



LONGGENESIS

# World's most advanced life data escrow

**Sergey Jakimov, deputy CEO**

U.S. and PCT Patent pending



LONG GENESIS

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**Data does not do you  
any good until turned  
into information, and  
that is really our  
challenge**

- Stanford, 2018

Longenesis is an ultimate merge of blockchain excellence of Bitfury and proprietary AI from Insilico medicine, delivering world's most advanced and secure platform for life data storage and longevity analytics

# Our founders

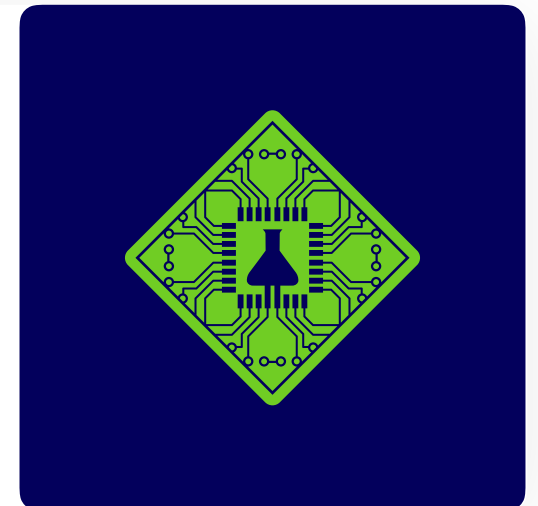
## Bitfury

The largest full-service blockchain technology company in the world. Bitfury provides its developed blockchain Exonum, the framework that is more flexible in implementing and upgrading functionality than permissionless blockchain networks (e.g., Ethereum).

