Helix

Driving precision medicine development for Immunology & Inflammation disorders

Helix, a leader in population genomics running the largest precision clinical network, is leveraging our growing I&I linked clinico-genomic database of recontactable individuals into actionable insights for autoimmune and inflammatory disorders

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, across US network. Ongoing data refreshes enable researchers to follow the patient journey beyond an initial encounter.

Proprietary Clinico-Genomic Database & Support

- Exome+® sequencing data linked with rich longitudinal clinical data from a network of US health systems
- Multi-site network protocol aggregating cohorts 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 Translational Research team

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

Target Identification and Validation

New Biomarker Discovery

Understanding Disease Mechanism

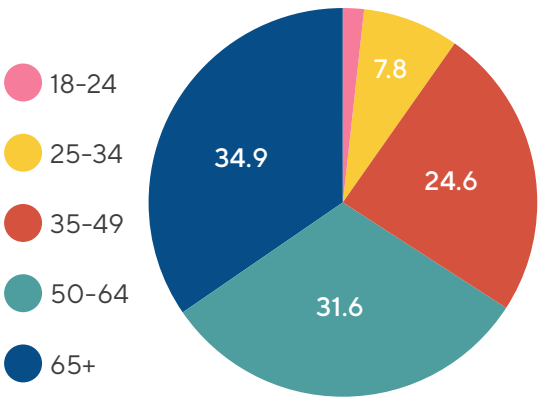
Research-ready linked clinico-genomic cohort of I&I conditions

15.6 years
on average of longitudinal patient history

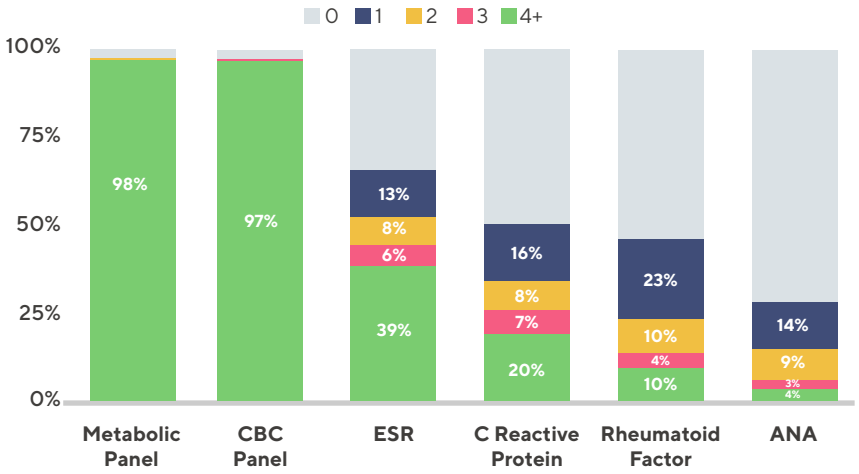
~13K
clinico-genomic records of I&I patients

15
conditions with at least 100 diagnosed patients

% of Patients by Age Range



% of patients with X number of measurements



Major conditions analyzed include:
Lupus, Psoriasis, Rheumatoid Arthritis, Multiple Sclerosis, Crohn's Disease, Ulcerative Colitis, Hashimoto's and many more!

***TL1A (TNFSF15)* genotype affects the long-term therapeutic outcomes of anti-TNFa-antibodies for Crohn's disease patients**
2020 study by Endo K. et. al

1. Investigated naïve CD patients treated with antibody therapy and anti-TNFa between *TLA1* and control groups
2. Results indicated that design of customized therapy with anti-TNF antibodies using *TL1A* genomic information could be effective in the future.

Helix's linked clinico-genomic data enable life sciences to expand similar studies and drive therapeutic development by:

- Building clinico-genomic cohort and gather prescription data and PRS deployment
- Test rare-variant gene burden in all patients and those with high PRS but no disease
- Analyze Impact of *TL1A* on outcomes after anti-TNFa antibodies and other treatments

For more information, please connect with us directly at helix.com or email Lifesciences@helix.com