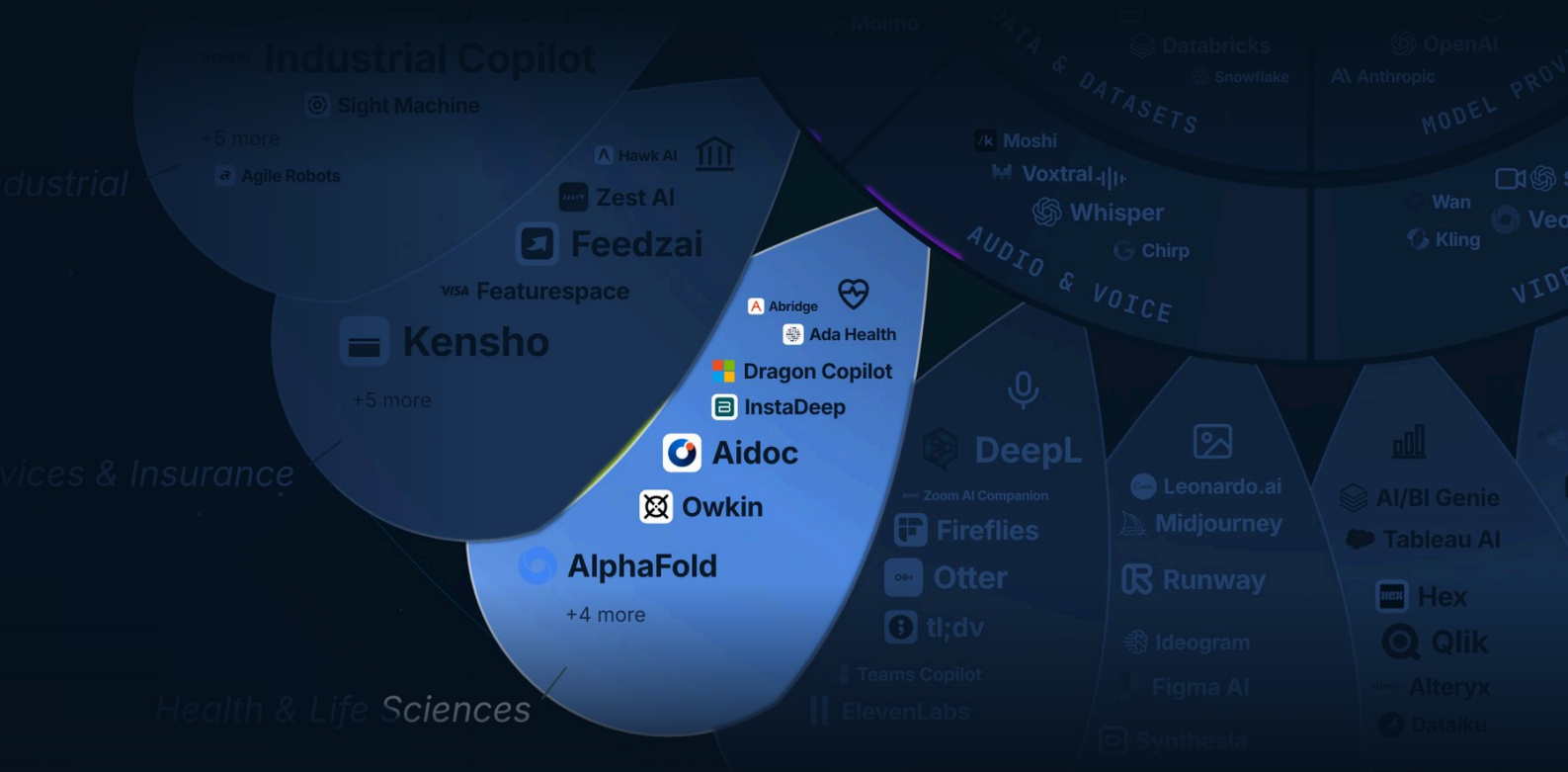
ETHORITY®
AI BUSINESS OPERATING SYSTEM

THEME STUDY

GOOD AI PRISM · THEME STUDY 2026/27 · PHARMA, BIOTECH & LONGEVITY

AI-generated drugs reach Phase 3.

Put AI to work in drug discovery, cancer care and ageing science: the first late-stage trials, the evidence and the money.



Phase 3

trials of generative-AI drugs have started

GENERATE, DEC 2025; INSILICO, SEP 2026

–44%

screen-reading workload with AI-supported breast screening, interval cancers non-inferior

MASAI TRIAL, THE LANCET, 2026

$135.7bn

out-licensing deals signed by Chinese drugmakers in 2025, up from $51.9bn

PHARMCUBE, JAN 2026

GLOBAL EDITION · EN · v1.3 · OCT 2026

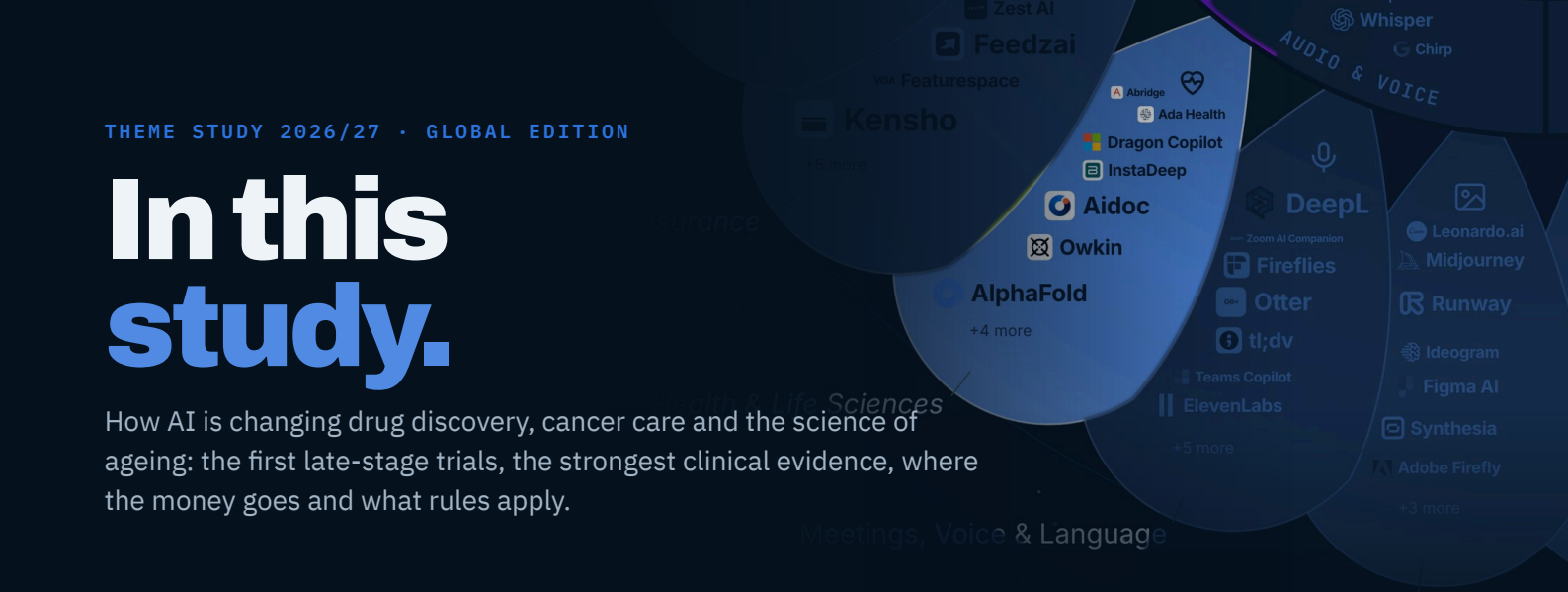
Created by Sten Franke with a people and governance lens by Severin L. Wilson

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THEME STUDY 2026/27 · GLOBAL EDITION

In this study.

How AI is changing drug discovery, cancer care and the science of ageing: the first late-stage trials, the strongest clinical evidence, where the money goes and what rules apply.



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ABOUT THIS STUDY

Every figure names its source and date. Company facts come from company filings and releases; consultancy and market figures are labelled as estimates. "AI-discovered" has no standard definition, so each drug is described by its method. Not medical, legal or investment advice.

AT A GLANCE

AI has reached the late-stage clinic; the proof is still coming.

Ten years after the first AI drug-discovery companies were founded, AI-designed medicines are in Phase 3, AI-supported cancer screening has randomised-trial evidence, and longevity research has dosed its first reprogramming therapy in a human. No AI-discovered drug is approved yet.

This study brings together regulator documents, peer-reviewed trials, company filings and analyst data on three fields that are converging: AI in drug discovery and development, AI and biotech in cancer, and the science and money of longevity. It maps 45 organisations, draws six conclusions and shows how organisations can turn the evidence into decisions.

READ ON

The Health & Life Sciences sector brief, the Science & Research area and the Good AI Prism Market Study.

