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Simply accurate.

Experience the new standard in angiography-based FFR

Medis QFR®

Clinical Evidence

SIMPLE FAST PROVEN

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Physiology made simple.

Powered by artificial intelligence and backed by scientific evidence, Medis QFR® is a novel noninvasive software solution, designed to assess angiography-derived physiology in patients with epicardial artery disease.

Medis QFR® streamlines procedures, saving time, and minimizing risks for interventional cardiologists

Pre-PCI
Analyze efficiently

Assess coronary lesion severity and morphology effectively[1]
Identify functionally significant lesions & CAD patterns for treatment planning
Predict post-PCI QFR[1]

During PCI
Optimize confidently

Enhance confident decision-making using immediate objective lesion data[2]
Determine the stent size & length for optimal stent positioning and placement
Streamline workflow during procedures[1]

Post-PCI
Evaluate safely

Evaluate physiological improvement and ensure long term safety & effectiveness
Improve patient's clinical outcomes[3]
Defer patients confidently sparing unnecessary Cath lab visits[4]

Simple, fast & proven.
One tool. Comprehensive insights.

Patient Safety
No wire manipulation

Patient comfort
No adenosine to inject

Measurement accuracy
No threat of signal drift (i.e., impaired accuracy)

Adaptation
No limitation with tortuous vessels

Speed
Automatic physiology & morphology insights

Unmatched clinical accuracy

Medis QFR® stands out with its proven exceptional accuracy in **clinical settings**.

QFR® vs. angiographic assessment	QFR® vs. FFR	QFR® vs. iFR
0.92 AuC	**0.94** AuC	**0.88** AuC
"Online computation of QFR in the Cath lab is clinically feasible and superior to angiographic assessment for evaluation of intermediary coronary artery stenosis using FFR as a reference standard.[5]"	"Excellent correlation and agreement between QFR and FFR was demonstrated. QFR value below the threshold of 0.80 optimally predicts functional significance of coronary stenosis.[6]"	"QFR showed excellent correlation and diagnostic performance for both invasive pressure–derived physiologic indices (FFR and iFR), regardless of clinical presentation.[7]"

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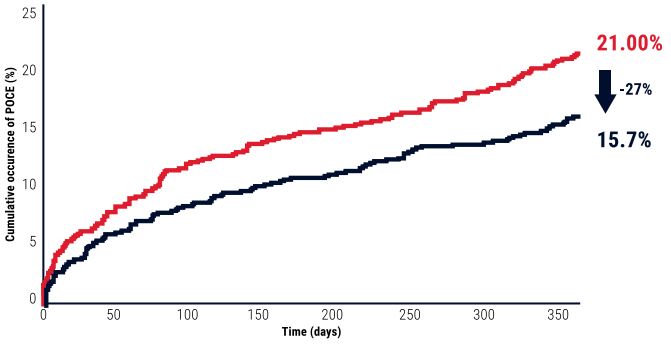
FIRE multicenter trial demonstrates superiority of physiology-guided complete revascularization

QFR and pressure wire guided complete revascularization superior to culprit-only revascularization[8]

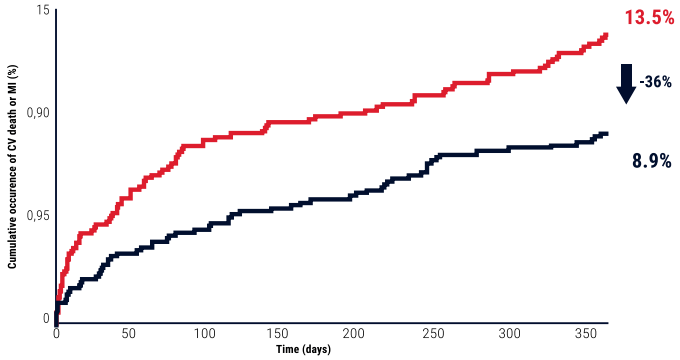
Physiology-guided complete revascularization in older patients (n=720) with myocardial infarction and multivessel disease leads to lower risk of adverse cardiovascular events compared to culprit-lesion–only (n=725) PCI. Physiological assessment was conducted by means of wire-based methods (hyperemic or non-hyperemic) and angiography-based QFR measurements.

