



FINGENIOUS®

| Finnish ecosystem for
| Future Clinical Trials

WWW.FINGENIOUS.FI

FINBB – Finland's biobank cooperative, owned by universities and hospitals

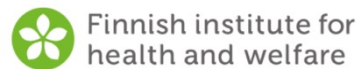
Hospital
Districts



Universities



State
(10/2019)



Future Clinical Trials: Why Finland?

Operational environment

- Biobank Act since 2013
- Act on Secondary Use of Health and Social Care Data since 2020
- One of the world's most digitalized countries;
we trust the authorities

High quality healthcare

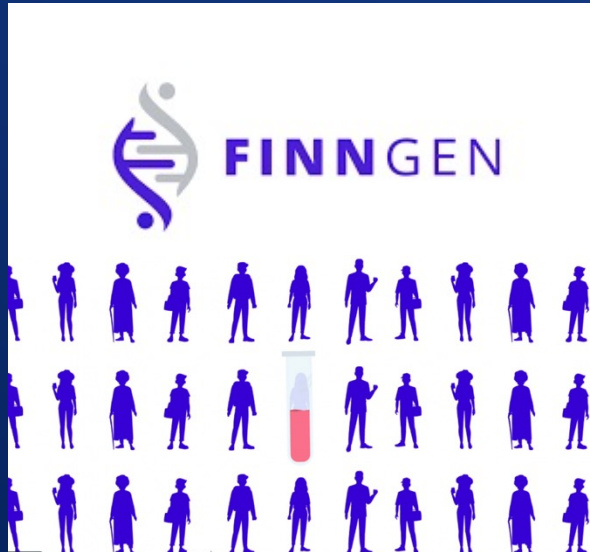
- 100% penetration of **electronic health records (EHR)**
- Unique personal ID codes
- Population based high quality public health care

Unique biobank services

- All Finnish public biobanks accessible through one service: Fingenious®
- Over 11 million samples
- Nearly 500,000 samples genotyped
- **Pre-pooled patients for recontacting**

Registry data over decades can be linked with unique personal IDs

Setting the stage: FinnGen and biobanks




FinnGen project collects genomic data on **10% of Finns**



Data will be owned by Finnish biobanks, **accessible through FINBB**



1 By registering to the Fingenuous® portal you can access the free Fingenuous® ICD-10 Catalogue to browse hospital biobank sample collections at aggregate-level.



Access samples and data: Fingenuous® Access

3 After receiving a response to your feasibility request from the biobanks, log in into Fingenuous® to fill a centralized access request.

Your window to FinnGen data and more: FINBB's **Fingenuous® portal**



Evolving Fingenious® ecosystem

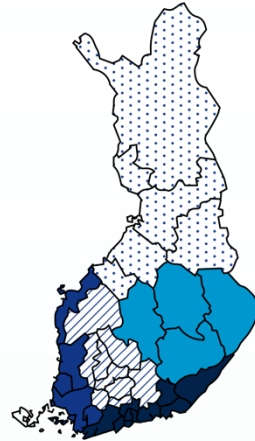
FOUNDING UNIVERSITIES



FOUNDING HOSPITALS



FINNISH HOSPITAL DISTRICTS



BIOBANKS



STRATEGIC COLLABORATION

BUSINESS
FINLAND

FINDATA



**Finnish SMEs
and
innovative
Biopharma**



- + Patient, data and sample finding
- + Study set-up and single point of contact
- + Data and sample delivery and analytics

Researchers

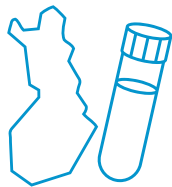


FINGENIOUS®

| Your Digital Gateway to Finnish
| Biobanks and Biomedical Research

What is Fingenious®?

A digital gateway to Finnish biobanks and biomedical research – *the 1st in class service in Europe.*

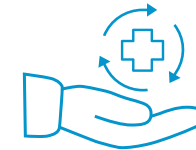


Built to serve academic and industry researchers and to advance medical research globally



FINBB is your single point of contact for all public biobanks and their samples, data and sample donors.

