

Towards the Kingdom's Global
Biotech & Innovation Leadership



INTERNATIONAL BIOTECHNOLOGY ACHIEVEMENT FORUM 2025 – RIYADH

SPEECHES & PANEL
DISCUSSIONS

STARTUP
PRESENTATIONS

INVESTOR
RECEPTION

RECOGNITION
& AWARDS

14
December



Venue:

King Abdulaziz City for Science
and Technology (KACST),
Conference Hall, Building 36

Culmination Forum of the Biotechnology Venture Readiness Program 2025



Saudi Biotechnology
Accelerator

Official Forum Brochure

SAUDI VISION

THE KINGDOM OF SAUDI ARABIA – LEADING THE GLOBAL CHANGE



“My primary goal is to be an exemplary and leading nation in all aspects, and I will work with you in achieving this endeavour.”

Custodian of the Two Holy Mosques
King Salman Bin Abdulaziz Al Saud

SBA OPENING MESSAGE:

Building in alignment with the national ambition to establish Saudi Arabia as a leading global biotechnology and innovation hub, this official brochure of the “International Biotechnology Achievement Forum 2025 – Riyadh” highlights the collective contributions of visionary Saudi ecosystem enablers, distinguished mentors and lecturers, and brilliant biotechnology and life sciences innovators.

We are proud to recognize the achievement of the first internationally trained and Saudi-supported biotechnology startup cohort, with the participation of 91 startups from 22 countries, advancing critical fields across health, agriculture, environment, and biomanufacturing.

On 14 December, we will gather in Riyadh to reflect on this transformative journey, celebrate the progress made, and discuss the path forward – including “What’s Next” to continue supporting our founders’ success.

Saudi Biotechnology Accelerator



“We will welcome qualified individuals from all over the world and will respect those who have come to join our journey and our success.”

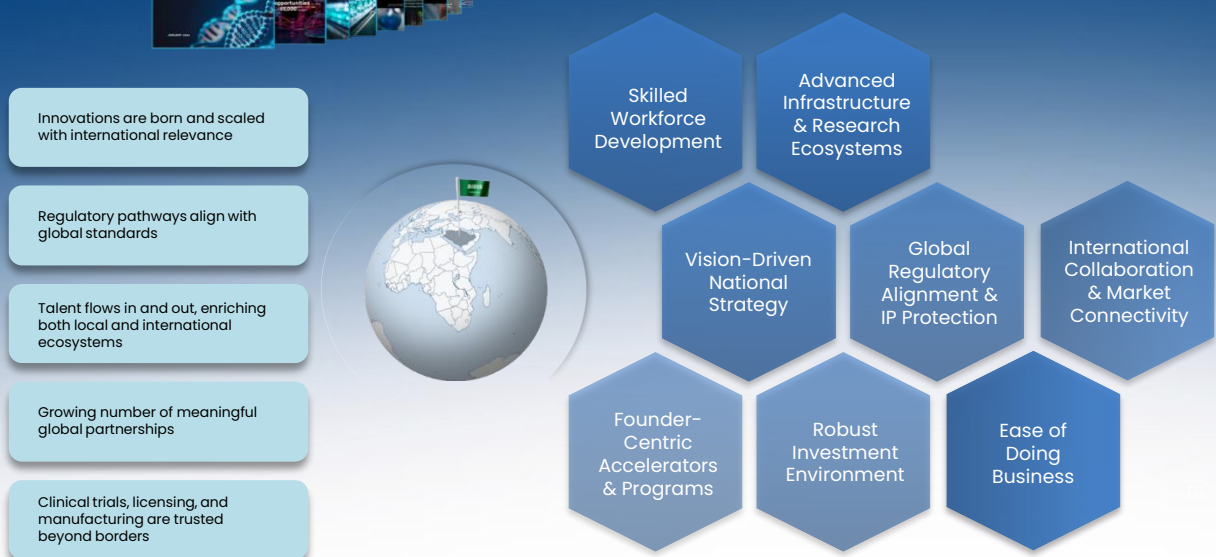
His Royal Highness
**Prince Mohammed bin Salman
bin Abdulaziz Al Saud**
Crown Prince and Prime Minister

SAUDI ARABIA – GLOBAL BIOTECHNOLOGY HUB

The Kingdom is moving forward on its own unique path – a path defined by ambition, clarity, and a long-term commitment to becoming a global center of biotechnology, deep tech, and innovation. With a national Vision that speaks boldly to the future, and with goals clearly articulated across the Vision Realization Programs and the National Biotechnology Strategy, Saudi Arabia is building an ecosystem where innovators know exactly what the country is aiming for – and where their work fits within that direction.



National Biotechnology Strategy



Across the Kingdom, scientific capabilities are expanding, research centers are growing stronger, and new national programs are opening doors for advanced biotechnology development. Clinical trial infrastructure is scaling, regulatory pathways are becoming more supportive and transparent, and partnerships with leading global and Saudi companies are accelerating technology transfer and commercialization.

Private and public sectors are moving together with a shared sense of purpose. Hospitals, health clusters, manufacturing companies, universities, investors, enablers and regulators are aligning around a single vision: to establish Saudi Arabia a world-class destination for breakthrough science and transformative biotech ventures.

SAUDI BIOTECHNOLOGY SECTOR

ACCELERATING BIOTECH BREAKTHROUGHS IN A \$3.25B MARKET

3.5B	14.2%	11,000	2.5%	9.22B+
Market Size by 2030	Annual Growth Rate	Jobs Created by 2030	GDP Investment by 2040	To Non-Oil GDP by 2040

What's Next?

It is a moment of opportunity – for founders, researchers, and investors who want to build, contribute, and grow within a rapidly rising global hub. Here, innovation is not only welcomed; it is actively supported, strategically guided, and nationally celebrated.



Saudi Biotechnology
Accelerator

We warmly welcome you to join the shared journey of building more success stories within Saudi Arabia's growing biotechnology and innovation ecosystem. – Be part of the Forum for meaningful discussions and direct access to top innovation projects.

ABOUT THE FORUM

INTERNATIONAL BIOTECHNOLOGY ACHIEVEMENT FORUM 2025 – RIYADH

The Forum marks the culmination of a 2.5-month intensive biotechnology startup program “Biotechnology Venture Readiness Program 2025”, celebrating the collective achievements of Saudi and international biotechnology ecosystem professionals – Mentors, Lecturers, and Startup Founders from the Kingdom and abroad. It represents an important national milestone in building a strong, globally competitive biotechnology and life sciences innovation sector.

In dedication to advancing deep-tech innovation in Saudi Arabia, and in alignment with the national vision to establish the Kingdom as a global biotechnology and innovation hub, this event will introduce the first Saudi-trained international biotech and life sciences innovation cohort.

The Forum is organized in accordance with international venture-readiness and demo-day standards.

200+ Participants



Saudi Biotechnology
Ecosystem Enablers
and Institutions



Key Program
Contributors –
Mentors & Lecturers



Best-performing
Saudi and
International
Startups



Investors – VCs,
Investment
Companies, Family
Offices



Major **Private-
Sector Players**

14

December



Speeches & Panel
Discussions



Startup
Presentations



Investor
Reception



Recognition
& Awards



Saudi Biotechnology
Accelerator

Official Forum Brochure

AGENDA & VENUE

International Biotechnology Achievement Forum 2025 – Riyadh

FORUM AGENDA

Guest Arrival & Registration ----- 8:30–09:30

Coffee, Networking, Access to the Startup Showcase

Opening Ceremony – Saudi Vision ---- 09:30–10:15

Welcome remarks from national biotechnology leaders and key ecosystem enablers

Mentor Lightning Talks ----- 10:15–11:00

Post-program highlights from mentors on venture readiness, strategies, and investor engagement

Startup Presentations -----11:00–12:30

Best-performing startups from the 2025 cohort present their ventures and readiness journeys. The judges decide the winners.

