Market Research Various Regions - Bio/Biomed/Tech/Life Sciences

Latest Update:

By Elizabeth Liu
Aug 20, 2025

Beachwood, OH

Beachwood and the surrounding Cleveland area host a mix of medical device, biotech, and health technology companies, with a focus on surgical innovation, diagnostics, and software for healthcare applications. Key local HQs include MIM Software, Surgical Theater, and…, while other companies maintain regional offices or operations, like BASF,.... The ecosystem is anchored by medical manufacturing, clinical research, and healthcare technology, with a growing emphasis on startups supported by local incubators and research partnerships. Beachwood serves as a regional hub for medtech and healthcare innovation, complementing Cleveland's broader hospital and academic research ecosystem.

- Beachwood Tech/Med/BioMed Presence Original (Google Docs) Version
- Tech Based Comps. in Beachwood

Indianapolis Region

Major presence in clinical trials, biotech, and medical devices; Indiana is a national leader in pharmaceutical and medical device manufacturing and ranks #1 in life sciences and pharma exports.

Indiana marked a major milestone in 2024, becoming the nation's #1 state for life sciences exports. This achievement, driven by growth in areas like incretin therapies and nuclear medicine, generated more than $99 billion in economic activity (According to BioCrossroads 2024 Annual Report).

Indiana is building strategic biomedical innovation hubs in key locations such as Indianapolis, Fishers, and Warsaw.

Purdue University

https://www.purdue.edu/

Purdue University is a public, land-grant research institution located in **West Lafayette, Indiana** (~65.2 mile drive from Indianapolis). Established in **1869**, it is renowned for its **STEM** programs, particularly in engineering and agriculture, and is the flagship campus of the Purdue University system. Purdue is especially recognized for its engineering programs, including aerospace, mechanical, electrical, and civil engineering. The university is also a leader in agricultural sciences, computer science, and pharmacy.

Research Activity Designation (according to Carnegie Classification as of Aug 7, 2025) Research 1: Very High Research Spending and Doctorate Production

- $844,570,000 Research Spending
- 817 Research Doctorates

Recent News (as of Aug 7, 2025):

OYE Therapeutics Inc. announces research collaboration with military (May 28, 2025): OYE Therapeutics Inc., an innovative drug development company affiliated with Purdue University, has entered into a research collaboration with the Uniformed Services University of the Health Sciences (USU) and The Henry M. Jackson Foundation for the Advancement of Military Medicine Inc. The research will evaluate the safety and efficacy of OYE's novel intravenous caffeine formulation to bring patients out of general anesthesia sooner and accelerate postoperative recovery in a multicenter pivotal clinical study.

NSF awards $300K grant to LyoWave to scale up its high-frequency microwave heating tech for biopharma manufacturing (May 28, 2025): The National Science Foundation has awarded a $304,436 Phase I Small Business Innovation Research (SBIR) grant to LyoWave Inc. for a project that could increase the availability of lifesaving medicines and reduce pharmaceutical development and manufacturing costs.

- The technology licensed by LyoWave has been developed by researchers at Purdue led by Alina Alexeenko, the Reilly Professor in Aeronautics and Astronautics and Chemical Engineering in Purdue's College of Engineering.
- LyoWave is supercharging the pharmaceutical freeze-drying process using state-of-the-art, high-frequency microwave heating technology. Their solution accelerates the freeze-drying process while simultaneously improving throughput and uniformity.

Blazing a new trail for early-stage innovation: Purdue announces creation of Low Institute for Therapeutics (LIFT) through a generous gift by Phil and Joan Low (Apr 29, 2025): The institute will work toward accelerating lifesaving therapeutics from the lab and into the world by funding necessary early-stage trials in partnership with Purdue University and Purdue Research Foundation.

Semiconductors@Purdue faculty look to 2025 and beyond (Feb 4, 2025): Based on the foundation laid with the signing of the CHIPS and Science Act in 2022, Purdue is forging pathways to the future with successful new partnerships and initiatives that will support a growing semiconductor ecosystem at Purdue and across Indiana.

- Over the past 2 1/2 years, this team has launched ambitious workforce development programs; brought leading semiconductor companies like MediaTek and SK hynix to West Lafayette; forged research partnerships with imec, Silicon Crossroads Microelectronics Commons Hub, and the Semiconductor Manufacturing and Advanced Research with Twins (SMART) USA Institute; and established global partnerships with countries including India and Japan.

Purdue Research Park

https://www.prf.org/researchpark/index.html

Managing six locations, the Purdue Research Park network has sites in **West Lafayette, Indianapolis, Merrillville and New Albany**. The park network has more than **260 companies** that employ about **4,500 people**. An independent study reports that the park network provides an annual economic impact of **$1.3 billion** to the state of Indiana. Established in 1961, the park is managed by the **Purdue Research Foundation** and serves as a hub for technology commercialization and economic development.

Focus: Purdue Research Park focuses on fostering innovation and entrepreneurship by providing resources and infrastructure to technology-based companies. The park supports startups and established firms in various sectors, including life sciences, engineering, information technology, and advanced manufacturing. It offers business incubation services, access to Purdue University's research expertise, and opportunities for collaboration with faculty and students.

Four incubator locations within the park: Purdue Technology Center — opened 1999 (May); Business & Technology Center — opened 1993; Innovation Center — opened 1999 (Nov.); Hentschel Center — opened 1964

Recent News (as of Aug 7, 2025):

Parkview Health invests $200M in new hospital at Purdue Research Park (Jul 31, 2025)

PRF: Parkview Health to build new medical facility in West Lafayette, 3rd announced this year (Jul 31, 2025): will include up to 40 inpatient beds and a variety of services including a 24/7 emergency department, surgical and procedural services, specialty care, lab and imaging, a comprehensive suite of outpatient services, and shell space for future expansion.

Emotions run high as experts weigh in on SK Hynix proposed rezone in WL; APC votes it down (Mar 20, 2025):

- The request by PRF to rezone 121.5 acres north of Kalberer Road, between Yeager Road and North Salisbury Street, followed initial plans by the foundation to locate the South Korean chip manufacturing plant on a 90-acre property currently zoned I3/heavy industry, located west of Yeager Road and just north of Kalberer Road.
- But those at the meeting who oppose the proposed new site said the construction of the chip-making facility so close to residential neighborhoods, a day care and several recreational areas was why that 121.5 acres should not be desirable.
- "Do not risk my health" and "I don't want Cumberland Park to smell" were a couple of the messages visible within the audience.

SK hynix receives $458 million of CHIPS Incentives Award for AI semiconductor facility and R&D center at Purdue Research Park (Dec 19, 2024):

- SK hynix is the world’s leading producer of high-bandwidth memory (HBM) chips.
- The SK hynix facility will be located in Purdue Research Park, one of the largest university-affiliated incubation complexes in the country, which unites discovery and delivery with easy access to Purdue faculty experts in the semiconductor field, highly sought-after graduates prepared to work in the industry, and vast Purdue research resources.
- The next generation of HBM chips that will be researched, developed, mass-produced and packaged in this ecosystem with Purdue University will play an important role in the U.S. semiconductor ecosystem. AI is driving the growth and demand for HBM capacity, which is one of the core supply chain constraints for the AI industry. The chips are a critical component of graphic processing units that train AI systems such as ChatGPT.

Indiana University

https://bloomington.iu.edu/index.html

Indiana University is a **public university** system in the U.S. state of Indiana. The system has **two core campuses and five regional** campuses, as well as two regional centers under Indiana University **Indianapolis**. The system's flagship campus is Indiana University **Bloomington**.

Research Activity Designation (according to Carnegie Classification as of Aug 7, 2025) Research 1: Very High Research Spending and Doctorate Production

- $853,056,000 Research Spending
- 449 Research Doctorates

Recent News (as of Aug 7, 2025:

IU Indianapolis earns R1 classification, solidifying place among top-tier US research universities (Feb 13, 2025): This designation is reserved for doctoral-granting universities with the highest research activity. With both its Indianapolis and Bloomington campuses classified as R1, IU is now among a select group of universities nationwide to have multiple R1 campuses.

IU School of Medicine

https://medicine.iu.edu/

IUSM is dedicated to preparing future physicians, advancing medical research, and improving healthcare delivery across Indiana. With nine campuses statewide, it offers a comprehensive medical education, including MD, PhD, and MS programs, and provides extensive clinical training through partnerships with IU Health and other healthcare institutions. The school emphasizes research in areas such as cancer, diabetes, and neuroscience, and is home to the NCI-designated Melvin and Bren Simon Comprehensive Cancer Center.

Recent News (as of Aug 7, 2025):

IU lands $16.5M grant to advance Alzheimer's research using 3D brain modeling (Aug 7, 2025): The five-year grant from the National Institute on Aging will fund a new research center at the medical school which will be one of only two centers in the United States dedicated to developing stem-cell-based models of the human brain to better understand Alzheimer's disease.

Two IU School of Medicine residency programs gain accreditation (Aug 6, 2025): The programs, emergency and internal medicine, aim to address physician shortages in rural areas of the state. Recent data shows 71 of Indiana's 92 counties are considered health professional shortage areas.

New national center at IU to develop stem cell brain models to better understand Alzheimer's disease (Jul 31, 2025): Researchers from the IU School of Medicine and the IU Luddy School of Informatics, Computing and Engineering are co-leading the newly funded Microphysiological Systems to Advance Precision Medicine for Alzheimer's Disease and Related Dementias, known as MAP-AD. The center draws upon the scientific expertise in the School of Medicine's comprehensive Alzheimer's disease research program.

- The center will develop brain organoids — three-dimensional cellular models derived from human pluripotent stem cells that can be developed into any type of cell in the body — to study various characteristics of Alzheimer's disease and related dementias, such as neuroinflammation and vascular dysfunction. Researchers will also lead preclinical and pharmacological studies to accelerate drug discovery and development.

IU School of Medicine opens $230 million education, research building amid NIH cuts (Jun 27, 2025): The 11-story building, which will officially open to IU medical students Aug. 4, houses new classrooms, an anatomy lab, a surgical skills center, dedicated community spaces and an eight-story research tower.

- Thursday IUSM Dean Jay Hess said that while the potential for funding cuts worries him, he remains confident in the value of the medical school's research. In addition to medical breakthroughs, IU estimates it created $635 million of economic activity and more than 2,400 jobs in Indiana last year thanks to its NIH-funded research.

IU School of Medicine funding could be hit by federal cuts (Apr 11, 2025): Congress has slashed a decades-old federal medical funding program by more than half. In 2023, the school was awarded $715,000 from the Congressionally Directed Medical Research Program (CDRMP). As the largest medical school in the U.S., the university was tasked with using the money to improve treatment for mild traumatic brain injuries. In March, Congress passed a bill that cuts the funding by 57%. The move is leaving doctors worried.

Eli Lilly and Company

https://www.lilly.com/

Eli Lilly is an American multinational **pharmaceutical** giant headquartered in **Indianapolis, Indiana**, founded in 1876. Offices in **18 countries**; its products are sold in approximately **125 countries**

Focus: Products span several therapeutic areas, including: Diabetes (e.g., Humalog, Mounjaro, Trulicity, Zepbound), Oncology (e.g., Cyramza, Verzenio), Immunology (e.g., Olumiant, Taltz), Neuroscience (e.g., Cymbalta, Emgality, Prozac, Zyprexa). Their current development pipeline highlights areas such as cancer, cardiometabolic health, immunology, neurodegeneration, pain

Employment (according to United States Securities and Exchange Commission 2024 Annual Report): At the end of 2024, employed **~47,000 people**, including ~25,000 employees outside the US. Employees include ~11,000 people engaged in R&D activities.

Revenue (according to United States Securities and Exchange Commission 2024 Annual Report): In 2024, Eli Lilly reported **45.0 billion USD** in total revenue marking a 32% increase from $34.1 billion in 2023

- Growth was led by a 39% surge in U.S. sales (to $30.4 billion) and a 19% increase internationally (to $14.7 billion). The primary driver was **volume growth** (accounting for 27% of the increase overall, and 31% in the U.S.), with price increases contributing an additional 5%. Foreign exchange rates had minimal net impact on revenue growth.
- In the U.S. the increase in volume in 2024 was primarily driven by **Zepbound** (weight loss and management in adults with obesity or those overweight with a weight-related condition) and **Mounjaro** (manage type 2 diabetes and may be prescribed off-label for weight loss), partially offset by **Trulicity** (manage type 2 diabetes and reduce the risk of cardiovascular events). In the U.S. the higher realized prices in 2024 were primarily driven by Humalog, Mounjaro, Verzenio, and Zepbound.
- Outside the U.S. the increase in volume in 2024 was primarily driven by **Mounjaro** and, to a lesser extent, **Verzenio** (medication for breast cancer), as well as a one-time payment received of $300.0 million related to Jardiance associated with an amendment to our collaboration with Boehringer Ingelheim. Outside the U.S. the increase in volume in 2024 was partially offset by the 2023 sale of rights for the olanzapine portfolio.

Market Cap (intraday Jul 31, 2025): **722.80 billion USD**

Recent News (as of Jul 31, 2025):

Eli Lilly Weight-Loss Drug Makes Cardio Advance. More Bad News for Novo Nordisk (Jul 31, 2025): best-selling drug Mounjaro has shown cardiovascular advantages in diabetes patients

Extension trial demonstrates long-term benefit for Lilly Alzheimer's drug (July 30, 2025): show that Kisunla (donanemab-azbt) provided sustained benefit in early Alzheimer's over a three-year period.

LTZ Therapeutics Announces Strategic Collaboration with Eli Lilly to Advance Development of its Myeloid Engager Platform for Autoimmune Diseases (Jul 29, 2025)

Lilly's cancer drug more effective than AbbVie's in head-to-head study (Jul 29, 2025): Jaypirca, was being tested in patients with chronic lymphocytic leukemia or small lymphocytic lymphoma

Eli Lilly (LLY) Announces Positive Results For Jaypirca In Phase 3 Trial (Jul 29, 2025): marking a significant advancement in treatment options for chronic lymphocytic leukemia

Lilly cuts partnership with Noom in latest salvo in war on compounded GLP-1s (Jul 25, 2025): terminating Noom's LillyDirect platform integration, a partnership that allowed patients on the platform access to vials of Lilly's blockbuster weight-loss drug Zepbound, which are cheaper than the pens typically sold

- Noom has recently promoted “microdosed” GLP-1 treatments, using compounded versions of the diabetes and weight-loss medication. Lilly has previously said that part of its deals with telehealth partners are that they don’t continue selling knockoff versions of GLP-1s.

Lilly to buy gene-editing partner Verve for up to $1.3 billion in cardiac care push (Jun 17, 2025): partnering to develop one-time, gene-editing therapies to reduce high cholesterol in people with heart disease, as part of Lilly's efforts to look beyond its blockbuster weight-loss and diabetes drugs for growth.
Eli Lilly pays $1B upfront to buy gene editing partner Verve Therapeutics (Jun 17, 2025): bringing in-house a pipeline of cardiovascular programs the Big Pharma had already secured a stake in
Over $3 billion in a month: Why is Eli Lilly starting 2025 on a buying spree? (Feb 24, 2025):

- The Eli Lilly and Alchemab partnership to discover treatments for ALS
- Eli Lilly partner with Mediar to tackle lung disease
- Eli Lilly buys Scorpion’s PI3Kα inhibitor drug for breast cancer
- Eli Lilly nabs rights to MASH drug
- Radiopharma: The big pharma making its mark
- Behind the scene: GLP-1 gives Eli Lilly a boost
- What makes licensing deals a good idea for the big pharma?

Indiana Biosciences Research Institute (IBRI)

https://www.indianabiosciences.org/

A nonprofit independent research institute headquartered in **Indianapolis, Indiana** within the **16 Tech Innovation District** (50-acre mixed-use innovation district) formed in 2013 under Indiana governor Mike Pence.

Focus: IBRI is the nation's first industry-led **collaborative life sciences research institute** with a primary focus on better understanding the pathogenesis of type 1 and type 2 diabetes while also expanding research into other metabolic diseases that share common systems and pathways (aka focused on **translational science** and **metabolic diseases**)

- In 2024 IBRI and **Indiana University** announced the **Joint Center of Excellence for Point of Care** focussed on innovation and treatment in four disease areas: **diabetes** and **metabolism**, **pediatric rare diseases**, **cancer**, and **Alzheimer's** disease.

Employment (according to 2022 Annual Report): 46 team members; 13 Member Companies

Revenue (according to 2022 Annual Report): $12.7M Operating expenses; $3.1M Capital expenditures

Market Cap: N/A - As a nonprofit entity, it does not have a publicly traded stock, and therefore, it does not possess a market capitalization

Recent News (as of Aug 6, 2025):

Allarity Therapeutics Announces Research Collaboration with Indiana Biosciences Research Institute to Further Advance Understanding of Stenoparib's Unique, Dual Therapeutic Mechanism of Action (Jun 4, 2025): Allarity Therapeutics, Inc.a Phase 2 clinical-stage pharmaceutical company dedicated to developing stenoparib—a differentiated, dual PARP and WNT pathway inhibitor—as a personalized cancer treatment using its proprietary, drug-specific Drug Response Predictor (DRP®) patient selection technology

Regenstrief Institute partners to advance bioscience innovation (Jan 27, 2025): Regenstrief Institute joined Indiana University and key bioscience organizations to establish the IU Launch Accelerator for Biosciences (IU LAB) at 16 Tech Innovation District. This initiative will drive advancements in human health, support commercialization efforts and position Indiana as a leader in bioscience innovation.

- $138 million grant from Lilly Endowment
- Organizations involved include IU, IU School of Medicine, 16 Tech, Central Indiana Corporate Partnership, BioCrossroads, Indiana Biosciences Research Institute, Regenstrief Institute and IU Health

IU, Indiana Biosciences Research Institute form center to advance point-of-care precision medicine (Sep 18, 2024): New center to improve individualized care for patients with diabetes, pediatric rare diseases, cancer, Alzheimer's

BioCrossroads

https://biocrossroads.com/

A nonprofit **catalyst organization** that connects Indiana's life sciences community to foster innovation and commercialization.

Focus: **Connecting** corporate, academic, and philanthropic partners; facilitating investments in promising **startups** and building new enterprises; and educating through conferences, reports, and market knowledge.

Initiatives include (as of Aug 6, 2025):

- Datalys Center: 501(c)3 non-profit specializing in sports injury research and prevention
- Indiana Biosciences Research Institute: first industry-inspired research institute in the US to accelerate discoveries/innovations for metabolic disease and poor nutrition
- Indiana Health Information Exchange: nation's largest health information exchange; health IT networking connecting 100 hospitals, care facilities, health clinics, other healthcare providers
- IndyHub: support of network of 20-and 30-somethings living and working in Indianapolis
- OrthoWorx: community based initiatives of talent pipeline, community enrichment, and industry acceleration to advance the orthopedic industry

Employment: 2-10 employees (according to BioCrossroads LinkedIn as of Aug 6, 2025), 18 employees (according to Growjo as of Aug 6, 2025), 1-10 employees (according to Crunchbase as of Aug 6, 2025)

Revenue: annual revenue is currently $2.8M per year (according to Growjo as of Aug 6, 2025).

Market Cap: N/A - As a nonprofit entity, it does not have a publicly traded stock, and therefore, it does not possess a market capitalization

Recent News (as of Aug 6, 2025):

Indiana Named 'Radiopharmaceutical Capital Of The World,' Sector Booms (Aug 4, 2025): BioCrossroads, a statewide initiative focused on advancing Indiana's life sciences sector, announced the designation this week. The state is already home to the largest concentration of radiopharmaceutical companies in the nation and leads the country in life sciences exports.

Indiana Sets New National Benchmark as #1 in Life Sciences Exports (May 5, 2025): BioCrossroads has released its 2024 Annual Report; report highlights how statewide collaboration, supported by BioCrossroads, continues to shape Indiana's future as a global leader in health and life sciences.

- Overtook California to become the number one life sciences exporting state in the country, with $27 billion in product exports and more than $99 billion in total economic activity.
- BioCrossroads helped power this progress through strategic partnerships, talent initiatives, and its role as a connector for companies, researchers, educators, and policymakers across the state.

Eli Lilly CEO named Life Sciences Champion of the Year (Nov 12, 2024): The award was presented at the BioCrossroads Life Sciences Summit and recognizes Ricks' contributions to Indiana's life sciences sector and his global impact on health care innovation.

- Under Ricks' leadership, Lilly invested billions into research and development to tackle challenging diseases.
- This strategy propelled Lilly to the forefront of treatment development in areas like obesity, oncology, immunology and neurodegenerative diseases like Alzheimer's, Parkinson's and ALS.
- In 2024, Lilly committed over $9 billion in capital investments in Indiana.

BioCrossroads announces board changes (Sep 5, 2024): BioCrossroads recently appointed seven new board members and elevated two current members.

Roche

https://www.roche.com/

F. Hoffmann-La Roche AG (commonly known as Roche), is a **Swiss** multinational holding healthcare company that operates worldwide under two divisions: **Pharmaceuticals** and **Diagnostics**. Founded in **1896** with Roche's Group and divisional management is based at the **Basel/Kaiseraugst, Switzerland** site. **Indianapolis, Indiana** serves as Roche Diagnostics Corporation's North American headquarters. Roche Pharmaceutical US headquarters: originally in New Jersey since 1929 (now vacated and sold in 2016) and moved to Genentech's facility in **South San Francisco**.

Focus: Roche Group is the world's largest biotechnology company with a leading position in in vitro diagnostics and tissue-based cancer diagnostics. One of the largest pharmaceutical companies overall, ranking fifth in prescription drug sales.

Employment (according to Roche Group Careers website as of Jul 30, 2025): **+101,000 employees** worldwide; +25,000 employees in 24 sites across eight US states (according to Roche April 21, 2025 press release).

Revenue (as of Finance Report 2024): Group sales were **CHF 60.5 billion**, an increase of 7% at CER (3% increase in CHF terms). Pharmaceuticals sales increased by 8% (CER) driven by the growing demand for newer medicines, which more than offset the negative impact from biosimilar and generic competition. Diagnostics sales increased by 4% (CER), while sales excluding COVID-19-related products grew by 8% driven by higher demand for immunodiagnostic product

- Average exchange rate in 2024: 1 CHF = 1.1362 USD
- CHF 60.5 billion = ~USD 68.74 billion

Market Cap (intraday Jul 30, 2025): **261.68 Billion USD**

Recent News (as of Jul 30, 2025):

Roche pushes ahead with late-comer strategy in obesity (Jul 30, 2025): Roche's efforts to break into the lucrative obesity market haven't abated.

- The pharma giant sealed the largest deal in the space earlier this year when it announced a collaboration with Zealand Pharma for more than $5 billion. The agreement built on Roche's $2.7 billion deal to pick up Carmot Therapeutics and its suite of early- and mid-stage obesity candidates in 2023.
- Roche's lead obesity candidate, CT-388, is a weekly injectable, dual GLP-1/GIP receptor agonist for obesity and Type 2 diabetes. Currently in phase 2, the drug has already shown promising weight loss results.

FDA launches probe into new Elevidys death as Sarepta, Roche stress gene therapy not at fault (Jul 28, 2025): the U.S. FDA revealed that it is looking into the death last month of another patient who received Sarepta Therapeutics' Duchenne muscular dystrophy (DMD) gene therapy Elevidys, which was quickly confirmed by Sarepta and its ex-U.S. partner Roche to have occurred in a young boy in Brazil. Although the latest death—the third reported in an Elevidys patient this year and the fourth for a person on a Sarepta gene therapy in general—has been deemed unlikely to be related to Sarepta's treatment, the fatality adds another wrinkle to concerns about the safety burden of AAV-based gene therapies overall.

Roche's Next-Gen Alzheimer's Antibody Clears or Reduces Amyloid Plaques in Seven Months (Jul 28, 2025): Roche touted rapid amyloid clearance from the brains of patients with Alzheimer's disease.

- The Brainshuttle AD results come more than five years after Roche's previous attempt at an Alzheimer's antibody, gantenerumab, fell flat. Safety was also a highlight for Roche this time around. Amyloid-related imaging abnormalities (ARIAs), signifying brain lesions or swelling, are

a known risk of anti-amyloid antibodies. Four of the total 149 patients treated with trontinemab across all doses had ARIAs. These abnormalities have dogged Biogen's and Lilly's drugs, reaching rates into the teens in tested patients with Leqembi.

Roche to investigate whether new drug can delay or prevent Alzheimer's disease (Jul 27, 2025): The clinical trial of the drug, Trontinemab, will target people who are at risk of cognitive decline and will aim to delay or prevent the symptoms of Alzheimer's. Rivals like Eli Lilly , have been making progress in the Alzheimer field recently, with Lilly's drug Kisunla getting a recommendation for approval for certain patients from the European Medicines Agency last week. Kisunla is already approved in the U.S.

- Treatments for Alzheimer's approved so far, including Eisai and Biogen's Leqembi and Lilly's Kisunla, are designed to clear sticky clumps of a protein called amyloid beta in the brain. They carry hefty price tags as well as the risk of serious brain swelling and bleeding.

European Commission approves Roche's Itovebi for people with ER-positive, HER2-negative, advanced breast cancer with a PIK3CA mutation (Jul 23, 2025): European Commission has approved Itovebi™ (inavolisib), in combination with palbociclib (Ibrance®) and fulvestrant, for the treatment of adult patients with PIK3CA-mutated, oestrogen receptor (ER)-positive, human epidermal growth factor receptor 2 (HER2)-negative, locally advanced or metastatic breast cancer, following recurrence on or within 12 months of completing adjuvant endocrine treatment.

- Itovebi is the first treatment of its kind to improve survival outcomes for those living with PIK3CA-mutated, ER-positive advanced breast cancer

Roche announces $550 million investment to expand its Indianapolis diagnostics manufacturing hub (May 12, 2025): plans to invest up to $550 million in its Diagnostics site in Indianapolis by 2030 to make it a major hub for the manufacturing of Roche's continuous glucose monitoring (CGM) systems

Roche to invest USD 50 billion in pharmaceuticals and diagnostics in the United States over the next five years (April 21, 2025): These investments further strengthen Roche's already significant US footprint with 13 manufacturing and 15 R&D sites across the Pharmaceutical and Diagnostics Divisions, and are expected to create more than 12,000 new jobs, including nearly 6,500 construction jobs, as well as 1,000 jobs at new and expanded facilities.

Additional Info: Roche owns the American biotechnology company **Genentech** (wholly owned independent subsidiary headquartered in South San Francisco, CA), and the Japanese biotechnology company **Chugai Pharmaceuticals**, and United States–based companies **Ventana Medical Systems** (Oro Valley, Arizona; part of the Roche Diagnostics Division, renamed Roche Tissue Diagnostics), **Foundation Medicine** (Cambridge, MA), and many more (seriously many many more).

Zimmer Biomet

https://www.zimmerbiomet.com/en

Zimmer Biomet Holdings, Inc., founded in **1927** and headquartered in **Warsaw, Indiana** (~112 mile drive from Indianapolis), is a leading global medical **technology** company leading **musculoskeletal healthcare** *Focus*: orthopedic implants, sports medicine, spine, trauma, dental, and extremities solutions. It also develops **integrated digital and robotic surgical technologies**, such as the ROSA™ robotics platform and Persona IQ® smart implants, to personalize patient care and optimize outcomes.

Employment (US SEC Commission file number 001-16407 for year ended Dec 31, 2024): employ ~**17,000 employees** worldwide, including ~2,000 employees dedicated to research and development. ~7,000 located within U.S. and ~10,000 located outside U.S., primarily throughout Europe and in Japan and China. ~7,000 employees dedicated to manufacturing our products worldwide.

Revenue (Feb 6, 2025 press release)*:* Full-year net sales of **$7.679 B** in 2024 (report released Feb 06, 2025) - an increase of 3.8% over the prior year, and an increase of 4.8% on a constant currency basis

Market Cap (intraday Jul 30, 2025): **18.675 billion USD**

Recent News (as of Jul 30, 2025):

The FDA clearances for medical devices you need to know (Jul 24, 2025): Z1 Hip System is a femoral hip implant system for hip replacement surgeries. Shape + size of implant + surgical tools it comes designed to support various hip replacement procedures + less invasive techniques.

Zimmer Biomet inks $177M deal for Monogram and its hands-free orthopedic robot (Jul 15, 2025): Zimmer plans to incorporate Monogram's (Austin, TX based) work into its Rosa robotics — currently has a new knee implant system undergoing review at the FDA—while it continues to grow commercially in hip and shoulder procedures.

- Earlier in 2025 FDA granted to Monogram's semi-autonomous mBôs system for total knee arthroplasty, as well as to its mPress 3D-printed, press-fit implants.
- Monogram previously outlined plans to expand the robot's reach into multiple orthopedic indications, while also advancing a fully autonomous version with cutting operated by foot pedal. Monogram was cleared to conduct a clinical trial of its hands-free robotic saw, with its first live human procedures in summer 2025.

The artificial intelligence-powered mBôs robotic arm uses CT scans to help plan bone cuts in advance and establish instrument boundaries to avoid damage to the joint's soft tissue. The two companies said they plan to launch the system with Zimmer Biomet's own line of implants in early 2027.

Zimmer Biomet Receives FDA Clearance for Persona® Revision SoluTion™ Femur (Mar 07, 2025): proprietary surface-hardening treatment designed to enhance wear performance; offers surgeons an array of anatomic components, including tibial and femoral cones with various stem choices to address zonal fixation.

Zimmer Biomet Completes Acquisition of Paragon 28 (Apr 21, 2025): Paragon 28, Inc., a leading medical device company focused exclusively on the fast-growing foot and ankle orthopedic space.

Zimmer Biomet snaps up clearance for shoulder replacement robot (Feb 22, 2024): the fourth in Zimmer's family of Rosa robotic helpers in the past five years, following go-aheads in total knee and hip replacement procedures. The system also claims the title of being "first-to-market" for assisted shoulder arthroplasty

Zimmer Biomet Hip Replacement Lawsuit: The U.S. Food & Drug Administration (FDA) issued a warning about Zimmer Biomet's CPT Hip System implants in September 2024, following a recall initiated by the company in July.

- The recall was prompted by concerns that the cobalt-chromium alloy implant is twice as likely to cause thigh bone fractures when compared to similar products made of stainless steel.
- Zimmer Biomet plans to phase out the use of their CPT Hip System Femoral Stem 12/14 Neck Taper by the end of October 2024

Zimmer Biomet to acquire AI surgical guidance company OrthoGrid Systems (Aug 9, 2024): signed definitive agreement to acquire. The orthopedics-focused medical technology company said the proposed acquisition will expand its hip portfolio with an AI-driven surgical guidance system.

