucl Cardiol, 2022. 29(4): p. 1742-1752.
  - 2.8 Clemmensen, T.S., et al., Clinical features, exercise hemodynamics, and determinants of left ventricular elevated filling pressure in heart-transplanted patients. Transpl Int, 2016. 29(2): p. 196-206.
  - 2.9 Clemmensen, T.S., et al., Noninvasive Detection of Cardiac Allograft Vasculopathy by Stress Exercise Echocardiographic Assessment of Myocardial Deformation. J Am Soc Echocardiogr, 2016. 29(5): p. 480-90.
  - 2.10 Clemmensen, T.S., et al., Right ventricular hemodynamics and performance in relation to perfusion during first year after heart transplantation. ESC Heart Fail, 2021. 8(5): p. 4018-4025.
  - 2.11 Clemmensen, T.S., et al., Myocardial Perfusion and the Relation to Central Hemodynamics in the Acute Phase After Heart Transplantation. The Journal of Heart and Lung Transplantation, 2018. 37(4).
  - 2.12 LC Gormsen, M Svart, HH Thomsen, E Søndergaard, M Vendelbo, N Christensen, LP Tolbod, HJ Harms, R Nielsen, H Wiggers, N Jessen, J Hansen, HE Bøtker, N Møller. Ketone Body Infusion With 3-Hydroxybutyrate Reduces Myocardial Glucose Uptake and Increases

- Blood Flow in Humans: A Positron Emission Tomography Study. *J Am Heart Assoc.* 2017 Feb 27;6(3). DOI: 10.1161/JAHA.116.005066.)
- 2.13 Gronman, M., et al., Assessment of myocardial viability with [(15)O]water PET: A validation study in experimental myocardial infarction. *J Nucl Cardiol*, 2021. 28(4): p. 1271-1280.
  - 2.14 Harms, H.J., et al., Association of Right Ventricular Myocardial Blood Flow With Pulmonary Pressures and Outcome in Cardiac Amyloidosis. *JACC Cardiovasc Imaging*, 2023. 16(9): p. 1193-1204
  - 2.15 Harms, H.J., et al., Automatic extraction of forward stroke volume using dynamic PET/CT: a dual-tracer and dual-scanner validation in patients with heart valve disease. *EJNMMI Phys*, 2015. 2(1): p. 25.
  - 2.16 Kero, T., et al., Evaluation of quantitative CMR perfusion imaging by comparison with simultaneous (15)O-water-PET. *J Nucl Cardiol*, 2021. 28(4): p. 1252-1266.
  - 2.17 Kero, T., et al., Quantitative myocardial blood flow imaging with integrated time-of-flight PET-MR. *EJNMMI Phys*, 2017. 4(1): p. 1.
  - 2.18 Kero, T., et al., Quantitative myocardial perfusion response to adenosine and regadenoson in patients with suspected coronary artery disease. *J Nucl Cardiol*, 2022. 29(1): p. 24-36.
  - 2.19 Kjeld, T., et al., Cardiac hypoxic resistance and decreasing lactate during maximum apnea in elite breath hold divers. *Sci Rep*, 2021. 11(1): p. 2545.
  - 2.20 Magnusson, P., et al., Positron emission tomography ((15)O-water, (11)C-acetate, (11)C-HED) risk markers and nonsustained ventricular tachycardia in hypertrophic cardiomyopathy. *Int J Cardiol Heart Vasc*, 2020. 26: p. 100452.
  - 2.21 Nielsen, R., et al., Heart failure patients with prediabetes and newly diagnosed diabetes display abnormalities in myocardial metabolism. *J Nucl Cardiol*, 2018. 25(1): p. 169-176.
  - 2.22 Nielsen, R., et al., Effect of liraglutide on myocardial glucose uptake and blood flow in stable chronic heart failure patients: A double-blind, randomized, placebo-controlled LIVE sub-study. *J Nucl Cardiol*, 2019. 26(2): p. 585-597.
  - 2.23 Nordstrom, J., et al., Calculation of left ventricular volumes and ejection fraction from dynamic cardiac-gated (15)O-water PET/CT: 5D-PET. *EJNMMI Phys*, 2017. 4(1): p. 26.
  - 2.24 Nordstrom, J., et al., Left-ventricular volumes and ejection fraction from cardiac ECG-gated (15)O-water positron emission tomography compared to cardiac magnetic resonance imaging using simultaneous hybrid PET/MR. *J Nucl Cardiol*, 2023. 30(4): p. 1352-1362
  - 2.25 Pryds, K., et al., Effect of remote ischemic conditioning on myocardial perfusion in patients with suspected ischemic coronary artery disease. *J Nucl Cardiol*, 2018. 25(3): p. 887-896.
  - 2.26 Vester, M., et al., Myocardial perfusion imaging by (15)O-H(2)O positron emission tomography predicts clinical revascularization procedures in

- symptomatic patients with previous coronary artery bypass graft. Eur Heart J Open, 2023. 3(3): p. oead044.
- 2.27 Bakkum, M.J., et al., The impact of obesity on the relationship between epicardial adipose tissue, left ventricular mass and coronary microvascular function. Eur J Nucl Med Mol Imaging, 2015. 42(10): p. 1562-73.
