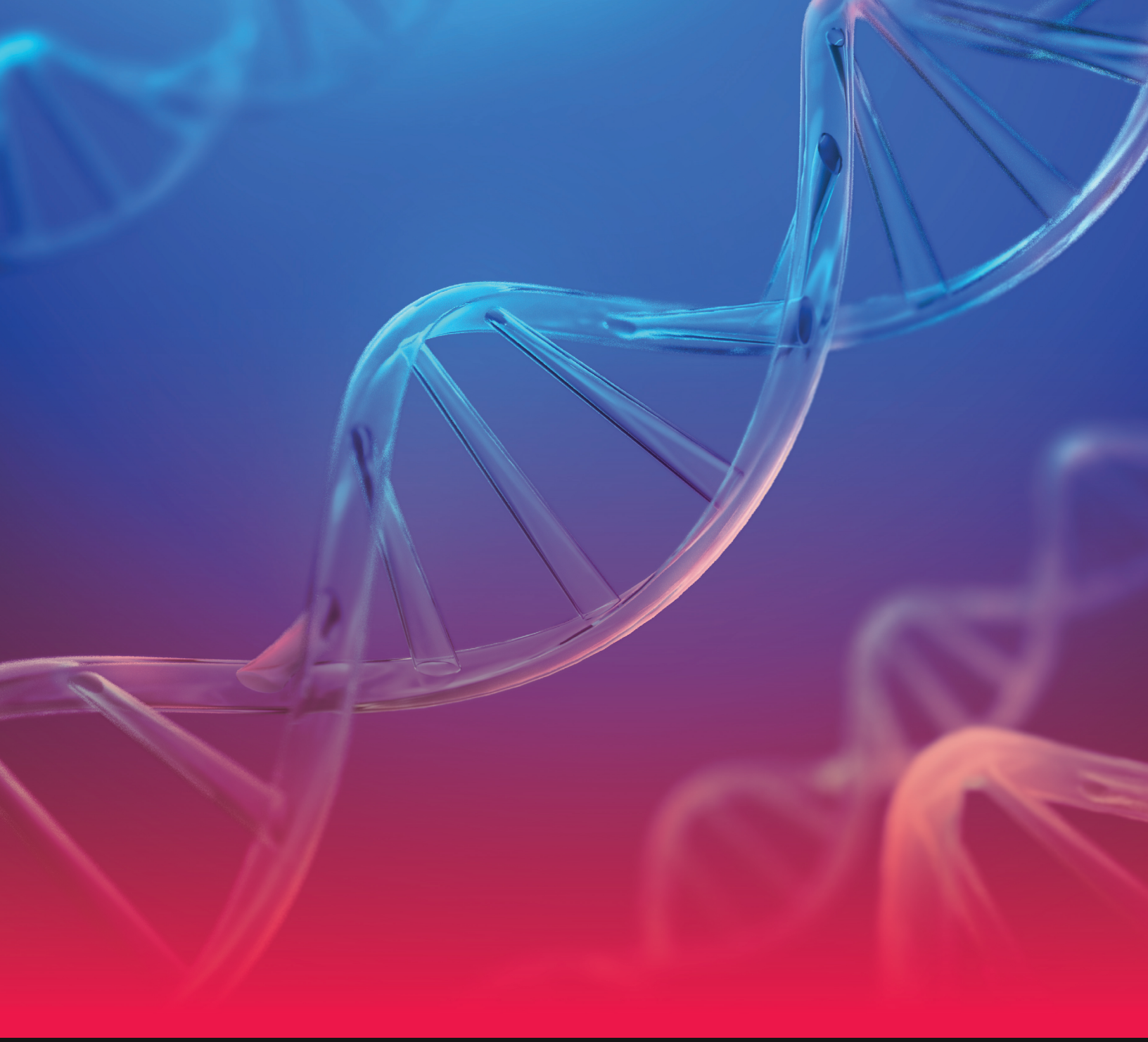

XPRIZE HEALTHSPAN | HEVOLUTION | SOLVE FSHD

INNOVATION LANDSCAPE & 2026 OUTLOOK

SEMI-FINALS STAGE & FINALS APPLICATIONS

AUG 2026

WE GRATEFULLY ACKNOWLEDGE THE CONTRIBUTIONS OF ALL THOSE WHO MADE THIS REPORT POSSIBLE:

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This report was designed by Tiny Giant

Thank you to all of the Teams who have taken on the challenge of competing for the XPRIZE Healthspan, and to our Scientific Advisors, Judges, Sponsors, and Strategic Partners who have helped design the competition and drive innovation and progress.

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XPRIZE HEALTHSPAN

In an era where advances in life sciences intertwine with the pursuit of prolonged well-being, the XPRIZE Healthspan initiative continues to serve as a catalyst for innovation in proactive approaches to extend healthy aging.

This initiative is not just about developing cutting-edge therapeutics; it is also about redefining our approach to extending the healthy, quality years of human life. Our focus remains on three systems crucial to healthy aging: restoring muscular, immune, and cognitive function. These systems were chosen through expert opinion about their relevance to aging and longevity, salience to populations likely to use a developed therapeutic, reliability and utility in Phase II geroprotector trials, and practicality for a global competition.

Conventional medicine is largely reactive, focusing on treating symptoms of injury, illness, or disease once they develop. While this approach extends life in populations with access to care, it doesn't address the root cause of age-related diseases – the biological aging processes themselves. Nor does it address the critical need for accessible and personalized approaches to make these solutions feasible and most impactful for the populations most in need of novel therapeutic solutions. As a result, millions grapple with poor quality of life and related economic challenges in their later years.

Here, we continue a collective endeavor to develop breakthrough, widely accessible therapeutics and/or biomedical interventions that provide proactive and personalized solutions and medicines that target the upstream mechanisms of biological aging versus specific disease treatments. Therapeutics that target biological aging processes will propel our ability to address physical and cognitive functional decline, enhance resilience in the face of illness or disease, and ultimately delay the onset of disability and death.

In addition, we also seek to catalyze the development of therapeutics that restore function in patients aging with facioscapulohumeral muscular dystrophy (FSHD). Aging with FSHD may accentuate the symptoms associated with muscular dystrophy, such as muscle weakness, loss of fitness, and fatigue. While the underlying genetics, molecular causes, and pathobiology of FSHD have been increasingly understood, the gap to novel therapies remains large.

Success would profoundly change our approach to aging, aging with FSHD, and positively affect quality-of-life and healthcare costs. Working across all sectors, we rigorously test solutions with personalized treatment goals that are also scalable and accessible to consumers, thereby creating a future where aging is full of potential.

This report summarizes data collected from Teams who competed in the Semi-Finals stage of the XPRIZE Healthspan competition. Over the course of one calendar year, Semi-Finalist teams conducted proof-of-concept clinical studies, advancing their therapeutic approaches from research and development into early-stage demonstration in human research subjects. The Teams reflected in this 2026 landscape report include 2025 Milestone 1 awardees, qualified teams, late-registered teams, and reformed existing teams or collaborations.

To advance, Teams were required to submit Finals Applications demonstrating real evidence and analyses drawn from their Semi-Finals work, including de-identified data from human research subjects made available for transparent review, evidence of relevant regulatory approvals, and demonstration of established infrastructure for clinical trials and for the appropriate and safe manufacture and compounding of their therapeutic solutions. Together, these requirements formed the foundation upon which Finalist teams will build as they enter the next stage of competition.

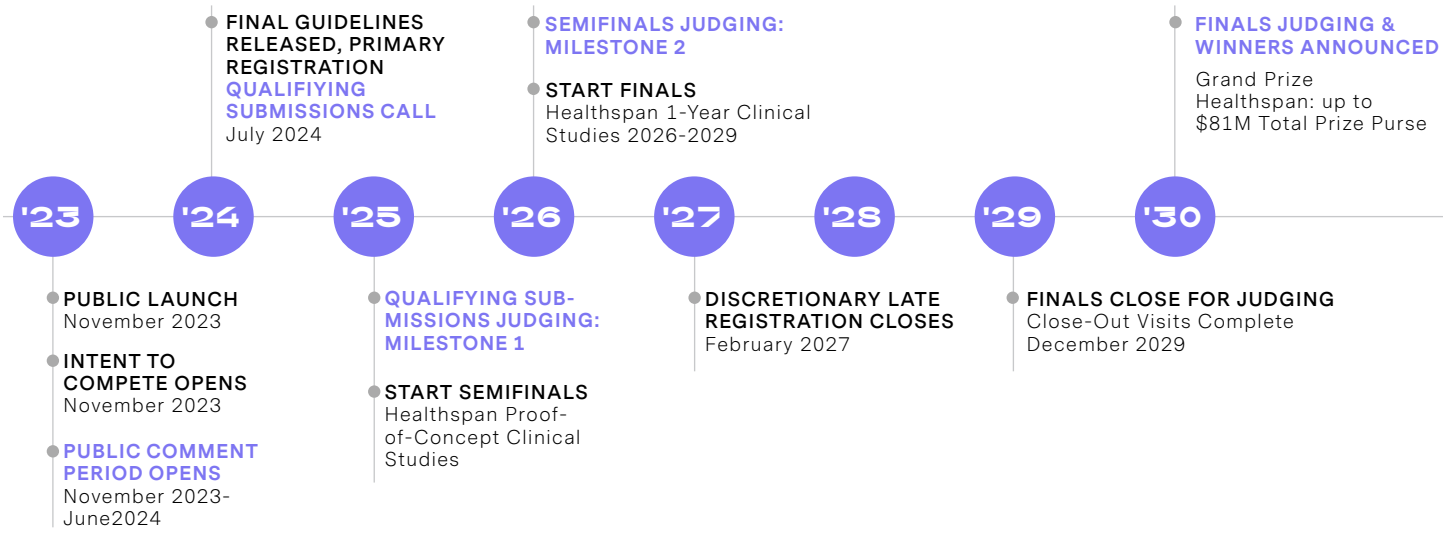
In the Finals, which run from late 2026 through the end of 2029, Finalist teams must conduct one-year randomized controlled clinical trials to demonstrate that their therapeutic solution improves – rather than merely attenuates the decline of – muscle, cognitive, and immune measures in adults over 50. To ensure rigor and comparability across this global competition, all Finalist teams will draw on a shared set of centralized resources: a Data Coordinating Center at the University of Utah; Central Laboratories and Biobank services through the UCSD Stein Institute for Research on Aging; common biomarker assays, including iAge (Edifice Health), IMM-AGE (Technion University), and proteomics (Olink/ThermoFisher); and common protocols, including cognitive assessments administered by CogState.

PRIZE OVERVIEW

Launched in 2023 with an audacious goal, XPRIZE Healthspan is a 7-year, $101 million global competition to revolutionize the way we approach human aging. The competition will incentivize Teams to develop and test therapeutics to improve healthy aging and close the gap between life expectancy and healthspan, or the period of life in reasonably good health, with autonomy, independence, and freedom from age-related disability and major chronic disease. Competing Teams will develop and test therapeutics that restore muscle, cognitive, and immune function by a minimum of 10 years, with a goal of 20 years. The winning Team of the $10M FSHD Bonus Prize must demonstrate a therapeutic treatment that restores muscle function in individuals with stable Facioscapulohumeral Muscular Dystrophy (FSHD). **This report will focus only on XPRIZE Healthspan, as there is not a Semi-Finals stage for the FSHD Bonus prize.**

PRIZE TIMELINE

QUALIFYING SUBMISSION		SEMI-FINALS		FINALS
Research & Development		Proof-of-Concept Clinical Studies		1-Year Clinical Trials in Older Adults
Milestone 1 $10M	40 TEAMS	Milestone 2 $10M	10 TEAMS	Grand Prize Up to $81M



2026 SEMI-FINALS COMPETITION OUTLOOK

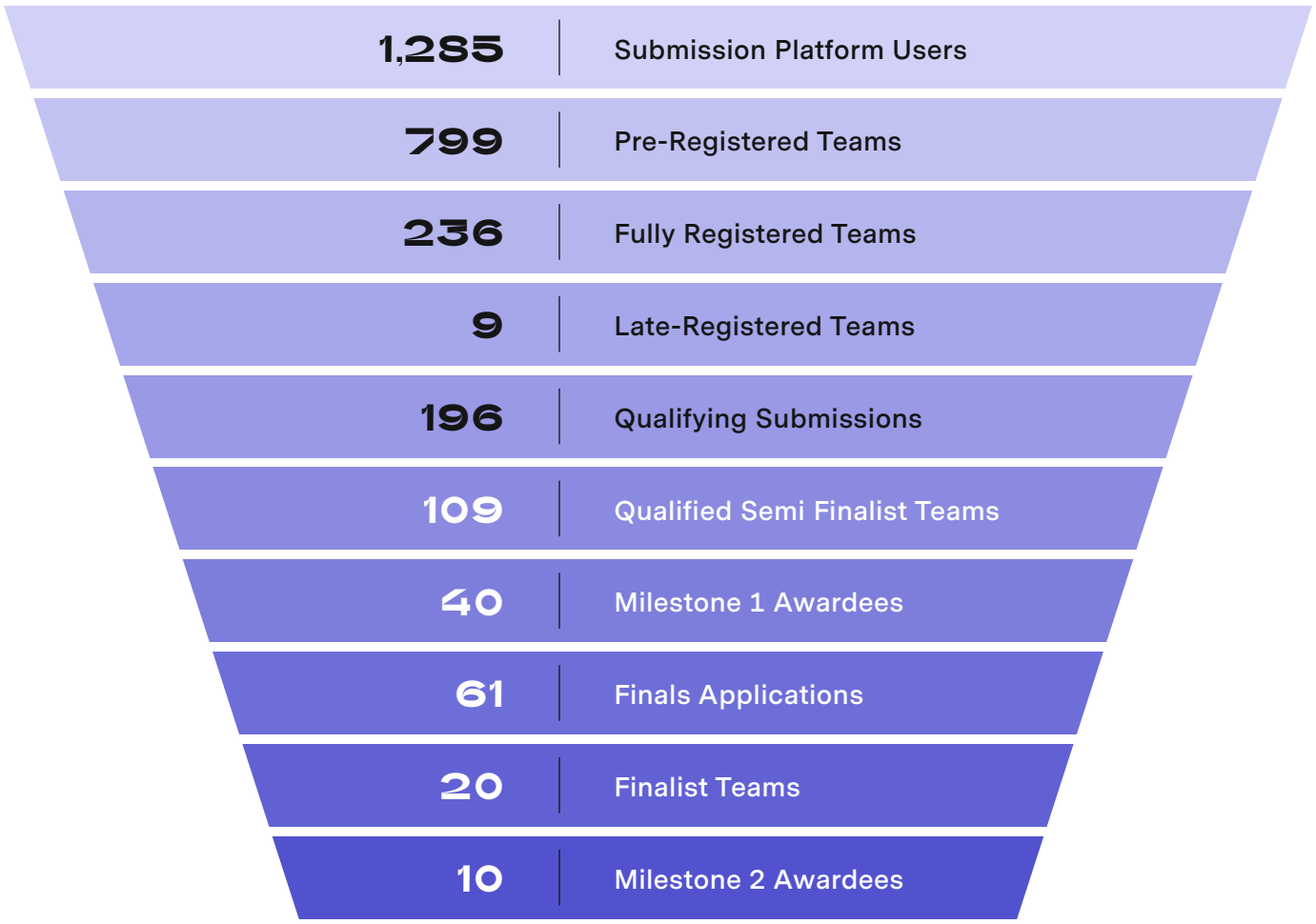
XPRIZE HEALTHSPAN

Since the launch of XPRIZE Healthspan on November 29th, 2023, over 800 Teams from around the world have initiated registration for the competition.

These Teams represent 73 countries from diverse academic, nonprofit, and commercial industries, and a full range of therapeutic pathways to improve healthspan. With upwards of 1,200 individual Team members, a broad range of demographics and backgrounds are represented including scientists, clinicians, biomedical engineers, longevity technology leaders, pharmaceutical companies, students, biohacker groups, and other newcomers to the field.

Competitor Funnel: Progress from Pre-Regristration to Finals

As of July 16, 2026, 800 Teams have signaled an interest in or begun active development of therapeutics by registering to compete in XPRIZE Healthspan, of which 245 completed full registration (including late registration), 196 submitted Qualifying Submissions, and 61 completed Finals Submissions for judging in 2026, shown in Recruitment Funnel data below:



Note: a subset of teams within each Semi-Finalist and Finalist group will be awarded a Milestone prize, but additional teams may be approved by judges to continue in the competition as self-supported (non-awarded) teams. In the Finals stage of competition, 10 teams are awarded Milestone 2 prize purse but an additional 7-10 judge approved teams may choose to continue in pursuit of the Grand Prize.

The recruitment funnel shows steep, expected narrowing, but strong late-stage retention. Of 1,285 platform users, 800 pre-registered (62.2%) and 245 completed registration (196 on time, 9 late) — a typical funding-and-feasibility filter as casual interest gives way to committed teams. The more notable trend shows up downstream: only 40 of 109 Semi-Finalist teams (37.0%) won a Milestone 1 Award, yet 61 teams ultimately submitted Finals Applications. That means 22 teams who did not receive a Milestone 1 Award still self-funded or otherwise continued into the Semi-Finals round — a signal of high intrinsic commitment beyond prize-money incentives.

Attrition between Qualified Semi Finalist Teams and Finals Applications (109 → 61, a loss of 48 teams) was driven overwhelmingly by two factors: lack of funding to run the semifinals trial, and inability to produce clinical data by deadline — both financial/operational rather than scientific barriers. Only one Milestone 1 Awardee was lost to competition, and for a benign reason (acquisition), underscoring that once a team clears the funding/data hurdle, it tends to stay in.

GEOGRAPHIC REPRESENTATION

The XPRIZE Healthspan competition set out to find the best approaches on Earth for extending healthy human lifespan — and the geography of who showed up tells its own story about where the longevity field is actually taking shape. Looking across all registered teams and Finals applicants, a clear pattern emerges: this is a race with a small number of deep hubs and a long, thin tail of emerging entrants reaching in from around the world.

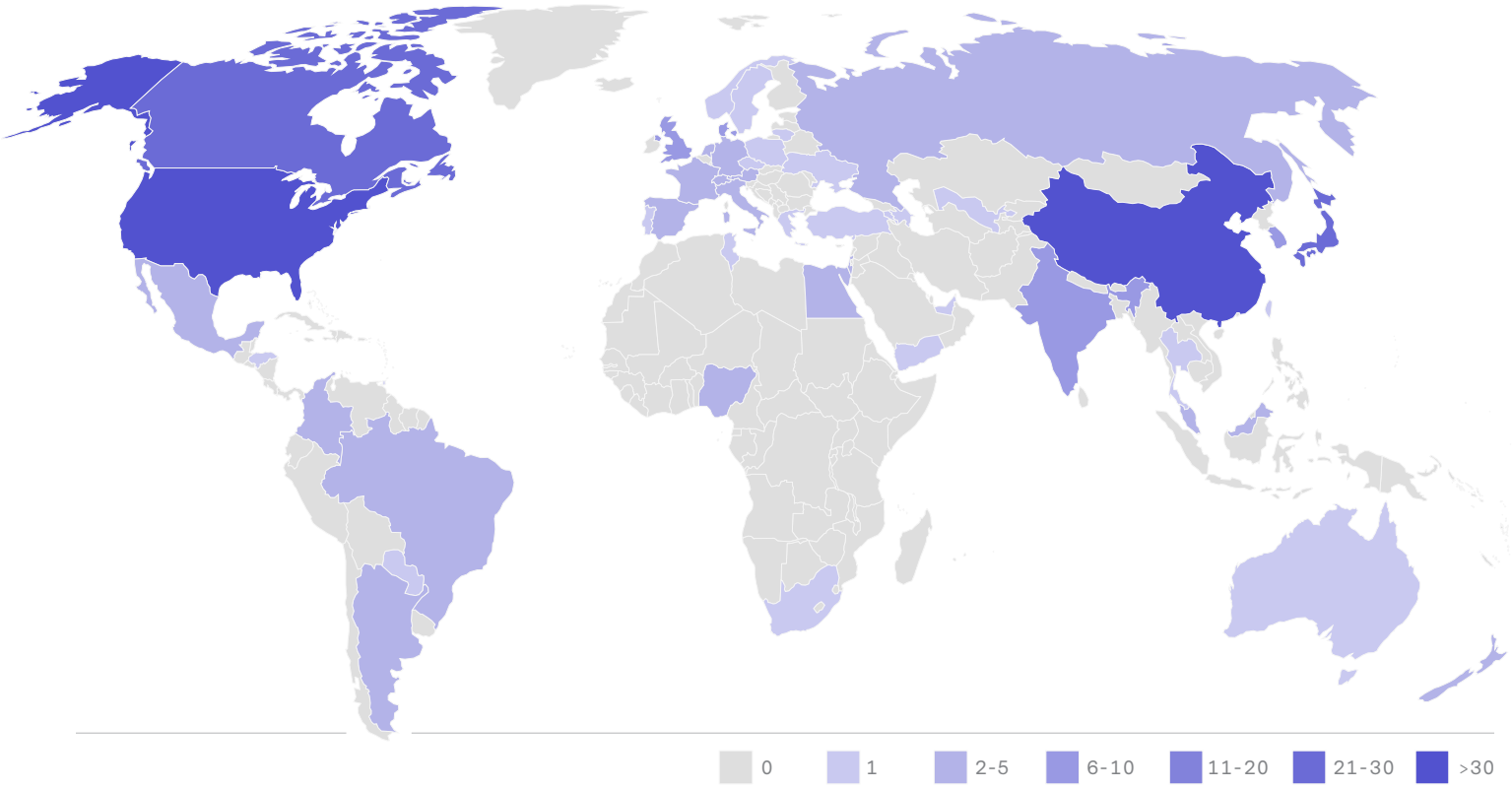
All data on geographic representation was provided by teams during registration on the XPRIZE Prize Operations Portal.

Geographic Representation Among Pre-Registered and Fully Registered Teams

The competition is global, but US-concentrated. The majority of all **Pre-Registered Teams** are based in **North America** (51.4%), but there is also significant activity in **Asia** (25.2%) and **Europe** (13.9%). However, not every team who initiated their entry into the competition converted to a fully-registered team. XPRIZE Healthspan teams that completed registration (n=316) span 48 countries, but participation is heavily concentrated in a small number of markets (see Global Heatmap showing geographic representation of fully registered teams in figure below). The **United States** accounts for roughly half of all completed registrations, with **China**, **Japan**, and **Canada** forming a clear second tier, together contributing most of the remaining volume.

Beyond these four countries, representation drops off sharply — the majority of countries in the dataset contributed only one or two teams, giving the field a long tail of low-volume, single-team countries rather than broad, even geographic distribution. South Korea, India, and the United Kingdom form a modest third tier, while the rest of the world contributes token representation, suggesting the competition's completed applicant pool remains anchored in a handful of established biotech/longevity hubs even as it draws interest from a genuinely global set of countries.

GLOBAL HEATMAP OF REGISTERED TEAMS



Trends: completed registrations vs. the pre-registration pool

Comparing the completed-registration set against the full 799-team pool that began pre-registration reveals meaningful shifts in who converts through to completion. The overall pool is more geographically dispersed (73 countries vs. 48), meaning a substantial share of the attrition between starting registration and completing it falls on teams from smaller or less-represented countries — 25 countries with pre-registration activity (including Pakistan, Saudi Arabia, Vietnam, and Kenya) show zero registration completions.

Among countries with high numbers of team pre-registrations and complete registrations, conversion rates vary widely: Japan and the Netherlands convert at roughly two-thirds, and China and South Korea convert at just over half, while India and South Africa convert at only around 12–16%, and the U.S. and Canada sit in the 40% range. Put simply, the completed-registration pool is somewhat more concentrated toward East Asia (China, Japan, South Korea gain share) and modestly less concentrated toward the U.S. and India than the starting pool, indicating that the registration process itself — not just initial interest — is reshaping the competition's geographic footprint, with East Asian teams disproportionately following through and South Asian and African teams disproportionately dropping off before completion.

Geographic Representation Among Finals Applicants

By Continental Category

Looking across all Registered teams and Finals applicants, a pattern emerges of a global field anchored by two hubs. When viewed as continental categories, North America and Asia stand out as the competitive field's two centers of gravity. The Teams entering the competition with completed **Finals Applications**, compared to the full Pre-Registered and Registration Completed pool, are shown below.

