

# Genourob<sup>®</sup>

INNOVATIVE LAXIMETRY



The LDA<sup>®</sup>,  
Automated Dynamic Laximetry,  
in Sports

■ Control and prevention  
of the risk of ACL injuries

# The LDA<sup>®</sup>, Automated Dynamic Laximetry in Sport

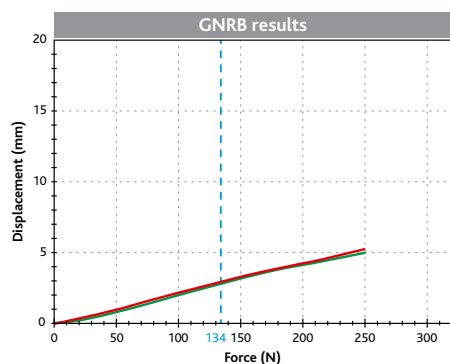
## A new tool for the prevention and the follow-up



- Device for the LDA<sup>®</sup> in tibial translation and medial tibial rotation
- Push forces from 1 to 300 N
- LDA<sup>®</sup> software
- Digital goniometer system for rotation measurement
- Optional : module PCL

### Test results of the LDA<sup>®</sup>

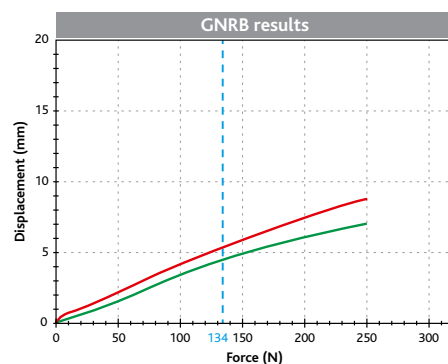
- Dynamic measurements of tibial displacement
- Curves of ligament resistance
- Calcul of the slope of curves
- Measurement of tibial medial rotation
- Chart with registered measures
- Patient data archiving
- Export to xls file
- Print in pdf format



#### Ligament check-up\*

Early in the season (or in recruitment phase) a GNRB ROTAB test informs within minutes on unique dynamic parameters to acquire an objective ligament performance check-up.

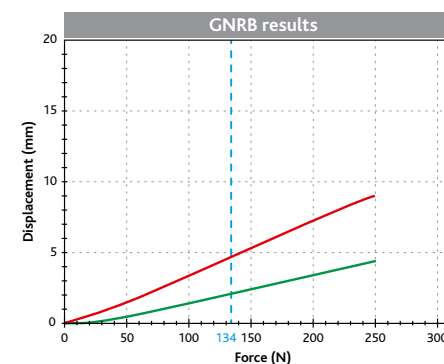
Given example:  $\Delta 134 = 0 \text{ mm}$ ,  $\Delta P2 = 0 \mu\text{m/N}$ ,  $\Delta^\circ = 0^\circ$   
**Identical conventional laximetrys: nothing to report**



#### Longitudinal tracking\*

Especially on risk subjects the automatized registrations enable a quick comparison of all personalized tests at any time.

Given example:  $\Delta 134 = 1,5 \text{ mm}$ ,  $\Delta P2 = 5 \mu\text{m/N}$ ,  $\Delta^\circ = 2^\circ$   
**Divergent curves → mild risk of instability**



#### Preoperative control\*

After sport injuries (knee sprain), feeling of instability.

Given example:  $\Delta 134 = 2,7 \text{ mm}$ ,  $\Delta P2 = 8 \mu\text{m/N}$ ,  $\Delta^\circ = 2^\circ$   
**Divergent curves, high differential of slopes → confirmation of high risk of functional instability**





### ■ An innovative support in Diagnostics

As first intention, by **objective confirmation** of clinical examinations, the Automated Dynamic Laximetry, LDA®, promotes an optimized detection of knee ligament injuries and the risk of instability.

### ■ A patented method

The fixation parameters of the ankle and the femur saved, the sensor positioned on the ATT (Anterior Tibial Tuberosity) measures the **anterior translation of the tibia** generated by a motorized push under the calf. The induced **medial tibial rotation** is automatically registered.

The **specific LDA® software** synthesizes and immediately compares the measurements of translation and rotation performed on both knees.

### ■ Prevention, a major asset!

The LDA® allows to accurately assess ligament function and optimizes the **prevention of the ACL injury risk**.

### ■ An effective longitudinal tracking

Integrated into the longitudinal follow-up, the LDA® is recommended for athletes and teams of pivot sports.

Non-invasive and painless, the tests can be repeated and operated **at any moment to provide a precise information on the level of knee stability**.

### ■ Networked devices

The test results of the GNRB can be integrated into the **inhouse patient data-management system**.

### ■ Surgery or specific training?

By measuring the **tibial rotation**, the GNRB Rotab enables a **quick functional analysis of instabilities** and thus fully participate in the **choice of adapted therapies** or of **specific intensive individual training** for instance.

### ■ LDA®, a real advantage for Isokinetic

The LDA® is the **ideal complement** to the muscular evaluation tests providing a **comprehensive approach (ligamentomuscular)** of the knee joint.

**Two different expertises helping to validate the return to play.**



## Quality Certificates

- NF IN ISO 13485 (2012)
- ISO 9001 (2008)
- ISO 13485 (2003)

## Patents

- French patents (INPI) : FR 0608725 and FR 0608726
- European patent : EP 078209.0-1526
- USA patent : Nr.13/502790



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