- Rapidly growing market demand for fluoroscopy-based surgical guidance solutions (a technique that uses real-time X-ray imaging to help guide procedures and improve surgical accuracy and safety)
- OrthoGrid's Hip AI system provides real-time image analysis, automated measurements of leg length and offset, and guidance on optimal cup placement while maintaining a small OR footprint.

Elanco

https://www.elanco.com/us

Elanco is the second-largest independent animal health company in the world. Elanco is headquartered in **Greenfield, Indiana**; in 2020, Elanco announced plans to build a new global headquarters in **Indianapolis** at the site of the former GM stamping plant. Until 2019, the company was a subsidiary of Eli Lilly and Company (**E**li **L**illy **and** **Co**mpany) with roots going back to 1892, before being divested.

Focus (According to Elanco Website as of Aug 6, 2025): Elanco focuses on 5 core species: dogs, cats, cattle, swine, and poultry; serves 90+ countries; 200+ brands sold for pet & farm animals

Employment: 16 manufacturing sites, ~9,450 employees worldwide (According to Elanco Website as of Aug 6, 2025). 9,000 full time employees and approximately 450 fixed-duration employees, which are individuals hired for a pre-defined length of time (typically one to four years). Approximately 30% of our global workforce is U.S.-based, while slightly more than 10% of our global employees are members of unions, works councils, trade associations or are otherwise subject to collective bargaining agreements, primarily in Germany and the U.S. Over 1,000 employees in our global R&D and Regulatory Affairs Organizations (according to United States Securities and Exchange Commission 2024 Annual Report).

Revenue (according to United States Securities and Exchange Commission 2024 Annual Report): **4.439 Billion USD**

- In 2024, 48% of revenue was pet health, 51% farm animal, remaining contract manufacturing and other.
- The U.S. is their largest market, accounting for 46% of our total revenue in 2024. By total revenue, China, Brazil and the United Kingdom (U.K.) are our largest markets outside the US.
- In 2024, Elanco's top five selling products and/or product families were our Advantage Family (cats and dogs), Seresto (cats and dogs), Rumensin (cattle), Maxiban / Monteban (poultry) and our Credelio Family (cats and dogs). These products and product families combined to represent approximately 36% of our total revenue in 2024, with our largest product family, Advantage Family, representing approximately 10% of total revenue.
- Revenue risk factors include: (1.) Fierce competition from generics and pharma firms; (2.) Disruptive tech making products obsolete; (3.) Patent expirations (Seresto 2027) boosting generics; (4.) Antibiotic bans reducing farm animal product demand; (5.) Top 5 products driving 36% of revenue creating concentration risk; (6.) Supply chain fragility with 130+ contract manufacturers; (7.) $4.3B debt limiting financial flexibility; (8.) Cyber threats to operations/data; (9.) Product liability lawsuits and regulatory actions; (10.) FX volatility affecting >50% of revenue, plus hyperinflation risks.

Market Cap (intraday Aug 6, 2025): **6.93 billion USD**

Recent News:

Elanco Secures Approval of Zenrelia™ (ilunocitinib) in the European Union (EU), Launching Innovative Canine Dermatology Treatment for Itchy Dogs (Jul 24, 2025): Approval by the EU reinforces Zenrelia's status as a highly effective, convenient, and safe once-daily oral JAK inhibitor

Elanco Receives USDA Approval for TruCan™ Ultra CIV H3N2/H3N8 (Canine Influenza Vaccine) Bringing to Market a High Standard of Respiratory Protection (Jul 9, 2025)

Elanco Announces Milestones Expanding Access to Canine Parvovirus Monoclonal Antibody (CPMA) to Veterinarians and Shelters Across the Country (Jun 27, 2024): expand veterinarians' efforts to Defend Puppies. Defeat Parvo. against the deadly canine parvovirus (parvo). Canine Parvovirus Monoclonal Antibody (CPMA) is the first and only U.S. Department of Agriculture (USDA) conditionally approved

treatment to target parvo. Most significantly, the USDA has approved the use of Canine Parvovirus Monoclonal Antibody (CPMA) for passive immunity (i.e., prophylactic treatment) to prevent parvo infection in puppies exposed to the virus, expanding the potential to protect dogs from this devastating disease.

Elanco Receives Positive Opinion on Zenrelia (ilunocitinib) from EU's Committee for Veterinary Medicinal Products (CVMP) (Jun 12, 2025): significant advancement in the expansion of Zenrelia, Elanco's fastest globalized product with eight major regulatory approvals expected in just 18 months

Elanco Releases New Report Highlighting the Significance of America's Itchy Dogs and the Need for Itch Relief (Jun 5, 2025): first-of-its-kind report includes findings from multiple surveys of pet owners, as well as veterinarians, and reveals startling details on how badly dogs around the country are itching for relief and cost-effective, long-lasting solutions. With Zenrelia™ (ilunocitinib tablets) now widely available as a once-daily, cost-effective solution, veterinarians and dog owners have another option to help dogs get back to normal.

Cook Medical

https://www.cookmedical.com/

Cook Medical is a global leader in the **development and manufacturing of medical devices**, headquartered in **Bloomington, Indiana** (~55.7 mile drive from Indianapolis). Founded in **1963**, the company is renowned for its innovative solutions in a wide range of medical fields, including vascular, urology, women's health, and gastroenterology. Cook Medical operates in over **135 countries** and serves more than **125,000 healthcare providers**.

Focus: developing and providing medical devices and solutions for multiple therapeutic areas, including:

- Vascular (e.g., stents, grafts)
- Urology (e.g., catheters, stone management devices)
- Women's Health (e.g., gynecological instruments, surgical meshes)
- Gastroenterology (e.g., endoscopy equipment, stents)

The company emphasizes patient-centered innovation and has a robust R&D pipeline aimed at expanding its product offerings in **minimally invasive solutions**.

Employment (according to Cook Medical Social Impact & SustainabilityReport 2024): employs over **12,000 people** globally.

Revenue (According to Forbes profile as of Aug 7, 2025): $2.4B in 2024

Market Cap: N/A - privately held and does not publicly disclose a market capitalization.

Recent News (as of Aug 7, 2025):

Cook Medical Launches New Imaging Division (Jul 29, 2025): develop specialized devices for complex procedures, offering improved precision and safety without radiation risks.

Cook Medical unveils new inverventional MRI division (Jul 28, 2025): appointed Peter Polverini as the new VP of the iMRI division. Polverini has over 20 years of experience — including more than 16 years at Cook — advancing medical technology and fostering strong healthcare partnerships.

Cook Medical debuts iMRI division (Jul 28, 2025): Interventional Magnetic Resonance Imaging (iMRI) division.

Angiographic Catheter Recall: Cook Removes Beacon Tip Angiographic Catheters due to Tip Separation (Jun 25, 2025)

Weil Advises Astorg in $282M Take-Private Acquisition of Hamilton Thorne and Concurrent Acquisition of Cook Medical Reproductive Health (Dec 3, 2024): Weil advised Astorg, a leading private equity firm with an extensive track record in global healthcare investments, in its approximately $282 million take-private acquisition of Hamilton Thorne, and simultaneous acquisition of Cook Medical's Reproductive Health business.

- Astorg is now combining the two businesses to create a new global ART MedTech company. A new brand identity for the combined business will be rolled out in 2025.Financial terms for the Cook Medical Reproductive Health transaction were not disclosed.
- Hamilton Thorne is a leading global provider of precision instruments, consumables, software and services that reduce cost, increase productivity, improve results and enable breakthroughs in Assisted Reproductive Technologies (ART), research, and the cell biology space.

Merit Medical completes acquisition of Cook Medical's lead management portfolio (Nov 1, 2024): The Cook lead management business provides medical devices and accessories used in lead management procedures. These procedures occur in patients who need a pacemaker or an implantable cardioverter-defibrillator (ICD) lead removed or replaced. In addition to this portfolio, Merit's own

electrophysiology and CRM portfolio includes steerable and other specialty technologies that help electrophysiologists access the heart to diagnose and deliver devices to treat cardiac rhythm disorders. 2024 SEC FORM 8-K Report (Sep 16, 2024): **Merit Medical Systems, Inc**., a Utah corporation, entered into an Asset Purchase Agreement with Cook Medical Holdings LLC, an Indiana limited liability company , to purchase Cook Medical's lead management portfolio of medical devices and certain related assets for total cash consideration of approximately $210 million.

Medtronic

https://www.medtronic.com/en-us/index.html

Medtronic is a global leader in medical technology, services, and solutions, founded in 1949 and operating in over **150 countries**. The company's legal and executive headquarters are in **Galway, Ireland**, while its operational headquarters are in **Minneapolis, Minnesota**.

Plainfield, IN (~198 mile drive from Indianapolis): Medtronic operates a U.S. Factory Service Center at 2824 Airwest Blvd, focusing on non-invasive medical devices previously manufactured by Covidien.

Warsaw, IN (~112 mile drive from Indianapolis): Medtronic maintains a facility at 2500 Silveus Crossing, a hub for orthopedic and musculoskeletal products.

Focus: Medtronic develops and manufactures biomedical devices and therapies to treat more than 30 chronic diseases, including heart failure, Parkinson's disease, urinary incontinence, obesity, chronic pain, spinal disorders, and diabetes.

Four reportable segments that primarily develop, manufacture, distribute, and sell device-based medical therapies and services (according to Medtronic SEC 2024 10-K Filling):

The Cardiovascular Portfolio

Divisions: Cardiac Rhythm & Heart Failure (Operating Units: Cardiac Rhythm Management and Cardiac Ablation Solutions), Structural Heart & Aortic (Operating Units: Structural Heart & Aortic and Cardiac Surgery), Coronary & Peripheral Vascular (Operating Units: Coronary & Renal Denervation and Peripheral Vascular Health)

Key products include Micra™ Transcatheter Pacing Systems, Aurora™ EV-ICD, Spere-9™ Catheter, Evolut™ FX+ TAVR System, Symplicity Spyral™ Renal Denervation System

The Neuroscience Portfolio

Divisions: Cranial & Spinal Technologies, Specialty Therapies (Operating Units: Neurovascular; Ear, Nose, and Throat (ENT); and Pelvic Health), Neuromodulation

Key Products include AiBLE™ Spine Technology Ecosystem, Percept™ family with Adaptive BrainSense Technology, Inceptiv™ Spinal Cord Simulator, InterStim X™ System, Propel™ Sinus Implant

The Medical Surgical Portfolio

Divisions: Surgical & Endoscopy (Operating Units: Surgical and Endoscopy), Acute Care & Monitoring

Key Products include LigaSure™ Maryland Jaw Thoracic Sealer/Divider, ProGrip™ Laporoscopic Self-Fixating Mesh, Hugo™ RAS system, GI Genius™ Intelligent Endoscopy Module, Nellcor™ Pulse Oximetry Sensor

The Diabetes Operating Unit

Management of Type 1 and Type 2 diabetes

Key Products include MiniMed™ 780G System with Simplera Sync™ and Extended Infusion Set, Guardian™ Sensor 4, InPen™ SmartInsulin Pen with Simplera™ CGM, Guardian™ Connect CGM System, Extended Infusion Set

- CGM: Continuous glucose monitoring

Employment (according to Medtronic SEC 2024 10-K Filling): 95,000+ employees, of which 44% are based in the U.S. or Puerto Rico.

Revenue (according to Medtronic Q4 Press Release): FY24 worldwide revenue of **$32.364 billion**, an increase of 3.6% as reported and 5.2% on an organic basis. The FY24 organic revenue growth comparison excludes:

- $111 million of current year revenue and $358 million of prior year revenue reported as Other, stemming from business separations and product line exits;
- $43 million of favorable impact from foreign currency translation on the remaining segments
- $265 million of prior year revenue from a one-time IP agreement

FY24 GAAP net income and diluted earnings per share (EPS) were $3.676 billion and $2.76, respectively, both representing decreases of 2%. As detailed in the financial schedules included at the end of this release, fiscal year 2024 non-GAAP net income and non-GAAP diluted EPS were $6.918 billion and $5.20, respectively, both representing decreases of 2%. Included in FY24 non-GAAP diluted EPS was a 33 cent unfavorable impact from foreign currency translation. FY24 non-GAAP diluted EPS on a constant currency basis increased 5%.

Market Cap (intraday Aug 8, 2025): **118.24 Billion USD**

Recent News (as of Aug 8, 2025):

Medtronic Diabetes shares preview of new Abbott sensor made for MiniMed insulin delivery systems (Aug 8, 2025): soon to be MiniMed after its planned separation from the medtech giant.

- A new sensor specifically designed for its own systems is called “Instinct,” built on the Abbott FreeStyle Libre platform.
- Medtronic and Abbott — two of the largest diabetes tech companies in the world — announced a year ago that they entered into a global partnership pairing Abbott continuous glucose monitors (CGMs) with Medtronic insulin delivery systems. The partnership aims to collaborate on a system based on Abbott’s FreeStyle Libre CGMs with Medtronic’s automated insulin delivery technology (the latest generation being the MiniMed 780G) and smart insulin pen systems, such as the InPen system.

Todd Davis: Third Major Deal of 2025 – Ligand and Medtronic Committed Over $70 million (Aug 6, 2025): to advance Orchestra’s late-stage partnered cardiology programs: AVIM therapy and Virtue SAB. These are high-impact, device-based therapies targeting high-risk patient populations with hypertension and arterial disease, two of the most significant global health challenges.

More Downside For Medtronic Stock? (Aug 5, 2025): Medtronic (NYSE:MDT), which is renowned for inventing the world’s first battery-operated implantable pacemaker, has over time earned respect as a worldwide leader in medical technology and has created substantial value for its shareholders. Its stock presents a more cautious narrative today, with a 50% decline in its stock from its 2021 peak

- Partly attributed to the recall of its MiniMed 600 and 700 series insulin pumps over battery complications.
- In the past year, Medtronic reported nearly $33.2 billion in revenue and $4.3 billion in net income, indicating slight top-line growth and consistent profitability. However, operating cash flow has been relatively weak and erratic, with only $127 million recorded in the latest quarter — a sum representing less than 0.5% of revenue and suggesting tighter cash generation despite stable earnings.
- While Medtronic continues to innovate within its healthcare segment, current economic challenges may hold greater significance.

United States Smart Pills Market Research and Company Analysis Report 2025-2033 Featuring Check-Cap, General Electric, Fujifilm, Koninklijke Philips, Medtronic, Olympus, Novartis, Otsuka (Aug 5, 2025): United States Smart Pills Market is expected to reach US$ 4.13 billion by 2033 from US$ 1.53 billion in 2024, with a CAGR of 11.66% from 2025 to 2033. Rising demand for minimally invasive diagnostics, an increase in gastrointestinal disorders, an aging population, improvements in wireless

capsule technology, rising healthcare costs, and significant R&D investments from pharmaceutical and medical device companies are some of the major factors propelling the U.S. smart pill market.

- Smart pills, sometimes referred to as digital pills or ingestible sensors, are cutting-edge medications with microscopic electronic parts that allow for data collecting and remote monitoring.

Partnering to expand access to advanced patient monitoring technologies: Medtronic (Aug 1, 2025): Philips has formed a technical partnership with Medtronic to expand the clinical capabilities of Philips' patient monitoring solutions. This partnership builds upon years of collaboration between Philips and Medtronic that began 30 years ago in 1992.

Medtronic wins US appeal to overturn $106.5 mln heart-valve patent verdict (Jul 28, 2025)

Medtronic secures CE Mark for MiniMed™ 780G System for insulin-requiring people with diabetes including expanded indications in children as young as two, during pregnancy, and for type 2 diabetes (Jul 21, 2025): announced CE (Conformité Européenne) Mark in Europe to expand indications of the MiniMed™ 780G system. This expanded indication underscores the commitment Medtronic has to advancing access to automated insulin delivery (AID) technology for broader and more diverse populations, helping to improve outcomes and quality of life for people at every stage of life living with diabetes. Automated insulin delivery (AID) systems are rapidly becoming the standard of care for children with type 1 diabetes across Europe.

Beckman Coulter Life Sciences

Life Sciences: https://www.beckman.com/
Diagnostics: https://www.beckmancoulter.com/
Founded in **1935**, the company focuses on **biotechnology** research and provides solutions in the areas of liquid handling, genomics, flow cytometry, particle analysis/counting, and centrifugation.
In 2012 Danaher purchased Beckman Coulter and divided the company into two operating companies, Diagnostics (HQ - **Brea, CA**) and Life Sciences (HQ – **Indianapolis, IN**). Associates live and work in more than **40 countries** across the world.
Focus: Beckman Coulter Life Sciences is a leader in scientific research instruments primarily serving the academia and pharma markets. The company also serves the clinical research market as well as applied markets such as agricultural, food and beverage, gas and oil, aerospace, among several others.
Current research areas include stem cells, 3D cell culture, biologics, dendritic cells, immunotherapy, and small particles.
Employment: The Life Sciences division has over 3,300 global colleagues (according to Beckman Coulter Life Sciences LinkedIn as of Aug 8, 2025). Beckman Coulter Diagnostics has more than 11,000 global team members (according to Beckman Coulter Diagnostics LinkedIn as of Aug 8, 2025).
Revenue: 3.2101 Billion USD (according to Beckman Coulter SEC 2024 10-K Filling). Note that this was prior to the Danaher acquisition and is the combined revenue of the now Diagnostics and Life Sciences division.
Market Cap: N/A - as a subsidiary, Beckman Coulter Life Sciences does not have a separate market capitalization; Danaher Corporation's market cap is 143.53 Billion USD (intraday Aug 8, 2025)
Recent News (as of Aug 8, 2025):
Designing the laboratory of the future: How sustainability and paperless workflows are shaping scientific innovation (Jul 27, 2025): Health system laboratories are on the front line of the effort to reduce emissions; new technology is enabling labs to digitize many of the processes that they traditionally performed manually

- In flow cytometry, it's now possible to fully automate sample preparation and testing, and to generate more information per tube than what was possible with older-generation technologies. Beckman Coulter Life Sciences offers a range of such technologies
- Reducing reagent waste: Health Services Laboratories created a collection of tubes that allow a fully automated set of panels for the diagnosis of acute and chronic leukemia and lymphomas while also utilizing reagents and analytical software from Beckman Coulter Life Sciences. The improvement in sustainability resulted from a reduction in manual processes
- Going paperless: required all raw data to be electronically transferred from the flow cytometers to the software system from Beckman Coulter Life Sciences, rather than printing the pages or having to manually transfer data via USB drives.
- Eliminating plastics: Laboratories can streamline sample preparation and cocktailing in ways that greatly reduce plastic use. Beckman Coulter Life Sciences offers cocktails that are made-to-order based on research requirements, and can contain uniform dried reagents.
- Productivity benefits: Automated, paperless workflows also free up researchers and clinicians to spend more time doing the work that matters most to them.

InBio and Beckman Coulter Life Sciences partner to advance food allergy research (Jul 24, 2025): enhance the performance of basophil activation tests (BAT) for food allergy research. The collaboration

integrates InBio's Food Protein Standards and purified allergens with the Next-Generation Basophil Activation Test (BAT) platform from Beckman Coulter Life Sciences.

Beckman Coulter Life Sciences Launches Modular Spectral Flow Cytometry Module, First of Its Kind in Industry (Mar 28, 2025): The CytoFLEX mosaic Spectral Detection Module offers substantially greater fluorescence sensitivity when connected to the CytoFLEX LX or S Flow Cytometers. The solution addresses challenges with dim and complex multicolor experiments because it can detect nanoparticles as small as 80 nm. The instrument provides two unmixing algorithms and up to 10 autofluorescence channels, with up to 88 detection channels. As a result, richer data can be generated from spectral analysis that can help untangle the complexities of biological systems and diseases faster. It also allows for a nuanced understanding of immune cell subsets and their functions and interactions by simultaneously detecting multiple markers.

Beckman Coulter Life Sciences and Rarity Bioscience partner to advance oncology research (Mar 18, 2025): Beckman Coulter Life Sciences, a global leader in laboratory automation and innovation, has partnered with Rarity Bioscience.

- Through a co-exclusive distribution agreement, Beckman Coulter Life Sciences will market and distribute Rarity Bioscience's superRCA® technology assays, significantly extending the reach of this advanced molecular research solution.
- The superRCA technology accelerates mutation detection with dramatically higher sensitivity compared to the widely used digital PCR (dPCR). This advancement is expected to establish new standards in molecular oncology and measurable residual disease (MRD) research.

FDA clears Beckman Coulter's DxC 500i Clinical Analyzer (Mar 11, 2025): The integrated clinical chemistry and immunoassay analyser claims to deliver up to 800 clinical chemistry tests and 100 immunoassay tests every hour, which is crucial for making timely clinical decisions. Since July 2024, the DxC 500i Clinical Analyzer has been available in nations that accept the CE mark.

Beckman Coulter Receives FDA Breakthrough Device Designation for Alzheimer's Disease Blood Test (Jan 28, 2025): Beckman Coulter Diagnostics, a global leader in clinical diagnostics, announced FDA granted Breakthrough Device Designation to Beckman Coulter's Access p-Tau217/β-Amyloid 1-42 plasma ratio. This blood test is designed to aid healthcare providers identify patients with amyloid pathology associated with Alzheimer's disease.

Genezen

https://www.genezen.com/

A Contract Development and Manufacturing Organization (CDMO) dedicated to advancing gene and cell therapies by providing cutting-edge viral vector services and manufacturing solutions.

Founded in 2014 in **Indianapolis, IN**, Genezen's state-of-the art **Lexington, MA** site holds multiple global regulatory licenses, including with the FDA, EMA, Health Canada, and MFDS Korea, in support of the active manufacture of a commercial viral vector-based product. Genezen produces viral vectors using meticulously validated processes within our state-of-the-art FDA-compliant facility in **Fishers, IN**, just outside of Indianapolis, which has been purposefully designed to accelerate and streamline the gene therapy development process with integrated, on-site testing alongside cGMP manufacturing, ensuring efficiency and adherence to the highest quality standards.

Focus: Specializing in lentiviral, retroviral, and adeno-associated viral vectors. Genezen partners with innovator organizations to deliver potentially life-saving gene and cell therapies – from concept to commercial.

Employment (according to Genzen LinkedIn as of Aug 8, 2025): 201-500 employees

Revenue (according to Genzen website as of Aug 8, 2025): Revenue growth FY 2017 to 2019 was 424%. 2019 revenue was $15.1 million. Genezen was the "fastest growing" company in Indiana, 2020.

- Genezen started out doing its manufacturing at Cincinnati Children's Hospital, then at the Centre for Commercialization of Regenerative Medicine in Toronto. But last year, after "the field exploded" and Genezen tripled its business, [Bill] Vincent decided the company needed its own manufacturing facility. He decided to locate in Fishers, where the company is building a 25,000-square-foot facility with its own "clean room."

Market Cap: N/A - private company and does not have a publicly traded stock, therefore it does not have a market capitalization

Recent News (as of Aug 8, 2025):

New partners to help develop CAR T-cell therapy for brain cancer (May 15, 2025): Optieum Biotechnologies and Genezen are teaming up to help develop OPTF01, an experimental cell therapy for glioblastoma, an aggressive form of glioma. Glioblastoma is the most common type of primary brain tumor that affects adults. OPTF01 is a CAR T-cell therapy, a type of immunotherapy that aims to kill cancer cells by weaponizing the body's immune system.

Genezen Partners with Elly's Team on Development for AAV Serotype 9 Gene Replacement Therapy for NEDAMSS; Genezen CTO Dr. Susan D'Costa to join nonprofit's board (May 12, 2025): Genezen, a leading gene therapy CDMO, has partnered with Elly's Team, a foundation dedicated to accelerating the translation of medical research into treatments, for an AAV9 gene replacement therapy targeting Neurodevelopmental Disorder with Regression, Abnormal Movements, Loss of Speech, and Seizures (NEDAMSS).

UniQure sells gene therapy manufacturing site to Genezen, along with production of CSL's Hemgenix (Jul 1, 2024): With biotech uniQure focused on reducing its expenses and CDMO Genezen zeroed in on growth, the two gene therapy specialists have made a timely deal.

- UniQure has sold its commercial viral vector manufacturing facility in Lexington, Massachusetts, to Genezen, which will now supply uniQure's clinical portfolio and produce CSL Behring-partnered hemophilia B gene therapy Hemgenix from the site.

- In an SEC filing, uniQure said that it will receive $25 million from Genezen in preferred stock and a convertible note, allowing uniQure to pay off a $50 million loan debt. Helping Genezen fund the agreement is Ampersand Capital Partners.

Genezen Secures $18.5 Million in Growth Equity to Expand Viral Vector Development and Manufacturing Capabilities (Nov 2, 2023): $18.5 million follow-on growth equity investment led by Ampersand Capital Partners. The financing will accelerate Genezen's growth trajectory in retroviral, lentiviral and adeno-associated viral (AAV) vector manufacturing and support the execution of a robust pipeline of customer projects for innovators developing groundbreaking cell and gene therapies.

With new facility and leadership, CDMO Genezen is stepping up to the big leagues (Sep 17, 2021): Thanks in part to an undisclosed investment from Ampersand Capital Partners, Genezen is building a new site that will transform it from a small networking firm to a full-fledged cell and gene therapy CDMO.

Point Biopharma

http://www.pointbiopharma.com

Eli Lilly and Company announced the successful completion of its acquisition of POINT Biopharma Global Inc., a radiopharmaceutical company with a pipeline of clinical and preclinical-stage radioligand therapies in development for the treatment of cancer (According to Dec 27, 2023 news release).

Prior to the agreement, POINT Biopharma, founded in 2019, was made up of three wholly-owned subsidiaries, POINT Biopharma Corp., located in Canada, and POINT Biopharma USA Inc. and West 78th Street, LLC which are both located in the USA.

Initially headquartered in **Toronto, Canada**, Point Biopharama now has its research and development center located in Toronto. However, the company established its first U.S. manufacturing facility and currently has its corporate headquarters in **Indianapolis, Indiana**. This Indianapolis facility is also a significant radiopharmaceutical manufacturing campus.

Scioto Biosciences

https://sciotobiosciences.com/

Scioto Biosciences is a clinical-stage biotechnology company dedicated to innovative research and discovery in the field of microbiome therapeutics. Headquartered in **Fishers, Indiana**, with research facilities in **Indianapolis, Indiana**. It was founded in **2017** through a partnership between **Monon Bioventures**, an Indiana-based business accelerator, and **The Research Institute at Nationwide Children's Hospital (RINCH)** in **Columbus, Ohio**. This collaboration provided Scioto Biosciences with exclusive global licensing rights to RINCH's microbiome platform technology.

Focus: Proprietary Activated Bacterial Therapeutics (ABT) platform for delivering best-in-class, live therapeutic bacteria to the gut. Our solution is focused on the activation of beneficial bacteria that have the potential to advance healing for various diseases associated with the GI tract, Oncology and CNS indications.

Employment (according to SciotoBiosciences LinkedIn as of Aug 8, 2025): 2-10 employees

Revenue: unknown

Market Cap: N/A - privately held company, therefore, it does not have a market capitalization

Recent News (as of Aug 12, 2025):

Results of a phase Ib study of SB-121, an investigational probiotic formulation, a randomized controlled trial in participants with autism spectrum disorder (Mar 30, 2023)

List Bio Raises $48.4M for Global Scale-Up (Apr 13, 2022):

- With the Series A investment, List Bio plans to establish a manufacturing facility in the Fishers Life Science & Innovation Park in Fishers, Indiana.
- List Bio is the latest venture of Genome and Company, a global provider of microbiome anticancer drug development, which has expanded into the U.S. in the last 18 months with a majority strategic investment in List Labs and Scioto Biosciences located in Campbell, CA and Fishers, IN.

NERx Biosciences

https://www.nerxbiosciences.com/

A pre-clinical stage biotechnology company developing novel anticancer therapeutics targeting DNA damage response (DDR) and DNA repair. Founded in 2009 and headquartered in Indianapolis, IN.

Focus: developed a novel strategy to realize the full therapeutic promise of the DDR, by targeting the proteins that detect DNA damage (DDR sensors), as opposed to proteins that react to the sensors (DNA kinases), to initiate DNA repair pathways.

Employment

Revenue

Market Cap

Recent News

MBX Biosciences

https://mbxbio.com/

A clinical-stage biopharmaceutical company pioneering Precision Endocrine Peptide™ (PEP™) therapeutic candidates to help people with endocrine and metabolic disorders live fuller and healthier lives. Founded in 2019 and headquartered in Carmel, IN (~15.7 mile drive from Indianapolis, IN).

Focus: MBX is advancing a pipeline of PEPs for clinically validated targets designed to deliver superior pharmaceutical properties and overcome key limitations of native peptide therapeutics.

Employment

Revenue

Market Cap

Recent News

BiomEdit

https://biomedit.com/

A biotechnology company that discovers, designs, and develops novel microbiome-derived products to address unmet needs in animal health. Founded in 2022 and headquartered in Greenfield, Indiana (~25.1 mile drive from Indianapolis, IN).

Focus: BiomEdit's technology is based on a unique platform that utilizes high-throughput sequencing and data analytics to rapidly discover and screen novel probiotic species and bioactive molecules. These can then be engineered to confer thermostability, enhanced production of beneficial metabolites, or expression of immune modulating proteins. These probiotics and microbially-derived compounds represent the next generation of products designed to promote animal health without the use of antibiotics.

Employment

Revenue

Market Cap

Recent News

Waterway Labs

https://www.waterway-labs.com/

100,000 SF of purpose-built lab space in the heart of Indianapolis, IN's booming research market, Waterway Labs is built to amplify one of the most innovative communities in Indiana.
Focus: HATCHspaces® is a revolutionary real estate platform meticulously crafted for the dynamic field of life sciences. By creating a platform that caters to the full life cycle of biotech professionals and lowering barriers to entry, HATCHspaces sets out to become the home for STEM-based startups and the birthplace of bold new ideas.
Employment
Revenue
Market Cap
Recent News

Heartland BioWorks

https://www.heartlandbioworks.com/home
Founded in 2024 and based in Indianapolis, IN. A biotech manufacturing Regional Tech Hub, built on a powerful consortium of leading biotech companies, research institutions, and government partners. Powered by the Applied Research Institute (ARI), Heartland BioWorks accelerates workforce development and innovation in next-gen biotechnology, advancing economic growth to strengthen national security and solidify Indiana's position as a global leader in biotech.
Focus: catalyze innovation and entrepreneurship in next-gen biotech
Employment
Revenue
Market Cap
Recent News

Philadelphia (and the Greater Philadelphia Region)

One of the top US life sciences hubs; known for cell and gene therapy, biotech, and startup incubation.

Philadelphia is home to one of the fastest growing and most collaborative life sciences ecosystems in the country. From gene and cell therapy to digital health, the city is at the forefront of healthcare innovation, making it an inspiring setting for meetings, conventions, and scientific gatherings of all kinds.

