

The Essential Life Science Partner for Data-Driven Answers in Rare & Neurodegenerative Diseases

CENTOGENE (CNTG) Company Presentation
January 2023



Disclaimer

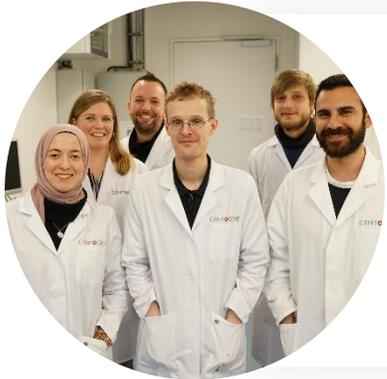
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For further information, please refer to the Risk Factors section in our Annual Report for the year ended December 31, 2021, on Form 20-F filed with the SEC on March 31, 2022, and other current reports and documents filed with the U.S. Securities and Exchange Commission (SEC). You may get these documents by visiting EDGAR on the SEC website at www.sec.gov.

CEN TOGENE @ a glance



- Headquarters **Rostock, Germany**, with locations in **Boston, MA, Berlin, Germany, Belgrade, Serbia**, and **Rotkreuz, Switzerland**
- ~**420 employees**¹
- Listed on **Nasdaq** in November 2019 (Ticker: CNTG)



- **FY2021 revenues of €42.3 million**²
- Guidance³ FY2022:
 - **Revenues of ~ €46.5 - €48.2 million**
 - YoY growth 9-13%