Coffee Break & Networking -----12:30–1:15

Refreshments and Networking Zone

Private Matchmaking Sessions ----- 1:15–2:30

Curated investor-founder meetings and VIP networking

Investors' Panel – Funding in Biotech ---- 2:30–3:15

Saudi and international investors discuss funding trends, market readiness, opportunities in MENA and Global biotech

Biotech Readiness – What's Next ----- 3:15–4:00

Interactive discussion: founders, regulators, investors, and mentors on accelerating national biotech readiness

Startup Nomination & Awards -----4:00–4:30

Recognition of top-performing Startups, resulting from the Biotechnology Venture Readiness Program 2025

Mentors & Stakeholders Recognition ---- 4:30–5:00

Acknowledgment of outstanding mentors and ecosystem contributors driving biotech excellence

Evening | Networking Reception -----5:00+

Open networking, media interviews, and cultural showcase



VENUE

Riyadh, KACST,
Conference Hall,
Building 36

[Location Link](#)



Saudi Biotechnology
Accelerator

14

December

Official Forum Brochure

THANK YOU TO PROGRAM PARTNERS

ORGANIZATIONS THAT SHAPE THE SAUDI AND GLOBAL BIOTECH AND DEEP-TECH INNOVATION SECTOR



ALL CARE
INVESTMENT
GROUP



مجموعة
كل الرعاية
الاستثمارية

Curie.Bio

HTA

Bioscience Equity Partners



SCALE
PIVOT
THE HIGH
VALUATION
CODE



AWEN
Life Sciences



VALUE CHAIN
GLOBAL



Saudi Biotechnology
Accelerator

DISTINGUISHED MENTORS & LECTURERS

Biotechnology Venture
Readiness Program 2025

ROLE

The distinguished Mentors and Lecturers have provided invaluable guidance throughout the Biotechnology Venture Readiness Program 2025. Through their experience and insight, they supported founders in shaping and strengthening their projects, improving their presentations, and advancing their overall readiness.

Their contribution to the startup mentorship and to the development of the first Saudi-trained and Saudi-supported biotech and life sciences innovation cohort is game-changing and deeply appreciated.



Prof. Ahmed
Alaskar 



Dr. Mobarak
Almulhim 



Dr. Noha A.
Alotaibi 



Dr. George
Syrmalis 



Dr. Ana
Baroni 



Dr. Abdullah K.
Alshememry 



Dr. Matteo
Turi 



Prof. Bander
Balkhi 



Dr. Yasser
Albogami 



Dr. Melya Hughes
Cramer 



Mr. Salem
Almutairi 



Mr. Sultan
Almansour 



Saudi Biotechnology
Accelerator

[All Mentors Profiles](#)

Official Forum Brochure

DISTINGUISHED MENTORS & LECTURERS

Biotechnology Venture
Readiness Program 2025



Dr. Budoor
AlMansour 



Mr. Ali
Djedid 



Dr. Sascha
Berger 



Dr. Mariam
AlEissa 



Mr. Jeff
Stinson 



Mr. Fadzhairi
Jabar 



Dr. George
Voren 



Dr. Amgad Talaat
Soliman 



Dr. Marwan
Alsaedi 



Dr. Yun Kyoung
Kang 



Mr. Osama K.
Bin Salman 



Dr. Ehab
AlShamleh 



Galiya
Potapchuk 



Mr. Deepak
Mansukhani 



Dr. Mustafa
Aljasser 



Mr. Zohaib
Ahmad 



Saudi Biotechnology
Accelerator

[All Mentors Profiles](#)

Official Forum Brochure

STARTUP COHORT 2025

BIOTECHNOLOGY VENTURE READINESS PROGRAM 2025

• Therapeutics --



CellRewire™



BASET®
for PHARMACEUTICALS

Rational Vaccines



Cellogen
Therapeutics



• Diagnostics --



OPHIOMICS
PRECISION MEDICINE



AISI X



BIOLOGIA
360



• Digital Health & AI --



MEDSYNTRA



PARROTS
Medical Assistive AI



• MedTech & Devices --



Pixelence



Nucleotica



INA-MedTech



NanoHeal-IX

• Biomanufacturing & Platforms --



شركة الابتكارات الحيوية
Biotech Innovations Co

• Industrial/Synthetic Biology --



ON●IDS

• Agri/Green Biotech--



ECOTERRA
BEYOND CARBON



PHAGE TECH
SOLUTION



WHY ATTEND THE FORUM

International Biotechnology Achievement Forum – Riyadh

Experience the Region's Most Diverse Biotech & Life Science Innovation Cohort

Meet 60+ best-performing startups of the 2025 cohort, representing therapeutics, diagnostics, digital health, AI-bio, agri & food biotech, and advanced medical technologies.

See firsthand how innovation aligns with Saudi Arabia's emerging biotech ecosystem.

Access High-Value Investment and Partnership Opportunities

Review high-potential ventures, explore co-development models, and meet founders who are ready for:

- clinical pilots
- technology localization
- R&D collaboration
- manufacturing partnerships
- early-stage investment

A unique chance to evaluate opportunities before they enter the broader market.

Engage With Saudi Arabia's Leaders Shaping the Future of Biotechnology

Connect with senior representatives from:

- national authorities
- regulators
- national research centers
- biomanufacturing initiatives
- sovereign funds and VC firms

Gain a direct understanding of national priorities, market needs, and upcoming programs.

Learn From Expert Mentors and Global Speakers

Hear insights from distinguished mentors, scientific leaders, policy makers, and industry experts presenting:

- venture readiness
- IP & regulatory expectations
- health economics and HTA
- market access in Saudi Arabia
- global biotech innovation trends.



Saudi Biotechnology
Accelerator

Official Forum Brochure

14

December

WHY ATTEND THE FORUM

International Biotechnology Achievement Forum – Riyadh

Build Strategic Relationships Across the Biotech Value Chain

One venue bringing together:

- startups
- investors
- clinicians
- scientists
- policy makers
- industry executives

An exceptional environment for matchmaking, collaboration, and cross-sector introductions.

Discover the Future of Biotech in Saudi Arabia

Gain clarity on:

- national biotech strategy
- clinical trial pathways
- data and bioinformatics agendas
- biomanufacturing localization
- talent development programs

Understand how Saudi Arabia is rapidly positioning itself as a regional leader in biotechnology and life sciences.

Celebrate Achievement and Shape the Next Wave of Innovation

The Forum marks the completion of a world-class program – and the beginning of long-term collaborations.

Celebrate the progress of the 2025 cohort and contribute to shaping the Kingdom's emerging biotech landscape.

Be Part of a Growing Global Community

Whether you are joining as:

a founder, investor, government official, researcher, clinician, or industry leader,

you are becoming part of a global network accelerating biotechnology innovation in Saudi Arabia and shaping the Kingdom's position as a global biotechnology and innovation hub.



Saudi Biotechnology
Accelerator

Official Forum Brochure

14

December

October–December 2025

Biotechnology Venture Readiness Program 2025

A 2-month intensive training and mentorship program
for Saudi and International biotechnology Founders

19

Program
Sessions –
covering
essential
topics

170+

1:1 Mentorship
Sessions –
targeted
startup
support

62

Startups
(from 91) have
performed venture
readiness
advancement



Program
Culmination
Forum
in Riyadh
14 December

[Program Website](#)

MEET THE FIRST SAUDI-TRAINED INTERNATIONAL BIOTECHNOLOGY & LIFE SCIENCES INNOVATION COHORT

Startup Projects – Saudi and International, that are introduced for this
Forum, have successfully finalized the Program and passed the final
submission requirements

STARTUP CATALOG
COHORT 2025



Saudi Biotechnology
Accelerator



STARTUPS: THERAPEUTICS



THERAPEUTICS

Conan Therapeutic is a biopharmaceutical company dedicated to creating a breakthrough treatment that mitigates the post-traumatic harm of mild traumatic brain injuries.

