

# 500 PRECISION MEDICINE CLINICS IN THE USA LANDSCAPE OVERVIEW 2021

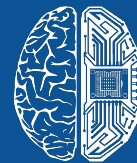
*Most Advanced Clinics and  
Practical Guidances  
Teaser*



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# 500 Precision Medicine Clinics in the USA

## Table of Contents

<b>Introduction</b>	2
<b>Executive Summary</b>	5
• Approach Used	9
• Research Methodology	10
• Criteria Classification Framework	14
<b>Precision Medicine Clinics in the USA</b>	20
<b>Practical Guidances</b>	40
• Choose the Precision Medicine Clinic	41
• Post-COVID Rehabilitation and Treatment	43
<b>Overview of the US Health Care System</b>	48
<b>Longevity Associations and Upcoming Events</b>	53
<b>Impact of COVID-19 on the Longevity Industry</b>	61
<b>Navigating the Future</b>	73
• Key Market Trends to Watch	74
• Emerging Technologies in the Longevity Industry	76
• New Entrants into the Healthcare Market	77
<b>Precision Medicine Clinics Predictions and Conclusions</b>	79
<b>Glossary</b>	82
<b>Disclaimer</b>	85

## Introduction

Developed by Aging Analytics Agency “**500 Precision Medicine Clinics in the USA Landscape Overview 2021**” Report contains a comprehensive overview of the Precision Medicine Clinics Ecosystem and insights on the Longevity Industry in the USA. The report (and its associated interactive mind-map) constitute the most comprehensive survey of the Longevity Industry made to date, categorising and profiling 500 Precision Medicine Clinics. In terms of the criteria used in this report, a clinic can be classified as a Precision Medicine Clinic if it specialises in at least one of the following areas: Age-Related Diseases, Functional Medicine, Reproductive Medicine, Regenerative Medicine, Rehabilitation Medicine, Aesthetic Medicine, and Sports Medicine.

This research report is the first of its kind to guide you through a variety of clinics and diagnostic and treatment procedures and choose the optimal solution that best suits your needs, health, geographic location and financial status. This report will be updated on a regular basis, including taking into account the feedback from all interested Longevity Industry participants – clinics, patients, government agencies and institutions. The COVID-19 pandemic has highlighted the need for rehabilitation treatments and technologies to increase lifespan. This report also provides information on the main types of Smart Technologies used by Precision Medicine Clinics including AI, blockchain, wearables, machine learning, IoT, robotic automation, and big data analysis and coming-soon technologies.

# 500 Precision Medicine Clinics in the USA

## Multidisciplinary



## Functional Medicine



## Age-Related Diseases



## Aesthetic Medicine



## Regenerative Medicine



## Rehabilitation Medicine



## Reproductive Medicine



## Sports Medicine



## Top Precision Medicine Clinics in the USA Landscape Overview 2021

This graphic presents a **Range of Precision Medicine Clinics** that have proved central to the cause of healthy longevity, arranged according to the size of clinics.

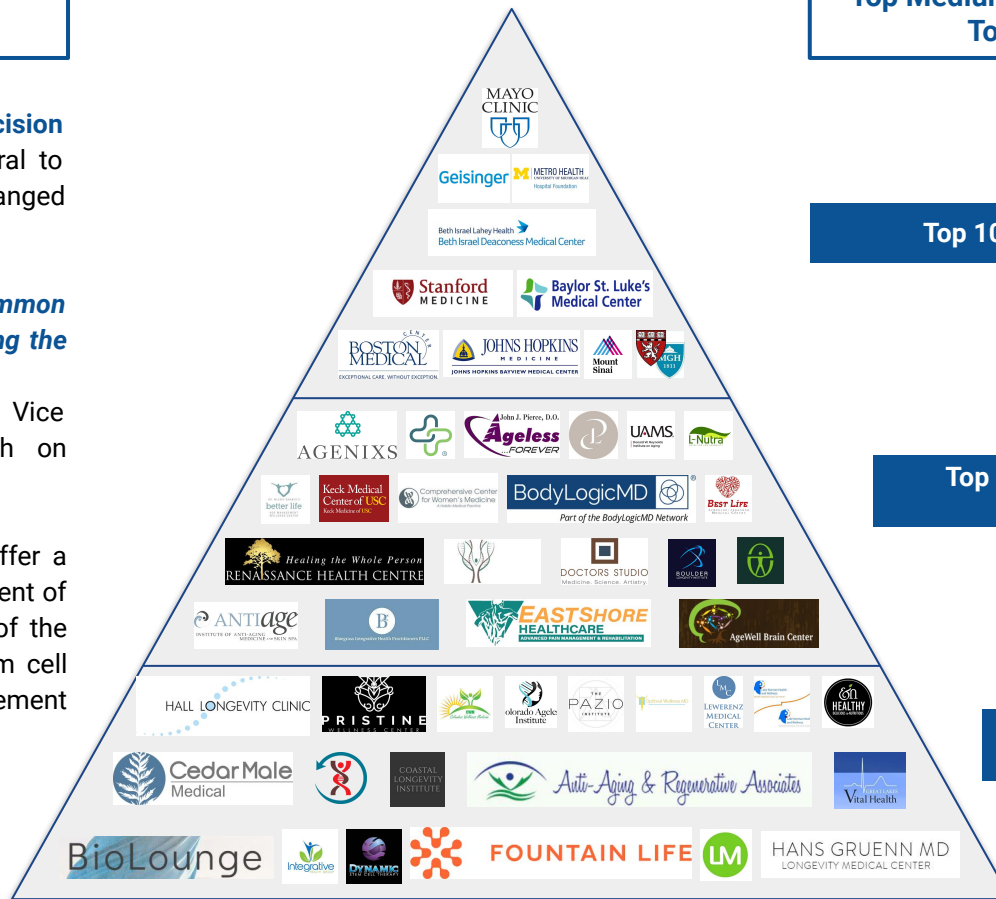
*"Aging and disease stem from common mechanisms. Delaying disease by delaying the aging process is a real proposition."*

- Gordon Lithgow, PhD, Professor and Vice President, Buck Institute for Research on Aging.