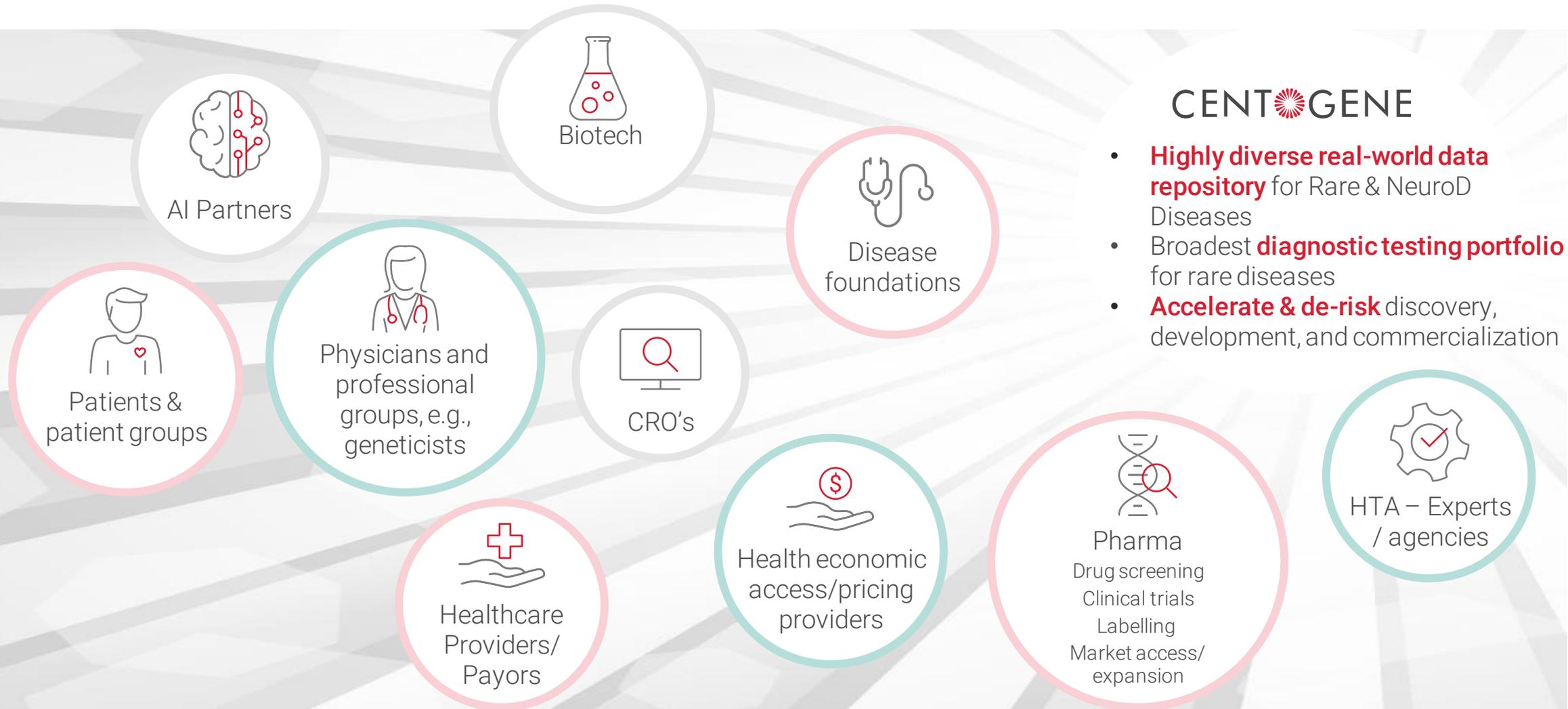


- **CEN TOGENE Biodatabank**, the **world's largest real-world data repository** for rare and neurodegenerative diseases
- State-of-the-art **genomics and multiomics reference lab** (ISO, CAP, & CLIA certified)



- **>50 collaborations with biotech/biopharma partners**, covering over **46 rare diseases**⁴
- **Market access and expansion, clinical development, target and drug screening**

Essential Life Science Partner for Data-Driven Answers in Rare and Neurodegenerative Diseases



Insights into 2,500 rare and neurodegenerative diseases to support breakthrough therapies

CENTOGENE

- **Highly diverse real-world data repository** for Rare & NeuroD Diseases
- Broadest **diagnostic testing portfolio** for rare diseases
- **Accelerate & de-risk** discovery, development, and commercialization

Bone, Skin, Immune

Rare Liver, Kidney, Endocrinology
PKD

Rare Hem
HAE

Rare Metabolic Disorders
Fabry disease
Gaucher disease
MPS II
NPC

Malformation and Retardation

Ophtha

Neurodegenerative Disorders
Parkinson's disease
Friedreich's ataxia
Alzheimer's disease
Frontotemporal dementia
Duchenne muscular dystrophy

GBA-PD

Vascular

Cardio and Lung

Rare cancers

Reproductive

ENT

The Opportunity: By 2024, 18% of Rx Worldwide Expected to Target Rare Diseases

Significant Need Rare Diseases

- **~350 million people affected** by rare genetic diseases, **~90% undiagnosed**
- Estimated **80%** of ~7,000 rare diseases are **genetic in origin**: ~5,600¹
- Public datasets are **~80% of European descent**⁷
- <5% of rare diseases have meaningful therapies

Growing Market for Rare Rx

- Rare diseases market expected to **grow 11+% to 2024**³
- By 2024, rare disease products expected ~18% R sales⁴
- FDA have approved 23 gene/cell therapies to date⁵
- **>50% of FDA approvals** in 2021 were **orphan drugs**⁶

Stakeholder Pressure to Act

- **Regulatory/payor scrutiny** raises standards for approval, access, and entry
- **Patient engagement** for new RD, NDD, & gene therapies; even with premium priced products
- **Stratification and patient profiling** can improve labelling, pricing optimization and success

Near-term opportunities in addressing key stakeholder challenges

Patients, Patient Groups, Disease Foundations



Our ambition is to be the essential life science partner for data-driven in rare and neurodegenerative diseases

Fueling revenues, growing CENTOGENE Biodatabank, and building pharma partnerships

3 STRATEGIC PILLARS

1 DIAGNOSTICS

Highly differentiated testing portfolio

Easy logistics via CentoCard & CentoCloud

WES/WGS

Multiomics

Network of ~29,000 active physicians

2 CENTOGENE BIODATABANK

Fuel CENTOGENE Biodatabank with biomaterial, multiomics, as well as clinical data

Productize CENTOGENE Biodatabank (data monetization)

3 BIOPHARMA PARTNERSHIPS

MARKET ACCESS & EXPANSION

Real world Registry

Early Access Programs

Patient Stratification, Genetic & Biomarker Profiling, Modelling

Patient Identification & Diagnostics

CLINICAL DEVELOPMENT

Observational Studies (e.g., epidemiology, patient finding, genetic & biomarker profiling)

POC/ Ph II/III:

Patient Multiomic Profiling, Stratification, Modelling, Efficacy Marker

Patient Identification & Diagnostic

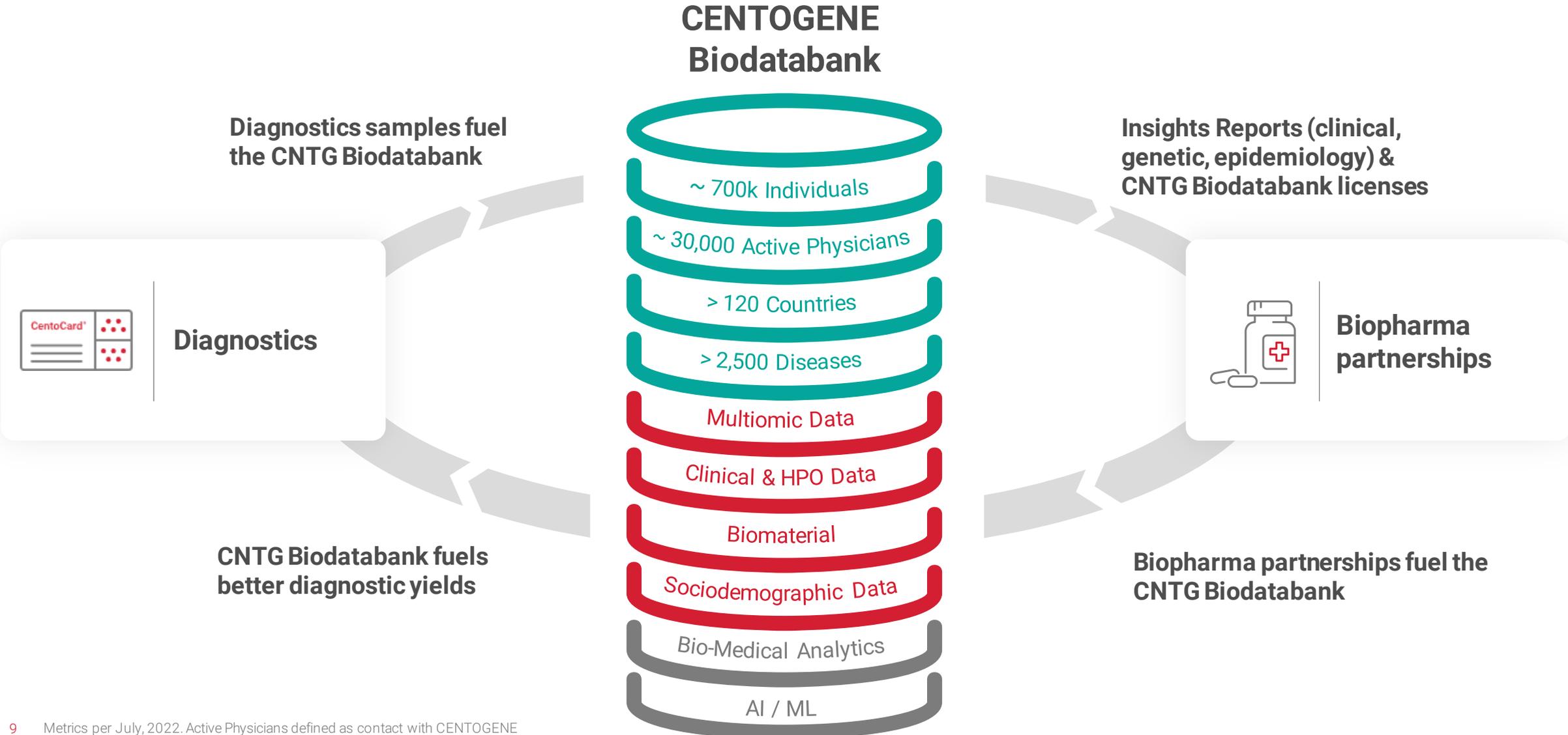
TARGET & DRUG SCREENING

Patient-derived Cell Models & Multiomics

Biomarker/ Assay Identification & Validation

CENTOGENE BIODATA NETWORK (Insight Reports & CNTG Biodatabank licenses)

CENTOGENE Biodatabank: Highly diverse real-world data repository for rare and neurodegenerative diseases