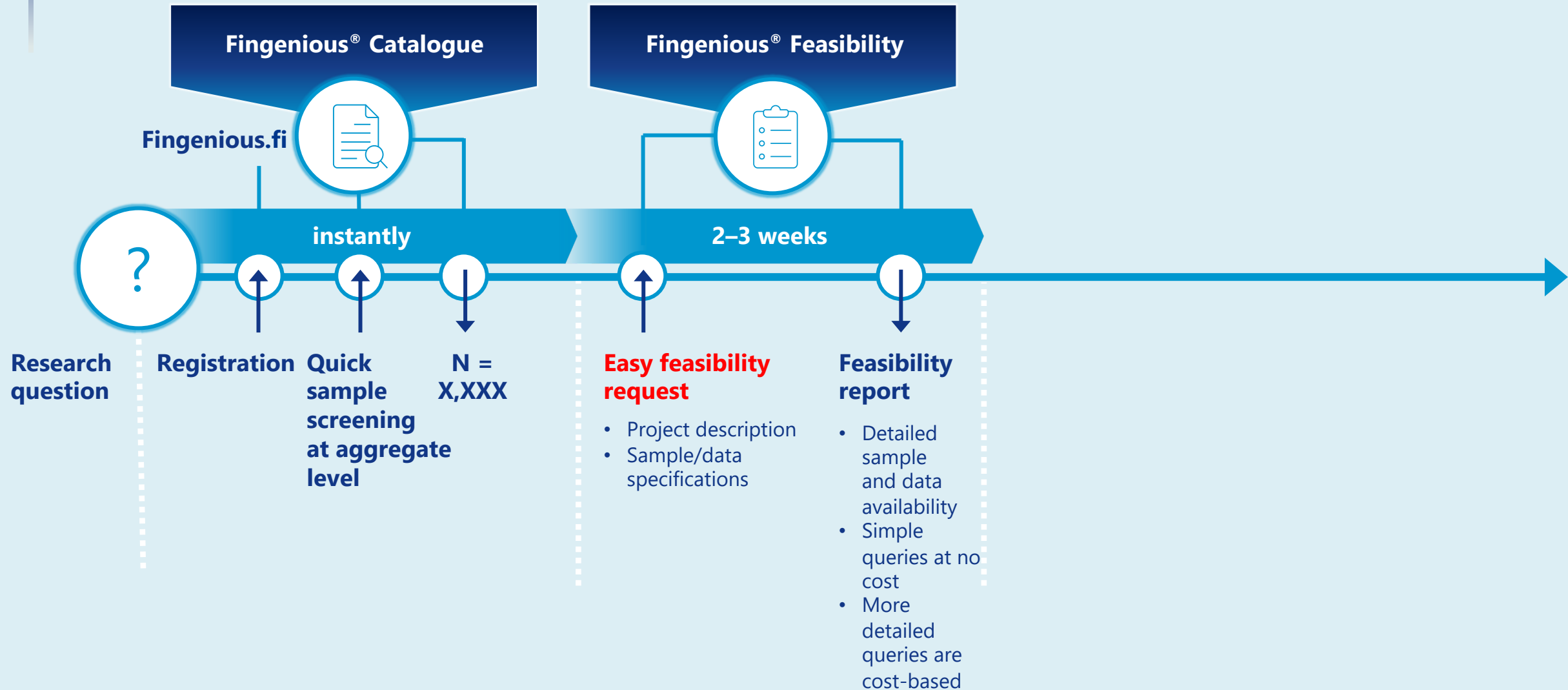
Register now and see for yourself at [Fingenious.fi](https://fingenious.fi)!