GEOGRAPHIC REPRESENTATION

Continental Region	ALL PRE-REGISTERED TEAMS	ALL REGISTERED TEAMS	FINALS APPLICATIONS
US & Canada	410 (51%)	137 (58%)	26 (43%)
Central & S. America	32 (4%)	3 (1%)	0 (0%)
Africa	29 (4%)	2 (1%)	0 (0%)
Asia	202 (25%)	61 (26%)	23 (38%)
Oceana	15 (2%)	3 (1%)	1 (2%)
Europe	111 (14%)	31 (13%)	11 (18%)
Total	**799 (100%)**	**237 (100%)**	**61 (100%)**

Asia and Europe both grew their share of Finals Applications relative to their share of the original pre-registered pool, while North America's share declined. North American Teams still submitted the largest number of Finals Applications overall, and produced 6 of the Milestone 2 Awardees. Asia's 4 Milestone 2 Awardees, by comparison, are spread across three different countries (Japan, South Korea, and China), making its Milestone 2 Awardee presence more geographically distributed than North America's. Africa and Central & South America, despite contributing 29 and 32 Pre-Registered Teams respectively, are not represented among the 61 Finals Applications — the only two regions with complete drop-off through the funnel.

By Country

Competing Teams represent numerous countries, each with unique considerations for medicines or therapeutic development, testing, resourcing needs, and regulatory landscapes; the countries with the highest numbers of Finals Applications are shown below, alongside their representation among the Milestone 2 Awardees.

COUNTRIES REPRESENTED AMONG FINALS APPLICANTS

COUNTRY	ALL FINALIST APPLICATIONS	TOP 10 MILESTONE 2 AWARDEES
USA	24	6
Japan	11	2
Switzerland	4	0
South Korea	3	1
China	3	1
UK	3	0
Canada	2	0
Singapore	2	0
Denmark	2	0
India	2	0
Spain	1	0
Australia	1	0
France	1	0
Malaysia	1	0
Taiwan	1	0
Total	**61**	**10**

The two global hubs identified in continental categories above, are driven by the United States and Japan, together forming the backbone of the applicant pool. Japan's share of Finals Applications is notably higher than its share of the original pre-registered pool, the clearest gain of any country. Milestone 2 Awardees representation is concentrated in just four countries — the U.S., Japan, South Korea, and China — meaning several countries with multiple Finals Applications (Switzerland, the UK, Canada) did not produce a Milestone 2 Awardee. Notably, Czech Republic and Taiwan each had only 1 Pre-Registered Teams, and in both cases that single Team advanced all the way to a Finals Application.

Trends in Geographic Representation: The strong showing by the U.S. and Japan is likely a reflection of infrastructure: both countries combine large biomedical research bases, established clinical trial networks, and — in the U.S. case in particular — deep venture and biotech financing ecosystems that let early longevity science move from bench to trial. Japan's strong showing also tracks with its national urgency around aging demographics, which has pushed both academic and corporate investment into healthspan-extending therapeutics for over a decade.

Beneath the U.S. and Japan sits a smaller cluster of countries with established life-science sectors — including hubs in Europe and East Asia — each contributing a handful of strong applicants. Beyond that, the pool thins into a wide scattering of single- and double-team entries from across Europe, Asia-Pacific, and beyond. The long tail signals that longevity science is not confined to a handful of traditional biotech capitals, but is being pursued by smaller, often academically-rooted teams in countries without large existing aging-research infrastructure. For an industry still defining its regulatory and commercial playbook, geographic spread is an early signal of where the next generation of hubs might emerge.

Milestone 2 Awardees: When the lens narrows to the Milestone 2 Awardees, the geographic picture concentrates further rather than diversifying, with sustained representation by U.S., Japan, South Korea, and China. This suggests that at the highest tier of rigor and readiness XPRIZE is screening for, existing scale-up infrastructure and trial-execution capacity may be as important as scientific innovation. Notably, several countries with meaningful representation in the broader Finals pool — including some of Europe's most active biotech ecosystems and Singapore — did not convert that participation into a Milestone 2 awardee result, though these teams ranked well by judges overall and may continue in the competition with self-support and investment.

Clinical Trial Locations: The majority of Final Application Teams with an identifiable clinical trial location are currently conducting Healthspan clinical trials in the United States. While most Teams plan to conduct trials in the same region as their headquarters, ~50% plan to do so — at least in part — in another country. Within this group, a significant portion involve the United States, with 8 Teams planning to conduct trials in the U.S. in addition to their home country (including Teams headquartered in South Korea, Taiwan, Japan, and Canada). In the U.S. and Europe, other teams are pursuing testing of agents like gene therapies or cell therapies in the Bahamas or Honduras. This may be due to regulatory environments, costs, or previously established partner locations.

Finally, competing teams located in countries with severe data access restrictions with the U.S. may be required to test in alternate locations, e.g. teams based in China are required to engage clinical research organizations outside of China for the purpose of biological material and data transfers required to judge the competition’s Grand Prize.

Bottom Line: Competition Registrations and Geographic Representation: XPRIZE Healthspan drew a global field of hundreds of teams worldwide, but the funnel narrowed sharply at every stage — only 245 teams completed registration, 196 submitted Qualifying entries, and 61 reached Finals. Attrition fell hardest on smaller or less-resourced countries and on financial, operational, and timeline barriers. Geographically, the competition became progressively more concentrated as it advanced: North America supplied the largest single share of Finals Applications and 6 of the Milestone 2 Awardees, but its overall share shrank relative to the original applicant pool, while Asia — led by a disproportionate surge from Japan — and Europe gained ground, and Africa and Central/South America dropped out of the competition entirely by the Finals stage despite contributing dozens of early registrants. Ultimately, Milestone 2 Awardee representation collapsed to just four countries (the U.S., Japan, South Korea, and China), showing that while XPRIZE Healthspan successfully cast a wide international net, sustained competitive success concentrated in a small set of established biotech/longevity hubs, with East Asian teams in particular converting and advancing at rates disproportionate to their starting share of the pool.

SECTOR REPRESENTATION

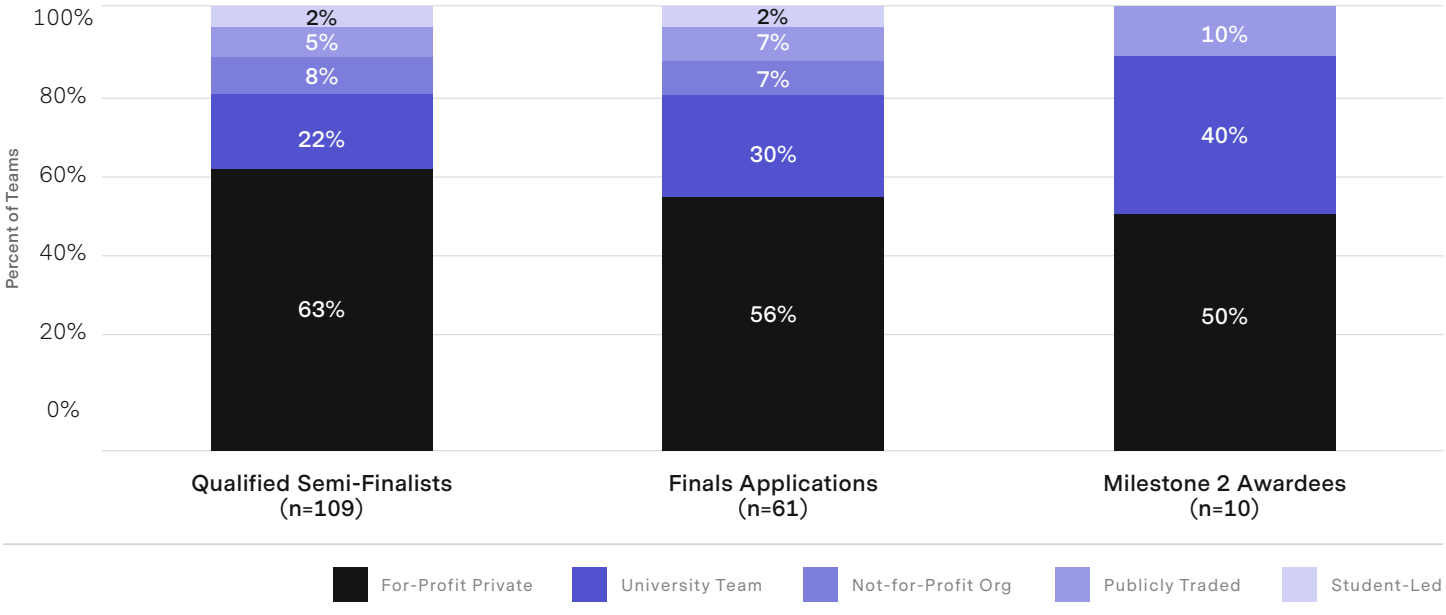
The XPRIZE Healthspan competition has drawn a broad cross-section of the longevity and healthspan field, spanning early-stage biotech startups, university research groups, nonprofit organizations, and publicly traded companies. Across the 191 Fully Registered Teams that provided sector data, the competition skews heavily toward private commercial ventures, followed by university-affiliated Teams and nonprofits. Funding profiles are similarly diverse, ranging from pre-seed and bootstrapped startups to Series D and IPO-stage participants, reflecting an ecosystem in which universities, startups, established biotechnology companies, and nonprofit organizations compete side by side. This mix of sectors, funding stages, and institutional backing offers a useful lens for understanding not just who enters the competition, but who tends to advance furthest within it.

All data on sector representation was provided by teams through a 2026 semi-finals close-out survey, a 2025 Team Look Book survey, or at the time of registration on the XPRIZE Prize Operations Portal, as indicated below tables or charts.

Commercial, Clinical, And Scientific Sector Representation

The healthspan field and longevity industry comprises a wide range of interested commercial, clinical, and scientific sectors. Sector representation skews private/commercial (113 of 191 teams, 59.2%), with university teams (30, 15.7%) and nonprofits (15, 7.8%) forming meaningful secondary blocs. Funding stage tends to be early: 43% of commercial teams are Pre-Seed or Seed, with a long tail reaching Series C and even IPO-stage participants (5 teams) — suggesting the field draws both early-stage science and more mature commercial operators. Notably, 121 of 191 teams (63.4%) report female or non-binary team leadership, either as sole or co-lead — a strong signal of diversity in this scientific area. Geographic equity remains limited: only 6 of 191 teams (3.1%) report LMIC leadership or partnership.

SECTOR REPRESENTATION



Source: Data compiled from the 2025 Lookbook Survey and the Prize Operations Portal (POP)

For-Profit Private organizations represent the largest sector across every stage of the competition, making up 62% of Qualified Semi-Finalists, 56% of Finals Applicants, and 50% of Milestone 2 Awardees.[1] University Teams show the opposite pattern, growing from 22% of Qualified Semi-Finalists to 30% of Finals Applicants and 40% of Milestone 2 Awardees, suggesting academically-affiliated Teams may convert to later stages at a somewhat higher rate.[1] Not-for-Profit Organizations and Publicly Traded companies each make up a modest share of the field, generally in the high single digits, while Student-Led Teams remain a small but steady presence.[1]

A few factors may help explain University Teams' stronger showing as the competition progresses. Grants and institutional budgets may offer more patience than investor-backed capital, which often forces commercial teams to choose between competition milestones and near-term deliverables. Universities also bring existing infrastructure and a renewable, low-cost labor pool — labs, IRB processes, and clinical trial support staffed by a continuous pipeline of graduate students, postdocs, and undergraduates — lowering both cost and staffing risk for sustained, multi-year work. Academic incentives reward exploratory, long-term research in ways that align with competition milestones, while commercial teams face pressure to demonstrate revenue or a de-risked path to market. Academic affiliation also brings built-in credibility and easier access to IRBs, hospitals, and recruitment networks — helping explain why for-profit teams increasingly lean on academic partnerships to run trials.

Consistent with this, more than half of Teams that reached Finals Applications (54%) report an academic, hospital, or university partnership supporting their work, most commonly for clinical trial execution[2] — suggesting that even For-Profit Teams increasingly lean on academic partners to help run trials, and that Teams with this kind of institutional backing and trial experience may be better positioned to advance through the competition.

Investment Stage

A clear pattern of maturation is emerging as the field narrows. Seed-stage funding remains the primary category throughout (26.5% of the qualified teams, 21.7% of finalist applicants, and 30.0% of award recipients), suggesting that Seed-stage ventures are both the most common entrant profile and a strong presence at every tier. Series A-D representation increases as the pool narrows to the Milestone 2 Awardees (25.5% → 24.3% →40%). Conversely, the proportion of pre-seed and Bootstrapped Teams declined – together they account for roughly 15–17% of the qualified teams and finalist applicants, but are entirely absent from the Milestone 2 Awardees.

INVESTMENT STAGE

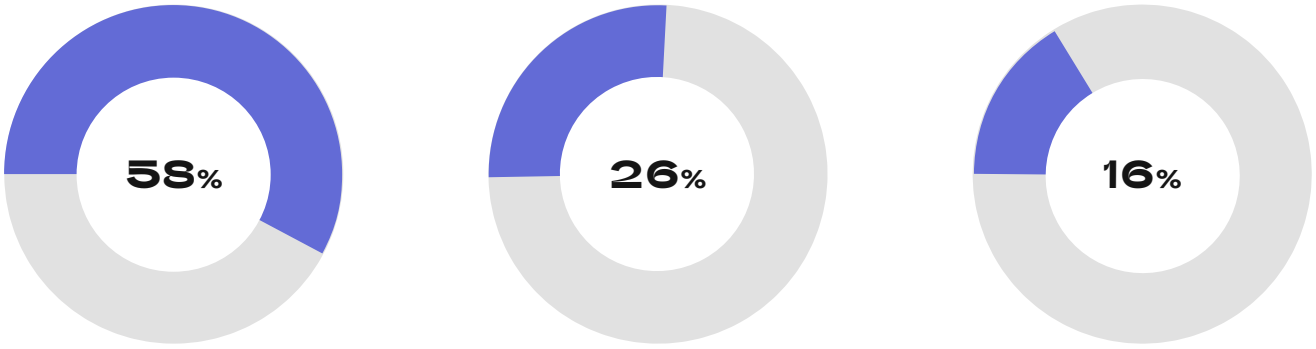
COMMERCIAL STAGE	QUALIFIED TEAMS (n=102)	FINALS APPLICANTS (n=60)	MILSTONE 2 AWARDEES (n=10)
Bootstrapped	5%	7%	0%
Pre-Seed	10%	10%	0%
Seed	27%	22%	30%
Series A	16%	13%	10%
Series B	5%	5%	20%
Series C	4%	5%	10%
Series D+	1%	2%	0%
Acquired	1%	0%	0%
Public	5%	8%	10%
Grant	14%	15%	20%
Other	7%	5%	0%
Not Applicable	7%	8%	0%

[1] Source: 2025 Lookbook Survey and Additional Team Info (POP).
[2] Source: 2026 Semifinals Close-Out Survey (Q20/21, Partnerships).

Publicly traded companies and grant-funded Teams become proportionally more prominent as Teams progress (Public: 4.9% → 8.3% → 10.0%; Grant: 13.7% → 15.0% → 20.0%), indicating that award-tier recognition favors teams with either established public-market backing or grant-supported academic/institutional pipelines over early, informally-financed ventures. Given the small n at the Milestone 2 Award tier (10 teams), these shifts should be read directionally rather than as statistically robust trends, but they are consistent with the broader intuition that the competition's highest recognition tends to concentrate among more institutionally or financially established teams.

The publicly traded Healthspan cohort spans a wide range of scale and maturity. Or teams range from pure-play longevity biotechs at roughly $1B, while another US company trades near $20M and a S. Korean publicly traded team sits between them at $0.6–0.75B. The group also includes two long-established Japanese teams, including a century-old confectioner and University drug-discovery spinout that range from $1.3B to ~$165M as of 2026.

ACTIVE FUNDRAISING STATUS

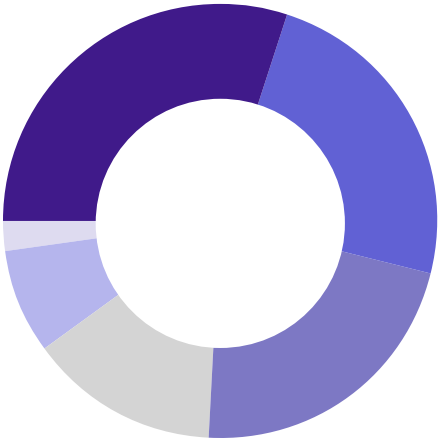


Actively Raising Now	Not Raising, Planning within 6 Months	Not Planning to Raise within 6 Months
n=29	n=13	n=8

Source: Semifinals Close-Out Survey, Q25 (Active Fundraising). Base: 50 of 61 Finals Application Teams that completed this question.

Among the 50 Finals Application Teams that responded to this question, the majority (58%) report actively raising capital, while a further 26% are not currently raising but plan to within six months. Only 16% report no plans to raise within the next six months, suggesting most Teams at this stage are either in-market for capital now or expect to be soon.

AMOUNT OF CAPITAL SOUGHT



AMOUNT SOUGHT	FINAL APPLICATION TEAMS	PERCENT
$1M - $5M	15	30%
$5M - $20M	12	24%
$20M - $100M	11	22%
Not Applicable	7	14%
$500,001 - $1M	4	8%
$100M+	1	2%

Source: Semifinals Close-Out Survey, Q30 (Amount of Capital Sought). Base: 50 of 61 Finals Application Teams that completed this question.

Among the 50 Finals Application Teams that responded, most are seeking mid-size rounds: 76% report seeking between $1M and $100M, with $1M–$5M the single most common range (30%). Very few Teams fall outside this middle band — only one sought $100M or more, and 14% indicated the question was not applicable to their organization.

OUTSIDE CAPITAL

GROUP	YES	NO	N REPORTING
Qualified Semi-Finalist Teams (n=109)	45 (53%)	40 (47%)	85 of 109
Finalist Applications (n=61)	21 (57%)	16 (43%)	37 of 61
Milestone 2 Awardees (n=10)	5 (56%)	4 (44%)	9 of 10

Source: Additional Team Info (POP)

Among teams for which data were available, roughly half reported raising conventional outside investment: 53% of Qualified Semi-Finalists, 57% of Finals Applications, and 56% of Milestone 2 Awardees. These shares are consistent across stages. This suggests that advancement is not necessarily dependent on VC or other dilutive capital. While participation requires substantial resources, teams secure funding through a mix of grants, institutional support, strategic partnerships, and internal resources.

Academic and Private Research Institutes

Academic participants continue to play a meaningful role in the competition. Among Finals Application Teams, 30% are organized as a University Team, compared with 22% among the broader pool of Qualified Semi-Finalists — suggesting academically-organized Teams convert into Finalists at a somewhat higher

rate than the pool overall.[3] That share holds at the very top of the competition as well: 40% of Milestone 2 Awardees are University Teams, essentially matching the Finalist-wide rate.[3]

The institutions behind these academic ties are concentrated among highly ranked, research-intensive universities. Of the 26 Finalist Teams with an identifiable academic or research-institute affiliation (see Table 7), 77% are tied to an institution ranked in the global top 400 by U.S. News & World Report's Best Global Universities rankings; among the 4 academically affiliated Milestone 2 Awardees, that concentration is nearly identical at 75%.[4]

That academic depth carries through into scholarly output and next-generation involvement. Among the 50 Finals Application Teams that completed the Semifinals Close-Out Survey, 88% reported at least one publication, preprint, or manuscript connected to their approach, and 72% have filed at least one patent, together accounting for 255 patents filed and 117 already granted.[3] Student involvement follows a similar pattern: 38% of these Teams report actively incorporating students into their solution development today, with a further 18% planning to do so — and among the 18 Teams that provided a headcount, students number 120 in total.[5]

Bottom line: Sector Representation

For-profit private organizations dominate participation at every stage of the competition, but university teams punch above their weight as the field narrows — growing from 22% of Qualified Semi-Finalists to 40% of Milestone 2 Awardees. This academic advantage appears linked to institutional resources: teams with grant funding, public-market backing, or academic/hospital partnerships (especially for clinical trial support) are increasingly overrepresented among top performers, while early, informally-financed ventures largely fall away by the award stage.

[3] Source: Lookbook Survey and Additional Team Info (POP) — Organization Type field.

[4] Source: U.S. News & World Report, Best Global Universities Rankings 2026-27 (external source, applied to the institution list in Table 7).

[5] Source: Semifinals Close-Out Survey, Q14 (Publications), Q16–17 (Patents Filed/Granted), Q18–19 (Student Participation). Base: 50 of 61 Finals Application Teams that completed the survey.

BARRIERS & RESOURCE NEEDS

Teams' Reported Barriers Faced

In the course of competition, teams anticipate a number of barriers that may slow or halt progress in accelerating the therapeutic development or translation through clinical trials. To evaluate these barriers, we administered a Semi-Finals close-out survey, asking our teams to identify, what, if anything, they think the biggest technical, financial, or organizational challenges will be in competing for the prize. The 49 respondents described the various barriers they will encounter.

TEAMS REPORTING BARRIERS

BARRIER CATEGORY	TEAMS MENTIONING (of 49)	% of 49 RESPONDENTS
Financial / Funding / Capital	24	49%
Technical / Scientific Validation	19	39%
Recruitment, Retention & Adherence	14	29%
Regulatory / Compliance	12	24%
Operational / Organizational Capacity	11	22%
Manufacturing / Production Scale-Up	4	8%
Commercialization / Market / Business	4	8%
Timeline / Trial-Duration Constraints	2	4%
Other (Self-Imposed Constraint)	1	2%
No Barrier Reported	2	4%

Note: Teams were able to select multiple categories

Financial constraints were the most common barrier (49%), almost always tied to the gap between semifinal-stage resourcing and the cost of a fully powered Finals trial — clinical operations, staffing, manufacturing, and long-term follow-up all scale up in cost. As one team put it, "As a research lab the major barrier is funding." Framing varied here: some teams named funding as an open, unresolved gap, while others pointed to an existing capital raise or secured funds as evidence it was already in hand.

Technical/scientific validation ranked second (39%) — concern over producing measurable, reproducible outcomes once a study moves to a larger, more heterogeneous population. One team summarized the core tension as "achieving a ten-year reversal in ageing biomarkers across three domains, given the heterogeneity of the trial population and limited sample size." Most technical mentions read as open questions rather than resolved risk.

Participant recruitment, retention, and adherence ranked third (29%) — enrolling and retaining enough participants across multi-month or multi-year interventions. Responses here were largely generic statements of difficulty rather than detailed accounts; a few teams offset this by citing a prior recruitment track record or an already-validated pilot.

Regulatory (24%) and Operational (22%) barriers followed, at lower but still notable frequencies. Regulatory mentions skewed toward constraints outside a team's direct control (e.g., cross-border regulatory

divergence, IRB review timelines) and were framed more consistently as unresolved. Operational barriers, such as internal coordination and multi-site logistics,) were more mixed, with some teams citing a specific fix already in place. A small number of teams (4%) reported no barriers at all.

ADVOCACY & POLICY

The Semi-Finals Close-Out Survey also asked Teams to describe any policy, advocacy, or regulatory engagement connected to their work. Among Finals Application Teams that completed the survey, roughly a third reported concrete activity in this space, ranging from direct regulatory-agency consultations to legislative testimony and leadership roles in longevity-focused professional societies. The remaining 67% reported no policy or advocacy activity to date, consistent with a field still concentrated on clinical validation rather than external influence.

Where Teams did report activity, it clustered into three recognizable patterns. Several engaged directly with regulatory bodies — national health ministries and agencies in India, Japan, and Australia, alongside U.S. FDA-adjacent channels. One Japan-based Team credited its engagement with Japan's Ministry of Health, Labour and Welfare with having "obtained the world's first food classification for NMN" in 2019, while a U.S.-based Team described partnering with a federal policy group "to optimize FDA regulatory guidelines and standards" for its therapeutic category. A smaller number of Teams reported direct legislative engagement — one Team's lead testified before their state Senate in support of a bill expanding veterans' access to hyperbaric oxygen therapy.

Other Teams' contributions ran through professional and advocacy organizations rather than government channels directly, founding or leading bodies such as the Nordic Aging Society, the Healthy Longevity Medicine Society, the Japan Autophagy Consortium, and the Alliance for Longevity Initiatives (A4LI) — one Team describing this work as helping "distinguish evidence-based, physician-led longevity care from unregulated … interventions." Taken together, policy and advocacy engagement remains a minority activity among Finals Application Teams that completed the Semi-Finals Close-Out Survey, but where it exists, it is beginning to move from informal awareness-building toward more substantive institutional and regulatory relationships.

Among Finals application teams that completed the close-out survey, most have not yet engaged in policy or advocacy work — consistent with a field still focused on clinical validation. Where activity exists, it splits into three patterns.

33%
Reported Activity

Regulatory Engagement: Health ministries in India, Japan, Australia; US FDA-adjacent channels. One team's work with Japan's MHLW led to a national food classification.

Legislative Engagement: Least common of the three. One team's lead testified before a state Senate on veterans' access to hyperbaric oxygen therapy.