$2.67bn

average R&D cost per new medicine at the top 20 pharma companies in 2025

DELOITTE, 2026

117

AI-enabled drug candidates had entered clinical trials by Dec 2025, from 63 companies

JCO, 2026

80–90%

Phase 1 success rate of AI-discovered molecules, above historic averages

DRUG DISCOVERY TODAY, 2024

20m

new cancer cases worldwide in 2022, rising to more than 35m by 2050

IARC

10

joint FDA–EMA principles for good AI practice in drug development

JAN 2026

$5.7bn

invested in longevity biotech in 2025, after $8.5bn in 2024

LONGEVITY.TECHNOLOGY ESTIMATES

01

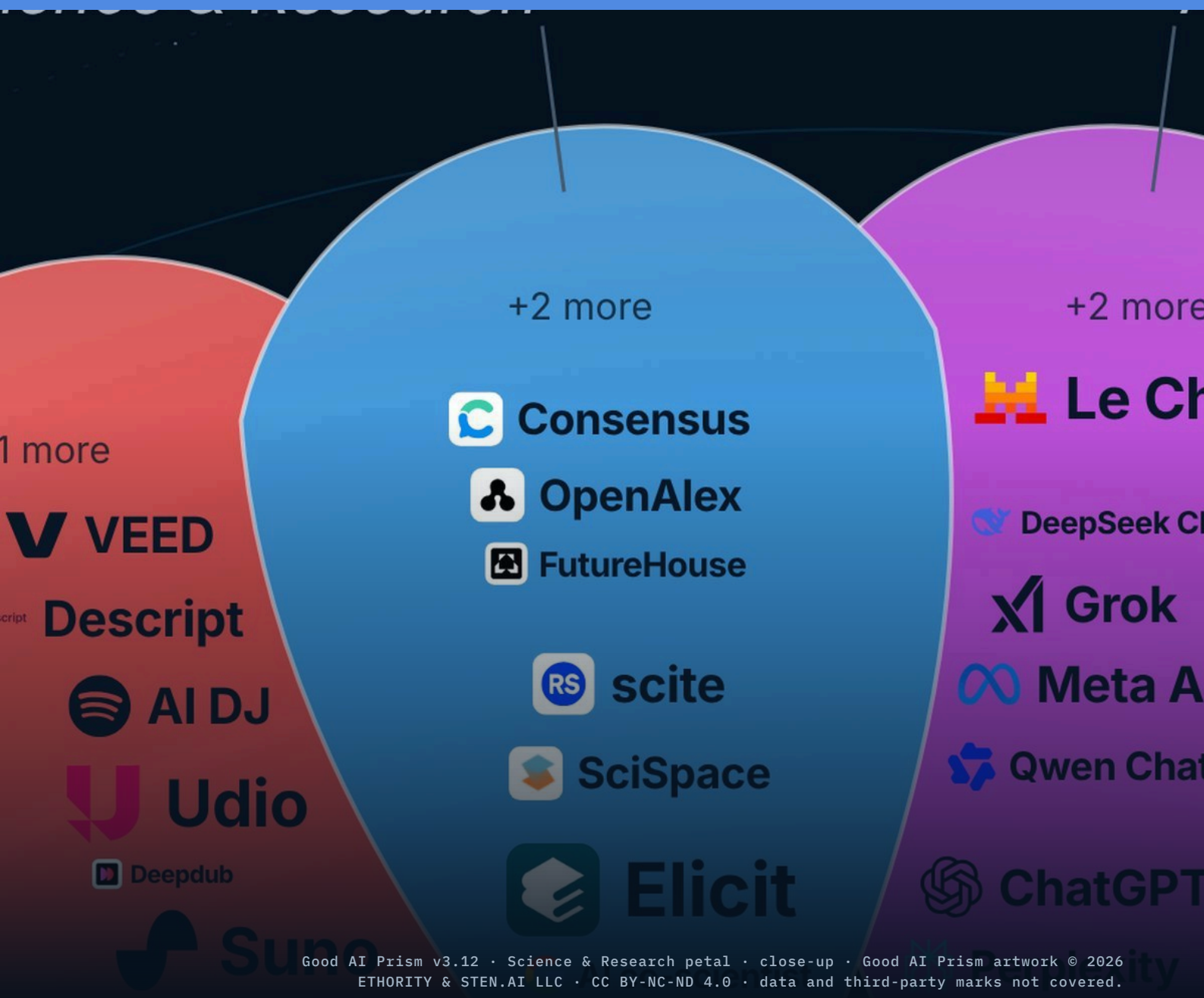
AI drugs reach the late-stage clinic; the proof is still coming.

AI-designed drugs pass early safety trials more often than average, but in Phase 2 they fail at similar rates to other drugs. The decisive tests have now begun: two Phase 3 programmes of generative-AI drugs and one filing for a computationally designed drug. Each success moves the economics of the whole industry.

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DRUG DEVELOPMENT IS STILL SLOW, · 6
FROM FIRST TRIALS · 7
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Health & Life Sciences



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117

AI-enabled drug candidates had entered clinical trials by Dec 2025, from 63 companies

JCO 44(16 SUPPL):11072, ASCO 2026

THE R&D EQUATION

Drug development is still slow, costly and mostly unsuccessful.

$2.67bn

average cost per new medicine at the top 20 pharma companies in 2025, up from $2.23bn

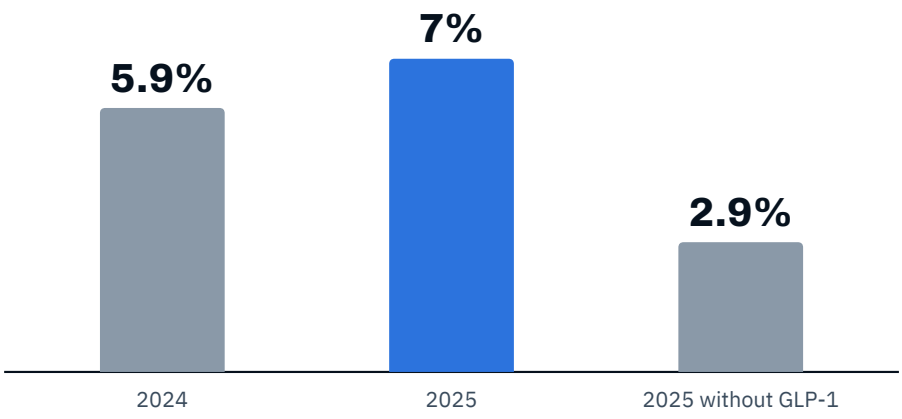
DELOITTE, 2026

A new medicine takes about ten years and billions of dollars, and around 90% of drugs that pass animal studies fail in humans. Deloitte puts the average cost per new medicine at the 20 largest pharma companies at $2.67 billion in 2025. Returns improved to 7.0%, but almost entirely because of GLP-1 obesity drugs: without them the return is 2.9%. Deloitte notes that AI's promise to cut time and cost has not yet been realised at scale.

EXHIBIT 1.1

R&D returns rose to 7.0%, but only 2.9% without GLP-1.

Internal rate of return of the late-stage pipeline, top 20 pharma companies



Source · Deloitte, Measuring the return from pharmaceutical innovation, 16th edition, 2026 (consultancy analysis)

That is the opportunity. AI can help at every step: choosing targets, designing molecules, predicting toxicity, selecting patients and running smaller, faster trials. Each success moves the economics of the whole industry.

~10 years

typical time to develop a new medicine

INDUSTRY ESTIMATE

~90%

of drugs that pass animal studies fail in human trials

FDA, 2026

$598m

average forecast peak sales per late-stage asset in 2025, up from $510m

DELOITTE

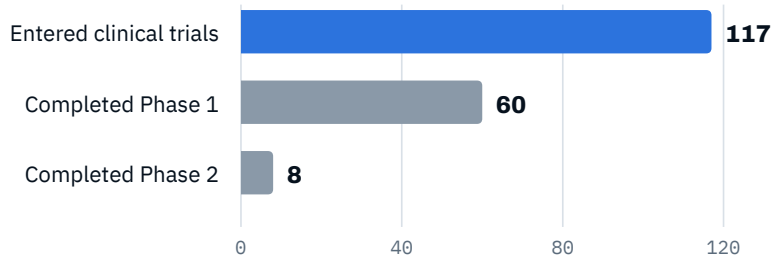
AI DRUGS IN THE CLINIC

From first trials to first filings.

EXHIBIT 1.2

117 AI-enabled candidates entered trials; 8 completed Phase 2.

Candidates from 63 companies; data to 1 Dec 2025



Source · ASCO 2026 abstract, JCO 44(16 suppl):11072 (peer-reviewed abstract); Jayatunga et al., Drug Discovery Today 2024

80–90%

Phase 1 success rate of AI-discovered molecules, above historic averages

DRUG DISCOVERY TODAY, 2024

PROGRAMME	WHAT HAPPENED	STAGE
Rentosertib (TNIK), Insilico	Generative AI chose both target and molecule. Phase 2a in lung fibrosis: lung function +98 mL vs −20 mL on placebo (Nature Medicine, Jun 2025). Phase 3 GENESIS-IPF-3, about 320 patients, first patient dosed Sep 2026.	Phase 3
GB-0895 (anti-TSLP), Generate:Biomedicines	AI-designed antibody for severe asthma, dosed twice a year. Two Phase 3 trials with about 1,600 patients started Dec 2025.	Phase 3
Zasocitinib (TYK2), Takeda / Nimbus	Designed with a computational, physics-based engine. US approval filing accepted under Priority Review; decision due Q1 2027.	Filed
REC-4881 (MEK1/2), Recursion	Rare inherited colon disease: polyp burden −43% in early data (n=6); updated data Nov 2026. Recursion stopped three other clinical programmes in May 2025.	Phase 2
ISM3412 (MAT2A), Insilico	AI-designed cancer drug for MTAP-deleted solid tumours; first patients dosed in Phase 1.	Phase 1
Isomorphic Labs	AlphaFold-based design; raised $2.1bn in May 2026; first trials targeted for end of 2026.	Preclinical

Company releases and filings, Nature Medicine 2025; status 22 Oct 2026

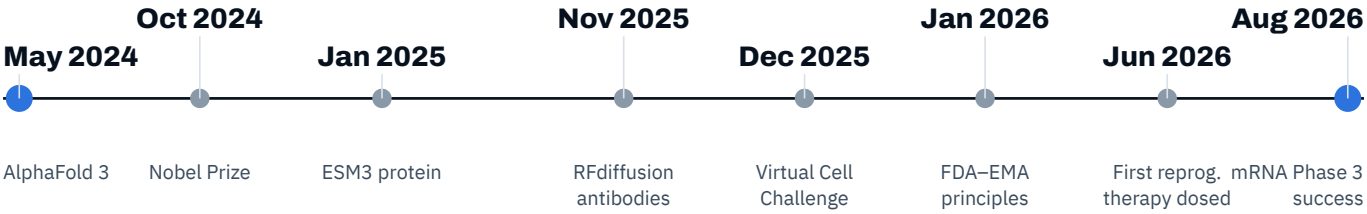
BREAKTHROUGH SCIENCE

Biology is becoming programmable.