Primary endpoint: death, MI, Stroke, or ID-revascularization



Physiology-guided complete revascularization led to 27% lower relative risk of composite outcome (death, myocardial infarction, stroke, or revascularization) compared to **culprit-only.**

Key secondary endpoint: CV death or MI

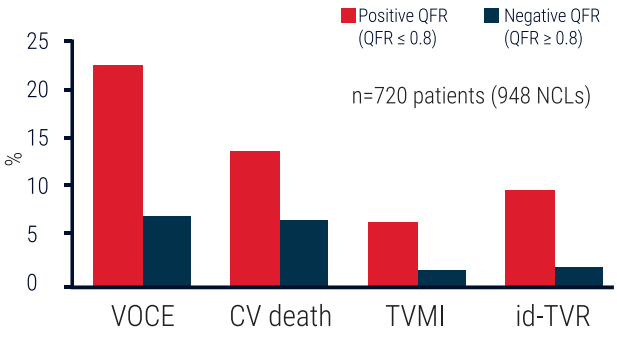


Physiology-guided complete revascularization led to 36% reduction in cardiovascular death or myocardial infarction, compared to **culprit-only.**

QFiRe: QFR-guided PCI of NCLs is non-inferior to wire-based physiology[9]

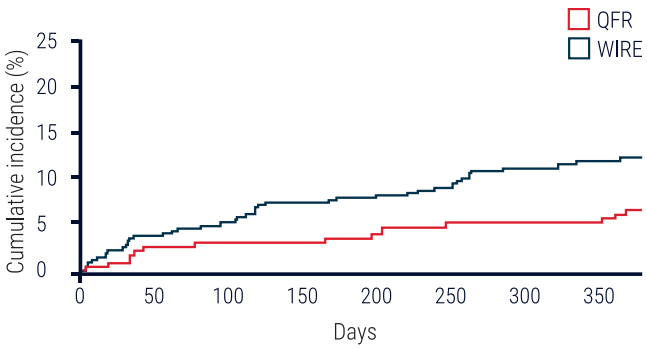
FIRE's prespecified sub-study assessing QFR for the revascularization of non-culprit lesions (NCLs) in older AMI patients (≥75 years) validates the safety and efficacy of QFR-guided interventions.

QFR computation of NCLs of the culprit-arm



QFR value ≤0.80 stands out as an independent predictor of VOCE, TVMI & id-TVR and effectively identifies NCLs at a higher risk of adverse events.

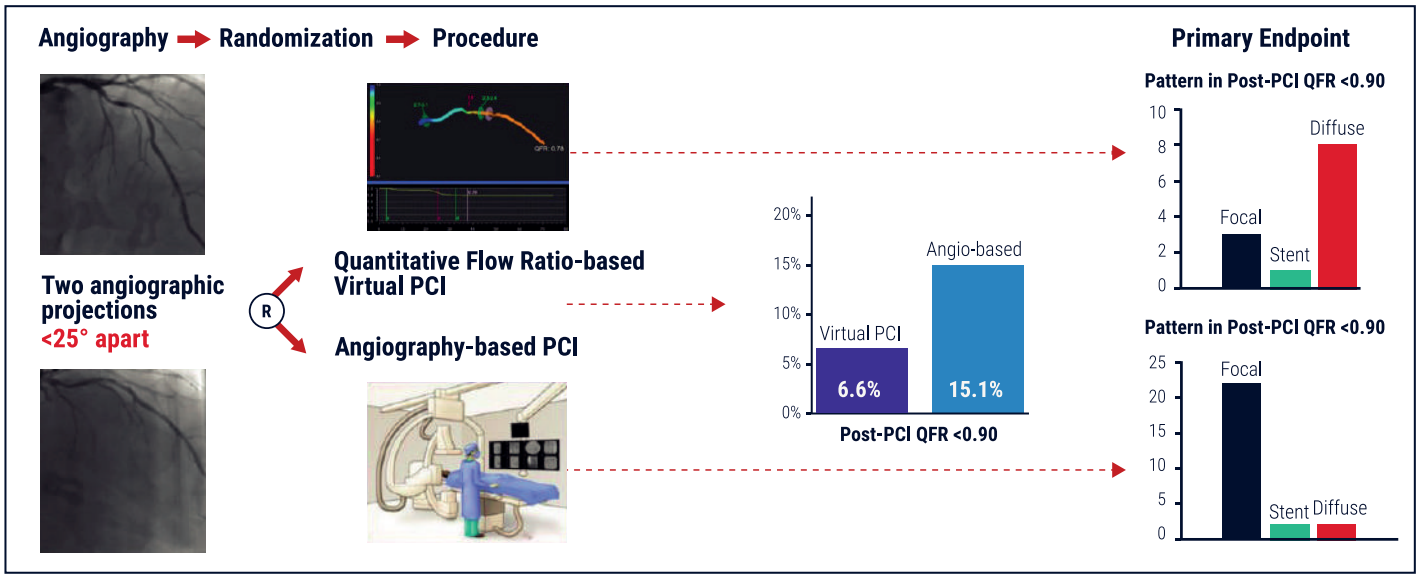
Comparison between QFR guidance and wire-based guidance PCI in physiology-complete arm



Occurrence of VOCE after adjusting for propensity score matching: QFR result non-inferior to wire-based tools in NCLs treatment.