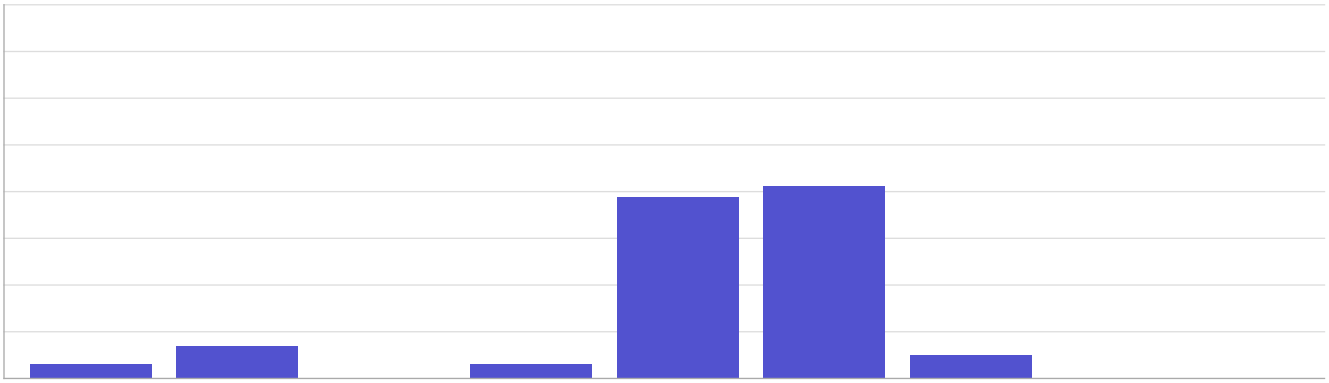
Professional & Advocacy Orgs: Founding or leading bodies like the Nordic Aging Society, Healthy Longevity Medicine Society, Japan Autophagy Consortium, and A4LI.

SEMI-FINALS TESTING: TEAM PROGRESS

XPRIZE HEALTHSPAN

TEAM READINESS LEVEL

Technology Readiness Level - adapted to Team Readiness Level (TRL) for XPRIZE Healthspan - is a framework used to benchmark the state of development of new technologies, and has been adapted for use in prior XPRIZE competitions. The TRL scale ranges from 1 (a hypothetical model, with no empirical evidence) and 2 (lab-level research into basic principles) up to 9 (a technology that is commercially and clinically proven). For this competition, these TRL categories were adapted specifically for healthspan therapeutics, using the information teams provided in their Finals Applications, along with their submitted de-identified data and reports.



Applying this adapted scale across the finalist pool shows a field that has largely moved past the purely theoretical stage: the overwhelming majority of teams have already generated some form of human data, and very few remain limited to preclinical or animal-model evidence. At the same time, relatively few teams have reached the most advanced end of the scale, which reflects the early-stage nature of the Semi-Finals clinical trial requirement rather than a weakness in the applicant pool. In short, most teams cluster in the middle of the readiness spectrum: past the hypothesis stage, actively collecting human data, but not yet at the scale of a large, definitive efficacy trial. Milestone 2 Awardees show advanced readiness: 9 of 10 awarded teams submitted data from small randomized controlled trials (TRL 6), and 1 awarded team submitted data from a single-arm open label study (TRL 5).

EVIDENCE CATEGORY	TRL SCORE	TRL NOTES
Basic Research & Discovery	1	Hypothetical model (no empirical evidence)
	2	Synthetic discovery platform or observational data in clinical cohorts
Pre-Clinical to Clinical Translation	3	Testing in cells, organoids, or tissues or in short-lived animal model
	4	Testing in mammalian models
Clinical Testing	5	Phase 0 study or clinical case studies
	6	Phase I - IIa clinical trial in patient populations
	7	Phase IIb - Phase III clinical trial in patient populations
Clinically Proven	8	Multiple clinical trials conducted with solution or meta-analyses
	9	Clinical guidelines / commercially and clinically proven technology in population proposed for competition

Highest Trial Stage Submitted as Evidence by Team

Beyond a single TRL score, each team's submitted trial data and reports were also examined to identify the most advanced clinical trial design each had actually completed or had underway — ranging from early feasibility work with a single arm and no comparison group, up through randomized, controlled studies, and, for a small number of teams, larger efficacy trials. Only evidence from trials that were already conducted or ongoing was considered; future or proposed studies described in Finals Applications were intentionally excluded, since the goal of this analysis is to characterize the evidence teams have in hand today, not the evidence they intend to generate later.

Viewed this way, the applicant pool splits fairly evenly between teams whose strongest evidence still comes from smaller, single-arm feasibility work and teams that have already progressed to randomized, controlled trial designs — the latter being the more rigorous evidence typically expected as programs mature. Very few teams have yet reached a larger-scale efficacy trial. This pattern is broadly consistent with what the Semi-Finals stage of the competition was designed to produce: teams are expected to have moved beyond hypothesis and into real human testing, and to build evidence necessary to support their potential translation to 1-year clinical trials with substantial resource investment needed for Finals - and multi-year efficacy trials that are beyond the scope of this prize competition.

HIGHEST STAGE OF TRIALS COMPLETED PER TEAM

BARRIER CATEGORY	FINALS APPLICANTS (# OF TEAMS)	% OF TEAMS
R&D Only (No Human Subjects)	4	7%
Clinical Case Study / Observational Only	5	8%
Phase 0 / Phase Ia - Single-arm, Open-Label - dose finding or feasibility (n<40)	23	38%
Phase IIa - parallel-arm, randomized - dose finding or feasibility (n<40)	3	5%
Phase IIb - parallel-arm, randomized controlled pilot trial (n<100)	23	38%
Phase III - parallel-arm, randomized controlled efficacy trial (>n=100)	3	5%

Patient Populaitions Used to Build Clinical Trial Evidence

Finally, the disease conditions and patient populations enrolled in each team's already-conducted or ongoing trials were reviewed, again excluding any population described only as a future or planned target. This lens speaks to a defining feature of the healthspan field: because the goal is to extend healthy years of life broadly, rather than to treat a single named disease, the great majority of teams chose to test their interventions in generally healthy older adults rather than in a disease-specific patient group.

Where teams did enroll more specific populations, the most common themes were age-related conditions that sit adjacent to general healthspan — such as cardiometabolic risk factors, cognitive decline or

Alzheimer's disease, and frailty — followed by a longer tail of teams applying their technology to a specific disease area (for example, cancer, cardiovascular disease, or musculoskeletal conditions) as a proof of concept. This mix suggests a field that is primarily oriented around whole-person aging, while still drawing on disease-specific trial data where teams' underlying technologies originated in, or were previously tested for, other clinical contexts.

PATIENT POPULATIONS FOR TESTING

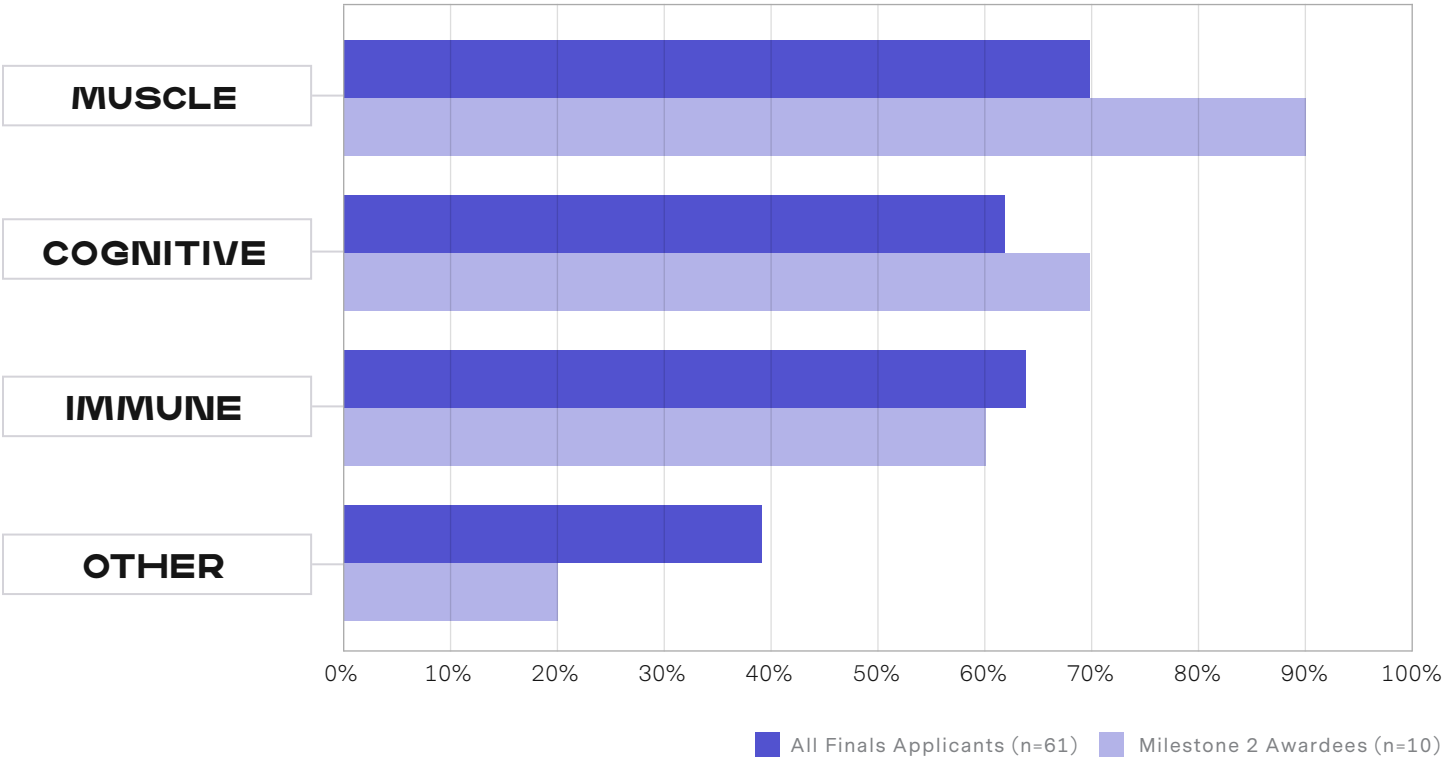
TEN MOST COMMON PATIENT POPULATIONS USED FOR PRELIMINARY TESTING	FINALS APPLICANTS (# OF TEAMS)	% OF TEAMS
Healthy Older Adults / No Specific Disease Condition	40	66%
Cardiometabolic Risk Factors (Hypertension, Pre-Diabetes/T2D, Dyslipidemia, Obesity)	9	15%
Mild Cognitive Impairment (MCI)	6	10%
Frailty or Pre-Frailty	6	10%
Alzheimer's Disease (Including Prodromal or Early)	6	10%
Rare Genetic / Neuromuscular Disease (Progeria, Becker MD, ALS, Mitochondrial Disease)	5	8%
Cardiovascular Disease (AMD, Heart Failure, PAD, AMI, CV Aging)	5	8%
Cancer (Various Types: Solid Tumors, Colon, Breast, Prostate, Hematologic)	4	7%
Musculoskeletal / Osteoarthritis	4	7%
Neurological / Brain Injury (TBI, Dementia, Motor Disorders, Epilepsy)	3	5%

EMERGING EVIDENCE FROM SEMI-FINALS

Level of Evidence by System

One of the clearest signs of a maturing field is which body systems teams are able to back up with real data — and how much of that data comes from actual human studies rather than early-stage research. Across the Finalist pool, muscle function emerged as the system most consistently supported by evidence, closely followed by immune and cognitive function, with “other” biomarkers like epigenetic clocks appearing somewhat less often. What stands out most, though, is that nearly all of this evidence — regardless of system — came from human clinical testing rather than preclinical (animal or lab-based) research. This is a meaningful marker of scientific credibility: it means that, by the Finals stage, most competing therapies aren’t just theoretically promising, they’re already being tested in people.

EMERGING EVIDENCE AND EVIDENCE CATEGORIES



Multi-Category Clinical Evidence

Longevity and healthspan interventions rarely work on just one part of the body — a therapy that helps muscles age better, for instance, might also support brain or immune health through shared biological pathways. The teams' evidence reflects this: 77% of all finalists demonstrated clinical evidence in more than one category, and this rose to 100% among the Milestone 2 awardees, meaning every single awardee showed multi-system clinical support. The single most common combination was muscle and cognitive function, the leading dyad both overall (35 teams) and among awardees (7 of 10). The strongest and most common pattern among award winners was solid clinical evidence spanning muscle, cognitive, and immune function together - without extraneous biomarker data. This suggests that judges and the broader field are rewarding therapies with a well-rounded, clinically-grounded story across a few core systems, rather than a scattered case built on many biomarkers.

MOST-REPRESENTED DYADS AND TRIADS (CLINICAL EVIDENCE ACROSS CATEGORIES)

Most-Represented Dyads (Clynical Evidence in Both)			
DYAD	ALL FINALS APPLICANTS	MILESTONE 2 AWARDEES	NOT AWARDED TEAMS
Muscle + Cognitive	35	7	28
Muscle + Immune	33	5	28
Cognitive + Immune	31	4	27
Muscle + Other	19	1	18
Immune + Other	19	1	18
Cognitive + Other	16	0	16

Most-Represented Triads (Clynical Evidence in Both)			
TRIAD	ALL FINALS APPLICANTS	MILESTONE 2 AWARDEES	NOT AWARDED TEAMS
Muscle + Cognitive + Immune	28	4	24
Muscle + Cognitive + Other	15	0	15
Muscle + Immune + Other	15	0	15
Cognitive + Immune + Other	13	0	13

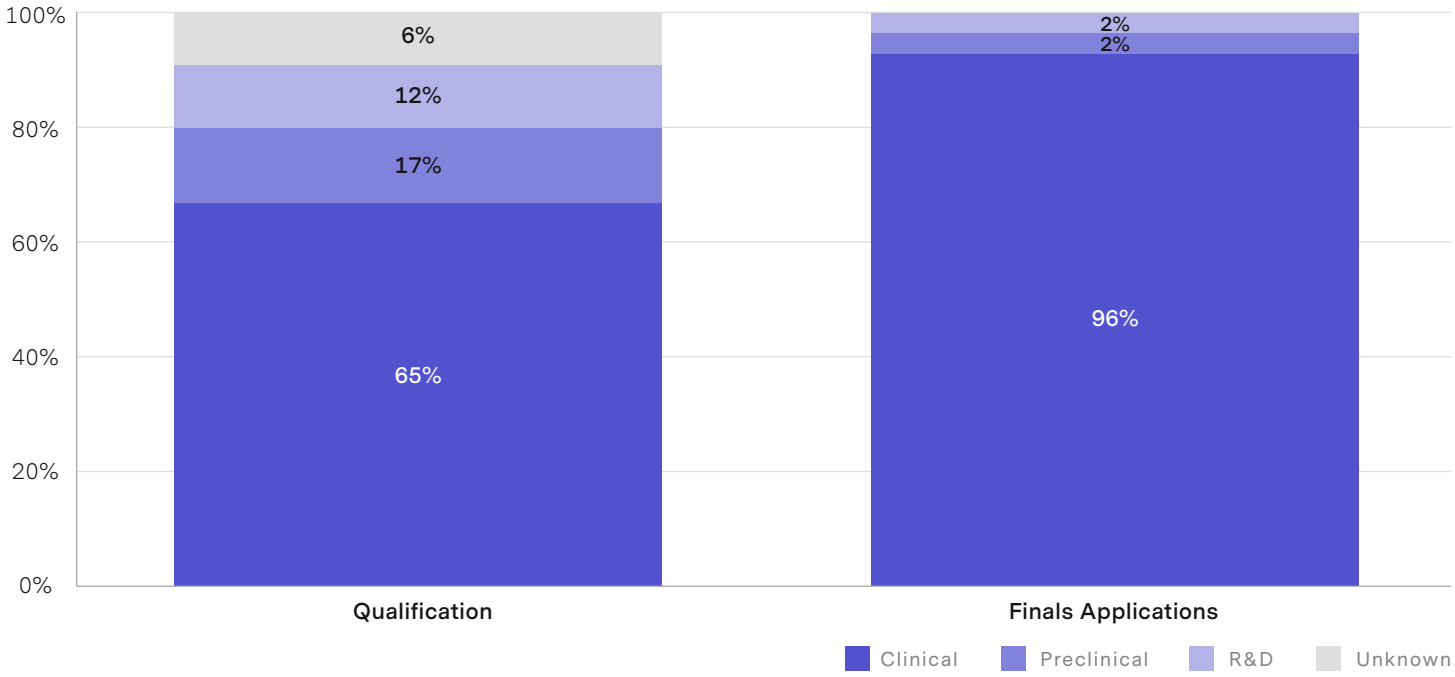
Note: Dyad/triad counts reflect co-occurrence — a team with clinical evidence is counted in every applicable dyad or triad it contains.

Change in Preliminary Evidence over Competition

Perhaps the most encouraging finding is how much progress individual teams made over the course of the Semi-Finals stage of the competition itself. Comparing Qualifying Submissions to Finals Applications shows a substantial field-wide shift toward clinical rigor: the share of submissions with clinical testing evidence rose from 46.9% to 93.4%, while Preclinical-only (16.0%→4.9%) and R&D-only (19.1%→1.6%) shares collapsed, and "Unknown" or no supportive evidence status disappeared entirely.

Looking specifically at teams that could be tracked from their earlier 2024 Qualifying Submission through to their 2026 Final application (52 of 61 teams, or 85% of Finals Applicants), the shift toward rigorous, human-based evidence was dramatic and consistent. This represents team-level progress, not just selection effects: within this matched group, clinical evidence share rose from 65.4% to 96.2%, and roughly a third of tracked teams advanced to a stronger evidence category during the competition — moving from animal/lab-stage research to human clinical testing — and not a single team lost ground. Awardees advanced at a slightly higher rate (37.5% vs 29.5%) and reached 100% clinical evidence by Finals — the 3 awardees who advanced all moved from Preclinical to Clinical evidence. In other words, the competition itself appears to be doing exactly what it was designed to do: pushing teams to accelerate their science and move faster from early-stage concepts toward real-world, testable results in people.

EVIDENCE CATEGORY SHIFT WITHIN THE 52 MATCHED TEAMS



TRANSLATIONAL SHIFT (QUALIFYING > FINALS)

Bottom Line: Team Readiness & Emerging Evidence from Semi-Finals

Taken together, these findings suggest the XPRIZE Healthspan competition is succeeding in its core mission of accelerating translational science for healthy aging. These analyses describe a finalist pool that has, as intended by the Semi-Finals design, moved decisively from concept into real human testing: most teams have generated genuine clinical data, a substantial share of that data already comes from randomized, controlled trial designs, and the populations tested reflect the field's core ambition of improving healthy aging broadly rather than treating a single disease. Teams aren't simply arriving with more polished applications — they're doing more rigorous science, testing their interventions in real people, and building evidence across multiple aspects of healthy aging rather than betting on a single biomarker. The therapies that rose to the top did so not by claiming to fix everything, but by demonstrating solid, credible, human-tested results across the systems that matter most to how we age — our muscles, our minds, and our immune resilience. That's a strong signal that the field of healthspan science is moving from promise toward proof.

INNOVATION LANDSCAPE

XPRIZE HEALTHSPAN

Teams competing in the XPRIZE Healthspan competition are pursuing healthy aging through a wide range of specific therapeutics — from repurposed drugs and novel biologics to nutraceuticals and engineered cell therapies — and through different "modalities," or broad categories of intervention, such as drugs, biologics, devices, supplements, lifestyle change, and personalized digital tools.

This report brings together the therapeutic- and modality-level analyses conducted across the 2024-2025 qualifying round, Finals applicant pool and the ten Milestone 2 Award teams.

A comprehensive approach, where modalities, mechanisms, and target systems are carefully considered and aligned, is critical in fostering an integrated strategy for extending healthspan. By understanding and addressing the complex interplay of biological systems, these innovative therapeutic interventions aim to ensure that individuals not only live longer but maintain their vitality and functionality throughout their lifespan.

Across all Finalist teams, structured exercise is the single most common intervention component, and a small set of repurposed, metabolism-focused compounds — metformin, GLP-1 agonists, rapamycin, and NAD+/NMN precursors — recur consistently. Biologic approaches such as extracellular vesicles, mesenchymal stem cells, and monoclonal antibodies also appear repeatedly, reflecting broad confidence in both metabolic and cell-based strategies.

At the modality level, nutraceuticals/supplements and lifestyle interventions are the two most common building blocks, and when teams combine several modalities — as roughly four in ten Finalist applicants do — these two are almost always part of the mix, typically joined by a drug and a personalized or digital-monitoring layer. Devices and advanced biologics are more often used alone or in simple pairs than folded into these larger combinations.

Among the ten Milestone 2 Awarded teams, both the therapeutics and the modalities look different from the broader field. Overlap in specific therapeutics is rare, with most Award teams bringing forward a singular, differentiated approach — a novel gene therapy, a first-in-class antibody, a proprietary cell therapy — rather than a familiar compound shared with other teams. The same pattern holds at the modality level: most Award teams concentrate on one well-defined modality rather than combining several, in contrast to the broader Finalist pool.

How the Field Has Shifted Since Competition Launch

Comparing today's Finalists to the roughly 200 teams that entered during the 2024 Primary Registration Qualifying Round shows a clear shift in emphasis. Nutraceuticals/supplements and lifestyle interventions were already present at Qualifying, but each has grown substantially more common among the teams who

completed Semi-Finals testing and submitted Finals applications, while biologics, drugs, personalized/digital tools, and devices have held roughly steady in relative terms. Finalist applicants teams are also somewhat more likely to combine multiple modalities than Qualifying-round teams were, suggesting that as teams progressed through the competition, proposals increasingly converged on a lifestyle-and-nutraceutical foundation layered with additional components, rather than narrowing toward a single modality.

OVERVIEW OF ALL PROPOSED THERAPEUTICS

The proposed therapeutic interventions for extending healthspan emphasize a range of approaches, with the top 20 approaches in healthspan shown in Tables below. Some teams rely on lifestyle changes like exercise and diet, others on repurposed or novel drugs, and still others on advanced biologic therapies such as stem cells, gene therapy, or engineered antibodies. Looking across all Finalist applications — and separately at the ten teams selected for Milestone 1 Awards — reveals which strategies the field is converging on, and where the most decorated teams are choosing to stand apart.

TOP 20 PROPOSED THERAPEUTIC SOLUTIONS: BY HEALTHSPAN FINALS APPLICANT KEYWORDS

THERAPEUTIC TREND	FINALS APPLICANTS (# OF TEAMS)	% OF TEAMS
Exercise (Resistance / Aerobic / HIIT)	22	36%
Omega-3 / EPA-DHA	8	13%
Intermittent Fasting / Time-Restricted Eating	6	10%
Metformin	5	8%
GLP-1 / Incretin Agonists (semaglutide, tirzepatide)	5	8%
NAD+ / NMN Precursors	5	8%
Vitamin D	5	8%
Mediterranean Diet	5	8%
Rapamycin	4	7%
Extracellular Vesicles (EVs) / Exosomes	4	7%
Mesenchymal Stem Cells (MSC)	4	7%
Monoclonal Antibodies (mAbs)	4	7%
GlyNAC (Glycine + NAC)	4	7%
Klotho	3	5%
Urolithin A	3	5%
Therapeutic Plasma Exchange (TPE)	3	5%
Gene Therapy (AAV / plasmid)	3	5%
Peptide Therapies (e.g., BPC-157, Epitalon, TB-500)	3	5%
Hormone Replacement (Testosterone/DHEA/Estradiol)	3	5%
Glutathione	2	3%

General Trends

Exercise and Lifestyle Anchor the Broader Field.

Across the full pool of Finalist applicants, structured exercise — whether resistance training, aerobic conditioning, or high-intensity interval formats — is by a wide margin the most common component of proposed interventions, appearing far more often than any single drug or biologic. Dietary strategies such as intermittent fasting and Mediterranean-style eating, along with foundational nutrients like omega-3s and vitamin D, round out a clear pattern: most teams are building their approach on a lifestyle foundation, even when a drug or advanced therapy is the headline intervention.

A Shared Pharmacologic Core, with Metabolic Health Front and Center.

Where teams do incorporate pharmacologic agents, a small set of repurposed and longevity-associated compounds recur consistently — metformin, GLP-1 receptor agonists, rapamycin, and NAD+/NMN precursors chief among them. These reflect a broader field consensus around metabolic and cellular energy pathways as promising levers for healthspan extension.

Rise of Biological Approaches.

Biologic approaches involving extracellular vesicles, mesenchymal stem cells, and monoclonal antibodies also appear repeatedly, signaling growing confidence in cell- and protein-based therapies alongside more traditional small-molecule drugs.