Conan Therapeutic addresses the unmet medical needs of concussion patients. Our therapy (NeuroProtect X) targets a brain-specific molecular pathway by inhibiting a key neuroinflammatory mediator that disrupts blood-brain barrier integrity after concussion, preventing barrier breakdown, reducing secondary injury, and promoting neural repair. With an advanced nasal delivery system, this novel, mechanism-driven approach addresses the root cause of concussion with precision, maximizing neuroprotection while minimizing toxicity and off-target effects.

Founded: 2025

United States



THERAPEUTICS

CellRewire is building an AI + wet-lab platform (RewireOS) that reprograms diseased cells back to healthy states to create in-vivo regenerative therapies for heart, brain, and metabolic diseases.

CellRewire is building RewireOS, an AI-driven “operating system” that discovers how to reprogram diseased cells back to healthy states and turns these insights into in-vivo cell-reprogramming therapies. By combining single-cell genomics, reinforcement-learning agents (Cell-DRL), and automated wet-lab experiments, we design precise molecular interventions for conditions such as myocardial infarction, diabetes, and neurodegenerative disorders. Our innovation lies in treating disease at the cell-state level, rather than just managing symptoms, enabling one-time, potentially curative therapies. From hubs in the US, Germany, Egypt, and KSA, CellRewire aims to anchor an AI-biotech platform in Saudi Arabia that supports Vision 2030 by bringing advanced regenerative medicine, local R&D capacity, and high-value biotech jobs to the Kingdom.

Founded: 2025

United States



STARTUPS: THERAPEUTICS



The only remaining vaccine company fighting herpes simplex.

THERAPEUTICS

The last company in phase 2 to create prophylactic vaccines against herpes simplex HSV-1 and HSV-2, and immunotherapy for persons previously infected by the same viruses. Rational Vaccines' advantages include evidence of safety and efficacy of the vaccines (preventative and therapeutic), addressing the high prevalence of the disease, which does not have other vaccine, nor treatment, nor a good diagnostic tool. The company provides a complex industrial process entirely developed and operational to generate GMP materials, able to scale up to large quantities.

Founded: 2015

United States



A nanotechnology-driven wound-care solution that enhance healing of diabetic foot wounds through an active therapeutic nanofiber dressing.

THERAPEUTICS

BioFiber is a Saudi startup specialized in developing innovative solutions for the treatment of diabetic foot ulcers, utilizing advanced technologies in biomaterials and nanotechnology. We have designed a dressing that accelerates wound healing by combating infections and associated inflammation, with a focus on pain relief and improving the quality of healthcare for diabetic foot patients. Our technology also aims to reduce the need for high or frequent doses of medications. Our ultimate goal is to secure funding from government entities, angel investors, or deep-tech incubators and accelerators, to localize the production of this innovation in Saudi Arabia, supporting the Kingdom Vision 2030 in the fields of health and industry.

Founded: 2025

Saudi Arabia



STARTUPS: THERAPEUTICS



THERAPEUTICS

Speratum Biopharma is developing a next generation RNAi therapeutic platform that restores tumor suppressor function and targets over 150 oncogenic pathways using an computerized engineered RNA molecule delivered through a cold chain free polymeric system designed for solid tumors.

Speratum Biopharma is a global oncology innovator developing a next generation RNAi therapeutic platform designed to overcome the historical failures of RNA medicines in solid tumors. Through our proprietary NoPass synthetic multi target RNAi technology and Nano In electrostatic polymeric delivery system, we combine siRNA precision with miRNA scale to silence more than 150 oncogenic drivers without chemical modifications and without cold chain limitations. Our lead candidate, NM198, has demonstrated more than 90% percent tumor suppression and more than 80% percent metastasis reduction across pancreatic, ovarian and colorectal models, positioning us as one of the most advanced RNAi platforms engineered specifically for chemoresistant cancers. Operating across the United States with active expansion in LATAM, APAC and the Middle East, we create accessible, scalable and clinically meaningful solutions that address global disparities in cancer care.

Founded: 2021

United States



THERAPEUTICS

IMMUNORA is developing innovative therapies for inflammatory diseases, combining novel peptide drugs with CAR-T cell therapy to restore immune balance.

We are developing a therapeutic platform for autoimmune and chronic inflammatory diseases built on two complementary solutions:

- A first-in-class anti-inflammatory peptide drug that blocks pathogenic immune cell trafficking into inflamed tissues (e.g., CNS in multiple sclerosis) without broad immunosuppression.
- An ex vivo lymphocyte-modulation workflow that uses existing CAR-T cell machines in a simplified way to “re-educate” patient immune cells and restore immune balance, without the complexity and cost of full genetic CAR-T engineering.

Founded: 2025

Saudi Arabia

STARTUPS: THERAPEUTICS



THERAPEUTICS

A first-in-class reformulated topical broad-spectrum antibiotic spray for wound and diabetic-foot infections.

This project introduces a first-in-class innovation: a broad-spectrum topical cephalosporin spray designed for diabetic and chronic wound infections. By reformulating injectable ceftizoxime into a stable, no-touch liquid spray using SBE- β -CD inclusion-complex technology, the product delivers high local antibiotic concentrations with minimal systemic exposure. This approach enhances safety, limits antimicrobial resistance, and overcomes the limitations of current topical antibacterial agents. Protected by a published SAIP patent and a PCT filing, this innovation addresses a major unmet need in wound care and has strong potential for clinical and commercial impact across Saudi Arabia and global markets.

Founded: 2024

Saudi Arabia



THERAPEUTICS

Valere Therapeutics pioneers precision immunotherapies for breast cancer, regionally manufactured and globally scalable, targeting immune resistance in solid tumors.

Valere Therapeutics develops precision immunotherapies to address urgent gaps in breast cancer care, particularly in the Gulf region. Our scalable platform targets immune resistance in solid tumours, starting with triple-negative breast cancer, where current treatments fall short. By integrating advanced immune profiling with locally manufactured biologics and cell therapies, we bridge the innovation-access gap, delivering impactful regional solutions with global relevance and a clear vision for transforming the future of cancer treatment.

Founded: 2025

Saudi Arabia



STARTUPS: THERAPEUTICS



Icahn
School of
Medicine at
Mount
Sinai

*Light and Health
Research Center*

A circadian-intelligence platform optimizing cardiac surgery timing to reduce complications and improve hospital efficiency.

THERAPEUTICS

LHRC developing Circadian Watch™, a medical-grade wearable and AI platform that predicts each patient's optimal biological timing for cardiac surgery. By measuring circadian phase through calibrated light, sleep, and activity signals, the system aligns surgical scheduling with the patient's peak physiological readiness, reducing complications, accelerating recovery, and improving ICU efficiency. Designed for Saudi Arabia's Vision 2030 digital-health transformation, Circadian Watch™ delivers clinically actionable insights that could reduce postoperative risk by up to 20% and save Saudi hospitals more than SAR 25 million annually.

Founded: 2023

United States



Revolutionizing cell and gene therapy with scalable, cost-efficient and AI driven advanced platforms.

THERAPEUTICS

Cellogen Therapeutics is an indigenous cell and gene therapy company developing next-generation, affordable CAR-T cell therapies and CRISPR-based gene editing solutions for cancer and genetic blood disorders. Using proprietary platforms, including AI-designed bispecific CAR-T cells, in-house lentiviral vector manufacturing (NeoLentiXTM), and novel fetal hemoglobin regulatory targets, we at Cellogen envision to reduce treatment costs by up to 90% compared to global options. Our mission is to democratize access to curative therapies by building a globally scalable innovations that deliver world-class treatments at a fraction of current prices.

Founded: 2021

India



STARTUPS: THERAPEUTICS



**NANO
BASED**

THERAPEUTICS

We create patentable, targeted cell–nanoparticle immunotherapies that achieve higher efficacy with fewer side effects, enabled by a scalable, platform–based approach for next–generation biopharmaceutical development.

