DEDICATED INSTRUMENTS

1. Graft Preparation
2. Graft Reinforcement
3. Femoral Tunnel Creation
4. Tibial Tunnel Creation
5. Anatomical Tunnels
6. Anatomical Graft Insertion

REFERENCES

INTRODUCTION

ANATOMY
The main function of the ACL is restraint of anteroposterior translation of the tibia relative to the femur. It also acts as a secondary restraint to tibial rotation and valgus or varus stress.

EPIDEMIOLOGY
The mechanisms of injury is typically a sudden deceleration or rotational maneuver with a force that sends the tibia one way and femur another (typically because the foot is planted and the body spins). The incidence of ACL is considered a common orthopedic injury with an annual incidence of 68.6 on 100,000 population in US[1] and 77.4 on 100,000 population in Australia.[2]

TREATMENT
Anterior cruciate ligament (ACL) reconstruction has evolved considerably over the past 30 years. This has largely been due to a better understanding of ACL anatomy and in particular a precise description of the femoral and tibial insertions of its two bundles. [3]

INNOVATIVE SINGLE BUNDLE WITH MORE NATURAL STRESS DISTRIBUTION

The ribbon-like structure of the graft does reproduce the anatomy and can reproduce the kinematics of the two bundles of the native ACL.

UNEXPECTEDLY IMPROVED HEALING

Lower necrosis risk, due to the reduced distance to bone of the ligament internal fibers: the graft’s healing process is estimated to be shorter and safer.

DEDICATED IMPLANTS

The Tibial Suture Plate (PSP) is a C-shaped extra cortical fixation device which is fixed in correspondence to the tibial tunnel, with its body sunk into the tibial tunnel and its edges seated on the tibial cortex, ensuring the correct orientation and tension of the graft.