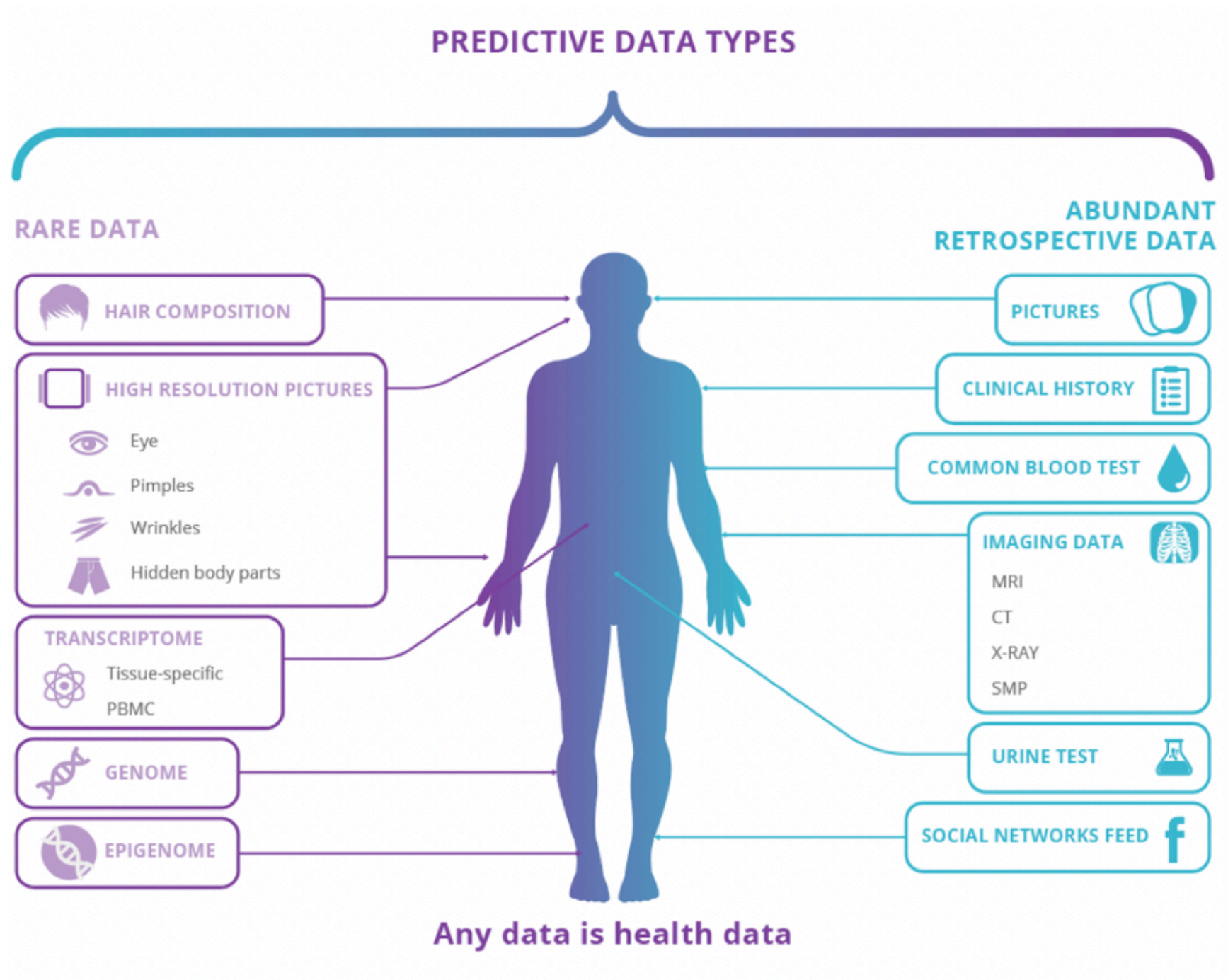


## Insilico Medicine

A Baltimore-based next-generation AI company specializing in the application of deep learning for target identification, drug discovery and aging research.



# Merging different data types in one time point unlocks extended insight in individual's health and longevity



# Why is data a big deal

**84%**

**OF PEOPLE ARE WILLING TO SHARE  
BASIC TEST DATA AND BLOOD  
PRESSURE**

**48%**

**OF PATIENTS ARE WILLING TO  
SHARE OR OTHERWISE  
MONETISE THEIR HEALTHCARE  
DATA**

# Why is data a big deal

**760TB**

OF DATA

Average hospital is generating  
yearly

**2314**  
**exabytes**

OF HEALTH DATA

to be produced 2020

**40% growth**

IN MEDICAL IMAGE ARCHIVES

annually

**300mUSD**

GSK spends on 10% of  
23andMe

**80%**

OF HEALTH DATA

Is unstructured in emails, images  
and scans

**2bn USD**

Personalised medicine  
market by 2022



# Challenges in health data storage

## Lack of Data

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Misdiagnosis

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Lack of preventive healthcare

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Lack of application

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## Oversaturation with Data

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What matters among the noise and generic data items?

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## Data Ownership & Transparency

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You own your data

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Trust in Data / Validation

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Use of analytics

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# Smart life data escrow

## Data users

Use live search to compile custom datasets based on unique search criteria. They access phenotypic and other anonymized data, having user consent, to accelerate research and drug development in a traceable way.

