

LIGAMENT



TLS[®]

Tape Locking Screw

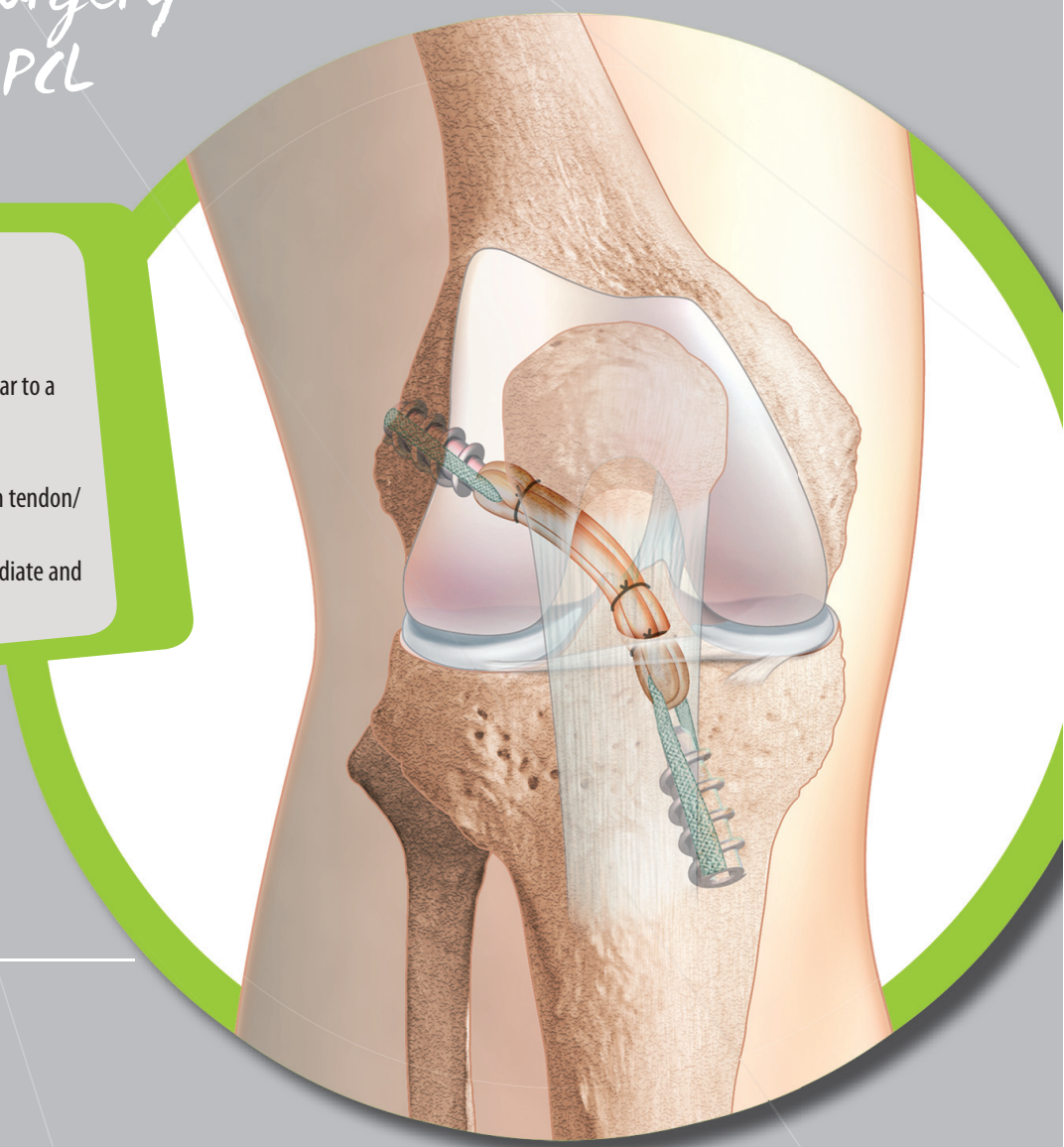
-STEP BY STEP- SURGICAL TECHNIQUE

*Knee ligament surgery
of the ACL and PCL*

TLS[®] System

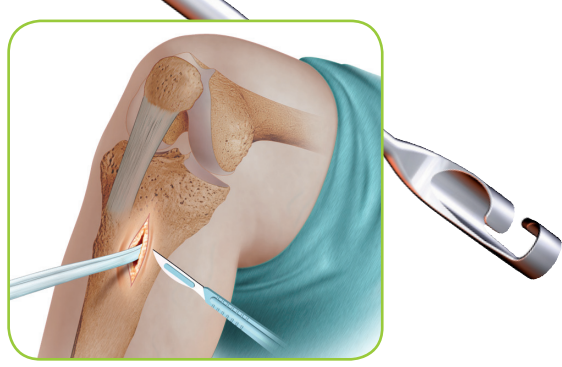
The advantages :