University of Pennsylvania

The University of Pennsylvania (Penn) is a prestigious Ivy League research university located in Philadelphia, Pennsylvania. Founded in 1740, Penn is renowned for its rigorous academics, pioneering research, and interdisciplinary approach to education. It is home to world-class schools including the Perelman School of Medicine and the Wharton School of Business. Penn plays a leading role in advancing life sciences, medicine, and technology through cutting-edge research, innovation hubs like Pennovation Works, and strong partnerships with industry and healthcare organizations.

Research Activity Designation (according to Carnegie Classification as of Aug 12, 2025): Research 1: Very High Research Spending and Doctorate Production

- 647 Research Doctorates
- $1,953,617,000 Research Spending

Recent News (as of Aug 12, 2025):

AI Uncovers New Antibiotics in Ancient Microbes (Aug 12, 2025): In a new study published in Nature Microbiology, researchers at the University of Pennsylvania used artificial intelligence to identify previously unknown compounds in Archaea that could fuel the development of next-generation antibiotics. In the past, de la Fuente's lab has used AI models to identify antibiotic candidates in a range of unlikely sources, from the DNA of extinct organisms to the chemicals in animal venom. Now, they're applying those tools to a new set of data: the proteins of hundreds of ancient microbes.

NIH restores Penn research grants following federal court order, termination appeal (Aug 11, 2025): The National Institutes of Health — which terminated several Penn research grants in March 2025 — reinstated funding for three University research project grants in recent weeks.

After receiving termination notices from the agency, grant holders at Penn were given the opportunity to appeal their loss of funding. Some reinstatements were awarded following the appeal process, while others were mandated by federal court rulings.

Could exoplanets locked in eternal day and endless night support life? (Aug 8, 2025): Daisuke Noto, a postdoctoral researcher in Hugo Ulloa's Penn GEFLOW Lab at the University of Pennsylvania, wondered if such a severe environment could support life. "Just looking at the extreme temperatures on the day and night sides—like 1,000-2,000 Kelvin on the day side and absolute zero on the night side—might lead one to conclude these exoplanets are too harsh for life. But," says Noto, "life might find a way."

Penn renames behavioral science building after donor ends support over antisemitism concerns (Aug 6, 2025): Penn has quietly removed the name of 1967 College graduate Stephen Levin from the behavioral sciences building he previously endowed after the longtime University donor halted his contributions over the administration's handling of antisemitism on campus following the Palestine Writes Literature Festival and the start of the Israel-Hamas war.

Drexel

Drexel University is a private research university in Philadelphia, Pennsylvania, founded in 1891. Known for its strong cooperative education (co-op) program, Drexel integrates real-world work experience with academics. It offers over 200 programs across disciplines like engineering, business, and health sciences. Drexel's urban campus is located in University City and is consistently ranked among the top 100 national universities in the U.S.

Research Activity Designation (according to Carnegie Classification as of Aug 12, 2025): Research 1: Very High Research Spending and Doctorate Production

- 267 Research Doctorates
- $169,583,000 Research Spending

Recent News (as of Aug 12, 2025):

Drexel to Lead $5 Million Multinational Effort to Produce MXene Materials for Water Desalination and Medical Diagnostics (Jul 23, 2025): Drexel University is embarking on a three-year, $5-million multinational collaboration to produce MXene nanomaterials. The project, which is a collaboration with Kalifa University in the United Arab Emirates, the University of Padua in Italy and the Kyiv, Ukraine-based MXene manufacturing company Carbon-Ukraine, seeks to use the promising nanomaterial, first discovered at Drexel, to provide clean drinking water for arid areas of the world threatened by climate change and improve cell labeling and tracking technology for biomedical analysis.

Jefferson Health

https://www.jeffersonhealth.org/home

Thomas Jefferson University Hospitals, Inc, branded as Jefferson Health, is a multi-state non-profit health system whose flagship hospital is Thomas Jefferson University Hospital in Center City Philadelphia. Founded in 1995 and headquartered in Philadelphia, PA, Jefferson Health provides medical services across more than 200 specialized centers, programs, departments and divisions.

Focus:

Centers & Institutes: Aphasia Center; Cardeza Foundation for Hematologic Research; Center for Connected Care; Center for Infection Prevention & Antibiotic Stewardship (CIPAS); Center for Injury Research & Prevention; Center for Translational Medicine; Center for Vaccines & Pandemic Preparedness; Center of Immersive Arts for Health; Computational Medicine Center; Daniel Baugh Institute for Functional Genomics /Computational Biology; Fashion & Textiles Future Center; Institute for Smart & Healthy Cities; Jefferson Clinical Research Institute (JCRI); Jefferson Moss Rehabilitation Research Institute; Klein Family Parkinson's Rehabilitation Center; Maternal Addiction Treatment, Education & Research (MATER); Melanoma Research Institute of Excellence (MRIE); Sidney Kimmel Comprehensive Cancer Center; Vickie & Jack Farber Institute for Neuroscience; Wills Vision Research Center at Jefferson

- 1,000+ Patents for new drugs, software innovations, medical devices & diagnostic tools
- $86,135,132 In National Institutes of Health (NIH) funding
- 1,200+ Applied, basic, clinical and scholarly research studies across Thomas Jefferson University and Jefferson Health

Recent News (as of Aug 11, 2025):

Jefferson Health Earns Get With The Guidelines® Achievement Awards from the American Heart Association and American Stroke Association (Aug 6, 2025)

LVHN and Jefferson Health Celebrate First Year of Merge | WDIY Local News (Aug 5, 2025): In the past year, Jefferson has expanded its services into the Lehigh Valley region.

- New services are being provided at the area's first Women's Health Center and a primary and specialty care health center, both on the former site of Bethlehem Steel's Martin Tower.
- Jefferson is preparing to open Hanover Hill Behavioral Health Hospital in partnership with Universal Health Services, an expanded emergency room at Lehigh Valley Hospital - Muhlenberg, and neighborhood hospitals and Tannersville and Hellertown.

Here's how Jefferson Health will spend a new $28M donation from the Kimmel family in Philly (Jul 9, 2025): Thomas Jefferson University Hospital is expanding and renovating its busy Center City emergency department this summer, backed by a $28 million gift from the Sidney Kimmel Foundation — a major show of support from one of Philadelphia's most prominent philanthropic names, the health care giant announced on Wednesday.

Jefferson Health reaches multi-year agreement with Cigna (Apr 4, 2025): Cigna is a global health benefits provider

Spark Therapeutics

http://www.sparktx.com

A biopharmaceutical company specializing in developing and delivering gene therapies. Founded in 2013 and headquartered in Philadelphia, PA, it was the first US company to receive FDA approval for a gene therapy for a genetic disease. Now part of the Roche Group, Spark focuses on challenging the limitations imposed by genetic diseases.

Focus: blindness, hemophilia, lysosomal storage disorders, and neurodegenerative diseases.

Employment (according to Spark Therapeutics LinkedIn as of Aug 11, 2025): 501-1,000 employees

Revenue: Unknown

Market Cap: N/A - Spark Therapeutics is no longer an independent publicly traded company. It was acquired by Roche in 2019 for $4.8 billion. At the time of the acquisition, its market cap was approximately $1.95 billion.

Recent News (as of Aug 11, 2025):

Spark Therapeutics Cuts 298 Employees as Part of Reorganization (Apr 4, 2025): In a reorganization first divulged in January, Philadelphia-based Spark Therapeutics, Roche's gene therapy subsidiary, is letting go of 298 employees in Philadelphia.

- The cuts will come in three waves starting May 9 and ending Dec. 31, according to a Worker Adjustment and Retraining Notification notice.
- With the move, Spark is potentially halving its staff.
- In its January financial report, Roche noted that the reorganization would involve integrating some of the biotech's operations into the Swiss pharma's broader pharmaceutical division. Roche estimated restructuring costs at about $341 million.

Spark Therapeutics is laying off 337 people, more than half its workforce, starting in May (Apr 3, 2025): Spark Therapeutics, a gene therapy pioneer based in Philadelphia's University City, is laying off 337 employees, more than half its workforce, as part of a restructuring by its owner, Swiss pharmaceutical giant Roche Group, Spark said Thursday.

- Another 310 Spark employees will be integrated into Roche and remain in Philadelphia, Spark spokesperson Denise Bradly said in an email. Roche announced the restructuring Jan. 30.
- A Spark gene therapy candidate for hemophilia A, known as SPK-8011, was the financial and clinical centerpiece of that deal. Roche ended the development work on it last year as the company rethinks its approach to the blood disease.

UPDATE: Roche overhauls Spark gene therapy unit, recording $2.4B in full impairment (Mar 10, 2025): Roche has recently launched a "fundamental reorganization" of Spark Therapeutics, the gene therapy unit the Swiss pharma bought for $4.3 billion in 2019.

- The move is part of the company's wider strategic change across its pharma division, a company spokesperson told Fierce Pharma.
- The entire Spark team is subject to reshuffling, raising a question of whether the Spark brand itself will be preserved. Of the 647 employees that Spark employed as of April 17, 337 employees will be laid off, while the rest 310 will have their jobs integrated into the parent Roche, a Roche spokesperson told Fierce Pharma in an update.
- In late 2021, Roche committed to a $575 million plan to build a new 500,000-square-foot gene therapy innovation center in Philadelphia. The multistory facility continues to be built, according to the spokesperson.

- Roche was reorganizing Spark before the latest revelation, incurring 162 million Swiss francs ($184 million) in restructuring costs of the unit in 2024. For the new "fundamental reorganization," Roche's preliminary estimate suggests an additional cost of 300 million Swiss francs ($340 million) in 2025.

Pfizer stops selling hemophilia gene therapy, citing weak demand (Feb 21, 2025): Originally developed by Spark Therapeutics, Beqvez was licensed by Pfizer in 2014 and gained U.S. approval last April for people with hemophilia B, the less common form of the genetic bleeding condition. No sales have been disclosed by Pfizer.

Layoffs Continued Across Biopharma in 2024 (Dec 31, 2024): While layoffs slowed in the second half of 2024, biopharmas including Bayer, Bristol Myers Squibb and Johnson & Johnson cut hundreds or even thousands of employees over the course of the year. Just as 2023 was a tough year for the biopharma industry, so was 2024. Scores of pharmas and biotechs downsized and restructured their workforces to stay afloat.

- Roche's Spark Therapeutics is laying off staffers and halting some of its early-stage programs, Endpoints News reported Thursday. A spokesperson for the Philadelphia-based gene therapy biotech told the publication that the company is pivoting its strategy to "accelerate its pipeline and help bring more therapies to patients sooner, but this move will include 'organizational changes.'"
- Spark has two late-stage trials in hemophilia A and hemophilia B in its pipeline and an early-stage asset for treating Pompe disease. The biotech has around 800 employees and was purchased by the Swiss pharma in 2019 for approximately $4.8 billion.

Spark Therapeutics CEO departs to lead another life sciences company (Sep 3, 2024)

Roche's gene therapy biotech Spark is laying off employees, ending some early-stage programs (Jul 11, 2024)

Roche completes $4.3B purchase of Philadelphia gene therapy pioneer Spark Therapeutics (Dec 17, 2019): Spark — which has grown to more than 300 employees — will continue to be based in Philadelphia and operate as a wholly owned subsidiary of Roche. Spark's shares will cease to be traded on the NASDAQ Stock Market.

Minaris Advanced Therapies

(Formerly Minaris Regenerative Medicine/WuXi Advanced Therapies/Advanced Therapies)
https://minaris.com/
Through strategic acquisitions made by New York–based investment firm Altaris, Minaris Regenerative Medicine and the U.S. and U.K. operations of WuXi Advanced Therapies have been combined to form Minaris Advanced Therapies™, a global cell therapy CDMO (Contract Development and Manufacturing Organization) and testing partner. The company is headquartered in **Philadelphia, PA**.
With a robust track record of 7,500+ GMP batch releases, 650,000 sq ft of facilities, and commercial read facilities in the **U.S., Europe, and Japan**, they provide a low-risk pathway from Phase 1 to commercial production, ensuring seamless scale-up. Commercial partner with two sites in the U.S. currently manufacturing approved products.
Focus: the development, manufacturing, and testing of cell and gene therapies. They are a global contract development and manufacturing organization (CDMO) and contract testing provider. Their services span from early-stage development to clinical trials and commercial manufacturing.
Employment (according to Minaris Advanced Therapies LinkedIn as of Aug 11, 2025): 1,001-5,000 employees
Revenue: Unknown
Market Cap: N/A - is not publicly traded
Recent News (as of Aug 11, 2025):
Philadelphia-based Minaris Advanced Therapies cuts jobs two months after launch (Jul 9, 2025)
Minaris Advanced Therapies Opens New State-of-the-Art GMP Facility to Support Global Cell and Gene Therapy Growth (Aug 4, 2025): announced the opening of its new GMP manufacturing facility in Munich, Germany. The facility, located in Taufkirchen, strengthens Minaris' global manufacturing network and reinforces its position as a trusted partner in advancing cutting-edge therapies from concept to commercialization.
China's WuXi to sell Advanced Therapies unit amid US restrictions (Dec 24, 2024)
WuXi AppTec Signs Definitive Agreement to Sell WuXi Advanced Therapies to Altaris, LLC (Dec 23, 2024): In 2024, WuXi AppTec's US and UK based operations of WuXi Advanced Therapies (ATU), its cell and gene therapy unit, was sold to Altaris, LLC, a healthcare investment firm headquartered in New York. WuXi AppTec's major business units – WuXi Chemistry, WuXi Biology and WuXi Testing's operations remained unchanged.

- WuXi AppTec is a global pharmaceutical CRDMO (Contract Research, Development, and Manufacturing Organization) providing integrated drug discovery, development & manufacturing services across Asia, Europe & North America. WuXi PharmaTech was founded in December 2000 in Shanghai.

Altaris to Acquire Minaris Regenerative Medicine from Resonac (Sep 24, 2024): Altaris, LLC (collectively with its managed funds, "Altaris") announced today that it has entered into a definitive agreement to acquire Minaris Regenerative Medicine (Minaris Regenerative Medicine, LLC in the United States, Minaris Regenerative Medicine Co., Ltd. in Japan, Minaris Regenerative Medicine GmbH in Germany, and along with its subsidiaries, "Minaris") from Resonac Corporation, a subsidiary of Resonac Holdings Corporation (TYO: 4004) ("Resonac").

- Minaris is a cell therapy contract development and manufacturing organization ("CDMO") that provides autologous and allogeneic manufacturing services for pharmaceutical and biotech customers globally.

- Founded in 1999 as Progenitor Cell Therapy, Minaris has been a pioneer in the field, including through its role in manufacturing pivotal study batches for Dendreon's Provenge®, the first cell therapy approved for cancer treatment.
- Today, Minaris operates six facilities across the United States, Germany, and Japan and has more than 500 employees. Through its strategic footprint and manufacturing expertise, Minaris enables leading cell therapy companies to deliver life changing products to patients globally.

Integral Molecular

https://www.integralmolecular.com/

Since **2001**, headquartered in **Philadelphia, PA**, Integral Molecular is the industry leader in isolating and characterizing complex membrane proteins. With 20+ years of experience focusing on membrane proteins and antibodies, their technologies have enabled hundreds of companies worldwide working in research, drug discovery, and vaccine development.

Focus: target biology, antibody discovery, virology, and protein engineering to advance therapies against difficult-to-treat diseases.

Employment (according to Integral Molecular LinkedIn as of Aug 11, 2025): 51-200 employees

Revenue: unknown

Market Cap: N/A - privately held company - does not have a publicly available market capitalization

Recent News (as of Aug 11, 2025):

Integral Molecular Out-Licenses First-in-Class Antibody Panel Targeting SLC2A4 Glucose Transporter (Jun 17, 2025): out-licensed a panel of highly selective antibodies for the glucose transporter SLC2A4 (also known as GLUT4) for therapeutic development. The transporter has eluded antibody discovery efforts due to its structural complexity, making it inaccessible using traditional antibody discovery methods.

The antibodies licensed by Integral Molecular represent the first-ever monoclonal antibodies described against SLC2A4 and include antibodies specific to the inward-open and outward-open states of the transporter.

These molecules were discovered using Integral Molecular's proprietary technology suite, specifically tailored to access difficult membrane protein targets.

Integral Molecular Named a Top Workplace by Philadelphia Inquirer (May 21, 2025): Integral Molecular, a founding member of Philadelphia's biotechnology hub.

FDA Accepts Integral Molecular's Membrane Proteome Array™ Qualification Plan, Advancing the Platform for Approval as a Drug Development Tool (Feb 5, 2025): Antibody drug developers already routinely include MPA data in regulatory packages, and qualification as a DDT (Drug Development Tool) will allow them to further rely on the MPA in the approval process. Integral Molecular's MPA is the industry-leading technology for antibody specificity testing and is the only specificity platform under FDA consideration as a DDT.

Integral Molecular Awarded $2.7 Million to Advance the Membrane Proteome Array™ Towards FDA-Qualification as a Drug Development Tool (Nov 19, 2024): awarded $2.7 million by the NIH Commercialization Readiness Pilot (CRP) Program. This funding will support FDA-qualification of Integral Molecular's Membrane Proteome Array™ (MPA), a next-generation technology that provides critical safety data required for Investigational New Drug (IND) filings of biologic drugs.

- The MPA is a cell-based protein array designed for specificity testing of antibody-based therapeutics and the only platform that screens for specificity using native protein conformations.

Integral Molecular lands $8M NIAID contract to battle emerging viruses (Oct 23, 2024): five-year $8 million contract from the National Institutes of Health's National Institute of Allergy and Infectious Diseases (NIAID) to support the company's continuing research into emerging viruses recognized as potential pandemic threats.

- This marks the fourth similar contract awarded to the company in 15 years. Prior contracts allowed responses to virus outbreaks such as SARS-CoV-2, Zika, Ebola, dengue and chikungunya.

Ex-Penn researcher launches a biotech startup to manufacture antibodies in Philly (May 15, 2024): In mid-May, Philadelphia-based life sciences company Integral Molecular birthed the biotech startup Cell Surface Bio, which manufactures antibodies for industry and academic researchers and scientists.

- Cell Surface Bio's antibodies are derived from a chicken and mass-produced by cloning. It is sold in small quantities and is a very valuable product.

Check out Integral Molecular's new research center in University City (Apr 25, 2023): moved into the One uCity building. The space will accommodate the company's growth over the last few years, including the work it's done to support COVID-19 research.

Integral Molecular joins FDA's ISTAND program (Sep 8, 2022): The program supports, and was created to expand, the drug development tool types listed in the 21st Century Cures legislation. A major goal of the pilot program is to qualify these tools, thus facilitating regulatory review by allowing them to be used in regulatory (IND, NDA or BLA) applications without needing the FDA to reconsider and reconfirm their suitability.

Carisma Therapeutics

(Formerly CARMA Therapeutics)

https://carismatx.com/

Founded in 2016 and headquartered in Philadelphia, PA, Carisma Therapeutics Inc. is a clinical stage biopharmaceutical company. A biotechnology company, focuses on developing transformative therapies to address fibrosis, oncology and autoimmune disorders.

Focus:

- Pioneering the development of CAR-Macrophages, a disruptive approach to immunotherapy. By engaging both the innate and adaptive immune systems to launch a multi-pronged attack on tumors, CAR-Macrophages address the key challenges faced by current cell therapies:

Portfolio (as of Aug 12, 2025):

- CT – 1119 (CAR-Monocyte)
- In Vivo CAR-Macrophage: GPC3+ Solid Tumors
- In Vivo CAR-Macrophage: Oncology Targets
- CT-2401 (Liver Fibrosis)
- Autoimmune Disease

Employment (according to Carisma Therapeutics SEC 2024 10-K Filling): As of December 31, 2024, they had 46 full-time employees, including a total of 22 employees with M.D. or Ph.D. degrees, all of whom are located in the United States. Of these full-time employees, 40 were engaged in research and development activities. On March 31, 2025, in connection with our cash preservation plan, we reduced our employee base to 6 employees, each of whom we believe is necessary to evaluate our strategic alternatives and execute an orderly wind down

Revenue (according to Carisma Therapeutics SEC 2024 10-K Filling): To date, they have not yet commercialized any products or generated any revenue from product sales and have financed operations primarily with proceeds from sales of preferred stock, proceeds from their collaboration with Moderna, research tax credits, convertible debt financing, and completion of the Merger and related financing.

- Through December 31, 2024, they have generated $44.4 million of collaboration revenues related to research and development services, deferred option rights, and milestones.
- Collaboration revenues were $19.6 million and $14.9 million for the years ended December 31, 2024 and 2023, respectively. The increase was primarily related to Moderna's development candidate nomination which resulted in $5.8 million of collaboration revenue consisting of $3.8 million of deferred option rights revenue recognition and $2.0 million of milestone revenue.
- Total research and development expenses in 2024: 59.673 millions

Notable Risks

- Risks Related to Our Financial Position and Need for Additional Capital: Any future resumption of research and development activities would depend on completing a strategic transaction that would support our prior operating plans or otherwise obtaining significant additional funding. Significant additional financing may not be available to us on acceptable terms, or at all.
- Risks Related to Our Evaluation of Strategic Alternatives and Wind Down: Our exploration and pursuit of strategic alternatives may not be successful. If we do not successfully identify a strategic alternative or, if such a strategic alternative is identified, consummate such a transaction, it is highly unlikely that there will be cash available for distribution to our stockholders.

Market Cap (intraday Aug 12, 2025): 11.41 million USD

Recent News (as of Aug 12, 2025):

Carisma Therapeutics, OrthoCellix enter definitive merger agreement (Jun 24, 2025): Carisma Therapeutics (CARM) and OrthoCellix, a wholly-owned subsidiary of Ocugen (OCGN).

- The combined company will focus on the development of OrthoCellix's NeoCart technology for the treatment of knee articular cartilage defects and plans to initiate a U.S. Food and Drug Administration-endorsed Phase 3 clinical trial for NeoCart.
- Under the terms of the merger agreement, OrthoCellix will merge with and into a wholly-owned subsidiary of Carisma, with OrthoCellix continuing as a wholly-owned subsidiary of Carisma and the surviving company of the Merger.

Carisma Therapeutics Provides Corporate Updates (Mar 31, 2025): announced that its Board of Directors has approved a revised operating plan focused on evaluating strategic alternatives while reducing operational cash burn. The Company's goal is to maximize the value of its assets, including its liver fibrosis and oncology development programs, its macrophage and monocyte engineering platform and the CAR-M platform and to realize value from the potential future milestone and royalty payments under Carisma's agreement with Moderna. To support this transition, the Company has reduced its workforce, retaining only those employees deemed essential to pursue strategic alternatives. With these actions, the Company estimates that it has cash and cash equivalents sufficient to fund its operations into the second half of 2025.

Carisma Therapeutics Approves Reverse Stock Split (Aug 8, 2025): Carisma Therapeutics faces severe financial difficulties, with negative equity and ongoing losses

Carisma winds down operations, lays off 95% of remaining staff (Apr 1, 2025): After a year of stripping back its head count and pipeline, Carisma Therapeutics is now cutting down to the bone and laying off any staff "not deemed necessary to pursue strategic alternatives."

- The macrophage-focused therapeutics company is in the process of "identifying and evaluating potential strategic alternatives with the goal of maximizing the value" of its remaining drug candidates.
- Carisma entered 2025 with just $17.9 million left in the bank but said its latest plans would eke out this cash into the second half of the year.

The past 12 months have seen Carisma steadily scale back its pipeline and head count. Exactly one year ago, on April 1, 2024, the company revealed plans to lay off 37% of staff and stop development of a phase 1-stage CAR-macrophage being studied in patients with HER2-overexpressing solid tumors.Then, last December, Carisma said it would wave goodbye to 34% of its remaining workforce, including its chief financial officer, its senior vice president of human resources and its general counsel. The biotech's lead asset, a gene-modified autologous CAR-monocyte cell therapy designed to treat HER2-overexpressing solid tumors, was also discontinued at the time.

- Carisma's role as a cancer drug developer seems to be over, with the company explaining in the filing that it "currently [has] no intention of resuming research and development activities." The biotech has already completed its R&D obligations as part of a CAR-M therapeutics-focused collaboration with Moderna that has seen the biopharma nominate 12 oncology targets to research further.

CARISMA Therapeutics 2025 Q1 Earnings Loss Narrows by 51.2% (Aug 8, 2025): CARISMA Therapeutics narrowed 2025 Q1 net loss by 51.2% to $9.27M, with $3.73M revenue up 9.8% YoY from collaboration activities. Company maintains R&D focus and clinical milestones but faces ongoing losses and volatility amid competitive biologics landscape.

Carisma Therapeutics faces Nasdaq delisting over share price (Jan 10, 2025): The notice, dated January 6, 2025, was issued because Carisma's common stock, currently trading at $0.47, closed below the $1.00 minimum bid price for 38 consecutive business days.

- The Nasdaq Listing Rule 5450(a)(1), also known as the Bid Price Rule, mandates that listed companies maintain a minimum bid price of at least $1.00 per share.
- Despite the notice, Carisma Therapeutics' stock will continue to be traded on The Nasdaq Global Market under the ticker symbol "CARM."

Carisma Therapeutics to Cut 34% of Staff, Reprioritize Pipeline (Dec 10, 2024): Carisma's second workforce reduction this year likely leaves the company with 44 full-time employees as turns its focus to developing therapies for fibrosis, oncology and autoimmune diseases.

- The three affected executives—Richard Morris, CEO; Eric Siegel, general counsel; and Terry Shields, senior vice president of human resources—will exit Dec. 31.
- In addition to its workforce reduction, Carisma's strategic restructuring includes ending development of CT-0525, a gene-modified autologous chimeric antigen receptor-monocyte (CAR-M) cellular therapy intended to treat solid tumors that overexpress human epidermal growth factor receptor 2 (HER2) metastasis. The company had completed patient enrollment of the Phase I clinical trial of CT-0525 but won't enroll patients in the previously planned third cohort of the study.

Carisma Therapeutics Announces Strategic Restructuring to Re-prioritize Pipeline (Dec 9, 2024): announced a strategic reprioritization of its pipeline, cessation of development of CT-0525, and a reduction in the workforce by 34%. These measures will enable Carisma to focus its resources on advancing its in vivo macrophage engineering platform for the development of fibrosis, oncology and autoimmune disease therapies

Carisma Therapeutics Announces Changes to its Board of Directors (Oct 30, 2024): appointment of Sohanya Cheng, MBA to the Company's Board of Directors, effective October 31, 2024. Additionally, Michael Torok has informed the Board of his intention to step down as a member, effective October 31, 2024, due to other professional commitments.

Inovio Pharmaceuticals

https://inovio.com/

INOVIO is a clinical stage biotechnology company founded in 1999 and headquartered in Plymouth Meeting, PA (~15.4 mile drive from Philadelphia).

Focus: developing and commercializing DNA medicines to help treat and protect people from HPV-related diseases, cancer, and infectious diseases

Employment (according to Inovio Pharmaceuticals SEC 2024 10-K Filling): As of February 14, 2025, we employed 134 people on a full-time basis. Of the total, 99 were in product research, which includes research and development, quality assurance, clinical, engineering and manufacturing, and 35 were in general and administrative functions, which includes corporate development, information technology, legal, commercial, investor relations, finance and corporate administration. Approximately one-half of our workforce is comprised of women and approximately one-half is comprised of individuals with ethnically diverse backgrounds.

Revenue (according to Inovio Pharmaceuticals SEC 2024 10-K Filling): Inovio Pharmaceuticals reported total revenue of $217,756 for the full year ended December 31, 2024. This represents a decrease of approximately 74% compared to the 2023 revenue of $832,010.

- During the years ended December 31, 2024 and 2023, we derived 100% and 29%, respectively, of our revenue from ApolloBio.
- All of our revenue for the years ended December 31, 2024 and 2023 was earned in the United States. All of our long-lived assets are located in the United States.

Notable Risks:

- We have incurred significant losses in recent years, expect to incur significant net losses in the foreseeable future and may never become profitable: We have experienced significant operating losses over the last several years. As of December 31, 2024 our accumulated deficit was $1.7 billion. We have generated limited revenues, primarily consisting of license revenue, grant funding and interest income. We expect to continue to incur substantial additional operating losses for at least the next several years as we advance our clinical trials and research and development activities. We may never successfully commercialize our DNA medicine candidates or proprietary device technology and thus may never have any significant future revenues or achieve and sustain profitability.
- A small number of licensing partners and government contracts have accounted for a substantial portion of our revenue.
- We will need substantial additional capital to develop our DNA medicines and proprietary device technology, which may prove difficult or costly to obtain.

Market Cap (intraday Aug 12, 2025): 75.17 million USD

Recent News (as of Aug 12, 2025):

Inovio Pharmaceuticals Announces Public Offering Agreement (Jul 7, 2025): INOVIO Pharmaceuticals entered into an underwriting agreement with Piper Sandler & Co. for a public offering of 14,285,715 shares of common stock and accompanying Series A and B warrants. The company expects net proceeds of approximately $22.5 million from the offering, which is anticipated to close around July 7, 2025, subject to customary conditions. This move is expected to bolster INOVIO's financial position, potentially impacting its market presence and stakeholder interests.

Inovio Pharmaceuticals (NASDAQ:INO) Will Have To Spend Its Cash Wisely (Jun 19, 2025)

INOVIO Highlights Anticipated 2025 Milestones and 2024 Key Accomplishments (Jan 9, 2025).

Anticipated Milestones for 2025: Submit BLA to the U.S. Food and Drug Administration (FDA) by mid-2025 and request priority review. Initiate confirmatory trial. Submit a redosing study protocol to the FDA. Present and publish recently announced durability data and immunology data

2024 Accomplishments:

- Reported data from a retrospective trial showing that half of RRP patients treated with INO-3107 achieved a complete response (CR) and required no surgery when evaluated at the end of year two and into year three after the initial Phase 1/2 trial, increasing from the initial CR rate of 28% at the end of the first year.
- Presented new immunology data demonstrating the ability of INO-3107 to induce antigen-specific T cell responses against HPV-6 and HPV-11 and drive recruitment of those T cells into airway tissues and papilloma of RRP patients, which could potentially slow or eliminate papilloma regrowth.
- Presented the full safety and efficacy data set for the Phase 1/2 trial in which administration of INO-3107 was shown to be well tolerated and resulted in clinical benefit.
- The European Medicines Agency's Committee for Advanced Therapies (CAT) certified the quality and non-clinical data for INO-3107, confirming that CMC data and nonclinical results available to date comply with the scientific and technical standards to be used in evaluating a potential European Marketing Authorization Application.
- INO-3107 was designated an innovative medicine as part of the U.K.'s Innovative Licensing and Access Pathway (ILAP).
- Progressed commercial readiness plans to be launch ready by the end of 2025, including: refining go-to-market strategy focused on patient and physician needs; driving key strategic decisions on pricing and access, product distribution, targeting and segmentation, and product positioning; and developing plans for the build out of the commercial organization.