Precision Medicine Clinics in the USA offer a wide range of services from the assessment of the current state of health, using state of the art biomarkers and technologies, to stem cell and bioidentical hormone replacement therapies.



Top Large Clinics - 10  
Top Medium-Sized Clinics - 20  
Top Small Clinics - 20



Top 10 Large Clinics

Top 20 Medium-Sized  
Clinics

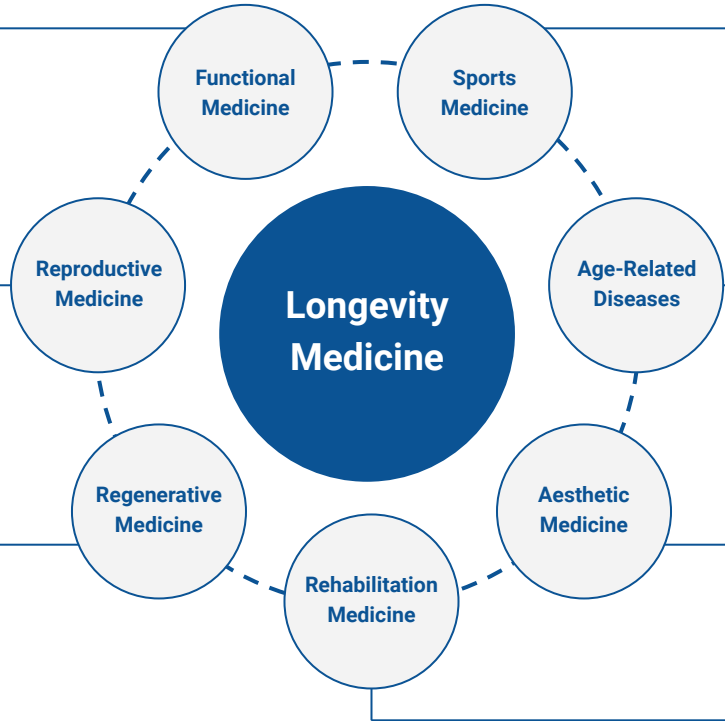
Top 20 Small Clinics

# Longevity Medicine Composition

Functional Medicine implies the complex use of dietology, rehabilitation programs, psychological recovery, functional training, spa treatments, etc. This combination of moderate physical activity, relaxing procedures and healthy eating has a healing effect.

The functioning of the reproductive system and the body as a whole is provided by hormones, which go off-balance in the process of ageing. Hormones are one of the objective indicators of biological age. Hormone therapies can revert the hormonal imbalances caused by aging to prolong a healthy and active life.

Biology views the aging of the human body as a disease, body's inability to restore damaged tissues and organs. Regenerative medicine offers treatments for aging at the tissue and cellular level, which can potentially treat previously incurable diseases such as diabetes mellitus, cardiovascular disease, chronic renal failure, osteoporosis, and spinal cord injury.



Sports medicine is a practical branch of medicine that studies the physical development and functionality of the body.

Age-related pathologies are the most common diseases of modern mankind. Treatment of age-related diseases is directly related to the prolongation of human life. To develop the most optimal anti-aging strategies, it is important to timely track the signs and markers of age-related changes in tissues and organs that lead to a weakening or disruption of their normal function and to the development of age-related pathologies.

Aesthetic medicine is a branch of the beauty and health industry that has absorbed all the theoretical information and practical possibilities of correcting a person's external data using medical techniques.

Rehabilitation is the restoration of health, functional state and working capacity for those who are impaired by diseases, injuries, or other physical/chemical factors. Medical rehabilitation is a combination of treatment procedures aimed at restoring the patient's physical and psychological health.

# Report Methodology

## Stage 1: Data Aggregation

From the large dataset that is available in open sources, a list of precision medicine clinics, clinics specialised in anti-aging and gerontology, and “rejuvenation” medicine clinics was conducted, taking into account anti-criteria to filter out clinics with doubtful and unreliable data.

## Stage 2: Classification of Organisations

Based on general description and gathered qualitative data all clinics were divided into eight categories: age-related diseases, aesthetic medicine, functional medicine, sports medicine, rehabilitation medicine, reproductive medicine, transplantation medicine, and regenerative medicine. Then, by using weighted parameters like revenue, number of employees, and foundation date, they were further specified into three categories by size: large hospitals, mid-size clinics and small clinics.

## Stage 3: Quantifying Leadership of Precision Medicine Clinics

The main goal of the project was to investigate longevity clinics of the USA and identify top 50 clinics out of over 5000 registered in the USA. The top-50 Precision Medicine Clinics ranking was created using data collection approach.

The evaluation of over 500 Precision Medicine Clinics by experts allowed to build a ranking of US clinics from the most advanced and competitive clinics at the top to less effective and developed at the bottom of the list. While some clinics at the bottom can be treated as less advanced in comparison with clinics which top the rank, they should be considered as truly effective ones as they are all in top 10% of US Precision Medicine Clinics.

**Top 50 Precision Medicine Clinics** were chosen based on computed marks and review of management team and scientific associates. The main purpose was to identify those organisations which work to develop, promote, and ensure widespread access to therapies that cure and prevent the diseases and disabilities of aging.

Every Precision Medicine Clinics from the list obtained scores from two independent experts. The weight of each of the experts' scores in the final mark is 50%. The method of normalised score allowed to rank every single clinic from 10 to 2. The best performing clinic from the rank obtained 9.4 out of 10 points, as it was decided not to use the best performing clinic from the list as the benchmark.

The aim of the project was to create three golden standards of Precision Medicine Clinics in large longevity clinics, middle-sized, and small Precision Medicine Clinics.

The best 50 Precision Medicine Clinics were selected according to aforementioned categories.