- Only one tendon harvested ;
- Preloaded 4 bundles short graft ;
- Immediate mechanical properties similar to a normal ACL ;
- Atraumatic fixation of the graft ;
- Optimal Secondary fixation : maximum tendon/ bone contact (360°) ;
- Post-operative period : no splint, immediate and full weight-bearing, free movement.



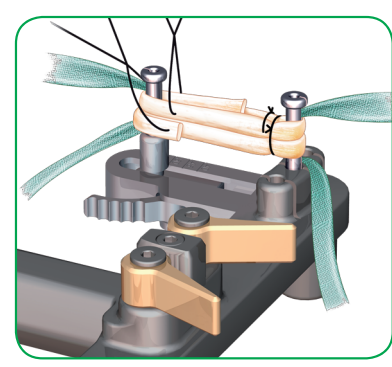


1 Transplant harvesting



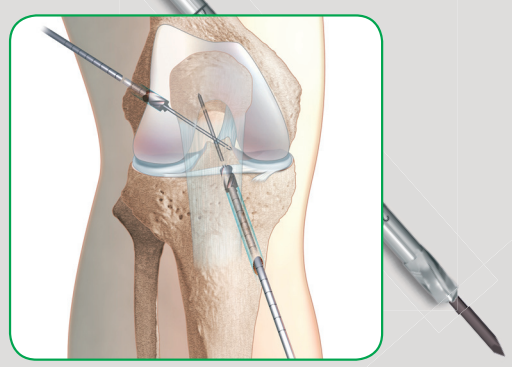
Harvesting of the semi-tendinosus
Open stripper - ref 242 049

2 Preparing the transplant



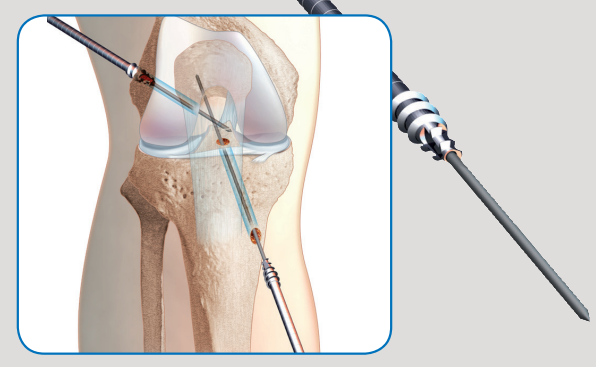
Positioning the tendon in the 4 strands loop and positioning the tapes.
Suturing the strands between them an X with 4 stitches in an X

5 Drilling the tunnels



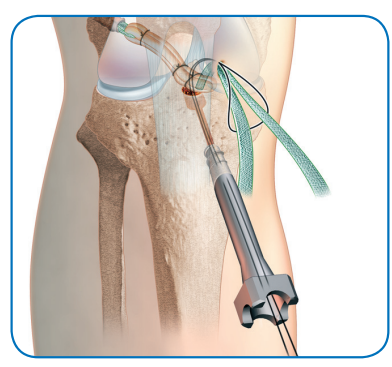
Positioning the pin.
Using the universal guide
TLS® drill - ref 251 262

6 Tapping



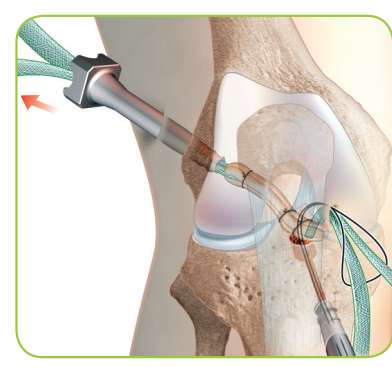
Tapping of the femoral and the tibial tunnels' entry
TLS® tap - ref 250 105

