ELLIPSE

MAGEC
ADJUSTABLE SOLUTIONS
FOR SPINE

MAGEC™ Remote Control Technology for the Treatment of Spine Deformities

The above image reflects multiple distractions of the growing rod totaling distraction length of 14mm

Ellipse Technologies, Inc., an innovative company focused on developing implantable technology to treat a broad spectrum of spinal and orthopedic applications, has developed a novel treatment for abnormal curvature of the spine. The company's initial spinal products address the treatment of scoliosis and focus on the children who suffer from the debilitating effects of this common and challenging spine disease.

MAGEC (MAGnetic Expansion Control) is an adjustable growing rod that utilizes a remote control to non-invasively lengthen the device. Following a minimally invasive procedure to implant the MAGEC Rod, the device can be lengthened, or retracted, non-invasively by using the MAGEC ERC (External Remote Controller), thereby eliminating the need for additional unnecessary surgeries and increasing quality of life.

Product Benefits:

- Maximizes thoracic spine height without the need for multiple surgeries to lengthen the growing rod
- Non-invasive adjustment via remote control
- Bi-directional axial adjustment to a maximum of 48mm
- Minimally invasive surgery
- Single or dual rod construct
- Independent distraction capability on dual rod constructs

CLINICAL HIGHLIGHTS

Published in The Lancet

Magnetically Controlled Growing Rods for Severe Spinal Curvature in Young Children: A Prospective Case Series.

The LANCET, April 19, 2012;doi:10.1016/S0140-6736(12)60112-3; Prof Kenneth Man-Chee Cheung MD et al. Clinical study focused on assessing the effectiveness and safety of a new magnetically controlled growing rod (MCGR) for non-invasive outpatient distractions.

ARC Adjusted By Remote Control

Not available for sale in the United States.

MAGEC

ADJUSTABLE SOLUTIONS
FOR SPINE

Designed for patients with challenging spine conditions

Non-invasive growing rod lengthening with the ERC

ERC 2 Device

How MAGEC Works

MAGEC is a system which includes proprietary implants (growing rods) and the External Remote Controller (ERC). Magnets outside the body contained in the ERC device communicate with magnets of the implanted rods.

- The device works with standard pedicle screws and hooks for increased ease of use.
- The ERC is a portable, hand held unit that uses permanent magnets to automatically modify the length of the growing rod through the touch of a button. The amount of distraction/retraction is visible immediately on the MAGEC ERC display module.

MAGEC eliminates the need for multiple surgeries to lengthen the growing rod. By using the implant with the ERC, the device can be adjusted frequently, through a non-invasive approach in an outpatient setting.

Visit www.ellipse-tech.com to learn more about our exciting technology.

Product Reference Guide

Model	Description	No.
Rods for Dual Rod Use	4.5 mm standard rod with 4.5 mm long extension	RA002-4545SL
	4.5 mm offset rod with 4.5 mm long extension	RA002-4545SLR
	5.5 mm standard rod with 5.5 mm long extension	RA002-5555SL
	5.5 mm offset rod with 5.5 mm long extension	RA002-5555SLR
Rods for Single Rod Use	4.5 mm standard rod with 4.5 mm long extension	RA002-4545SL
	5.5 mm standard rod with 5.5 mm long extension	RA002-5555SL
Non-Sterile Accessories	External Remote Controller (ERC2)	EAD-M1

1. *Dual growing rod technique followed for three to eleven years until final fusion: the effect of frequency of lengthening.* Spine (Phila Pa 1976). 2008 Apr 20;33(9):984-90. Authors: Akbarnia BA, Breakwell LM, Marks DS, McCarthy RE, Thompson AG, et al. University of California, San Diego
2. *Dual growing rod technique for the treatment of progressive early-onset scoliosis: a multicenter study.* Spine (Phila Pa 1976). 2005 Sep 1;30(17 Suppl):S46-57. Authors: Akbarnia BA, Marks DS, Boachie-Adjei O, Thompson AG et al. University of California, San Diego
3. *Rate of complications in scoliosis surgery – a systematic review of the Pub Med literature.* Scoliosis. 2008; 3: 9. Published 2008 August 5. doi: 10.1186/1748-7161-3-9PMCID: PMC2525632. Authors: Hans-Rudolf Weiss1 and Deborah Goodall
4. *Primary effect of dual growing rod technique for the treatment of severe scoliosis in young children.* Chinese Medical Journal 2010;123(2):151-155. Authors: LI Qi-yi, ZHANG Jian-guo, QIU Gui-xing, WANG Yi-peng, et al

Ellipse Technologies, Inc. | 13900 Alton Parkway, Suite 123 | Irvine, CA 92618
Phone: (+1) 949-837-3600 | Fax:(+1) 949-837-3664

CE 0297

PP1510-B