Our startup is developing a patentable, next-generation nano-based therapeutic platform that merges nanotechnology with biological systems to create second-generation, cell-therapy–like immunomodulatory treatments. By engineering nanoparticles loaded with RNA, peptides, or small molecules, we aim to precisely modulate the immune microenvironment. Our platform is adaptable across autoimmune diseases, cancer immunotherapy, and chronic inflammatory conditions, using nanoscale precision to regulate immune pathways with greater efficacy and safety. Its flexible design enables rapid customization for diverse therapeutic needs.

Founded: 2022

Saudi Arabia



TMAB
THERAPEUTICS

THERAPEUTICS

Nuclear medicine delivering precise, life-extending treatment for patients with aggressive neuroendocrine cancers.

TMAB Therapeutics (TMAB) is a Houston headquartered, nuclear medicines company developing potentially best-in-class DLL3 targeting antibody–radiopharmaceuticals invented at Memorial Sloan Kettering Cancer Center. Our DLL3–targeting theranostic pair addresses unmet medical need in neuroendocrine tumors, starting with small cell lung cancer and neuroendocrine prostate cancer. TMAB is backed by Memorial Sloan Kettering Cancer Center, the American Cancer Society’s Bright Edge Fund, Wilson Sonsini Partners Fund and other family offices and angel investors.

Founded: 2023

United States



STARTUPS: THERAPEUTICS



THERAPEUTICS

BASET Pharma develops next-generation engineered antibodies and multispecific biologics for oncology and autoimmune diseases, using an AI-powered antibody-engineering platform tailored for rapid preclinical validation and global licensing.

BASET Pharma is a biotechnology startup developing next-generation engineered antibodies and multispecific biologics for oncology and autoimmune diseases. Using an AI-powered antibody-engineering platform, we generate safer, more potent therapeutic candidates that address limitations of current biologics. Our strategy includes biosimilar-plus innovation tailored for Saudi Arabia, GCC, and Europe, enabling the localization of high-value immunotherapies. Through partnerships and licensing, BASET Pharma aims to accelerate the availability of advanced biologics and transform patient outcomes in the region and globally.

Founded: 2025

United Kingdom



THERAPEUTICS

Delivering scalable, off-the-shelf Cell & Gene Therapy for Cancers and Rare Diseases designed for India, Saudi Arabia, and emerging global markets.

East Ocyon Bio is India's first allogeneic cell therapy company developing affordable, off-the-shelf CAR-NK and CAR- $\gamma\delta$ T cell therapies for solid tumors, autoimmune, and rare diseases. Using a proprietary γ -retroviral vector platform and high-efficiency BaEV pseudotyping, we engineer immune cells that do not require patient-specific manufacturing, enabling next-generation therapies to be faster, more scalable, and significantly more accessible. With strong scientific, clinical, and global advisory expertise, East Ocyon Bio is building a robust pipeline and GMP ecosystem aimed at delivering impactful, cost-effective advanced therapeutics to underserved populations in India, Saudi Arabia, and emerging markets.

Founded: 2022

India



STARTUPS: THERAPEUTICS



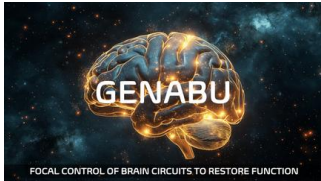
Skin restoration and Hair regrowth/Alopecia treatment:
Short linear SPX Peptides combined AI Powered
computer vision high spectral imaging technology

THERAPEUTICS

Skin BioScience is a DeepTech Longevity Innovative company revolutionizing the \$500B+ anti-aging HealthTech market. Our proprietary Digital Twin SaaS platform leverages AI-driven computer vision, advanced spectral imaging, and novel exosome and peptide technologies to deliver clinically validated longevity skin restoration solutions. Backed by world-renowned scientists.

Founded: 2023

United States



Gene therapy startup with the mission to deliver novel
approaches for fighting CNS diseases with synthetic biology.

THERAPEUTICS

Neuronal networks are composed of excitatory and inhibitory neurons. They work together to establish excitation/inhibition balance. Imbalanced brain circuits can be hyperactive or hypoactive leading to the development and expression of different psychiatric and neurological diseases, e.g., Parkinson's disease, epilepsy, chronic pain, schizophrenia, autism spectrum disorder, and depression. Based on the worldwide prevalence of these diseases, up to 2 billion people currently suffer from conditions associated with excitation/inhibition imbalance. Alterations in excitation/inhibition balance therefore constitute an important emerging theme in clinical neuroscience. We have developed novel gene therapy technologies to rebalance excitation and inhibition in affected neuronal circuits. We are currently focusing our pre-clinical development efforts on Parkinson's disease and epilepsy.

Founded: 2024

Spain



STARTUPS: THERAPEUTICS



THERAPEUTICS

GPN Therapeutics is a regenerative medicine startup developing a first-in-class orthobiologic that enhances spinal fusion outcomes, particularly in high-risk patients such as those with diabetes, obesity, or chronic inflammatory conditions.

GPN Therapeutics is a regenerative medicine startup developing a first-in-class orthobiologic that enhances spinal fusion outcomes, particularly in high-risk patients such as those with diabetes, obesity, or chronic inflammatory conditions. Built on over a decade of scientific discovery, our innovation leverages the therapeutic potential of GPNMB—a naturally occurring, anti-inflammatory, pro-osteogenic protein—to accelerate bone healing and reduce costly revision surgeries. GPN's technology offers a safer, more effective alternative to current biologics and aligns directly with global needs for improved musculoskeletal care. As we expand into Saudi Arabia, our solution supports the Kingdom's Vision 2030 goals by advancing local biotechnology capabilities, improving clinical outcomes, and reducing the healthcare burden of spine disease.

Founded: 2017

United States



THERAPEUTICS

Saudi-made native marine collagen powder for advanced chronic wound healing.

RedSea BioCollagen develops a Saudi-made native marine collagen powder extracted from local Red Sea fish skin for chronic wound care. The innovation focuses on preserving the natural triple-helix structure to enhance stability and healing performance while enabling a low-cost, locally controlled biomaterial. The platform reduces dependence on imports, strengthens national biotech capabilities, and opens the door to future advanced collagen-based products.

Founded: 2025

Saudi Arabia / Germany

STARTUPS: DIGITAL HEALTH & AI



PARROTS
Medical Assistive AI

Patented AI brain-body monitoring and cognitive games that detect and manage dementia years earlier, at home and in clinic.

DIGITAL HEALTH/AI

Parrots Medical is a neuro-digital health startup using patented, AI-powered brain-body monitoring and cognitive games to detect and manage dementia and other neurodegenerative conditions earlier, years before obvious symptoms. Our platform, Polly, turns a few minutes of gameplay plus multimodal signals (EEG, speech, vitals, wearables) into continuous brain-health scores and personalized care plans for clinics, home-care teams, and families. By shifting brain health from rare, expensive assessments to continuous, accessible monitoring, Parrots aims to delay decline, reduce caregiver burden, and lower the cost of dementia care at scale.

Founded: 2023

United States



Med iQ is an advanced medical AI platform providing accurate clinical decision support, dose calculations, diet recommendations, a study hub, and a collaborative community connecting doctors and patients.

DIGITAL HEALTH/AI

Med iQ is an advanced medical AI platform designed for clinics of all sizes, offering fast and accurate clinical decision support powered by specialized medical models. The system analyzes symptoms, labs, images, and patient history to deliver clear assessments, structured reports, and precise medication dosing guidance. Med iQ also provides personalized diet recommendations, a comprehensive study hub for continuous medical learning, and an integrated community that connects doctors with patients and fellow clinicians. Built around a smooth, clinician-first workflow, Med iQ enhances diagnostic confidence, improves efficiency, and elevates the quality of care across all healthcare settings.