# Longevity Landscape Framework

## Geroscience R&D

Rejuvenation Biotechnology	Basic Research on Biology of Ageing
Geroprotectors	Regenerative Medicine
Nutraceuticals	Gene Therapy

## P4 Medicine

Personalised Diagnostics	Personalised HALE and QALE Estimation
Personalised Prognostics	Personalised in vivo and in silico Drug Testing
Preventive Therapies	Participatory Medicine

## AgeTech

NeuroTech	Cognitive Enhancement
Smart Homes	NextGen Mobile Apps for the Elderly
Continuing Education	Entertainment for the Elderly

## Longevity WealthTech

Financial Planning	Asset Management
Micro-Investments	Digital Brokers
AI-Driven Assistants	Long-Term Securities

## Longevity Finance

Longevity Index Fund	Longevity Hedge Fund
Longevity Stock Exchange	AgeTech Bank
Longevity Derivatives	Longevity Investment Bank

## Longevity Governance

Pension Plans	National Healthcare Budgets
Longevity Development Strategies	Elderly Care Programs
National Insurance	Elderly Education

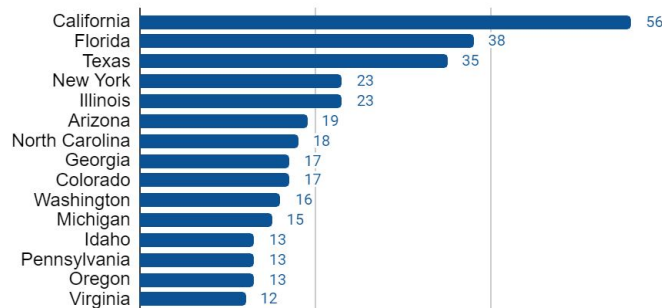
# Diversification of Precision Medicine Clinics in the USA

**California takes the number one spot by the quantity of the Precision Medicine Clinics.** It features clinics of any size, from the giants of the industry like Stanford Health Care to a smaller yet highly expert-rated Fountain Life and L-Nutra.

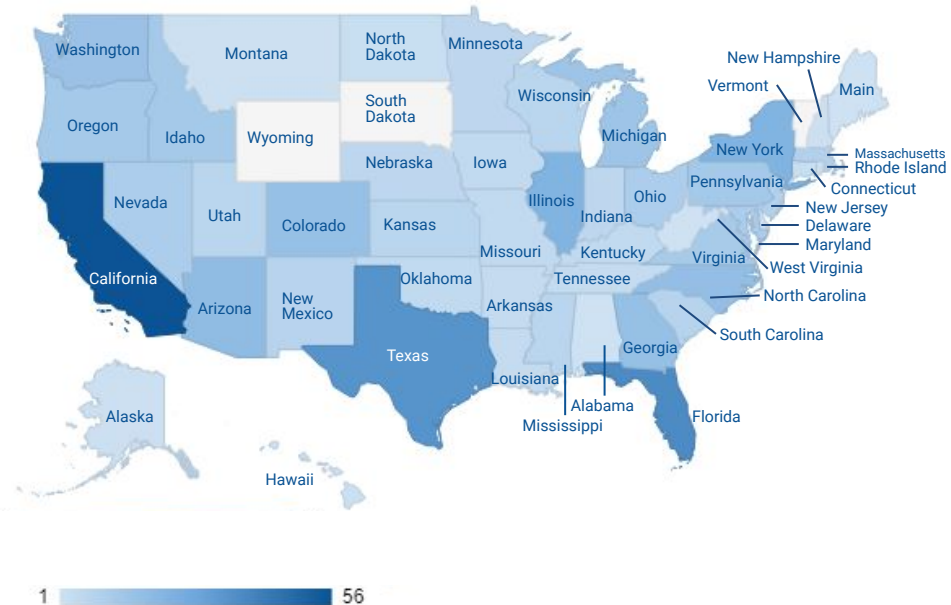
**California is followed by Florida and Texas, locating 38 and 35 clinics respectively.** Florida features a few highly ranked medium clinics, Doctors Studio and Hope Wellness and Recovery Center, while Texas hosts a popular private practice, Brynna Connor Family Medicine.

Honourable mentions include Mayo Clinic in Minnesota, Massachusetts General Hospital in Massachusetts, East Shore Healthcare in Pennsylvania, and Coastal Longevity Institute in New Jersey.

## Top 15 States in the USA by the Number of Precision Medicine Clinics



## Distribution of 500 Precision Medicine Clinics in the USA by State





# Methodology Overview

The rapid acceleration of longevity industry development necessitates a complex, comprehensive, and flexible methodology for examination.

**To evaluate the top Precision Medicine Clinics and choose the most prominent ones, a framework with almost 20 overarching categories was developed:**

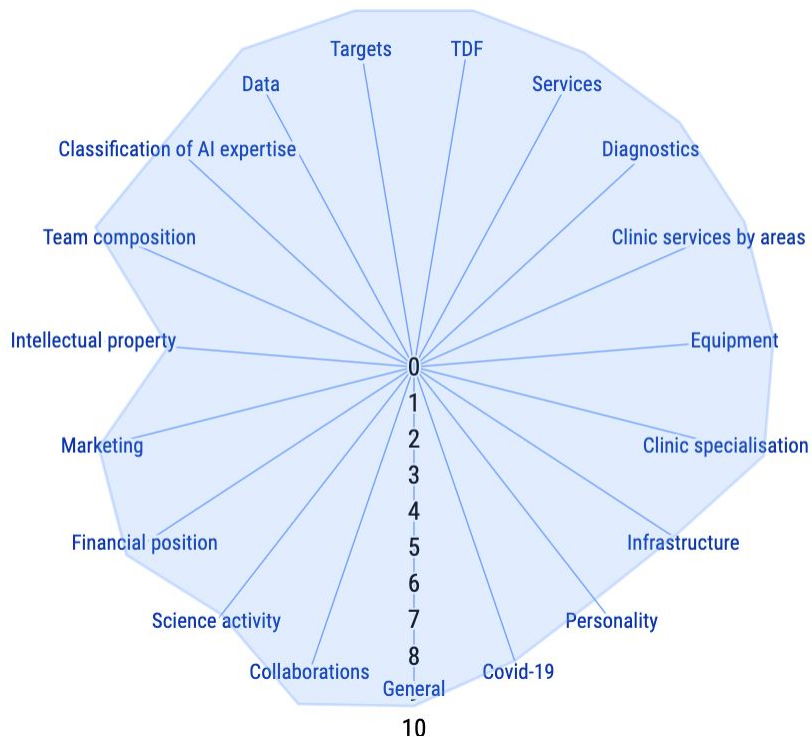
- General Characteristics
- Collaboration
- Marketing
- Science Activity
- Financial Position
- Intellectual Property
- Team Composition
- Classification of AI Expertise
- Data Processing
- Targets of Treatment
- Focus Level (Therapeutic Depth Factor)
- Services
- Diagnostics
- Clinic Services by Areas
- Equipment
- Clinic Specialisation
- Infrastructure
- Personality
- Covid-19 Factors