Merck & Co.

https://www.merck.com/

An American multinational pharmaceutical company headquartered in **Rahway, New Jersey**. The company does business as Merck Sharp & Dohme or MSD outside the United States and Canada. The company is ranked fourth on the list of largest **biomedical** companies by revenue.

In 1917, due to World War I, the United States government confiscated the shares of the American subsidiary of the German Merck company (Merck Group) and sold them. In 1919, George F. Merck bought the American company, making it independent of its former German parent. This independent American company, Merck & Co. Inc., established its first global headquarters in New Jersey (Rahway) in 1933 when it created the Merck Research Laboratory there.

Major manufacturing facility in **West Point, PA** (~33.1 mile drive from Philadelphia)

Focus: Oncology, Vaccines, Infectious Disease, Cardio-metabolic disorders, Immunology, Neuroscience, Ophthalmology

Employment (according to Merck & Co. SEC 2024 10-K Filling): As of December 31, 2024, the Company had approximately 75,000 employees worldwide, with approximately 31,000 employed in the U.S., including Puerto Rico, and approximately 15,000 third-party contractors globally. Approximately 73,000 of the Company's employees are full-time employees.

- Globally, women comprise 52% of employees, and in the U.S. individuals from underrepresented ethnic groups comprise 37% of its workforce (the Company defines workforce as its employees). Women comprise 46% of the members of the Board of Directors. Additionally, the Company's senior management team is made up of 39% women.
- Approximately 21% of the Company's employees are represented by various collective bargaining groups. The Company's voluntary turnover rate was approximately 4.6% and 5.6%, in 2024 and 2023, respectively.
- At December 31, 2024, approximately 23,500 people were employed in the Company's research activities.
- In 2024, the Company hired approximately 7,300 employees across the globe through various channels including the Company's external career site, direct passive candidate sourcing, employee referrals, universities and other external sources.

Revenue (according to Merck & Co. SEC 2024 10-K Filling): Sales in the U.S. grew 13% to $32.3 billion in 2024 primarily driven by higher sales of Keytruda (immunotherapy drug used to treat various types of cancer), Winrevair (treat adults with pulmonary arterial hypertension), Gardasil 9 (vaccine that protects against nine types of human papillomavirus), Welireg (oral medication approved for treating certain types of cancers associated with von Hippel-Lindau (VHL) disease and, more recently, pheochromocytoma and paraganglioma (PPGL)), Bridion, Lagevrio, and Prevymis, as well as higher alliance revenue from Reblozyl, partially offset by lower sales of Januvia and Vaxneuvance.

International sales grew 1% in 2024, or 6% excluding the unfavorable effect of foreign exchange. The devaluation of the Argentine peso contributed approximately 3 percentage points of the negative impact of foreign exchange, which was largely offset by inflation-related price increases consistent with practice in that market. International sales growth was primarily due to higher sales of Keytruda, Vaxneuvance, Prevymis, as well as higher sales of animal health products, partially offset by lower sales of Gardasil/Gardasil 9, Lagevrio, Bridion, Janumet, Januvia, and Simponi. International sales represented 50% and 53% of total sales in 2024 and 2023, respectively.

Market Cap (closing Aug 12, 2025): 200.57 Billion USD

Recent News (as of Aug 12, 2025):

Merck layoff notifications begin in New Jersey (Aug 12, 2025): indicating it plans to eliminate 58 positions at its Rahway campus, which also serves as its world headquarters. According to the notice, the layoffs become effective on November 14.

- Merck has several facilities in eastern Pennsylvania, including its largest manufacturing facility in the state, which Merck calls West Point, in Upper Gwynedd Township, Montgomery County. Merck previously told 69 News it employs about 14,000 people in Pennsylvania.
- In March, the company announced plans to close its plant in Northumberland County. 163 workers are being impacted by the closure, which is expected to become final next year.

Pfizer, Astellas post late-stage trial win for Padcev with Merck's Keytruda in bladder cancer (Aug 12, 2025): Pfizer and Astellas Pharma announced on Tuesday that their jointly developed antibody-drug conjugate, Padcev, in combination with Merck's PD-1 inhibitor, Keytruda, reached the main goals in a late-stage trial for certain patients with bladder cancer.

In the study, Padcev in combination with Keytruda demonstrated tolerability profiles in line with their individual safety profiles, the companies stated. Pfizer and Astellas plan to discuss the results with global health authorities seeking potential regulatory submissions as the trial continues to evaluate its other secondary goals: EFS, OS, and pathologic complete response ((pCR)).

Merck KGaA is looking into direct distribution to U.S. patients (Aug 11, 2025): MK-8527, an experimental once-monthly oral PrEP therapy: EXPrESSIVE-10 and EXPrESSIVE-11. The EXPrESSIVE-11 trial, which is enrolling people in 16 countries worldwide, focuses on high-risk individuals. Meanwhile, EXPrESSIVE-10, which is funded by the Gates Foundation, focuses on women and adolescent girls in Sub-Saharan Africa. The trials will start enrolling participants in August 2025 and in the ensuing months, respectively.

Immunome's Undervalued Gamma Secretase Inhibitor Pipeline in Light of SpringWorks' Merck Acquisition (Aug 11, 2025): The acquisition of SpringWorks Therapeutics by Merck MRK +0.11% KGaA for $3.9 billion in April 2025 has sent shockwaves through the rare disease oncology sector. This blockbuster deal, driven by SpringWorks' two FDA-approved gamma secretase inhibitors—OGSIVEO (nirogacestat) for desmoid tumors and GOMEKLI (mirdametinib) for neurofibromatosis type 1—underscores the premium investors are willing to pay for therapies targeting unmet medical needs in niche markets.

Merck will lay off 6,000, reducing workforce by 8% in cost-cutting purge (Jul 31, 2025): Word of the dismissals comes two days after Merck revealed a sweeping cost-cutting effort designed to save $3 billion annually by the end of 2027.

The changes are necessary as the company will undergo massive transformation with biosimilar competition coming for Keytruda, likely starting in 2028 in the U.S. Second-quarter sales results illustrated the company's dependence on the cancer superstar.

The company also is dealing with a sudden free fall in sales of HPV vaccine Gardasil, which tumbled to $1.1 billion in the second quarter, down from $2.48 billion the same period last year.

Merck isn't the only Big Pharma company undergoing a significant cost-cutting effort.

- Over the last two years, Bayer has reduced its head count by more than 11,000 under an initiative designed to save 2 billion euros ($2.3 billion) through 2026.
- Bristol Myers Squibb has launched a "strategic productivity initiative," which will slash $2 billion in costs through 2027.

- In April, Pfizer upped the ante on its cost-cutting program, aiming to save $7.7 billion through 2027.

Merck Just Announced a $10 Billion Deal That Will Help Diversify Its Business (Jul 17, 2025): For the price of $10 billion, it's acquiring Verona Pharma. For $10 billion, Merck is acquiring a promising healthcare company which is in the early stages of its growth. Key to its potential is Ohtuvayre, a blockbuster drug that regulators approved last year as a treatment for chronic obstructive pulmonary disease (COPD). Analysts estimate that it could generate $1 billion in annual revenue by 2029.

Merck shuts down Northumberland County facility, focus shifts to Upper Gwynedd (Mar 22, 2025): remains committed to Upper Gwynedd Township and Pennsylvania at-large. The layoffs will take place in May, June/July, and the final round in 2026, per the notice. Merck had previously indicated its plans to wind down operations at this site in 2022, where it produced active pharmaceutical ingredients (APIs) for antibiotics.

Merck to close Pennsylvania plant, lay off 163 (Mar 20, 2025): Merck has invested more than $3 billion in its Pennsylvania operations to date, according to the company.

The Riverside location, located off the Susquehanna River, has dealt with groundwater contamination issues over the years and affected some nearby residential wells, according to the U.S. Environmental Protection Agency. Merck completed a clean-up plan to address contamination areas and concerns in 2008, and since then the facility has monitored groundwater and maintained the remediation system.

Thermo Fisher Scientific

https://www.thermofisher.com/us/en/home.html

An American life science and clinical research company based in Waltham, MA and formed through the merger of Thermo Electron and Fisher Scientific in 2006.

Thermo Fisher Scientific has a presence in Philadelphia through a sponsorship agreement with CIC (Cambridge Innovation Center) Philadelphia. This sponsorship provides CIC Philadelphia with access to Thermo Fisher's instruments, equipment, technology, and software across 450 benches. One address in Philadelphia is listed as a location for Thermo Fisher Scientific, although it's unclear if it's a dedicated office or a shared space through the CIC partnership.

Focus: a global supplier of analytical instruments, clinical development solutions, specialty diagnostics, laboratory, pharmaceutical and biotechnology services

Employment (according to Thermo Fisher Scientific SEC 2024 10-K Filling): As of December 31, 2024, we employed approximately 125,000 colleagues globally, with an approximate regional distribution as follows: 60,000 based in the Americas, 22,000 in the Asia-Pacific region, and nearly 43,000 in Europe, the Middle East and Africa (EMEA).

Revenue (according to 2024 Thermo Fisher Scientific Annual Report): $42.88 Billion USD - 52% Laboratory Products & Biopharma Services, 21% Life Science Solutions, 17% Analytical Instruments, 10% Specialty Diagnostics

Market Cap (closing Aug 12, 2025): 180.28 billion USD

Recent News (as of Aug 12, 2025):

Thermo Fisher Scientific (TMO) Oncomine Dx Test Gains FDA Approval for NSCLC Treatment (Aug 12, 2025): has seen significant developments with the recent FDA approval of its Oncomine Dx Target Test as a companion diagnostic for HERNEXEOS. The approval, alongside the launch of new products and strategic partnerships, positions the company favorably within the precision medicine sector.

The recent FDA approval of Thermo Fisher's Oncomine Dx Target Test as a companion diagnostic for HERNEXEOS is likely to reinforce the company's ongoing expansion efforts in precision medicine and pharmaceutical manufacturing.

Thermo Fisher Receives FDA Approval for NGS-Based Companion Diagnostic for New Non-Small Cell Lung Cancer Treatment (Aug 11, 2025): Oncomine Dx Target Test as a companion diagnostic (CDx) to identify patients who may be candidates for HERNEXEOS® (zongertinib tablets), a tyrosine kinase inhibitor (TKI), developed by Boehringer Ingelheim. The test allows clinicians and pathologists to assess if non-small cell lung cancer (NSCLC) tumors harbor human epidermal growth factor receptor 2 (HER2/ERBB2) tyrosine kinase domain (TKD) activating mutations.

Thermo Fisher plots 85 layoffs in California as its cost-cutting crusade marches on (Aug 5, 2025): Thermo employees in the city work in areas such as R&D, information technology, communications, manufacturing, quality, commercial sales and marketing, the CDMO says on its virtual site map.

Thermo Fisher has been pruning its ranks around the U.S. in recent years. Like many other CDMOs that enjoyed a major sales boost during the COVID-19 pandemic, Thermo initially struggled to maintain that same magnitude of growth once the situation became endemic. At the height of the pandemic in 2021, Thermo boosted its head count from 80,000 to 130,000 employees—in part through a series of acquisitions—but the company has been whittling that number down in more recent years.

As of August 1, 2025, the company has identified restructuring actions, primarily in the laboratory products and biopharma services segment, that it expects will result in additional charges of

approximately $140 million, primarily in 2025, and expects to identify additional actions in future periods.

Thermo Fisher Scientific (TMO) Unveils New Microscopes At M&M Conference (Jul 25, 2025): recently unveiled two new electron microscopes, Scios 3 and Talos 12, at the Microscopy & Microanalysis conference, reinforcing their advanced technology offerings

Thermo Fisher Scientific Profit, Revenue Rise (Jul 23, 2025)

Thermo Fisher flags improving tariff situation, raises annual profit view (Jul 23, 2025)

Thermo Fisher Scientific and Sanofi Expand Strategic Partnership to Enable Additional U.S. Drug Product Manufacturing (Jul 16, 2025): Under the agreement, Thermo Fisher will acquire Sanofi's steriles manufacturing site in Ridgefield, New Jersey and will continue to manufacture a portfolio of therapies for Sanofi. In addition, Thermo Fisher will expand use of the site to meet the growing demand from pharma and biotech customers for U.S. manufacturing capacity.

Thermo Fisher dishes up $40M for Pennsylvania facility expansion, creating more than 100 jobs (Feb 15, 2022): The company is plugging $40 million into an upgrade of its single-use technology manufacturing facility in Millersburg, Pennsylvania. Single-use technologies are increasingly being used in the development of biologic drugs and vaccines. Since the start of the pandemic, Thermo Fisher's Millersburg site has been involved with more than 20 pharmaceutical partners to develop therapies and vaccines.

Aclaris Therapeutics

https://www.aclaristx.com/

A clinical-stage biopharmaceutical company headquartered in Wayne, PA (~30 mile drive from Philadelphia, PA) founded in 2012.

Focus: immuno-inflammatory conditions - Atopic Dermatitis, Alopecia Areata, Vitiligo, Asthma, Chronic Rhinosinusitis with Nasal Polyps (CRSwNP), Chronic Obstructive Pulmonary Disease (COPD), Inflammatory Bowel Disease

Employment (according to Aclaris Therapeutics SEC 2024 10-K Filling): As of December 31, 2024, had **64 total employees**, of which 61 were full-time employees. All employees are located in the US

Revenue (according to Aclaris Therapeutics SEC 2024 10-K Filling): **18.720 million USD** with 2.541 million from contract research and 16.179 million from licensing. This was a 12.529 million dollar decrease from 2023. The decrease in total revenue was mainly driven by a one-time upfront payment received in 2023 from a license agreement with Sun Pharmaceutical Industries, Inc., which was not present in 2024. However, this was partially offset by a commercial milestone achieved in 2024 under the Eli Lilly and Company license agreement.

Since our inception, they have incurred significant net losses. Net loss was $132.1 million for the year ended December 31, 2024 and $88.5 million for the year ended December 31, 2023. As of December 31, 2024, they had an accumulated deficit of $902.9 million. They expect to incur significant expenses and operating losses for the foreseeable future as we advance our product candidates from discovery through preclinical and clinical development.

Market Cap (closing Aug 12, 2025): 177.66 million USD

Recent News (as of Aug 12, 2025):

Aclaris Reports Positive Phase 2a Results for ATI-2138 in Atopic Dermatitis Trial (Aug 9, 2025): announced encouraging top-line results from a Phase 2a trial evaluating ATI-2138, its oral investigational treatment targeting moderate-to-severe atopic dermatitis (AD).

Aclaris Therapeutics Announces Leadership Transition (July 28, 2025): announced that Roland Kolbeck, Ph.D. has been appointed as Chief Scientific Officer, replacing Joe Monahan, Ph.D. who will remain with the Company as Special Scientific Advisor to the Chief Executive Officer through the first quarter of 2026 as part of his planned retirement. Dr. Kolbeck's extensive experience in areas including inflammation and antibody development will be important as the Company develops its growing portfolio of immuno-inflammatory product candidates, including its next generation kinase and cytokine signaling pathway inhibitors and potential first-in-class bispecific antibodies.

Aclaris Therapeutics receives FDA approval for Phase Ia/Ib trial of ATI-052 (Apr 23, 2025)

Endo International

(formerly Endo Health Solutions Inc./Endo Pharmaceuticals Holdings Inc./Endo Products/Intravenous Products of America)

https://www.endo.com/

Endo International plc is an American Irish-domiciled generics and specialty branded pharmaceutical company.

Endo's management, operations, and customers are almost exclusively U.S.–based, in 2013 Endo executed a corporate tax inversion to Ireland to avoid U.S. corporate taxes on their U.S. drug sales, and to avail of Ireland's corporate tax system.

Endo's legal headquarters is in Dublin, Ireland while its operational headquarters is in Malvern, PA (~26.9 mile drive from Philadelphia).

Focus: endocrinology, orthopedics, and urology, as well as in hospital systems and with retail generic medications

Employment (according to Endo International SEC 2024 10-K Filling): As of March 4, 2025, **3,116 employees**.

Revenue (according to Endo International SEC 2024 10-K Filling): Total revenues for the Successor year ended December 31, 2024 and the Predecessor period from January 1, 2024 through April 23, 2024 were $1,178.2 million and $582.0 million, respectively, compared to $2,011.5 million in 2023 (Predecessor), as competition resulted in a net decrease in revenue in the Generic Pharmaceuticals and Sterile Injectables segments, partially offset by increased revenues in our Branded Pharmaceuticals segment driven by increased revenues from XIAFLEX®.

Market Cap (closing Aug 12, 2025): 1.80 billion USD

Recent News (as of Aug 12, 2025):

Mallinckrodt, Endo Complete Merger to Create Global, Scaled, Diversified Therapeutics Leader (Aug 1, 2025): The combined company is well-positioned to continue growing its brands portfolio across a wide range of therapeutic areas of significant unmet need, including endocrinology, gastroenterology, hepatology, neonatal respiratory critical care, nephrology, neurology, pulmonology, ophthalmology, orthopedics, rheumatology, and urology. In addition, the generics and sterile injectables business features a broad product portfolio, a leading controlled substances franchise, robust commercial and manufacturing infrastructure in the U.S. and internationally, extensive supply chain capabilities, and expertise in complex, highly regulated products. This business operates under the Par Health name and is intended to be spun off as an independent company with a target date of the fourth quarter of 2025, subject to approval by Mallinckrodt's Board of Directors and other conditions.

Endo Completes International Pharmaceuticals Business Divestiture (Jun 17, 2025): announced that it has completed the previously announced divestiture of its International Pharmaceuticals business, primarily operated through Canada-based specialty pharmaceutical company Paladin Pharma Inc., to Knight Therapeutics Inc. Total cash consideration for the sale is up to approximately $105 million, consisting of approximately $79 million paid at closing, approximately $11 million related to certain permitted holdbacks, and up to $15 million in future payments contingent upon the achievement of certain milestones.

Mallinckrodt, Endo Plan $6.7B Merger (Mar 13, 2025): Mallinckrodt and Endo said they will merge through a $6.7 billion cash and stock deal creating a combined company that will be intent on bouncing back from their troubled recent histories, stemming from their involvement in marketing opioid drugs. The combined company will have a presence in branded and generic drugs across a variety of therapeutic

areas, a significant controlled substances franchise, and a product portfolio across multiple delivery technologies, formulations, and dosage forms.
The Mallinckrodt-Endo combination will have approximately 5,700 employees at closing, as well as 17 manufacturing facilities, 30 distribution centers, and an operating footprint primarily located in the United States, with additional facilities in Europe, India, Australia, and Japan.
Endo divests international pharma unit in $99M deal (Mar 11, 2025): Endo is offloading its international pharmaceuticals business to Knight Therapeutics in a deal worth up to $99 million. The agreement includes an upfront cash payment of $84 million, with the potential for an additional $15 million tied to future milestones. The transaction primarily involves Canada-based specialty pharmaceutical company Paladin Pharma, which has been under Endo's ownership since 2014. The divestiture marks another chapter in Endo's ongoing efforts to restructure following years of financial challenges linked to opioid litigation.
Endo's End Around: How One of the Nation's Largest Opioid Makers Escaped a $7 Billion Federal Penalty (Dec 17, 2024): This spring, the Justice Department announced a major victory against a drug firm that manufactured billions of opioid painkillers. Endo Health Solutions, the agency said, would face $1.5 billion in fines and forfeitures and plead guilty to a corporate criminal charge. But in the end, federal prosecutors offered far friendlier terms than those trumpeted by the agency. Endo would not have to pay the $1.5 billion in criminal penalties, which was already a deep discount from the billions federal officials said Endo owed for dodging taxes and driving up Medicare costs. In what amounted to a liability fire sale by the Justice Department, the company's woes with the federal government would all be resolved by a $200 million payment.
The DOJ, after years of aggressively prosecuting opioid companies, delayed for a decade a winning criminal case against Endo. In the intervening years, Endo vastly expanded its narcotic-pill empire before executing a corporate escape plan. Codenamed Project Zed, the plan allowed Endo to restructure its debt to retain control of the company and hand out $95 million in executive bonuses before seeking protection in bankruptcy. The result for U.S. taxpayers: Endo paid a tiny fraction — three pennies on the dollar — of the $7 billion that officials said it owed the U.S. government, including $4 billion in taxes.
Opioid Manufacturer Endo Health Solutions Inc. Agrees to Global Resolution of Criminal and Civil Investigations into Sales and Marketing of Branded Opioid Drug (Feb 29, 2024): Endo Health Solutions Inc. (EHSI), which is in bankruptcy, has agreed to resolve criminal and civil investigations related to the company's sales and marketing of the opioid drug Opana ER with INTAC (Opana ER).
Endo International Files for Bankruptcy to Weather Opioid Lawsuits (Aug 17, 2022): Endo International PLC became the latest pharmaceutical company to file for bankruptcy under the weight of lawsuits alleging it played a role in fueling the opioid crisis.
Tax avoidance: The Irish inversion (Apr 29, 2014): Endo's move of their global headquarters to the basement of a Georgian house in central Dublin is a part of one of the biggest trends in global mergers and acquisitions – a practice known as inversion. By moving their headquarters to another country, US companies are able to slash their tax rate. For the US, the trend threatens billion of dollars of tax revenues and raises "significant policy concerns", in the words of the US Treasury. The popularity of inversions is starting to worry the Irish authorities. They fret that the country's 12.5 per cent corporate tax rate – a pillar of Irish development policy – is being used for purposes for which it was not intended.

Neuronetics

https://neurostar.com/neuronetics/

Neuronetics, Inc., is the creator of NeuroStar Advanced Therapy, the market leader in Transcranial Magnetic Stimulation (TMS) for the treatment of Major Depressive Disorder and other mental health conditions. Based in Malvern, PA (~26.9 mile drive from Philadelphia, PA)

Focus: Neuronetics' NeuroStar® Advanced Therapy for Mental Health is today's leading TMS (transcranial magnetic stimulation) treatment and is backed by more clinical evidence than any other TMS technology for depression.

Employment

Revenue

Market Cap

Recent News

EPAM Systems

Since 1993, EPAM Systems, Inc. has used its software engineering expertise to become a leading global provider of digital engineering, cloud and AI-enabled transformation services, and a leading business and experience consulting partner for global enterprises and ambitious startups. Based in Newtown, PA (~31.1 mile drive from Philadelphia, PA)

Focus: EPAM Systems leverages AI and GenAI to deliver transformative solutions that accelerate our clients' digital innovation and enhance their competitive edge. Through platforms like EPAM AI/RUN™ and initiatives like DIALX Lab, EPAM Systems integratse advanced AI technologies into tailored business strategies, driving significant industry impact and fostering continuous innovation.

Employment

Revenue

Market Cap

Recent News

Pittsburg

Growth in digital health and AI-driven life science tools; Focused on bioengineering, diagnostics, and computational biology

A leading hub for biomedical research, robotics, and advanced manufacturing; Pittsburgh is renowned for its strengths in healthcare innovation, precision medicine, and medical devices.

Pittsburgh boasts a world-class life sciences ecosystem anchored by institutions like the University of Pittsburgh and Carnegie Mellon University. The region excels in translating cutting-edge research into commercial biotech and medical technologies. With a growing network of startups and innovation centers, Pittsburgh is a key player in precision medicine, diagnostics, and robotics-driven healthcare solutions.

UPMC

https://www.upmc.com/

A globally recognized nonprofit healthcare and innovation leader, UPMC integrates patient care, research, and education across hospitals, outpatient facilities, and specialty centers.

UPMC is at the forefront of biomedical innovation, with strengths in clinical trials, advanced medical devices, and translational research. Its collaboration with the University of Pittsburgh fosters breakthroughs in precision medicine, robotics, and digital health, making UPMC a cornerstone of Pittsburgh's life sciences ecosystem.

UPMC operates 40 academic, community, and specialty hospitals; 800 doctors' offices and outpatient centers; 8,700 licensed beds. We serve people throughout western and central Pennsylvania, Maryland, New York, and around the globe. UPMC is the #1 Ranked Hospital in Pittsburgh.

Global programs span four continents, with focused efforts in: Italy, Ireland, Croatia

Focus: Renowned centers of excellence in transplantation, cancer, neurosurgery, psychiatry, rehabilitation, geriatrics, and women's health.

One of the largest integrated community cancer networks in the United States with more than 70 centers in Pennsylvania, Ohio, New York, and Maryland, and more than 2,000 physicians, researchers, and staff

More than 200 psychiatrists and psychologists provide mental health and addiction services across UPMC, with more than 17,000 admissions annually.

28 senior communities, assisting over 2,500 residents on a daily basis

More than four million members covered by UPMC Insurance Services products.

Region's largest network of rehabilitation services, including more than 100 inpatient, outpatient, and long-term care facilities

Employment (according to UPMC website): 100,000 staff members. More than 6,600 affiliated physicians, including more than 5,000 employed by UPMC. The largest nongovernment employer in Pennsylvania

Revenue (Total Operating Revenue according to UPMC website): $28 billion in Calendar Year 2023

Market Cap: N/A - non-profit organization, and therefore does not have a market capitalization

Nearly $700 million in National Institutes of Health funding advances medical research at the University of Pittsburgh and UPMC.

Recent News (as of Aug 13, 2025):

UPMC, OIP partner to expand orthopaedic care access in Central Pa. (Aug 13, 2025): UPMC and the Orthopedic Institute of Pennsylvania have formalized a new partnership. The move builds upon decades of collaboration between the two leaders in musculoskeletal health and is designed to deliver patient-centered care closer to home while also expanding access to orthopaedic services.

Pittsburgh community, UPMC nurses turn out to support unionization (Aug 7, 2025): UPMC Magee-Womens Hospital nurses and supporters rallied Thursday across the street from the Oakland medical center, two weeks before a National Labor Relations Board-sanctioned vote for unionization.

UPMC among clinics subpoenaed by Department of Justice over gender-affirming care (Jul 31, 2025): The U.S. Department of Justice subpoenaed more than 20 doctors and clinics that have been involved in performing gender-affirming care on children.

UPMC Continues to Advance Behavioral Health Services Locally (Jun 9, 2025): opening a new behavioral health inpatient unit, with construction expected to begin in June. Both UPMC Jameson and UPMC Horizon offer services locally in partnership with experts at UPMC Western Behavioral Health.

University of Pittsburg

https://www.pitt.edu/

A leading research university with a strong focus on health sciences, engineering, and biomedical research.

Pitt is a key driver of Pittsburgh's life sciences ecosystem, known for its contributions to medicine, public health, and translational research. Its partnership with UPMC and other local institutions fosters innovation in areas like precision medicine, neuroscience, and medical devices.

Research Activity Designation (according to Carnegie Classification as of Aug 13, 2025): Research 1: Very High Research Spending and Doctorate Production

- 430 Research Doctorates
- $1,398,078,000 Research Spending

Recent News (as of Aug 13, 2025):

Pittsburgh researchers develop rapid treatment for carbon monoxide poisoning (Aug 11, 2025): Developed in collaboration with researchers at the University of Maryland, the novel treatment could eventually lead to a CO poisoning antidote designed to work better and faster than therapies currently available.

Pitt was awarded $489K through TRIO Student Support Services (Jul 22, 2025): The U.S. Department of Education has awarded the University's Pittsburgh campus with a federal TRIO Student Support Services (SSS) grant totaling $489,444 annually for five years to improve college retention and graduation rates among low-income and first-generation students, and students with disabilities. This award marks the continuation of 53 years of TRIO SSS services on the Pittsburgh campus.

Pitt's move to close diversity office follows trend among American universities (Jul 14, 2025): The move by Pitt to close its Office for Equity, Diversity and Inclusion (OEDI) as of July 1 and open a new Office of Institutional Engagement and Wellbeing follows a trend being seen at universities throughout the country both before and since the Trump administration returned to office in January.

A new Pitt study has upended decades-old assumptions about brain plasticity (Jun 3, 2025): showing that the brain uses distinct transmission sites — not a shared site — to achieve different types of plasticity. The findings, published in Science Advances, offer a deeper understanding of how the brain balances stability with flexibility, a process essential for learning, memory and mental health.

Pitt institutes hiring freeze at least through June in response to funding uncertainties (Mar 10, 2025): Pitt announced today that it will institute a faculty and staff hiring freeze, in response to the uncertainty surrounding federal funding of research grants under the Trump administration.

Carnegie Mellon University

https://www.cmu.edu/

A world-renowned research university specializing in technology, computer science, and robotics. CMU is a cornerstone of Pittsburgh's innovation ecosystem, advancing AI, software engineering, and computational biology. Its interdisciplinary programs and partnerships with local biotech and healthcare institutions support cutting-edge research and commercialization in life sciences and technology.

CMU has a strong track record of spinning research into startups and ventures. The university actively supports entrepreneurship through programs like the CMU VentureBridge, Project Olympus, and the Swartz Center for Entrepreneurship, which help students and faculty commercialize breakthroughs in AI, robotics, biotech, and healthcare. CMU's ecosystem has fueled Pittsburgh's emergence as a hub for tech-driven startups, from autonomous vehicles to digital health solutions.

Research Activity Designation (according to Carnegie Classification as of Aug 13, 2025): Research 1: Very High Research Spending and Doctorate Production

- 332 Research Doctorates
- $484,757,000 Research Spending

Recent News (as of Aug 13, 2025):

Timeline: CMU lays off employees, the latest Pittsburgh higher ed response to Trump moves (Aug 7, 2025): CMU lays off 18 employees in its School of Computer Science, affecting those in "several departments" with both administrative and academic support duties. These included "marketing and communications, program support, computing support and outreach," according to an email from the school's dean that was shared with Public Source.

Carnegie Mellon University launches new venture to further math research with AI (Aug 11, 2025): Carnegie Mellon University is getting federal money to create a new venture into artificial intelligence-assisted math, one of six such programs across the country. The National Science Foundation is awarding $6.6 million to CMU to start the Institute for Computer-Aided Reasoning in Mathematics. The Simons Foundation is providing additional funds.

CMU lays off 18 employees in computer science school (Aug 8, 2025): Carnegie Mellon University has laid off 18 employees in its School of Computer Science as it undergoes a staffing reorganization. Rumors had circulated on social media this week that hundreds of workers were laid off. Spokeswoman Cassia Crogan confirmed that the true number was 18.

Tool Helps Scientists Spot Source of Disease (Jul 21, 2025): Carnegie Mellon University researchers have developed a statistical tool that could help pinpoint the genetic changes that cause diseases like Alzheimer's and schizophrenia. While scientists have long identified genes associated with these conditions, confirming which changes actually cause disease has remained a challenge. The tool, causarray, offers hope.

UPMC Enterprises

https://enterprises.upmc.com/

The innovation, commercialization, and venture capital arm of UPMC, a $28 billion health care provider and insurer.

