Novel biomarkers for lysosomal storage disorders (LSDs)

**ENABLING DIAGNOSIS, PREDICTION & THERAPY MONITORING**

Biomarkers transform the management of LSDs

- Easy to be analyzed using DBS (dried blood spots) technology
- Linked to clinical manifestation
- Quantify easily and reliably in clinical samples
- Reflect realistically the burden of the disease
- Elucidate the molecular pathogenesis of the disease
- Reflect the therapeutic measure outcomes

Novel mass-spectrometry (MS) based biomarkers for LSDs

- Proven world-class expertise in the identification of new biomarkers, validated in epidemiological clinical trials
- Established MS-based proprietary biomarker tests for Gaucher, Niemann-Pick type A/B and C, Fabry and Farber
- Optimized and facilitated sample logistics with our CE labeled filtercards, CentoCard®

**EARLY DETECTION**

**DIAGNOSTIC CLASSIFICATION FOR TREATMENT INITIATION**

**MONITORING TREATMENT EFFECTIVENESS**

**DISEASE RISK ASSESSMENT**

**CLINICAL APPLICATION**

- Prognosis, diagnosis, therapy

**CLINICAL VALIDATION**

- Healthy controls, carriers, affected patients

**ANALYTICAL VALIDATION**

- Mass spectrometry

**BLOOD PLASMA DBS**

**m/z**

**GAUCHER DISEASE**

**NIEMANN PICK TYPE A/B AND C DISEASE**

**FABRY DISEASE**

**FARBER DISEASE**
Benefits of CENTOGENE’s biomarkers

ANALYTICAL SUPERIORITY

• Simplified logistics and analysis in blood, plasma and DBS (CentoCard®)
• High sensitivity and specificity

CLINICAL SUPERIORITY

• Shortest TAT
• Interpretation by scientific and medical experts

Application of CENTOGENE’s biomarkers: diagnosis, therapy monitoring and evaluation

For example, lyso-glucosylsphingosine (Lyso-Gb1) is an excellent biomarker used by our scientists for the accurate screening, diagnosis and follow-up of Gaucher disease.

LYSO-GB1 QUANTIFICATION IN GAUCHER PATIENTS AND CARRIERS

Our biomarkers guarantee more personalized LSD diagnostics and tailored treatments

LYSO-GB1 FOLLOW-UP STUDY FOR A PATIENT UNDER ERT FOR MORE THAN 2 YEARS

CENTOGENE works alongside academic and industrial partners, as well as patient organizations to develop new diagnostic assays and biomarkers that can improve the condition and prospects of patients affected by lysosomal storage disorders.