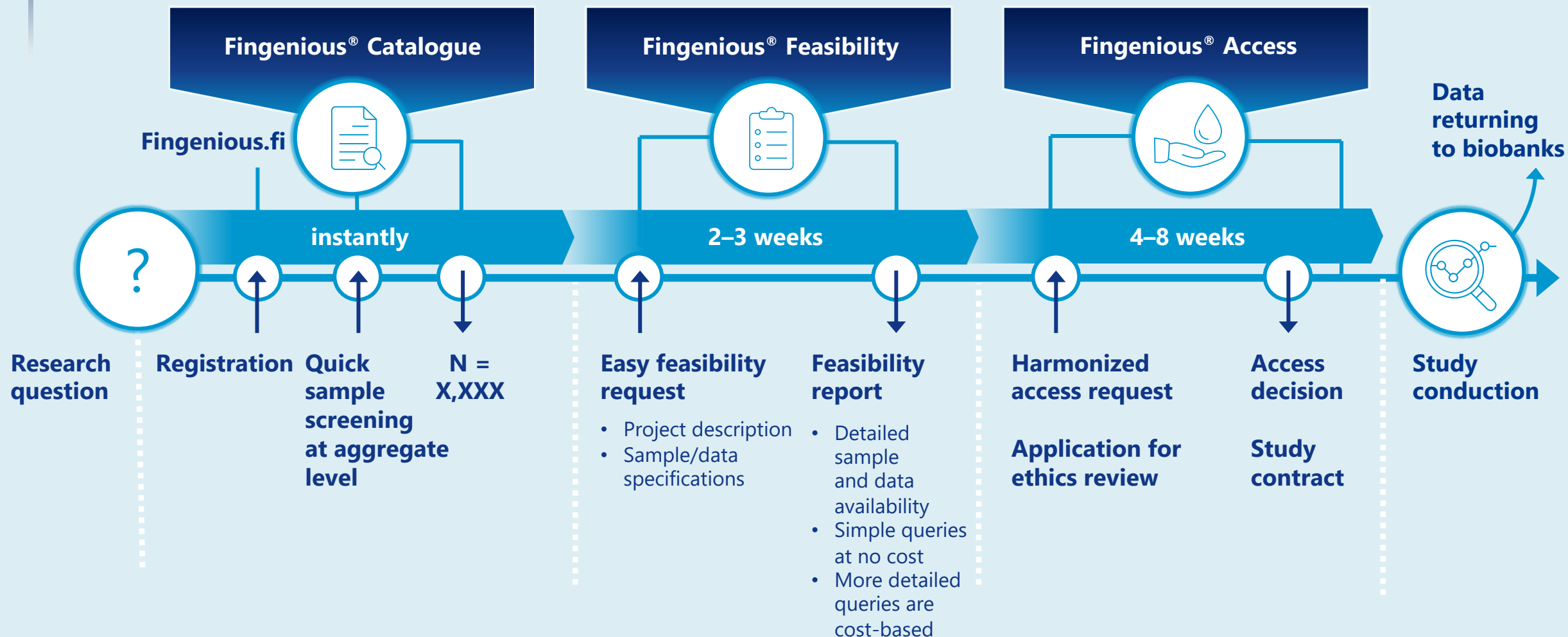
Step 1: Browse the catalogue



Step 2: Study feasibility assessment



Step 3: Access to data and samples



Step 4: Recontact study participants!

- Majority of biobank sample donors have also provided their **consent to be recontacted** on medical studies
- Fingenious enables e.g. recontacting patients with a specific genotype/phenotype combination!
 - Study participants are contacted through the biobanks; they remain anonymous to the sponsor
 - FINBB's role is to enable new biomedical research like clinical trials in Finland by providing recalling services to study participant recruitment

"The ability to recall and target-recruit patients is very exciting!"

- Head of early clinical development of a Big Pharma

Case example: Gyroscope

- Gyroscope Therapeutics Ltd, a US-based clinical-stage gene therapy company, works on age-related macular degeneration (AMD)
- Gyroscope collaborates with FINBB to assess the prevalence of carriers of particular genetic variants in the Finnish dry AMD population
- The service concept offers fast and easy way to conduct the feasibility part of study participant recruitment for the gene therapy clinical trial

