

### Glucagon-like-Peptide-1 (GLP-1) clinico-genomic dataset for drug discovery and development

Helix, a leader in population genomics running the largest precision clinical network, is offering end-to-end genomics solutions that leverage our growing GLP-1 linked clinico-genomic database of recontactable individuals into actionable insights for diabetes and obesity research.





### **Comprehensive Whole Exome Sequencing Platform**

The first and only FDA de novo class II authorized exome platform (Exome+®) optimized to be the most comprehensive and technically sensitive WES offering available.



#### **Differentiated Clinical Data**

De-identified. OMOP-standardized EHR integrations. including full clinical data & lab results, within US network. Ongoing data refreshes enable continued following of patient journey beyond initial encounter.



Exome+<sup>®</sup> sequencing data linked





with rich longitudinal clinical data from a network of US health systems

Multi-site network protocol aggregating databases for a range of therapeutic areas Geographically and demographically diverse population consented for Life Sciences re-contact

World class analytical capabilities and a dedicated in-house Research Services team

### The power of Exome+® to drive drug discovery and preclinical research

**Proprietary Clinico-Genomic Database & Support** 



**Target Identification** and Validation





Understanding **Disease Mechanism** 

# Research-ready linked cohort for GLP-1 related conditions

Leveraging our geographically extensive network of health system partners across the US, Helix has built a rapidly growing clinico-genomic cohort of over 5,000 GLP-1 agonist treated patients

## Therapeutic agents assessed (short and long acting):

Exenatide, Liraglutide, Lixisenatide, Albiglutide, Dulaglutide, Semaglutide, Beinaglutide, Tirzepatide





of measurements

3

>=4

% of patients with X number

% Total Cohort vs. BMI Reading





**Type 2 Diabetes:** Identify and analyze *GLP1R* variants associated with Type 2 diabetes



0 1 2

**GLP-1 custom cohort:** Created based upon a range of inclusion criteria



**Obesity:** Analyze the emerging impact of GLP-1 agonists in obesity

# Pharmacogenomics of GLP-1 agonist response: 2023 study by Dawed, et al. demonstrates the robust utility of genomic data to analyze variants related to therapeutic response.



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Built a clinical cohort of T2D patients treated with GLP-1 receptor agonists

Conducted GWAS analysis which provided novel insights on GLP-1 signaling and individuals with specific variants benefitting from earlier treatment with GLP-1 receptor agonists Helix's cohort of >5,000 linked clinicogenomic records of GLP-1 agonist treated patients enable Life Sciences to expand similar studies and drive drug development with:



Research ready datasets:

Easy to access and ready to drive impact for your needs



#### Custom delivered insights:

Flexible solution enabling you to work with us on quick analysis or end-to-end research projects for T2D, Obesity and more.

# **\***Helix

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