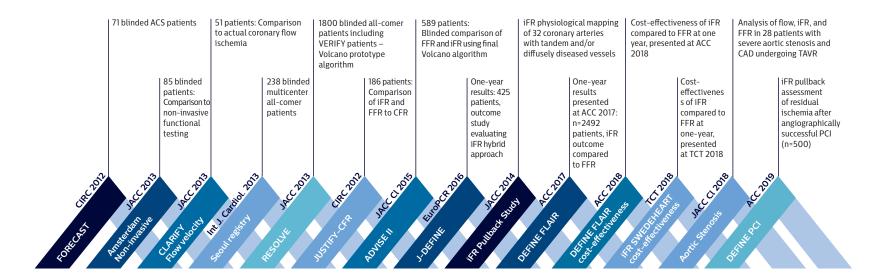
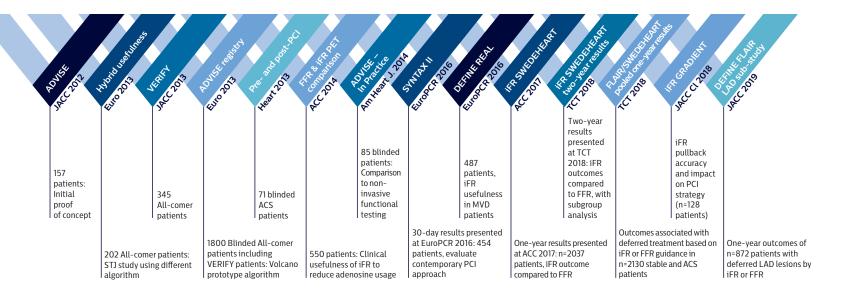


## Proven outcomes iFR clinically-validated patient outcome data





- Sen S, et al. Development and validation of a new adenosine-independent index of stenosis severity from coronary wave-intensity analysis: results of the ADVISE (Adenosine Vasodilator Independent Stenosis Evaluation) study. J Am Coll Cardiol. 2012 Apr 10;59(15):1392-402.
- Petraco R, et al. Classification performance of instantaneous wavefree ratio (iFR) and fractional flow reserve in a clinical population of intermediate coronary stenoses: results of the ADVISE registry. EuroIntervention. 2013 May 20:9(1):91-101.
- Berry C, et al. VERIFY (VERification of Instantaneous Wave-Free Ratio and Fractional Flow Reserve for the Assessment of Coronary Artery Stenosis Severity in Everyday Practice): A Multicenter Study in Consecutive Patients. J Am Coll Cardiol. 2013 Apr 2;61(13):1421-1.
- Jeremias A, et al. Multicenter core laboratory comparison of the instantaneous wave-free ratio and resting Pd/Pa with fractional flow reserve: the RESOLVE study. J Am Coll Cardiol. 2014 Apr 8:63(13):1253-61.
- De Rosa S, et al. Resting Pressure Gradient (iFG) Instantaneous Wave-free ratio (iFR) for Non-culprit Stenosis Evaluation in Patients with Acute Coronary Syndromes. Preliminary Data from the FORE-CAST Study. Circulation. 2012; 126: Abstract 18978.
- Petraco R, et al. Hybrid iFR®-FFR decision-making strategy: implications for enhancing universal adoption of physiology-guided coronary revascularisation. EuroIntervention. 2013 Feb 22:8(10):1157-65.
- van de Hoef T, et al. Basal Stenosis Resistance Index and Instantaneous Wave—Free Ratio Have the Same Diagnostic Performance as Fractional Flow Reserve to Detect Myocardial Ischemia Using Myocardial Perfusion Imaging. J Am Coll Cardiol. 2013;61(10\_S):. doi:10.1016/S0735-1097(13)61756-8.
- Sen S, et al. Diagnostic Classification of the Instantaneous Wave-Free Ratio Is Equivalent to Fractional Flow Reserve and Is Not Improved With Adenosine Administration: Results of CLARIFY (Classification Accuracy of Pressure-Only Ratios Against Indices Using Flow Study). J Am Coll Cardiol. 2013 Apr 2;61(13):1409-20.
- Park JJ, et al., Clinical validation of the resting pressure parameters in the assessment of functionally significant coronary stenosis; results of an independent, blinded comparison with fractional flow reserve. Int J Cardiol. 2013 Oct 9;168(4):4070-5.
- Nijjer SS, et al. Improvement in coronary haemodynamics after percutaneous intervention: assessment using instantaneous wave-free ratio. Heart. 2013 Dec;99(23):1740-8.