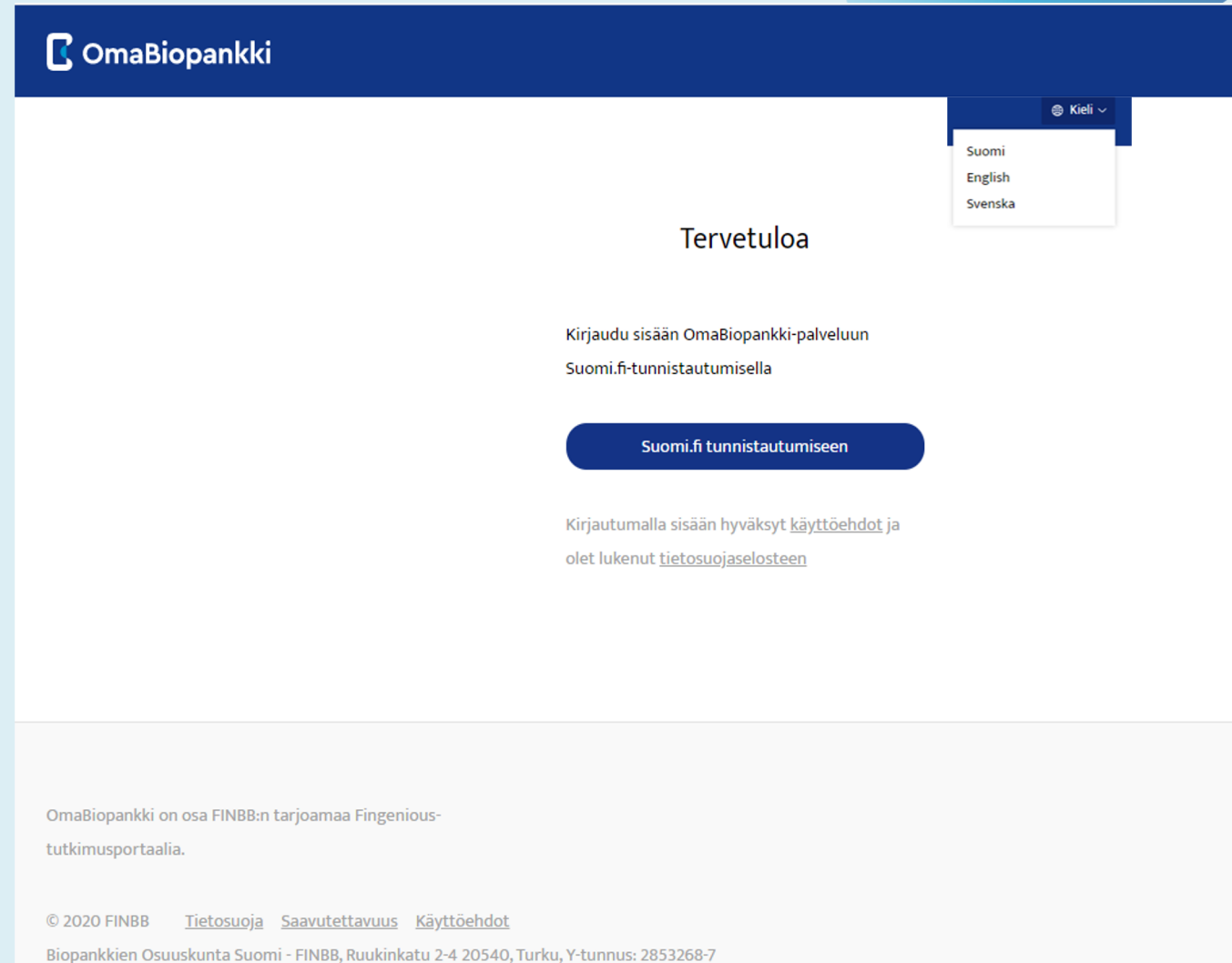
New 1st in class service: MyBiobank (omabiopankki.fi)



Latest enhancement of Fingenious®:

- MyBiobank: Digitally engaging research subjects
- Biomedical and health related query studies
- Recontacting research subjects for further studies
- Tampere (Tays) is piloting end-to-end digital process

Participants can use the service in Finnish, Swedish, or English



Feeding into Fingenious®: FinnGen – Great Performance by Finnish Biobanks



Goal: 500 000 participants by 2023

During FinnGen1 (3 years), the number of new consented samples in Finnish biobanks increased
30,000 → 253,000

At the end of Aug 2020:

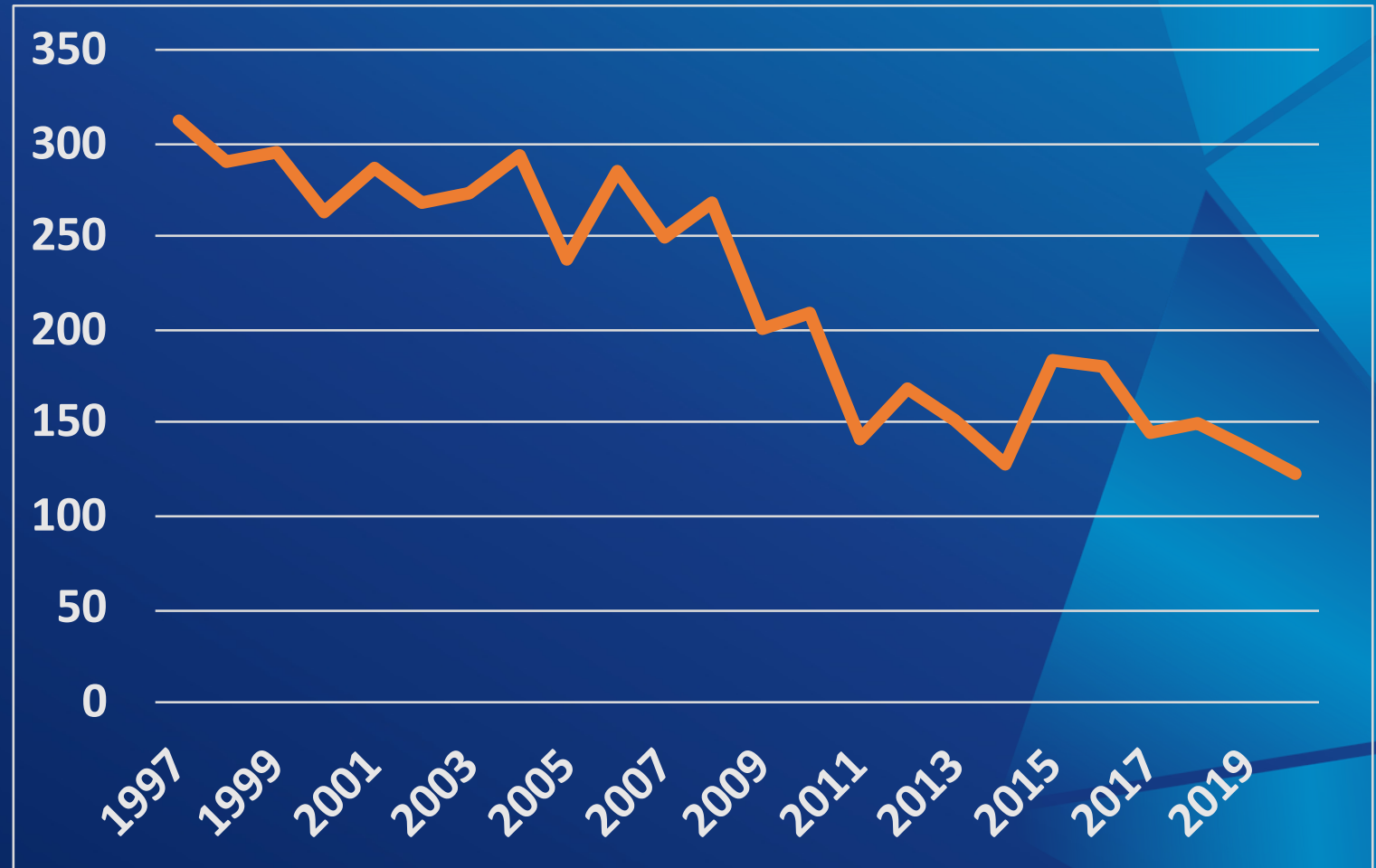
- 158,500 legacy samples
- 253,000 new samples
- ≈ Total of **411,500** available samples

Fingenious ecosystem and next steps in 2021

- The common goal is to increase the number of biomedical research programs and collaboration in Finland
- New Fingenious® services will be piloted by co-creation with Finnish biobanks, researchers, FinnGen and Finnish companies
- Practical ecosystem development with rules and responsibilities will take place in June 2021 – **more to come**

...Finland, let's finally reverse this curve!

- Number of clinical studies in Finland has declined for two decades
- Now we have a strong offering to help turn this curve!



Thank you

- For more details please contact Marco Hautalahti, CEO, FINBB
- **Register for free at fingenious.fi**