9 Metrics per July, 2022. Active Physicians defined as contact with CENTOGENE within the last 5 years, respectively.

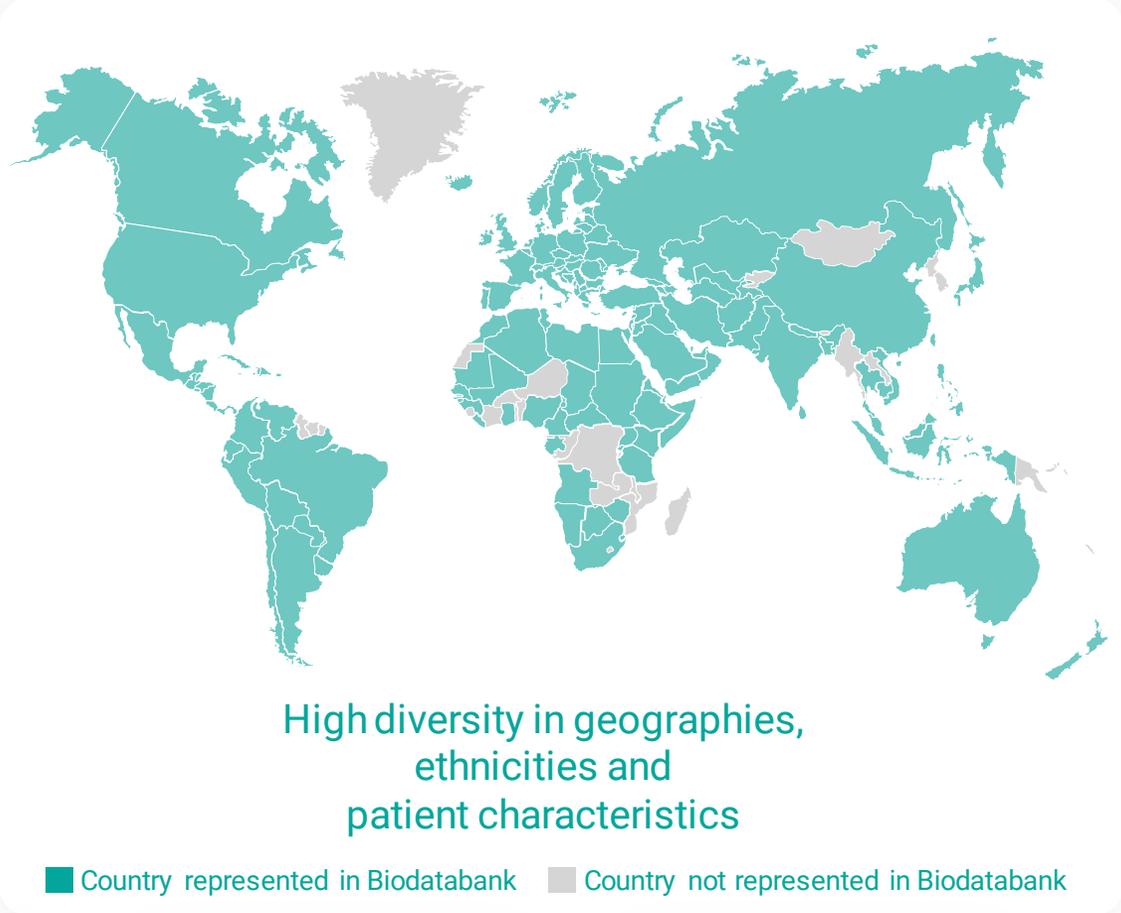
The breadth and depth of the CENTOGENE Biodatabank makes it a unique resource

~700,000 individuals
>30,000 via clinical studies

>400,000 biosamples from
>120 countries

~30,000 active physicians
in our network

~50% broad research consent
(**>70%** in recent years)



>70% of individuals of **non-european descent***

>31 million unique variants

High share of pediatric cases
>13k families with trio analysis

>2,500 rare diseases covered
with diagnosed patients

**Clinical
Diagnostics**

**Market Access
& Expansion**

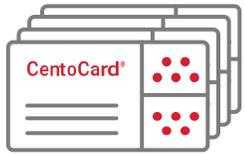
**Clin. Development
Support**

**Target & Drug
Screening**

Metrics per July, 2022. Active defined as contact with CENTOGENE within the last 5 years, respectively. * Internal estimate.

