



LARS™

PCL and extra-articular applications

Corin

Responsible Innovation

Stability | Versatility | Recovery

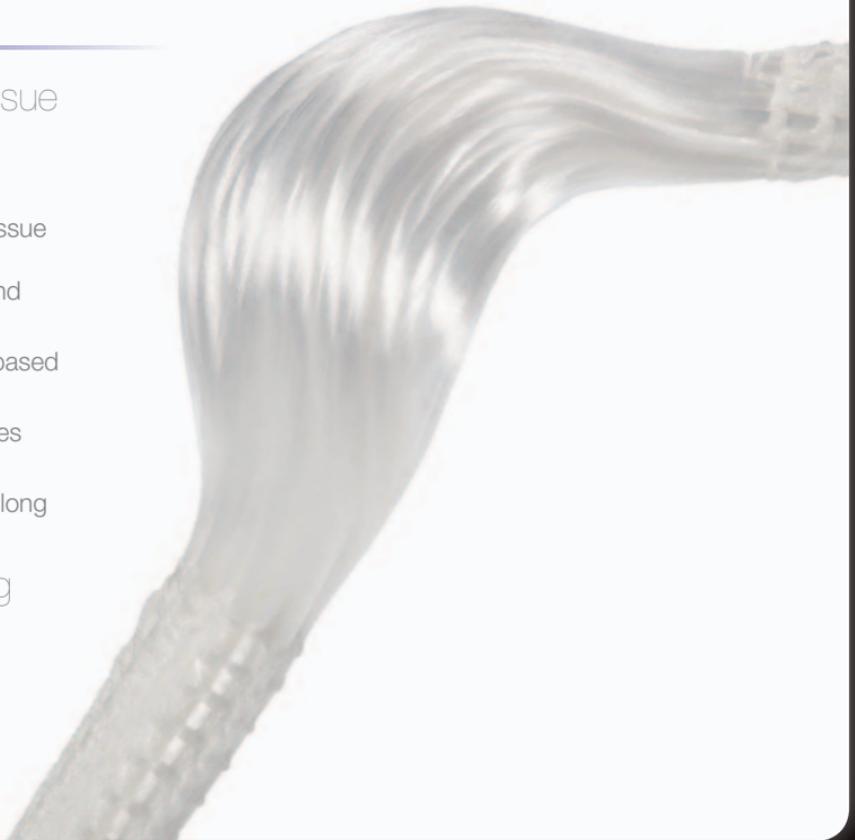
LARS™

The next generation in soft tissue internal fixation

The most advanced non-biological soft tissue treatment option, LARS provides a high performance alternative to autogenous and allogeneous tissue reconstructions.

- Patented free-fibre design concepts based on current kinematic principles^{5,14}
- Novel fibre treatment process facilitates excellent tissue in-growth^{5,6,8}
- Refined surgical techniques ensuring long term clinical product efficacy¹⁵

The reason to stop harvesting





Restoring confidence in
non-biological soft tissue
fixation solutions.

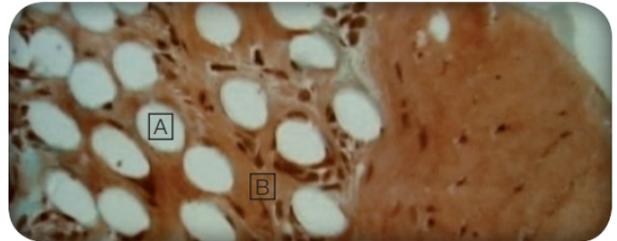
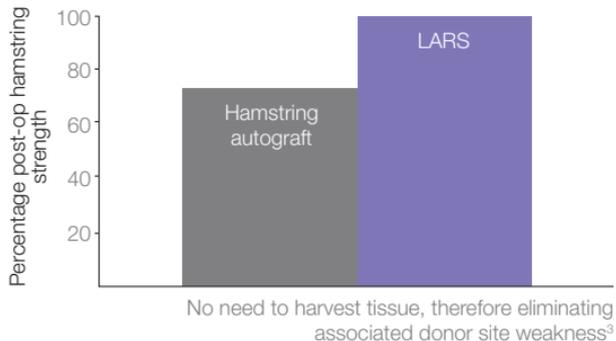
- 90% patient satisfaction in ACJ reconstructions¹
- 93% of patients demonstrated excellent to good results in PCL reconstructions²

LARS™

Through modern design principles and advanced manufacturing technologies, LARS addresses the four key concerns with existing soft tissue treatment options taking an innovative step forward in high performance sport injury solutions.

Immediate strength

LARS provides immediate stability and strength whilst diminishing associated post-operative weakness and pain due to iatrogenic tissue harvesting.