EXHIBIT 1.3

Biology became programmable in 28 months.

Milestones from structure prediction to the first late-stage results, May 2024 to Aug 2026



Source · Nature 2024, AlphaFold 3; nobelprize.org; Science 2025; Nature 2025, RFantibody; Arc Institute; company releases

WHAT IT MEANS

Design cycles that took years can shrink to months, and targets once called undruggable come into reach. The bottleneck moves from ideas to data, wet-lab validation and clinical proof.

May 2024	AlphaFold 3 predicts the structure of complexes of proteins, DNA, RNA and drug-like molecules (Nature).
Oct 2024	Nobel Prize in Chemistry to David Baker for computational protein design and to Demis Hassabis and John Jumper for protein structure prediction.
Jan 2025	ESM3 language model generates a working fluorescent protein far from any known in nature (Science).
Nov 2025	Atomically accurate de novo design of antibodies with RFdiffusion (Nature, Baker lab).
Dec 2025	Arc Institute Virtual Cell Challenge: more than 1,200 teams from 114 countries model how cells respond to perturbations.
Jan 2026	FDA and EMA publish ten joint principles for good AI practice in drug development.
Jun 2026	First patient dosed with a partial epigenetic reprogramming therapy (Life Biosciences ER-100, eye disease).
Aug 2026	First Phase 3 success for a personalised mRNA cancer therapy (intismeran autogene, melanoma).

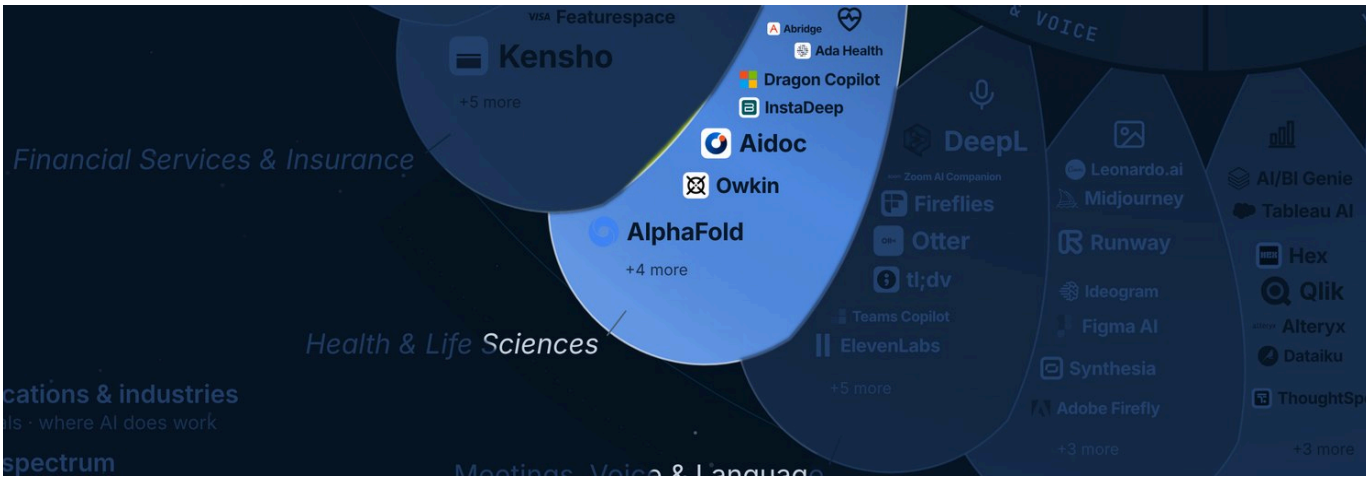
BREAKTHROUGH SCIENCE

The bottleneck moves from ideas to proof.

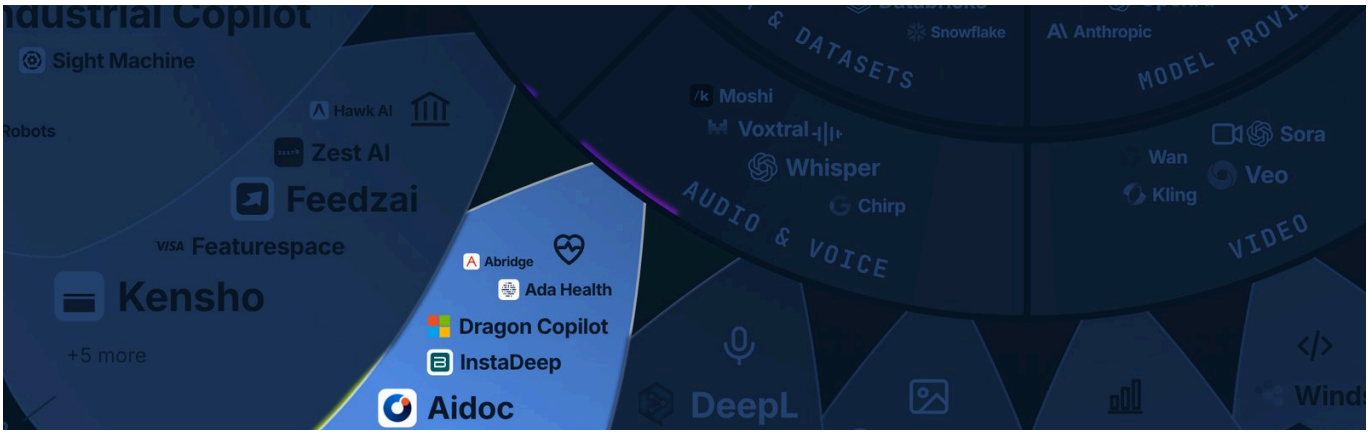
Three waves are converging. Structure prediction showed that AI can read the language of proteins. Generative models now write new proteins, antibodies and molecules. Foundation models of cells aim to predict how a cell responds to a drug before the experiment is run. Together they move biology from discovery by trial and error towards design.

Design cycles that took years can shrink to months.

ETHORITY ANALYSIS OF THE MILESTONES ABOVE



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02

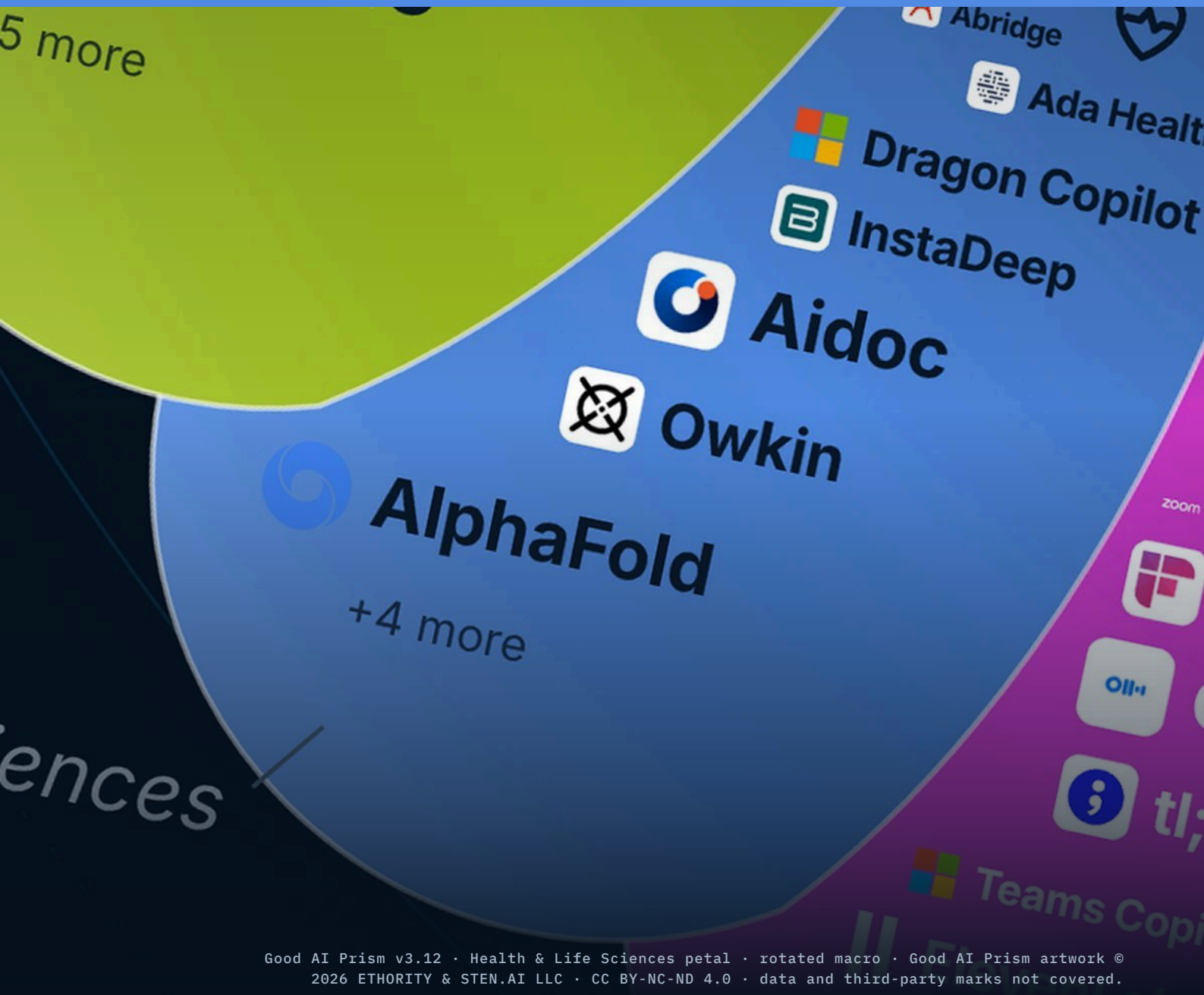
AI screening finds more cancers earlier.