First-in-class data capture and proprietary curation and analysis technologies

Data capture



Gold standard for DNA and multiomic sampling
(from >120 countries)

All common forms of sampling accepted
(incl. buccal swab)



Clinical data capture



Clinical data extraction & curation



Whole Genome Sequencing



State-of-the-art mass spectrometry



RNA sequencing

Data bioinformatics

CENTOGENE BIODATABANK



Automated pipelines for

- variant annotation
- prioritization
- medical reporting
- > 31 million variants
- multiomic analysis and combination expertise

Data utilization

Clinical Diagnostics

Biopharma Partnerships

Target & Drug Screening

Clinical Development Support

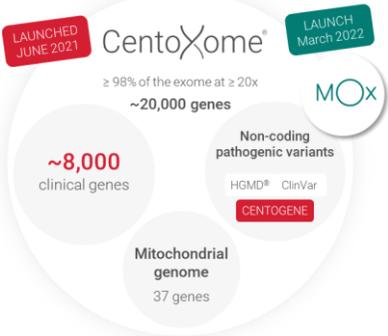
Market Access & Expansion

Value chain supported by advanced bioinformatics and AI tools

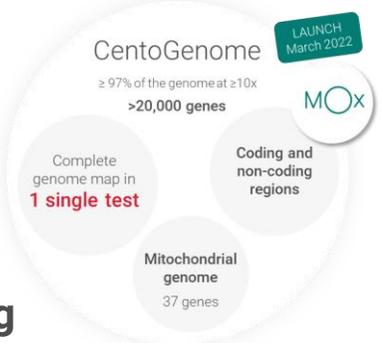
Diagnostics: A distinctive offering and services that support efficient and timely diagnosis of rare and neurodegenerative diseases, leading to better treatment and health outcomes

Highly differentiated testing portfolio in state-of-the-art CLIA/CAP certified laboratory with **deep medical expertise**

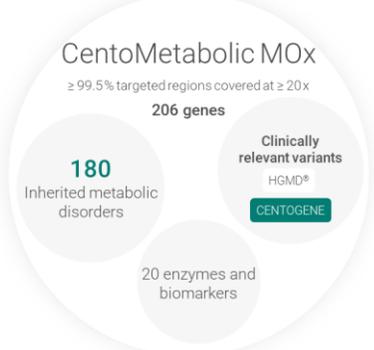
Exome testing



Genome testing



Multimomic testing



Easy logistics for centralized testing enabling **broad access to multiomics**



Dry-lab (SaaS) solution enabling laboratories around the world to deliver leading diagnostic **insights to local patients**



Unique global footprint with **network of ~30,000 active physicians** and **focus on countries with a high prevalence of rare diseases**

CENTOGENE Unique Pharma Offering: Our ambition is to be the essential life science partner for data-driven answers in rare and neurodegenerative diseases

Target & Drug Screening

Patient-derived Cell Models & Multiomics

Biomarker/Assay Identification & Validation

Clinical Development

Observational Studies

POC/ Ph II/III

Observational Studies
(e.g., epidemiology, patient finding, genetic & biomarker profiling)

Patient Multiomic Profiling, Stratification, Modelling, Efficacy Marker

Patient Identification & Diagnostics

Market Access & Expansion

RW Registry & Early Access Programs

Patient Stratification, Genetic & Biomarker Profiling, Modelling

Patient ID & Diagnostics

CENTOGENE Biodata Network

Insight Reports
(e.g., new and existing reports, clinical, genetic, epidemiology)

CNTG Biodatabank Licenses



Market Access and Expansion: Maximize access and personalize patient, provider, and pharma value

Market Access and Expansion



- Real world registry
- Early access programs
- Patient Stratification
- Genetic and Biomarker Profiling
- Modelling
- Patient Identification
- Patient Diagnostics
- CENTOGENE Biodata Network
 - Insight Reports & CNTG Biodatabank Licenses



- **2015 - Ongoing**
- **Rare metabolic and rare neurodegenerative diseases**
- **Provide diagnostic testing services** to identify patients with **rare metabolic and rare neurodegenerative diseases**
- **42 Countries**



- **2019 - 2022**
- **Duchenne muscular dystrophy (DMD)**
- **DMD Sponsored testing program (250 samples)**
- **5 countries:** UAE, KSA, Lebanon, Kuwait, Egypt



- **2015 - Ongoing**
- **Hereditary transthyretin amyloidosis (hATTR) disease**
- **Sponsored testing program** with > 600 samples from 10 countries (Europe) & 125 samples (U.S.)