Focus: invest in companies from early- to growth-stage, and tailor the size of an investment to best support our shared goals of making a significant impact on patient care

Employment (according to UPMC Enterprises LinkedIn as of Aug 13, 2025): 201-500 employees

Revenue: NA - UPMC Enterprises does not publicly report separate revenue figures. It's a venture capital and development arm of the larger UPMC health system

Market Cap: N/A - UPMC Enterprises, as the innovation, commercialization, and venture capital arm of UPMC, does not have its own separate market capitalization.

Recent News (as of Aug 13, 2025):

ViVE 2025: UPMC Enterprises has AI on its radar as it launches new testing environment for developers (Feb 17, 2025): The product, call Ahavi, will debut at ViVE 2025 as part of a soft launch, according to executives. The platform incorporates real-world insights from UPMC's patient population.

UPMC Enterprises partners to create pain management company (May 12, 2025): UPMC Enterprises is partnering with a New York company to create a venture that supports doctors in providing pain management care. Glimmer Health, the second company started by UPMC Enterprises and Redesign Health, will aid primary care doctors by providing nurse practitioners and social workers trained in pain management to oversee patients suffering from chronic pain, through telemedicine.

UPMC Enterprises participates in fundraising rounds totaling $155M for three companies (Jan 23, 2025): invested in three different, non-local companies

Duolingo

https://www.duolingo.com/

Founded in 2011 and officially launched in 2012, Duolingo is a Pittsburgh, PA headquartered edtech company known for its popular language-learning platform and app. The company also has offices in New York, Seattle, Detroit, and Beijing.

Focus: Leveraging gamification and AI-driven personalized learning, it serves millions of users worldwide, making language education accessible and engaging. Duolingo has expanded into literacy and language certification services, solidifying its role as a major player in digital education and innovation. Their flagship app has organically become the world's most popular way to learn languages and the top-grossing Education app in the app stores As of December 31, 2024, Duolingo offers courses in over 40 languages to more than 100 million monthly active users (according to Duolingo SEC 2024 10-K Filling).

Employment (according to Duolingo SEC 2024 10-K Filling): approximately 830 passionate employees, including more than 380 engineers

Revenue (according to Duolingo SEC 2024 10-K Filling): Revenues increased by $216.9 million USD, or 41%, to $748.0 million during the year ended December 31, 2024, from revenues of $531.1 million during the year ended December 31, 2023. The main drivers of the increase were:

- Subscription revenue increased by $202.8 million, or 50%, to $607.5 million during the year ended December 31, 2024, primarily due to an increase in the average number of paid subscribers during the period;
- Other revenue increased by $14.1 million, or 11%, to $140.5 million during the year ended December 31, 2024, driven by increased advertising revenue of $5.0 million and In-App Purchases of $4.0 million, both of which were primarily driven by the increase in DAUs. Additionally, other revenue increased by $4.4 million from Duolingo English Test revenue, which was driven by increases in the average revenue per test.

Market Cap (intraday Aug 14, 2025): $15.40 billion USD

Recent News (as of Aug 14, 2025):

Duolingo's SWOT analysis: ai-driven language learning stock poised for growth (Aug 14, 2025): The leading language learning platform known for its gamified approach to education, has been making waves in the edtech industry with its innovative use of artificial intelligence and strategic expansion plans. At the forefront of Duolingo's growth strategy is its embrace of artificial intelligence.

The company's new AI-powered subscription tier, Max, has shown promising results with a significant increase in subscription revenue. Priced at approximately twice the cost of the standard Super subscription, Max is expected to drive upgrades and increase Average Revenue Per User (ARPU).

Duolingo's AI advancements have enabled the creation of more content and improved user experiences. The company has expanded its Video Call feature to Android and added more languages, engaging users through occasional calls from an AI character named Lily. These innovations are part of a broader trend where generative AI is evolving media and content creation in the edtech space.

Duolingo to Expand in Music Education After U.K. Acquisition; German Ed-Tech Startup Raises €1M in Pre-Seed Round (Aug 14, 2025): Duolingo is looking to expand its reach in the music education space with the acquisition of a U.K.-based gaming studio. The tech company, well-known for its language learning apps and its viral marketing efforts, said it scooped up the team behind NextBeat, a London-based music gaming startup that created the Beatstar and Countrystar apps.

- Terms of the deal were not disclosed.

By acquiring the 23-person team at NextBeat, Duolingo said it will be able to expand its efforts behind Duolingo Music, the music learning app it launched in 2023 (The deal is also a “strategic bet on talent”). Alongside Duolingo Music, the company has also added offerings aimed at K-12 districts and schools, including Duolingo for Schools. The free tool is designed to be aligned to ACTFL and CEFR learning standards and includes free professional development resources.

We went hands-on with Google Translate's Duolingo rival ahead of its launch (APK teardown) (Aug 13, 2025): Earlier this year, we discovered evidence that Google was working on a new Practice feature in Google Translate. This would allow people to (surprise) practice a desired language.

Securities Investigation: Levi & Korsinsky Investigates Duolingo, Inc. (DUOL) on Behalf of Investors (Aug 12, 2025): Levi & Korsinsky notifies investors that it has commenced an investigation of Duolingo, Inc. concerning possible violations of federal securities laws.

On July 28, 2025, JMP Securities lowered its price target on Duolingo stock to $450 from $475, citing concerns about slowing user engagement ahead of the Company's second-quarter earnings report. Specifically, third party data suggested that daily active user growth decelerated to approximately 39% year-over-year in the second quarter, a noticeable drop from about 51% in the first quarter. Following this news, Duolingo's stock price fell over 6% on the same day.

The Scoop: The internet turned against Duolingo. It saw 40% user growth anyway. (Aug 8, 2025): But after its CEO announced the integration of more AI into the app, leading to a decreased headcount and use of contractors, the same social media users who once loved Duo the owl turned against the app. Every social media post became a cascade of comments asking, “Did AI make this?” and “Duolingo’s falloff needs to be studied.”

But after all the angst, all the angry social media posts, Duolingo beat earnings expectations this week. The company beat its earnings estimates, increased active users by 40% year-over-year and is on track to earn $1 billion in annual revenue.

The backlash against Duolingo going ‘AI-first’ didn’t even matter (Aug 7, 2025): Duolingo announced on Wednesday that it beat its quarterly revenue estimates, even though the company faced widespread backlash for choosing to embrace generative AI over human workers. Duolingo stock rose almost 30% on the news. In April, CEO Luis von Ahn shared that Duolingo would become an “AI-first” company, phasing out its use of contract workers. He also discouraged teams from hiring more employees, unless the team is unable to automate more of its work. With the use of generative AI, Duolingo introduced 148 new language courses, more than doubling its previous offerings.

While some Duolingo users have argued that these AI features are making the app worse, the company’s financial metrics tell a different story. Now the company anticipates making over $1 billion in revenue this year, and daily active users have grown 40% year-over-year. The growth is significant but falls in the lower range of the company’s estimates of growing between 40% and 45%, which an investor brought up to von Ahn on Wednesday’s quarterly earnings call.

Predictive Oncology

(formerly Helomics Corporation)

https://predictive-oncology.com/

Founded in 2022, Predictive Oncology is a pharmaceutical manufacturing company headquartered in Pittsburgh, PA.

Focus: Leverage machine learning, scientific rigor, and biologics to advance oncology drug discovery and enable the development of more effective therapies in the treatment of cancer.

This approach helps pharmaceutical and biotech companies: Identify the most promising drug candidates faster, Reduce costly late-stage clinical trial failures, Personalize therapies by understanding which patients are most likely to respond

Employment (according to Predictive Oncology SEC 2024 10-K Filling): We had 23 full-time employees and 1 part-time employee as of December 31, 2024

Revenue (according to Predictive Oncology SEC 2024 10-K Filling): Recorded revenue of $1,623,817 in 2024, compared to $1,627,697 in 2023. Revenues for the years ended December 31, 2024, and 2023, were primarily derived from our Eagan operating segment. In each of the years ended December 31, 2024, and 2023, substantially all the Company revenues were located or derived from operations in the United States.

The Eagan operating segment contributed $1,539,005 and $1,135,101 for the years ended December 31, 2024, and 2023, respectively, while the Pittsburgh operating segment contributed $84,812 and $492,596, respectively. Revenues from the Eagan operating segment increased in 2024 primarily due to an increased number of STREAMWAY systems sold, while revenues from the Pittsburgh operating segment decreased in 2024 primarily due to decreased sales of 3D tumor-specific models.

Predictive Oncology has incurred significant and recurring losses from operations for the past several years and, as of December 31, 2024, had an accumulated deficit of $180,426,271. THey had cash and cash equivalents of $734,673 as of December 31, 2024, and need to raise significant additional capital to meet our operating needs. They had short-term obligations of $3,593,401 and long-term operating lease obligations of $1,558,239 as of December 31, 2024. They do not expect to generate sufficient operating revenue to sustain our operations in the near term. During the year ended December 31, 2024, they incurred negative cash flows from continuing operating activities of $10,974,568.

Market Cap (intraday Aug 14, 2025): $8.59 million USD

Recent News (as of Aug 14, 2025):

Predictive Oncology Reports Second Quarter 2025 Financial Results and Provides Corporate Update (Aug 14, 2025): Despite cost-cutting efforts in some areas, the company's cash position has deteriorated to $506,078, down from $611,822 at the end of 2024. More troubling is the company's stockholders' deficit which has ballooned to $1.65 million from $202,610 at year-end 2024, indicating a rapidly worsening financial position.

POAI's drug repurposing program shows early promise, but ChemoFx commercialization remains unproven amid severe cash constraints.

Their drug repurposing initiative has identified three promising candidates from abandoned pharmaceutical compounds: Afuresertib for breast cancer, and Alisertib and Entinosta for colon cancer. This approach of mining existing data to repurpose failed drugs represents a potentially cost-effective R&D strategy that could accelerate development timelines if successful.

The company's flagship product, ChemoFx, addresses a critical clinical need in oncology by enabling personalized treatment selection through live cell testing of multiple chemotherapies on a patient's actual tumor cells.
Their partnership with Labcorp to develop 3D liver toxicity models demonstrates technical capabilities in creating complex cell culture systems.
However, the sharp decline in product revenue raises serious questions about market adoption of their current offerings. Despite possessing a biorepository of over 150,000 patient tumor samples, which should be a competitive advantage, the company hasn't demonstrated the ability to monetize this asset effectively.
Predictive Oncology Granted Nasdaq Compliance Extension (Jul 24, 2025): Predictive Oncology Inc. faced potential delisting from The Nasdaq Capital Market due to non-compliance with the minimum stockholders' equity and bid price requirements. After a hearing on July 17, 2025, Nasdaq granted the company an extension until December 8, 2025, to meet these requirements, though there is no assurance of compliance.
Predictive Oncology Develops Functional 3D Organoid Models Exclusively for Labcorp (Jun 12, 2025): announced today the company has successfully developed 3D organoid models exclusively for Labcorp, a global leader of innovative and comprehensive laboratory services. As part of an ongoing agreement, Predictive Oncology recently developed two distinct and unique 3D liver toxicity models exclusively for Labcorp, including a human and rat model. Both models represent the liver microenvironment and can be used for the evaluation of both drug metabolism and liver toxicity related to drugs.
Predictive Oncology Inc. Advances AI-Driven Drug Discovery with Extensive Biobank of Tumor Samples (May 22, 2025): leveraging its extensive biobank of over 150,000 tumor samples to advance drug discovery and biomarker research using artificial intelligence (AI) and machine learning. This initiative follows Regeneron Pharmaceuticals' acquisition of 23andMe, which underscores the industry's shift towards utilizing real-world data for drug development. Predictive Oncology recently achieved a significant milestone by developing predictive tumor response models for 21 untested molecules, showcasing the potential of AI in early-stage drug discovery.
Renovaro Inc. Accelerates 2025 Lawsuit to Force Predictive Oncology Merger (May 22, 2025): A binding merger agreement signed on January 1, 2025, which called for Predictive Oncology to merge into Renovaro Inc. in exchange for a new class of preferred stock, is being enforced in this action. According to Renovaro's complaint, POAI violated the terms of exclusivity and good faith by launching a $545,000 public securities offering on February 19, 2025, and then making an attempt to unilaterally end the agreement on April 3, 2025. Renovaro Inc. is seeking damages, injunctive relief, and specific performance.
Predictive Oncology Successfully Develops Predictive Models Derived from Never-Before-Seen Compounds for Prevalent Cancer Indications Including Breast, Colon and Ovary (Mar 25, 2025): announced today that it has successfully developed predictive models derived from 21 unique compounds from the Natural Products Discovery Core (NPDC) at the University of Michigan Life Sciences Institute. Predictive Oncology, in partnership with the NPDC, recently evaluated 21 novel compounds using Predictive's active machine learning platform. The platform is used to shorten the time necessary to select drug candidates, while increasing the probability of technical success using live-cell tumor samples from its extensive biobank of frozen specimens.

Argo AI

Argo AI LLC was an autonomous driving technology company headquartered in Pittsburgh, PA and founded in 2016. Argo AI was an independent company that built software, hardware, maps, and cloud-support infrastructure to power self-driving vehicles. Argo was mostly backed by Ford Motor Co. and the Volkswagen Group. At its peak, the company was valued at $7 billion.

In October 2022 it was announced by Ford that the company would be disbanded and some employees would be split between VW and Ford. Argo's technology will be salvaged and further developed in-house by Ford and VW. Ford stated their intent to change the focus of development from Level 4 autonomous driving to Level 3 and Level 2+.

Aurora Innovation

https://aurora.tech/

Aurora Innovation, Inc., doing business as Aurora, is a self-driving vehicle technology company based in Pittsburgh, PA and founded in 2017.

Aurora tests its vehicles in the San Francisco Bay Area, Pittsburgh, and Dallas. The company also has offices in San Francisco, Bozeman, Montana, Detroit, Michigan, Louisville, Colorado, Seattle, Washington, and Texas.

Focus: Aurora has developed the Aurora Driver (backed by Verifiable AI), a computer system that can be integrated into cars for autonomous driving.

Road-tested hardware designed to be seamlessly integrated into autonomy-enabled redundant OEM trucks. Preparing to scale through partnerships with OEMs like Volvo and PACCAR, and strategic partners like Continental and NVIDIA.

Employment (according to Aurora Innovation SEC 2024 10-K Filling): As of December 31, 2024, they had approximately 1,800 employees. None of their employees are represented by a labor union. To date, they have not experienced any work stoppages.

Revenue (according to Aurora Innovation SEC 2024 10-K Filling): Collaboration revenue was $68 million in the twelve months ended December 31, 2022 under the collaboration project plan with Toyota Motor Corporation. As of December 31, 2022, the Company had recognized all revenue associated with cash payments received under the collaboration project plan and, as a result, no revenue was recognized during the twelve months ended December 31, 2023.

- In January 2021, the Company entered into a collaboration framework agreement with Toyota Motor Corporation (“Toyota”) with the intention of deploying the Aurora Driver into a fleet of Toyota vehicles, subject to further agreement of a collaboration project plan that was signed in August 2021.

In the twelve months ended December 31, 2024, 2023 and 2022, the Company received payments of $0 million, $0 million and $100 million, respectively, under the collaboration project plan with Toyota. As of December 31, 2022, the Company had recognized all revenue associated with cash payments received under the collaboration project plan with Toyota. As a result, no revenue was recognized during the twelve months ended December 31, 2024 and 2023

Market Cap (intraday Aug 14, 2025): 12.06 billion USD

Recent News (as of Aug 14, 2025):

Aurora Innovation at Oppenheimer Conference: Autonomous Trucking Insights (Aug 11, 2025):

- Aurora Innovation is currently operating driverless trucks on public roads and plans to expand operations to new lanes by the end of the year.
- The company maintains a strong balance sheet, with liquidity sufficient to fund operations into 2027.
- Aurora’s "driver as a service" model aims for capital efficiency and increased shareholder value.
- The introduction of second-generation hardware in 2026 is expected to enhance production volumes and reliability.
- Aurora’s focus on safety and transparency is demonstrated through its comprehensive safety case framework and the launch of "Aurora Driver Live" on YouTube.
- Driverless Operations: Aurora is actively operating driverless trucks, with nighttime operations achieved ahead of schedule.
- Weather Adaptability: By year-end, Aurora aims to operate in rain and heavy winds.

- Lane Expansion: Plans to extend operations to new routes, including Fort Worth to El Paso to Phoenix.
- Hardware Developments: Second-generation hardware is set for 2026, with a third-generation kit to follow, enabling larger-scale deployment.

Aurora begins nighttime driverless operations (Aug 5, 2025): The expansion comes as the tech company seeks to scale operations. The company said in a shareholder letter that nighttime driving "more than doubles truck utilization potential." That decision was connected with Paccar's process and concern over prototype parts being in the trucks.

Another milestone in Q2 involved earning its first revenue. "with the launch of driverless operations during the second quarter of 2025, we began recognizing revenue, which totaled $1 million across driverless and vehicle operator supervised commercial loads for hirschbach, uber freight, werner, fedex, schneider and volvo autonomous solutions, among others."

Aurora also expanded its driverless operations to three trucks in July, operating between Dallas and Houston. The approximately 200-mile trip takes about three hours to complete one way, and those trucks haul freight for customers Hirschbach and Uber Freight seven days a week both day and night.

Meanwhile, Aurora is also evaluating its autonomous tech with a vehicle operator on board on additional routes from Fort Worth to El Paso, Texas; El Paso to Phoenix; and Fort Worth to Phoenix. The tech company expects to unlock driverless lanes for those additional routes all by the end of 2025. Aurora also anticipates using the technology on vehicles in the rain in that same timeframe.

Aurora Innovation's Earnings Call Highlights Driverless Progress (Jul 31, 2025): Aurora Innovation, Inc.'s recent earnings call painted a picture of significant progress in the realm of driverless technology, marked by the successful launch of both daytime and nighttime driverless operations. The company demonstrated substantial financial stability, although challenges such as the need for prototype parts and ongoing weather condition validations remain. Overall, the positive developments slightly outweigh these challenges, indicating a promising trajectory for Aurora.

Aurora Innovation Launched its First Commercial Self-driving Trucking in Texas (Jul 15, 2025): Its Aurora Driver trucks are now delivering freight between Dallas and Houston without a human driver. The company has achieved significant milestones, including 1,200 miles of driverless deliveries. Management has noted that it plans to expand to El Paso, Texas, and Phoenix, Arizona, by the end of 2025.

The Aurora Driver is an SAE Level 4 autonomous system, which uses advanced sensors and artificial intelligence to detect hazards and navigate highways. The system has delivered over 10,000 loads and driven more than three million autonomous miles in supervised tests.

Driverless Semi Trucks Are Here, With Little Regulation and Big Promises (May 28, 2025): Last month, Aurora Innovation, based in Pittsburgh, became the first company to operate a driverless 18-wheeler on an American highway, ushering in an era that could dramatically change how cargo moves across the United States.

Autonomous trucks, proponents say, could solve a knot of problems facing the American shipping industry, which has struggled to recruit drivers for grueling, low-paying long-haul shifts, and which expects major growth in cargo shipment activity in the coming decades, driven by the overwhelming popularity of online shopping.

Aurora's driverless speed bump (May 21, 2025): Less than three weeks after Aurora Innovation made a splash with the commercial launch of the first driverless semi-trucks in Texas, the company is putting a human observer in the driver's seat. Why it matters: The decision is another speed bump for an industry

leader after a widely watched milestone, coming just days after co-founder Sterling Anderson left to take a big job at General Motors.

Aurora Reverses Course, Puts Human Back in Driver's Seat (May 16, 2025): Driverless vehicle developer Aurora Innovation is putting a human back in front of the wheel of big rigs operating in Texas, reversing course less than three weeks after the company began commercial autonomous service there. The decision to move an "observer" from the rear of the cabin into the driver's seat was made at the request of Paccar Inc., which manufactured the trucks, Aurora CEO Chris Urmson said May 16 in a post on the company's website. The trucks will still be operated by the Aurora Driver autonomous system, but the person will be able to intervene if needed.

Ansys

(formerly Swanson Analysis Systems, Inc.)
https://www.ansys.com/
An American multinational software company with its headquarters based in Canonsburg, PA (~21.4 mile drive from Pittsburgh, PA). It develops and markets CAE/multiphysics engineering simulation software for product design, testing and operation. On July 17, 2025, the company became a subsidiary of Synopsys.
Synopsys, Inc. is an American multinational electronic design automation (EDA) company headquartered in Sunnyvale, California, that focuses on design and verification of silicon chips, electronic system-level design and verification, and reusable components (intellectual property). Synopsys supplies tools and services to the semiconductor design and manufacturing industry.
Focus: Ansys specializes in engineering simulation software, helping companies across aerospace, automotive, electronics, energy, and healthcare industries design and test products digitally. Its tools cover areas such as structural mechanics, fluid dynamics, electromagnetics, and multiphysics simulations, enabling faster innovation, reduced physical prototyping, and improved product reliability.
Employment (according to Ansys SEC 2024 10-K Filling): As of December 31, 2024, we employed 6,500 people, including: 2,500 in product development, 3,200 in sales, support and marketing, and 800 in general and administrative functions. Of these employees, 43% were located in the Americas, 29% were located in Europe, Middle East and Africa (EMEA) and 28% were located in Asia-Pacific (APAC).

- Product development staff consisted of 2,500 as of December 31, 2024 and 2,400 employees as of December 31, 2023 - many of whom hold advanced degrees and have industry experience in engineering, mathematics, computer science or related disciplines.
- Direct sales and marketing organization comprised 3,200 and 3,000 employees as of December 31, 2024 and 2023, respectively.

Revenue (according to Ansys SEC 2024 10-K Filling): $25.398 million USD
Market Cap: N/A - ANSYS is not actively traded anymore. When ANSYS last traded, it had a market cap or net worth of $32.91 billion.
Recent News (as of Aug 15, 2025):
Ansys collaborates with Nvidia to embed Omniverse in simulation solutions (Aug 13, 2025): Ansys, a unit of Synopsys, has entered into an agreement with Nvidia to incorporate Nvidia Omniverse technology into its autonomous vehicle simulation solutions. This integration will commence with Ansys' computational fluid dynamics (CFD) and autonomous vehicle solutions, providing customers with direct access to Omniverse's technologies as well as libraries.
Ansys Integrates NVIDIA Omniverse Capabilities Into Its Products (Aug 12, 2025): Ansys, part of Synopsys (SNPS) and NVIDIA signed an agreement to license, sell, and support Omniverse technology embedded in Ansys simulation solutions. Through its integration of NVIDIA Omniverse, Ansys will deliver easy access to Omniverse technologies and libraries to customers, starting with its CFD and autonomous solutions.
Synopsys Bets Big On Ansys With $35 Billion Acquisition (Aug 11, 2025): By acquiring Ansys, Synopsys wants to build a powerhouse in simulation and chip design tools, right as the push for advanced semiconductors and AI heating up. The move is expected to drive major cost savings—Morgan Stanley predicts $400 million per year within three years—by streamlining operations and boosting automation. That efficiency should free up more resources for research and development, with analysts estimating profit could climb up to 17% higher than Synopsys on its own by 2026.

Synopsys Wraps Up Ansys Acquisition, Targeting Integrated Design Solutions (Aug 11, 2025): Synopsys has completed its $35 billion acquisition of Ansys, combining EDA leadership with multiphysics simulation expertise - approved by regulators in the US, EU, UK, and China. Synopsys' buyout of Ansys is a major shake-up in the engineering software world. By matching Synopsys' EDA know-how with Ansys' leading simulation tech, the new team can offer complete design workflows that link electronics and physics from start to finish. This acquisition is critical for Synopsys as it seeks to build a full-stack EDA solution, enabling multiphysics simulation at both the chip and system levels.

Beyond the company's traditional focus on standalone chip design tools, the deal positions design within the broader context of system functionality, supported by core multiphysics expertise and automotive-specific virtual testing capabilities.

Along with a bigger $31 billion market, the deal opens the door to stronger AI-driven optimization, closer integration across domains, and better management of complex systems through their full lifecycle.

Synopsys Completes Acquisition of Ansys (Jul 17, 2025): The transaction, which was announced on January 16, 2024, combines leaders in silicon design, IP and simulation and analysis to enable customers to rapidly innovate AI-powered products. Synopsys is now positioned to win in an expanded $31 billion total addressable market (TAM).

China gives conditional nod to Synopsys-Ansys deal, removing last major hurdle (Jul 14, 2025): The State Administration for Market Regulation's (SAMR) conditional approval, which came on Monday, would finally allow two major players in the electronic design automation (EDA) industry to combine. The deal, which was announced early last year, faced intense antitrust scrutiny in markets such as Britain. Synopsys said on Monday that the companies now expect to close the transaction on or around July 17. Months of back-and-forth over U.S. restrictions on export of EDA tools to China had led to fears of Chinese regulators possibly blocking the deal in retaliation.

The companies will have to continue supplying EDA products to Chinese customers on fair and non-discriminatory terms. The conditions also require the companies to honour existing customer contracts, maintain existing interoperability agreements and renew them on request from Chinese customers.

Synopsys' acquisition of Ansys could help its competitive position against Cadence, with a more diverse set of design tools under its belt, analysts say.

Go With the Flow: NVIDIA Teams With Ansys and DCAI to Advance Quantum Algorithms for Fluid Dynamics (Jul 11, 2025): Ansys announced today it is using the NVIDIA CUDA-Q quantum computing platform running on the Gefion supercomputer to advance quantum algorithms for fluid dynamics applications.

Gefion is Denmark's first AI supercomputer, consisting of an NVIDIA DGX SuperPOD interconnected with NVIDIA Quantum-2 InfiniBand networking. Using the open-source NVIDIA CUDA-Q software platform, Ansys drew on the power of the supercomputer to perform GPU-accelerated simulations of quantum algorithms applicable to fluid dynamics applications.

Abridge

https://www.abridge.com/

Founded in 2018, Abridge is a healthcare technology startup based in Pittsburgh, PA, focused on leveraging AI to improve patient-provider communication.

Focus: Abridge offers an enterprise-grade AI platform that converts medical conversations into clinically functional and billable documentation at the point of care. The Abridge platform uses natural language processing to summarize medical conversations, helping patients better understand diagnoses, treatment plans, and follow-up steps.

Employment (according to Abridge LinkedIn as of Aug 15, 2025): 201-500 employees

Revenue (according to TechCrunch Jun 24, 2025): In Q1, Abridge reached $117 million in contracted annual recurring revenue (a metric that includes all signed recurring contacts, including from customers that have still not been onboarded)

Market Cap: N/A - Abridge doesn't have a market cap because it's not a publicly traded company - estimated valuation of $5.3B (according to Mobi Health News as of Jun 25, 2025)

Recent News (as of Aug 15, 2025):

$5.3 billion Abridge is eyeing acquisitions. Here's what the healthcare AI startup is looking for. (Aug 14, 2025): Abridge is on a hot streak. Now, as the healthcare startup competes in the AI talent wars, it's considering acquisitions to grow even faster.

In 18 months, Abridge has raised $700 million in total and boosted its valuation from $850 million to $5.3 billion.

With 80% of its cash reserved for doubling down on its tech, Abridge is earmarking the remaining 20% for potential acquisitions.

While Rao said Abridge isn't "in talks" with any particular company, it's prepared to notch deals for its next phase of growth. The startup hasn't made any acquisitions since its 2018 founding. Those deals are looking increasingly critical in the brutal, competitive landscape of ambient healthcare scribes.

Highmark Health taps Abridge to build 'real-time' prior authorization using AI (Aug 12, 2025): Highmark Health plans to roll out Abridge's ambient clinical documentation technology across its entire organization, which includes 14 hospitals and hundreds of clinics.

Highmark plans to work with Abridge to codesign an AI-powered prior authorization solution at the point of care along with other innovative tools that integrate Abridge's AI technology, the organization said. Highmark and Abridge will start testing the prior auth tool with Highmark Health members seeing an AHN clinician using Abridge's technology.

Epic reportedly debuting AI scribe, giving startups a reason to sweat (Aug 11, 2025): Epic is reportedly prepping to launch its own AI scribe, giving startups. While Epic is joining the party late, its presence would force startups that have secured hundreds of millions in funding to differentiate even more quickly.

Abridge secures $300M, boosts valuation to $5.3B (Jun 25, 2025): In February, Abridge raised $250 million in Series D funding, bringing its valuation at the time to $2.75 billion.

Other companies in the AI medical documentation space include Commure, which last week raised $200 million in growth funding from General Catalyst's Customer Value Fund. In 2021, Commure raised almost $500 million over two rounds of funding. In October, Suki, maker of an AI-enabled voice tool for healthcare, raised $70 million in Series D funding, bringing its total raise to $165 million. Suki secured $55 million in Series C funding in 2021, two years after closing a $20 million Series C funding round. Microsoft's Nuance also offers a clinical documentation tool, Dragon Ambient eXperience (DAX) Copilot, formerly DAX Express, which uses OpenAI's model GPT-4.

Avista Therapeutics

https://www.avistatx.com/

A pre-clinical-stage biotechnology company developing novel AAV capsids with high efficacy and unique tropisms into innovative gene therapies for rare ophthalmic conditions founded in 2021 and headquartered in Pittsburgh, PA.

Focus: Computationally guided scAAVengr platform to generate and validate a toolkit of proprietary AAV vectors.

Employment (according to Avista Therapeutics SEC 2024 10-K Filling): On December 31, 2024, Avista Utilities employed 1,950 individuals with bargaining unit employees comprising 36 percent of our overall workforce.

Revenue (according to Avista Therapeutics SEC 2024 10-K Filling): $1.938 Billion USD

Market Cap (intraday Aug 15, 2025): $3.03 Billion USD

Recent News (as of Aug 15, 2025):

Avista Therapeutics and Forge Biologics Announce AAV Development and cGMP Manufacturing Partnership (Aug 13, 2025): Avista Therapeutics and Forge Biologics, ("Forge"), a leading manufacturer of genetic medicines and member of the Ajinomoto Bio-Pharma Services group, today announced a strategic partnership to advance the development and manufacturing of AVST-101, Avista's lead gene therapy candidate targeting X-linked retinoschisis (XLRS), a serious inherited retinal disease.

Through this partnership, Forge will provide Avista with process development, Current Good Manufacturing Practices (cGMP) manufacturing, toxicology, and analytical development services. Avista will also leverage Forge's proprietary FUEL™ technologies, including its HEK293 suspension Ignition Cells™ and pEMBR™ 2.0 adenovirus helper plasmid. All development and manufacturing activities will occur at the Hearth, Forge's 200,000 square foot gene therapy development and manufacturing facility in Columbus, Ohio.