Each category of clinics – large, medium-sized, and small clinics – has distinct characteristics that are notable:

- **Large:** flagships of the longevity industry, these clinics excel in therapeutics and diagnostics due to tremendous laboratory and staff resources, yet often lack distinction in marketing, personality, and specialisation – they are not branded as Precision Medicine Clinics, which is an exciting avenue for development in the upcoming decade, marking expansion of longevity industry
- **Medium-sized:** a segment of great promise, medium sized clinics combine the benefits of both smaller and larger counterparts while minimising their drawbacks. A relatively diverse team composition and
- **Small:** offering the most personalised and target-specific approach, longevity cabinets approach an ideal of P4 medicine, focusing on prevention of age-related diseases and early interventions rather than alleviating symptoms

5 Precision Medicine Clinics from each size category have demonstrated exemplar performance and are examined in greater detail below. Overall performance within each criteria category was taken into account to choose the leading clinics and small cabinets.

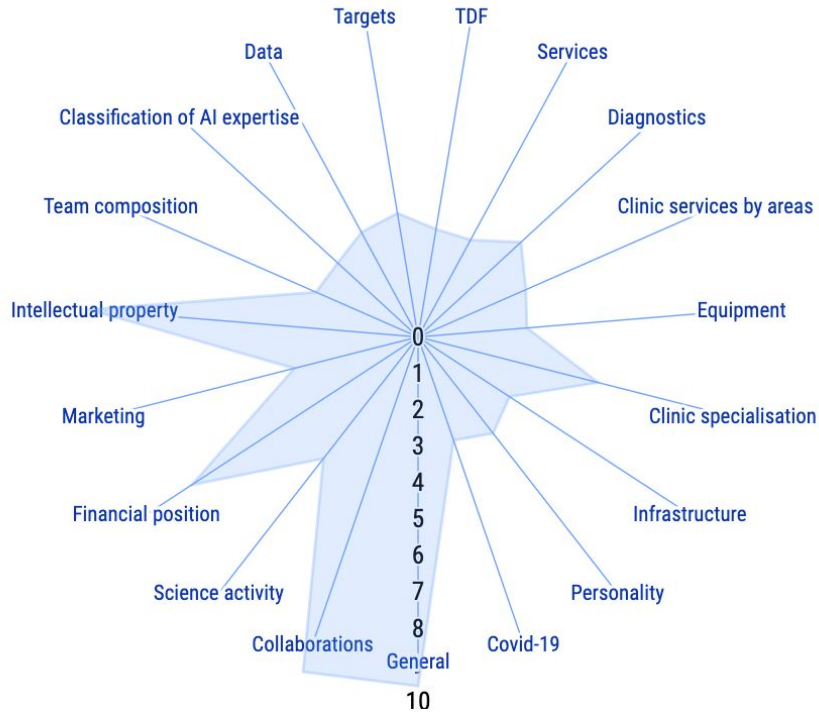
# Mayo Clinic



**Mayo Clinic** is a nonprofit American academic medical center focused on integrated health care, education, and research.

<b>Size</b>	Large
<b>Headquarters</b>	Rochester, Minnesota
<b>Number of Employees</b>	65,000
<b>Foundation Year</b>	1871
<b>Specification</b>	The clinic specialises in surgery, dermatology, endocrinology, geriatrics, rheumatology, neurology, restorative medicine and rehabilitation medicine.

# L-Nutra



**L-Nutra** is a nutrition technology company using breakthrough science to enhance human health and longevity.

<b>Size</b>	Medium-Sized
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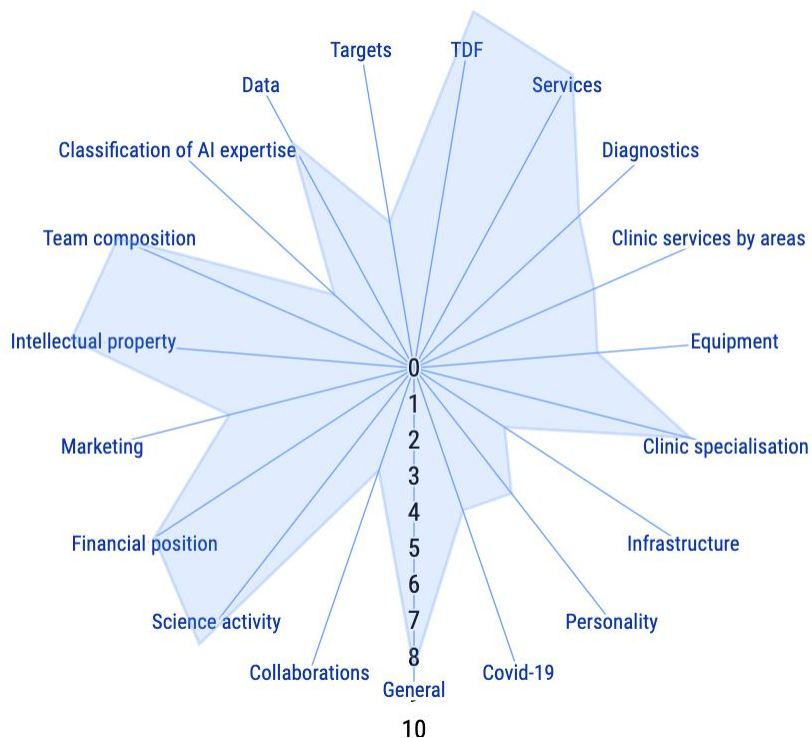
<b>Headquarters</b>	Los Angeles, California
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<b>Number of Employees</b>	81
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<b>Foundation Year</b>	2009
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<b>Specification</b>	The clinic specialises in investigation of the fasting mimicking diet and scientific development of nutritional breakthrough.
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# Fountain Life