Cancer is the clearest proving ground for clinical AI. In breast screening the evidence has moved from accuracy studies to randomised outcomes. Personalised and bispecific therapies lead the new wave of treatment, and AI picks the targets.

Health & Life Sciences

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−44%

screen-reading workload with AI-supported breast screening, interval cancers non-inferior

MASAI TRIAL, THE LANCET, 2026

CANCER: DETECTION

AI screening finds more cancers earlier.

Cancer is the clearest proving ground for clinical AI. In breast screening the evidence has moved from accuracy studies to randomised outcomes: in the Swedish MASAI trial, AI-supported screening was non-inferior on interval cancers (rate ratio 0.88; 95% CI 0.65–1.18) while radiologists read 44% fewer images. The 12% lower point estimate is not a demonstrated reduction. The German PRAIM study confirmed the gain at national scale. A Polish study is a warning: doctors who got used to AI found fewer polyps when working without it.

STUDY	DESIGN	RESULT	EVIDENCE
MASAI, Sweden	Randomised trial, 106,000 women	Interval cancers non-inferior: rate ratio 0.88 (95% CI 0.65–1.18; p=0.41); detection +29%; screen-reading workload −44%	The Lancet, 2026 (doi 10.1016/S0140-6736(25)02464-X); Lancet Digital Health, Feb 2025
PRAIM, Germany	Real-world study, 463,094 women, 12 sites	Detection +17.6% with no rise in recalls	Nature Medicine, Jan 2025
Capital Region, Denmark	Before and after, about 119,000 women	Detection 0.70% to 0.82%; false positives 2.39% to 1.63%; screening reads −33.5%	Radiology 311(3), Jun 2024 (doi 10.1148/radiol.232479)
Colonoscopy, Poland	Observational, 4 centres	Adenoma detection without AI fell from 28.4% to 22.4% after doctors had used AI	Lancet Gastroenterology & Hepatology, 2025

20m

new cancer cases and 9.7m deaths worldwide in 2022

IARC GLOBOCAN

2.7m

new cancer cases in the EU in 2024

ECIS ESTIMATE

70%

five-year relative survival in the US, diagnosed 2015–21

ACS, 2026

CANCER: TREATMENT

Personalised and bispecific therapies lead the new wave.

Personalised mRNA cancer therapy	Moderna and Merck's intismeran autogene with pembrolizumab met its Phase 3 endpoints for recurrence-free and distant-metastasis-free survival in resected melanoma (1,137 patients; sponsor topline announcement, Aug 2026; overall survival still under evaluation; full peer-reviewed data pending). BioNTech's autogene cevumeran continues in pancreatic cancer; its colorectal trial was stopped for futility (Aug 2026).
Bispecific antibodies from China	Akeso's ivonescimab (PD-1×VEGF) improved overall survival against pembrolizumab in PD-L1-positive lung cancer: hazard ratio 0.73, median 30.8 vs 22.6 months (HARMONi-2, China, Sep 2026). US decision for a different indication due 14 Nov 2026.
Multi-cancer blood tests	NHS-Galleri (142,250 people) missed its primary endpoint for stage III–IV cancers but showed 14% fewer stage IV cancers. An FDA advisory panel voted 7–2 for benefit over risk (Sep 2026); the decision is pending.
AI-designed cancer drugs	Insilico's ISM3412 is in Phase 1; Isomorphic Labs targets its first trials for end of 2026, with oncology among its programmes.
Cell therapy in solid tumours	The first approvals came in 2024: lifileucel for melanoma and afami-cel for synovial sarcoma.

WHERE AI FITS

Personalised cancer vaccines depend on algorithms that pick each patient's neoantigens from tumour sequencing. AI also guides target choice, antibody design and patient selection. The next step is linking early detection, molecular profiling and personalised treatment in one pathway.

03

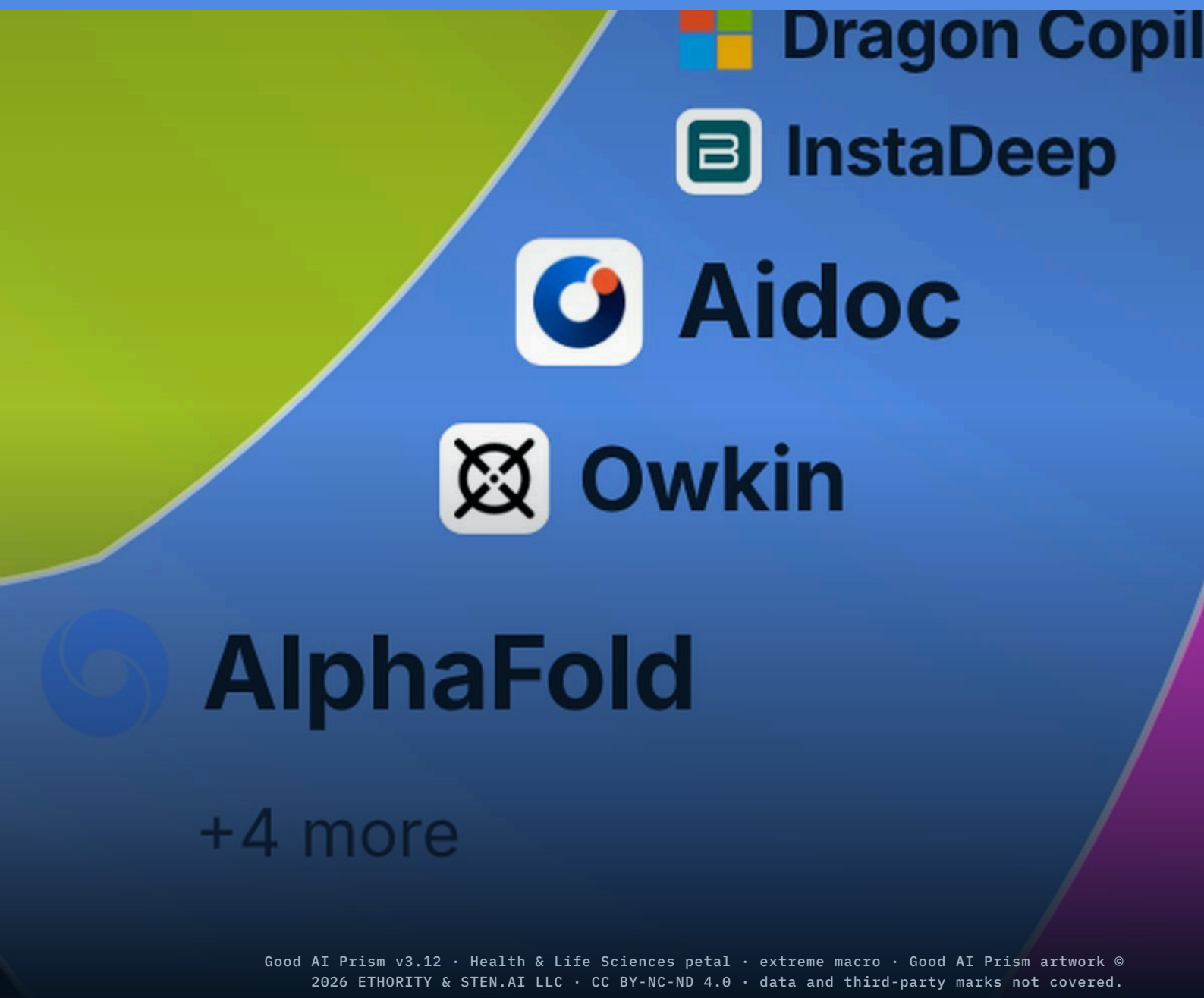
Longevity moves to the clinic; capital follows proof.

