



Topic Exploration Report

Topic explorations are designed to provide a high-level briefing on new topics submitted for consideration by Health Technology Wales. The main objectives of this report are to:

1. Inform discussions on new topics received by HTW.
2. Determine the quantity and type of evidence available on a topic.
3. Assess the topic against HTW selection criteria.

Topic:	Frequent rhythmic electrical modulation system therapy
Topic exploration report number:	TER054
Referrer:	Vivienne Webb
Topic exploration undertaken by:	Cedar (on behalf of Health Technology Wales)

Aim of Search

Cedar researchers searched for evidence on the use of frequent rhythmic electrical modulation system (FREMS) therapy in patients with Dercum's Disease.

Summary of Findings

We identified one case report documenting the use of FREMS therapy to treat Dercum's disease in a single patient in Italy. This was the only evidence identified specific to the use of FREMS therapy to treat this disease; we did not identify any ongoing trials of FREMS therapy to treat Dercum's disease.

Costs associated with FREMS therapy were identified in a 2017 NICE Medtech Innovation Briefing (MIB), detailing the use of this technology in patients with diabetic neuropathy. This gives the cost of the device as £28,750 with an additional cost of £5.46 for consumables per treatment.

Two clinical trials on the use of FREMS in patients with diabetic neuropathy carried out in the Hospital San Raffaele, Milan were identified, completing in 2006 and 2012.

Conclusions

Evidence to support the use of FREMS therapy as a treatment for Dercum's disease is very limited, and a lack of identified ongoing trials suggests that no new evidence is anticipated in the near future.

Areas of Uncertainty

FREMS therapy is also used for patients with diabetic neuropathy, and there may be more evidence to support its effectiveness in this area, although a thorough search for evidence to support this was beyond the scope of this report. It is unclear whether any evidence from the use of FREMS therapy to treat diabetic neuropathy could be used to support its application to other diseases, such as Dercum's disease.

Feasibility of Technology Assessment

HTW's Assessment Group concluded not to progress this topic further because there is insufficient evidence to conduct a fuller assessment of the benefits of FREMS therapy to treat Dercum's disease.

Brief literature search results

Resource	Results
HTA organisations	
Healthcare Improvement Scotland:	No results relevant to FREMS
Health Technology Assessment Group	No results relevant to FREMS
Health Information and Quality Authority	No results relevant to FREMS
UK guidelines and guidance	
SIGN	No results relevant to FREMS
	None for Dercum's disease
NICE	A Medtech Innovation Briefing for FREMS in patients with diabetic neuropathy provides cost information for the device. https://www.nice.org.uk/advice/mib119/resources/aptiva-for-painful-diabetic-neuropathy-pdf-2285963283164101
Secondary literature and economic evaluations	
EUnetHTA	No results relevant to FREMS
ECRI	No results relevant to FREMS
Cochrane library	No results relevant to FREMS
Medline	No results relevant to FREMS
Primary studies	
Medline	Martinenghi S; Caretto A; Losio C; Scavini M; Bosi E. Successful Treatment of Dercum's Disease by Transcutaneous Electrical Stimulation: A Case Report . <i>Medicine</i> . 94(24):e950, 2015 Jun.
Cochrane library	No results relevant to FREMS
Ongoing secondary research	
PROSPERO database	No results relevant to FREMS
Ongoing research	
Clinicaltrials.gov	No results relevant to FREMS
Other	
Manufacturer's website	The manufacturer's website provides background information on the device: https://www.bhr.co.uk/frems-therapy . This includes information on its use in trials in diabetic neuropathy but does not suggest any intended use in Dercum's disease.
Date of search:	May 2019
Concepts used:	FREMS; Frequency Rhythmic Electrical Modulation System; Lorenz Therapy; Dercum's disease