- 2.28 Bom, M.J., et al., Diagnostic value of longitudinal flow gradient for the presence of haemodynamically significant coronary artery disease. Eur Heart J Cardiovasc Imaging, 2019. 20(1): p. 21-30.
- 2.29 Bom, M.J., et al., Impact of individualized segmentation on diagnostic performance of quantitative positron emission tomography for haemodynamically significant coronary artery disease. Eur Heart J Cardiovasc Imaging, 2019. 20(5): p. 525-532.
- 2.30 Bom, M.J., et al., Prognostic value of  $[15\text{O}]H_2O$  positron emission tomography-derived global and regional myocardial perfusion. Eur Heart J Cardiovasc Imaging, 2020. 21(7): p. 777-786.
- 2.31 Chen, W.J., et al., Effect of type 2 diabetes mellitus on epicardial adipose tissue volume and coronary vasomotor function. Am J Cardiol, 2014. 113(1): p. 90-7.
- 2.32 Chen, W.J.Y., et al., Effects of exenatide on cardiac function, perfusion, and energetics in type 2 diabetic patients with cardiomyopathy: a randomized controlled trial against insulin glargine. Cardiovasc Diabetol, 2017. 16(1): p. 67.
- 2.33 Danad, I., et al., Quantitative relationship between coronary artery calcium score and hyperemic myocardial blood flow as assessed by hybrid  $^{15}\text{O}$ -water PET/CT imaging in patients evaluated for coronary artery disease. 2012. 19(2): p. 256-64.
- 2.34 Danad, I., et al., Hybrid imaging using quantitative H $^{215}\text{O}$  PET and CT-based coronary angiography for the detection of coronary artery disease. J Nucl Med, 2013. 54(1): p. 55-63.
- 2.35 Danad, I., et al., Coronary risk factors and myocardial blood flow in patients evaluated for coronary artery disease: a quantitative  $[15\text{O}]H_2O$  PET/CT study. Eur J Nucl Med Mol Imaging, 2012. 39(1): p. 102-12.
- 2.36 Danad, I., et al., Effect of cardiac hybrid  $(1)(5)\text{O}$ -water PET/CT imaging on downstream referral for invasive coronary angiography and revascularization rate. Eur Heart J Cardiovasc Imaging, 2014. 15(2): p. 170-9.
- 2.37 Danad, I., et al., Carotid artery intima-media thickness, but not coronary artery calcium, predicts coronary vascular resistance in patients evaluated for coronary artery disease. Eur Heart J Cardiovasc Imaging, 2012. 13(4): p. 317-23.
- 2.38 de Haan, S., et al., Parametric imaging of myocardial viability using  $(1)(5)\text{O}$ -labelled water and PET/CT: comparison with late gadolinium-enhanced CMR. Eur J Nucl Med Mol Imaging, 2012. 39(8): p. 1240-5.
- 2.39 de Waard, G.A., et al., Fractional flow reserve, instantaneous wave-free ratio, and resting Pd/Pa compared with  $[15\text{O}]H_2O$  positron emission

- tomography myocardial perfusion imaging: a PACIFIC trial sub-study. Eur Heart J, 2018. 39(46): p. 4072-4081.
- 2.40 de Winter, R.W., et al., The impact of coronary revascularization on vessel-specific coronary flow capacity and long-term outcomes: a serial [<sup>15</sup>O]H<sub>2</sub>O positron emission tomography perfusion imaging study. Eur Heart J Cardiovasc Imaging, 2022. 23(6): p. 743-752.
- 2.41 Driessen, R.S., et al., Incremental prognostic value of hybrid [<sup>15</sup>O]H<sub>2</sub>O positron emission tomography-computed tomography: combining myocardial blood flow, coronary stenosis severity, and high-risk plaque morphology. Eur Heart J Cardiovasc Imaging, 2020. 21(10): p. 1105-1113.
- 2.42 Driessen, R.S., et al., Impact of Revascularization on Absolute Myocardial Blood Flow as Assessed by Serial [(<sup>15</sup>O)H(<sup>2</sup>)O Positron Emission Tomography Imaging: A Comparison With Fractional Flow Reserve. Circ Cardiovasc Imaging, 2018. 11(5): p. e007417.
- 2.43 Driessen, R.S., et al., Effect of Plaque Burden and Morphology on Myocardial Blood Flow and Fractional Flow Reserve. J Am Coll Cardiol, 2018. 71(5): p. 499-509.
- 2.44 Everaars, H., et al., Doppler Flow Velocity and Thermodilution to Assess Coronary Flow Reserve: A Head-to-Head Comparison With [(<sup>15</sup>O)H(<sup>2</sup>)O PET. JACC Cardiovasc Interv, 2018. 11(20): p. 2044-2054.
- 2.45 Everaars, H., et al., Continuous thermodilution to assess absolute flow and microvascular resistance: validation in humans using [<sup>15</sup>O]H<sub>2</sub>O positron emission tomography. Eur Heart J, 2019. 40(28): p. 2350-2359.