Milestone 2 Award-Winning Teams Skew Toward Novel, Differentiated Science

Among the ten Milestone 2 Award recipients, the picture shifts. Overlap between teams is much rarer — only a couple of trends (such as rapamycin use and extracellular vesicle-based therapies) appear in more than one Award-winning team's approach. Rather than clustering around shared strategies, these top-ranked teams tend to bring forward more singular, differentiated science: a novel gene therapy, a first-in-class antibody, a proprietary cell therapy. This suggests that while lifestyle and a handful of familiar compounds define the broader competitive field, scientific distinctiveness is a hallmark of the teams that rise to the very top.

PROPOSED THERAPEUTIC SOLUTIONS: BY MILESTONE 2 AWARDEE KEYWORDS

THERAPEUTIC TREND	MILESTONE 2 AWARDEES (# OF TEAMS)	% OF TEAMS
Rapamycin	2	20%
Extracellular Vesicles (EVs) / Exosomes	2	20%
Personalized or Digital Health Approach	2	20%
Metformin	1	10%
GLP-1 / Incretin Agonists	1	10%
NAD+ / NMN Precursors	5	8%
Mesenchymal Stem Cells (MSC)	5	8%
Klotho	5	8%
Gene Therapy (AAV / plasmid)	4	7%
Monoclonal Antibodies (mAbs)	4	7%
Mitochondrial Targeting Peptide Therapies	4	7%
Glutathione	4	7%
Exercise (Resistance / HIIT)	4	7%
Spermidine	3	5%
Naltrexone	3	5%
Probiotic/Prebiotic (Bifidobacterium, ginseng, astragalus)	3	5%

Bottom Line: Overview of Proposed Therapeutic Solutions

The Healthspan Finals field is united by a common foundation of exercise, diet, and a handful of metabolism-focused compounds, but the teams recognized as top performers tend to distinguish themselves through novel, less-replicated science rather than by following the pack.

PROPOSED MODALITIES

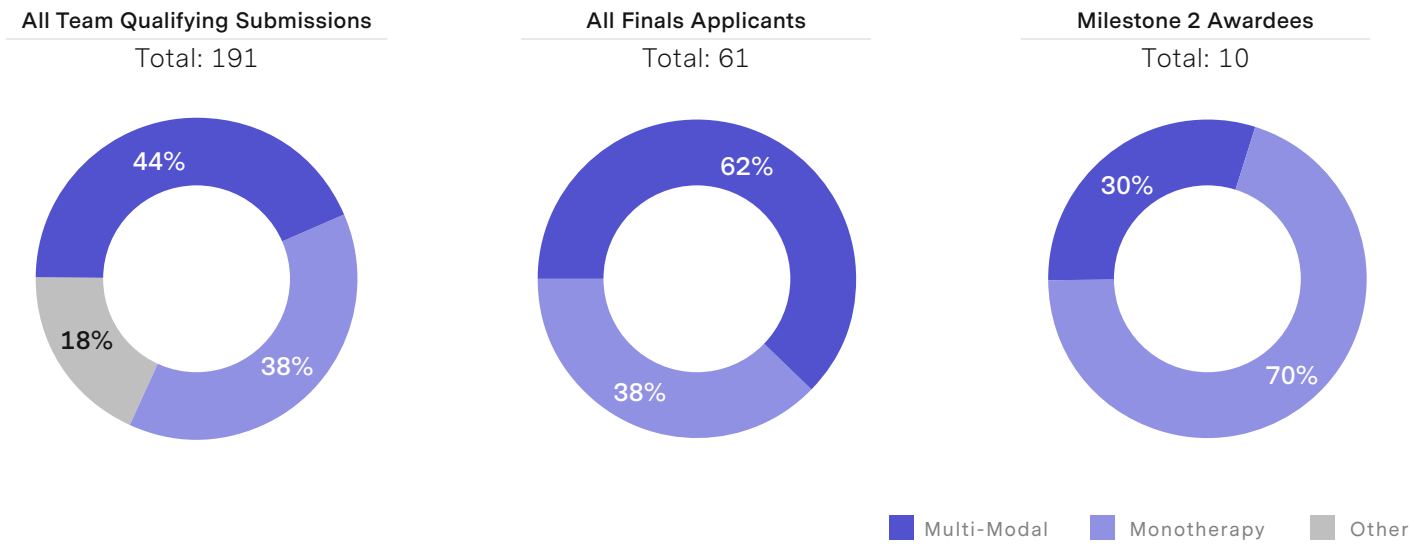
Teams competing in the XPRIZE Healthspan competition are tackling healthy aging through very different kinds of interventions — some through nutraceuticals and supplements, others through prescription drugs, biologic therapies, wearable devices, or structured lifestyle programs. Many teams don't rely on just one of these "modalities," but combine several at once. Looking at how often each modality appears, and how teams combine them, offers a window into where the field is converging and what sets the most decorated teams apart.

Monotherapies Versus Multimodal Intervention Approaches

Consistent with the qualifying round of competition, the number of teams proposing multi-modal (combined solutions) outnumber those proposing single therapy solutions - or monotherapies. At the qualifying round of competition, teams proposed multi-modal, monotherapy, and 18% proposed difficult to categorize concepts - represented by “Other” in the figures below. This reflects the lower maturity of many teams at the outset of the

competition, with theoretical proposals and screening approaches. Through Semi-Finals testing round teams focused on solutions likely to meet the plurality of effect required for success in the competition, with 62% of Healthspan Teams proposing multi-modal solutions rather than a single drug or therapeutic solutions. However, this trend flipped for the ten teams awarded by judges: 7 proposed monotherapies and only 3 proposed multi-modal or combination solutions of which were personalized using biomarkers, digital twins, or individualized health coaching.

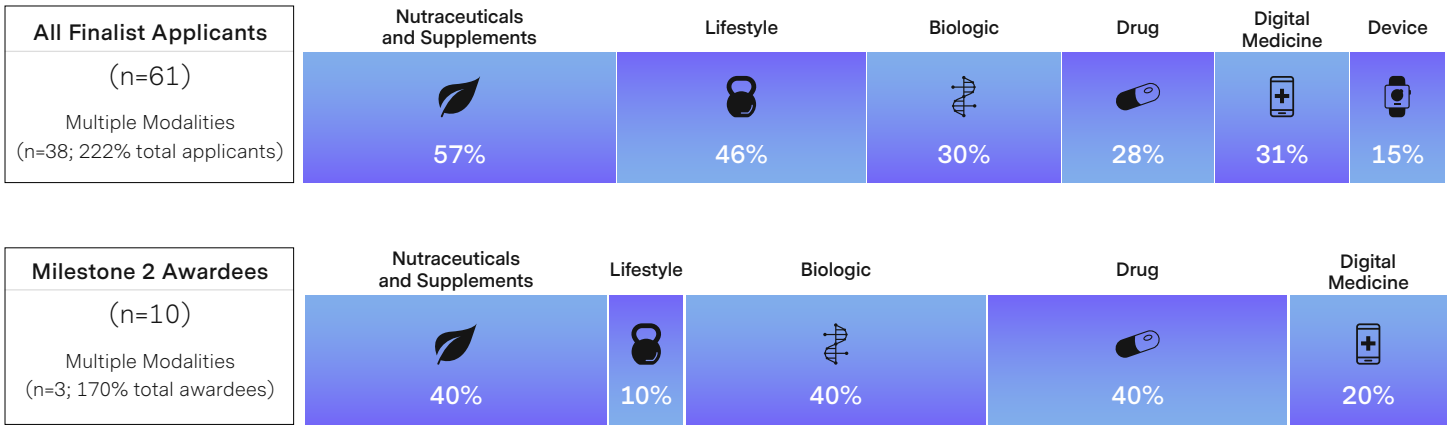
MULTI-MODAL VS MONOTHERAPY APPROACHES ACROSS THE COMPETITION



Modality Categories

Across the full Finalist pool, nutraceuticals/supplements and lifestyle interventions (exercise, diet, sleep, and related behavior change) are the two most common modalities by a wide margin, appearing far more often than drugs, biologics, or devices. When teams do combine multiple modalities, these two elements are almost always part of the mix — acting less like standalone interventions and more like a common base that other components, such as a drug or a personalized digital-tracking tool, are layered on top of.

MODALITY TYPES PROPOSED BY TEAMS



Award-Winning Teams Favor Focus Over Complexity

The pattern shifts among the ten teams that earned Milestone 1 Awards. Rather than stacking several modalities together, the large majority of these top-ranked teams center their proposal on a single, sharply-defined approach — a specific drug, a targeted biologic, or a novel gene therapy. Combining many modalities at once was common across the Finalist field overall, but it was not a hallmark of the teams recognized as the strongest performers.

Complexity Follows Recognizable Patterns

About four in ten Finalist teams combine three or more modalities into a single proposal. Rather than mixing components at random, these more complex proposals tend to follow a recognizable template: a nutraceutical or supplement base, paired with a lifestyle component, a drug or small molecule, and a personalized or digital-monitoring layer. Devices and advanced biologic therapies are far less likely to be folded into these larger combinations, appearing more often on their own or in simple pairs.

HEATMAP OF MULTI-MODAL DYADS - ALL FINALIST APPLICANTS

	Nutraceuticals	Lifestyle	Biologics	Drugs	Digital Medicine	Devices
Nutraceuticals	35	22	5	6	16	5
Lifestyle	22	28	8	8	17	7
Biologics	5	8	18	4	6	3
Drugs	6	8	4	17	7	2
Digital Medicine	16	17	6	7	19	7
Devices	5	7	3	2	7	9

The heatmap above describes dyads, but many teams proposed more complex combinations of 3 or more modalities. Looking at these teams, a few trends emerged:

- 24 of 61 Finalist teams (39%) combine three or more modalities in their proposed intervention; most cluster at 3–4 modalities, with only 4 teams reaching 5 or 6 simultaneously.

- Lifestyle (96%) and Nutraceuticals/Supplements (88%) are near-universal within this subgroup — almost every team stacking modalities builds outward from these two as a base, rather than treating them as optional add-ons.

- Personalized & Digital Medicine shows up in 75% of multi-modal teams, suggesting that once a team combines 3+ approaches, pairing in a personalization/digital-tracking layer becomes the norm rather than the exception.

- Drug or Small Molecule (54%) and Biologic (42%) appear in roughly half of these more complex proposals, while Device remains the least common addition (33%) — hardware is more often used alone or in simple pairs than folded into larger combinations.

- The strongest two-way pairing within this group is Nutraceuticals + Lifestyle (20 of 24 teams), reinforcing that complexity tends to be built on top of a lifestyle and nutraceutical foundation rather than starting from a drug, biologic, or device.

Bottom Line: Modalities

Most Healthspan Finalist teams build their approach on a shared foundation of nutraceuticals and lifestyle change, often layering on additional components in recognizable combinations. But the teams that rose to the very top tended to do the opposite — concentrating on one well-defined, differentiated therapeutic approach rather than combining many at once.

SUMMARY OF PROPOSED THERAPEUTICS BY MODALITY

XPRIZE HEALTHSPAN

DRUGS AND SMALL MOLECULES

Across the XPRIZE Healthspan competition's progression from Qualifying submissions through Finals applications and into the Milestone 2 Awardees, drug and small molecule proposals reveal a consistent pattern: as teams advance through selection, the applicant pool consolidates around fewer, more established drugs and small molecules rather than diversifying further.

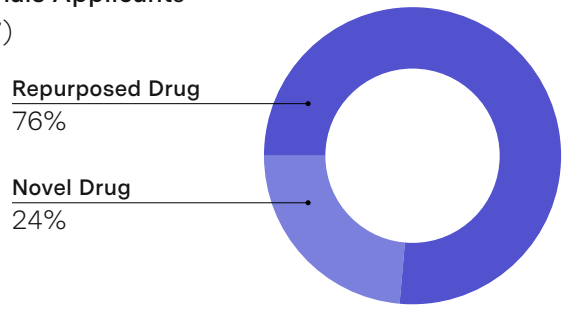
DRUGS AND SMALL MOLECULES PROPOSED

DRUG OR SMALL MOLECULE TYPE	ALL FINALS APPLICANTS (# PROPOSED DRUGS BY 17 TEAMS)	MILESTONE 2 AWARDEES (# PROPOSED DRUGS BY 4 TEAMS)
Hormone Therapies	9	-
GLP-1	5	1
Metformin	6	1
Rapamycin	4	2
SGLT2	2	-
Senolytic (dasatinib, novel PAI-1 inhibitor)	2	-
Lactitol	1	-
Progerinin	1	1
Small molecule partial chemical reprogramming (SL100)	1	-
Acarbose	1	-
Ambroxol hydrochloride	1	-
Atorvastatin	1	-
Lamivudine	1	-
Naltrexone	1	1
Vortioxetine	1	-
Elamipretide (mitochondria-targeting peptide)	1	1

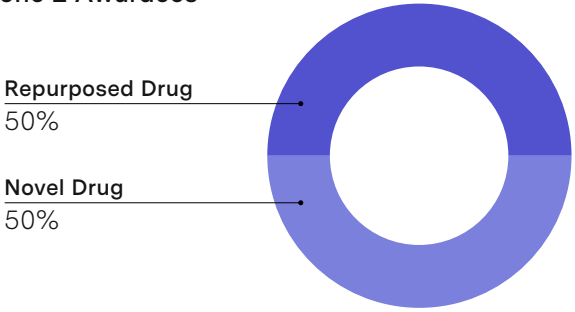
The most striking shift is the balance between novel and repurposed compounds. Teams proposing repurposed, already-approved drugs became substantially more represented at each successive stage, while proposals built around net-new chemical entities became comparatively rare among Finalists and Awardees. This suggests that judges and the selection process favor de-risked, clinically familiar compounds with existing safety and mechanistic data over higher-risk, unproven novel chemistries — likely reflecting the practical realities of demonstrating credible near-term clinical pathways within the competition's timeline.

NOVEL VERSUS REPURPOSED DRUG CATEGORIES

All Finals Applicants
(n=17)



Milestone 2 Awardees
(n=4)



A small number of drug classes account for a growing share of activity. Metabolic agents (metformin, GLP-1 agonists, SGLT2 inhibitors) and mTOR inhibitors — chiefly rapamycin — both grew as a proportion of the pool from Qualifying to Finals, and rapamycin stands out as the single most common named therapeutic among actual Awardees. Hormone-based approaches also gained ground. Senolytics/cytotoxic agents held a stable share overall, though the specific compounds evolved from generic category labels toward named agents like Dasatinib or novel PAI-1 inhibitors.

At the same time, several categories present at Qualifying — neuroprotective or anti-neural-degeneration agents, inflammasome inhibitors, and anti-hyperammonemia approaches — did not carry through to any Finals drug-modality applicant. Their disappearance may reflect narrower applicability to a general healthy-aging population, thinner evidence bases, or simply small initial sample sizes that didn't survive selection. A meaningful share of Finalists still proposed unique, hard-to-classify compounds - including highly anticipated small molecule compounds for partial chemical reprogramming - indicating that molecular diversity persists for truly novel drug categories even as the aggregate composition narrows toward familiar drug classes.

QUALIFYING VS FINALS TREND COMPARISON (DRUG/MOLECULE CATEGORY)

CATEGORY	QUALIFYING SUBMISSIONS (# OF TEAMS)	QUALIFYING SUBMISSIONS (% OUT OF n=54)	FINALS APPLICANTS (# OF TEAMS)	FINALS APPLICANTS (% OUT OF n=17)	TREND
Hypoglycemics (Metformin/GLP-1/SGLT2)	14	26%	7	44%	▲ Increase
mTOR inhibitors (rapamycin)	7	13%	4	25%	▲ Increase
Hormone (Sex/Growth Hormone/HRT)	3	6%	3	19%	▲ Increase
Cytotoxics / Senolytics	7	13%	2	13%	▶ Stable
Statins	2	4%	1	6%	▲ Slight
Anti-Viral / Anti-Infectives	2	4%	1	6%	▲ Slight
Opioid Antagonists	1	2%	1	6%	▲ Slight
Neuroprotective / Anti-neural degeneration	5	9%	0	0%	▲ Slight
Inflammasome Inhibitors	3	6%	0	0%	▼ Dropped Out
Anti-hyperammonemia	2	4%	0	0%	▼ Dropped Out
Mitochondrial-targeting peptide	3	6%	1	6%	▶ Stable
Other / Unique Novel Compounds	23	43%	6	35%	▼ Decline
Novel Drug (overall)	24	44%	4	24%	▼ Decline
Repurposed Drug (overall)	30	56%	13	76%	▲ Increase

Bottom Line: Trends in Drugs and Small Molecules

From Qualifying to Finals, the drug and small molecule landscape shifted decisively toward repurposed, well-characterized compounds — particularly metabolic drugs and rapamycin/mTOR inhibitors — while several novel and narrowly-targeted categories fell away, suggesting the competition's selection process rewards clinical credibility and mechanistic familiarity over untested innovation.

BIOLOGICS

As XPRIZE Healthspan advanced from the 2024 Qualifying round to Finals applications, the biologic therapeutics proposed by teams narrowed considerably in both volume and technological mix. This summary describes the biologic modalities proposed by Finalist teams and the Milestone 2 Awardees, then places those findings in context against the Qualifying round.

About a third of Finalist teams proposed a biologic-based intervention, spanning several distinct categories with no single modality dominating the field. Cell therapies — principally allogeneic and autologous mesenchymal stem cell products — were the most frequently cited approach, reflecting their maturity as an investigational class. Monoclonal antibodies were the second-most common category and, notably, the only biologic modality that grew in relative share among Milestone 2 Awardees compared to the Finalist pool as a whole, suggesting antibodies may be viewed as a comparatively de-risked translational path by both applicants and judges.

Gene therapies (non-viral plasmid or AAV-vector constructs targeting genes such as follistatin and klotho) and RNA therapies (largely mRNA-lipid nanoparticle constructs aimed at the same longevity-associated targets) together represented a meaningful share of biologic proposals, underscoring genetic and RNA-based reprogramming as an active area of Finals-stage innovation. Extracellular vesicle and cell-derived secretome products, along with therapeutic plasma exchange, rounded out the landscape, while peptide therapeutics split cleanly into mitochondrial-targeting agents and other regenerative peptides.

Among the Milestone 2 Awardees specifically, four distinct biologic categories were represented — extracellular vesicles, monoclonal antibodies, gene therapy, and cell therapy — each with one team a piece. This spread indicates the judging panel rewarded a genuinely diverse set of biologic strategies rather than concentrating around one dominant approach.

Engineered targeting of small extracellular vesicles	Galectin-3 inhibiting monoclonal antibodies	Injectable plasmid gene vectors	Mesenchymal stem cell therapy

Trends from Qualifying to Finals.

Comparing the Qualifying round to Finals applications shows that overall interest in biologics as a therapeutic category was stable — roughly three in ten teams proposed some biologic modality at both stages. What changed substantially was the mix: cell therapies, gene therapies, blood/plasma-based products, and EV/secretome biologics were each proposed by roughly a quarter of Qualifying teams but fell to well under 10% of Finalists, suggesting the early field was heavily weighted toward these approaches and that comparatively few advanced at the same rate. Meanwhile, peptide therapeutics and RNA therapies emerged as distinct categories only at the Finals stage, and monoclonal antibodies stood out as the established category with substantial growth in relative share.

BIOLOGICS TREND COMPARISON - QUALIFYING VS FINALS

SHARED CATEGORY	QUALIFYING SUBMISSIONS (# OF TEAMS)	% OF PROPOSED	FINALS APPLICANTS (# OF TEAMS)	% OF PROPOSED	TREND (BY %)
Cell Therapies	16	19%	4	15%	Stable
Gene Therapies	16	19%	3	12%	Decline
Plasma / TPE	15	18%	3	12%	Decline
EV / Cell-Derived Biologics	14	17%	4	15%	Stable
Immunotherapy (Broad)	9	11%	1	4%	Decline
Monoclonal Antibodies	3	4%	4	15%	Increase
Recombinant Proteins	4	5%	1	4%	Stable
Vaccines	3	4%	1	4%	Stable
Peptides	3	4%	2	8%	Stable
RNA Therapies	1	1%	3	12%	Increase
Total Biologics Proposed	84		26		

Bottom Line: Trends in Proposed Biologics

While the overall appetite for biologic therapeutics among XPRIZE Healthspan applicants has held steady from Qualifying through Finals, the underlying technology mix has shifted decisively away from the cell-, gene-, and plasma-based approaches that dominated early submissions and toward a more diversified, increasingly antibody-, RNA-, and peptide-oriented biologic landscape.

DEVICES

Devices — wearables, neurostimulation tools, hyperbaric chambers, and similar technologies — were proposed by teams competing in the XPRIZE Healthspan competition through qualifying rounds and semi-finals testing. Device-based interventions were a minority approach among Finalists, with roughly 1 in 6 teams (10 of 61) proposing at least one device as part of their strategy. Notably, among teams who proposed a monitoring or therapeutic device, 9 of 10 teams included mention of more than one device as part of their proposed solution.

THERAPEUTIC DEVICE FREQUENCY BY CATEGORY - ALL FINALIST TEAMS

DEVICE CATEGORY	FINALIST APPLICANTS (# TEAMS)	% OF TEAMS	DEVICE MENTIONS (%)
Neurostimulation / Electrical Stimulation	4	7%	5
Wearable & Digital Monitoring	2	3%	7
Hyperbaric / Hypoxic Conditioning	2	3%	2
Acoustic / Ultrasound	2	3%	2
Photobiomodulation (Red-Light Therapy)	1	2%	1
Mechanotherapeutic (Biosensor-Integrated)	1	2%	1
Ambiguous / Other	0	0%	0
TOTAL - Any Device Proposed (unique teams)	10	20%	18

The most common device category was neurostimulation and electrical stimulation — tools like transcutaneous acupoint stimulation and cranial stimulation — used by four teams. Wearable and digital monitoring technologies, such as EEG headsets, continuous glucose monitors, and activity trackers, appeared in many teams applications, but only two teams' proposals specifically tied their therapeutic approach to the monitoring device and these teams paired several sensors together.

Smaller numbers of teams proposed hyperbaric or hypoxic conditioning, ultrasound-based therapies, red-light (photobiomodulation) therapy, and biosensor-integrated mechanotherapeutic devices. Though some of these therapeutic devices included promising emerging evidence from preliminary trials, challenges around their scalable application over months or years was discussed by judges as a potential barrier to generalized use or applications outside of clinics.

Notably, none of the Milestone 2 Awardees relied on a device as part of their winning approach. This suggests that, at least in this competition, device-based strategies were more commonly explored earlier in the innovation pipeline, or were used in complex or multi-component clinic based strategies that were not favored by the judges in this round compared with teams who concentrated on drug, biologic, and nutraceutical interventions.

Bottom Line: Trends in Devices

Devices played an exploratory role in the Healthspan Finalist landscape but were absent entirely from the Milestone 2 Awardees, suggesting that other intervention types were viewed as more mature or promising at this stage of the competition.

NUTRACEUTICALS

Nutraceuticals, dietary supplements, vitamins, and other food-derived biotherapeutics represent one of the most widely proposed intervention types across the XPRIZE Healthspan competition - with more than half of the Semi-Finalist teams submitting Finals Applications proposing a nutraceutical, supplement, or food-derived biotherapeutic component (35 teams proposed a nutraceutical or similar compound in this category). No individual sub-category dominated the field; instead, teams spread across more than a dozen distinct categories, frequently stacking several types into multi-ingredient protocols.

Vitamins and minerals, NAD-boosting compounds (NAD+, NMN, and related precursors), and omega-3 fatty acids were among the most frequently cited established categories, reflecting continued reliance on well-characterized, broadly available compounds with existing safety track records. Glutathione-precursor formulations (largely GlyNAC-based) and probiotic/prebiotic/postbiotic products were also well represented, alongside smaller but notable clusters in urolithin A, ginseng-based compounds, exogenous ketones, and autophagy-focused agents such as spermidine.

NUTRACEUTICALS AND SUPPLEMENTS FREQUENCY BY CATEGORY - ALL FINALIST TEAMS VS MILESTONE 2 AWARDEES

SHARED CATEGORY	ALL FINALS APPLICANTS (# NUTRACEUTICALS PROPOSED)	% OF PROPOSED	MILESTONE 2 AWARDEES (# NUTRACEUTICALS PROPOSED)	% OF PROPOSED
Any Nutraceutical/Supplement/Food-Derived Bio	35	33%	4	31%
NAD (NAD+/NMN/NR precursors)	6	6%	1	8%
Glutathione (GlyNAC precursors)	5	5%	1	8%
Vitamins & Minerals	8	8%	1	8%
Omega-3 / Fatty Acids	7	7%	0	0%
Polyphenol	5	5%	0	0%
Probiotic / Prebiotic / Postbiotic (Synbiotic)	4	4%	1	8%
Urolithin A	3	3%	0	0%
Ginseng	3	3%	1	8%
Ketone (BHB, Exogenous Ketones)	2	2%	0	0%
Autophagy-Focused (e.g., Spermidine)	2	2%	1	8%
Herbal / TCM (incl. Mushroom)	2	2%	0	0%
Functional Foods / Food-Derived Biotherapeutics	4	4%	1	8%
Other / Unique Compounds	19	18%	2	15%

Note: Categories are not mutually exclusive; most teams stack multiple supplement types.