Pre-PCI: QFR helps in PCI planning[10]

The AQVA trial demonstrated superiority of a QFR-based virtual PCI plan versus a conventional angio-based approach with regard to post-PCI optimal physiological results.

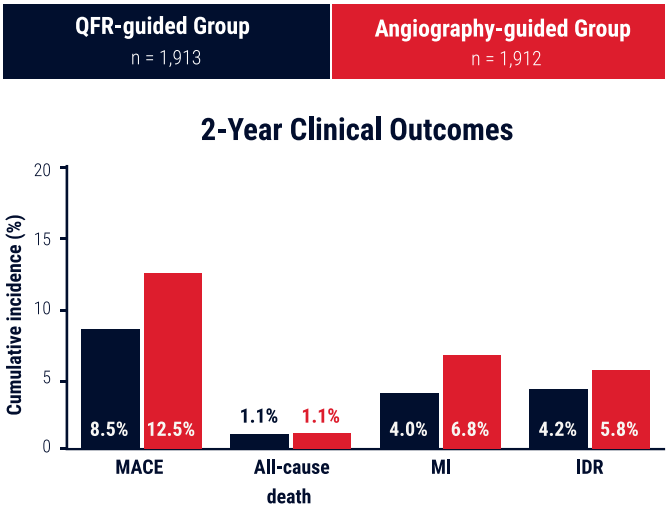


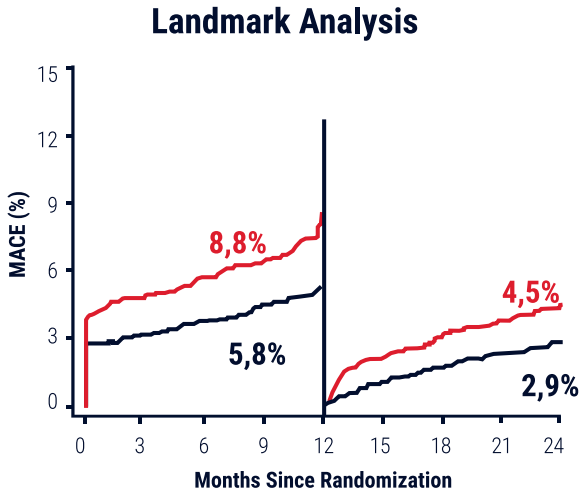
The **QFR-based virtual PCI** strategy changed the operators' procedural plan in one-quarter of the cases and was not associated with either longer procedures or a higher amount of contrast or radiation dose.

During-PCI: QFR-guided PCI approach improves long term clinical outcomes[11]

The FAVOR III Trial demonstrated a 32% reduction in MACE in a 2-year follow-up (FU) study.

3,825 patients with at least 1 lesion with DS% of 50-90% in a coronary artery with at least a 2.5 mm RVD by visual assessment





QFR resulted in a strategy change in 23.3% of patients, with 19.6% undergoing deferral and 4.4% receiving treatment for a vessel initially not planned for intervention.

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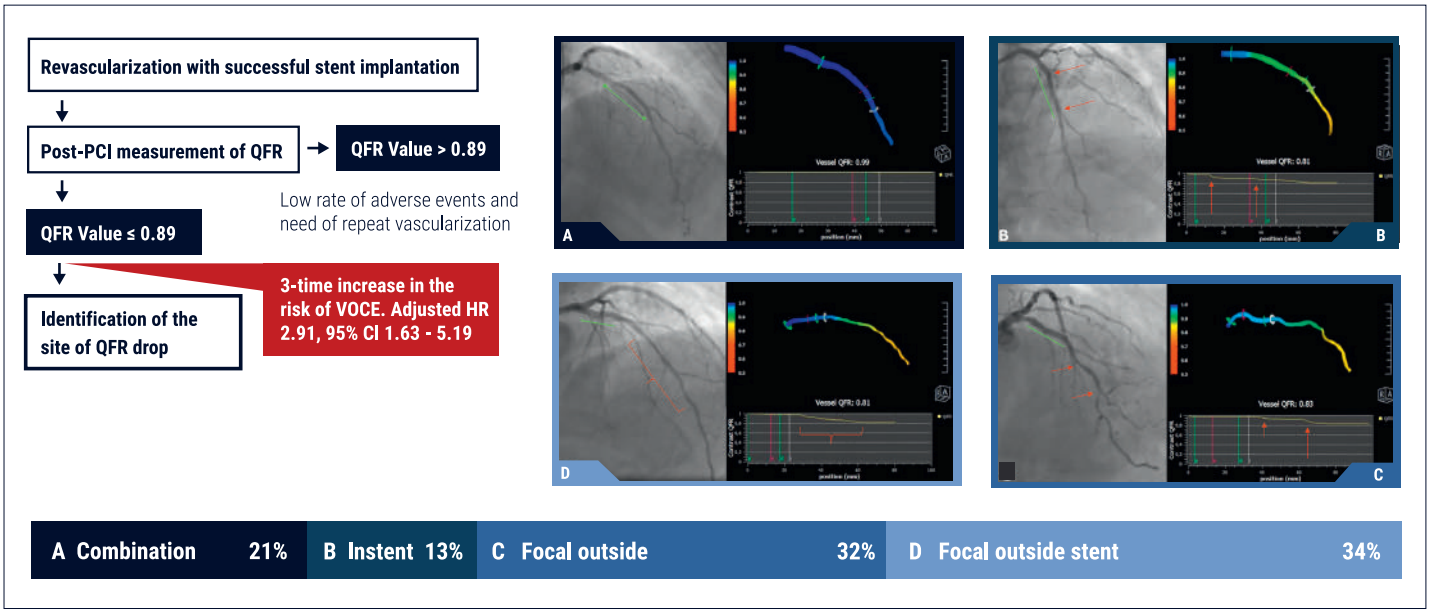
Post-PCI: QFR independently predicts adverse events after stent implantation[12]

