IQWiG Reports – Commission No. H20-01

Microvascular reperfusion after percutaneous coronary intervention for acute anterior myocardial infarction[1]

Extract

[1] Translation of the executive summary of the §137h assessment: H20-01 *Mikrovaskuläre Reperfusion nach perkutaner Koronarintervention bei akutem Vorderwandinfarkt* (Version 1.0; Status: 14 May 2021). Please note: This translation is provided as a service by IQWiG to English-language readers. However, solely the German original text is absolutely authoritative and legally binding.

Publishing details

Publisher
Institute for Quality and Efficiency in Health Care

Topic
Microvascular reperfusion after percutaneous coronary intervention for acute anterior myocardial infarction

Commissioning agency
Federal Joint Committee

Commission awarded on
1 April 2021

Internal Commission No.
H20-01

Address of publisher
Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen
Im Mediapark 8
50670 Köln
Germany

Phone: +49 221 35685-0
Fax: +49 221 35685-1
E-mail: berichte@iqwig.de
Internet: www.iqwig.de

IQWiG employees involved in the §137h assessment

- Katrin Dreck
- Thorsten Busan
- Moritz Felsch
- Naomi Fujita-Rohwerder
- Tatjana Hermanns
- Nadine Reinhardt
- Stefan Sauerland

Keywords: Oxygen, Myocardial Infarction, Device Approval, Risk Assessment, Benefit Assessment

Executive summary

The Federal Joint Committee (G-BA) commissioned the Institute for Quality and Efficiency in Health Care (IQWiG) to assess the method "microvascular reperfusion after percutaneous coronary intervention for acute anterior myocardial infarction" according to §137h Social Code Book (SGB) V – Statutory Health Insurance. The assessment documents were submitted to IQWiG on 6 April 2021.

According to the information in the submission form, microvascular reperfusion (SSO_2 therapy) is intended to follow successful primary percutaneous coronary intervention (pPCI), i.e., following the restoration of macrovascular reperfusion via stent implantation. Compared with pPCI alone, additional SSO_2 therapy aims to reduce cellular damage caused by ischaemia and macrovascular reperfusion and to preserve functional myocardial tissue and limit the extent of the infarction.

A total of 5 studies were available to assess the method: 2 randomized controlled trials (RCTs), 1 nonrandomized comparative trial, and 2 case series. In the RCTs, there were no statistically significant differences between the intervention group (SSO_2) compared with the control group (pPCI alone) with respect to patient-relevant outcomes. Furthermore, in these studies, the precision of the effect estimates was low. Due to modifications of the treatment parameters of the intervention, transferability of the results of the RCTs to the requested variant of the method cannot be assumed with certainty; therefore the nonrandomized comparative study was also considered. From the data of this study, no difference between the intervention and the control group with regard to patient-relevant outcomes was identifiable in a magnitude that could not be plausibly explained by the influence of confounders alone.

Overall, based on the documents submitted, neither a benefit, harmfulness or ineffectiveness of the method can be identified in the present assessment according to § 137h.

A testing study suitable to provide the necessary findings to assess the benefit of the method is possible in principle.

The full report (German version) is published under

https://www.iqwig.de/en/projects/h20-01.html