- Escaned J, et al; ADVISE II Study Group. Prospective Assessment of the Diagnostic Accuracy of Instantaneous Wave-Free Ratio to Assess Coronary Stenosis Relevance: Results of ADVISE II International, Multicenter Study (ADenosine Vasodilator Independent Stenosis Evaluation II). JACC Cardiovasc Interv. 2015 May;8(6):824-33
- de Waard G, et al. Hyperemic FFR and baseline iFR have an equivalent diagnostic accuracy when compared to myocardial blood flow quanitifed by H2O15 PET Perfusion Imaging. Abstract presented at ACC 2014.
- Petraco R. et al. Baseline Instantaneous Wave-Free Ratio as a Pressure-Only Estimation of Underlying Coronary Flow Reserve: Results of the JUSTIFY-CFR Study (Joined Coronary Pressure and Flow Analysis to Determine Diagnostic Characteristics of Basal and Hyperemic Indices of Functional Lesion Severity-Coronary Flow Reserve). Circ Cardiovasc Interv. 2014 Jul 1.
- Petraco R. et al. Real-time utilisation of instantaneous wave-Free Ratio: Results of the ADVISE in-practice: an international, multi-centre evaluation of iFR in clinical practice. Am Heart J. Epub 2014 July 21.
- Nijjer SS, et al., Pre-angioplasty instantaneous wave-free ratio pullback provides virtual intervention and predicts hemodynamic outcome for serial lesions and diffuse coronary artery disease. JACC Cardiovasc Interv. 2014 Dec;7(12):1386-96.
- A prospective, observational, European, multi-center registry, collecting REAL-life information on the utilization of instantaneous wave-free ratio (iFR) in the multi-vessel disease patients population, E. Van Belle, presented at EuroPCR 2016.
- One year clinical follow-up outcome of on-site iFR-FFR hybrid approach: J-DEFINE registry, Masato Makamura et al., presented at EuroPCR 2016.
- iFR/FFR and IVUS Guided Percutaneous Coronary Revascularization with New Generation Drug-eluting Stents in Patients with De Novo Three Vessel Disease: 30 days outcomes of the SYNTAX II trial, P. Serruys, MD PhD, presented at EuroPCR 2016.
- Davies JE, et al., DEFINE-FLAIR: A Multi- Centre, Prospective, International, Randomized, Blinded Comparison of Clinical Outcomes and Cost Efficiencies of iFR and FFR Decision-Making for Physiological Guided Coronary Revascularization. New England Journal of Medicine, epub March 18, 2017.
- Gotberg M, et al., Instantaneous Wave-Free Ratio Versus Fractional Flow Reserve Guided Intervention (IFR-SWEDEHEART): A Multicenter, Prospective, Registry-Based Randomized Clinical Trial. New England Journal of Medicine, epub March 18, 2017.

- Patel, M. Cost-effectiveness of instantaneous wave-Free Ratio (iFR) compared with Fractional Flow Reserve (FFR) to guide coronary revascularization decision-making – Analysis from DEFINE FLAIR. Late Breaking Clinical Trial Presentation at ACC 2018.
- 22. Gotberg, M. Is iFR Guided Revascularization Effective and Cost Saving? Presented at TCT 2018.
- 23. Frobert, O. iFR Swedeheart: Two-year results, Randomized Trial of Instantaneous Wave-Free Ratio vs Fractional Flow Reserve Guided PCI. Presented at TCT 2018.
- Escaned et al. Safety of coronary revascularization deferral based on iFR and FFR measurements in stable angina and acute coronary syndromes, a pooled patient-level analysis of DEFINE FLAIR and iFR SWEDEHEART trials. J Am Coll Cardiol Intv 2018;11(15):1437-1449.
- Kikuta et al. Pre-Angioplasty Instantaneous Wave-Free Ratio Pullback Predicts Hemodynamic Outcome In Humans With Coronary Artery Disease. JACC: Cardiovascular Interventions Apr 2018, 11 (8) 757-767; DOI: 10.1016/j.jcin.2018.03.005
- Ahmad et al. Coronary Flow in Severe Aortic Stenosis and CAD.
   JACC: Cardiovascular Interventions Oct 2018, 11 (20) 2019–2031; DOI: 10.1016/j.jcin.2018.07.019
- Sen et al. Clinical events after deferral of LAD revascularization following physiological coronary assessment. JACC 2019; 73(4):444-53.
- 28. Jeremias, A. The DEFINE PCI Trial: Blinded Physiologic Assessment of Residual Ischemia After Successful Angiographic Percutaneous Coronary Intervention. Presented at ACC 2019.



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