Avista Therapeutics Partners with Roche to Develop Next-Generation AAV Gene Therapy Vectors for Ocular Diseases (Jul 19, 2022): Avista Therapeutics, which recently launched as a spinout of leading health system UPMC, aims to develop innovative gene therapies for rare ophthalmic conditions. The new company today announced a partnership with Roche to develop novel AAV gene therapy vectors for the eyes.

The partnership aims to apply Avista's single-cell adeno-associated virus (AAV) engineering (scAAVengr) platform technology to develop intravitreal AAV capsids matching a capsid profile defined by Roche.

Avista Therapeutics Presents In Vivo Data for its AAV Capsid in Inherited Retinal Diseases at Association for Research in Vision and Ophthalmology 2025 Annual Meeting (May 8, 2025): Avista Therapeutics, a pre-clinical-stage biotechnology company developing innovative gene therapies for rare ophthalmic conditions, today held an oral presentation on data showcasing progress towards the development of the Company's best-in-class intravitreal capsid for inherited retinal diseases, with lead indication in X-linked retinoschisis (XLRS), at the Association for Research in Vision and Ophthalmology (ARVO) 2025 Annual Meeting in Salt Lake City, Utah.

Key Findings:

- ATX002 strongly outperforms 7m8 in nonhuman primate (NHP) eyes.
- ATX002 results in efficient panretinal transduction.
- ATX002 delivers endogenous levels of Retinoschisin protein from intravitreal injection.
- AVST-101, leveraging ATX002 capsid, is currently in IND (investigational new drug)-enabling studies in XLRS, with plans to submit for IND approval in early 2026.

- scAAVengr-HUnT platform generates highly efficient adeno-associated virus (AAV) vectors optimized for retinal delivery via intravitreal injection and implements innovative machine learning methods to further enhance AAV vector generation.

BlueSphere Bio

https://bluespherebio.com/

BlueSphere Bio was founded in 2018 to unlock the potential of personalized T cell therapy for the treatment of cancer by harnessing the unique specificity of each patient's own T cells for the particular molecular fingerprint of each patient's own cancer through our novel TCXpress technology. Based in Pittsburgh, PA.

Focus: Developing novel TCR-based therapies to treat hematologic malignancies, solid tumors, and rare diseases.

Employment (according to BlueSphere Bio LinkedIn as of Aug 15, 2025): 11-50 employees

Revenue: unknown

Market Cap: N/A - BlueSphere Bio is a private company, so it does not have a market capitalization.

Recent News (as of Aug 15, 2025):

BlueSphere Bio Accepted as Member of Johnson & Johnson Innovation-JLABS (Aug 14, 2025): JLABS is a global network of open innovation ecosystems, enabling and empowering innovators to create and accelerate the delivery of life-enhancing healthcare solutions to patients around the world.

Celularity inks manufacturing deal with BlueSphere Bio (Feb 24, 2025): Celularity Inc. , a cellular and regenerative medicine company with a market capitalization of approximately $38 million, has announced a collaboration with BlueSphere Bio, Inc. to manufacture cell therapy products. This Master Services Collaboration Agreement will utilize Celularity's cGMP manufacturing infrastructure to produce BlueSphere's T cell receptor (TCR) T cell therapies.

TCR-T Therapy Cleared for AML Trial in Combination With AlloHSCT (Jun 6, 2024): The FDA has cleared BlueSphere Bio's investigational new drug (IND) application for the company's T-cell receptor T-cell (TCR-T) therapy BSB-1001, allowing the company to open the forthcoming phase 1/2a TCX-101 trial in patients with high risk refractory acute myeloid leukemia (AML), acute lymphocytic leukemia (ALL) and myeloid dysplastic syndrome (MDS), in conjunction with allogeneic hematopoietic stem cell transplantation (alloHSCT).

BlueSphere expects to enroll the first patient in the study in the fourth quarter of 2024. The study seeks to enroll patients with active morphologic disease or cytogenetic features placing them at high risk of relapse to receive simultaneous administration of BSB-1001 with allogeneic hematopoietic stem cell transplant (alloHSCT) without the use of immunosuppressive drugs.

BlueSphere Bio Establishes Strategic Collaboration with the National Cancer Institute to Advance Treatments for Rare Respiratory Disease (Jun 4, 2024): announced a strategic collaboration with the National Cancer Institute (NCI), part of the National Institutes of Health. The collaboration will seek to advance a novel TCR T-cell therapy targeting recurrent respiratory papillomatosis (RRP), a rare orphan disease.

Under the terms of a Cooperative Research and Development Agreement (CRADA), BlueSphere will collaborate with the Center for Cancer Research (CCR) at the NCI. The clinical studies contemplated under the CRADA will be conducted under the leadership of Clint Allen, M.D. and Scott Norberg, D.O. at the CCR, NCI. An earlier Material Transfer Agreement had granted BlueSphere access to HPV+ tumor samples collected by the NCI, with which BlueSphere leveraged its proprietary high-throughput TCR discovery platform, TCXpress™, to identify multiple TCRs with a high affinity for human papilloma virus (HPV) 6 and 11, strains of the virus intricately linked to RRP.

Infectious Disease Connect

https://idctelemed.com/

Infectious Disease Connect utilizes telemedicine to bring Infectious Disease specialty services to hospitals and today services facilities ranging from 20 to nearly 400 beds. Based in Pittsburgh, PA and founded in 2019.

Focus: a world leader in telemedical care of infectious diseases, antimicrobial stewardship, and infection control and prevention

Employment (according to Infectious Disease Connect LinkedIn as of Aug 15, 2025):

Revenue: unknown

Market Cap: N/A - Infectious Disease Connect doesn't have a market cap because it's not a publicly traded company

Recent News (as of Aug 15, 2025):

Infectious Disease Connect Expands Telemedicine Services (Apr 16, 2024): has expanded its services to meet growing demand. The company now offers two cutting-edge service lines — pediatric infectious diseases telemedicine (tele-ID) and tele-Outpatient Parenteral Antimicrobial Therapy (tele-OPAT).

ID Connect's pediatric tele-ID service provides right-sized, top-quality pediatric ID care to hospitals and health systems via telemedicine. The company currently provides pediatric tele-ID services to 10 of its over 80 hospital partners.

Infectious Disease Connect's ILÚM Insight Receives CDC Certification as a Validated Antimicrobial Use Reporting Solution (Aug 3, 2023): Infectious Disease Connect announced today that its antimicrobial stewardship clinical decision support solution (CDSS), ILÚM Insight®, has been named an official National Healthcare Safety Network (NHSN) Validated Antimicrobial Use and Reporting (AUR) Solution.

Validated data reporting software is needed to format and submit data to the NHSN AUR Module to participate in the Centers for Medicare & Medicaid Services Promoting Interoperability program. Beginning in calendar year 2024, NHSN AUR Module reporting will become a mandatory component of this program for all eligible acute care and critical access hospitals.

With this certification, ILÚM Insight can now be used as a Clinical Document Architecture (CDA) Implementor to complete all newly required NHSN AUR Module reporting.

The NHSN AUR Module compares a facility's data to benchmarks of similar hospitals that participate in NHSN AUR Module reporting by providing comparative data to contextualize antibiotic use and resistance. These comparative metrics can then be used to identify opportunities for quality improvement within their antimicrobial stewardship efforts.

Infectious Disease Connect Combines with ILÚM Health Solutions (May 19, 2020) Infectious Disease Connect has combined with Merck's ILÚM Health Solutions, a provider of technology and services to support infectious disease management, clinical decision-support and precision antibiotic therapy.

As part of this agreement, UPMC Enterprises and Merck Global Health Innovation Fund each are investing $5 million to support development of customer offerings and business growth for the newly combined entity. UPMC will retain a majority stake in the combined company.

Novasenta

https://novasenta.com/

Nosvasenta, founded in 2019 and headquartered in Pittsburgh, PA, is a biotechnology research company discovering novel therapeutic targets to develop innovative and effective treatments with the goal of transforming the lives of patients with cancer.

Focus: use systematic, rigorous, and unbiased human tumor microenvironment analysis to uncover new druggable targets, exploiting the critical interplay of disease, immune response, and metabolism. Single-cell level analysis of high-quality, human tumor samples combined with the advanced data mining abilities of our research and computational biology teams accelerate the path from discovery to patient.

Employment (according to Novasenta LinkedIn as of Aug 15, 2025): 11-50 employees

Revenue: unknown

Market Cap: N/A - Novasenta doesn't have a market cap because it's not a publicly traded company.

Recent News (as of Aug 15, 2025):

20 People to Know in Health Care: Mani Mohindru, Novasenta (Feb 5, 2024)

Novasenta Completes $40 million Series A to Advance Novel Cancer Therapeutics (Jul 29, 2022): announced the completion of $40 million in Series A financing led by UPMC Enterprises. The funding will allow Novasenta to advance its pipeline of antibody-based therapeutics and expand its proprietary computational platforms for target discovery, while continuing to recruit top talent.

Novasenta comprehensively maps the tumor microenvironment — the network of cells and structures that surround and interact with tumor cells inside the body — to develop immunotherapies that enable the body's own immune system to fight cancer. Novasenta is building on decades of research in the fields of tumor biology, immunology, computational biology and drug discovery.

Through its relationship with UPMC, the company has access to high-quality human tumor samples representing more than a dozen solid tumor types across various stages of disease and treatment for single-cell level analysis of gene expression profiles. This differentiated approach enables Novasenta's discovery of novel druggable targets and development of therapeutics.

UPMC Launches Novasenta to Develop Targeted Immunotherapy Drugs for Cancer (Aug 23, 2021): UPMC has launched Novasenta, a drug discovery and development company seeking novel and effective treatments for cancer. Based on years of cancer research by renowned University of Pittsburgh scientists and a machine-learning-enabled platform that drives the discovery of potential drug targets, Novasenta focuses on the tumor microenvironment – or the ecosystem that surrounds and constantly interacts with the tumor inside the body – to develop immunotherapies.

SovaSage

https://sovasage.com/

Headquartered in Pittsburgh, PA and founded in 2019. leverages the latest in computer vision & machine learning technologies to help Homecare providers provide better therapy, while doing so profitably and providing a level of care to the patient not previously possible.

Focus:

sovaFit™ The first-of-its-kind, agnostic mask selector powered by visual recognition

sovaStart™ AI assistant for On-Time PAP onboarding

sovaGuide™ featuring Jeanie™ sovaGuide Pro | sovaGuide Biz Jeanie is a virtual coach designed to engage patients at pivotal moments, Jeanie checks-in, coaches patient behavior, and supports through the tough early phases of therapy. And when human intervention is necessary, Jeanie escalates to a live coach—ensuring timely, meaningful support.

Employment

Revenue

Market Cap

Recent News

Helexva

Helexva is a pre-clinical company developing a family of peptide nucleic acids (PNAs) that target mutations that cause genetic diseases. Founded in 2023 and headquartered in Pittsburgh, PA

Focus: The company's initial target is for Huntington's disease, a neurodegenerative disease that is ultimately fatal and currently has no disease-modifying treatment options. The PNAs also could have applications in other inherited genetic conditions.

Employment

Revenue

Market Cap

Recent News

Globin Solutions

https://globinsolutions.com/

A biopharmaceutical company that is committed to researching and developing a rapidly acting antidote to CO poisoning. Founded in 2017 and headquartered in Pittsburgh, PA.

Focus: Globin intends to aggressively develop its lead compound through preclinical testing with the goal to pursue regulatory clearance for clinical testing

Employment

Revenue

Market Cap

Recent News

Glimmer Health

https://glimmer-health.com/

Platform integrates purpose-built resources for chronic pain management. Headquartered in Pittsburgh, PA.
Focus: multi-modal specialty care expertise, supportive longitudinal care team resources and behavioral health support
Employment
Revenue
Market Cap
Recent News

Generian

Pharmaceutical manufacturing company headquartered in Pittsburgh, PA.
https://www.generian.com/
Focus: building a first-in-class drug discovery pipeline of small molecule drugs to address the shortcomings of biologics and improve the patient experience by increasing convenience and access. Generian has internal programs for clinically validated targets, FcRn and IL-4r alpha, as well programs focused on novel targets through a research collaboration agreement with Astellas.
Employment
Revenue
Market Cap
Recent News

Galapagos

(formerly Abound Bio)
https://www.glpg.com/
Abound Bio is a company whose mission is to generate novel antibody-based biological therapeutics to meet unmet medical needs in the fields of cancer and infectious disease.
In 2022, Abound Bio was acquired by Galapagos, a fully integrated biotechnology company. Since then, they have been united around a single purpose: to transform patient outcomes through life-changing science and innovation for more years of life and quality of life. Headquartered in Pittsburgh, PA.
Focus: therapeutic antibody, infectious disease, and cancer space with a significant track record of successful development of biotherapeutics, licensing, and partnerships
Employment
Revenue
Market Cap
Recent News

Cook MyoSite

https://www.cookmyosite.com/
Established in 2002 and headquartered in Pittsburgh, PA, Cook MyoSite was created to guide the Cook Group organization into the expanding world of cellular technologies.
Focus: commercializing muscle cell therapies and advancing the field of muscle cell technologies
Employment
Revenue

Market Cap
Recent News

Rubitection

https://rubitection.com/
Founded in 2011 and headquartered in Pittsburgh, PA. Rubitection's skin health and care management system improves assessment, detection, and care management of dermatological and vascular conditions.
Focus: Non invasive Monitoring and Care Management Decision Support Platform for Chronic Wounds, Dermatology, and Cosmetics
Rubitection's technology, the Rubitect Assessment System, is a low cost easy to use hand held system that empowers anyone to monitor the health of their skin to identify a range of conditions early including bedsores, diabetic foot ulcers, vascular leg ulcers and chronic dermatological conditions.
Employment
Revenue
Market Cap
Recent News

Peptilogics

https://peptilogics.com/
Clinical-stage biopharma company ushering in a new era of peptide R&D with biology- and data-driven scalable design. Headquartered in Pittsburgh, PA.
Focus: revolutionizing the discovery and development process for novel peptide therapeutics for patients with serious and life-threatening diseases
Employment
Revenue
Market Cap
Recent News

Consegna Pharma

https://www.consegnapharma.com/
Consegna Pharma Inc. is a specialty pharmaceutical company with a mission to create best-in-class long-acting medications. Headquartered in Pittsburgh, PA.
Focus: Consegna Pharma reformulates FDA approved drugs and creates new, long-acting injectable (LAI) medications with improved clinical and economic benefits.
Lead product is an LAI to address renarcotization that can occur with high-potency, synthetic opioid overdoses. Additional products focus on areas where LAIs offer high therapeutic and economic value, such as addressing non-adherence, solving specific drug delivery challenges, or reducing side effects. Artificial intelligence (AI) based Computational Drug Delivery™ technology can design LAIs faster and better than legacy practice and with reduced regulatory and technical risk. We further reduce risk since we start with FDA-approved drugs that have known safety, efficacy, and market success. Consegna recently acquired Fathom Pharma LLC, a company developing LAI non-opioid pain medications, to complement our opioid initiatives.
Employment

Revenue
Market Cap
Recent News

Citrine Informatics

https://citrine.io/

Citrine empowers product experts with vanguard AI technologies by using AI to transform innovation, production and sales in materials, chemicals, ingredients and products using them. Headquartered in Redwood City, California with a location in Pittsburgh, PA and founded in 2013.

Focus: Citrine's software learns easily from the knowledge of its users and their idiosyncratic data to enhance all aspects of the product lifecycle across all industries with a physical product. Citrine's users increase supply chain efficiency, rapidly improve product quality, enhance customer experience, expand product reach and increase the velocity of product delivery.

Employment
Revenue
Market Cap
Recent News

Krystal Biotech

https://www.krystalbio.com/

A commercial-stage biotechnology company focused on the discovery, development and commercialization of genetic medicines for high unmet medical needs. Founded in 2016 and headquartered in Pittsburgh, PA.

Focus: develop and deliver genetic medicines to patients using redosable gene therapies for the treatment of severe, life-threatening or rare diseases that have limited or no approved therapies.

Employment
Revenue
Market Cap
Recent News

LifeX™ Labs

https://lifexglobal.com/

LifeX is a life sciences capital growth company that de-risks time, resources, and investment. Founded in 2017 and headquartered in Pittsburgh, PA.

Focus: LifeX is on a mission to drive the development and growth of life sciences startups in Pittsburgh and across the country bu supporting drug, device, diagnostic, and digital health technologies that are poised to transform the future of healthcare.

LifeX Greenhouse Cultivating a robust entrepreneurial ecosystem
LifeX Global Achieving commercialization milestones with industry expertise
LifeX Ventures Funding transformative life science companies

Employment
Revenue
Market Cap

Recent News

TechGiant Spin-offs from CMU – Various AI and robotics startups like RedZone Robotics, Argo AI, Aurora Labs, Lidar-focused companies

Central PA (Hershey, Harrisburg, State College)

Strong in research, biotech startups, and agribiosciences.

A growing hub for healthcare, biotech, and life sciences, anchored by institutions like Penn State and the Hershey medical and research ecosystem. The region has strong strengths in pharmaceuticals, medical devices, and agri-biotech, with a collaborative network of hospitals, research centers, and startups fostering innovation.

Hershey, PA

- Penn State Health Milton S. Hershey Medical Center and Penn State College of Medicine dominate the life sciences ecosystem.
- Research Focus: Strong in translational research, cancer (Penn State Cancer Institute), pediatrics, and biomedical engineering.
- Commercial Presence: Mostly early-stage spin-offs (e.g., LifeX™ Labs, an incubator supporting startups). No major independent biotech HQs—most companies are university-affiliated or small startups.
- Recent Development: The Hershey Innovation District aims to foster more commercialization, but it's still early.

Harrisburg, PA

- Pharma Distribution: Major players like McKesson, AmerisourceBergen, and Teva have distribution/logistics hubs, but no R&D or biotech HQs.
- Government & Support: PA Department of Health and other agencies provide funding/oversight but don't drive biotech innovation directly.
- Gaps: No significant wet labs, incubators, or venture-backed biotech firms.

State College, PA

- Penn State University: Strong engineering and life sciences research (e.g., Huck Institutes of the Life Sciences), but commercialization lags.
- Spin-offs: Examples include Rapid Micro Biosystems (originally from PSU, now HQ in Massachusetts) and Actuated Medical (medical devices). Most remain small or relocate.
- Challenges: Limited local venture capital and lack of large-anchor biotech firms hinder growth.

Central PA Overall

- Academic/Clinical Dominance: Heavy reliance on Penn State and hospital systems.
- Emerging Efforts: Initiatives like Ben Franklin Technology Partners and LifeX™ Labs aim to boost startups, but the region lacks critical mass in venture funding and industry presence.
- Comparison to Philly/Pittsburgh: Correct—neither has a commercial biotech cluster like those cities (which have major gene therapy, AI-drug discovery, and medtech hubs).

Key Missing Context

- Manufacturing: Some CDMOs (Contract Development & Manufacturing Orgs) operate in the region, serving pharma but not driving innovation.
- Defense/DoD Funding: Some biodefense research ties (via Penn State and Army facilities like Carlisle Barracks), but minimal crossover to commercial biotech.

Penn State University

https://www.psu.edu/

A leading research university in State College, Penn State drives innovation in life sciences, biotechnology, and healthcare. Founded in 1855, its strong research programs, extensive industry partnerships, and focus on translational science make it a key contributor to Central Pennsylvania's growing biomedical and technology ecosystem.

Research Activity Designation (according to Carnegie Classification as of Aug 15, 2025): Research 1: Very High Research Spending and Doctorate Production

- 701 Research Doctorates
- $1,206,793,000 Research Spending

Recent News (as of Aug 15, 2025):

New screener offers empirical insights to improve veteran transitions (Aug 15, 2025): To help veterans tackle these hurdles, the researchers created an online assessment tool that assists veteran-serving organizations identify individualized risks and provide targeted, evidence-informed support. Developed by the Clearinghouse for Military Family Readiness at Penn State (Clearinghouse), with support from the May and Stanley Smith Foundation, the free Veteran Transition Screener (VTS) guides professionals in choosing more personalized interventions that may lead to better transition outcomes for veterans.

Unified theory may reveal more superconducting materials (Aug 15, 2025): superconductor materials are limited in how they can be used in everyday life, especially because superconductivity requires extreme temperatures too low for things like next-generation energy or advanced electronic devices. With the support from the "Theory of Condensed Matter" program at Basic Energy Science of Department of Energy (DOE), a team at Penn State developed a new approach to predict which materials could behave as superconductors, potentially bringing us closer to discover new superconductors at higher temperatures.

Tiny robots use sound to self-organize into intelligent groups (Aug 12, 2025): an international team of scientists have taken a page from nature's playbook to model micro-sized robots that use sound waves to coordinate into large swarms that exhibit intelligent-like behavior. The robot groups could one day carry out complex tasks like exploring disaster zones, cleaning up pollution, or performing medical treatments from inside the body

Penn State Hershey Medical Center

https://www.pennstatehealth.org/locations/milton-s-hershey-medical-center

A major academic medical center in Hershey, PA, Penn State Hershey is a hub for clinical care, medical research, and healthcare innovation. Penn State Hershey Medical Center was founded in 1963 through a gift from The Milton S. Hershey Foundation. The center specializes in patient care, translational research, and education, playing a central role in Central Pennsylvania's biomedical and life sciences landscape. The hospital is owned by the Penn State Health System and is its largest hospital.

Penn State College of Medicine

https://med.psu.edu/

Located in **Hershey, PA** near the Penn State Milton S. Hershey Medical Center and Penn State Health Children's Hospital, Penn State College of Medicine was founded in 1967. The College of Medicine is a hub for medical education, clinical care, and translational research. It is closely integrated with Penn State Health Milton S. Hershey Medical Center and focuses on areas like cancer, pediatrics, neuroscience, and biomedical engineering. While primarily academic and clinical, the College supports early-stage commercialization through spin-offs and incubators, helping translate research into potential therapies and medical technologies.

Penn State's Center for Medical Innovation (entrepreneurial ecosystem within Penn State Health and College of Medicine): https://research.med.psu.edu/innovation/

SIG Medical Inc.

https://research.med.psu.edu/cmi-innovations/sig-medical/

- Trauma – Medical Device

Founded in 2016 and headquartered in Hershey, PA.

510(k) cleared by the FDA device, instrument set and technique to allow for a minimally-invasive approach to rib fixation in trauma patients.

inTRAvent Medical Partners LP

https://research.med.psu.edu/cmi-innovations/intravent/

- Neurosurgery, Neurocritical Care & Trauma – Medical Device

Founded in 2015 and headquartered in Hershey, PA.

FDA 510(k) cleared SOLOPASS® device designed to provide imaging and guidance to improve the placement of external ventricular drains (EVDs), one of the most common and lifesaving procedures occurring in neurointensive care.

Respana Therapeutics Inc.

AviCan Inc.

https://research.med.psu.edu/cmi-innovations/avican/

- Pancreatic Cancer – Therapeutic

Founded in 2017 and headquartered in Philadelphia, PA

A novel compound (AS-10) that is selectively toxic to cancer cells, inducing apoptosis (cell death) and in a mouse model found to inhibit tumor growth in pancreatic cancer. More than 100 times more potent than gemcitabine.

Sidero Bioscience

https://research.med.psu.edu/cmi-innovations/sidero-bioscience/

https://www.siderobio.com/our-team.html

- Iron Deficiency – Medical Food

Founded in 2007 and headquartered in Hummelstown, PA
Patented Medical Food technology platform, Siderosorb, delivers therapeutic proteins/complexes directly to the GI tract.
BioFe is the first medical food product, utilizing Baker's yeast to express the human H-Ferritin gene, FTH1, allowing direct delivery to the bloodstream from the intestine in the non-toxic Fe+3 state.
Sidero is poised to rapidly advance a market launch with BioFe.

Respana Therapeutics Inc.

- Influenza Pneumonia – Therapeutic

Founded in 2017 and headquartered in Philadelphia, PA.
Enhances eradication of the influenza virus, post-influenza pneumonia infections.
Decreases harmful inflammation that may lead to hypoxia.
Promotes recovery of respiratory function.
Reduces the risk of developing secondary bacterial infections in the respiratory system.

Actuated Medical

https://actuatedmedical.com/

Actuated Medical is a medical device product innovator founded in 2006 and headquartered in Bellefonte, PA on the entrepreneurial idea that motion "Actuation" will solve clinical needs.

Actuated was selected as a Contract Research Organization (CRO) under the National Institutes of Health (NIH) Blueprint MedTech (BPMT) initiative. It is also a recipient of the 2014 & 2020 SBA Tibbets Awards for SBIR commercialization excellence and the 2020 Life Sciences Pennsylvania CEO of the Year due to its Covid PPE pivot (according to NIH SEED).

Focus:

GripTract-GI™ Manipulator: FDA cleared and patented GripTract endoscopic tissue manipulator is a single use accessory to the endoscope. It assists clinicians with visualization, diagnosis, and treatment during endoscopic procedures.

TubeClear® System: FDA cleared and patented TubeClear System clears sluggish and clogged indwelling feeding tubes at bedside and in minutes. It has repeat sales in several US hospitals, skilled nursing facilities and homes.

Actuated Neuroscience™: pre-clinical ultrasonic technologies have enabled researchers to achieve greater precision and longer working lifetimes with their brain implants resulting in better research outcomes. Our goal is to transition these technologies into clinical systems.

Employment (according to SEC Form S-1 filed May 24, 2024): As of December 31, 2023, we had five regular full-time employees, four of whom were engaged in research and development activities, and seven contract workers, four of whom were engaged in research and development activities. We currently have ten full-time employees that manage and oversee all aspects of our pre-clinical and clinical development. In addition, we currently work with numerous highly experienced consultants and contractors that provide management and oversight in manufacturing, analytical, clinical supply chain, regulatory, pharmacovigilance and safety, clinical operations, data management, statistics, non-clinical toxicology, nonclinical and clinical pharmacology, and medical affairs.

Thus, we currently operate as a semi-virtual pharmaceutical company with expertise in numerous aspects of preclinical and clinical development.

Revenue (according to SEC Form S-1 filed May 24, 2024): the Company has incurred recurring operating losses, has had negative operating cash flows and has not recognized any revenues since its inception. In addition, the Company has an accumulated deficit of $105,094,521 as of December 31, 2023 and is dependent on its ability to raise capital.

Market Cap (Intraday Aug 18, 2025) : $170.519 Million USD

Recent News (as of Aug 18, 2025):

Keiretsu Forum Brings 13 High-Potential Startups to 2025 Angel Capital Association Innovation Funders Showcase (Apr 14, 2025): Keiretsu Forum Mid-Atlantic, South-East, and Texas (K4-MST), a leading force in early-stage investing, proudly announces its endorsement of 13 dynamic companies selected to present at the 2025 Angel Capital Association's Innovation Funders Showcase

This angel investor network is using AI to speed due diligence on promising startups (Feb 11, 2025): Typically, due diligence reports, which help determine how risky an investment would be, take 80 to 120 hours to complete, according to Lubert. He expects AI to cut that time in half by reading through hundreds of files, summarizing them and annotating them in reference to the original files.

The tool was trained using existing due diligence reports from a variety of sectors. Keiretsu ran over two dozen trials over the last few months with local investors and startups, like medical device company Actuated Medical.

Using Ultrasound to Boost Brain Implant Biocompatibility (July 9, 2024): A collaboration between University of Pittsburgh bioengineers and a medical technology company may bring us one step closer to measuring human brain activity more efficiently - and potentially benefit people with nervous system injuries as well as improve artificial intelligence.

For the past five years at Pitt's Swanson School of Engineering, Takashi D.Y. (TK) Kozai, Associate Professor of Bioengineering and Ernest E. Roth Faculty Fellow has worked with Actuated Medical to enhance the biocompatibility of implanted devices in the brain.

Actuated Medical developed the SonoShield Defender, the ultrasound transducer used by Kozai's team, and performed their own longitudinal electrophysiology experiments in parallel with the Kozai lab's imaging experiments.

Bringing motion to medicine: How Actuated Medical is innovating deep brain stimulation and more (Oct 4, 2022): Actuated Medical is making electrode placement for deep brain stimulation easier and less traumatic.

It has three commercial devices, including the NeuralGlider neural implant inserter that reduces tissue deformation during trans-pial insertion of deep brain stimulation electrodes, TubeClear feeding tube clearing system and GentleSharp blood sampling system.

The company also has eight products in its pipeline: the GripTract GI endoscopic tissue manipulator, Baby GentleStick heel stick helper, IntelliNeedle for epidurals, OsteoAccess that enables angled bone entry, TumorSite CNB tissue edge identifier, BleedClear endoscopic clot clearing system, GentleClear endotracheal suction catheter and GentleDispense for needle-free drug delivery.

Actuated Medical received funding through a National Institute of Health Small Business Innovation Research (SBIR) grant, which is the biggest source of seed funding for medical device startups in the product development and proof-of-concept stages.

Toronto (Ontario)

One of the largest life sciences clusters in North America; Strong in AI-driven health tech, biotech, and neuroscience.

One of Canada's leading life sciences hubs, Toronto is strong in biotech, digital health, medical devices, and pharmaceuticals. The city benefits from a dense network of research hospitals, universities (e.g., University of Toronto, Ryerson University, York University, Ontario Tech University), and incubators, fostering innovation and startup growth. Toronto's ecosystem is particularly notable for cell and gene therapy, AI-driven drug discovery, and precision medicine, making it a magnet for both domestic and international investment.

University of Toronto

https://www.utoronto.ca/

One of Canada's top research universities and a global leader in life sciences, biomedical research, and biotechnology. U of T is renowned for its contributions to **stem cell research, immunology, and regenerative medicine**, and it actively collaborates with hospitals, research institutes, and biotech startups. The university is a key anchor in **Toronto's life sciences ecosystem**, fostering innovation, commercialization, and spin-offs that strengthen the city's biotech and health technology sectors.

Toronto continues to lead the country in the number of **AI startups**, with more than 200 created by U of T students, faculty and alumni that have drawn some **$5 billion in investment** over the past five years. U of T also sits at the intersection of **AI and life sciences**, supported by our network of **14 affiliated academic research hospitals**. Innovations in **health analytics**, where AI models are helping improve diagnostics, **clinical workflows** and **faster drug discovery**, are all enabled by collaboration between AI and life sciences researchers and clinicians. In short, U of T functions as a magnet and accelerator for Toronto's tech ecosystem.

Recent News (as of Aug 18, 2025):

Researchers identify protein that evolved to enable plants to thrive on land (Aug 18, 2024): Evolutionary plant biologists at the University of Toronto have identified a protein that evolved approximately 500 million years ago that enables plants to convert light into energy through photosynthesis as they moved from aquatic environments to land.

