

# Genourob®

INNOVATIVE LAXIMETRY



The LDA®,  
Automated Dynamic Laximetry  
in Radiology

■ Knee ligament analysis  
by the measurement of laxity

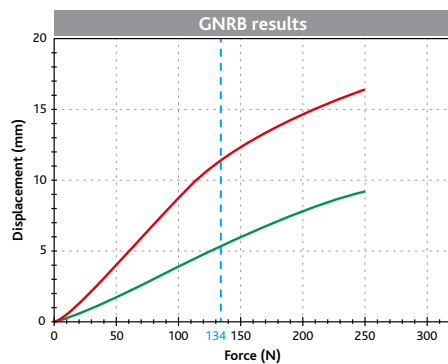
# The LDA<sup>®</sup>, Automated Dynamic Laximetry in Radiology for a new approach of the examination of ligament function



- Device for the LDA<sup>®</sup> in tibial translation
- Push forces from 1 to 300 N
- LDA<sup>®</sup> software
- Translation lock in the up position
- Cliché cassette holder
- Optional modules : Rotab, PCL

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

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

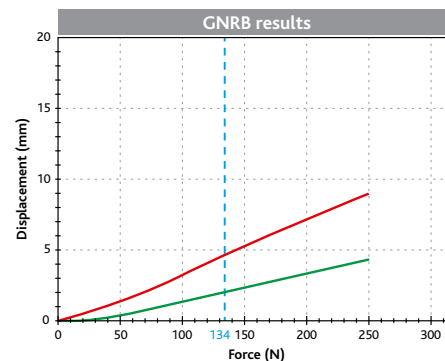


### Preoperative control\*

$\Delta 134 = 6 \text{ mm}$ ,  $\Delta P2 = 2 \text{ } \mu\text{m/N}$

### Complete rupture

Objectivation of a clinical Lachman's test.

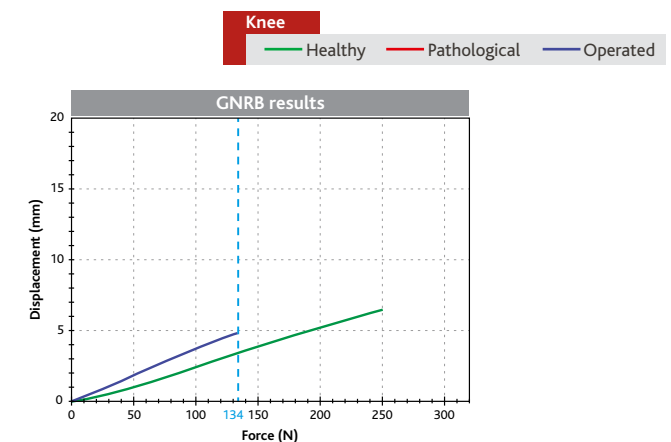


### Preoperative control\*

$\Delta 134 = 2,4 \text{ mm}$ ,  $\Delta P2 = 18 \text{ } \mu\text{m/N}$

### Almost complete lesion

High curves divergence showing severe functional instability.  
In Arthroscopy: fostering on the PCL, explaining the non-functionality of the ACL (attachment without resistance: soft tissue)  
In MRI: difficult exploration (Haemarthrosis, Hydarthrosis).



### Postoperative control after 3 months\*

$\Delta 134 = 1,2 \text{ mm}$ ,  $\Delta P2 = 0$

### Good evolution of the plasty

The parallel curves show a good resistance of the ACL reconstruction against adapted, non-deleterious pushes. The graft is considered functional and the curves should ideally maintain parallel during the ligamentisation process. Any divergence of the curves will indicate a deterioration of the tissue reconstruction process (of tendon in neo-ligament).



### ■ Networked devices

The GNRBs are the only **automated dynamic laximeters**, where test results can be integrated into the patient data-management system of the radiology practice.

The result of the LDA® test is **immediately printed and joins the radiological examination** in the file of the patient. Export in different formats is possible.

### ■ The Automated Dynamic Laximetry in Radiology

The LDA® allows the measurement and calculation of new parameters to enable a sometimes complex radiological examination of the knee ligament function.

The LDA® test is an **essential complement to the medical imaging** in the exploration of the ACL.

It permits a dynamic vision by the registration of ligament resistance curves.

### ■ A patented method

The Lachman's test is fully automated thanks to the GNRB Radio.

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



### ■ The GNRB Radio is specially designed for a rational use in a radiology practice

**Simple and fast to use**, comfortable for the patient (laying on the radiology table), the LDA® test is performed within minutes **during the radiological examination**.

The GNRB Radio features a 5 seconds lock function of the tibial translation, in the up position, allowing to **operate an XRay image**.

In addition to the technical innovations (see brochure LDA®), the device GNRB Radio offers an integrated **biofeedback** system (option) to detect hamstrings muscle contractions, avoiding false-negatives.



## 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



Build. 60  
Rue du Chef de Bataillon Henri G eret  
53000 Laval - France

+33 (0)2 43 90 43 01  
contact@genourob.com

[www.genourob.com](http://www.genourob.com)