Investment peaked in 2024 and normalised in 2025, while the first therapies reached human trials. Investors now reward AI companies with clinical assets. China has become a major source of licensed innovation.

Health & Life Sciences

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$5.7bn

invested in longevity biotech in 2025, after $8.5bn in 2024 (estimates)

LONGEVITY.TECHNOLOGY, MAR 2026

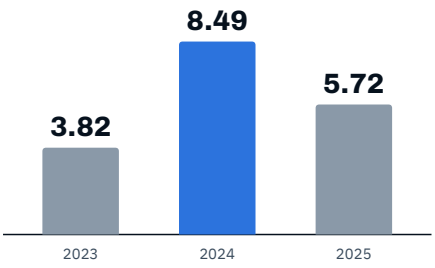
LONGEVITY

Longevity moves from hype to the clinic.

EXHIBIT 3.1

Longevity investment peaked at $8.5bn in 2024.

Estimates; definitions differ between trackers; US$ billion



Source · Longevity.Technology annual investment report, May 2025; analysis of PitchBook data, Mar 2026 (estimates)

Longevity science asks whether the biology of ageing can be measured and slowed, so that people stay healthy for longer. Investment peaked in 2024 and normalised in 2025, while the first therapies reached human trials. AI is central: ageing clocks, cell models and target discovery all depend on it.

Partial reprogramming	Life Biosciences dosed the first patient with ER-100, an OSK reprogramming therapy for optic nerve disease (Jun 2026). NewLimit raised $130m (May 2025); Altos Labs launched with $3bn.
Ageing clocks	Plasma proteins from 44,498 UK Biobank participants estimate the biological age of 11 organs; an aged brain carried three times the Alzheimer's risk (Nature Medicine, Jul 2025). Clocks are research tools, not yet accepted trial endpoints.
Drugs for healthy ageing	Oral semaglutide did not slow early Alzheimer's disease (evoke, Nov 2025). BioAge's NLRP3 inhibitor cut inflammation markers by 80–86% in Phase 1. Loyal's lifespan drug for dogs passed two FDA steps towards conditional approval.
Prizes and policy	XPRIZE Healthspan named 20 finalists in Aug 2026 for its $101m prize. The FDA does not recognise ageing as an indication; a 2026 FDA-linked meeting discussed endpoints for ageing trajectories.

MONEY AND DEALS

Capital concentrates on platforms that reach the clinic.

Investors now reward AI companies with clinical assets: three AI drug developers listed between December 2025 and October 2026. Big pharma builds its own AI infrastructure and buys external platforms. China has become a major source of licensed innovation: its share of global out-licensing value rose from 8% in 2021 to 32% in the first quarter of 2025, often at lower prices than Western peers.

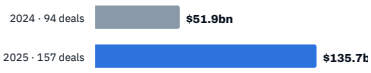
COMPANY OR DEAL	TYPE	VALUE	DATE
Isomorphic Labs	Funding round	$2.1bn	May 2026
AstraZeneca – CSPC	AI co-discovery deal	up to $5.3bn	Jun 2025
XtalPi – DoveTree	AI discovery deal	up to $5.99bn	Aug 2025
NVIDIA – Eli Lilly	AI co-innovation lab	up to $1bn over 5 years	Jan 2026
Chai Discovery	Series C	$400m at $3.8bn valuation	Jul 2026
Generate:Biomedicines	Nasdaq IPO	$400m	Feb 2026
Insilico Medicine	Hong Kong IPO	HK$2.28bn	Dec 2025
Iambic Therapeutics	Nasdaq IPO	$150m	Oct 2026

Company releases and filings; Reuters; trade press

EXHIBIT 3.2

Chinese out-licensing rose to $135.7bn in 2025.

Value of out-licensing deals by Chinese drugmakers, US$ billion, and number of deals



Source · PharmCube NextPharma via Caixin, Jan 2026; Jefferies via Fierce Biotech

04

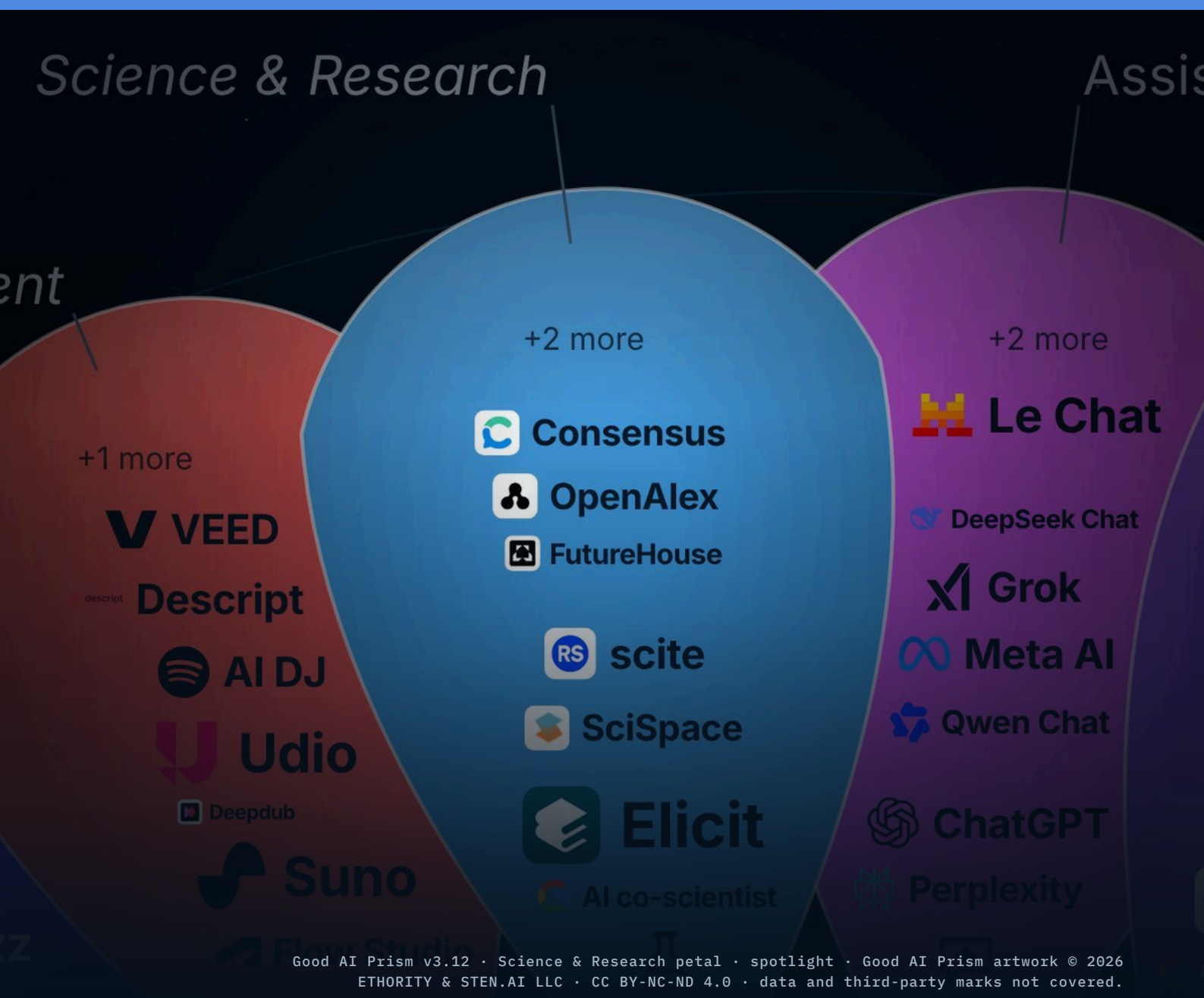
45 organisations, six innovation models.

The map spans AI-native drug developers, design platforms, pharma companies building AI capacity, cancer detection and therapy leaders, and the longevity field. Six regions follow different models: capital, speed, data, rules, mRNA and screening, and funding for healthspan.

Health & Life Sciences

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45

organisations shaping AI in drugs, cancer and longevity, mapped for this study

RESEARCH PACK, 22 OCT 2026

SIX INNOVATION MODELS

Where the next medicines will come from.

United States · Capital and the FDA

Most AI drug developers and longevity companies, deep venture and public markets, NVIDIA–Lilly compute, FDA's internal AI and plan to reduce animal testing.

China · Speed and licensing

Fast trial approval, large patient populations, 157 out-licensing deals in 2025; Insilico runs its Phase 3 at 47 Chinese sites; XtalPi and BioMap on AI platforms.

United Kingdom · Data and design

Isomorphic Labs and Google DeepMind in London; NHS screening programmes with AI; up to £600m for an AI-ready Health Data Research Service.

European Union · Rules and research

Life Sciences Strategy (Jul 2025) to be the most attractive place for life sciences by 2030; Biotech Act proposal (Dec 2025) cuts multinational trial approval from 106 to 75 days.

Germany · mRNA and screening

BioNTech with InstaDeep in Mainz; PRAIM proved AI breast screening at national scale; new pharma and medtech strategy due in the second half of 2026.

Gulf · Funding healthspan

Hevolution Foundation in Riyadh, up to $1bn a year, lead funder of XPRIZE Healthspan.

The map spans AI-native drug developers, design platforms, pharma companies building AI capacity, cancer detection and therapy leaders, and the longevity field. It is an extension research set for this study: it is not admitted to the Wave 1 market snapshot (998 entries) and overlaps with the Health & Life Sciences map, so the counts are not additive.