- 2.46 Everaars, H., et al., Comparison between cardiac magnetic resonance stress T<sub>1</sub> mapping and [<sup>15</sup>O]H<sub>2</sub>O positron emission tomography in patients with suspected obstructive coronary artery disease. Eur Heart J Cardiovasc Imaging, 2022. 23(2): p. 229-237.
- 2.47 Everaars, H., et al., Comparison between quantitative cardiac magnetic resonance perfusion imaging and [(<sup>15</sup>O)H(<sup>2</sup>)O positron emission tomography. Eur J Nucl Med Mol Imaging, 2020. 47(7): p. 1688-1697.
- 2.48 Harms, H.J., et al., Use of a Single <sup>11</sup>C-Meta-Hydroxyephedrine Scan for Assessing Flow-Innervation Mismatches in Patients with Ischemic Cardiomyopathy. J Nucl Med, 2015. 56(11): p. 1706-11.
- 2.49 Heijne, M., et al., Coronary steal: revealing the diagnosis with quantitative cardiac PET/CT. J Nucl Cardiol, 2010. 17(6): p. 1118-21.
- 2.50 Rijnierse, M.T., et al., Non-invasive imaging to identify susceptibility for ventricular arrhythmias in ischaemic left ventricular dysfunction. Heart, 2016. 102(11): p. 832-40.
- 2.51 Rijnierse, M.T., et al., Impaired hyperemic myocardial blood flow is associated with inducibility of ventricular arrhythmia in ischemic cardiomyopathy. Circ Cardiovasc Imaging, 2014. 7(1): p. 20-30.
- 2.52 Stuijfzand, W.J., et al., Prevalence of ischaemia in patients with a chronic total occlusion and preserved left ventricular ejection fraction. Eur Heart J Cardiovasc Imaging, 2017. 18(9): p. 1025-1033.

- 2.53 Stuijfzand, W.J., et al., Myocardial Blood Flow and Coronary Flow Reserve During 3 Years Following Bioresorbable Vascular Scaffold Versus Metallic Drug-Eluting Stent Implantation: The VANISH Trial. *JACC Cardiovasc Interv*, 2019. 12(10): p. 967-979.
- 2.54 Stuijfzand, W.J., et al., Relative flow reserve derived from quantitative perfusion imaging may not outperform stress myocardial blood flow for identification of hemodynamically significant coronary artery disease. *Circ Cardiovasc Imaging*, 2015. 8(1).
- 2.55 Teunissen, P.F., et al., Coronary vasomotor function in infarcted and remote myocardium after primary percutaneous coronary intervention. *Heart*, 2015. 101(19): p. 1577-83.
- 2.56 Timmer, S.A.J., et al., In vivo assessment of myocardial viability after acute myocardial infarction: A head-to-head comparison of the perfusable tissue index by PET and delayed contrast-enhanced CMR. *J Nucl Cardiol*, 2017. 24(2): p. 657-667.
- 2.57 van Diemen, P.A., et al., Prognostic Value of RCA Pericoronal Adipose Tissue CT-Attenuation Beyond High-Risk Plaques, Plaque Volume, and Ischemia. *JACC Cardiovasc Imaging*, 2021. 14(8): p. 1598-1610.
3. LP Tolbod, LC Gormsen: Routine clinical use of <sup>15</sup>O-water cardiac PET: Initial experience with a novel automated solution. *European Heart Journal - Cardiovascular Imaging*, Volume 22, Issue Supplement\_3, June 2021, jeab111.029.
4. Tomiyama Y, Manabe O, Oyama-Manabe N, Naya M, Sugimori H, Hirata K, Mori Y, Tsutsui H, Kudo K, Tamaki N et al: Quantification of myocardial blood flow with dynamic perfusion 3.0 Tesla MRI: Validation with (15) O-water PET. *J Magn Reson Imaging* 2015, 42(3):754-762.
5. Ito Y, Katoh C, Noriyasu K, Kuge Y, Furuyama H, Morita K, Kohya T, Kitabatake A, Tamaki N: Estimation of myocardial blood flow and myocardial flow reserve by 99mTc-sestamibi imaging: comparison with the results of [15O]H<sub>2</sub>O PET. *Eur J Nucl Med Mol Imaging* 2003, 30(2):281-287.
6. De Bruyne B, Baudhuin T, Melin JA, Pijls NH, Sys SU, Bol A, Paulus WJ, Heyndrickx GR, Wijns W: Coronary flow reserve calculated from pressure measurements in humans. Validation with positron emission tomography. *Circulation* 1994, 89(3):1013-1022.
7. Dijkmans PA, Knaapen P, Sieswerda GT, Aliazian E, Visser CA, Lammertsma AA, Visser FC, Kamp O: Quantification of myocardial perfusion using intravenous myocardial contrast echocardiography in healthy volunteers: comparison with positron emission tomography. *J Am Soc Echocardiogr* 2006, 19(3):285-293.
8. MG Stabin, JB Stubbs and RE Toohey, Oak Ridge Institute for Science and Education. Radiation Dose Estimates for Radiopharmaceuticals NUREG/CR-6345.