A distinct group of teams proposed functional foods or food-derived biotherapeutics rather than traditional supplements — examples include plant-derived extracellular vesicles, a scallop-derived plasmalogen product, and a multi-molecule food-derived capsule — signaling a small sub-field of biologically active food products distinct from conventional nutraceuticals.

Roughly a third of Finalist proposals fell into a broad “Other” bucket of proprietary blends and less-common compounds that didn't map cleanly onto a single named category, underscoring the heterogeneity of this space. However, the bigger trend in this category was not the specific compounds proposed, but the number of combined therapeutic solutions in this category proposed by teams. For example, among the 35 Finalist teams that proposed any nutraceutical, supplement, vitamin, or food-derived biotherapeutic agent:

22 of 35 (63%)
Teams proposing more than one individual agent or compound

5 of 35 (14%)
Teams proposing ten or more nutraceutical compounds in a “stack”

19
Maximum number of compounds proposed by a single team

4
Average number of compounds proposed per team

Among the Milestone 2 Awardees, four of ten teams proposed a nutraceutical or food-derived approach — a somewhat lower rate than the Finalist pool overall — but those that did spanned a diverse set of categories, including NAD, glutathione, vitamins/minerals, probiotics, ginseng, autophagy-focused compounds, and functional foods, with no single category repeated across multiple Awardees. This suggests the judging panel did not favor one nutraceutical strategy over another, but rather rewarded teams whose broader intervention packages — nutraceutical or otherwise — were most compelling. Among Awardees, one team proposed a stack of up to 10 nutraceuticals, one proposed a single nutraceutical with three combined compounds, and one proposed a single autophagy-activator nutraceutical in a strategy combined with repurposed drugs and lifestyle interventions. Thus, the judges awarded teams consistent with the spectrum of nutraceutical approaches reflected in the field of Finalist applicants.

Trends in Nutraceuticals from Qualifying to Finals

Comparing the Qualifying round to Finals applications shows that overall interest in nutraceutical and food-derived interventions grew substantially — from roughly a third of Qualifying submissions to well over half of Finalists — the opposite pattern seen in the biologics analysis, where prevalence held flat across rounds. At the same time, the specific mix shifted considerably: herbal products, polyphenols or antioxidants, and generic functional foods were the three largest categories at Qualifying, each proposed by roughly a quarter to nearly two-fifths of teams, but each fell to single-digit shares by Finals — the steepest category contractions observed across either the biologics or nutraceutical analyses. Meanwhile, the "Other/Unknown" bucket more than doubled in share, suggesting Finalist-stage supplement stacks became more idiosyncratic and multi-ingredient rather than converging on standardized categories. Glutathione and urolithin A were the only established categories to grow modestly in relative share, while ginseng and autophagy-focused compounds emerged as newly distinct categories only once teams reached the Finals stage.

NUTRACEUTICALS TREND COMPARISON - QUALIFYING VS FINALS

SHARED CATEGORY	QUALIFYING (# TEAMS)	QUALIFYING (%)	FINALS APPLICANTS (# TEAMS)	FINALS (%)	TREND (BY %)
NAD (NAD+/NMN/NR precursors)	17	12%	6	9%	▼ Modest Decline
Glutathione (GlyNAC precursors)	1	1%	5	7%	▲ Increase
Omega-3 / Fatty Acids	7	5%	7	10%	▲ Increase
Probiotic / Prebiotic / Postbiotic	10	7%	4	6%	▶ Stable
Polyphenols / Antioxidants	27	19%	5	7%	▼ Decline
Vitamins & Minerals	15	11%	8	11%	▶ Stable
Herbal Products / TCM	22	16%	2	3%	▼ Decline
Functional Foods / Food-Derived Bio	17	12%	4	6%	▼ Decline
Ketone / Metabolism Support (BHB)	5	4%	2	3%	▶ Stable
Urolithin A	2	1%	3	4%	▲ Increase
Ginseng	1	1%	3	4%	▲ Increase
Autophagy-Focused (e.g. Spermidine)	2	1%	2	3%	▶ Stable
Other, Proteins, Amino Acidspeutics	14	10%	19	27%	▲ Increase

Note: Categories are not mutually exclusive; most teams stack multiple supplement types.

Bottom Line: Trends in Nutraceuticals and Supplements

Nutraceuticals and food-derived biotherapeutics became both more common and more idiosyncratic as XPRIZE Healthspan progressed from Qualifying to Finals — the well-established categories that dominated early submissions gave way to a more fragmented, proprietary, and blend-driven landscape, even as more teams overall embraced some form of nutraceutical intervention.

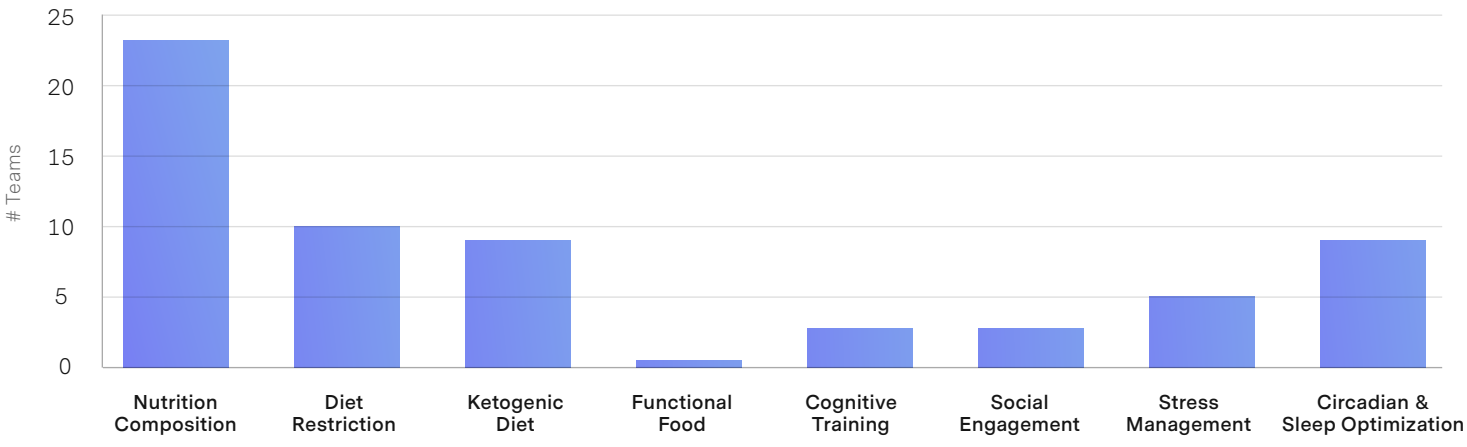
LIFESTYLE & BEHAVIORAL

Alongside drugs, biologics, and devices, a meaningful share of XPRIZE Healthspan teams built their approach around lifestyle change — exercise, diet, sleep, stress, and social connection. These interventions are inexpensive, low-risk, and often deeply personal, but they raise a hard question for a competition built to reward measurable extension of healthy years: can lifestyle changes alone move the needle enough to win? Can a drug or biologic exceed the thresholds set out by the competition without including diet, exercise, sleep, or other lifestyle and behavioral factors as a foundation? This summary looks at how often finalist teams used lifestyle strategies and what specific approaches or combinations they chose.

How Common Was a Lifestyle Component?

Among all 61 finalist applicants, 24 teams — about 2 in 5 — built exercise or another lifestyle element into their proposal. Nutrition-based strategies were similarly common: 22 teams, or roughly 1 in 3, proposed a specific dietary approach. Many teams combined the two, pairing a structured exercise plan with a nutrition strategy as part of a broader, multi-pronged intervention. The pattern shifts sharply when we narrow the lens to the ten teams that ultimately won an award at Milestone 2. Only one of the ten included any lifestyle component at all, and even then, it appeared as one part of a multi-modal strategy that combined a repurposed drug, a supplement, and structured exercise (specifically HIIT and resistance training).

DIET EXERCISE, AND LIFESTYLE INTERVENTIONS AMONG ALL FINALIST APPLICANTS



Exercise Was the Dominant Lifestyle Strategy

Exercise was by far the most frequent lifestyle component, appearing in 23 of the 24 teams with any lifestyle proposal. Within exercise programs, resistance and strength training was the single most common element (14 teams), followed closely by aerobic and endurance training (11 teams). A smaller number of teams incorporated high-intensity interval training, balance work, flexibility training, or structured walking protocols. Nine teams described their exercise component only in general terms — "structured physical activity" or "moderate exercise" — without specifying a particular training method.

EXERCISE INTERVENTIONS: SUBCATEGORIES PROPOSED BY FINALIST APPLICANTS

SUB-CATEGORY	ALL FINALS APPLICANTS (# OF TEAMS)	MILESTONE 2 AWARDEES (# OF TEAMS)
Resistance/Strength	14	1
Aerobic/Endurance	11	0
General/Unspecified	9	0
HIIT	3	1
Balance	3	0
Flexibility	2	0
Walking	2	0

Diet Strategies: Composition Over Restriction

Where teams specified a nutrition strategy, the most common approach centered on the composition of the diet rather than restricting when or how much a person eats. Ten teams proposed diets built around specific nutrient targets — high-protein regimens, Mediterranean-style eating patterns, anti-inflammatory whole-food diets, or specific food-based protocols. Eight teams instead focused on restriction-based approaches such as caloric restriction or intermittent fasting and time-restricted eating. A single team proposed a ketogenic diet — a distinct metabolic approach that marries elements of dietary restriction with ketone-based approaches by other teams in nutraceuticals and functional food categories. Three teams centered their nutrition strategy on a specific functional compound or supplement blend, such as a synbiotic (prebiotic and probiotic) formulation or a bioactive compound drink, rather than a broader dietary pattern.

Sleep, Stress, and Social Connection Played Supporting Roles

Beyond exercise and diet, a smaller set of teams incorporated other lifestyle levers. Eight teams built in a sleep or circadian-rhythm component — things like light-exposure timing, structured sleep coaching, or therapy for insomnia. Five teams included a stress-management element such as yoga, meditation, or Tai Chi. Cognitive training and social engagement components (group sessions, community-based activities) were each present in three teams. These elements rarely stood alone; they were almost always layered on top of an exercise or nutrition foundation rather than serving as the core intervention.

How Lifestyle Elements Were Combined

Teams rarely relied on a single lifestyle lever in isolation — most paired two or more together. The most common combination by far was exercise with a nutrition-composition strategy (8 teams) and exercise with a sleep or circadian component (also 8 teams), suggesting that when teams built a lifestyle-based proposal, physical activity typically anchored it. Exercise paired with a restriction-based diet (caloric restriction or intermittent fasting) in 6 teams. Nutrition composition and diet restriction — two different ways of describing a dietary strategy — were combined in 4 teams, as were nutrition composition and sleep/circadian optimization. Exercise paired with stress management (yoga, meditation, Tai Chi) in 4 teams and with social engagement or cognitive training in 3 teams each. Pairings that did not involve exercise or diet at all — such as stress management with sleep optimization, or social engagement with cognitive training — were rare, appearing in only 1 or 2 teams. Overall, exercise functioned as the connective thread running through nearly every multi-component lifestyle strategy in the finalist pool.

HEATMAP OF LIFESTYLE INTERVENTION - ALL FINALS APPLICANTS

	Exercise	Nutrition Composition	Diet Restriction	Ketogenic Diet	Functional Food	Cognitive Training	Social Engagement	Stress Management	Circadian & Sleep Optimization
Exercise	23	8	6	1	2	3	3	4	8
Nutrition Composition	8	10	4	0	0	1	0	0	4
Diet Restriction	6	4	8	1	0	0	1	2	2
Ketogenic Diet	1	0	1	1	0	0	1	1	0
Functional Food	2	0	0	0	3	0	0	0	1
Cognitive Training	3	1	0	0	0	3	1	0	2
Social Engagement	3	0	1	1	0	1	3	1	1
Stress Management	4	0	2	1	0	0	1	5	1
Circadian & Sleep Optimization	8	4	2	0	1	2	1	1	8

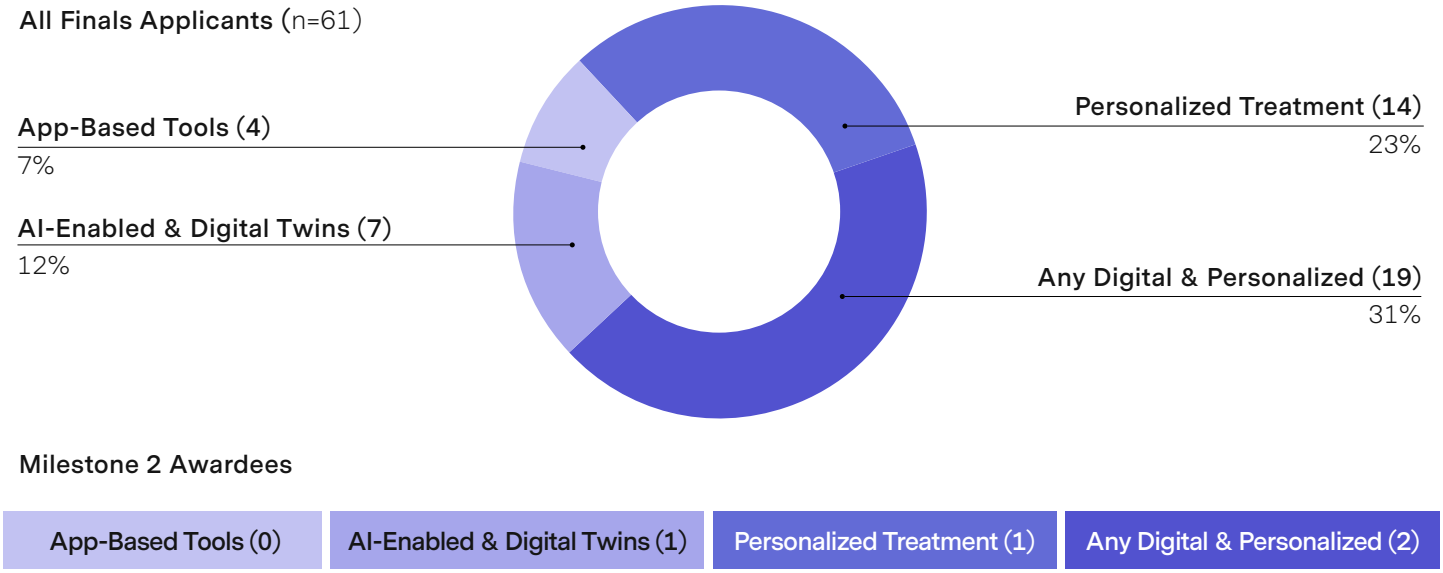
Bottom Line: Lifestyle Interventions

Lifestyle strategies — especially exercise — were common among the broader finalist pool, appearing in roughly 2 in 5 teams, with resistance training and aerobic exercise as the clear favorites. Nutrition approaches leaned toward changing what people eat rather than restricting when or how much. But, while lifestyle change remains a popular and accessible strategy at the broader field level, the teams recognized for Milestone 2 awarding leaned overwhelmingly toward biological interventions — drugs, biologics, and devices — with lifestyle elements, where present at all, playing a supporting rather than a central role.

DIGITAL & PERSONALIZED

Across the XPRIZE Healthspan competition, a meaningful minority of teams proposed interventions built around artificial intelligence, mobile apps, or individualized treatment protocols rather than a single drug, biologic, or device.

DIGITAL TOOLS AND PERSONALIZED INTERVENTIONS



Nearly a third of all 61 Finalist teams (19 teams, 31%) incorporated a digital or personalized component into their proposed intervention. The most common approach was personalized treatment — tailoring a therapy to an individual's biomarkers, phenotype, or diagnostic profile — used by 14 teams (23%). Fewer teams built AI-enabled tools such as digital twins or algorithm-driven optimization (7 teams, 8 total instances), and even fewer relied on app-based delivery for coaching or adherence (4 teams). Among the Milestone 2 Awardees, only 2 teams (20%) proposed a digital or personalized element — one using an AI-driven digital twin platform, the other using personalized telehealth coaching. Though no Awardee relied on an app-based delivery model, this was discussed by judges and advisors as a strength for adherence and delivery of multi-modal interventions in particular. Collectively, though digital and personalized approaches were reasonably common across the applicant pool, they were not, on their own, a decisive factor; most winning teams centered their innovation on a drug, biologic, or combination therapy instead.

Bottom Line: Digital and personalized tools

Though AI-Enabled solutions – especially personalization based on individual biomarkers — appeared across roughly a third of Finalist applications, these approaches are more often a complement to a core therapeutic than a primary driver of competition success.

MECHANISTIC TARGETS AND HALLMARKS OF AGING

Most teams entering the XPRIZE Healthspan competition is, at its core, making a bet on a biological target: a specific pathway or process it believes drives human aging, and a specific way to intervene on it. Looking across all 61 Finals applicants — from early-stage Qualifiers through the Milestone 2 Awardees — reveals which of these bets are most common, which are rare, and how the strategies favored by the highest-scoring teams differ from the applicant pool as a whole. This summary draws on two complementary views of the same 61 applications: team-reported mechanism keywords (their own free-text descriptions of how their intervention works) and a mapping of each team's approach onto a set of field-recognized "Hallmarks of Aging," the widely-used framework for organizing the biological drivers of aging.

Mechanistic Trends Across All Finalist Applicants

When reviewing the team-reported mechanisms for their proposed therapeutics, several key trends emerge:

- Inflammation dominates. Nearly 6 in 10 applicants (36 of 61, 59%) describe a mechanism that reduces inflammation or "inflammaging," making it by far the most common target in the entire pool — well ahead of any other single mechanism.

- Mitochondria, brain health, and immune function form the next tier. Roughly one-third of teams target mitochondrial function (34%), cognitive/neuroprotective pathways (31%), or immune system restoration (31%), reflecting broad interest in the organ systems most visibly affected by aging.

- Muscle-preserving mechanisms (myostatin inhibition, sarcopenia reversal) appear in 30% of applications and are the dominant focus of resistance training strategies.

- Cellular senescence is well represented.and senescent-cell clearance ("senolytics") in 26% — demonstrating a mature, well-validated aging-biology target.

- A long tail of specific, mechanistically precise targets. Smaller but scientifically well-defined clusters include oxidative stress (16%), autophagy and stem-cell/regenerative signaling (13% each), and single-digit-percentage groups targeting mTOR, AMPK, NAD+, exercise physiology, vascular/angiogenic signaling, and genomic stability/epigenetics — each representing a handful of teams pursuing a sharply defined biological lever rather than a broad wellness claim.

- Combination approaches are the norm, not the exception. Most applicants — and nearly all of the highest-ranked teams — propose interventions that stack three to five mechanisms simultaneously (for example, pairing mTOR inhibition with AMPK activation and NAD+ repletion), rather than targeting a single pathway in isolation.

The top ~22-25 team-identified mechanistic targets appear on the following page:

MECHANISMS OF ACTION KEYWORDS - ALL FINALS APPLICANTS

MECHANISM KEYWORD	FINALS APPLICANTS (# OF TEAMS)	% OF APPLICANTS
Inflammation / Anti-inflammatory	36	59%
Mitochondria / Mitochondrial function	21	34%
Neuroprotection / Cognitive	19	31%
Immune function / Immunosenescence	19	31%
Muscle / Myostatin / Sarcopenia	18	30%
Senescence / Senolytic	16	26%
Oxidative stress / Antioxidant	10	16%
Autophagy	8	13%
Stem cell / Regenerative signaling	8	13%
mTOR pathway	7	12%
Exercise / Physical activity	7	12%
Angiogenesis / Vascular (VEGF)	7	12%
SASP (senescence-associated secretory phenotype)	6	10%
NF-kB / cGAS-STING signaling	6	10%
AMPK signaling	6	10%
IGF-1 / GH axis	6	10%
Genomic stability / DNA repair / Epigenetic	5	8%
Exosomes / Extracellular vesicles (EVs)	5	8%
NAD+ / NAD metabolism	5	8%
Cardiometabolic / Insulin signaling	5	8%
Klotho signaling	4	7%
GLP-1 / Metabolic signaling	4	7%
Gut microbiome	4	7%

Mapping to Hallmarks of Aging Construct

The geroscience hypothesis has supported remarkable progress in understanding the basic biological mechanisms of aging as well as identifying interventions that can extend healthy lifespan in animal models such as Drosophila, Caenorhabditis elegans, rodents, nonhuman primates, and companion animals. Geroscience research has advanced unifying mechanisms and theories to explain broad biological aging processes and identified pathways that can be targeted to delay or reverse age-related decline. A major catalyst was the proposal of several biological “Hallmarks” or “Pillars” of aging, first proposed by Kennedy

et al.[6,7,8] The 'Hallmarks of Aging' comprehensive reviews established three criteria that must apply for each mechanistic hallmark of aging: (1) that biological pathway must change in a time-dependent way, reflective of the natural aging process across species, (2) experimental aggravation of the mechanistic pathway may accelerate aging phenotypes and elevate the risk of death, and—most relevant to XPRIZE Healthspan —(3) that targeting the mechanism by therapeutic interventions may slow, halt, or reverse aging phenotypes and extend median or maximum lifespan in animals. We have adapted concepts from the latter, most recent Hallmarks of Aging review as a conceptual framework for the purposes of this Innovations Landscape Report.

Importantly, the specific biological mechanisms outlined below and targeted by Teams in XPRIZE Healthspan are not distinct but are connected and highly interdependent. Thus, the classifications below are inevitably arbitrary, but do create a framework for reporting that is familiar to the field of geroscience.

However, not all of our teams' proposals fit neatly into the 'Hallmarks' construct. For example, a "General Health" catch-all category was adopted for lifestyle interventions that do not target specific mechanisms of biological aging but describe broad wellness or multi-system benefits that don't map cleanly to a single biological hallmark. Yet, when each team's proposed mechanism is mapped onto the 12 adapted Hallmarks of Aging, a similar picture emerges to the keyword search above:

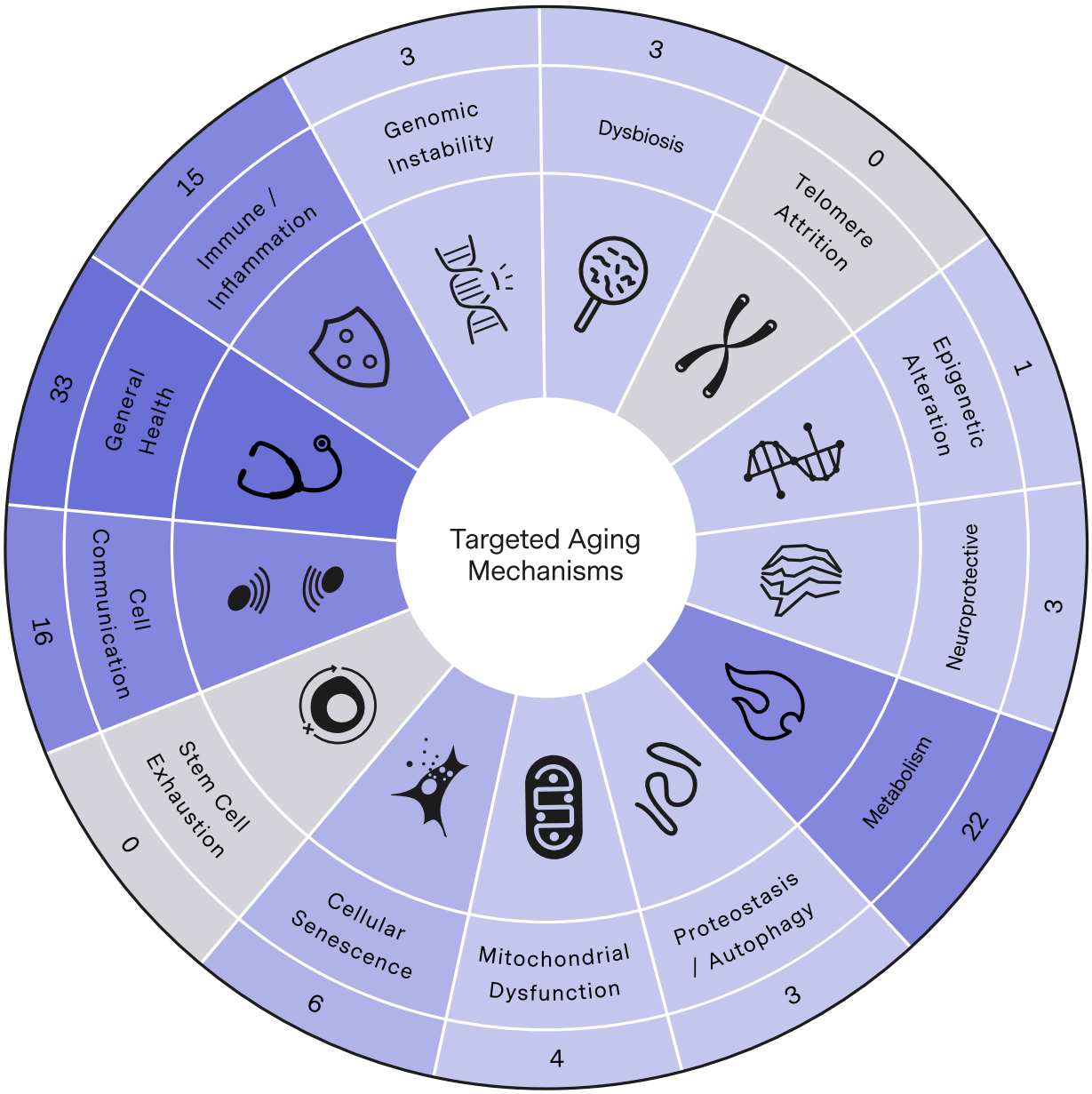
- General Health is the largest single bucket (54%). This reflects applicants — often nutraceutical, lifestyle, or multi-modal teams — whose proposed benefits span several systems at once without targeting one specific aging mechanism.
- Metabolism is the clearest "true hallmark" leader (36%). Nutrient-sensing and metabolic pathways (mTOR, AMPK, NAD+, insulin/IGF-1 signaling) are the most common well-defined biological target in the pool.
- Cell Communication and Immune/Inflammation follow (26% and 25%). These capture paracrine/exosome-mediated signaling and systemic tissue-repair approaches, and classic immune-inflammatory targeting, respectively.
- Cellular Senescence, Mitochondrial Dysfunction, Genomic Instability, Dysbiosis, Neuroprotection, and Proteostasis/Autophagy are each modestly represented (5–10%).
- Telomere Attrition and Stem Cell Exhaustion are essentially untargeted. This round, no applicant's primary mechanism was classified under either hallmark — a possible white space in the current applicant pool.