THE LANDSCAPE

45 organisations shaping AI in drugs, cancer and longevity.

EXHIBIT 4.1

Generative chemistry and small molecules lead the map: 8 of 45.

Organisations per segment; country of headquarters; alphabetical, not a ranking. Logos as shown in the Good AI Prism v3.12 artwork.

8 — **Generative chemistry and small molecules**

Iambic Therapeutics (US) · Insilico Medicine (HK) · Isomorphic Labs (UK) · Nimbus Therapeutics (US) · Recursion (US) · Relay Therapeutics (US) · Schrödinger (US) · XtalPi (CN)

7 — **Protein and antibody design**

BioMap (CN) · Chai Discovery (US) · EvolutionaryScale (US) · Generate:Biomedicines (US) · Google DeepMind (AlphaFold) (UK) · Institute for Protein Design (US) · Xaira Therapeutics (US)

3 — **Platforms, compute and cell models**

Arc Institute (US) · InstaDeep (UK) · NVIDIA (BioNeMo) (US)

6 — **Pharma building AI**

AstraZeneca (UK) · CSPC (CN) · Eli Lilly (US) · Novartis (CH) · Sanofi (FR) · Takeda (JP)

2 — **AI in clinical trials**

Formation Bio (US) · Unlearn (US)

7 — **Cancer detection and diagnostics**

Exact Sciences (US) · GRAIL (US) · Optellum (UK) · PathAI (US) · ScreenPoint Medical (NL) · Tempus AI (Paige) (US) · Vara (DE)

5 — **Cancer therapeutics**

Akeso (CN) · BioNTech (DE) · Merck & Co. (US) · Moderna (US) · Summit Therapeutics (US)

7 — **Longevity**

Altos Labs (US) · BioAge Labs (US) · Hevolution Foundation (SA) · Life Biosciences (US) · Loyal (US) · NewLimit (US) · Retro Biosciences (US)

Source · Research pack, 22 Oct 2026 · company and public sources · alphabetical within segment, not a ranking

05

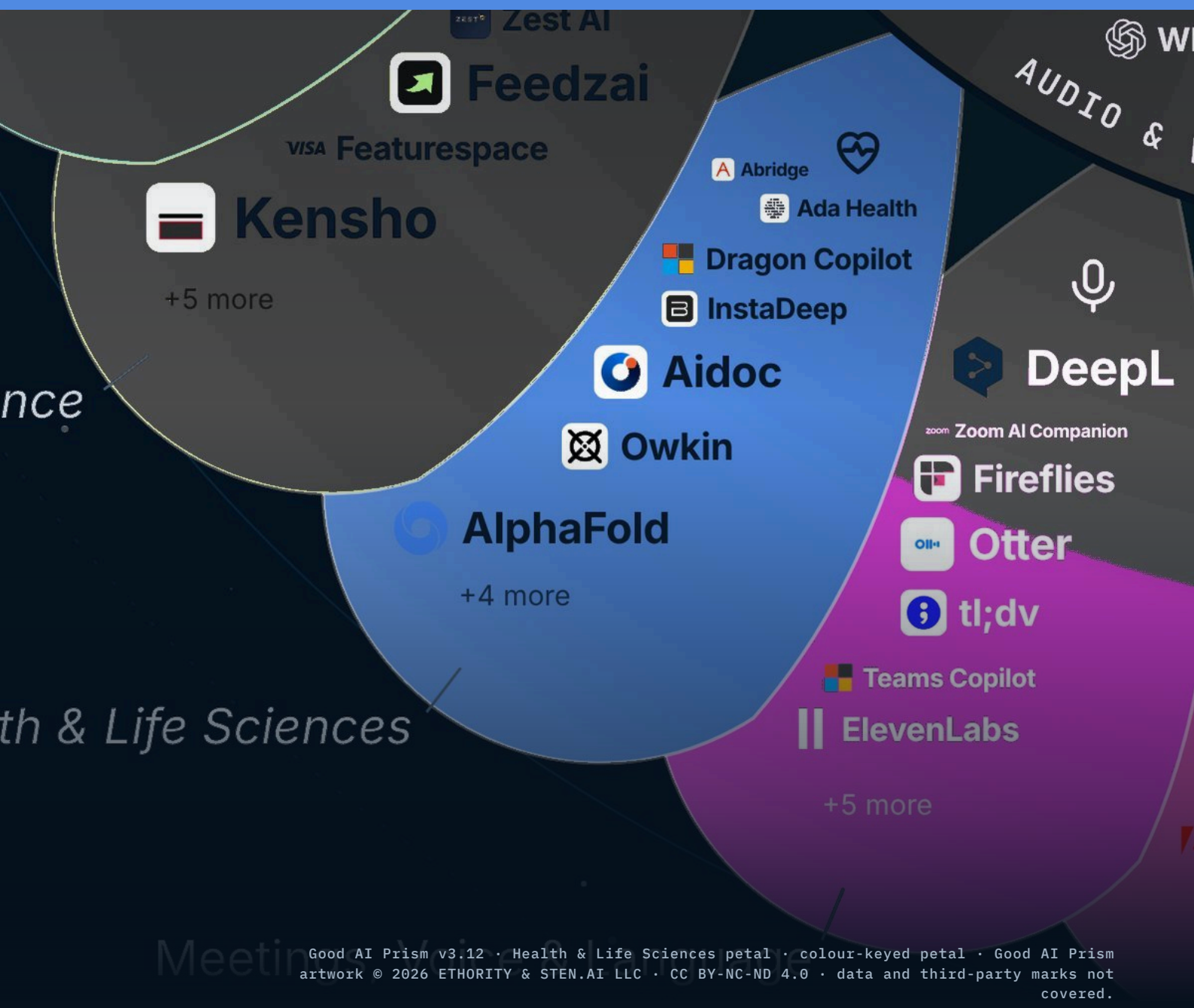
Regulators build shared rules; governance accelerates.

AI is changing how medicines are found, how cancer is detected and how ageing is studied. These six conclusions translate the evidence into decisions organisations can take now. The direction is the same on both sides of the Atlantic: define the context of use, show that the model is credible for that use, govern the data and watch the model over its lifecycle.

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Health & Life Sciences



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10

joint FDA–EMA principles for good AI practice in drug development

FDA AND EMA VIA RAPS, JAN 2026

THE RULES

Regulators are building shared rules for AI in medicines.

WHAT THE RULES MEAN FOR A PROJECT

The direction is the same on both sides of the Atlantic: define the context of use, show that the model is credible for that use, govern the data and watch the model over its lifecycle. Organisations that document this from the first pilot reach regulators faster; those that add it later rework their evidence.

WATCH LIST TO MID-2027

FDA decision on the Galleri blood test · US decision on ivonescimab (14 Nov 2026) · zasocitinib decision (Q1 2027) · first Isomorphic trials · Phase 3 readouts of AI-designed drugs · EU Biotech Act negotiations.

FDA	Draft guidance on AI to support regulatory decisions for drugs, with a risk-based credibility framework (Jan 2025, still draft); agency-wide generative AI tool Elsa (Jun 2025); roadmap to reduce animal testing, first-year goals met (Apr 2026).
FDA and EMA	Ten joint guiding principles for good AI practice in drug development, including risk-based approach, context of use, data governance and lifecycle management (Jan 2026).
EMA	Reflection paper on AI across the medicine lifecycle (Sep 2024); AI workplan 2025–28; first qualification opinion for an AI tool, AIM-NASH (Mar 2025).
European Union	Biotech Act proposal with faster trial approval and AI sandboxes (Dec 2025); AI Act: AI in medical devices high-risk from Aug 2028; European Health Data Space: secondary use of health data from 2029.
United Kingdom	Life Sciences Sector Plan (Jul 2025): commercial trial set-up under 150 days; AI-ready health data service.
China	Regulator proposal to extend the 30-working-day review for innovative drug trials nationwide (2025).
Longevity claims	US: claims need competent and reliable scientific evidence (FTC); UK: advertising regulator upheld a complaint against an ageing-reversal claim; ageing is not an FDA indication.

CONCLUSIONS

What the evidence adds up to.

1 Judge AI drugs by clinical proof, not by origin

EVIDENCE AI-designed molecules pass Phase 1 in 80–90% of cases, but fail in Phase 2 about as often as other drugs. The first Phase 3 trials have started; no AI-discovered drug is approved yet.

WHAT TO DO Track each candidate's evidence and describe its method precisely. Count Phase 2 success, not the number of AI programmes.

SEE · AI DRUGS IN THE CLINIC

2 Make productivity the business case

EVIDENCE A new medicine costs $2.67bn on average; without GLP-1 drugs the return on R&D is 2.9%, and about 90% of candidates fail in humans.

WHAT TO DO Set measurable targets for cycle time, cost per candidate and stage success, with a baseline before the first pilot.

SEE · THE R&D EQUATION

3 Build on data and the lab loop

EVIDENCE Foundation models such as AlphaFold 3, ESM3 and RFdiffusion are widely available. Capital flows to platforms that combine models with proprietary data, wet labs and clinical assets.

WHAT TO DO Invest in data quality, experimental feedback and clear data rights in every partnership.

SEE · SCIENCE; MONEY AND DEALS

4 Keep humans in the loop in cancer care

EVIDENCE AI-supported breast screening cut screen-reading workload by 44% with interval cancers non-inferior; the 12% lower estimate is within the uncertainty. Doctors who got used to AI found fewer polyps without it.

