



IQWiG Reports – Commission No. N16-01

# **Active knee motion devices in the treatment of anterior cruciate ligament ruptures<sup>1</sup>**

**Extract**

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<sup>1</sup> Translation of the key statement of the final report N16-01 *Aktive Kniebewegungsschienen in der Behandlung von Rupturen des vorderen Kreuzbands* (Version 1.0; Status: 16 March 2017). 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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**Keywords:** Continuous Active Motion Therapy, Rehabilitation, Anterior Cruciate Ligament, Benefit Assessment, Systematic Review

**Key statement****Research question**

The aim of this report is to

- assess the benefit of the (self-)application of active knee motion devices following conservative and surgical treatment

in patients with anterior cruciate ligament rupture with regard to patient-relevant outcomes. No limitations were applied regarding the comparator intervention.

**Conclusion**

No studies were found on patients **self**-applying continuous active motion (CAM) devices to the knee or on their use following conservative therapy. Regarding the application of CAM devices in the **inpatient** setting following surgical reconstruction of the anterior cruciate ligament, 1 study was found comparing the CAM devices with knee continuous passive motion (CPM) devices and 1 study comparing follow-up treatment with CAM devices versus follow-up treatment without motion devices. Both studies included few patients and suffered from methodological shortcomings. The results were collected over a short time period (1 week).

Both of the included studies contained usable results on the outcomes **range of motion** and **pain**. No hint of benefit or harm was found for follow-up treatment with CAM devices versus follow-up treatment with CPM devices or treatment without movement devices.

The outcomes **proprioceptive deficit** and **adverse events** as collected in the studies could not be used as patient-relevant outcomes; therefore, no statement of benefit or harm was possible.

For the outcomes **morbidity, activities of daily living, dependence on the help of others, and participation in professional and social life**, no statement on benefit or harm of follow-up treatment with CAM devices versus the two other treatment options was possible either, since no data concerning this matter were available.

As a result, the benefit and harm of CAM devices are unclear overall – particularly in the home care setting.

*The full report (German version) is published under*

*<https://www.iqwig.de/de/projekte-ergebnisse/projekte/nichtmedikamentoese-verfahren/n-projekte/n16-01-aktive-kniebewegungsschienen-in-der-behandlung-von-rupturen-des-vorderen-kreuzbands.7192.html>*