9 Recovering the tapes



Femoral tape, tibial tape

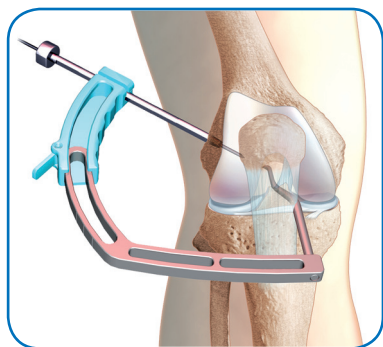
10 Implanting the graft



Dynamic tensioning of the tapes

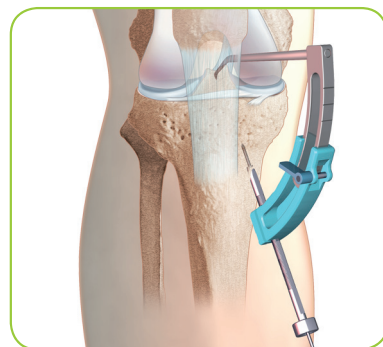


3 Outside inside femoral targeting



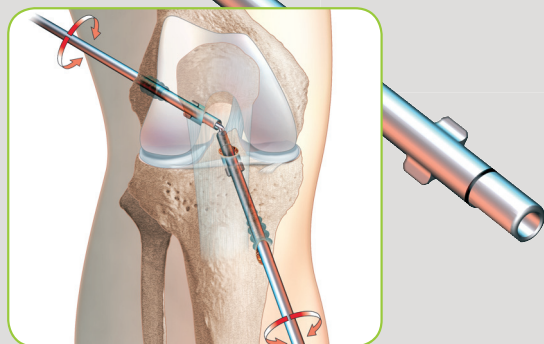
Positioning the pin. Using the universal guide
ACL femoral guide. ACL femoral drill guide

4 Outside to inside tibial targeting



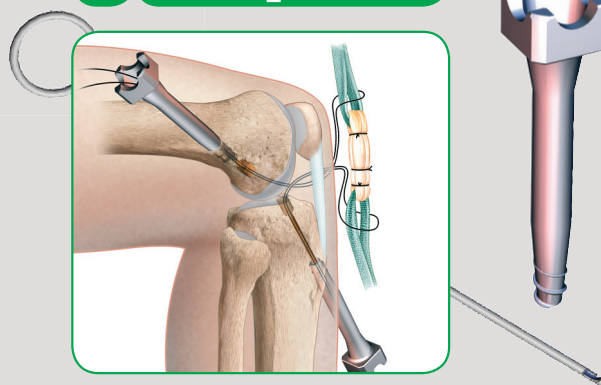
Positioning the pin. Using the universal guide ACL
femoral guide. ACL femoral drill guide

7 Retrograde reaming of cavities



Femoral recess on 10 mm large, tibial recess on 15 mm large
TLS® drills - ref 254 537 or 253 165 or 251 830 or 250 102 or 250 101

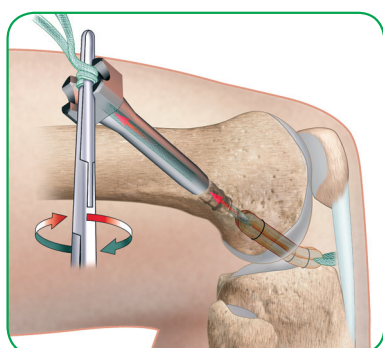
8 Passing threads



Passing the threads from the outside to the inside, and retrieved via
the antero-medial instrumental portal.

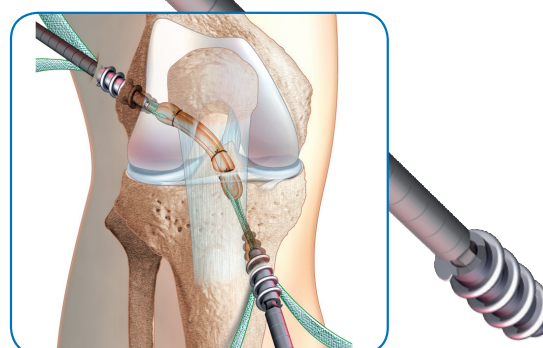
TLS® pin guide cannula - ref 255 275 / TLS® wire guide - ref 256 010

11 Tensioning of the graft



Femoral and Tibial "sardine tin key" maneuver

12 Fixing



Femoral and Tibial fixation of tapes with screw
TLS® screwdriver - ref 254 599



TLS® INSTRUMENTATION LIST

FH ORTHOPEDICS ref.