[6] Kennedy BK, Berger SL, Brunet A, Campisi J, Cuervo AM, Epel ES, Franceschi C, Lithgow GJ, Morimoto RI, Pessin JE, Rando TA, Richardson A, Schadt EE, Wyss-Coray T, Sierra F. Geroscience: linking aging to chronic disease. Cell. 2014 Nov 6;159(4):709-13. doi: 10.1016/j.cell.2014.10.039. PMID: 25417146; PMCID: PMC4852871.

[7] López-Otín C, Blasco MA, Partridge L, Serrano M, Kroemer G. The hallmarks of aging. Cell. 2013 Jun 6;153(6):1194-217. doi: 10.1016/j.cell.2013.05.039. PMID: 23746838; PMCID: PMC3836174.

[8] López-Otín C, Blasco MA, Partridge L, Serrano M, Kroemer G. Hallmarks of aging: An expanding universe. Cell. 2023 Jan 19;186(2):243-278. doi: 10.1016/j.cell.2022.11.001. Epub 2023 Jan 3. PMID: 36599349.

HALLMARKS OF AGING - ALL FINALS APPLICANTS



Full Applicant Pool vs. Milestone 2 Awardees

The mechanistic profile of the Milestone 2 Awardees looks meaningfully different from the applicant pool as a whole — the winning teams cluster much more tightly around a small number of well-defined biological targets. General Health falls sharply: Among all applicants, General Health is the top category (54%); among Awardees, it drops to just 20% — tied for fifth place. This suggests that winning teams tend to propose mechanistically specific interventions rather than broad wellness claims.

Among targeted pathways, Cell Communication and Immune/Inflammation rise to the top. Half of all Awardees (50%) target cell-to-cell/paracrine signaling mechanisms, and 40% target immune or inflammatory pathways — both notably higher than their share of the full applicant pool (26% and 25%, respectively).

Metabolism remains consistently important. Nutrient-sensing/metabolic mechanisms are the third most common target among Awardees (30%), close to their prevalence across the full pool (36%), suggesting this is a durable, competition-wide strength rather than a differentiator. Finally, awardees show broader hallmark coverage per team. Genomic Instability, Cellular Senescence, and Mitochondrial Dysfunction are each represented at a higher relative rate among Awardees (20% each) than in the applicant pool overall, consistent with the pattern of top teams stacking multiple validated mechanisms rather than relying on one.

HALLMARKS OF AGING TARGETED, MILESTONE 2 AWARDEES

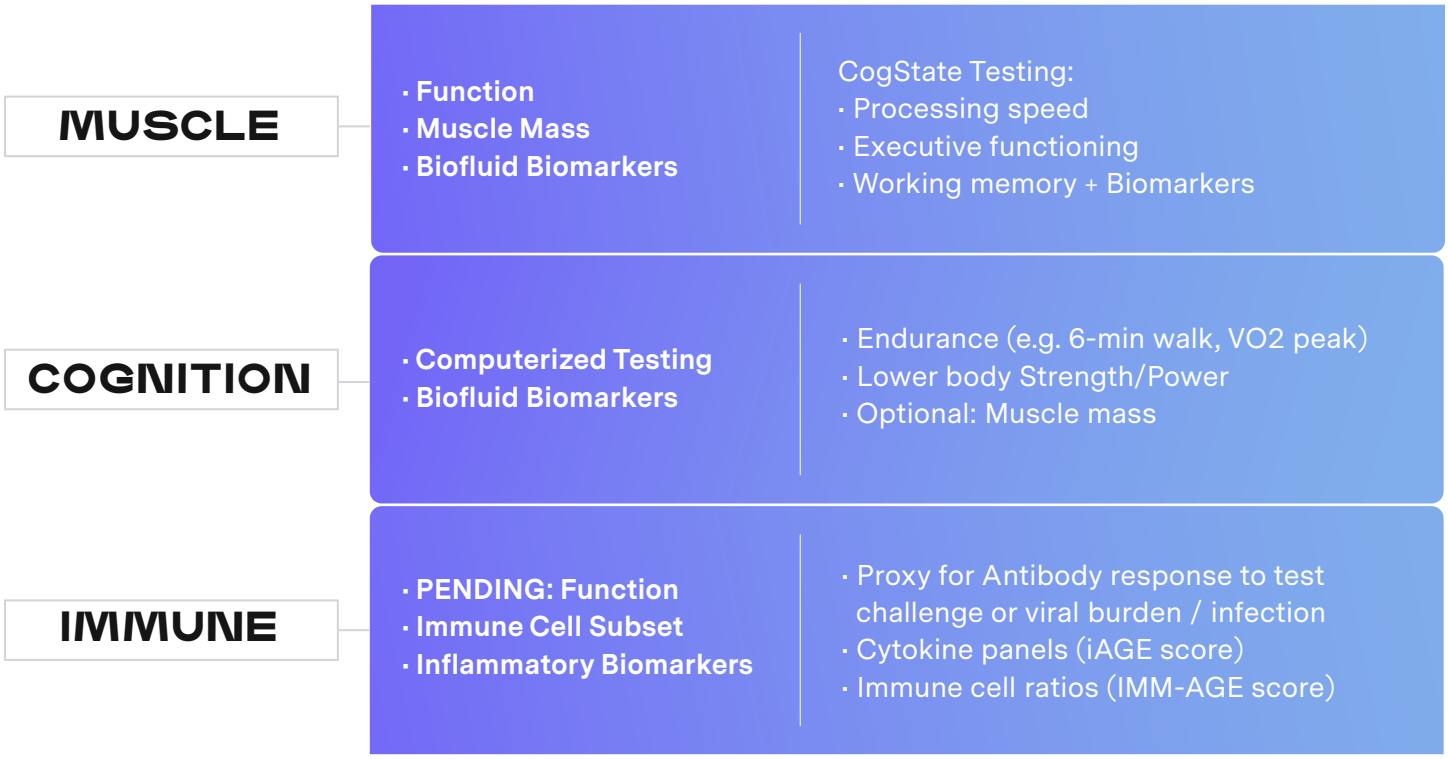
HALLMARK CATEGORY	MILESTONE 2 AWARDEES (# OF TEAMS)	MILESTONE 2 AWARDEES (%)
Immune / Inflammation	4	40%
Genomic Instability	2	20%
Dysbiosis	0	0%
Telomere Attrition	0	0%
Epigenetic Alteration	0	0%
Neuroprotective	1	10%
Metabolism	3	30%
Proteostasis / Autophagy	1	10%
Mitochondrial Dysfunction	2	20%
Cellular Senescence	2	20%
Stem Cell Exhaustion	0	0%
Cell Communication	5	50%
General Health	2	20%

LOOKING AHEAD - FINALS COMPETITION

XPRIZE HEALTHSPAN

Ten teams have advanced from Semi-Finals to Finals, meaning each has already shown early clinical evidence that its approach is promising, exciting, and worth testing at scale.

Over the next three and a half years, these teams will run full one-year randomized controlled trials to determine whether their therapies can meaningfully restore age-related declines in muscle, cognitive and immune function.



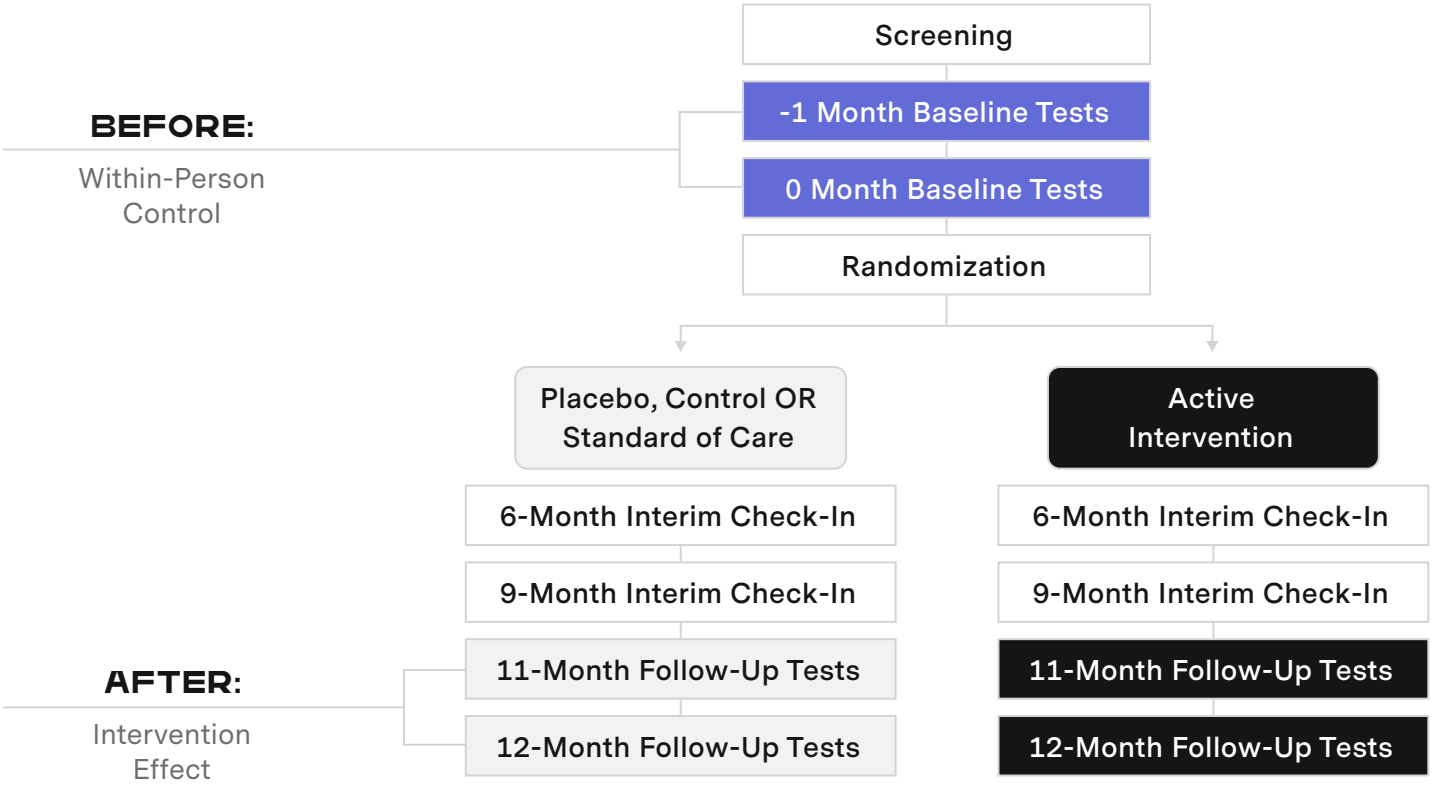
During the trials, participants complete a standardized set of assessments designed to measure three core functional domains. Muscle function is evaluated using a six-minute walk test and a lower-body strength or power test. Cognitive function is assessed with a computerized battery that measures memory, attention, processing speed, and executive function. Participants also provide blood and other biospecimens, which are analyzed in centralized laboratories to measure immune function and identify biomarkers associated with healthy aging.

A Trials Framework Built Around Meaningful Change, Not Average Change

Most clinical trials ask whether the treatment group improves more, on average, than the control group. But averages can hide important differences. A few people who improve dramatically can make a treatment appear successful even if most participants see little benefit. Likewise, small improvements in laboratory measurements may not translate into meaningful improvements in everyday life.
XPRIZE Healthspan is designed differently. Rather than rewarding therapies that produce small average improvements, it rewards therapies that produce meaningful improvements in individual people. Each participant is evaluated individually against a personalized improvement target. This raises the bar for success: therapies must produce meaningful improvements in real people, not just statistically significant changes in study averages.

The competition also prioritizes improvements people can actually experience, such as walking endurance, strength, memory, and immune function. Biomarkers remain an important part of the trials, helping researchers understand how therapies work and discover new biological signals of healthy aging.

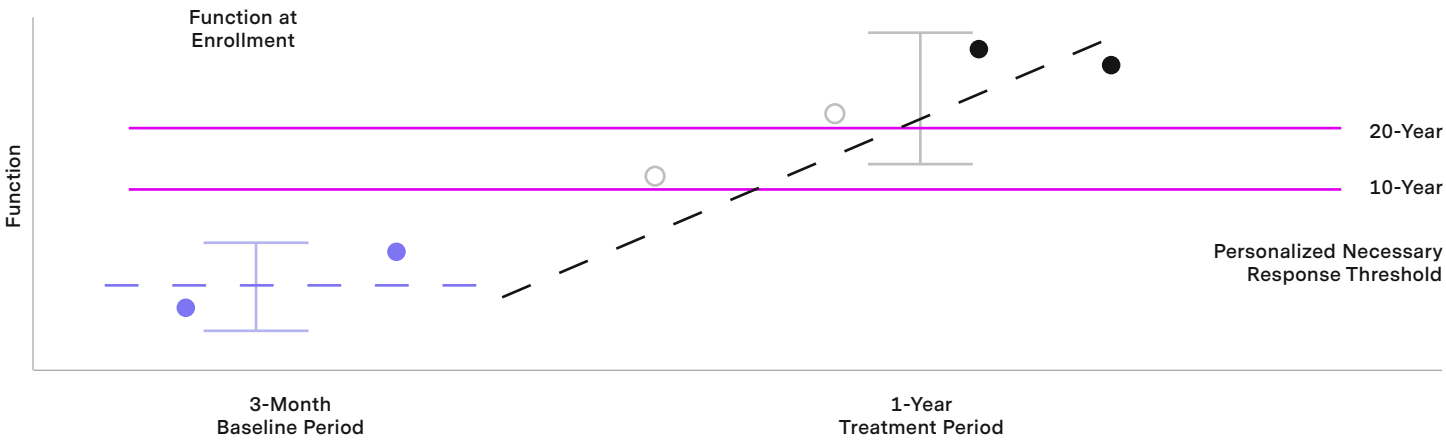
To measure change reliably, every participant completes two baseline visits one month apart and two follow-up visits after one year of treatment. Averaging these measurements reduces normal day-to-day variation, making it easier to detect genuine changes caused by the therapy. All Finalist teams use this same framework and the same centralized assessment tools, allowing fair comparisons across different therapeutic approaches.



Personalized Response Thresholds

The other piece that makes this possible is how "improvement" gets defined for each person. Rather than comparing group averages, XPRIZE Healthspan asks an individual question: given this specific participant's age, sex, and starting point, did they improve by more than we'd expect?

Rather than using the same target for everyone, each participant receives a personalized response threshold based on factors such as age, sex, and baseline performance. These thresholds represent improvements equivalent to restoring approximately 10, 15, or 20 years of age-related functional decline. Participants are counted as responders only if they exceed their own threshold. Because these thresholds are intentionally demanding, improvements are unlikely to occur by chance alone. Comparing responder rates between the treatment and control groups helps determine whether the therapy—not natural variation or other factors—is responsible for the observed improvements.



Winning Team Criteria

To be eligible for a prize, a team must demonstrate that at least 20% more participants achieve meaningful improvements across all three functional domains compared with the control group. Teams that meet this bar can be considered for one of three award levels, based on how large the demonstrated improvement is:

10-YEAR
Functional Improvement
$61M
(awarded only if no team reaches a higher tier)

15-YEAR
Functional Improvement
$71M
(awarded only if no team reaches 20 years)

20-YEAR
Functional Improvement
$81M

What Comes Next

XPRIZE Healthspan Finals represents one of the largest coordinated global efforts to prospectively test healthspan therapeutics under a common evaluation framework. Over the next two years, Finalist Teams will move into full recruitment and randomization under this framework. Their trials will be completed by end of 2029 and a Grand Prize awarded in 2030. Beyond identifying a winning therapy, the competition will generate one of the largest standardized datasets ever assembled on how older adults respond to interventions at the individual level. These data will provide an important resource for researchers long after the competition concludes.

APPENDIX A.

List of Semi-Finalist Teams with Complete Finals Applications

XPRIZE HEALTHSPAN

HEALTHSPAN

TEAM NAME (ALL FINALS APPLICANTS)	LOCATION	MILESTONE 2 AWARDEE
A New Dimension	US	
ABATE Qr / PALM	Canada	
ANI.AI [rev]	US	
ASAGI Labs, Inc.	Japan	
ASU Team Healthspan	US	
Abe Yoando Pharmaceutical Co., Ltd.	Japan	
AgelessRx	US	✕
Agemica	UK	
Alaskan International Healthspan	US	
AutoPhagyGO Inc.	Japan	
BHI Therapeutic Sciences / Blue Horizon International	US	
BOOCS & Plasmalogen	Japan	
BioArmor	Malaysia	
BlueBird Longevity	Switzerland	
Boston Healthspan Team	US	
Canadian Translational Geroscience Network	Canada	
Circadian	US	
Exomed	Australia	
GI Innovation: XPRIZE Mission Control	South Korea	
GOQii Sanjeevini	India	
Global Health Span Extension Consortium	Switzerland	
Goda Lab	Japan	✕
Gplife Healthcare Pvt. Ltd.	India	
HONYA Medical	Taiwan	
Healthspan Heroes	Singapore	
Healthy Longevity Clinic & Klothea Bio	Denmark	
Immunis	US	

HEALTHSPAN

TEAM NAME (ALL FINALS APPLICANTS)	LOCATION	MILESTONE 2 AWARDEE
Intervene Immune, Inc.	US	
Japan Longevity Consortium	Japan	
Johns Hopkins-Suninflam	US	✕
Kimera RESET	US	
LONO Jaeyak Inc.	South Korea	
Lifespan Group	US	
Lionheart Health, Inc.	US	
Longeveron, Inc.	US	✕
Low Frequency Ultrasound for Healthy Aging	US	
MetHealthspan	US	
MetaPhys	Denmark	
Minicircle	US	✕
Mitochondrial All Stars	US	✕
Morinaga Healthspan	Japan	
NUS PROMETHEUS	Singapore	
NYC-Vita	US	✕
PAIoneer	Japan	
Prometheus Cell Team	China	
R42 Group	US	
RETRO-EPIGERNA	China	✕
RPRGAON-Progeria	South Korea	✕
SunnyBay Biotech	US	
TAZ Inc.	Japan	
TIME TRAVELER - Plant-EVs	Japan	✕
TIME TRAVELER Corp.	Japan	
Team GlyNAC	US	
The Healthy Mind and Body	US	

HEALTHSPAN

TEAM NAME (ALL FINALS APPLICANTS)	LOCATION	MILESTONE 2 AWARDEE
Timeline	Switzerland	
University Hospital Institute HealthAge	France	
Unlimited Bio	UK	
VITA	Spain	
YOXLO	Switzerland	
ZEO ScientifiX / REGEN-OS	US	
reOrigin	China	

APPENDIX B.

Scientific Advisors & Consultants

XPRIZE HEALTHSPAN

SCIENTIFIC ADVISORS & CONSULTANTS

NAME	TITLE	AFFILIATION
Steven Austad, PhD	Endowed Chair in Healthy Aging and Distinguished Professor of Biology	University of Alabama Birmingham
Nir Barzilai, MD	Ingeborg and Ira Leon Rennert Chair in Aging Research; Director, Institute for Aging Research	Albert Einstein College of Medicine
Daniel Belsky, PhD	Associate Professor	Columbia University
Kim Branson, PhD	SVP Global Head of Artificial Intelligence and Machine Learning	GSK
Peggy Cawthon, PhD	Scientific Director	California Pacific Medical Center Research Institute, University of California San Francisco
Eva Chin, PhD	Executive Director	Solve FSHD
Aubrey de Grey, PhD	Founder, President, and Chief Science Officer	LEV Foundation
Luigi Ferrucci, MD, PhD	Scientific Director	National Institute on Aging, NIH
Kaivan Khavandi, MD PhD	SVP & Global Head, Respiratory, Immunology & Inflammation	GSK
George Kuchel, MD	Professor of Medicine, Travelers Chair in Geriatrics and Gerontology; Director, UConn Center on Aging	University of Connecticut
Michael Kyba, PhD	Professor of Pediatrics	University of Minnesota
Morgan Levine, PhD	Vice President of Computation	Altos Labs
Patrick Maxwell, MD	Regius Professor of Physic & Head of the School of Clinical Medicine	University of Cambridge
Huong Meeks, PhD	Assistant Professor, Department of Pediatrics	University of Utah
Thomas Osborne, MD	Chief Medical Officer	Microsoft
Graham Pawelec, PhD	Professor of Experimental Immunology	University of Tübingen
Thomas Rando, MD, PhD	Director, UCLA Broad Stem Cell Research Center	University of California Los Angeles
Perminder Sachdev, MD, PhD	Scientia Professor of Neuropsychiatry	UNSW Sydney
Nik Schork, PhD	Distinguished Professor and Director of the Division of Clinical Genomics and Therapeutics	Translational Genomics Research Institute
Risa Starr, MBA, MPH	Executive Director	Longevity Biotech Association
Erwin Tan, MD	Director of Thought Leadership	AARP
Alex Zhavoronkov, PhD	Founder & CEO	Insilico Medicine

APPENDIX C.

Judges for Late-Registrations and Semi-Finals

XPRIZE HEALTHSPAN

JUDGES FOR LATE-REGISTRATION AND SEMI-FINALS

NAME	TITLE	AFFILIATION
Arne Akbar, PhD	Professor	University College of London
Joanna Bensz, MA	Founder & CEO	Longevity Center, Europe
Steven Cummings, MD	Director	San Francisco Coordinating Center
Leslie Crews, PhD	Assistant Professor	University of California San Diego
Susan Howlett, PhD	Professor	Dalhousie University
Stephen Kritchevsky, PhD	Professor	Wake Forest School of Medicine
Nathan Labrasseur, PhD, PT	Professor	Mayo Clinic
Yotam Levin, MD, MBA*	President of Innovation	Nanopass Technologies
Ravi Mahajan, MD	Director, Research & Innovation	Apollo Hospitals
Sofiya Milman, MD	Professor	Albert Einstein College of Medicine
Phil Newman	Founder & CEO	Longevity Technology
Miranda Orr, PhD	Associate Professor	Washington University at St. Louis School of Medicine
Andrew Su, PhD*	Professor	The Scripps Research Institute
Joshua Tompkins, PhD*	Associate Research Professor	City of Hope
Kenny Simmen, PhD	Biopharma Consultant	
Heather Snyder, PhD	SVP	Alzheimer's Association
Ninie Wang	Founder & CEO	Pinetree Care Group China

* ad-hoc judge for semifinals

APPENDIX D.