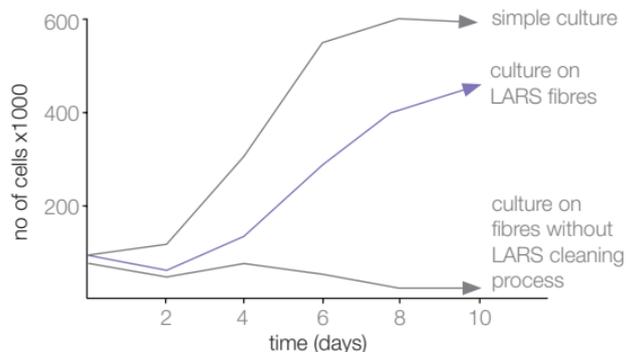


Encapsulation of LARS fibres (A) surrounded by new collagenous tissue (B) and reported presence of endothelial cells at 6 months^{6,7,8}

Optimised function

The long-term stability and superior biocompatibility of LARS is due to its patented free-fibre design and cleaning process, creating a viable environment essential to tissue regeneration^{4,5,6,7,8}. LARS demonstrates up to 3 times the cell adhesion compared to existing competition, allowing superior tissue in-growth which facilitates ultra low wear and protection of fibres reducing the risk of synovitis^{4,6,7,8}. The progressive fibre recruitment permits restoration of natural kinematics and physiological gait patterns¹⁴.

The novel fibre treatment allows superior cellular proliferation with LARS^{5,6}



Rapid recovery

LARS maintains proprioceptive mechanoreceptors and permits mechanotherapy through exercise-led tissue healing¹¹. By eliminating donor site morbidity, weakness and pain, LARS allows^{2,10}:

- Recovery of full ROM^{12,13}
- Restoration of joint function^{12,13}
- Faster rehabilitation and return to activity⁴

Conservative anatomical restoration

To minimize further iatrogenic injury, LARS surgical technique requires smaller tunnel diameters and out-side-in drilling. The preservation of soft tissue remnants is vital to the success of LARS, facilitating micro-separation of adjacent fibres thereby reducing risk of long-term fretting^{6,7}.

Simple, fully jugged instrumentation allows fast and accurate surgery, restoring confidence in reproducible anatomical reconstruction⁹.



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The LARS logo is displayed in a white, bold, sans-serif font against a dark purple rectangular background. The letters are spaced out, and a small trademark symbol (TM) is located at the top right of the 'S'.

PCL and extra-articular applications

References:

1. Prof. L. Funk, 2011: Podium presentation at BESS 2011
2. Shen et al, 2010. Arthroscopic posterior cruciate ligament reconstruction using LARS artificial ligament: A retrospective study. Journal of Surgical Research
3. Ardern et al., 2010: Hamstring strength recovery after hamstring tendon harvest for anterior cruciate ligament reconstruction: a comparison between graft types. Journal of Arthroscopy
4. Papadopoulos et al., 2011. Treatment of unstable knee anterior cruciate ligament deficiency using the new generation LARS artificial ligament: long-term follow-up of 162 operated knees in 155 patients. Presented at: AOA, Rotorua, New Zealand
5. Pelletier and Durand. Human fibroblast culture: in vitro study. Institut National de Recherche Appliquée (INRA) test report. Data to file. Corin Group 2005
6. LARS laboratory testing. Data held on file, Corin Group PLC 2005
7. Shao-bin et al., 2008. Histological characteristics and ultrastructure of polyethylene reconstruction of anterior cruciate ligament in rabbits. Journal of ZGLCKF, e-journals
8. Trieb et al., 2004. In vivo and in vitro cellular ingrowth into a new generation of artificial ligaments. European surgical research
9. LARS PCL/ACJ operational technique guides. Corin Group 2005, 1633
10. Georgoulis et al., 2001: The presence of proprioceptive mechanoreceptors in the remnants of the ruptured ACL as a possible source of re-innervation of the ACL autograft. Knee Surg Sports Traumatol Arthrosc
11. Khan & Scott, 2009: Mechanotherapy: how physical therapists' prescription of exercise promotes tissue repair. Br J Sports Med
12. Fialka et al., 2000: Preliminary results in AC-Joint dislocation using a Ligament Augmentation Device (LARS). ESSKA
13. Machotka et al., 2010: Anterior cruciate ligament repair with LARS (ligament advanced reinforcement system): a systematic review. Sports Med Arthrosc Rehabil Ther Technol
14. Guidoin et al., 2000. Analysis of retrieved polymer fibre based replacements for ACL. Biomaterials.
15. Ranger et al., 2010. Evaluation of reconstructive surgery using artificial ligaments in 71 acute knee dislocations. International Orthopaedics (SICOT)

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