WHAT TO DO Design screening as AI plus human reader, and monitor skills, quality and outcomes over time.

SEE · CANCER: DETECTION

5 Ask longevity for endpoints

EVIDENCE Investment fell from $8.5bn to $5.7bn as the field moved to the clinic. Ageing clocks are not accepted endpoints, and ageing is not an FDA indication.

WHAT TO DO Fund and claim on validated clinical endpoints; keep consumer claims evidence-based.

SEE · LONGEVITY

6 Use governance as an accelerator

EVIDENCE FDA and EMA share ten principles; AI in medical devices becomes high-risk in the EU from Aug 2028; China competes on speed and price.

WHAT TO DO Keep an inventory of AI in research, clinical and commercial work, qualify tools early and map each use to the rules where you operate.

SEE · THE RULES

THE AGENDA

What each group can do now.

Pharma and biotech leaders

Measure AI by clinical outcomes: Phase 2 success, cycle time and cost per approved drug. Invest in proprietary data and wet-lab feedback loops; models alone are not a moat. Qualify AI tools with regulators early, using the FDA–EMA principles.

Cancer centres and screening programmes

Introduce AI as a second reader with clear accountability. Track detection, interval cancers, recalls and workload together. Train staff and check performance without AI at set intervals.

Investors and research funders

Back platforms with clinical proof points and clear data rights. Fund open biological data and benchmarks, as the Virtual Cell Challenge does. Ask for Phase 2 evidence, not programme counts.

Longevity companies and clinics

Treat longevity as clinical science: build on validated endpoints. Keep claims within the evidence; consumer rules apply. Protect biomarker and genomic data by design.

Regulators and health systems

Agree endpoints for prevention and healthy-ageing trials. Open trusted health-data access for research, with privacy by design. Publish AI tool qualifications so others can reuse them.

AI and data providers

Publish method, validation data and intended use for every model. Make data rights, hosting and model updates explicit in contracts. Support independent evaluation, not only case studies.

When agendas change quickly, the people side breaks first: half-adopted tools, skills that lag the system, employees who were not involved, and decisions no one owns. Plan adoption, training, employee participation and accountable oversight as part of every staged commitment, not after it.

SEVERIN L. WILSON, WORKFORCE LENS IN THE GOOD AI PRISM MARKET STUDY 2026/27

PRACTICAL APPENDIX

Seven questions for any AI claim in life sciences.

Use these questions when you assess a partner, a product or a press release. A claim that cannot answer them is an open question, not a finding.

QUESTION	WHAT TO ASK	EVIDENCE TO REQUEST
Method	How was AI used: target choice, generative design, physics-based design, screening, patient selection?	Method description; what was done by people and what by models
Stage	How far has it got: preclinical, Phase 1, 2, 3, filed, cleared or approved?	Registry entry, regulator decision
Evidence type	Randomised trial, real-world study, retrospective analysis or company report?	Peer-reviewed publication or full study report
Endpoint	Does the result measure what patients feel, how they function or survive, or a surrogate?	Primary and secondary endpoints, validation of biomarkers
Comparator	Better than what: standard of care, human readers, the previous process?	Baseline and comparison on the same population
Data and rights	Which data trained the model, who owns results and models, where is data hosted?	Data sources, licences, contract terms
Oversight	Who checks outputs, and how are errors and skill loss monitored?	Named overseers, monitoring plan

Pilot charter: agree it before the pilot starts

01
Scope and duration
Process, users, volume and weeks

02
Success threshold
The result that justifies scaling

03
Quality controls
Who reviews what, how errors are recorded

04
Budget ceiling
Total spend, including integration and review

05
Stop conditions
Results or incidents that end it early

06
Decision date and owner
When go or stop is decided, and by whom

ETHORITY RECOMMENDATION

A pilot without a threshold and a stop condition cannot fail, and so cannot prove anything. ETHORITY recommendation, derived from the evidence in this publication.

THE PROBLEM

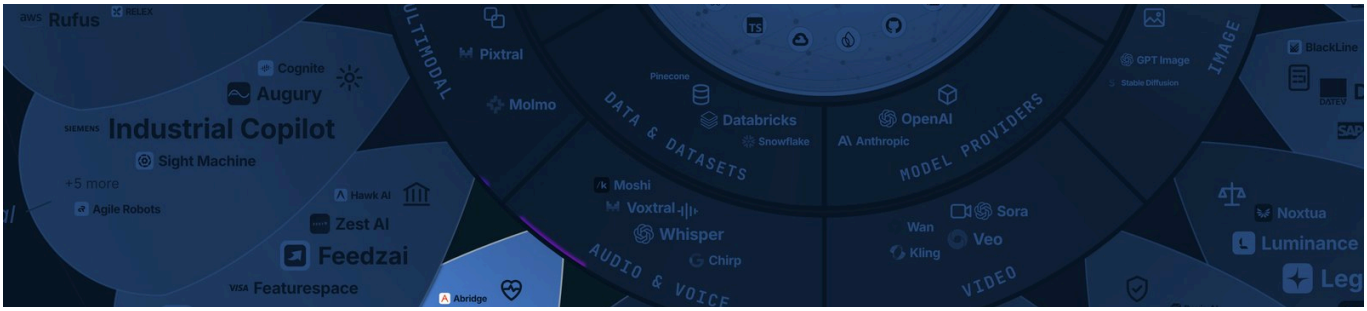
Life sciences are not short of AI. They are short of decisions they can defend.

The science is moving faster than the organisations that must use it. Leaders have to decide which AI to trust, which partner to choose, which pilot to fund and how to prove the result to boards, regulators and patients.

THE PROBLEM	WHAT WE SEE IN THE EVIDENCE	WHAT IT COSTS
Many options, little comparable evidence	117 AI drug candidates, 45 organisations in this study alone and hundreds of tools. "AI-discovered", "validated" and "clinical-grade" mean different things to different suppliers.	Wrong partner choices, duplicated platforms, years lost.
Pilots that cannot fail	Many pilots start without a baseline, a success threshold or a stop condition, so they cannot prove anything either way.	Budgets spent without a decision; pilots that never reach operation.
Rules across jurisdictions	FDA and EMA principles, the EU AI Act, medical-device law, the European Health Data Space, data protection and fast-moving rules in China and the US apply at the same time.	Delays at filing, rework of evidence, uncertain liability.
Data rights and dependency	Value sits in data, models and compute, which are often spread across partners, cloud providers and model vendors.	Lock-in and loss of IP value in licensing and exit.
People and skills	Scientists, clinicians and managers need to use AI well, question it and stay skilled without it.	Tools left unused or trusted too much; deskilling.

The question behind every project: what should improve, which options are credible, what evidence is missing, what implementation requires, and who owns the outcome?

ETHORITY



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HOW ETHORITY HELPS

From AI ambition to evidence you can act on.

ETHORITY helps life-science organisations choose, govern and prove AI: from independent market evidence to decisions that can be defended and outcomes that can be measured. We work across the whole cycle, so knowledge informs the decision, implementation tests the assumptions and results guide the next improvement.

01
Discover
Find and qualify the opportunity: options, evidence, constraints and rules.

02
Create
Design and build the solution with your data, systems and people.

03
Run
Operate it responsibly, with owners, controls and support.

04
Improve
Measure against the objective and adjust.

05
Grow
Turn what was learned into new capability and value.

AI opportunity case
One use, such as target triage, trial matching or a screening workflow, assessed against evidence, cost and rules. It ends in a clear decision: pilot, redesign, expand or stop.

Partner and evidence due diligence
Good AI Prism research profiles and comparisons, plus a structured check of AI claims: method, stage, endpoint, data rights and regulatory status.

AI estate audit
An inventory of AI across research, clinical and commercial work, including tools staff bring themselves, with owners, risks and overlaps.

Governance and regulatory readiness
Each use mapped to the FDA–EMA principles, the EU AI Act, device law, health-data rules and data protection, with proportionate controls.

AI literacy for science and care teams
Role-based training for researchers, clinicians and managers, with named overseers and safeguards against deskilling.

From pilot to operation
A pilot charter with baseline, threshold and stop conditions, then building and running the solution after the pilot on ETHORITY's AI Business Operating System.

WHO WE WORK WITH

Pharma and biotech companies, cancer centres and screening programmes, research institutes and funders, investors, longevity companies, insurers and public health bodies. Start with one question. Talk to us: sten@ethority.ai · severin@ethority.ai

ABOUT ETHORITY

From understanding markets to building AI capability.