- **2019 - Ongoing**
- Identify patients in **DMD & Aromatic L-amino Acid Decarboxylase (AADC)**
- **Genetic testing and biomarker analytics** for AADC deficiency in **65 countries** (LATAM, Europe, MENA)
- >2,500 DMD & >2,900 AADC samples screened

Clinical Development: Accelerate and expand pharma partnerships

Clinical Development



Observational studies

- Epidemiology & Patient finding
- Genetic & biomarker profiling

POC/Ph II/III

- Patient multiomic profiling
- Stratification, Modelling, and Efficacy markers
- Patient identification & diagnostics

CENTOGENE Biodata Network

- Insight Reports & CNTG Biodatabank Licenses



- **2021**
- **Hypophosphatasia (HPP)**
- Strensiq (innovative enzyme replacement therapy)
- **De novo variant identification** for HPP and **identification of potential new genes** causing HPP
- **Germany**



- **2021 - Ongoing**
- **Pyruvate kinase ("PK") deficiency**
- **Genetic testing and identification of causative mutations**, incl. HBA1, HBA2, and HBB genes, in Ph. II/III trials
- **20 Countries** (North America, Europe, MENA, APAC, & LATAM)



- **2018 - Ongoing** (ROPAD Study with extensions)
- **Parkinson's disease (PD)**
- **Enroll and genotype 12,500 patients**
- **10 countries**
- Recently extended to test 5,000 patients more



- **2020 - Ongoing**
- **Hereditary transthyretin-related amyloidosis (hATTR)**
- **Longitudinal study providing a molecular genetic diagnosis of hATTR** via NGS and MLPA
- **Germany**
- **5,000 patients enrolled**



- **2018 - 2021**
- **Gaucher disease**
- **Longitudinal natural history study** (LysoProof) with **>1,600 samples analyzed**
- **13 countries** (EU, LATAM, APAC, MENA)
- **Identified and genetically tested >250 Gaucher patients**



- **2021 - Ongoing**
- **Frontotemporal dementia (FTD)**
- **Enroll and genetically test over 3,000 FTD patients in EFRONT Study**
- **7 countries** (Belgium, Germany, Greece, Italy, Portugal, Spain, and Turkey)

Target & Drug Screening: Build partnerships around precision and confidence

Target and Drug Screening



Target & Drug Screening

- Patient-derived cell models & multiomics
- Biomarker/Assay identification & validation

CENTOGENE Biodata Network

- Insight Reports & CNTG Biodatabank Licenses



- **2021 - Ongoing**
- **Niemann-Pick type C**
- **Collaboration to generate data set to enable start of drug discovery**



- **2020 - Ongoing**
- **Gaucher Disease – joint drug discovery project**
- **Joint drug discovery project to identify small molecules reducing biomarker Lyso-GB1 in disease cell models**
- **Transcriptomic and metabolomic data set enabling patient selection with highest unmet need**