## Data aggregators

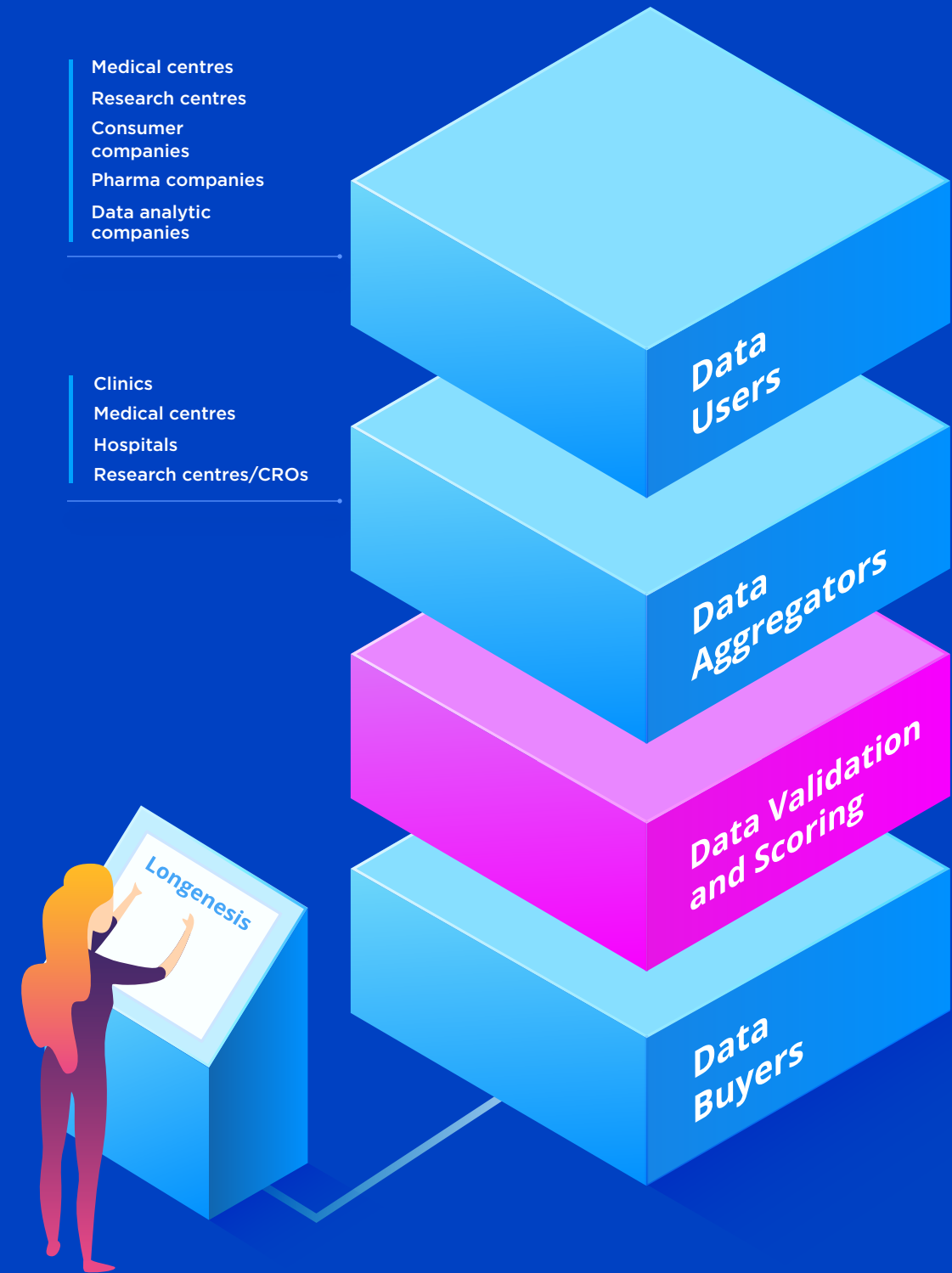
Institutions and individuals (healthcare organizations, doctors, etc.) use the platform for data storage and analytics.