Founded: 2024

Sudan



STARTUPS: DIGITAL HEALTH & AI



DIGITAL HEALTH/AI

KidneyTwin is an AI-powered digital twin platform that simulates kidney function and disease progression by integrating biosensor, clinical, and biomedical data, enabling faster, safer, and more precise kidney drug development

KidneyTwin is developing the first AI-powered digital twin of the human kidney, an intelligent, real-time simulation platform that unifies lab biosensor data, electronic health records, and scientific literature into a single, machine-readable system. Built on a regulatory-grade biomedical ontology, KidneyTwin enables predictive modeling of kidney disease progression, early detection of drug induced toxicity, and accelerated discovery of new therapies. By addressing the critical gap in kidney drug development, the lack of dynamic, translatable human models. KidneyTwin offers a scalable, ethical, and clinically relevant alternative to outdated lab systems and animal testing. Our platform is designed to power precision nephrology, reduce late-stage clinical trial failure, and support the global shift toward model-informed, digitally integrated therapeutic innovation.

Founded: 2013

United States



DIGITAL HEALTH/AI

Erada is a pioneering Saudi digital health platform offering AI-driven personalized nutrition and wellness solutions integrated with obesity genetic testing to empower healthier lifestyles across the Gulf region.

Erada for Healthy Life is a HealthTech platform designed to help individuals adopt sustainable healthy lifestyles through personalized nutrition plans, AI-driven coaching, and expert-led guidance. The app integrates therapeutic nutrition consultations, tailored meal programs, and progress tracking into one seamless experience. With a special focus on working women and young adults in Saudi Arabia, Erada addresses rising lifestyle diseases by making healthy living accessible, culturally relevant, and measurable. Our innovation lies in combining professional dietetic care with smart technology to deliver a scalable, affordable, and high-impact solution for long-term wellness.

Founded: 2025

Saudi Arabia



STARTUPS: DIGITAL HEALTH & AI



Ligandora is a cloud-native platform that lets researchers design, simulate, and analyze biomolecules with AI-driven, zero-code computational tools.

DIGITAL HEALTH/AI

Ligandora democratizes biomolecular design by offering a cloud-native computational playground where anyone can design, simulate, and analyze drugs, proteins, enzymes, diagnostics, and materials, without infrastructure or coding. By integrating AI models, molecular simulations, quantum-ready chemistry, and automated analytics into one unified platform, Ligandora replaces expensive wet-lab and HPC setups with on-demand, scalable, GPU-accelerated workflows. This empowers universities, SMEs, startups, and research labs across the MENA region to innovate faster, reduce R&D costs, and build local biotechnology capabilities aligned with national priorities and Vision 2030.

Founded: 2025

Saudi Arabia



Built on cutting-edge research and real-world health data, NATHRA uses advanced AI to help health systems shift from treatment to prevention.

DIGITAL HEALTH/AI

NATHRA (Nodal AI for Tracking Health and Risk Assessment) is an early stage AI platform built at MGB and Harvard that predicts and tracks chronic disease risk using electronic health records, lab data, and biobank information. It generates personalized risk scores for patients, gives clinicians actionable guidance for targeted prevention, and provides policymakers with clear population level insights for smarter planning and resource allocation. Its first cardiovascular model reached 90 percent accuracy, validating its predictive strength and real world potential. NATHRA supports Saudi Arabia's shift toward preventive, data driven healthcare in line with Vision 2030.

Founded: 2025

United States / Saudi Arabia



STARTUPS: DIGITAL HEALTH & AI



MEDSYNTRA

DIGITAL HEALTH/AI

Provides research-ready, enriched medical imaging datasets to empower global healthcare innovators to accelerate AI development and clinical validation.

MedSyntra delivers a sovereign radiology data infrastructure designed to support Saudi Arabia's Vision 2030 ambition to build one of the world's most advanced digital health ecosystems. The platform unifies fragmented imaging data from all regions and vendors, harmonizes it into AI-ready national datasets, and enables fully PDPL-compliant storage within the Kingdom. With 60 TB of harmonized radiology data and 30 PB of exclusive global imaging rights, MedSyntra accelerates early cancer detection, strengthens national AI model development, and supports Saudi Arabia in becoming a global leader in medical AI and data-driven healthcare.

Founded: 2024

Lithuania



DIGITAL HEALTH/AI

Train Lab Competence, Without the Lab.

XenoClinic is a VR-based medical laboratory training platform transforming how healthcare professionals learn and practice critical laboratory procedures. We simulate real clinical workflows. Such as ABO/Rh blood typing, DNA/RNA extraction, and advanced diagnostic techniques, within an immersive virtual environment that enables safe, hands-on training with measurable performance analytics. Our innovation reduces costly training time, minimizes laboratory errors, and supports accreditation and competency standards (CAP, CBAHI, SCFHS). By combining virtual reality, AI-driven assessment, and modern educational design, XenoClinic empowers hospitals, universities, and training centers to scale high-quality laboratory education, strengthen workforce readiness, and accelerate healthcare excellence in alignment with Vision 2030.

Founded: 2025

Saudi Arabia



STARTUPS: DIGITAL HEALTH & AI



DIGITAL HEALTH/AI

AI-driven early detection solution for chronic cardiopulmonary diseases using continuous acoustic bio-signal monitoring.

SmartSound provides a next-generation preventive healthcare solution that uses an AI stethoscope to screen for hidden cardiac and respiratory conditions at an early stage. Even when no visible symptoms are present, our technology detects subtle abnormalities in heart and lung function, enabling early identification of potential diseases. By improving the accuracy and accessibility of preventive screening, SmartSound helps individuals maintain better long-term health outcomes and enhances overall quality of life.

Founded: 2011

South Korea



DIGITAL HEALTH/AI

Unifying Vigilance, Elevating Safety

ThinkTouch Solution is a health-tech company at the intersection of AI and pharmaceutical sciences, focused on innovation, specifically by developing an AI-powered platform for multivigilance. Simply put, our goal is to completely change how product safety and development are handled. The heart of our technology is called CureSkyAi, which is a smart, predictive intelligence engine. This engine is incredibly powerful because it can pinpoint various dangerous interactions, such as those between different drugs, between drugs and certain foods, or even between drugs and herbal supplements. Beyond interactions, it also assesses how toxic different molecules are and allows for efficient in-silico testing, which means testing things using computer simulations rather than in a lab.

Founded: 2022

Algeria



STARTUPS: DIGITAL HEALTH & AI



From insight to action: AI-powered personalized wellness for your unique body.

DIGITAL HEALTH/AI

VLEED is a Saudi health-tech startup that turns routine lab results and everyday data into simple, actionable longevity and wellness insights. Using AI and clinically designed biomarker panels, we translate complex medical data into clear scores, explanations, and lifestyle recommendations that patients and family doctors can understand in seconds. Our innovation lies in combining multi-modal data (labs, genetics, wearables, and phone-based measurements) with locally calibrated models for the Saudi/GCC population. By making preventive and lifestyle medicine easier to practice at scale, VLEED aims to reduce the burden of chronic disease and help people live longer, healthier lives.

Founded: 2025

Saudi Arabia



**BIOLOGIA
360**

Integrating biosensors and AI to deliver smarter, faster, and more accessible healthcare diagnostics.

DIGITAL HEALTH/AI

Biologia 360 is a biotechnology and neurotechnology venture developing AI-enhanced diagnostic and monitoring solutions for neurological and metabolic disorders. Our innovation integrates multimodal biosignal acquisition (EEG, wearable sensors, physiological monitoring) with advanced machine-learning models to deliver real-time clinical decision support and early detection of high-risk conditions such as epilepsy, depression, diabetic neuropathy, and metabolic dysfunction. By combining scientific rigor, accessible design, and scalable digital health infrastructure, Biologia 360 aims to accelerate precision medicine adoption across Saudi Arabia and emerging markets—improving patient outcomes, reducing healthcare costs, and strengthening national biotech capabilities under Vision 2030.