FOUNTAIN LIFE

**Fountain Life** provides an innovative, fully-integrated platform delivering best-in-class predictive, preventative, personalised, and data-driven health.

**Size** | Small

**Headquarters** | White Plains, New York

**Number of Employees** | 34

**Foundation Year** | 2019

**Specification** | The clinic specialises in precision diagnostics, performance optimisation, rapid recovery, and regenerative medicine.

# Choose the Precision Medicine Clinic

Active and healthy longevity, slowing down the aging process is a new norm for people who are conscious of their health. One of the main instruments for achieving this norm is the emerging innovative industry of Longevity Medicine – **Smart & Precision Medicine using Longevity Biomarkers**.

The multidisciplinary nature of Longevity Medicine and the lack of specialised training programs and specialists in this area make it difficult to practically use its capabilities for conditionally healthy people who want to take preventive, preventive measures to slow down the aging process.

**This Guidance and regular analytical studies on Precision & Longevity Medicine provide practically useful information on the criteria for choosing medical institutions**, the correct formulation of questions when contacting highly specialized doctors, and allow you to better build your system of goals and priorities for achieving active and healthy longevity.

An analogy can be drawn between personal achievement in Longevity and athletic performance. High results in sports of high achievements can be achieved only with the help of the teamwork of the athlete himself with a high degree of motivation and a team of professionals - a trainer-methodologist, doctors, nutritionist, physiotherapist, psychotherapist, etc. Likewise, in slowing down the aging process, it is necessary to rely on the support of professionals — specialists in the field of Longevity Medicine and assembled into a single team of medical specialists from other fields.

The Precision Medicine Clinic is a medical institution whose specialists deal with the problems of prolonging an active life in its various aspects. They can be multidisciplinary or focus on one of the following areas:

- Diagnostics and Treatment of Age-Related and Systemic Diseases
- Regenerative Medicine
- Functional Medicine
- Rehabilitation
- Aesthetic Medicine and Cosmetology
- Reproductive Medicine
- Sports Medicine

This gradation allows the potential customer to quickly navigate to the proposals on the market. In terms of capacity, all Precision Medicine Clinics can be divided into large, medium-sized medical centers and small offices (cabinets). Large multidisciplinary clinics are simultaneously diagnostic and research centers with the latest equipment, which actively involve world-class specialists in their work. Clients of large clinics can receive all the necessary medical and consulting assistance on complex issues have the opportunity to participate in clinical trials conducted at the center. The main advantage of specialised Precision Medicine Clinics is their extensive experience in a particular medical field. Well-equipped with specific equipment, narrow specialisation of doctors make highly specialised clinics the best choice for solving a specific, separately taken. problem.

# Overview of the US Health Care System

**The healthcare system in the USA is the most expensive in the world.** The national health expenditures reached \$3.8B in 2019 (17.7% of the 2019 GDP), \$11,582 per person. This level of spending is about 40% higher than in Switzerland, who has the second highest per capita spending.

**Healthcare in the USA is not universal.** Patients finance their medical expenses through a combination of funds from private insurance, federal and state assistance, and out of pocket.

**Healthcare varies significantly by state.** While the richer states like Massachusetts and California top the national rankings in healthcare quality/access, Arkansas and Mississippi are at the end of all three lists.

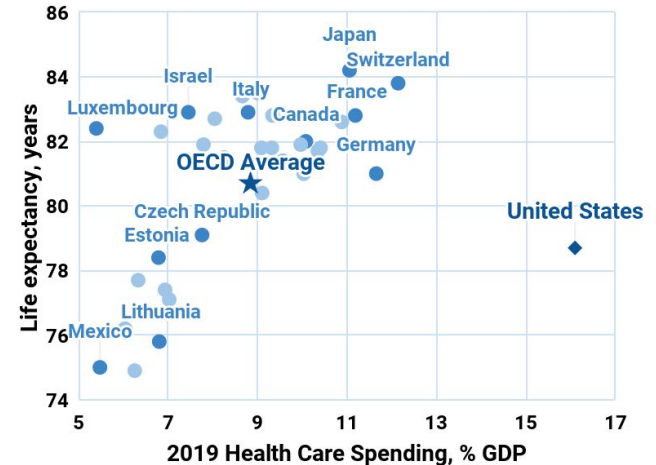
**Patients have access to healthcare through hospitals and private care practices.** There are about 6,000 hospitals in the USA; 24% are private for-profit, 19% are funded by state and local governments; others are private non-profit. About 2/3 of physicians practice outside the hospital in a small (<7 physicians) private cabinets.

**The healthcare quality does not hold up to the expenses.** People in the USA live 4 years less on average than people in Switzerland, who has the second biggest health-related expenditure. Chronic diseases are more prevalent; the care is often insufficient.

**The resulting healthcare system has a high potential.** With some of the best physicians and abundant resources, the inequality in access, and lack of focus on primary care, the system performs much worse than comparable OECD country systems.

**The Department of Health and Human Services**, the main federal legislative and regulatory body in the US healthcare, identifies improved quality, access to healthcare, increased well-being throughout lifespan, advancement of research, and improved management as the focus areas in their strategic plan for 2018-2022.