No more 'garbage in, garbage out': U of T rolls out health data repository for AI researchers (Aug 18, 2025): Hospitals, clinics, universities and other health-focused organizations routinely collect data on everything from spinal scans to sleep study results - but much of that valuable intelligence stays tucked away in-house.

Enter the Health Data Nexus (HDN), a cornerstone offering of the University of Toronto's Temerty Centre for AI Research and Education in Medicine (T-CAIREM), part of the Temerty Faculty of Medicine. The health database repository offers a safe, secure way to share data that's been stripped of personal patient information. It's also straightforward to access - for those with academic or research credentials - and is organized to be read easily by AI algorithms.

In short, the HDN is a silo-busting, open-source home for health data that's poised to help solve AI's old "garbage in, garbage out" problem.

U of I System, University of Toronto launch collaborative research teams (Mar 4, 2025): The University of Illinois System and the University of Toronto this week awarded funding to four new interdisciplinary research teams that will drive innovations and advance collaboration between the universities. Selected from 21 applications, these are the first awards from an institutional partnership launched in 2024.

Building on talent, innovations and resources from the two universities, the initiative seeks to accelerate economic development through the development of innovative technologies. Funding for the program comes from U of T's Office of the Vice-President, International and the U of I System's President's Office and the Office of the Vice President for Economic Development and Innovation.

The newly funded seed grant projects will focus on sustainable urban transportation in African countries, the future for archives as data, coupling large-scale transportation models with travelers' decision-making science, and travel demand modeling in an era of autonomous and electric transport.

MaRS Discovery District

https://www.marsdd.com/

MaRS Discovery District, founded in 2001, is Canada's leading urban innovation hub, helping startups in cleantech, health, fintech, and more.

Focus:

Employees (according to Betakit as of Oct 7, 2024): 101 employees

1,200+ companies supported by MaRS; 126 companies call MaRS Centre and MaRS Waterfront home; 33,000+ people employed by MaRS-supported companies; facilities housing 700,000+ square feet of wet and dry labs

Revenue: N/A

Market Cap: N/A

Recent News (as og Aug 18, 2025):

MaRS and Toyota Mobility Foundation select participants for the Mobility Unlimited Hub's second cohort (Aug 6, 2025): These 10 high-potential startups are working on affordable prosthetics, smart exoskeletons and other innovative solutions to support active mobility.

- Bionic Power Inc. - This Vancouver-based startup has developed a smart orthosis to address knee-related gait deficiencies, allowing people with cerebral palsy, spina bifida and post-polio syndrome to move more easily, safely and independently.
- GiveVision - This London, U.K. startup has developed sight-enhancing wearable headsets that allow visually impaired users to watch live sports and cultural events.
- Human in Motion Robotics Inc. - This Vancouver-based startup has developed a wearable self-balancing lower-limb exoskeleton designed for rehabilitation and personal mobility.
- ImaginAble Solutions Inc. - This Hamilton-based startup has developed an assistive device to help people with limited hand mobility write, draw, paint and use touchscreens.
- Kinesix XR Inc. - This Montreal- and Chile-based startup leverages virtual reality and augmented reality technologies to deliver AI-powered rehabilitation therapy for patients recovering from strokes and traumatic brain injuries and those living with Parkinson's disease, multiple sclerosis (MS), chronic pain and other ongoing conditions.
- Ora Medical Inc. - This Montreal-based startup has developed a hands-free gait trainer designed to support walking rehabilitation for children with mobility challenges.
- Possibility Neurotechnologies - This Calgary-based startup has developed a mobile app that transforms EEG headsets into brain-computer interfaces, allowing users to control devices and communicate using only their thoughts.
- smartARM Robotics Inc. - This Toronto-based startup has developed an intuitive, affordable, AI-powered bionic arm with vision-based grip recognition.
- Steadiwear - This Toronto-based startup has developed hand-stabilization gloves to assist adults with tremors, including those caused by Parkinson's disease and strokes.
- Victoria Hand Project - This Victoria-based non-profit partners with local clinics to manufacture 3D-printed upper-limb prosthetics for amputees in low-resource and conflict-affected regions.

MaRS partners with leading Japanese consortium to accelerate Canada's carbon removal industry (Apr 3, 2025): MaRS Discovery District (MaRS), Canada's largest urban innovation hub, pre-purchased carbon removal credits from six Canadian ventures, helping these early-stage companies gain market traction and attract future investment.

Over the past six months, MaRS led a carbon dioxide removal (CDR) credit purchase and educational program with participation from M-Lab, a Japanese consortium, which includes Mitsubishi Corporation (Americas), ENEOS Americas Inc., Mitsubishi Research Institute, Inc., Tokio Marine Holdings Inc., and Yazaki Innovations, Inc.

For carbon removal to succeed at scale, we need more corporate buyers, but many companies don't know where to start. Through the educational program, MaRS was able to equip M-Lab members with strategies, knowledge, and tools to begin making their own carbon credit purchases, aligning with Japan's commitment to achieve net-zero emissions by 2050.

MaRS Discovery District and Communitech survey shows Cdn. startups bracing for tariff fallout (Apr 1, 2025): A new survey conducted by MaRS Discovery District and Communitech reveals that Canadian startups are preparing for significant disruption if U.S. tariffs are imposed. More than three-quarters of respondents expect direct or indirect impacts on their businesses, with potential implications for revenue, investment and hiring.

MaRS and the Canadian Cancer Society launch innovation challenge to improve cancer screening in rural and remote communities (May 8, 2025): announce the launch of the Rural & Remote Community Cancer Screening Challenge – a nationwide initiative to identify and support community-designed solutions that increase participation in cancer screening across rural and remote communities in Canada. This initiative will award a total of $175,000 across two phases.

MaRS and RBC partner to support Canada's cleantech future with $3.5-million grant (Dec 3, 2024): MaRS Discovery District (MaRS) today announced a transformative $3.5-million grant from RBC, the largest climate-focused grant in RBC's history, to support cleantech innovation aimed at advancing climate technology and environmentally sustainable innovation across Canada.

The collaboration will continue to support the RBC Women in Cleantech Accelerator and launch the new UnCarbon Corporate Adoption Accelerator, a climate-focused initiative under the Mission from MaRS program. Currently aligned with the Better Buildings Mission, the UnCarbon Accelerator is designed to evolve and support companies addressing the various challenges brought on by climate change.

Federal government reinvests in Scale-Up Platform with $47.5 million commitment to Invest Ottawa, MaRS, and Communitech (Nov 18, 2024): The funding will be dispersed across the three regional innovation hubs responsible for the program: Communitech, MaRS Discovery District, and Invest Ottawa. Through the Scale-Up Platform, innovation hubs help entrepreneurs in high-growth sectors access capital, talent, markets, and mentorship services.

According to the federal government, the goal of the platform is to accelerate businesses' growth and create new Canadian "anchor firms," defined as those that generate $100 million in annual revenue or more, and attract billions in investment.

MaRS CEO lays out reset business model as innovation hub makes more cuts (Oct 7, 2024): After laying off 20 staff members in June 2024, predominantly at the leadership level, MaRS told BetaKit it had cut a further 11 people from its team, while moving eight of its advisors from employees to contract positions. These latest reductions bring MaRS Discovery District's total headcount to 101 employees.

Major Hospitals

UHN's Toronto General Hospital (TGH)

https://www.uhn.ca/OurHospitals/TGH

- Renowned for its multidisciplinary approach to research, with a strong focus on areas like cardiology, transplantation, immunology and autoimmunity, infectious diseases, tissue injury, and diabetes

Sunnybrook Hospital

https://sunnybrook.ca/

- Strengths in biology, physics, and imaging

Mount Sinai Hospital/Sinai Health

https://www.mountsinai.org/
https://www.sinaihealth.ca/our-hospitals/mount-sinai-hospital

- Mount Sinai Hospital's research efforts in Canada, primarily through the Lunenfeld-Tanenbaum Research Institute and the Science of Care Institute, aim to make breakthroughs in areas such as diabetes, cancer, women's health, brain disorders, addiction, and the overall improvement of patient care.

Sanofi Canada

https://www.sanofi.com/en/canada
https://www.sanofi.com/en
Sanofi is a French multinational pharmaceutical and healthcare company headquartered in Paris, France. It was established in 1973 and merged with Synthélabo in 1999 to form Sanofi-Synthélabo, which is now known as Sanofi.
Business operations in approximately 63 countries and our products are available in more than 160 countries: United States: we rank fifteenth with a market share of 2.1%; Europe: we are the fifth largest pharmaceutical company in France where our market share is 4.0%, and we rank fourth in Germany with a 4.0% market share; and other countries: we are ranked twelfth in Japan with a market share of 2.3%, and ninth in China with a market share of 1.5%.
Sanofi's Canadian headquarters is in North York, ON (24.1 km drive from Toronto, ON) with roots in the country tracing back to 1914 and operates world-leading R&D and biomanufacturing facilities in Toronto.
Focus:
The Toronto Campus has grown to be the largest biotech site in Canada – a culmination of a rich history in healthcare innovation dating back to the early 1900s.
Sanofi also operates an artificial intelligence AI centre of excellence located in Toronto that uses leading technologies to develop world-class data and AI products that accelerate research and development.
The Toronto Campus is one of the largest vaccine research and development and manufacturing sites in the world. Each year, Sanofi protects over seven million Canadians against infectious diseases and exports vaccines to over 60 countries around the world.
Employment (according to Sanofi 2024 FORM 20-F): In 2024, Sanofi employed 82,878 people worldwide, 3,210 fewer than in 2023. 50% in Europe, 16% in US, 35% in the rest of the world
More than 2,000 people across Canada (according to Sanofi Canada website)
Revenue (according to Fierce Pharma Apr 21, 2025): For all of 2024, Sanofi logged sales of 41.08 billion euros ($44.46 billion), a step down from the roughly 43 billion euros it reported in 2023 but an 8.6% increase when accounting for the subtraction of consumer health sales last year.
Reorganization in which it is separating from its consumer health business. In its financial reports, the company is accounting for the spinoff as if it has happened, even though the sell-off has yet to be completed. Aside from the effects of the divestment, Sanofi's pharma products accomplished a 9% sales increase in 2024.
Market Cap (intraday Aug 19, 2025): 124.61 Billion USD
Recent News (as of Aug 19, 2025):
Sanofi's multiple myeloma candidate granted FDA orphan drug designation (Aug 19, 2025): Sanofi's investigational multiple myeloma (MM) therapy has been granted orphan drug designation by the US Food and Drug Administration (FDA) to treat patients with relapsed or refractory disease.
Sanofi's anti-CD38 therapy Sarclisa (isatuximab) is already approved in the US to certain cases of relapsed or refractory MM, as well as newly diagnosed patients who are not eligible for autologous stem cell transplant.The company is also investigating a subcutaneous (SC) formulation of Sarclisa, offering a potential new administration option for patients.
The ongoing IRAKLIA study has been comparing SC Sarclisa, delivered at a fixed dose with Enable Injections's on-body delivery system, against weight-based doses of the drug's approved intravenous (IV) formulation in adults with relapsed or refractory MM who have received at least one prior line of therapy, including lenalidomide and a proteasome inhibitor.

Sanofi receives orphan status from EMA for rilzabrutinib (Aug 18, 2025): Sanofi has received orphan designation from the European Medicines Agency (EMA) for rilzabrutinib, a reversible covalent Bruton's tyrosine kinase (BTK) inhibitor, to treat immunoglobulin G4 (IgG4)-related disease (IgG4-RD), a rare immune-mediated condition.

Rilzabrutinib's potential was demonstrated in a Phase II study involving individuals with IgG4-RD. Over 52 weeks, patients treated with rilzabrutinib experienced fewer disease flares and showed improvement in other disease markers and reduced need for glucocorticoids.

In addition to treating IgG4-RD, rilzabrutinib has been recognised internationally with orphan designations for immune thrombocytopenia (ITP) across the US, EU and Japan. It also received orphan status in the US for warm autoimmune haemolytic anaemia and sickle cell disease, and fast-track designation by the US Food and Drug Administration (FDA) for ITP and IgG4-RD.

Rilzabrutinib is currently undergoing regulatory review in major markets, including the US, the European Union and China, specifically for ITP treatment applications. The FDA has set the target action date for its regulatory decision on ITP for 29 August 2025.

Novavax Strengthens Position with Vaccine Approval and Sanofi Partnership (Aug 18, 2025): Novavax, Inc. is a biotechnology company focused on recombinant protein-based vaccines using nanoparticle and Matrix-M adjuvant technology. The Maryland-based company has an approved COVID-19 vaccine, Nuvaxovid, which is being commercialized globally through partnerships, including a major agreement with Sanofi. Currently, the company is expanding its product reach for emerging infectious disease prevention.

Sanofi stops supply of high cholesterol drug to China due to limited availability (Aug 12, 2025): Sanofi said on Tuesday it had stopped supplying Praluent, a popular cholesterol drug jointly developed by the French pharmaceuticals firm and its partner Regeneron Pharmaceuticals, in China due to limited availability.

Sanofi is the latest foreign drugmaker to stop supplying popular medications to China. Merck suspended shipments of its blockbuster human papillomavirus vaccine Gardasil to the country in February, citing weak discretionary spending.

Sanofi pens $395M China pact for Arrowhead metabolic med awaiting approval decision (Aug 1, 2025): Sanofi is handing over $130 million upfront for the China rights to Arrowhead Pharmaceuticals' rare metabolic disease treatment that is currently being considered for approval by Chinese regulators.

The RNA interference (RNAi) therapeutic, called plozasiran, already aced a phase 3 trial last year Since then, Arrowhead's China-focused subsidiary Visirna Therapeutics has submitted an approval request to Chinese regulators.

Now, Sanofi wants in—paying Visirna $130 million upfront with the potential for $265 million in milestones to follow should plozasiran score Chinese approvals in FCS and various other indications. For its part, Arrowhead will be in line for royalties on sales from the greater China region as part of its licensing arrangement with Visirna.

In the U.S., Arrowhead had already been beaten in a tight race to market by Ionis Pharmaceuticals' antisense candidate Tryngolza, which secured FDA approval in FCS at the end of 2024. However, Ionis has yet to push for approval in China.

Sanofi Canada appoints new Country Lead, Canada and General Manager, Specialty Care (Jun 9, 2025): Sanofi Canada announced the appointment of James Guy as Country Lead, Canada and General Manager, Specialty Care. In this role, Guy will lead Sanofi's Canada Country Council, which manages the

operations of the company's three business units and functions. Guy will also head the Specialty Care business unit in Canada.

Health Canada approves Tzield – the first ever disease modifying therapy for type 1 diabetes (May 5, 2025): Sanofi announced Health Canada approval of Tzield, the first disease-modifying therapy for type 1 diabetes (T1D). This is a huge win for the T1D community in that it is the first medicine to be approved in Canada that addresses the autoimmunity behind T1D – not just the symptoms that is causes.

TZIELD (Teplizumab) is indicated to delay the onset of Stage 3 type 1 diabetes in adult and pediatric patients 8 years of age and older with Stage 2 type 1 diabetes.

Tzield has been shown to delay the onset of a clinical T1D diagnosis by a median of 2 years. Clinical diagnosis (stage 3) is defined by the onset of symptoms requiring insulin therapy.

Sanofi nets €10B from Opella stake sale, eyes more 'bolt-on' deals (Apr 30, 2025): Six months after entering talks with U.S. private equity firm Clayton, Dubilier & Rice (CD&R), Sanofi has closed a deal to sell a 50% controlling stake of its consumer health business Opella for 10 billion euros ($11.4 billion), the French biopharma powerhouse said on Wednesday.

Altuviiio approved to treat hemophilia A in Canada (Apr 8, 2025): Health Canada has approved Altuviiio (efanesoctocog alfa) to treat children, adolescents, and adults with hemophilia A, with the aim of preventing and controlling bleeds, including those occurring around the time of surgery.

Sanofi, which will market the therapy in Canada, developed Altuviiio alongside Sobi (Sobi - Swedish Orphan Biovitrum; Pharmaceutical company in Stockholm, Sweden).

Sanofi Hit With $250M Impairment After Scrapping J&J-Partnered E. coli Vaccine (Feb 13, 2025): Sanofi and Johnson & Johnson on Thursday terminated the Phase III E.mbrace study of their investigational vaccine for invasive E. coli disease due to disappointing data.

As a result of the termination, Sanofi will record a $250 million impairment charge, to be reflected in its fourth-quarter 2024 balance sheet, according to the company's press announcement.

The decision to discontinue E.mbrace came after an independent data monitoring committee found during a scheduled review of the trial that the vaccine candidate "was not sufficiently effective at preventing" the disease versus placebo. Safety was clean overall, with no signals of concern linked to the shot throughout the study.

Designing Sanofi's new vaccine facility in Toronto (Dec 17, 2024): Global healthcare company Sanofi opened a new state-of-the-art vaccine manufacturing facility at its Toronto campus this past spring. As the largest biomanufacturing facility in Canadian history, this facility will significantly increase Sanofi's capacity to produce pediatric and adult vaccines for diseases like pertussis, diphtheria and tetanus. These vaccines will be exported to more than 60 global markets, enhancing health protection both in Canada and internationally.

This new facility is part of Sanofi's ongoing investment in Canada's biomanufacturing sector, representing a total investment of more than $800 million, supported by federal, provincial and municipal governments.

Sanofi OTC spinoff wholesale partnership with Alliance and Phoenix (Mar 4, 2024): Opella Healthcare, Sanofi's OTC division, has announced a dual partnership agreement with Alliance Healthcare and Phoenix Healthcare Distribution to supply OTC products to pharmacies in the UK.

Opella, which trades as Sanofi Consumer Healthcare, is expected to demerge from Sanofi in the near future, with a divestment set to take place in the first quarter of the 2024 financial year at the earliest.

Apotex

https://www.apotex.com/global

Apotex Inc. is a Canadian pharmaceutical corporation, founded in 1974 and headquartered in Toronto, ON.

Focus: 800+ pharmaceutical, over the counter, and consumer health products, including natural health product portfolio

Key areas of focus for pharmaceutical innovation include dermatology, neuroscience, oncology, ophthalmology, osteoporosis, pain management and women's health.

Employment (according to Apotex 2024 Sustainability Report): employing more than 6,000 people around the world.

Over the past decade, Apotex has invested more than $2 billion in research and development, resulting in the launch of more than 60 products annually.

- 5 Canadian sites including our global headquarters, oral solid dose and liquid dose manufacturing, and active pharmaceutical ingredient manufacturing, packaging, warehousing and distribution.
- 2 U.S. sites including warehousing and distribution, and the headquarters for Apotex Corp., our U.S. affiliate.
- Mexico sites including oral solid dose manufacturing and active pharmaceutical ingredient manufacturing.
- India sites including finished dose manufacturing and active pharmaceutical ingredient manufacturing.

Revenue: unknown (but likely several billion)

Market Cap: NA - Apotex is a privately held company, so it does not have a market capitalization. In 2023, it was acquired by SK Capital Partners, with the sale valuing the company between $3 billion and $4 billion CAD.

Recent News (as of Aug 19, 2025):

Apotex receives Health Canada approval for Aflivu™, a biosimilar to Eylea®, available in pre-filled syringe and vial formats (Jul 2, 2025): The Canadian-based global health company, today announced that Health Canada has approved Aflivu™ (aflibercept), a biosimilar to Eylea®, indicated for the treatment of neovascular (wet) age-related macular degeneration, macular edema secondary to central or branch retinal vein occlusion, treatment of diabetic macular edema, and treatment of myopic choroidal neovascularization.

Apotex introduces IVRA™ (Melphalan) hydrochloride injection: First ready to dilute liquid formulation of Melphalan injection approved via 505(b)(2) NDA in the United States (May 9, 2025): IVRA is an alkylating drug indicated for the palliative treatment of patients with multiple myeloma for whom oral therapy is not appropriate, and will be distributed primarily through hospital and institutional channels.

Apotex announces expansion of licensing agreement with Formosa Pharmaceuticals to Mexico for commercialization of clobetasol propionate ophthalmic suspension for the treatment of inflammation and pain following ocular surgery (May 6, 2025): APP13007 was approved by the U.S. Food and Drug Administration (FDA) in 2024. APP13007's active ingredient is the corticosteroid clobetasol propionate, and it is derived from Formosa Pharma's proprietary APNT® nanoparticle formulation platform. This novel formulation proved statistically and clinically superior to its matching placebo in Phase 3 trials in the United States ($p<0.001$).

This license agreement for the Mexican market adds to Apotex's existing exclusive rights to this product in Canada.

Attorney General Bonta Urges Consumers to Check Eligibility for Compensation for Inflated Generic Drug Prices (Mar 26, 2025): California joins 50 states and territories in seeking preliminary approval of a $39.1 million settlement with generic drug manufacturer Apotex over conspiracy to inflate prices and limit competition. Attorney General Bonta previously announced the settlement in principle with Apotex last fall, along with a $10 million settlement with Heritage Pharmaceuticals. At the time of that announcement, the settlement with Apotex was conditioned on the signatures of all necessary states and territories. Those signatures have been obtained, and the coalition is filing the settlement today in U.S. District Court for the District of Connecticut.

IPO Radar: Brazil Potash, K&F Growth Acquisition, Apotex, The GrowHub (Nov 6, 2024): Canadian drugs manufacturer Apotex Inc is planning to IPO at some point next year. Although there is little available information on the details of the deal, among the book runners appointed are believed to be RBC Capital Markets, Jeffries Financial Group, and TD Securities.

Apotex Inc. eyes potential IPO in 2024 with major advisers on board (Nov 4, 2024): Canadian generic drug manufacturer Apotex Inc. is reportedly considering an initial public offering (IPO) next year, as per sources cited by BNN Bloomberg.

The Toronto-based company, which ranks among the largest global producers of generic drugs, has retained RBC Capital Markets, Jefferies Financial Group, and TD Securities as advisers for the deal, according to individuals familiar with the matter.

These sources are written for a general audience indicated that no final decisions have been made regarding the exact timing or size of the IPO, and additional banks may later join the advisory lineup.

Heritage Pharmaceuticals and Apotex to pay millions amid price fixing scandal (Oct 31, 2024): Attorney General Anthony G. Brown reached two significant settlements with Heritage Pharmaceuticals and Apotex totaling $49.1 million.

The companies are being accused of engaging in “long-running conspiracies to artificially inflate and manipulate prices, reduce competition, and unreasonably restrain trade for numerous generic prescription drugs”

Heritage and Apotex have agreed to cooperate with Maryland and other state plaintiffs in ongoing litigations led by Connecticut against 30 corporate defendants and 25 individual executives. As part of the settlement, the enterprises also agreed to change their business model to ensure fair competition and compliance with antitrust laws.

Heritage’s settlement, worth $10 million, will be filed on Thursday, Oct. 31 in the United States District Court for the District of Connecticut in Hartford. The settlement with Apotex, valued at $39.1 million, will soon be finalized and filed in the U.S. District Court for the District of Connecticut.

The case began in 2016, when a coalition of nearly all states and territories filed three antitrust complaints.

Geneseeq Technology

https://na.geneseeq.com/

A precision oncology company advancing cancer detection, diagnosis, and treatment headquartered in Toronto, ON and founded in 2012. Geneseeq Technology's Chinese headquarters is located in Nanjing.

Focus: next-generation sequencing (NGS) technologies

- Our comprehensive testing portfolio including: Pan-cancer panels covering over 400 genes; Cancer-type-specific panels tailored for solid tumors and hematologic malignancies; Minimal residual disease (MRD) monitoring technologies; Multi-cancer early detection (MCED) solutions, including CanScan®, which holds both CE mark and FDA Breakthrough Device Designation; CE-IVD and NMPA-approved NGS-based assays, including tumor mutational burden (TMB) testing.

Geneseeq's testing services and products are widely adopted by more than 8,000 oncologist partners across 20+ countries and regions. Geneseeq is actively involved in over 2,700 research collaborations with pharmaceutical and academic partners, providing high-quality genomic data to support biomarker discovery, clinical development, and translational research.

Employment (according to Geneseeq Technology website as of Aug 19, 2025): 1,000 employees across Canada and China

Revenue: unknown

Market Cap: N/A - a private company and its shares are not publicly traded

Recent News (as of Aug 19, 2025):

Geneseeq's Breakthrough Cancer Detection Blood Test Published in Nature Medicine (May 28, 2025): CanScan® is a non-invasive blood test powered by AI-driven whole-genome sequencing. It analyzes subtle cancer-specific changes in circulating cell-free DNA (cfDNA) using Geneseeq's proprietary MERCURYTM Technology. By integrating fragmentomics, genomic, and epigenomic features, the test identifies whether a cancer signal is present and accurately predicts the tissue of origin (TOO). In 2023, CanScan® received Breakthrough Device Designation from the U.S. FDA.

Unlike traditional cancer screening tools that are limited to one type of cancer and often involve invasive procedures, CanScan® offers a convenient, comprehensive solution: a single blood test that screens for more than a dozen cancers at once.

Geneseeq's new blood test may detect early-stage pancreatic cancer (May 23, 2025): Geneseeq Technology is developing a blood test that uses cell-free DNA (cfDNA) and artificial intelligence (AI) to detect early-stage pancreatic ductal adenocarcinoma — the most common type of pancreatic cancer, which forms in the cells of the pancreas responsible for producing digestive juices — that is often missed by standard screening tests.

In a new study, an AI-based machine learning model looked for patterns in cfDNA — DNA fragments released by cancer cells into circulation — and could accurately distinguish patients with pancreatic ductal adenocarcinoma from healthy individuals. It also differentiated between benign, or noncancerous, lesions and malignant, or cancerous, ones.

Geneseeq scores FDA breakthrough designation for cancer detection device (Jan 4, 2024): Geneseeq's CanScan device, the multi-cancer early detection solution, can detect early cancer signals with 99% specificity in peripheral blood.

CanScan was built using Geneseeq's highly sensitive MERCURY multi-omics technology. The solution uses low-depth whole-genome sequencing (WGS) on circulating cell-free DNA (cfDNA) present in

peripheral blood to detect cancer. The genetic and fragmentomic features of the cfDNA are used to detect early cancer signals with 99% specificity and predict the tissue of origin of cancers.
The test can be used to detect a variety of cancer types and can obviate the need for multiple tests. According to Geneseeq, CanScan has the potential to improve current screening methods in common cancer types such as prostate and lung cancers, as well as detect cancers, which do not have effective detection tools, such as oesophageal and endometrial cancers.
Geneseeq Gains CE Marks for NGS-based Test Kits for Solid Tumors and Hematological Cancer (Aug 22, 2023): announced that three of our next-generation sequencing (NGS)-based cancer genetic testing kits, GENESEEQPRIME NGS Tumor Gene Detection Kit (GeneseeqPrime ™), GENESEEQ Homologous Recombination Deficiency Detection Kit (GeneseeqPrime™ HRD), and GENESEEQ Blood Cancer Gene Detection Kit (Hemasalus™ DNA/Hemarna™ RNA), have obtained the European Union's CE Mark approval. These approvals signify that GeneseeqPrime™ and GeneseeqPrime™ HRD are suitable for solid tumor genomic profiling, while Hemasalus™ DNA/Hemarna™ RNA is cleared for hematological cancer genomic profiling. In addition to the CE-Marked GENESEEQ multi-cancer minimal residual disease detection (Shielding™ ULTRA MRD) and GENESEEQ multi-cancer early detection (CanScan™ MCED) kits introduced earlier this year, Geneseeq currently offers five CE-marked cancer genetic testing kits tailored for various clinical situations.
GeneSeeq and Illumina to develop clinical oncogene kit (Jun 26, 2018): GeneSeeq, industry leader in next-generation sequencing (NGS) will collaborate with Illumina, global leader in DNA sequencing and array-based technologies,to develop an oncogene detection kit for clinical diagnosis based on its industry-leading sequencing techology. Both parties will also conduct comprehensive cooperation in the promotion of high-throughput oncogene testing in China.
GeneSeeq has been at the forefront of the development of high-throughput tumor genetic test kits. Its Multi-gene Detection Kit for Lung Cancer, a high-throughput sequencing method, has entered the China Food and Drug AdministrationCFDA's innovative approval green channel and is expected to be approved this year. In addition, the company has several NGS-based test kits in the development and application process in the oncology field.

Deep Genomics

https://www.deepgenomics.com/

Founded in 2014 and headquartered in Toronto, ON, Deep Genomics is using artificial intelligence to build a new universe of life-saving genetic therapies.

Focus: In 2018, proprietary AI Platform unlocked first targets in which RNA splicing was the defect and the mechanism for correction.

In 2023 Deep Genomics released the first Foundation Model for RNA Biology, BigRNA.

Deep Genomics is currently developing BigRNA+, which will expand the number of mechanisms and genetic variants they can pursue. This includes expanding into more complex genetic diseases and discovering new biology. As genetic targets are less understood in complex genetic disease, the AI Platform will play an even greater role in identifying novel targets, as well as therapies, to modulate disease.

Employment (according to Deep Genomics website as of Aug 19, 2025): 100+ team members, with expertise in artificial intelligence, automation, cell and molecular biology, clinical development, in vitro disease models, machine learning, medicine, molecular genetics, preclinical development, organic chemistry, and software engineering.

Revenue: unknown

Market Cap: N/A - a private company and its shares are not publicly traded

Recent News (as of Aug 19, 2025):

Genomics Market Surges with PCR and AI Technologies Projected to Reach USD 175.18 Billion by 2034 (Jul 29, 2025): The genomics market is expected to see immense growth owing to the sudden increasing need for genetic testing, advanced research in chronic diseases, in the current period. Moreover, the ongoing trend for personalized medicine demand is actively contributing to the industry's growth in recent years. Also, several hospitals and research centers have seen a heavy usage of genomics for diagnostics and drug development in recent years, as per last year's observation.

Artificial Intelligence in Biotechnology Market to Hit USD 7.75 Billion by 2029 with 19.1% CAGR | MarketsandMarkets™ (Oct 28, 2024): The global AI in Biotechnology market is projected to reach USD 7.75 billion by 2029 from USD 3.23 billion in 2024, at a high CAGR of 19.1% during the forecast period. Increasing cross-industry collaborations and partnerships that foster innovation and resource sharing are the main reasons for the growth of this market. High penetration of AI-powered biomarker discovery for complex diseases, rising utilization of AI in digital twins for drug discovery, and AI and CRISPR-Cas9 synergy in genetic drug discovery are some of the other factors propelling market growth. However, several factors will likely restrain market growth such as fragmented global regulations for AI, lack of sufficient AI infrastructure in developing economies, and difficulties in applying ai-generated knowledge to clinical settings are some factors contributing to challenges in the market growth.

Deep Genomics announces key hires, expands operations in Cambridge, Mass. (Jun 13, 2024): recently opened a new office and lab in Cambridge, Massachusetts, an expansion of its Toronto office, and several leadership hires.