## Ai-based data verifier

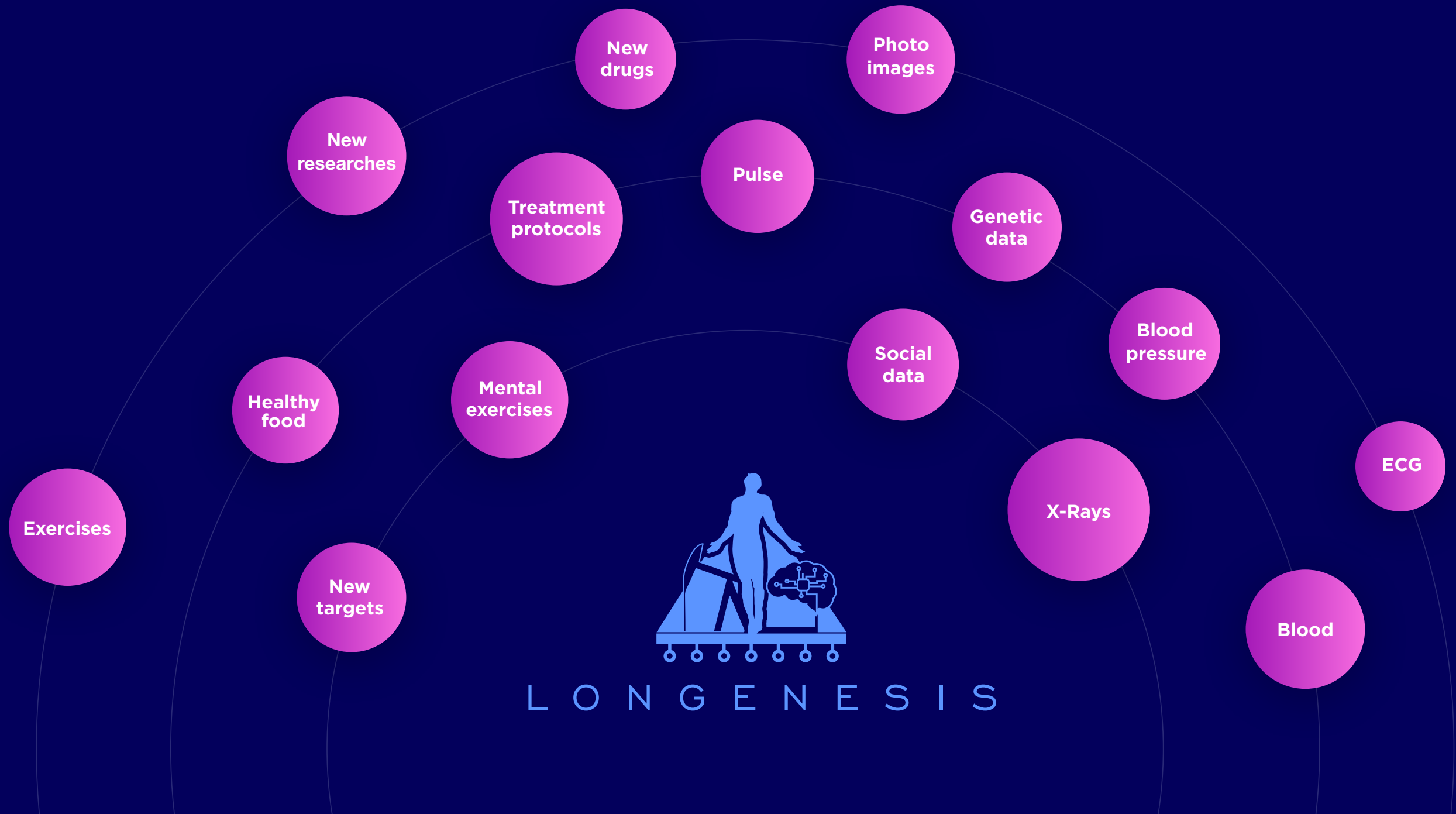
Proprietary and flexible system for data validation and scoring in order to classify and evaluate uploaded data for better future analytics.

## Data owners

Individuals/Patients, who contribute or otherwise upload their data.



# Longenesis - fit for any data type



# System described — key metrics

## Security and data privacy



Secured data storage, allowing convenient mechanisms for data encryption and storage, minimizing the risks of data leaks. Selected unique security features include data encryption algorithms, key splitting, and advanced deployment

## Multiple data types in one ecosystem



Longenesis helps to organize various data types from a patient/group of patient, allowing to query data by a variety of phenotypic types and forming a “data lake” for future analytics and aggregation

## Data analytics



The ability to analyze collected data types and correlate them in order to “view the bigger picture”, providing in-depth health analytics for certain patient/cohort of patients

## Full data access control



Ability to manage the access controls to certain data, limiting 3rd party usage of certain data items

## Data validation



Automatized system for data validation and scoring in order to classify and evaluate uploaded data for better future analytics, as well as drive out generically generated/artificial data items

## Data traceability



Gives the users an opportunity to see who and when accessed their data, as well as purpose it was used for

**U.S. and PCT patent pending**

# Media featured in:

The logo for WIRED, featuring the word "WIRED" in a bold, black, sans-serif font. Each letter is contained within a black square.The logo for nature medicine, with "nature" in a small, red, lowercase sans-serif font and "medicine" in a larger, red, lowercase serif font.The logo for REUTERS, featuring an orange circular icon composed of dots to the left of the word "REUTERS" in a grey, uppercase sans-serif font.The logo for PubMed, with "Pub" in a blue sans-serif font and "Med" in a white sans-serif font inside a blue book-like shape.The logo for COINTELEGRAPH, featuring a yellow lightning bolt icon to the left of the word "COINTELEGRAPH" in a bold, black, uppercase sans-serif font, with the tagline "The future of money" in a smaller, black, lowercase sans-serif font below it.

## Ongoing Deployments

September 2018 — **Longenesis established a partnership with Nebula Genomics** — a company that wants to sequence your genome and let you share it on a blockchain, while retaining your rights to control its usage (co-founded by prof. George Church).

The logo for NEBULA GENOMICS, featuring a teal circular icon with a white "N" inside to the left of the word "NEBULA" in a large, teal, uppercase sans-serif font, with "GENOMICS" in a smaller, teal, uppercase sans-serif font below it.

# Contacts

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