



IQWiG Reports – Commission No. H21-04

**Transcranial magnetic
resonance-guided focused
ultrasound (tcMRgFUS) for the
treatment of essential tremor
Addendum to commission H20-05¹**

Extract

¹ Translation of the executive summary of the addendum: H21-04 *Transkranieller Magnetresonanz-gesteuerter fokussierter Ultraschall (TK-MRgFUS) zur Behandlung des essenziellen Tremors – Addendum zum Auftrag H20-05* (Version 1.0; Status: 5 July 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.

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Executive summary

In a letter dated 21 May 2021, the Federal Joint Committee (G-BA) commissioned the Institute for Quality and Efficiency in Health Care (IQWiG), as an addendum to commission H20-05, to examine the conclusions of the assessment according to §137h Social Code Book (SGB) V on the benefit, harmfulness and ineffectiveness of the method “transcranial magnetic resonance-guided focused ultrasound (tcMRgFUS) for the treatment of essential tremor.”

Research question

The aim of the present investigation was to determine whether further relevant studies on tcMRgFUS for the treatment of essential tremor exist besides the documents already used in the §137h assessment H20-05. The question was limited to the use of tcMRgFUS for the treatment of patients with drug-resistant essential tremor who are eligible for deep brain stimulation (DBS), corresponding to research question 2 in H20-05. In the case of additional relevant studies, it was to be examined whether, taking these into account, neither a benefit, harmfulness nor ineffectiveness could be identified for the examination or treatment method in question. Furthermore, it was to be examined whether, besides the studies already used in the §137h assessment, ongoing studies exist that are in principle suitable to provide relevant findings on the benefit, harmfulness or ineffectiveness of the method in the near future.

Methods

Randomized controlled trials (RCTs) and prospective comparative cohort studies were included that investigated the tcMRgFUS method for the treatment of essential tremor with regard to patient-relevant outcomes and had not already been used in the assessment according to §137h.

A systematic literature search for studies was conducted in MEDLINE, Embase, and the Cochrane Central Register of Controlled Trials. In parallel, a search for relevant systematic reviews was conducted in MEDLINE, Embase, the Cochrane Database of Systematic Reviews, and the HTA Database. The last search was conducted on 1 June 2021. In addition, the following information sources and search techniques were considered: study registries and screening of reference lists. The selection of relevant studies was performed by 2 reviewers independently of one another.

Results

No additional relevant completed or ongoing studies related to the present research question were identified in the information retrieval process.

Conclusion

After systematic examination, there is still no evidence of a benefit, ineffectiveness or harmfulness of tcMRgFUS for the treatment of patients with drug-resistant essential tremor who are eligible for DBS. Beyond the studies already considered in the §137h assessment, no additional completed or ongoing studies were found that would in principle be suitable to provide evidence of a benefit, ineffectiveness or harmfulness in the near future.

The full report (German version) is published under

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