



IQWiG Reports – Commission No. D15-02

Measurement of myocardial fractional flow reserve (FFR) in coronary heart disease¹

Extract

¹ Translation of the key statement of the final report D15-02 *Messung der myokardialen fraktionellen Flussreserve (FFR) bei koronarer Herzkrankheit* (Version 1.0; Status: 14 November 2016). Please note: This document was translated by an external translator and is provided as a service by IQWiG to English-language readers. However, solely the German original text is absolutely authoritative and legally binding.

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This report was prepared in collaboration with external experts.

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Key statement***Research question***

The aim of this report is to assess the benefit of FFR-guided treatment decisions compared to FFR-independent treatment decisions

- in CHD patients with PCI indication and
- in patients with stable CHD

with respect to patient-relevant outcomes.

Conclusions

For the present benefit assessment, 9 relevant RCTs were found. Five studies were used to answer research question 1 (FFR measurement in case of PCI indication) and 4 studies to answer research question 2 (FFR measurement in stable CHD without PCI indication).

Research question 1

For the combined outcome death or myocardial infarction, there is an indication of benefit of an FFR-guided treatment strategy in comparison with an FFR-independent treatment strategy, and for the outcome myocardial infarction, proof of benefit of an FFR-guided treatment strategy. For the patient-relevant outcomes all-cause mortality, cardiac mortality, cardiac death or myocardial infarction, repeat coronary revascularization, angina, heart failure, health status and adverse effects of the diagnostic and therapeutic strategy, there is no hint of benefit or harm of an FFR-guided treatment strategy in comparison with other treatment strategies. No data were available for the outcomes cardiac arrhythmia, health-related quality of life, and re-hospitalization.

Research question 2

For the patient-relevant outcomes all-cause mortality, cardiac mortality, death or myocardial infarction, cardiac death or myocardial infarction, myocardial infarction, angina, and adverse effects of the diagnostic and therapeutic strategy, there is no hint of benefit or harm of an FFR-guided treatment strategy in comparison with other treatment strategies. For the outcome repeat coronary revascularization, the data were not interpretable. No data were available for the outcomes cardiac arrhythmia, heart failure, health-related quality of life, and rehospitalization.

The full report (German version) is published under

<https://www.iqwig.de/de/projekte-ergebnisse/projekte/nichtmedikamentoese-verfahren/d-projekte/d15-02-messung-der-myokardialen-fraktionellen-flussreserve-ffr-messung-bei-koronarer-herzkrankheit.6910.html>