2009

the first Social Media Prisma, the start of ETHORITY's market maps

ETHORITY, 21 SEP 2009

LINEAGE

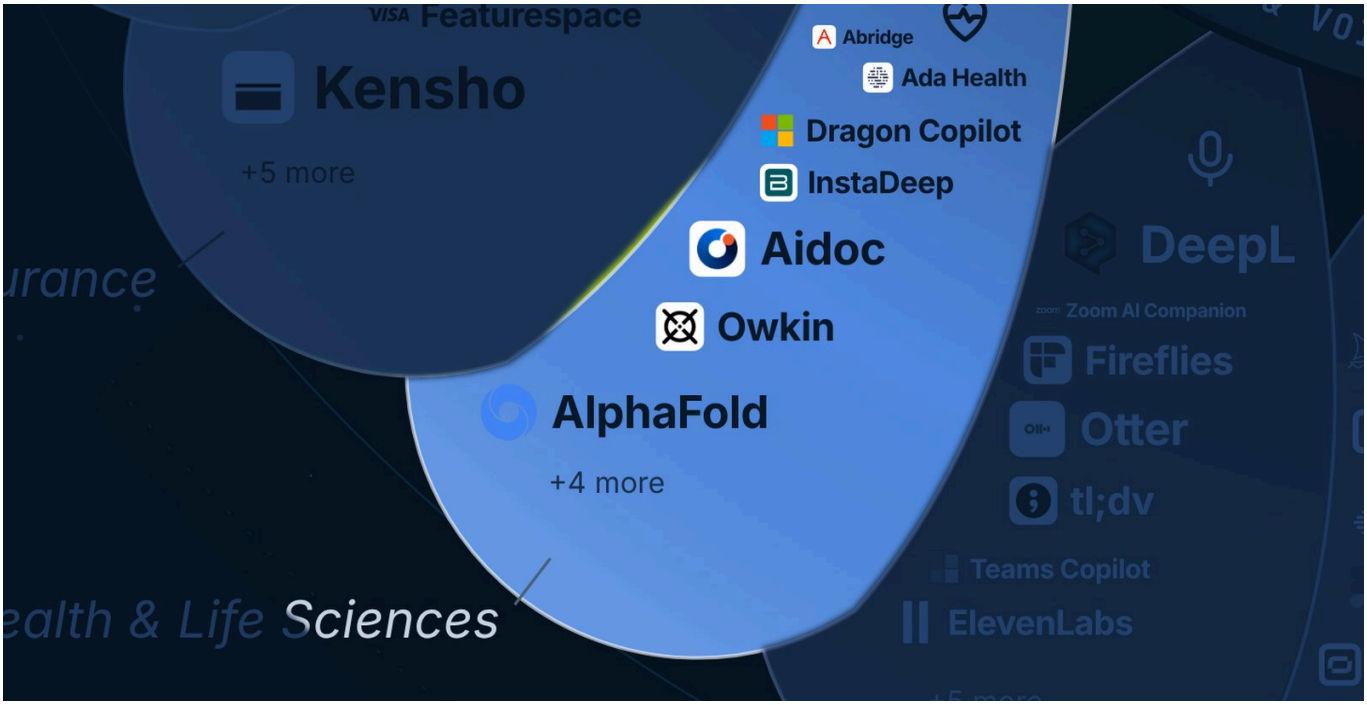
Good AI Prism by Sten Franke & ETHORITY® · since the first Social Media Prisma in 2009 · mapping markets since 1997 · roots: ETHORITY.AI and STEN.AI

ETHORITY connects market intelligence, research and practical delivery to help organisations put AI to work. It is built as an AI1st organisation: humans and AI agents work on one AI Business Operating System, with the research, engineering and operations to build and run AI after the pilot. Its roots lie in the digital intelligence business Sten Franke founded in 2005, which combined monitoring, research and advisory work to help organisations understand changing markets.

The Good AI Prism is the entry point: research profiles, documented relationships and comparisons help users investigate their options. Advisory, governance and transformation work connect those options with an organisation's objectives, data, systems, people and operating conditions. More on ETHORITY, the company.

SELECTED REFERENCES AND PARTNERS SINCE 2005

Bosch · Bayer · BMW · Siemens · Mercedes-Benz · Coca-Cola · Deutsche Bank · T-Mobile · Telefónica o2 · DHL · EDEKA · AIDA Cruises. Selected historical references and partners from the group's market-intelligence and advisory heritage, in projects or through former group companies.



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METHOD

How this study was built.

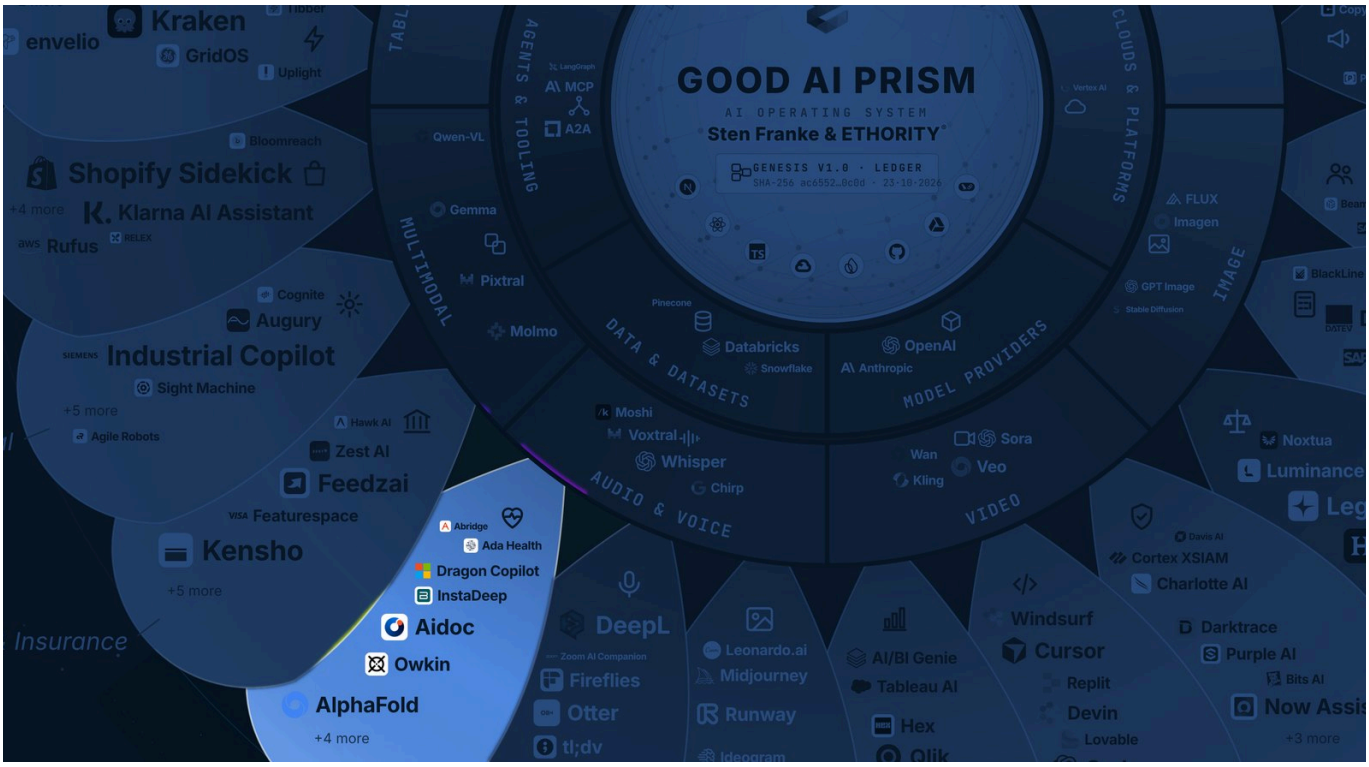
Facts from regulators, registries, peer-reviewed journals and company filings as cited, status 22 October 2026. Consultancy, tracker and market figures are labelled as estimates. "AI-discovered" is described by method because definitions differ. Organisation map from public and company sources, extending the Good AI Prism 2026/27 dataset. Not medical, legal or investment advice. (see Sources)

DATASET

Organisation map of 45 entries from public and company sources, extending the Good AI Prism 2026/27 dataset; status 22 Oct 2026.

EXHIBITS

Charts are drawn from the figures printed in this study; each names its source under the chart.



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SOURCES

Main sources.

01 IARC GLOBOCAN 2022; ECIS; ACS Cancer Statistics 2026

02 Deloitte, Measuring the return from pharmaceutical innovation 2026

03 JCO 2026 abstract 11072; Jayatunga et al., Drug Discovery Today 2024

04 Nature Medicine 2025 (rentosertib; PRAIM; proteomic clocks); The Lancet 2026 and Lancet Digital Health 2025 (MASAI); Radiology 2024

05 Nature 2024 (AlphaFold 3), 2025 (RFantibody); Science 2025 (ESM3); nobelprize.org

06 FDA, EMA and European Commission documents; UK Life Sciences Sector Plan

07 Company releases and SEC filings: Insilico, Generate, Takeda, Recursion, Iambic, Merck, Moderna, BioNTech, GRAIL, Summit, Life Biosciences, BioAge, Loyal

08 PharmCube via Caixin; Jefferies via Fierce Biotech; Longevity.Technology; XPRIZE

09 Further sources as cited: MASAI, Lund University; PRAIM; Merck and Moderna; HARMONi-2; FDA panel on Galleri; Life Biosciences; XPRIZE Healthspan; EU Biotech Act; UK Life Sciences Sector Plan

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This study is not medical, legal or investment advice.

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AI BUSINESS OPERATING SYSTEM

FROM BUSINESS AMBITION TO AI THAT WORKS

Put AI to work, with evidence.

ETHORITY helps organisations choose, govern and prove AI: from independent market evidence to decisions that can be defended and outcomes that can be measured.

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01 **Put AI to Work: The Good AI Prism Global Market Study 2026/27**
Global edition · EN and DE

02 **Good AI Prism sector briefs 2026/27**
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04 **AI for Care in Ageing Societies**
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05 **AI in Pharma, Biotech and Longevity** YOU ARE READING
Study 2026/27 · Global EN and DE

06 **The Social Media Prisma 2009–2025**
Historic paper · EN and DE

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