The HAWKEYE Trial shows that a Post-PCI cut off value <0.89 was associated with a 3-fold increase in the risk of adverse events.



QFR can be used with a sufficient degree of confidence to drive prognostic intervention decision-making, with lower post-PCI QFR values accurately predicting adverse clinical outcomes

Exceptional performance

3x
3-fold decrease in the risk of adverse events associated with a Post-PCI cut off value > 0.89[12]

32%
Reduction in MACE compared to angiographic group after 2 years[11]

30%
Faster than wire-based FFR guided approach[13]

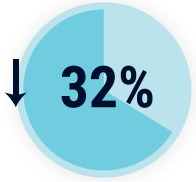
Medis QFR® enhances safety for both patient & provider[14]

Time-saving and radiation-reducing benefits of QFR® implementation

CCI

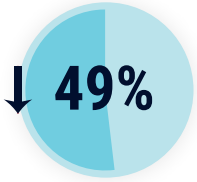
Medis QFR® measurements of coronary artery blood flow correlate with iFR or RFR measurements and are associated with shorter procedure times and reduced radiation dose

Faster Diagnosis



Less Fluoroscopy time vs iFR or RFR examination

Lower Radiation



Less dose vs iFR or RFR examination

What experts say about Medis QFR®

> QFR® streamlines the Cath Lab workflow, increasing the adoption of coronary physiology. The benefits are the cost effectiveness as well as the time efficiency. [11]
>
> **Dr. Yuhei Kobayashi**
> New York Presbyterian Hospital, United States
> Interventional cardiologist / Cardiologist

> This technique is simpler, safer and less expensive with equivalent outcomes and will conceivably be readily and widely adopted.
>
> **Dr. Morton J. Kern**
> University of California, United States
> Interventional cardiologist / Cardiologist

> State-of-the-art approach in acute coronary syndrome targets on the "pancoronary risk". This can be assessed easily, safely and reproducibly by QFR®.
>
> **Dr. David M. Leistner**
> Universitätsklinikum Frankfurt am Main, Germany
> Interventional cardiologist [13] / Cardiologist

> QFR® is a robust technology and it provides good diagnostic data and guiding information.
>
> **Dr. Niels Holm**
> Aarhus University, Denmark
> Clinical Researcher

About Medis

Medis was created in 1989 as a spin-off of the Leiden University Medical Centre (LUMC Netherlands). Our founder and current CSO, Hans Reiber, built the company focusing on X-ray and image analysis of the heart with the mission to make these tools available to all medical researchers and specialists.

For over 30 years, Medis has been providing high-quality quantitative analysis solutions for cardiovascular imaging to the medical community. Our heritage and core values are based on this strong purpose of contributing to a healthier society by providing the right tools to cardiologists, radiologists, researchers, and industry partners.

Medis' software is internationally appreciated due to its ease of use, and due to the clinical outcome for the patients. Our software creation and realization process is as simple, as it is unique: starting from a medical need that develops from concept to product. We continue to create, research, and innovate toward clinically relevant software solutions in cardiovascular imaging. In Medis, this continuous innovation leads to new software solutions based on new ideas for the ever-changing cardiovascular imaging environment.

At the same time, we remain relevant socially and sustainably. At Medis, quality is key. We test and validate in the most optimal way and deliver software solutions of the highest quality, without compromise.

That is what we have been doing for the last 30 years.

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