Founded: 2021

Pakistan



STARTUPS: DIGITAL HEALTH & AI



DIGITAL HEALTH/AI

AI-powered chromosome, genetics, and protein-engineering platform for faster diagnostics and accelerated biological discovery.

Deep Medical Solutions AI is a next-generation biotechnology company uniting artificial intelligence, bioinformatics, and synthetic biology to redefine how genetic data is analyzed and used in healthcare. Our flagship innovation is an AI-powered chromosome and genomic analysis platform that automates cytogenetic diagnostics – identifying chromosomal abnormalities with unmatched accuracy and speed. The platform integrates AI-based imaging, genomic sequencing interpretation, and automated clinical reporting into one intelligent ecosystem, bridging the gap between hospital diagnostics, research labs, and biotech R&D. Beyond chromosome analysis, Deep Medical Solutions AI is building the future of synthetic biology and protein engineering.

Founded: 2025

Saudi Arabia



STARTUPS: MEDTECH & DEVICES



MedTech/Devices

MetSanex® provides an advanced antibacterial and antifungal surface treatment for titanium-based medical and industrial applications, designed to significantly reduce infection risk and improve long-term device performance.

MetSanex® is an innovative antibacterial and antifungal surface technology based on titanium enhanced with controlled micro-particles of silver, copper, and zinc. Our patented solution creates a self-sanitizing surface that prevents bacterial and fungal growth for long periods, without using nanoparticles. Already validated in dental and orthopedic applications, MetSanex® offers a scalable and safe platform for healthcare, consumer products, fitness equipment, and industrial use. Our mission is to improve global hygiene and safety by integrating long-lasting antimicrobial protection into everyday devices and high-value products.

Founded: 2023

Italy



MedTech/Devices

Nucleotica provides a reagent free CNT-based nanosensor platform for ultra sensitive and rapid DNA and RNA detection in under 30 minutes.

Nucleotica develops an ultra sensitive, PCR-free platform for rapid DNA/RNA detection using carbon nanotube nanosensors. The system achieves exceptional sensitivity, detects even highly degraded DNA and delivers results in under 30 minutes without reagents or optical detection. It enables precise analysis of rare variants and low abundance targets in oncology, transplant monitoring, infectious disease detection and other fields. Compact, automated and reagent free, Nucleotica makes high performance molecular diagnostics accessible in laboratories, clinics and resource limited settings, offering new possibilities where traditional PCR and NGS based methods fail.

Founded: 2024

Poland



STARTUPS: MEDTECH & DEVICES



MedTech/Devices

Pixelence offers AI-predictive model that generates synthetic contrast-enhanced brain MRI images from standard MRI scans—eliminating the need for gadolinium-based dyes & related procedures.

Over 1.3 million people living with a primary brain tumor in the US. This includes both malignant (cancerous) and non-malignant (benign) brain tumors. 93,000 new cases are diagnosed annually - 24,000 are malignant primary brain tumors. Pixelence offers AI-predictive model that generates synthetic contrast-enhanced brain MRI images from standard MRI scans—eliminating the need for gadolinium-based dyes & related procedures. We target for national health services and private insurance companies in GCC, US and EU.

Founded: 2025

Malaysia



MedTech/Devices

Integrated validation and monitoring system for biologic medications.

Integrated validation and monitoring system for biologic medications. A hardware/software-based solution managing the whole treatment journey; Prescription-to-Disposal Collection.

- Providing patient with a valid medication with integrated notification, storage, and disposal.
- Providing healthcare system with data and reports essential to achieve impactful planning.

Founded: 2018

Saudi Arabia



STARTUPS: MEDTECH & DEVICES



**OPPORTUNITY
HEALTH**
innovation to save lives

MedTech/Devices

Yarnasa – an automatic, self-applicable anti-choking medical device designed to clear airway obstructions and save lives in seconds.

Opportunity Health is developing Yarnasa, an automatic and self-applicable medical device designed to clear airway obstructions within seconds during choking emergencies. Powered by a CO₂-based multi-stage Venturi system, Yarnasa delivers standardized negative-pressure extraction without physical force or prior training. The device targets high-risk B2B environments—eldercare centers, healthcare facilities, transportation networks, emergency units, schools, and restaurants—and is supported by a European patent application and PCT filing.

Founded: 2024

Spain



MedTech/Devices

We develop sustainable, nature-inspired biotech solutions that transform agricultural biomass into high-value healthcare and material products, accelerating innovation in Saudi Arabia and beyond.

NanoHealix is a sustainable wound-care startup that converts rice straw waste into biodegradable hydrogel bandages using green-chemistry cellulose extraction and nanomaterial reinforcement. Our core innovation lies in tailored hydrogel formulations that deliver high transparency, strong tissue adhesion, and tunable mechanical strength. By replacing synthetic, non-degradable dressings, NanoHealix reduces medical plastic waste, mitigates agricultural burning pollution, and supports rural economic value creation through biomass upcycling. We are currently prototyping universal, biocompatible bandages optimized for moist-wound healing, with a scalable manufacturing path powered by standard processing equipment. Our impact spans public health and the environment, advancing circular-economy medical materials that are natural, cost-competitive, and designed for future additions such as plant-based antibacterial agents and self-healing nanocomposites.

Founded: 2025

Egypt



STARTUPS: MEDTECH & DEVICES



INA-MedTech

MedTech/Devices

INA-MedTech delivers AI-driven quality and validation solutions that accelerate compliant product development for MedTech, biotech, and digital health companies.

INA-Medtech is a U.S.-based digital health and regulatory innovation startup that enables medical device, biotech, and healthcare organizations to achieve fast, compliant, and scalable product development. Our platform combines AI-driven Quality Management, automated validation, and regulatory intelligence to simplify the entire lifecycle—from design and risk management to 21 CFR/ISO/MDR compliance and market readiness. By replacing manual, fragmented processes with intelligent, real-time oversight, INA-Medtech reduces development timelines, strengthens product quality, and accelerates safe access to innovative therapies. Our mission is to support global health systems, including emerging biotech ecosystems such as Saudi Arabia's Vision 2030, by providing world-class digital quality infrastructure built for the future of medical technology.

Founded: 2023

United States

STARTUPS: GREEN BIOTECH



ECO TERRA is KSA's anchor technology for Durable Carbon Removal (DCR), transforming abundant date palm biomass waste into carbon-negative biofertilizer, soil restoration agent, and clean energy.

Agri-Biotech

ECO TERRA unlocks climate finance by transforming abundant date palm biomass waste into a durable carbon sink and high-value agricultural products using proprietary hybrid pyrolysis technology. We offer a low-temperature, palm-optimized process that generates a high-sequestration biochar (PGPM-biochar), renewable energy (syngas), and biopesticides, establishing a full circular economy solution. Our impact includes sequestering \$1M+ \ tCO_2e/\$year by 2030, generating \$6.2M in Year 1 revenue, and creating 100+ jobs, supporting both KSA and MENA decarbonization goals.

Founded: 2025

Malaysia



Fitr Farms transforms local agricultural waste into high-value mushrooms and mycelium-based materials through sustainable, biotech-powered production.

Agri-Biotech

Fitr Farms is redefining mushroom cultivation in Saudi Arabia. Using cutting-edge biotech and circular-economy systems, we up-cycle local agricultural waste into premium gourmet mushrooms and potent functional extracts. Our R&D-driven approach ensures sustainable, high-quality, fully traceable products tailored for modern consumers and industry leaders in food, wellness, and Pharma.

Founded: 2023

Saudi Arabia



STARTUPS: GREEN BIOTECH



Agri-Biotech

PhageTech Solution develops Saudi-made bacteriophage products that replace antibiotics in poultry, cutting Salmonella and boosting food safety sustainably.