## The Relationship Between Life Expectancy and Healthcare Spending, OECD Countries, 2019



# Longevity Associations and Foundations in the USA



**Name:** American Academy of Anti-Aging Medicine

**Mission:** Medical education in longevity medicine, metabolic resilience, and whole-person care.

**Directors:** Andrew Heyman, Director of Academic Affairs; Sahar Swidan, Director of Professional Programming.

**Founded:** 1993



**Name:** Life Extension

**Mission:** To develop quality products based on pure ingredients and potent formulas in order to support and promote healthy life.

**Directors:** Bill Faloon, Co-Founder and Technical Director; Paul Gilner, CEO.

**Founded:** 1980



**Name:** Longer Life Foundation

**Mission:** To support the study of scientific and public health factors predicting longevity and wellness.

**Directors:** Anna Manning, President and CEO; David H. Perlmutter.

**Founded:** 1998

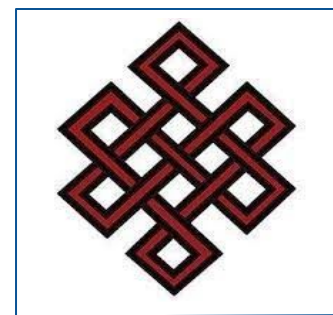


**Name:** American Federation for Aging Research

**Mission:** To support and advance healthy aging through biomedical research.

**Directors:** Irving S. Wright, Founder; James L. Kirkland, President.

**Founded:** 1981








**Name:** American Aging Association

**Mission:** To promote biomedical aging studies and increase knowledge of biogerontology in public and in the health fields.

**Directors:** Rozalyn Anderson, President; Matt Kaerberlein, Chair.

**Founded:** 1970

# Longevity Associations and Foundations in the USA

				
<p><b>Name:</b> The Life Extension Advocacy Foundation</p> <p><b>Mission:</b> To promote the advancement of biomedical technologies which will increase healthy human lifespan.</p> <p><b>Directors:</b> Keith Comito, President; Oliver Medvedik, Vice President.</p> <p><b>Founded:</b> 2015</p>	<p><b>Name:</b> Buck Institute for Age Research</p> <p><b>Mission:</b> To end the threat of age-related disease for this and future generations.</p> <p><b>Directors:</b> Eric Verdin, President and CEO; Malene Hansen, CSO.</p> <p><b>Founded:</b> 1985</p>	<p><b>Name:</b> Alliance for Aging Research</p> <p><b>Mission:</b> To accelerate the pace of scientific discoveries to vastly improve the universal human experience of aging and health.</p> <p><b>Directors:</b> James G. Scott, President and CEO; John L. Steffens, Chair Emeritus.</p> <p><b>Founded:</b> 1986</p>	<p><b>Name:</b> Methuselah Foundation</p> <p><b>Mission:</b> To make 90 the new 50 by 2030.</p> <p><b>Directors:</b> David Gobel, Co-Founder and CEO; Dane Gobel, Co-Founder.</p> <p><b>Founded:</b> 2003</p>	<p><b>Name:</b> Betterhumans</p> <p><b>Mission:</b> To extend healthy maximum human lifespan and greatly reducing the risk of disease.</p> <p><b>Directors:</b> James Clement, President and Director; Jim Gibbons, Director; Travis Christofferson, Director.</p> <p><b>Founded:</b> 2008</p>



# Upcoming Longevity Conferences and Events in 2021



**The Long Life Family Study: Resources and Discoveries in Human Aging**  
*Jun 30, 2021*

**American Aging Association - 49th Annual Meeting. Metabolism of Aging**  
*Jul 20-23, 2021*

**Ending Age-Related Diseases 2021**  
*Aug 19-22, 2021*



**Bio-identical Hormone Replacement Therapy Symposium**  
*Sep 9-11, 2021*

**RAADfest 2021 Annual Conference: Revolution Against Aging and Death**  
*Oct 1-3, 2021*

**2021 Century Summit**  
*Dec 7-9, 2021*



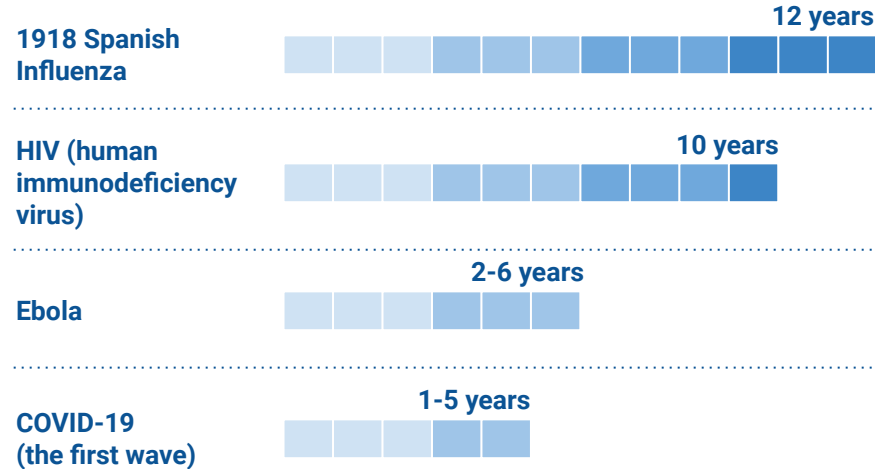
**A4M 29th Annual World Congress**  
*Dec 10-12, 2021*

**Exponential Medicine 2021**  
*TBD, 2021*

**Harvard/Paul F. Glenn Symposium on Aging**  
*TBD, 2021*

# The Impact of COVID-19 on Life Expectancy

## Estimated Impact of Historic Epidemics on Life Expectancy



**Life expectancy** is a measure that is used to summarize the risk of death at different ages in a given population. For instance, life expectancy at birth in the USA is 78.6 years. This means that babies born today would live 78.6 years, on average, given current mortality rates.

However, we do not know how mortality rates will change in the future.