TLS® CONTAINER	256 008
TLS® SCREWDRIVER 3.5 CANNULA Ø1.8	254 599
TLS® TAP	250 105
TLS® DRILL Ø 4.5 MM	251 262
PIN FOR TLS® SCREW Ø 1.8 LG 220MM SOFT/SOFT	255 970
TLS® RETROGRADE REAMER Ø6	254 537
TLS® RETROGRADE REAMER Ø7	253 165
TLS® RETROGRADE REAMER Ø8	251 830
TLS® RETROGRADE REAMER Ø9	250 102
TLS® RETROGRADE REAMER Ø10	250 101
TLS® PIN GUIDE CANNULA	255 275
TLS® CALIBRATOR	255 923
TLS® WIRE GUIDE	256 010
TLS® COMPACTOR	256 009
OPEN STRIPPER	242 049
SCREWDRIVER FOR TLS® PEEK	263 783

TLS® WORKSTATION

FH ORTHOPEDICS ref.

TLS® PRE-TENSIONED SCREW	256 011
TLS® PRE-TENSIONED ASSEMBLY	256 012
TLS® WORKSTATION	256 013
TLS® CHOPPING BLOCK	256 217

UNIVERSAL GUIDE LIST

FH ORTHOPEDICS ref.

UNIVERSAL GUIDE CONTAINER	256 034
TLS® GUIDE PIN Ø 2.4 LG 230MM SOFT/POINTED	255 994
UNIVERSAL DRILLING HANDLE	255 693
FEMORAL ANTERIOR CRUCIATE LIGAMENT UNIVERSAL GUIDE	255 694
TIBIAL ANTERIOR CRUCIATE LIGAMENT UNIVERSAL GUIDE	255 695
FEMORAL POSTERIOR CRUCIATE LIGAMENT UNIVERSAL GUIDE	255 696
TIBIAL POSTERIOR CRUCIATE LIGAMENT UNIVERSAL GUIDE	255 697
UNIVERSAL GUIDE HANDLE ASSEMBLY	255 698
UNIVERSAL GUIDE DOUBLE TUNNEL ASSEMBLY	255 699

PRODUCT REFERENCE

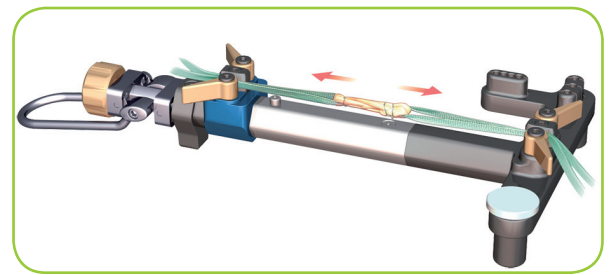
TLS® TENDON FIXATION SYSTEMS

FH ORTHOPEDICS ref.

TLS® TENDINOUS FIXATION SCREW Ø 10MM LG 20MM	253 569
TLS® TENDINOUS FIXATION SCREW Ø 10MM LG 25MM	248 853
TLS® TENDON ANCHORING SCREW Ø 12MM LG 20MM	264 274
TLS® TENDON ANCHORING SCREW PEEK Ø 10 MM LG 20 MM	263 653
TLS® TENDON ANCHORING SCREW PEEK Ø 10 MM LG 25 MM	263 654
TLS® + TENDON ANCHORING TAPE	256 193

TLS® is under permanent evaluation by the members of the GRAAL Group of GECCO, a study group for ligament knee surgery.
(www.gecco-medical.org)

GECCO



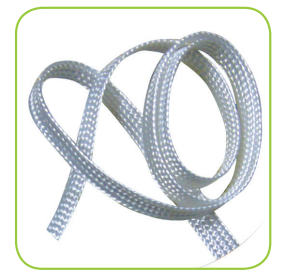
TLS® work station



Universal guide



TLS® tendinous fixation screw



TLS® tendinous fixation tape

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www.tls-medical.com