PhageTech Solution is a Saudi biotech startup developing sustainable bacteriophage-based products to replace or reduce antibiotic use in agriculture and food production. Our first focus is on locally isolated, high-efficacy phages that target Salmonella in poultry, delivered as safe, easy-to-use sprays that reduce bacterial contamination, improve flock health, and enhance food safety. By combining microbiology, bioinformatics, and AI to design and optimize phage formulations tailored to local environments, we offer a precise, residue-free alternative to chemicals and antibiotics. PhageTech Solution supports Saudi Vision 2030 by strengthening national food security, enabling local biomanufacturing, and helping curb antimicrobial resistance within a One Health framework.

Founded: 2024

Saudi Arabia



Agri-Biotech

Neo Alchemist Bio Solutions.

Alchemist vision under Quantum science. Nano-scale phenomena Research
Production of phyto-complexed nano structures by plants' polyphenols and nano metals. Water Mixtures for Agriculture, Nutraceuticals, and Petcare to boost immunity. Wide Spectrum of activity on parasites insect repellent, antibacterial, antiviral solutions, biocompatible.

Founded: 2017

Italy



STARTUPS: INDUSTRIAL/SYNTHETIC BIOLOGY



Industrial/Synthetic
Biology

PrintyMed is a biotech company producing nature-identical, medical-grade spider silk proteins via a proprietary bacterial bioreactor process, creating revolutionary biomaterials for advanced medical applications.

PrintyMed, a 2023 spin-out from the Latvian Institute of Organic Synthesis, is a Latvian deep-tech startup pioneering medical innovation through the development and supply of nature-identical artificial spider silk produced via recombinant bacteria. Leveraging proprietary molecular-engineering strategies, biomimetic production methods, and green-chemistry workflows, PrintyMed delivers a scalable and sustainable platform for generating high-performance biomaterials previously inaccessible at industrial scale. Its engineered spider-silk materials offer unprecedented mechanical strength, biocompatibility, and tunability, enabling breakthroughs in advanced wound care, tissue models, and Organ-on-Chip (OoC) systems. By replacing petrochemical polymers with biomimetic spider silk protein, PrintyMed drives transformative impact across biomedical research, therapeutic development, and the future of regenerative medicine.

Founded: 2023

Latvia / Saudi Arabia



ON●IDS

Industrial/Synthetic
Biology

ONoids is the integrated precision oncology platform utilizing patient-derived Tumor Organoids and personalized CAR-T validation to accelerate drug screening and establish the critical MENA tumor data biobank.

ONoids is a precision oncology platform integrating patient-derived Tumor Organoids, validated Personalized CAR-T design, and a strategic MENA-focused Biobank. We solve the critical challenge of trial-and-error cancer treatment by providing an integrated in vitro system for rapid drug screening and individualized CAR-T efficacy testing. Our innovation creates a vital data asset, reduces failed treatments by accelerating therapeutic validation, and strategically aligns with the Saudi National Biotechnology Strategy to improve localized oncology care.

Founded: 2025

Saudi Arabia



STARTUPS: DIAGNOSTICS



Diagnostics

VuEssence leverages gene expression information measured in blood to understand and distinguish between serious conditions that have overlapping clinical symptoms

VuEssence leverages gene expression information measured in blood to improve understanding and diagnosis of complicated conditions in hospital settings. Initially focused on stroke, the company has identified proprietary gene signatures for distinguishing stroke from other conditions that share similar clinical symptoms. The signatures can be packaged into hospital laboratory tests to diagnose patients in real time. More precise diagnosis leads to better care at lower cost by directing lifesaving treatment to patients who need it most.

Founded: 2016

United States



ophiomics
PRECISION MEDICINE

Diagnostics

Early HCC detection through next-generation liquid biopsy and AI-driven precision diagnostics.

Ophiomics is a precision diagnostics company developing advanced genomic and liquid-biopsy solutions for liver disease, one of the fastest-growing and most underdiagnosed health burdens globally. Our flagship product, HepatoDetect, is a next-generation liquid biopsy test for early detection of hepatocellular carcinoma (HCC) using omic biomarkers and AI-driven risk modelling. Built from clinically validated data and designed with cost-effectiveness in mind to address the high HCC and liver disease burden in the Gulf, HepatoDetect enables earlier treatment, improved outcomes, and more efficient allocation of healthcare resources.

Founded: 2020

Portugal



STARTUPS: DIAGNOSTICS



Diagnostics

Karyon Bio is developing an AI-powered Digital LiverTwin platform that will integrate multiomics, imaging, and clinical data to enable non-invasive early detection and monitoring of fatty liver diseases (MASLD/MASH).

Founded in Silicon Valley, Karyon Bio is developing the next generation of AI-powered healthcare solutions to combat metabolic dysfunction, associated steatotic liver disease (MASLD), a condition affecting 30% of the global population, with particularly high prevalence in Saudi Arabia due to rising metabolic disorders. Our innovative Digital LiverTwin platform, currently in advanced development, will seamlessly integrate multi-omics data, medical imaging, electronic health records, and real-world clinical evidence to detect early biomarkers, predict disease progression, and enable personalized treatment strategies, replacing invasive, costly liver biopsies with accessible AI-powered diagnostics.

Founded: 2024

United States



Diagnostics

AI-powered spatial & multiomics platform predicting cancer treatment response from a single tissue slide. AI

Rosetta Omics is a deep-tech precision oncology startup developing an AI-enabled spatial and multiomics platform to predict treatment response in solid tumors from a single tissue slide. By integrating proteomics, lipidomics, and transcriptomics with advanced machine learning, Rosetta Omics identifies clinically actionable biomarkers and provides physicians with personalized, data-driven treatment recommendations. The platform also supports pharmaceutical companies in biomarker discovery, patient stratification, and therapeutic target identification. With proven retrospective proof-of-concept studies in colorectal and kidney cancers, an exclusive patent, and collaborations with leading cancer centers, Rosetta Omics aims to transform cancer care by enabling precise, cost-effective, and earlier therapeutic decisions.

Founded: 2023

France



STARTUPS: DIAGNOSTICS

twinn.health



AI-powered whole-body MRI diagnostics for early detection of chronic disease.

Diagnostics

Twinn Health is an AI-powered MRI diagnostics platform that transforms whole-body MRI scans into actionable, quantitative biomarkers for early detection of chronic diseases. Using proprietary AI algorithms, Twinn automatically analyses fat, muscle, liver, brain, and vascular health to enable earlier intervention, improved clinical decision-making, and population-scale screening. Built and clinically validated on Middle East datasets, Twinn supports hospitals with accurate, compliant imaging workflows aligned with Vision 2030's priorities for preventive care, quality of life, and precision diagnostics.

Founded: 2023

United Kingdom



AISI X

AI Multimodal Triage Assistant for Brain Diseases.

Diagnostics

We're building a multimodal AI Triage Assistant that streamlines neuroimaging by analyzing brain CT, MRI, clinical history, and lab data in one workflow. It flags urgent cases, filters routine studies, and generates structured report drafts within minutes. By reducing noise and cognitive load, it helps radiology and neurology teams handle growing imaging volumes with less effort. Hospitals get faster triage, more consistent reporting, and a more efficient path to patient care.

Founded: 2025

United States / Japan



STARTUPS: DIAGNOSTICS



Illume Bio develops rapid, low cost molecular diagnostics that detect antimicrobial resistance at the point of care.

Diagnostics

Illume Bio is building a low cost, rapid diagnostic that detects antimicrobial resistance at the point of care. The platform uses antibiotic molecules as probes that release a DNA barcode when attacked by resistant bacteria, creating a simple color readout without instruments. The design keeps chemistry, detection, and workflow compact so clinics and low resource settings can identify resistance in under an hour. The goal is to make AMR testing affordable and accessible so clinicians can choose the right treatment early and slow the spread of drug resistant infections.