The USA has one of the lowest life expectancies among high-income countries. The COVID-19 pandemic contributes to the decline of life expectancy. In 2020, mortality increased above its expected level in the USA.

However, the historical facts ensure that the **life expectancy can come back to the pre-pandemic level**. We can refer to the **1918 influenza pandemic and the declines in life expectancy in 2014**. During the influenza pandemic, life expectancy in the USA dropped by approximately 6.8 years, however, it increased by 8.8 years by 1919, putting life expectancy back on trend.

The other example is a bad flu year in 2014, a number of developed countries, including the USA, the UK, Italy, and Germany, experienced life expectancy declines, and most of the countries that experienced declines saw increases in 2016 and were back on track the following year.

There are two possible scenarios:

- **Best-case Scenario:** life expectancy could get back on track and increase almost linearly as it did following the 1918 influenza pandemic.
- **Worst-case Scenario:** If it will be discovered that coronavirus exposure has lifelong impacts that are not apparent until years later, increasing mortality and decreasing life expectancy for years to come.

# Recommendations for people with Long-COVID syndrome

## Recommendation 1: Choose a clinic

The link between the disease COVID-19 and the factors of accelerated aging and the age dependence of post-COVID syndrome indicates the possibility of using longevity medicine methods for the prevention and rehabilitation of COVID-19. This research report is a guide to choosing a longevity clinic where specialists in the fields of age-related diseases, rehabilitation, regenerative and functional medicine can help you. You need an interdisciplinary approach to treatment. Longevity clinics in the United States are included in this study.

## Recommendation 2: Use the Resources for PCCC

In this Guide, you can find a link to the [list of Post-COVID Care Centers](#) with an interactive map that shows the nearest hospitals that specialize in the treatment of the consequences of COVID. If such longevity clinics and PCCC centers have not yet been opened near your place of residence, consider telemedicine. You can get the initial virtual consultation to find out about the next steps, like the needed further diagnostics. Also, your family doctor can identify and treat conditions such as mood swings, depression, or anxiety. Check if you need pulmonary rehabilitation, as this method may promote a speedy recovery of the whole body.

## Recommendation 3: Follow a Healthy Lifestyle

Practice wellness and sports. Consult your doctor and find the optimal exercise program that suits your health condition, the level of your recovery progress and the degree of fatigue. If you have heart or breathing problems, you will need an official authorization from your doctor to practice safe sports such as tai chi or yoga. Stay asleep for seven to nine hours. Monitor your body mass index. Follow a balanced diet: eat vegetables, lean animal protein, whole grains, and drink plenty of water.

## Recommendation 4: Maintain a Positive Attitude

It is difficult to remain optimistic when you don't know what's happening to your health and don't know when the illness will end. Spend more time with people you like and talk to your doctor more often; he will instil in you confidence in a speedy recovery.

## Recommendation 5: Consider Vaccination

Carefully study all available information about vaccination. Consult your doctor about any potential risks. In some people with Long-term COVID, symptoms improve after vaccination, but there is still no complete research on its effects on Long-COVID patients. Researchers at Yale University are currently studying the vaccine's effects on Long-COVID patients.

# Embracing the New Normal – Post COVID-19

## The COVID-19 Pandemic Highlights:

1

It is necessary for all countries to invest in the development of a strong healthcare system and primary health care, as the best way against outbreaks such as COVID-19 and against other health threats that people face. Health systems and health security should be a priority for the government of every country around the globe.

2

The Ministry of Health needs to protect people from health emergencies, as well as to promote universal health coverage and healthier populations to keep people from needing health services through multi-sectoral interventions like improving basic hygiene and sanitation.

3

There is an urgent need for stronger data and health information systems, especially for emerging countries. Countries should be able to collect and use timely, accurate, and comparable health data and statistics. It will help to understand population health trends, develop appropriate policies, allocate resources and prioritise interventions.

## Long-term Impact of the COVID-19 Pandemic

The uncertainty surrounding the potential long impact of COVID-19 heightens the need for new ways to increase longevity.

The long-term consequences of the pandemic are still unclear for the younger generation. In view of these circumstances, the demand for longevity technologies and treatments may increase as people will seek more support in dealing with mental health difficulties.

A set of basic rules and advice will help prolong the lifespan after the COVID-19 disease. In addition, professionals at the Longevity Clinics developed a set of rehabilitation programs to prevent ageing and mitigate the risks of the pandemic.

Selected Advice to achieve well-being after the COVID-19 illness:

- Monitoring of the lung conditions and managing breathlessness
- Physical exercise after leaving the hospital
- Management of eating, drinking, and swallowing
- Management of attention, memory, and clarity of thought problems
- Management of lifestyle
- Management of stress and mood disorders
- Visiting the required list of doctors and professionals

# Companies Focusing on Reducing COVID-19 Severity



## BioAge

Being a California-based biotech company, Biotech develops anti-aging drugs and discovers treatments for aging-related diseases.

Founded in 2015, it has attracted more than \$127M in venture capital to map molecular pathways that affect human lifespan and develop therapies targeting severe diseases.

In May 2021, the company commenced the second phase of testing of its BGE-5 drug. It is expected that the drug will improve the functioning of the immune system in elderly people, thereby protecting them from viruses, including COVID-19. During the previous stage of research, it was found that BGE-5 reduces the rate of reproduction of the virus in the lungs, thereby reducing the impact of the virus on the body and the likelihood of its transmission to other people.

losmapimod, an anti-inflammatory drug, is expected to boost immunity and treat muscular dystrophy. In 2018, scientists injected the chickenpox virus into the skin of older adults. Despite being already infected with chickenpox, they demonstrated a weak immune response, which was attributable to excessive inflammation. After being injected with losmapimod, they exhibited an improved immune response and a nearly 70% reduction of inflammation.



## Fulcrum Therapeutics

Founded in 2015, Fulcrum Therapeutics is a biotechnology company developing new medicines to deliver a new future to patients.