Finals Testing Partners

XPRIZE HEALTHSPAN

FINALS TESTING PARTNERS

PARTNER NAME	PARTNERSHIP	REPRESENTATIVE
University of Utah DCC	Data Coordinating Center	Amy Goodman, PhD Director, Research & Science Business Development
University of California San Diego, Stein Institute for Research on Aging	Central Lab & Biorepository	Anthony Molina, PhD Scientific Director
Technion Research & Development Foundation	Specialized Biomarker Assay Provider (IMM-AGE)	Shai Shen Orr, PhD Head, Laboratory of Systems Immunology & Precision Medicine
Edifice Health	Specialized Biomarker Assay Provider (iAge)	David Goldberg, CEO
Thermo Fisher Scientific	Proteomics and Biomarker Analysis (Olink)	Yan Zhang, PhD President, Proteomic Sciences
CogState	Computerized Cognitive Assessment Battery Provider	Paul Maruff, PhD Chief Innovation Officer

APPENDIX E.

Prize Sponsors

XPRIZE HEALTHSPAN

SPONSORS

SPONSOR NAME	SPONSORSHIP	REPRESENTATIVE, ROLE & COMPANY AFFILIATION
Hevolution Foundation	Co-Title Sponsor	Mehmood Khan, MD, CEO
Solve FSHD	Co-Title Sponsor	Eva Chin, PhD Executive Director, Solve FSHD Jason Gaede, President, House of Wilson
GSK	Pharmaceutical Industry Sponsor	Jason Sanders, MD PhD Executive Medical Director, Translational Medicine Group Leader - Aging
Bennie Kante	Sponsor	CEO, Kante Group and Chief Strategy Officer, SeneGence
Brett Blundy	Sponsor	Chairman and Founder, BB Retail Capital (BBRC)
Carl Barney	Sponsor	Founder, Prometheus Foundation
Charlie and Lorie Epstein	Sponsor	Owner, Yield of Dreams LLC and Vice President, HUB Retirement and Wealth Management
Chris Ouwinga	Sponsor	Chairman, Unit4 NV
Christian Angermayer	Sponsor	Founder, Apeiron Investment Group
Christian Peneff	Sponsor	President, Merx Global Inc.
Daniel Krizek	Sponsor	Portfolio Manager, Surveyor Capital
David Beck	Sponsor	President, Wilson M. Beck Insurance Services (Alberta) Inc.
Howard Morgan	Sponsor	Chair and General Partner, B Capital Group
Kasia Bordier	Sponsor	Co-Founder, Nest-360
Mark Siegel	Sponsor	Founder & President, ReMY Investors & Consultants, Inc.
Peter Diamandis	Sponsor	Founder and Executive Chairman, XPRIZE Foundation
Rob Hamwee	Sponsor	Managing Director, New Mountain Capital
Sergey Young	Sponsor	Founder, Longevity Vision and Co-Founder, BOLD Longevity Growth Fund
Todd Wanek	Sponsor	CEO, Ashley Furniture HomeStores
Howard & Nancy Marks	Sponsor	Co-Chairman, Oaktree Capital Management

APPENDIX F.

Milestone 2 Awardee Lookbook

XPRIZE HEALTHSPAN

TOP 10

AGELESSRX

COMPANY OVERVIEW

TEAM / COMPANY NAME
AgelessRX

TRACK
Healthspan

ORGANIZATION TYPE
For-Profit Private Company

HQ LOCATION
Ann Arbor, MI, USA

YEAR FOUNDED
2019

NUMBER OF EMPLOYEES
100

TRL (SELF-REPORTED)
TRL 6 - Phase I–IIa clinical trial in patient populations

FUNDRAISING DETAILS

COMMERCIAL STAGE
Growth Stage (growing beyond initial customers)

REVENUE RANGE
$50M - $100M

CAPITAL RAISED TO DATE
$1M - $5M

ACTIVELY RAISING CAPITAL FOR ANY PURPOSE?
No - Not raising now, but planning to raise within 6 months

TYPE OF CAPITAL SOUGHT
Prefer Not to Say

TYPE OF INVESTORS SOUGHT
Not Applicable

AMOUNT OF CAPITAL SOUGHT
$1M - $5M

CURRENT INVESTMENT STAGE
Series A

Dr. Stefanie Morgan
stefanie@agelssrx.com
agelessrx.com

COMPANY DESCRIPTION

AgelessRx is a national telehealth-based longevity platform, delivering physician-supervised, prescription longevity medicine directly to consumers. The Finals protocol combines rapamycin, low-dose naltrexone, metformin, NAD+, glutathione, sermorelin, and tirzepatide with structured resistance training and telehealth health coaching in a decentralized, multi-site clinical trial.

CORE INNOVATION

The combination protocol targets several aging pathways simultaneously: mTOR inhibition, AMPK activation, NAD+ repletion, oxidative stress reduction, and growth-hormone axis signaling, alongside a proprietary supplement blend (the "Infinite Supplement": alpha-ketoglutarate, quercetin, glucosamine, carnosine, pterostilbene, astaxanthin, and curcumin). Individual components are FDA-approved medications; the combinatorial protocol and supplement formulation are AgelessRx's proprietary IP.

HEALTHSPAN IMPACT

The Semi-Finals randomized, controlled, three-arm proof-of-concept trial (registered on ClinicalTrials.gov) enrolled 26 participants, with 18 included in final analyses. The Finals-stage trial is designed to enroll 186 participants over 22 months in a fully decentralized, 14-month, 12-component protocol. AgelessRx's individual therapeutic components are already prescribed to more than 100,000 patients nationally through its telehealth platform.

LEADERSHIP TEAM

Dr. Stefanie Morgan, PhD leads the team with Dr. Jenell Decker, MD, supported by Dr. Robert Dudley. PhD, and Dr. Brianne Molloy-Paolilo, PhD

PARTNERSHIPS

The team's clinical and data partnerships include TravaLabs (mobile phlebotomy and biospecimen processing), DexaFit (VO2 max assessment), regional gym partners (functional strength testing), OpenCures (biospecimen cryostorage), Oura (wearable biometric monitoring), Edifice Health (iAge immune age profiling), Iollo (at-home metabolomics), and Creyos (online cognitive assessment).

GODA LAB (UNIVERSITY OF TOKYO / NANOTITAN / TOHOKU UNIVERSITY / TOKYO RELIFE CLINIC)

COMPANY OVERVIEW

TEAM / COMPANY NAME
Goda Lab (University of Tokyo / NanoTitan / Tohoku University / Tokyo Relife Clinic)

TRACK
Healthspan

ORGANIZATION TYPE
University Team

HQ LOCATION
Bunkyo City, Tokyo, Japan

YEAR FOUNDED
2012

NUMBER OF EMPLOYEES
70

TRL (SELF-REPORTED)
TRL 6 - Phase I–IIa clinical trial in patient populations

FUNDRAISING DETAILS

COMMERCIAL STAGE
Early Commercial Demonstration

REVENUE RANGE
<$1M

CAPITAL RAISED TO DATE
$50,000 - $250,000

ACTIVELY RAISING CAPITAL FOR ANY PURPOSE?
Yes - Actively Raising Now

TYPE OF CAPITAL SOUGHT
Venture Capital; Angel Investors/Family & Friends; Government Contracts or Public Funding; Non-dilutive Grant Funding

CAPITAL TYPE - OTHER
Working Capital; Equity Capital; Debt Capital

TYPE OF INVESTORS SOUGHT
Angel Investors; Venture Capital; Government or Public Funders

INVESTOR TYPE - OTHER
Angel Investors; Venture Capitalists; Banks & Financial Institutes; Corporate Investors

AMOUNT OF CAPITAL SOUGHT
$1M - $10M

CURRENT INVESTMENT STAGE
Seed

Prof. Keisuke Goda
goda@chem.s.u-tokyo.ac.jp

COMPANY DESCRIPTION

The team, spanning the University of Tokyo, NanoTitan, Tohoku University, and Tokyo Relife Clinic, is developing a transformative rejuvenation therapy based on engineered extracellular vesicles (EVs) derived from stem cells or plasma. Its proprietary super homotypic targeting (SHT) platform reprograms EV surfaces to dramatically enhance delivery of regenerative molecular cargo to aged and dysfunctional tissues. By combining biologically derived therapeutic payloads with precision tissue targeting, the platform is designed to address multiple hallmarks of aging simultaneously rather than treating individual age-related diseases one at a time. More information is available at: https://goda.chem.s.u-tokyo.ac.jp

CORE INNOVATION

The SHT platform transforms naturally occurring EVs into precision-targeted regenerative therapeutics. By engineering EV surfaces, it greatly strengthens their affinity for cells and tissues of origin, enabling more efficient delivery of regenerative miRNAs and proteins to muscle, neural, and immune cells. This approach addresses a major limitation of conventional EV therapy (i.e., poor tissue targeting) while potentially reducing dose, off-target effects, and manufacturing burden. Preclinical studies showed suppression of p16 and p21 and reduced inflammation, indicating activity against fundamental drivers of aging.

HEALTHSPAN IMPACT

In aged mice, SHT-engineered EVs slowed frailty progression and produced a predicted lifespan extension of more than 10 months, equivalent to approximately 15 human years. Treated animals also showed visible hair regeneration, suggesting restored tissue function. Importantly, no significant inflammation, organ dysfunction, or delayed toxicity was observed. By targeting multiple aging pathways simultaneously, the therapy has the potential to preserve mobility, resilience, immune function, and independence – not simply extend lifespan. NanoTitan, Inc. is now advancing GMP manufacturing, clinical translation, and commercialization.

LEADERSHIP TEAM

Prof. Keisuke Goda (University of Tokyo, Tohoku University, and NanoTitan) leads the team alongside Assoc. Prof. Hiroyuki Matsumura (University of Tokyo), Assistant Prof. Tianben Ding (University of Tokyo, Tohoku University, and NanoTitan), and Yoshiaki Furuyama (Tokyo Relife Clinic). Together, they lead a multidisciplinary group spanning bioengineering, biochemistry, nanotechnology, and clinical medicine.

PARTNERSHIPS

The partnership network includes Tohoku University's Healthspan Research Center (aging biology and biomarker development), Tohoku University Hospital (clinical translation and clinical trials), the University of Tokyo (bioengineering and EV analysis), NanoTitan Inc. (proprietary EV manufacturing and GMP production scale-up), and Tokyo Relife Clinic (clinical translation and physician-supervised trial planning).

JOHNS HOPKINS - SUNINFLAM

COMPANY OVERVIEW

TEAM / COMPANY NAME
Johns Hopkins-Suninflam

TRACK
Healthspan

ORGANIZATION TYPE
Academic Institution & C Corporation

HQ LOCATION
Baltimore, MD & San Francisco, CA, USA

YEAR FOUNDED
1876 & 2023

NUMBER OF EMPLOYEES
Over 60,000 & 12

TRL (SELF-REPORTED)
NA

FUNDRAISING DETAILS

COMMERCIAL STAGE
Clinical Stage

REVENUE RANGE
NA

CAPITAL RAISED TO DATE
$35M

ACTIVELY RAISING CAPITAL FOR ANY PURPOSE?
Yes - Actively Raising Now

TYPE OF CAPITAL SOUGHT
Private

CAPITAL TYPE - OTHER
Grants

TYPE OF INVESTORS SOUGHT
VC

INVESTOR TYPE - OTHER
Foundations

AMOUNT OF CAPITAL SOUGHT
$20M

CURRENT INVESTMENT STAGE
Series B

TEAM DESCRIPTION

Johns Hopkins-Suninflam is developing SIF001, a monoclonal antibody (mAb) that inhibits Galectin-3 (Gal-3), in a partnership between Johns Hopkins University/Johns Hopkins Center on Aging and Immune Remodeling (JH CAIR) and Suninflam Inc. The proposed Finals trial targets subclinical Alzheimer's disease or Mild Cognitive Impairment (MCI) in community-dwelling adults 65 and older, designed as a Phase IIa randomized, double-blind, placebo-controlled study (N=100, 50:50 allocation). The Johns Hopkins-Suninflam team is a prime example of academic-industry collaboration.

CORE INNOVATION

SIF001 is the 2nd generation of anti-Gal-3 mAb that blocks Gal-3-mediated chronic inflammation, inhibits Gal-3 oligomerization to prevent aggregation of amyloid-beta and possibly numerous other waste products and harmful molecules being accumulated during aging. It also disrupts Gal-3-mediated monocyte/macrophage activation and regulatory T-cell suppression. The team characterizes this as a dual immune/inflammation and aggregation prevention mechanism targeting a shared upstream driver of age-related inflammatory/immune dysregulation, neurodegenerative, and overall aging processes.

HEALTHSPAN IMPACT

Prior data include a Phase Ib/IIa randomized, placebo-controlled study of the 1st generation anti-Gal-3 mAb (TB006, N=67) in patients with moderate-to-severe Alzheimer's disease; an open-label investigator-initiated trial of SIF001 in China (N=9 at 1 month, N=6 at 3 months) in patients with moderate-to-severe Alzheimer's disease; and a U.S. Phase I dose-escalation safety/tolerability study of SIF001 in healthy volunteers and drug-resistant epilepsy patients. Improvement has been observed in cognitive function, a behavioral scale (NPI), and seizure activities; the team notes no prior immune blood-biomarker data have yet been reported for this mechanism, and epigenetic/aging-clock endpoints remain prospective.

LEADERSHIP TEAM

Dr. Sean X. Leng, MD PhD (Principal Investigator, Board certified geriatrician, Director of JH CAIR, Professor of Medicine, Molecular Microbiology & Immunology, Health Policy & Management, Johns Hopkins University School of Medicine and Bloomberg School of Public Health, Baltimore, MD, USA) and Dr. Dongxu Sun, PhD (Co-Principal Investigator, Immunologist, CEO and Owner of Suninflam, Inc.) lead the team.

PARTNERSHIPS

JH CAIR at Johns Hopkins University is supported in part by Mr. Howard P. Milstein and his family through Paul and Irma Milstein Foundation Program and Milstein Medical Asian American Partnership (MMAAP) Foundation.

TOP 10

LONGEVERON INC.

COMPANY OVERVIEW

TEAM / COMPANY NAME
Longeveron Inc.

TRACK
Healthspan

ORGANIZATION TYPE
Publicly Traded Company (Nasdaq:LGVN)

HQ LOCATION
Miami, FL, USA

YEAR FOUNDED
2014

NUMBER OF EMPLOYEES
29

TRL (SELF-REPORTED)
TRL 7 — Phase IIb–Phase III clinical trial in patient populations (self-reported)

FUNDRAISING DETAILS

COMMERCIAL STAGE
Growth Stage (growing beyond initial customers)

REVENUE RANGE
$1M - $5M

CAPITAL RAISED TO DATE
$100M+

ACTIVELY RAISING CAPITAL FOR ANY PURPOSE?
Yes - Actively Raising Now

TYPE OF CAPITAL SOUGHT
Angel Investors/Family & Friends; Convertible Note / SAFE; Non-dilutive Grant Funding; Government Contracts or Public Funding; Philanthropic / Prize Capital; Strategic Partnership or Co-Development; Venture Capital

CAPITAL TYPE - OTHER
Market capital. Nasdaq: LGVN

TYPE OF INVESTORS SOUGHT
Angel Investors; Private Equity; Corporate or Strategic Partners; Government or Public Funders; Foundations/Impact Investors; Family Offices; Crowdfunding or Individual Investors

INVESTOR TYPE - OTHER
Market

AMOUNT OF CAPITAL SOUGHT
$20M - $100M

CURRENT INVESTMENT STAGE
Public

Brian G. Rash, PhD
brash@longeveron.com
longeveron.com

COMPANY DESCRIPTION

Longeveron is a clinical trial-stage biopharmaceutical company with a team of experienced scientists and clinicians actively engaged in the Healthspan track, focusing on Aging-related Frailty, immune dysfunction, and Alzheimer's disease. Its investigational product, laromestrocel (Lomecel-B®), is a clinical-stage allogeneic bone marrow-derived mesenchymal stem cell (MSC) therapy that has completed five clinical trials in the USA. Since qualifying for the X-Prize Healthspan competition, Longeveron has published its Phase 2b results in Aging-related Frailty (Cell Stem Cell, Feb, 2026) and Phase 2a results in mild Alzheimer's disease (Nature Medicine, Mar, 2025), and has been granted a U.S. patent (No. 12,465,620) covering laromestrocel's use in treating Aging-related Frailty.

CORE INNOVATION

Cell-based therapy with laromestrocel, a mesenchymal stem cell (MSC) product, is positioned as a treatment candidate for multiple aging-related conditions through potential pro-vascular, immunomodulatory, and tissue-repair mechanisms of action. For cognitive decline, including the delay or prevention of Alzheimer's disease, these mechanisms — paracrine anti-inflammatory signaling, neuroinflammation suppression, and mitochondrial transfer to damaged cells — may offer a neuroprotective route that addresses root causes of neuronal death. The potential core anti-inflammatory effect of laromestrocel, observed in the brains of Alzheimer's patients, may also feature in the treatment of inflammation in aging ('inflammaging'). This pleiotropic mechanism of action may potentially be more effective than a single drug with a single target, since it aligns with multiple age-related disease states simultaneously.

HEALTHSPAN IMPACT

Published clinical trial data show improvements in muscle, immune, and cognitive function versus placebo. The Phase 2b Aging-related Frailty trial (N=148) and the Phase 2a Alzheimer's trial (N=49) both used randomized, double-blind, placebo-controlled designs. The Company reports the stem cells secrete proteins and exosomes that act on target cells throughout the body, with precise mechanisms still under active research. Longeveron's sole current commercial deployment is a fee-for-product program in the Bahamas, where roughly 200 patients have received over 350 total doses to date; U.S. and broader global commercialization depend on further regulatory milestones.

LEADERSHIP TEAM

Brian G. Rash, PhD (Team Co-Lead / Principal Investigator, Longeveron Inc.) and Joshua M. Hare, MD (Co-Lead / Chief Science Officer, Longeveron Inc.) lead a team that has executed clinical trials for laromestrocel over the past 10 years. The team includes seasoned clinical investigators and scientists with cardiac, geroscience, neuroscience, stem cell, and brain-research backgrounds, along with expert biostatisticians, CMC experts and a GMP manufacturing team, and regulatory staff experienced in managing multi-country trials under both FDA and international (e.g., PMDA) regulatory frameworks.

PARTNERSHIPS

Longeveron reports four active partnerships: Biorasi and IQVIA, engaged as CROs on past clinical trials; Solvias, which validates the Company's potency assay; and Banner Health, which conducts biomarker assays on trial samples. Longeveron has received US Federal grant funding through the NIH that supported Longeveron's Phase 2b trial in Aging-related Frailty. The team notes several additional companies and consultants provide other services to Longeveron.

MINICIRCLE

COMPANY OVERVIEW

TEAM / COMPANY NAME
Minicircle

TRACK
Healthspan

ORGANIZATION TYPE
For Profit Private Company

HQ LOCATION
Austin, TX, USA

YEAR FOUNDED
2019

NUMBER OF EMPLOYEES
12

TRL (SELF-REPORTED)
Phase 2 study, two arms

FUNDRAISING DETAILS

COMMERCIAL STAGE
Commercial Sales in 9 Countries

REVENUE RANGE
$8.25M Cumulative Revenue

CAPITAL RAISED TO DATE
$13.5M

ACTIVELY RAISING CAPITAL FOR ANY PURPOSE?
Yes - Actively Raising Now

TYPE OF CAPITAL SOUGHT
Angel, Institutional, Sovereign-adjacent

CAPITAL TYPE - OTHER
$1M minimum check size, Pre-money SAFE

TYPE OF INVESTORS SOUGHT
Aligned Angels, Institutional, Sovereign-adjacent

AMOUNT OF CAPITAL SOUGHT
$30M

CURRENT INVESTMENT STAGE
Seed

coordinator@minicircle.clinic
minicircle.io

COMPANY DESCRIPTION

Minicircle develops a non-viral plasmid gene therapy platform, aiming for a safer, more accessible, and substantially more affordable alternative to conventional gene therapy. The current lead program combines two gene cassettes — follistatin (FST) and klotho (KL) — targeting muscle and systemic aging pathways. Note: this team did not complete this year's Close-Out Survey, so fundraising and several company-overview fields below are not yet available and should be completed by the team.

CORE INNOVATION

Follistatin inhibits myostatin/activin signaling to promote muscle growth and reduce inflammation, while klotho modulates FGF23 signaling for systemic anti-aging and neuroprotective effects. Both are delivered via a transfection reagent-complexed plasmid using non-viral, episomal (subcutaneous injection) delivery, avoiding the manufacturing complexity and cost of viral vectors.

HEALTHSPAN IMPACT

A single-arm, uncontrolled pre-post pilot study of the combined FST+KL therapy enrolled 14 healthy adults aged 50–80 at the GARM Clinic in Honduras, with 10 completing full follow-up; a related klotho-only arm dataset (N=14) has also been referenced. Prior data from the team's Follistatin-only Phase 1 trial reported no adverse events, with signals of lean mass gain, body fat reduction, and reduced epigenetic age.

LEADERSHIP TEAM

Mac Davis (Co-Leader) leads the team with Walter Patterson (Co-Leader / Chief Scientific Officer).

NYC-VITA

COMPANY OVERVIEW

TEAM / COMPANY NAME
NYC-Vita

TRACK
Healthspan

ORGANIZATION TYPE
University Team

HQ LOCATION
New York, NY, USA

YEAR FOUNDED
1968 (Icahn School of Medicine at Mount Sinai)

NUMBER OF EMPLOYEES
--

TRL (SELF-REPORTED)
TRL 6 - Phase I–IIa clinical trial in patient populations

FUNDRAISING DETAILS

COMMERCIAL STAGE
R&D

REVENUE RANGE
Not Applicable

CAPITAL RAISED TO DATE
$50,000 - $250,000

ACTIVELY RAISING CAPITAL FOR ANY PURPOSE?
Yes - Actively Raising Now

TYPE OF CAPITAL SOUGHT
Government Contracts or Public Funding; Philanthropic / Prize Capital

TYPE OF INVESTORS SOUGHT
Angel Investors; Internally Funded (No outside investors)

AMOUNT OF CAPITAL SOUGHT
$1M - $10M

CURRENT INVESTMENT STAGE
Not Applicable

Dr. Miriam Merad (Team Lead)
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icahn.mssm.edu

COMPANY DESCRIPTION

NYC-Vita unites more than 30 experts from Mount Sinai's Healthspan Program, integrating expertise in inflammation, muscle biology, and cognitive health with proteomics, functional immune assays, and whole-body MRI. The Finals protocol is a randomized controlled trial testing low-dose rapamycin, spermidine supplementation, and structured HIIT/resistance exercise in adults 50–90, layered with deep multi-omics and imaging phenotyping.

CORE INNOVATION

The team's approach rebalances aging macrophages to reduce chronic inflammation while jointly targeting metabolic, muscle, and cognitive decline associated with inflammaging: rapamycin inhibits mTOR and suppresses the senescence-associated secretory phenotype (SASP), spermidine restores autophagy and reduces aging-driven myelopoiesis, and structured exercise drives tissue repair. A key differentiator is the home-based, unsupervised exercise design, which the team reports has produced high retention and adherence versus more intensive, center-based interventions.

HEALTHSPAN IMPACT

The Semi-Finals trial (N=20; preliminary analyses on 4 per arm, comparing rapamycin+spermidine vs. lamivudine+spermidine arms) informed the Finals-stage RCT layering pharmacologic, supplement, and exercise interventions with comprehensive immune and proteomic phenotyping. A parallel spermidine dose-escalation sub-study showed measurable changes in NULISA brain-aging biomarkers.

LEADERSHIP TEAM

Team lead Dr. Miriam Merad (macrophage biology, inflammaging, deep immune profiling) works closely with Dr. Thomas Marron (Director, Early Phase Trial Unit; adaptive trial design), Dr. Zahi Fayad (imaging and longevity; leads the muscle team), and Dr. Fanny Elahi (brain function and health biomarkers), with additional collaborators including Drs. Walker and Bagiella across the Mount Sinai Healthspan Program. Dr. Marron and a multidisciplinary team of experts will lead the longitudinal phenotyping backbone across clinical, biological and digital markers of aging.

PARTNERSHIPS

NYC-Vita is collaborating with Chrysea Labs on an early-phase, dose-escalation clinical study evaluating bio-effective dose levels of Chrysea's Sprevive® (a pure spermidine formulation) on immune and metabolic markers.