The company has developed a platform known as the “AI Workbench” that analyzes genomic data to identify therapeutic targets and design RNA-based drug candidates for genetically-defined diseases. The company is focusing on developing treatments for metabolic disorders like Wilson disease and refractory gout, as well as neurological conditions such as frontotemporal dementia, Niemann-Pick disease, pediatric epilepsy and Parkinson’s disease.

In 2021, Deep Genomics raised $180 million in a Series C funding round, reportedly the largest biotech funding round in Canadian history at the time. The company has also established research collaborations with institutions like Mila, the Quebec Artificial Intelligence Institute, to further develop AI applications for drug discovery. Deep Genomics' founder and CEO, Brendan Frey, also co-founded the Vector Institute for Artificial Intelligence.

Deep Genomics debuts AI model for debugging the body's RNA code and finding paths to potential therapies (Sep 27, 2023): The company has put forward an artificial-intelligence-powered foundation model designed to explore RNA biology, and how the small pieces of genetic material can contribute to various diseases or provide avenues for new therapies.

Deep Genomics' AI, dubbed BigRNA, is a transformer neural network designed to predict the biological mechanisms that regulate RNA expression tissue-by-tissue, to help better understand how specific variants in genes ultimately give rise to different diseases. At the same time, the program can identify potential binding sites for proteins and microRNAs, which could possibly be exploited for the discovery and development of new drug compounds.

AI-driven Deep Genomics gets $180M to turn biology into informational medicines (Jul 28, 2021): Softbank led the Series C round of funding for Deep Genomics, a startup that applies its artificial intelligence technology to all aspects of discovering and developing new drugs. The Deep Genomics platform has yielded 10 programs; CEO Brendan Frey aims to advance four of them to the clinic in two years, all while tripling the company's pipeline.

Evoco Ltd.

https://evocoltd.com/

Evoco is a material innovation company harnessing the power of nature through plant-based chemistry to develop the next generation of high-performing, sustainable products. Founded in 2017 and headquartered in Toronto, ON.

Focus: Evoco's innovation platform can be used to produce high-performance Bio-Foams, Bio-Leathers, and Bio-TPU technologies. They have scaled the technology today with a focus on continued growth in the footwear industry while expanding our global reach with operations in China, Vietnam and Italy. With 14 patents granted, Evoco is expanding its market opportunities by introducing new materials and technologies into additional verticals and product line categories.

Employment (according to Evoco LinkedIn as of Aug 19, 2025): 11-50 employees

Revenue: unknown

Market Cap: N/A - a private company and its shares are not publicly traded

Recent News (as of Aug 19, 2025):

Made in Canada: How a Toronto startup is navigating supply-chain shake-ups (Jul 20, 2025)

EVOCO Ltd raises CAD $12M in series A funding to scale its plant-based materials platform and support its consumer goods partners in migrating to sustainably sourced feedstocks (Mar 24, 2023): The investment was led by Circular Innovation Fund- (CIF) – a fund jointly managed by European-based Demeter and North American-based Cycle Capital, joined by new investor Export Development Canada (EDC), and return investor The Stewart Group Limited (SGL).

The company's flagship technology, FATES®, a patented eco-foam boasting an industry-leading 80% plant-based content, can be adapted to a wide range of applications and is readily scalable. Evoco has initially partnered with established brands in the footwear industry such as Vans, Keen, and Timberland. Evoco recently opened its own production facility in Vietnam to meet its global customers' demand and this new funding will accelerate its operational footprint expansion globally. The company will also be embarking on new partnerships with leading material manufacturers to further support its diversification. In addition, this funding round will allow Evoco to extend its materials innovation offering, providing solutions including leather alternatives, plastics, 3D printing, and allowing the company to enter additional verticals such as furniture, automotive, bedding and fashion.

Sustainability Start-Up Shaping Future at the Sole of Footwear (Apr 4, 2022): Global leaders in active footwear – Kodiak, Timberland and Vans to name a few – have partnered with evoco ltd., a Canadian cleantech start-up, to reimagine the materials used in their line-ups. Using plant-based and carbon-reducing technologies, evoco has developed patented insoles – FATES™ – to offer a high-performance eco-foam alternative to traditional footwear end-use applications.

Avicanna

https://www.avicanna.com/

Avicanna is a commercial-stage international biopharmaceutical company founded in 2016 and headquartered in Toronto, ON.

Focus: Advancement and Commercialization of Evidence-Based Cannabinoid-Based Products for the Medical and Pharmaceutical Market Segments.

Medical Cannabis & Wellness Products (RHO Phyto™): The formulary offers a diverse range of proprietary formulations including oral, sublingual, topical, & transdermal deliveries with varying ratios of cannabinoids and is supported with ongoing patient, and medical community education. RHO Phyto is a leading medical brand in Canada and is currently available nationwide to patients across several medical channels and continues to expand into new international markets.

Pharmaceutical Preparations and Pipeline: Leveraging Avicanna's scientific platform, vertical integration, and real-world evidence, Avicanna has an extensive pipeline of indication-specific, patent-pending drug candidates in various stages of clinical development and commercialization. These drug candidates aim to address unmet medical needs in dermatology, chronic pain, and various neurological disorders. Avicanna's first pharmaceutical preparation (Trunerox™) is approved in Colombia and is in registration in other South American markets.

MyMedi.ca Medical Cannabis Care: MyMedi.ca is a medical cannabis care platform formed with the aim to better serve medical cannabis patients' needs and enhance the patient journey. MyMedi.ca is operated by Northern Green Canada Inc., and features a diverse portfolio of products and pharmacist-led patient support programs. It also provides specialty services to distinct patient groups such as veterans and collaborates with public and private providers for adjudication and reimbursement. MyMedi.ca provides educational resources to facilitate the incorporation of medical cannabis into health care regimens.

Employment (according to Avicanna website as of Aug 19, 2025): 10+ Scientists

Revenue (according to Avicanna website April 14, 2025): 2024 Revenue of $25.5M, a 52% increase from 2023. Consolidated Gross Margins of 51%, Gross Profits of $12.9M, a 94% increase from 2023.

Market Cap (intraday Aug 19, 2025): 30.84 million CAD

- Average exchange rate in 2024: 1 USD = 1.370 CAD
- CAD 30.84 million = ~USD 22.511 million

Recent News (as of Aug 19, 2025):

Avicanna sees increased international sales, but overall losses in Q2 2025 (Aug 14, 2025): Avicanna Inc. reported $6.2 million in net revenue in the three months ended June 30, 2025 (Q2 2025), gross profits of $3.1 million, and a net loss of $850,991.

The company's net revenue was on par with that reported in the same quarter in the previous year, Q2 2024, while gross profits increased 8.5% and net losses declined by 70.4% over the same period.

The majority of Avicanna's revenue came from the Canadian cannabis market ($5.8 million), while another $321,680 came from sales into the international cannabis market. Revenue from Canadian sales was down 2.3% from Q2 2024, while revenue from exports increased by 118.2%

The company says its international revenue continues to be driven by API and finished product sales, as well as licensing and service agreements initiated in 2024.

Avicanna announces new patent for topical cannabinoid compositions (Aug 1, 2025): covers a topical gel formulation that is comprised of cannabinoids in combination with antioxidants, anti-microbial agents, and anti-inflammatory agents and in reference to its potential in treating and preventing skin diseases and conditions, including but not limited to, acne, wrinkles, rosacea and erythema.

Avicanna Announces Closing of Non-Brokered Private Placement (Jul 16, 2025): closed a non-brokered private placement offering of 4,000,000 units of the Company ("Units") at a price of $0.25 per Unit for aggregate gross proceeds of $1,000,000 ("Offering"). The Company intends to use the proceeds from the Offering for general working capital purposes, general and administrative expenses, expenditures related to production and manufacturing, and research and clinical development.
Avicanna reports first profitable quarter as international revenue increases (May 16, 2025): Avicanna Inc. reported $6.3 million in revenue for the three months ended March 31, 2025 (Q1 2025), $3.6 million gross profit, and net income of $74,154 in the company's first profitable quarter.
Gross profit was up 7% year-over-year while revenue decreased by 2%.
Most of the company's revenue came from sales in the Canadian market, $5.3 million, while another $1 million came from the international market. Revenue in the Canadian market comes from sales of Avicanna's products, revenue generated from licensing intellectual property and research and development services, and revenue from sales through their medical cannabis platform, MyMedi.ca.
PMI Expands in Medical Cannabis (Jan 21, 2025): Avicanna Inc., a commercial-stage, international biopharmaceutical company based in Canada, announced a "scientific and medical affairs" collaboration agreement with Vectura Fertin Pharma, a subsidiary of Philip Morris International (PMI). Avicanna, who specializes in cannabinoid-based medicine, has a clinical R&D department that has led to the commercialization of more than 30 proprietary, evidence-based finished products.
Avicanna Announces Scientific and Medical Affairs Collaboration with Vectura Fertin Pharma (Jan 16, 2025): Avicanna and Vectura Fertin Pharma are collaborating to establish a joint Scientific and Medical Affairs Committee focused on improving the understanding of medical cannabis access and applications in Canada. This committee will work closely with Canadian healthcare professionals to facilitate research studies and deliver evidence-based educational resources.

Centricity Research

https://centricityresearch.com/

An integrated research organization (IRO) with more than 40 wholly owned and integrated clinical research offices across North America. Founded in 2021 and headquartered in Columbus, Georgia. Its Canadian Headquarters are in Toronto, ON.

Centricity Research was formed in 2021 as a merger between three companies, namely the Georgia-based research management agency IACT Health, research site network LMC Manna, and True North Clinical Research.

Focus: The company conducts Phase I-IV clinical research in over 35 therapeutic areas: inpatient and outpatient; pharmaceutical, biotechnology, and medical device trials

Specialises in researching immunology, inflammation, diabetes, weight loss and other endocrine diseases.

Employment (according to Centricity Research LinkedIn as of Aug 19, 2025): 201-500 employees

Revenue: unknown

Market Cap: N/A - a private company and its shares are not publicly traded

Recent News (as of Aug 19, 2025):

Centricity Research acquires North Carolina-based Lucas Research (Dec 20, 2023): has announced that it has acquired Morehead City, North Carolina-based Lucas Research, extending the organization's reach and capabilities.

Operating five research sites in North Carolina — in Morehead City, New Bern, and Hickory — Lucas Research is the fifth clinical research company to join Centricity Research since the organization launched in November 2021 following the merger of industry leaders IACT Health and LMC Manna Research.

With this acquisition, Centricity now offers contract research organizations (CROs) and sponsors access to more than 35 clinical research sites, reaching 8.5 million geographically and ethnically diverse patients, and over 155 experienced investigators who perform trials in more than 20 therapeutic areas, including infectious disease, neurology, endocrinology, oncology, cardiology, dermatology, vaccines, and more.

Centricity Research acquires North Carolina's Lucas Research (Dec 14, 2023): This is the fifth acquisition since Centricity Research's inception in 2021. It brings the number of sites under the company's ownership up to more than 35 with a catchment area of approximately 8.5 million people and 155 investigators.

It also has more than 250 clinical trials to its name in therapeutic areas, including cardiovascular, endocrine and metabolic, gastroenterology, infectious disease, respiratory and women's health.

It follows after Centricity Research was able to merge with the Ohio and Arizona-centred Aventiv Research in June 2022, specialising in Phase I-IV pharmaceutical, device, and diagnostic clinical trials.

The acquisition comes amid a somewhat shrinking market for clinical research organisations (CROs), with research by GlobalData finding that 2021 saw 50 completed mergers and acquisitions in the space, an additional 21 deals over 2020's 29 mergers and acquisitions among CROs and research networks.

The rate at which mergers and acquisitions have been occurring across the clinical trials industry is cause for concern among some sponsors

North America's Largest Integrated Research Site Organization, Centricity Research, Expands Further with Addition of Aventiv Research (Jun 21, 2022): North America's clinical research leader, Centricity Research, announced that Aventiv Research has merged with the organization, extending the reach and capabilities of the largest integrated research site organization across the USA and Canada.

Aventiv Research is the fourth clinical research company to join Centricity Research, which launched in November 2021 when IACT Health and LMC Manna Research joined forces, followed by the merger with True North Clinical Research in December 2021.

With research sites in Ohio and Arizona, Aventiv specializes in phase I-IV pharmaceutical, device, and diagnostic clinical trials in a variety of therapeutic areas. Founded in 2007 by Dr. Samir Arora, a proven leader with over 15 years of experience, Aventiv has conducted 475+ clinical trials with over 55 pharmaceutical sponsors, helping 26 drugs become FDA-approved and available for use.

With this merger, Centricity now offers CROs and sponsors access to 45 clinical research sites, over 1.6 million geographically and ethnically diverse patients, and over 150 experienced investigators who perform trials in more than 35 therapeutic areas, including Infectious Disease, Neurology, Endocrinology, Oncology, Cardiology, Dermatology, Vaccines and more.

IACT Health, LMC Manna, True North merge to form Centricity Research (Jan 19, 2022): In November last year, IACT Health and LMC Manna Research formed a strategic alliance, and this continued with the integration of True North Clinical Research in December. The mergers have resulted in the largest combined research network in North America, according to a press release.

Centricity Research has over 40 fully owned and integrated clinical research offices in the US and Canada with access to more than 1.6 million patients and over 150 active investigators.

It now handles broad-ranging trials for CNS disorders, such as mild cognitive impairment, Huntington's, depression and attention deficit hyperactivity disorder.

New England Biolabs

https://www.neb.com/en-ca/

Founded in 1974 with its headquarters in Ipswich, MA, New England Biolabs, Inc. (NEB) is the industry leader in the discovery and production of enzymes for molecular biology applications and now offers the largest selection of recombinant and native enzymes for genomic research.

Founded in 1990 with its subsidiary in Whitby, Ontario (~55.7 km drive from Toronto, ON), New England Biolabs (NEB) Canada is a wholly owned subsidiary of New England Biolabs Inc. and the exclusive Canadian distributor for reagents from Cell Signaling Technology (CST).

Focus: expand its product offerings into areas related to PCR, gene expression, sample preparation for next generation sequencing, synthetic biology, glycobiology, epigenetics and RNA analysis. Additionally, NEB is focused on strengthening alliances that enable new technologies to reach key market sectors, including the development of molecular diagnostics, as well as nucleic acid vaccines.

Extensive worldwide distribution through a network of exclusive distributors, agents and subsidiaries located in Australia, Canada, China, France, Germany, Japan, New Zealand, Singapore, South Korea and the UK.

Employment: New England Biolabs has 501-1,000 employees (according to New England Biolabs LinkedIn as of Aug 19, 20225). New England Biolabs Canada has 11-50 employees (according to New England Biolabs LinkedIn as of Aug 19, 2025).

Revenue: unknown

Market Cap: N/A - a private company and its shares are not publicly traded

Recent News (as of Aug 19, 2025):

New England Biolabs Finalizes $7.15 Million Stock Plan Pact (Aug 8, 2025): A $7.15 million class settlement benefiting former New England Biolabs Inc. employees received final court approval, resolving a lawsuit saying they were forced to sell their stock in the genomic research company at an unfair price.

The settlement is slated to give an average gross recovery of $89,000 for each of about 80 people who had their company stock liquidated between September 2017 and September 2021. Workers say the deal represents about 42% of their potential damages.

New England Biolabs® launches NEBNext® Low-bias Small RNA Library Prep Kit, presenting a new method for capturing the true diversity of RNA samples (Jul 22, 2025): New England Biolabs (NEB®) today announced the launch of the NEBNext Low-bias Small RNA Library Prep Kit, designed to minimize biased representation of small RNA species in sequencing data. This next generation small RNA preparation method is faster, less biased, and has a broader input range than other commercially available kits.

The kit's novel approach to adaptor ligation culminated from over a decade of research by NEB scientists. The first study, published in 2012, recognized that RNA sequencing bias was significant and caused mostly by unpredictable differences in ligation efficiency for small RNAs. The second foundational study, published in 2020, presented a novel library preparation workflow that reduced bias and increased sensitivity in small RNA library prep. Several protocol enhancements have since improved the kit to outperform the originally published methods.

New England Biolabs® Announces B Corporation™ Recertification (May 8, 2025): NEB remains one of the few life-science companies to achieve this certification, which requires for-profit businesses to meet high standards of social and environmental impact. To become certified, NEB exceeded standards across

various areas of governance, which include customer stewardship, treatment of employees, environmental protection, and community engagement.

Award of Merit,Higher Ed/research: New England Biolabs Garden Site Expansion (Nov 11, 2024)

New England Biolabs® Expands Lyophilization Capabilities with Opening of Manufacturing Facility in the UK (Nov 7, 2024): New England Biolabs (NEB®), a leading supplier of life science reagents, announced the opening of its first manufacturing facility outside of the United States. New England Biolabs Lyophilization Sciences (NEB Lyo Sciences®) joins NEB's wholly owned subsidiary network and brings expertise in the design, development and manufacturing of innovative solutions for ambient molecular biology products.

NEB founded NEB Lyo Sciences in 2022, following the acquisition of a UK-based company, and has been integrating their extensive experience in lyophilization with NEB's expertise in enzymology and enzyme-related technologies. NEB Lyo Sciences is located in Milton Park, near Oxford, one of the UK's leading life science clusters. The new state-of-the-art, 30,000 sq.ft. facility was purpose-built as a manufacturing and laboratory space and was designed with sustainability in mind.

New England Biolabs buys English company (May 10, 2021): Biolabs will buy Fluorogenics Limited, which was founded in 2011. Under the terms of the agreement, FGL will become a wholly-owned subsidiary of NEB. Fluorogenics is a lyophilization (freeze-drying) R&D company. NEW said that technology is “well-established technology across a number of industries, making it desirable from a regulatory and feasibility perspective.”

The NEB announcement said Fluorogenics’ operations “will continue without disruption to its existing customers. NEB will be making further investments to strengthen their operations.”

ProteinQure

https://www.proteinqure.com/

Founded in 2017 and headquartered in Toronto, ON, ProteinQure is a biotech company focused on the design of novel exotic peptides with broad therapeutic applications.

Focus:

Developed ProteinStudio™ an integrated platform of proprietary technologies to solve complex drug design challenges involving peptides and proteins.

Their proprietary peptides can be used to deliver a variety of therapeutic payloads intracellularly via receptor mediated endocytosis.

Using ProteinStudio™, our proprietary technology for computational peptide design, we developed high-affinity SORT1-targeting peptides.

Employment (according to ProteinQure website as of Aug 19, 2025): 29 team members

Revenue: unknown

Market Cap: N/A - a private company and its shares are not publicly traded

Recent News (as of Aug 19, 2025):

Proteinqure's PQ-203 cleared to enter clinic in US and Canada (Aug 8, 2025): Proteinqure Inc. has received regulatory clearances from the U.FDA and Health Canada to initiate a phase I trial of lead candidate, PQ-203. The trial will begin in Canada and expand to U.S. sites later in 2025. The FDA also granted PQ-203 fast track designation for triple-negative breast cancer (TNBC).

ProteinQure Raises Series A Financing to Advance First AI-Designed Peptide Therapeutic into Clinical Trials (May 28, 2025): announced today the close of an $11 million Series A financing round. The proceeds will support the initiation of the company's first clinical trial for PQ203, a first-in-class peptide-drug conjugate for triple-negative breast cancer (TNBC), and the advancement of additional pipeline programs in neurology and nephrology.

The financing round was led by Tom Williams of Heron Rock Fund, with participation from Golden Ventures, Kensington Capital, and select returning investors. This brings ProteinQure's total funding to $16 million across seed and Series A rounds.

ProteinQure's lead candidate, PQ203, is a first-in-class peptide-drug conjugate designed to target the sortilin receptor, which is overexpressed in many solid tumors, including TNBC. The drug is being developed for tumors resistant to topoisomerase I inhibitors (e.g., antibody-drug conjugates like Trodelvy®), based on robust preclinical evaluation in patient-derived xenograft models.

Medtech AI startups ProteinQure and AssistIQ each close Series A rounds (May 28, 2025): Two Canadian startups using artificial intelligence (AI) to improve healthcare at different levels have each raised more than $10 million in Series A financing.

Montréal-based AssistIQ has secured $11.5 million in financing for its AI-powered hospital supply management platform, while Toronto-based ProteinQure nabbed $11 million for its AI-powered drug discovery platform.

ProteinQure Announces A Breakthrough Therapeutic with Remarkable Efficacy in Heterogenous Patient-Derived Xenograft Models of Triple-Negative Breast Cancer to be presented at AACR (Mar 25, 2024): ProteinQure, the leading startup in the computational design of peptide drugs, announces a significant breakthrough in the fight against triple-negative breast cancer (TNBC). The novel Peptide Drug Conjugate (PDC) designed by ProteinQure demonstrated exceptional efficacy in a comprehensive suite of Patient-Derived Xenograft (PDX) models.

Developed through ProteinQure's cutting-edge computational platform, the innovative SORT1 targeting PDC is a novel peptide attached to a highly potent chemotherapeutic agent. The drug candidate was tested across a broad range of breast cancer models. The results demonstrated remarkable antitumor efficacy, including cancers resistant to standard chemotherapies and antibody-drug conjugates.

U of T startup ProteinQure applying computational methods to structurally design pharmaceuticals (Oct 18, 2020): ProteinQure, a startup launched out of the Creative Destruction Lab (CDL) at U of T's Rotman School of Management, was recently selected by Google to join the first cohort of its new Canadian accelerator program. ProteinQure is one of only nine companies in the cohort and is joining the program alongside fellow U of T startup Bridge7.

The company uses high performance computing and machine learning to take a structure-based approach to drug formulation. The company's co-founders Lucas Siow, Tomas Babej, Chris Ing, and Mark Fingerhuth met through the CDL, where they were able to combine their areas of expertise.

ProteinQure raises $5.2 million CAD for protein-focused drug design platform (Jul 29, 2019): The round was led by California-based Felicis Ventures, with participation from 8VC, Golden Ventures, iNovia, Global Founders Capital, and angel investor Tom Williams.

iNovia and Golden have previously backed other biotechnology companies like BenchSci, which reached $27 million in overall funding this year. Golden has also backed Xanadu, which raised a $32 million Series A last month. ProteinQure said its funding will allow the company to add more "interdisciplinary" talent to its team and expand its industry partnerships.

ProteinQure raises $4M seed round to unlock the potential of protein therapeutics (Aug 7, 2019): Today, we are privileged to announce a USD $4M Seed round led by Felicis Ventures with participation from 8VC, Golden Ventures, iNovia, Global Founders Capital and angel investor Tom Williams.

Phenomic

https://phenomic.ai/

Phenomic is a biotechnology research company working to raise the survival curve for the hardest to treat solid tumors (e.g., colorectal, pancreatic, breast cancers). Founded in 2017 and headquartered in Toronto, ON.

Focus: Built an ML-powered transcriptomics platform that allows us to understand the interactions of all the cell types in these tumors to identify compelling targets and a system to test their drugs in human tumor explants thus delivering translational insights during our discovery process.

Phenomic's lead program is a CD3 engager that uses a novel targeting approach identified by our platform that should be able to overcome limitations of traditional tumor-associated antigens. This program is generating compelling results in challenging cancers and is now at a development candidate stage demonstrating Phenomic's ability to identify novel high-impact, druggable targets.

Employment (according to Phenomic website as of Aug 19, 2025): 22 team members

Revenue: unknown

Market Cap: N/A - a private company and its shares are not publicly traded

Recent News (as of Aug 19, 2025):

Phenomic AI inks second deal in two days, Shape stretches Roche collab (Nov 30, 2023): Twenty-four hours after announcing a target identification deal with Boehringer Ingelheim worth more than $500 million, Phenomic is back. Phenomic says the work will involve an antibody for the tumor stroma target identified by its scTx platform.

Aakalu said at the time that the company was also advancing an internal pipeline, with a lead asset aimed at a novel solid tumor target, CTHRC1.

Phenomic Enters into Strategic Research Collaboration with Astellas for Solid Tumor Cell Therapies (Nov 30, 2023): entered into a strategic research collaboration with Astellas Pharma Inc., "Astellas" through Xyphos Biosciences, Inc. (a wholly owned subsidiary of Astellas).

For this collaboration, Phenomic and Astellas will explore the ability of antibodies, developed by Phenomic and directed at a novel target of the tumor stroma identified with Phenomic's scTx platform, to enhance cell therapy approaches for the treatment of solid tumors.

Boehringer bets $509M on Phenomic's tumor-targeting tech, as AI biotech plans for busy year (Nov 29, 2023): The Canadian company is teaming up with Boehringer Ingelheim on a target identification collaboration with more than $500 million at stake, including $9 million in upfront cash. The targets will take on the tumor stroma, a complex structure made up of connective tissue that broadly helps tumors to stay intact. Cancer cells rely on stroma as both a defensive shield from the immune system's counterattack and a bridge to other parts of the body that can help feed the tumor. Phenomic and Boehringer both hypothesize that drugging sites in the stroma directly could spur a new class of cancer therapies.

Phenomic believes its single-cell RNA computing platform, dubbed scTx, will be the key that unlocks these targets. Aakalu said the platform not only provides a high-resolution glimpse at the stroma but uses significant statistical power to pull out valuable insights about the biology that can result in new therapeutic targets and, ultimately, drugs.

Phenomic AI Launches with $6 Million Financing and an AI/ML Platform for Targeting the Tumor Stroma (Oct 7, 2020): Phenomic AI, a biotech using AI/ML to reveal drug targets that emerge from cell-cell interactions and drive novel antibody drug discovery for challenging diseases, today announced the official launch of the company with US$6 million seed financing.

The financing was led by CTI Life Sciences Fund and joined by AV8 Ventures, Luminous Ventures, and Viva BioInnovator. Current investors, Garage Capital, Hike Ventures, and Cantos Ventures, also joined the round.

The proceeds of the financing will support preclinical studies for two validated cancer drug targets discovered with the company's platform as well as discover and advance additional drug targets into the company's pipeline.

BlueRock Therapeutics

https://www.bluerocktx.com/

BlueRock Therapeutics is an engineered cell therapy company developing regenerative medicines for intractable diseases. Based in Cambridge, Massachusetts and founded in 2016 with a location in Toronto, ON as well as New York, NY and Berlin, Germany.

Focus:

BlueRock Therapeutics' cell+gene platform harnesses the power of cells to create new medicines for neurology, cardiology, and immunology indications

BlueRock Therapeutics' cell differentiation technology recapitulates the cell's developmental biology to produce authentic cell therapies, which are further engineered for additional function. Utilizing these cell therapies to replace damaged or degenerated tissue brings the potential to restore or regenerate lost function.

Employment

Revenue

Market Cap

Recent News

Takeda

https://www.takeda.com/

https://www.takeda.com/en-ca/

Takeda Pharmaceutical Company Limited is a pharmaceutical manufacturing company founded in 1781 with Global Headquarters in Tokyo, Japan. Takeda's Bay Adelaide Centre is located on Toronto, ON.

Focus: including gastrointestinal and inflammation, rare diseases, plasma-derived therapies, oncology, neuroscience and vaccines.

Employment (according to Takeda website as of Aug 20, 2025): 5,486 (parent), 49,095 (consolidated) *As of March 31, 2023

Revenue

Market Cap

Recent News

Veeva

https://www.veeva.com/

Veeva Systems Inc. is a leader in cloud-based software for the global life sciences industry headquartered in Pleasanton, CA with a location in Toronto, ON. Veeva also has offices in Europe, Asia, and Latin America

Focus: Veeva has more than 875 customers, ranging from the clinical, regulatory, quality, safety, medical, and commercial industries.

Employment

Revenue

Market Cap

Recent News

Cockroach Labs

https://www.cockroachlabs.com/

A software devlopment company founded in New York, NY with an office in Toronto, ON.

Focus: CockroachDB, the most highly evolved cloud-native, distributed SQL database. CockroachDB delivers the reliability, robust consistency and ACID transactions of RDBMS, while offering the horizontal scaling and distributed architecture of NoSQL. All of this is built to thrive in any environment, ensuring effortless scalability, global availability and distribution, and continuous uptime all with a familiar, compliant SQL interface.

Employment

Revenue

Market Cap

Recent News

ZS

https://www.zs.com/

ZS is a management consulting and technology firm founded in 1983 and headquartered in Evanston, IL with a location in Toronto, ON.

Focus: transform ideas into impact by bringing together data, science, technology and human ingenuity to deliver better outcomes for all.

Employment (according to ZS LinkedIn as of Aug 20, 2025): 13,000 employees in over 35 offices worldwide

Revenue

Market Cap

Recent News

AmacaThera

https://www.amacathera.com/

AmacaThera is a biotechnology company founded in 2016 and headquartered in Toronto, ON that specializes in developing innovative drug delivery solutions that enhance the efficacy and tolerability of treatments across various therapeutic areas.

Focus: AmacaGel hydrogel drug delivery platform enables injectable long-acting sustained release formulations of small molecules and biologics to solve key drug delivery challenges faced by the pharmaceutical industry

Employment

Revenue

Market Cap

Recent News

Biofect Innovations

https://www.biofectinnovations.com/

Biofect Innovations is a biotechnology research company founded in 2018 and headquartered in Toronto, ON.

Focus: Leveraging the synergy of synthetic biology and fermentation technology, Biofect Innovations develops unique microbes that produce ingredients, both structurally and functionally similar to those found in nature. This innovative approach supports the development of healthy and delicious food products and environmental stewardship for future generations.
Employment
Revenue
Market Cap
Recent News

Cora Therapeutics

https://coratherapeutics.com/
Cora Therapeutics is a biotechnology research company dedicated to delivering and supporting innovative research-based wellness solutions for whole body health headquartered in Toronto, ON.
Focus: Halo, the first product launched by Cora Therapeutics, is an antioxidant formulation to help prevent cellular and mitochondrial damage from oxidative stress to counter radiation exposure.
Employment
Revenue
Market Cap
Recent News

Psyence

https://psyence.com/
Psyence (PSYG) is a clinical-stage life science biotechnology company founded in 2019 and headquartered in Toronto, ON.
Focus: pioneering the use of natural psilocybin in mental health and well-being, focussing on these conditions in the context of palliative care.
Employment
Revenue
Market Cap
Recent News

Radiant Biotherapeutics

https://radiantbio.com/
Radiant Biotherapeutics is a biotechnology research company founded in 2020 and headquartered in Toronto, ON.
Focus: Radiant's Multabody™ platform enables multi-valent, multi-specific antibodies that have the potential to transform the treatment of cancer, inflammation, infections and other heterogeneous diseases. This breakthrough in antibody engineering combines avidity – superior binding power – with multi-specificity to create multifunctional biologics with the potential to unlock biology not achievable with current antibodies. Multabodies are a new class of biologics built on a modular, fully human scaffold, simplifying development while leveraging existing antibody manufacturing processes.
Employment
Revenue

Market Cap
Recent News