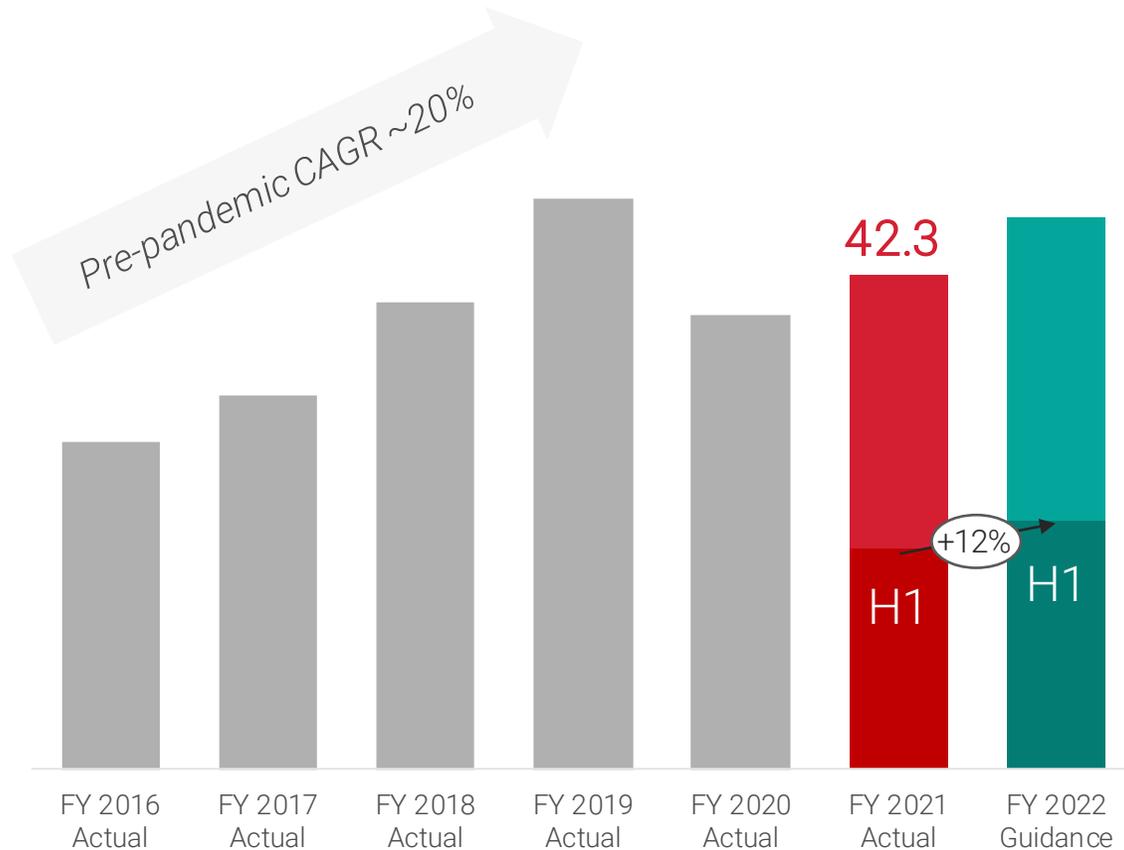
- **2021 - Ongoing**
- **Friedreich's Ataxia, Duchenne Muscular Dystrophy, Hereditary transthyretin-related amyloidosis**
- **Novel biomarker discovery to stratify and monitor patients for disease severity/progression and to enable the discovery of disease modifiers explaining heterogeneity**



- **2018 - 2022**
- **Rare neurodegenerative diseases**
- **Data Access and Collaboration Agreement granting access to the CENTOGENE Biodatabank for discovery & validation of novel genetic and biochemical targets for the potential development of new therapies for rare diseases**

CENTOGENE Financials – per H1 2022

Core Business - Dx and Biopharma revenues¹



Outgrowing the market

Diagnostics

- H1' 22 revenues of 14.5 € million +15% vs H1'21
- # tests for Whole Exome/ Genome Sequencing (WES/ WGS) up 34.7% YoY
- Received CE-mark for CentoCloud decentralized SaaS and clinical decision support platforms

Recovering from COVID impact

Biopharma

- H1' 22 revenues of 6.9 € million +7% vs H1'21
- Increased activity in the clinical studies of pharmaceutical partners
- 45 active collaborations; 12 contracts signed in H1'22; there/of 10 with existing partners
- Launched Biodata Network data-driven partnering solutions for biopharma and research

Near- and mid-term priorities

Topline

Growth

- Focus on unique and transformative business model
- Expand pharma partnerships
 - Fully execute on our ongoing partnerships and target ~20+ new pipeline deals
- Keep growing Dx at above-market level
 - Focus on profitable growth
 - Commercial excellence, CentoCloud, & multiomics

2022 Guidance:*

Revenues
~46.5-48.2 €M

+9-13%
YoY

Bottomline

Cost management

- Drive fit-for-purpose organization
- Focus on efficient operations and margin improvement

H1
2022

Revenues of €21.4M up +13% yoy driven by Diagnostics +15% yoy and Pharma +7% yoy

Runway

Cashflow

- Sector is not about growth at all costs
- Diligently manage cash and extend runway

\$

~\$62M financing (~€55M) in Q1 2022: €15M PIPE & \$45M secured debt facility **

Thank
you