Founded: 2025

Singapore



EpiNova is building the next generation of non-invasive cancer diagnostics, using advanced biomarkers and AI to make early detection faster, smarter, and scalable.

Diagnostics

EpiNova is a Saudi precision-diagnostics startup developing an AI-powered, blood-based test that detects cancer at its earliest and most treatable stages. Our platform combines advanced molecular and epigenetic biomarkers with secure, privacy-first AI analytics to deliver fast, non-invasive, and clinically actionable results for hospitals, labs, and national screening programs. Our mission is to localize cancer diagnostics, reduce late-stage cases, and advance Vision 2030 by enabling a preventive, data-driven healthcare system built in Saudi Arabia.

Founded: 2025

Saudi Arabia



STARTUPS: DIAGNOSTICS



KDx Diagnostics provides clinically validated, non-invasive cancer diagnostics that improve outcomes and reduce healthcare costs.

Diagnostics

KDx Diagnostics Inc. develops non-invasive, market-friendly diagnostic solutions that enable earlier, more accurate detection of urothelial cancers. Using proprietary biomarker technology and proven detection technology with fast adaptation, KDx delivers rapid, reliable tests that improve clinical decision-making while reducing dependence on invasive procedures. Our innovation empowers healthcare providers with actionable insights, enhances patient outcomes, and supports more efficient, cost-effective care across global health systems.

Founded: 2017

United States



VIDANEX

Vidanex is the infrastructure powering the future of diagnostics and medical imaging AI in ASEAN.

Diagnostics

Vidanex delivers an enterprise digital pathology and AI infrastructure that digitizes workflows, enhances diagnostic efficiency, and connects hospitals into a scalable regional network, positioning Vidanex as the gateway for medical imaging AI expansion into ASEAN.

Founded: 2023

Malaysia



STARTUPS: DIAGNOSTICS



Diagnostics

Biosensor for Early Viral Infection Detection: A Novel Point-of-Care Diagnostic Tool.

We are developing an innovative point-of-care biosensor designed to enable early detection of viral infections. Unlike traditional diagnostics, this technology aims to provide rapid, real-time insights and support early clinical decision-making.

Founded: 2025

Saudi Arabia

STARTUPS: BIOMANUFACTURING & PLATFORMS



Biomanufacturing/Platforms

We are a lean pre-clinical antimicrobial biologic drug discovery company aiming to deliver the largest pipeline of novel antimicrobials on the planet in the next 5 years.

We are a pre-clinical stage anti-infective discovery company developing first-in-class drugs that have potent activity against pathogens recognized by the WHO as key threats. Our target clinical indications are infections that cause significant morbidity and mortality in KSA and the wider GCC region. Our lead asset has undergone advanced pre-clinical evaluation, showing potent in vivo efficacy, with some superiority over competitor agents. With exceptional capital efficiency, we are growing our drug portfolio using an AI-driven discovery platform that has generated more than 10 new leads for exploitation. Our novel drug class will be a key intervention in efforts to address the threat of AMR in the GCC region and globally.

Founded: 2018

United Kingdom



Biomanufacturing/Platforms

Unlocking scalable & affordable regenerative medicine to reverse the root causes of degenerative diseases.

Conveyxo harnesses the power of exosomes, the body's natural, stem cell-derived healing messengers, to revolutionize regenerative medicine. By enhancing these tiny vesicles with therapeutic payloads like RNA, we amplify their anti-inflammatory and regenerative potential, creating the next generation of cell-free therapies. Our technology platform delivers potent, scalable, and affordable treatments aimed at reversing inflammatory and degenerative diseases, including those that significantly impact Saudi Arabia.

Founded: 2019

Belgium



STARTUPS: BIOMANUFACTURING & PLATFORMS



Biomanufacturing/Platforms

Biotechnology Innovation Company (BIC) is Saudi Arabia's first private, fully integrated biotech firm, pioneering the development of life-saving vaccines, starting with the MERS solution, to ensure national health security and self-reliance.

Biotechnology Innovation Company (BIC) was established in January 2024 by Dr. Khaled Almosa, a senior strategic management consultant and regional leader in the biotechnology industry. BIC is Saudi Arabia's first private biotech firm providing fully integrated R&D services and clinical trials for vaccines, biologics, and biosimilars, dedicated to transforming cutting-edge science into life-saving health solutions that enhance public health and well-being based in KACST. We are developing national expertise in vaccine, biologic, and biosimilar R&D, consultation, and training services. Our efforts are establishing Saudi Arabia as a regional leader in biotechnology, poised to address emerging health challenges with agility, innovation, and excellence.

Founded: 2024

Saudi Arabia



Biomanufacturing/Platforms

Human-relevant micro-organ-on-chip systems enabling predictive drug discovery and hepatobiliary toxicity screening.

DLOC Biosystems is a deep-tech organ-on-chip company developing next-generation human micro-organ models for predictive drug discovery and safety assessment. Our proprietary 3D cylindrical organ architecture recreates true epithelial polarity, luminal flow, and stromal-parenchymal interactions, enabling highly accurate hepatobiliary, toxicity, and disease models that outperform current in-vitro and animal systems. With patented microfluidic scaffolds, AI-enhanced analytics, and planned regulatory submission through FDA ISTAND, DLOC delivers a breakthrough platform to reduce drug failure rates, accelerate development, and support precision medicine.

Founded: 2021

United Kingdom



STARTUPS: BIOMANUFACTURING & PLATFORMS



Building the Amazon of Life Science Products

Biomanufacturing/Platforms

At Augmented Research, we are revolutionizing life science procurement by offering researchers, scientists, and lab managers a centralized online marketplace. Our platform simplifies access to laboratory equipment, consumables, and services, enabling faster, more efficient research. Integrating innovative digital solutions empowers the scientific community to focus on breakthroughs, not bureaucracy.

Founded: 2021

Saudi Arabia



AI-CHEM LENS automates unknown chemical risk predictions using AI-driven non-targeted analysis (NTA) and HRMS data to support regulatory and safety decisions.es

Biomanufacturing/Platforms

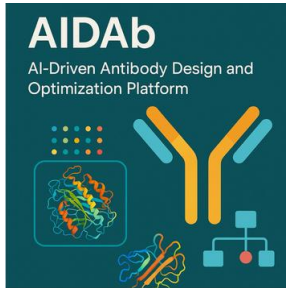
AI-CHEM LENS is an AI-powered platform that automates non-targeted chemical analysis (NTA) using high-resolution mass spectrometry (HRMS). By integrating advanced domain-adversarial neural networks with standardized HRMS workflows, the platform identifies unknown chemical compounds with higher speed, accuracy, and reproducibility. Designed for regulators, food safety labs, medical device manufacturers, and forensic toxicology units, AI-CHEM LENS supports ISO 10993-18 compliance and enhances chemical safety evaluations across Saudi Arabia and global markets.

Founded: 2025

Saudi Arabia



STARTUPS: BIOMANUFACTURING & PLATFORMS



AI-Driven Antibody Design and Optimization Platform.

Biomanufacturing/Platforms

AIDAab (AI-Driven Antibody Design and Optimization Platform) is a novel initiative aimed at accelerating therapeutic antibody discovery and optimization using cutting-edge artificial intelligence and computational biology approaches. This end-to-end workflow accelerates the discovery timeline by incorporating built-in developability and immunogenicity assessments, moving viable, computationally-validated therapeutic candidates directly toward preclinical studies for cancer and infectious diseases.

Founded: 2025

Saudi Arabia

Towards the Kingdom's Global
Biotech & Innovation Leadership



We're proud to cooperate with visionary leaders, ecosystem enablers, distinguished mentors and speakers, key market players, and brilliant founders

INTERNATIONAL BIOTECHNOLOGY ACHIEVEMENT FORUM 2025 – RIYADH



Join Forum

Express Your Interest to
Attend – Register for the
Forum [HERE](#)



Saudi Biotechnology
Accelerator

14

December