Fulcrum is based in Massachusetts. The company develops a proprietary product engine that employs to identify and validate cellular drug targets that can modulate gene expression. Its product candidate, losmapimod, is a small molecule that was developed for the treatment of FSHD, a muscle-wasting disorder that leads to physical impairments and disability. It is focused on improving the lives of patients with genetically defined diseases in areas of high unmet medical need, with an initial focus on rare diseases.

In June 2020, Fulcrum Therapeutics began Phase III trials of losmapimod, a muscular dystrophy drug. It was found that the drug can reduce the intensity of inflammation, thereby increasing the effectiveness of the immune response to viruses.

Involving 400 volunteers and investigators, Phase III trial helped determine that losmapimod can prevent death and respiratory failure in elderly people having COVID-19.

# Emerging Technologies in the Longevity Industry

## CRISPR Gene Editing

Ability to directly edit the human genome has the potential to cure Alzheimer's, hereditary diseases, otherwise untreatable cancers, and directly control gene expression at the cellular level. This approach will greatly aid in targeting the cell-level causes of human aging.

## Bioprinting

Like regular 3D-printing, bioprinting is a process of creating a 3D structure layer by layer. However, instead of ink or plastic, bioprinting uses human cells or tissues to recreate biological structures, where cells can continue to grow and multiply, a breakthrough for Regenerative Medicine.

## AI and Machine Learning

AI has the capacity to strongly boost the field of Longevity Medicine, as the computer-assisted tools help analyze biomarkers and human conditions, predict developments, and design treatments and clinical solutions to the problems of aging.

## Immunotherapy

Activating the body's immune system and training it to attack the target of interest is currently a prospect of a great scientific interest. Researchers find so-called active immunotherapy a high-potential solution to many cancers and other diseases.

## Biological Predictive Systems

Combining biology with physics and engineering, predictive biological systems modelling allows scientists to predict the behavior and the properties of complex multimicrobial systems, prompting new developments in low-level biological sculpting.

## DNA Origami

DNA origami is a bottom-up approach to generating nanometer- and micrometer-scale DNA particles of desired parameters by folding them up with the use of scaffolding structures. It is a potential solution to some problems in biophysics, drug delivery, and bioimaging.

# Longevity Investment Big Data Analytics Dashboard



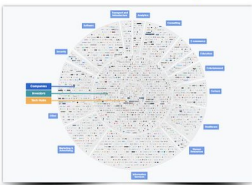
## Longevity Investment Big Data Analytics Dashboard

**Market Intelligence**

Longevity Investment Market Intelligence

- Major Trends
- Network Diagrams
- Interactive MindMaps

**Interactive Mindmaps**




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**Dashboard Parameters**

DATA POINTS	PERSONALITIES	COMPANIES
<b>4810866</b>	<b>16107</b>	<b>19603</b>
INVESTORS	SECTORS	SUBSECTORS
<b>9007</b>	<b>14</b>	<b>140</b>

**Dynamic Industry Charts**



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Longevity Investment Market Intelligence


- SWOT Analysis
- FAQ & Tutorials
- Register Free Account
- Send Us Feedback

**Search Engine**

Longevity Investment Ecosystem Investors

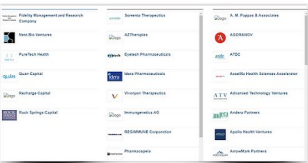
- Investor Portfolio Search
- Investor Competitors Search
- Investor Search

**Investor & Company Advanced Search**




Find Investors
Find Companies

**Competitor Search**



Company Competitors
Investor Competitors

**Interactive Network Diagrams**



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Longevity Investment Ecosystem Companies

- Company Investor Search
- Company Competitors Search
- Entrepreneur Search

# About Aging Analytics Agency

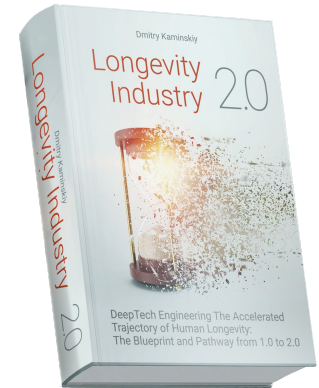
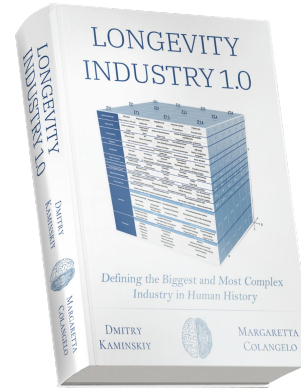
**Aging Analytics Agency is the only analytical company focused exclusively on Longevity, Ageing, Geroscience, Preventive Medicine and AgeTech.** Operating for over five years, it began producing reports on Longevity long before it emerged as an industry. Aging Analytics Agency is primarily interested in strategic collaboration with international corporations, organisations and governments of countries in longevity-related projects and initiatives.

Aging Analytics Agency is open for cooperation with strategic clients via a variety of approaches, including:

- Conducting customised case studies, research and analytics for internal (organisational) use, tailored to the precise needs of specific clients
- Producing open-access analytical reports
- Offering customised analysis using specialised interactive industry and technology databases and IT-platforms

**Aging Analytics Agency sees its mission in transforming the ageing population challenge into an opportunity.** By utilising AI-driven big data analytics, benchmarking and profiling national and local industry strategies, it aims to come up with Longevity policy initiatives and develop Longevity strategies. Aging Analytics Agency is recognised internationally as the premier analytics agency for advanced data analysis, industry reports and next-generation infographics on the topics of Aging and Longevity. Now in its 7th year, Aging Analytics Agency has been on the frontlines of Longevity Analytics.

[www.longevity-book.com](http://www.longevity-book.com)



## Longevity Industry 1.0

- Defining the Biggest and Most
- Complex Industry in Human History

## Longevity Industry 2.0

- DeepTech Engineering the Accelerated
- Trajectory of Human Longevity
- The Blueprint and Pathway from 1.0 to 2.0



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