MITOCHONDRIAL ALL STARS

COMPANY OVERVIEW

TEAM / COMPANY NAME
Mitochondrial All Stars

TRACK
Healthspan

ORGANIZATION TYPE
Corporate/Academic Collaboration

HQ LOCATION
Needham, MA & Seattle, WA, USA

YEAR FOUNDED
Mighty founded 2006; UW founded 1861; Mighty-UW collaboration began in 2010; Mitochondrial All Stars founded 2024

NUMBER OF EMPLOYEES
Mighty ~80; UW ~35K

TRL (SELF-REPORTED)
9

FUNDRAISING DETAILS

COMMERCIAL STAGE
NA

REVENUE RANGE
>$10M per Annum

CAPITAL RAISED TO DATE
>$500M

ACTIVELY RAISING CAPITAL FOR ANY PURPOSE?
Yes - Actively Raising Now

TYPE OF CAPITAL SOUGHT
Series B Equity Round Ongoing

TYPE OF INVESTORS SOUGHT
Crossover / VC / Healthspan Focused

AMOUNT OF CAPITAL SOUGHT
$25M - $75M

CURRENT INVESTMENT STAGE
Series B

COMPANY DESCRIPTION

The Mitochondrial All Stars combine mitochondrial and drug development experts from industry with a prestigious academic aging research institute to advance a novel approach for Healthspan. The team pairs Mighty Therapeutics, a Boston-based biotechnology company, with researchers from the University of Washington Nathan Shock Center of Excellence in Basic Biology of Aging.

CORE INNOVATION

This project will investigate the first and only FDA-approved mitochondria-targeting peptide, elamipretide, as a Healthspan intervention in older adults. Elamipretide is FDA approved for an ultra-rate disease and binds cardiolipin, an integral phospholipid within the inner mitochondrial membrane. Published studies have demonstrated elamipretide's ability to improve mitochondrial function across models of aging, including in aged humans. These bioenergetic benefits in non-clinical models have been associated with improved brain and muscle function and attenuated markers of inflammation.

The innovative nature of this technology is paired with high technological readiness. Elamipretide has an extensive safety record, with an Integrated Summary of Safety spanning more than 1700 subjects and over 400 patient years, including safety testing in almost 500 aged individuals (in age-related macular degeneration trials). Elamipretide is manufactured for clinical use and is commercially deployed.

HEALTHSPAN IMPACT

The decline of mitochondrial function is a major driver to age-related pathologies and declining Healthspan. Despite widespread research into this area, there are no mitochondria-targeting therapies approved to treat Healthspan or age-related diseases. If successful, this project could have a profound impact on Healthspan by stabilizing or improving mitochondrial function in older adults. The team's Finals project is based on a successful Semi-Finals trial. This was an open-label, single-arm Phase 2a feasibility and safety pilot (N=23, ages 65–79, 4-week treatment) in healthy older adults, where encouraging trends were observed in muscle function, cognitive function, and plasma proteomics.

LEADERSHIP TEAM

Dr. David A. Brown, PhD (Chief Scientific Officer, Mighty Therapeutics) leads the team with over 25 years experience researching and developing mitochondrial therapies. Dr. David J. Marcinek, PhD (Professor at the University of Washington and co-director of the UW Healthy Aging & Longevity Institute) has two decades of experience studying the biology of aging in both laboratory models and clinical studies, where he has been focused on targeting mitochondria in aging.

RETRO-EPIGERNA

COMPANY OVERVIEW

TEAM / COMPANY NAME
RETRO-EPIGERNA

TRACK
Healthspan

ORGANIZATION TYPE
University Team (Macau University of Science and Technology)

HQ LOCATION
Macau, China

YEAR FOUNDED
2000

NUMBER OF EMPLOYEES
1,600

TRL (SELF-REPORTED)
TRL 6 — Phase I study or clinical case studies

FUNDRAISING DETAILS

COMMERCIAL STAGE
Early Commercial Demonstration

REVENUE RANGE
Not Applicable

CAPITAL RAISED TO DATE
$2M - $5M

ACTIVELY RAISING CAPITAL FOR ANY PURPOSE?
Yes - Actively Raising Now

TYPE OF CAPITAL SOUGHT
Venture Capital; Angel Investors; Private Equity; Government or Public Funders; Corporate or Strategic Partners

TYPE OF INVESTORS SOUGHT
Venture Capital; Angel Investors; Private Equity; Government or Public Funders; Corporate or Strategic Partners

AMOUNT OF CAPITAL SOUGHT
$5M - $20M

CURRENT INVESTMENT STAGE
Pre-Seed

Prof.Zhi-Hong Jiang
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COMPANY DESCRIPTION

RETRO-EPIGERNA of Macau University of Science and Technology researches anti-aging products built on a discovery linking a specific tRNA epitranscriptional modification to aging. This year's lead candidate, the KYN Composite Capsule, combines some medicinal & edible Chinese herbs and probiotics to restore this modification — an evolution from the team's earlier work identifying the effect in Chinese herbal medicine compounds.

CORE INNOVATION

The team's mechanism centers on restoring a specific tRNA epitranscriptional modification to improve translational fidelity and proteostasis, mitochondrial function, and immune resilience, which the team frames as a multi-system route to reversing aging processes.

HEALTHSPAN IMPACT

A randomized, double-blind, placebo-controlled pilot (N=12: 6 active, 6 placebo; 1-month duration) in generally healthy older adults aged 50–80 showed improvements in muscle function and immune biomarkers; cognitive scores (MoCA) remained stable in both groups, which the team attributes to the short trial duration in a cognitively intact population. Two pilot deployments with industry partners in Japan and Macau have validated real-world performance, though no commercial deployment has occurred yet.

LEADERSHIP TEAM

Prof. Zhi-Hong Jiang (Vice President of Macau University of Science and Technology, Director of State Key Laboratory of Mechanism and Quality of Chinese Medicine) whose major is natural products chemistry and RNA chemical biology leads the team including a chair professor, associate professor, assistant professor, physician, clinical pharmacist, and public health economist.

PARTNERSHIPS

The team's partnerships include Ruina (Zhuhai Hengqin) Biotechnology (pilot process and formulation development), Jiangsu Province Hospital (clinical trial technical support and regulatory guidance), and SODX Co., Ltd. in Japan (pilot testing, production, and market strategy support).

RPRGAON (PRG S&TECH) - PROGERININ

COMPANY OVERVIEW

TEAM / COMPANY NAME
RPRGAON (PRG S&Tech) — Progerinin

TRACK
Healthspan

ORGANIZATION TYPE
For-Profit Private Company

HQ LOCATION
Busan, South Korea

YEAR FOUNDED
2017

NUMBER OF EMPLOYEES
40

TRL (SELF-REPORTED)
TRL 6 — Phase I–IIa clinical trial in patient populations

FUNDRAISING DETAILS

COMMERCIAL STAGE
Pre-Commercial Pilot

REVENUE RANGE
<$1M

CAPITAL RAISED TO DATE
$1M - $5M

ACTIVELY RAISING CAPITAL FOR ANY PURPOSE?
Yes - Actively Raising Now

TYPE OF CAPITAL SOUGHT
Venture Capital; Government Contracts or Public Funding

TYPE OF INVESTORS SOUGHT
Venture Capital; Government or Public Funders

AMOUNT OF CAPITAL SOUGHT
$5M - $20M

CURRENT INVESTMENT STAGE
Pre-IPO

Baehoon Kim
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prgst.com

COMPANY DESCRIPTION

PRG S&Tech, a South Korea-based biotech company, has focused for years on Hutchinson-Gilford Progeria Syndrome (HGPS), a rare disorder causing accelerated aging roughly 10x normal. The team identified progerin — a mutant form of lamin A — as a key driver of HGPS and developed Progerinin, a small molecule that selectively degrades progerin. Progerinin has since advanced into a Phase 2a trial (NCT06775041) at Boston Children's Hospital, with 10 HGPS patients treated to date, alongside a single-patient compassionate-use program in Werner Syndrome (adult-onset premature aging).

CORE INNOVATION

Progerinin inhibits the progerin–lamin A interaction, driving selective progerin degradation, restoring nuclear membrane/lamina architecture, and reversing markers of cellular senescence and genomic instability. The team frames this as a mechanism relevant beyond HGPS, since progerin accumulation is also implicated in tissues affected by natural aging (arteries, muscle, adipose tissue).

HEALTHSPAN IMPACT

A 4-week study of a topical 1% Progerinin skin serum in healthy individuals showed a statistically significant 23.6% improvement in dermal density, supporting the compound's broader anti-aging potential. The team has completed three Phase 1 studies in healthy volunteers, and is now evaluating Progerinin (in combination with lonafarnib) in a randomized, active-controlled Phase 2a HGPS trial, with plans to extend into oral Progerinin trials in general aging populations.

LEADERSHIP TEAM

The team is led by PRG S&Tech (South Korea/USA), with Boston Children's Hospital serving as clinical collaborator on the Phase 2a HGPS trial.

PARTNERSHIPS

The team's partnership network includes a central lab handling clinical trial data analysis and WuXiSTA as IP manufacturing partner; the clinical trial site and CRO for the Finals-stage program are still being finalized.

TIME TRAVELER - PLANT-EVS

COMPANY OVERVIEW

TEAM / COMPANY NAME
TIME TRAVELER - Plant-EVs

TRACK
Healthspan

ORGANIZATION TYPE
For-Profit Private Company

HQ LOCATION
Bunkyo, Tokyo, Japan

YEAR FOUNDED
2024

NUMBER OF EMPLOYEES
6

TRL (SELF-REPORTED)
TRL 6 — Phase I–IIa clinical trial in patient populations

FUNDRAISING DETAILS

COMMERCIAL STAGE
Growth-Stage (Growing Beyond Initial Customers)

REVENUE RANGE
<$1M

CAPITAL RAISED TO DATE
$1M - $5M

ACTIVELY RAISING CAPITAL FOR ANY PURPOSE?
Yes - Actively Raising Now

TYPE OF CAPITAL SOUGHT
Venture Capital; Angel Investors/Family & Friends; Non-dilutive Grant Funding; Government Contracts or Public Funding; Philanthropic / Prize Capital; Strategic Partnership or Co-Development

TYPE OF INVESTORS SOUGHT
Angel Investors; Corporate or Strategic Partners; Private Equity; Government or Public Funders; Venture Capital

AMOUNT OF CAPITAL SOUGHT
$6M

CURRENT INVESTMENT STAGE
Seed

Dr. Tomoatsu Hayashi
info@ttraveler.jp
ttraveler.jp

COMPANY DESCRIPTION

TIME TRAVELER Corp. (TT) is a biotechnology company dedicated to integrating prevention and treatment to advance longevity and extend healthy human lifespan. Founded to translate the research of Professor Tetsu Akiyama at the University of Tokyo into real-world applications, TT operates two core businesses: healthcare products utilizing plant-derived extracellular vesicles and a high-potential drug discovery program targeting multiple aging-related proteins. Within this expanding therapeutic pipeline, TT is advancing antibody therapeutics targeting Factor-K, a protein identified by the Akiyama Laboratory as a novel pro-aging factor.

For the XPRIZE competition, where TT has advanced as a Top 10 Finalist, the company is represented by its P-EV program, which is designed to help mitigate age-related declines in physical function, support health maintenance, and help mitigate frailty. In May 2025, TT launched its P-EV brand, “exofull FUJI” through its e-commerce platform and has since expanded its retail presence to Isetan Shinjuku.

On the research front, both the P-EV and drug discovery programs are conducted in collaboration with the Nureki Laboratory at the University of Tokyo, one of the world's leading structural biology laboratories. Grounded in robust scientific evidence and its proprietary manufacturing technology, TT continuously advances complementary healthcare and drug discovery programs to address longevity through both prevention and treatment.

TT initially advanced to the XPRIZE Healthspan Top 40 Semifinalists with its therapeutic antibody program. During the semifinal stage, the company generated human clinical evidence for its P-EV platform, leading to TT's selection as a Top 10 Finalist.

CORE INNOVATION

The team conducted an extensive screening of extracellular vesicles (EVs) extracted from more than 140 edible plant species, representing approximately 95% of the vegetables available in Japan, to evaluate their anti-inflammatory and anti-senescence properties. This extensive screening successfully established a robust, proprietary library of multiple promising plant-derived EV candidates, with parsley-derived EVs (P-EVs) selected as the initial lead product.

To commercialize this discovery, the team developed a proprietary non-thermal, low-stress extraction process named “FROZEN–TT01”. This technology is designed to preserve the purity and biological activity of P-EVs while maintaining stability at room temperature, enabling their use as a practical dietary supplement for daily health maintenance.

HEALTHSPAN IMPACT

A randomized, double-blind, placebo-controlled exploratory clinical study (UMIN000059942) enrolled 40 adults aged 55-69 who were sedentary, at risk of physical decline, or considered pre-frail. With a 97.5% completion rate (39 participants), the trial demonstrated that P-EVs hold significant potential to mitigate age-related declines in muscle strength and support overall physical performance. Complementing these clinical insights, a product-use monitoring program with 60 volunteers yielded positive outcomes in overall health and physical functionality. These combined results further validate the potential of P-EVs to help sustain physical function and contribute to healthy longevity.

LEADERSHIP TEAM

Prof. Tetsu Akiyama, Chairman of TIME TRAVELER Corp. and Professor at the University of Tokyo, provides overall scientific leadership. Dr. Tomoatsu Hayashi, Co-CEO of TIME TRAVELER Corp., serves as the team lead and oversees data analysis. Rieko Akiyama, Co-CEO of TIME TRAVELER Corp., oversees corporate management, business development, product development, and fundraising.

PARTNERSHIPS

The team has secured retail placement for “exofull FUJI” at Isetan, one of Japan’s leading department stores. TT is also in discussions with major corporations and strategic partners regarding the supply of P-EV ingredients and the co-development of new products. Through these collaborations, the company aims to make P-EVs accessible to a broader range of consumers and expand its presence in both domestic and international markets.

UC San Diego

SAM AND ROSE STEIN INSTITUTE FOR RESEARCH ON AGING

Advancing Healthy Aging
Science ● Innovation ● Translation

About Us

Founded in 1983, the Stein Institute for Research on Aging at UC San Diego is one of the nation's leading institutes dedicated to advancing lifelong health and well-being through research, training, and community outreach. The Institute improves the health, independence, and quality of life of older adults by translating discoveries into solutions that help people live healthier, more independent lives as they age.

The Stein Institute brings together academic researchers, clinicians, entrepreneurs, industry partners, and community organizations. By integrating science, clinical expertise, community engagement, and innovation, the Institute is advancing the next generation of diagnostics, biomarkers, therapeutics, and technologies for healthy aging.

Research Excellence

The Stein Institute supports a diverse portfolio of basic, translational, clinical, and population research focused on the biology of aging and the drivers of healthy longevity. Our research is strengthened by the Stein Living Lab, where innovations are evaluated in a real-world senior living setting, and the SAGE Study, a prospective study of healthy aging with more than 2,500 participants.

Key Areas of Expertise

- Geroscience and the drivers of healthy longevity
- Clinical trials and geriatric assessments (physical, cognitive, sensory, and mental health)
- Mitochondrial physiology and metabolism
- Immunology and inflammation
- Epigenetics
- Proteomics and metabolomics
- Exposomics
- Artificial intelligence and digital health technologies

XPRIZE Healthspan Central Lab and Biorepository

As the Central Laboratory for the XPRIZE Healthspan competition, the Stein Institute provides the infrastructure and expertise to ensure rigorous evaluation of interventions designed to extend healthspan.

Central Laboratory Capabilities

- Biospecimen collection, processing, tracking, and management
- Standardized protocols and quality management procedures
- Specialized geroscience biomarker assays performed in-house and by partner laboratories
- Advanced multi-omic analyses
- Secure data coordination and management

Anthony Molina, PhD

Michael Corley, PhD

Scientific Leadership

The Stein Institute's scientific program is led by **Anthony Molina, PhD,** an internationally recognized leader in healthy aging and mitochondrial bioenergetics research. His work identifies key biological and psycho-social drivers of healthy aging and translates those discoveries into innovative therapies, gerotechnology products, and evidence-based lifestyle interventions that extend healthspan, promote resilience, and improve quality of life for older adults.

Michael Corley, PhD, is a member of the Stein Institute's scientific leadership team and brings expertise in immunology, epigenomics, and biomarker discovery. His global research program has specialized expertise in clinical-trial-grade geroscience assessments, high-throughput automation/robotics, and global biospecimen logistics across challenging environments.

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(858)534-2230 steininstitute@ucsd.edu

XPRIZE TESTING PARTNER · HEALTHSPAN COMPETITION

Systemic chronic inflammation finally has a validated measure. One you can run.

Systemic chronic inflammation accumulates over decades and drives the muscular, cognitive and immune decline this competition exists to reverse. It has had no standard biomarker. Single markers such as hs-CRP, IL-6 and TNF are heavily confounded by illness and acute responses to infections or trauma, and a 2026 *Nature Medicine* consensus judged them inadequate to capture immune fitness.

iAge® integrates multiple circulating inflammatory proteins into a single score that is associated with multimorbidity, frailty, immunosenescence and all-cause mortality. It was derived from the **Stanford 1,000 Immunomes Project** by David Furman and Mark M. Davis, published in *Nature Aging*. It is a prespecified immune aging biomarker for the XPRIZE Healthspan Finals, selected against five criteria set out in that same consensus.

iAge is CLIA-certified and commercially available today. We support venous draw and five-minute at-home capillary collection, so it fits centralized and decentralized trial designs alike. And it responds: in a placebo-controlled randomized trial, iAge fell measurably within two weeks in participants with elevated baseline scores.

Edifice Health serves the XPRIZE Healthspan Finals as a testing partner through 2030, and works with research groups, clinicians and trial sponsors beyond the competition.

PEER-REVIEWED

Sayed N, et al.
Nature Aging 1, 598–615 (2021)

Cipriano A, et al.
Nature Medicine (2026)

Dioum EHM, et al.
Nutrients 14, 4471 (2022)

THE ASSAY

Certification	CLIA
Collection	Venous or capillary
Committed TAT	30 days
Reference cohort	1,001 adults, 8–96 yr

MEET US

XPRIZE Healthspan Team Summit
Salt Lake City, 12 August 2026

EDIFICE HEALTH

XPRIZE participating team or research partner?
Talk to us about inflammation endpoints for your study.
edificehealth.com/xprize
partnerships@edificehealth.com

MEASURING IMMUNE HEALTH

IMM-AGE™

A systems-based metric that quantitatively measures immune aging.

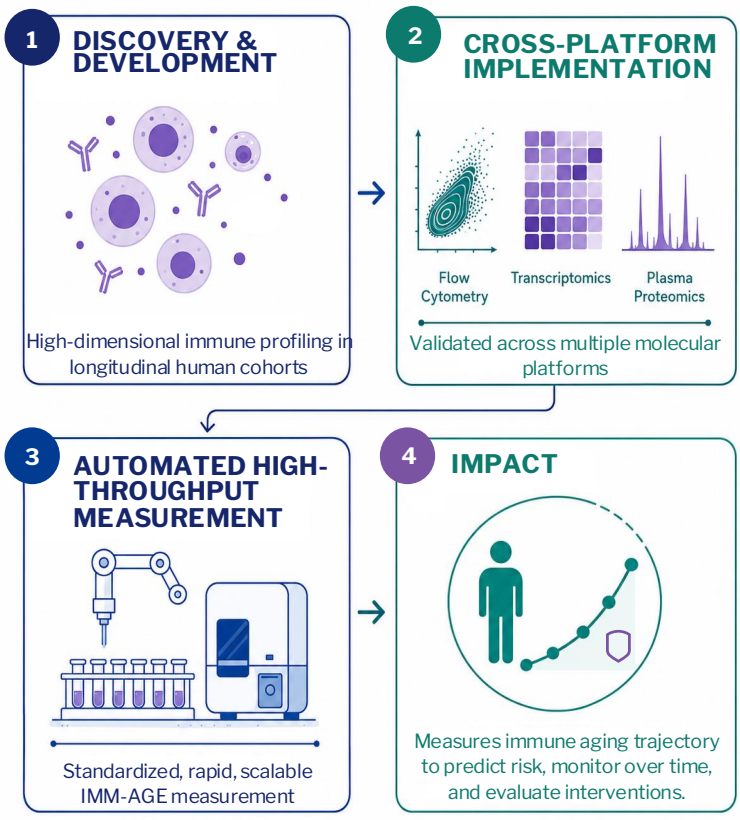
The immune system is a major determinant of healthy aging, influencing susceptibility to cardiovascular disease, cancer, infection, and the response to vaccines and therapies. Yet until recently, there was no practical way to quantify an individual's immune health.

The immune system is a major determinant of healthy aging, influencing susceptibility to cardiovascular disease, cancer, infection, and the response to vaccines and therapies. Yet until recently, there was no practical way to quantify an individual's immune health.

Developed by the Shen-Orr Laboratory at the Technion-Israel Institute of Technology, leveraging nearly two decades of a **longitudinal tracking** individual's immune system, **IMM-AGE** is the first systems-based metric that quantitatively measures immune aging (Alpert et al. Nature Med. 2019). IMM-AGE tracks a structured immunological process that forms a trajectory of immune cell subsets changes that occur with "exposure to life" in all individuals. **IMM-AGE** captures an individual's immune system state as it is projected on the IMM-AGE trajectory, reflecting a dynamic measure of immune health that adds value on top of standard clinical lab tests and predicts disease risk and clinical outcomes.

A key innovation of **IMM-AGE** is its **cross-platform implementation**. Originally developed using high-dimensional cellular immune profiling (CyTOF), IMM-AGE has since been translated and validated across multiple molecular technologies offering with proxy measures to estimate IMM-AGE now available for flow cytometry (most accurate and scalable),transcriptomics, and plasma proteomics, enabling broad adoption in both research and clinical settings. To further accelerate its use, we developed an **automated high-throughput flow cytometry assay** that enables rapid, standardized, and scalable measurement of IMM-AGE in large clinical cohorts, population studies, and future clinical trials.

Our vision is to make immune health a measurable clinical parameter, one that can be monitored over time, used to evaluate interventions, and ultimately guide precision strategies to promote healthy aging.



IMM-AGE enables immune health to become a measurable clinical metric—advancing precision prevention and healthy aging.

SYSTEMS IMMUNOLOGY & PRECISION MEDICINE LAB
Prof. Shai Shen-Orr

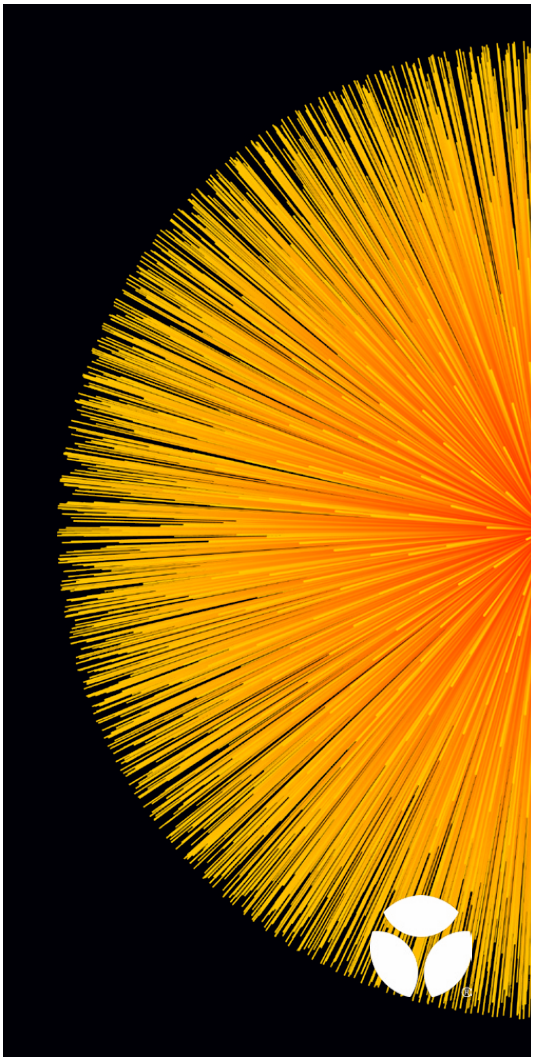
TECHNION
Israel Institute of Technology

Olink™ Explore HT

Unprecedented power for proteomics

Olink Explore HT is the next-generation solution for high-throughput protein biomarker discovery at any scale, from tens to millions of samples.

Proteins	Specificity	Readout	Sample
~5,400	99.5%	NGS	2 µL
With proven specificity	Negligible cross-reactivity	Automated workflow & software	Plasma, serum or other materials



NOTES

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XPRIZE HEALTHSPAN | HEVOLUTION | SOLVE FSHD

CONTACT THE XPRIZE HEALTHSPAN TEAM AT HEALTHSPAN@XPRIZE.ORG

Join the movement

xprize.org/healthspan

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XPRIZE
HEALTHSPAN
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