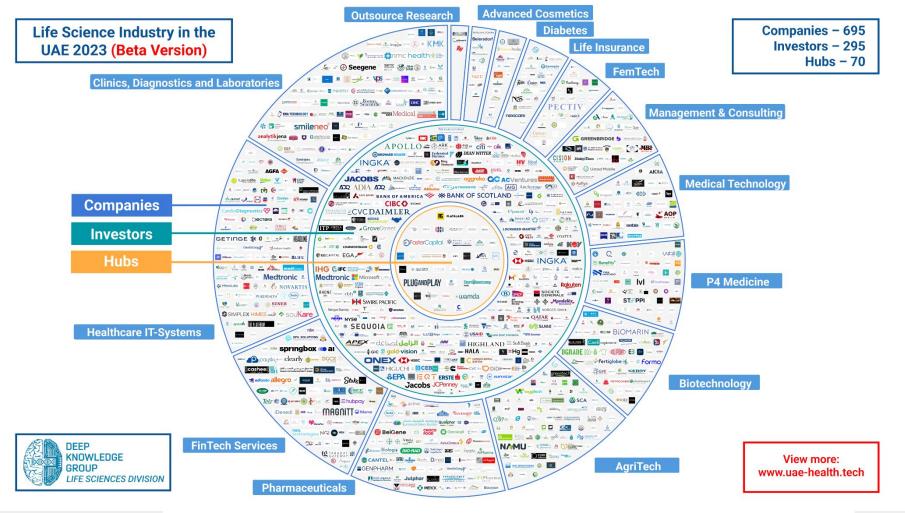


Teaser: Life Sciences in the United Arab Emirates

BETA VERSION

October 2023





Global Life Sciences Industry Outlook

Drivers of Growth

Population ageing

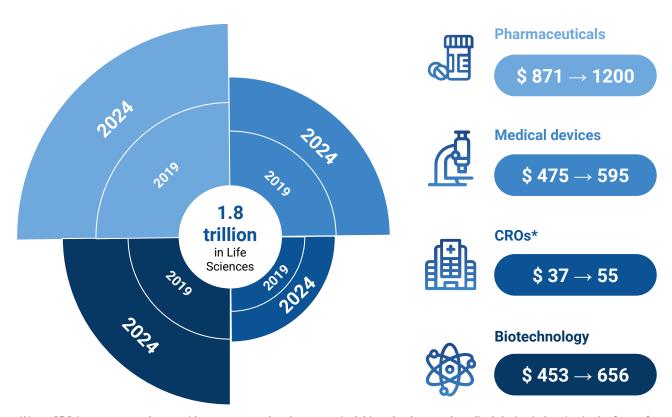
Medical services are in high demand as the world's population ages.

New machines and drugs

New remedies are being developed to meet previously unmet health requirements, stimulating additional technological advancements and pharmacological development.

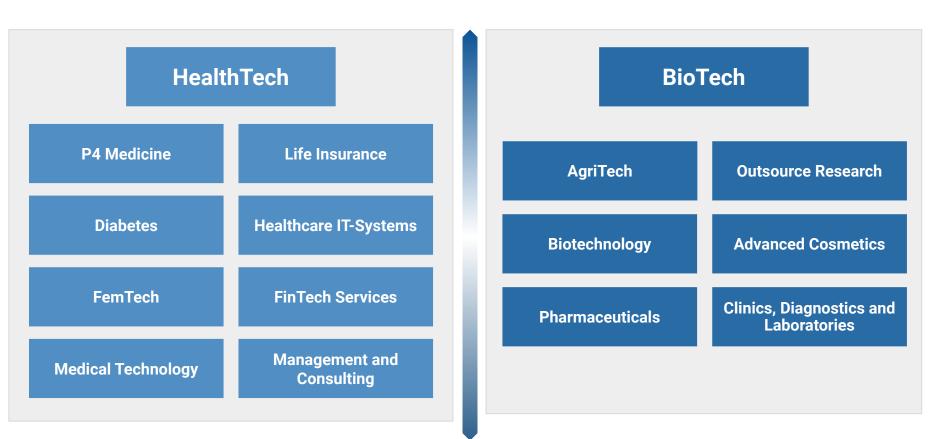
Patient centricity

A shift to customised health care is underway, and platforms that deliver it to patients (literally) at their doorstep are in high demand.



*Note: CRO is a company that provides support to the pharmaceutical, biotechnology, and medical device industries in the form of research services outsourced on a contract basis.

Life Sciences in the UAE Framework

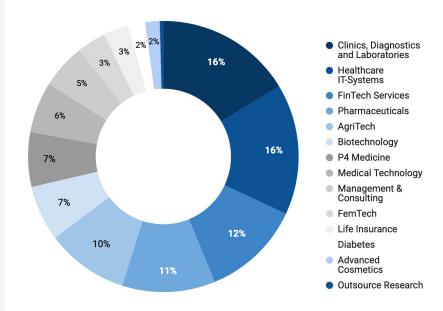


UAE Life Sciences Industry at a Glance

The UAE Life Sciences Industry presents a vibrant and multifaceted landscape. It encompasses a range of sectors, each with its unique focus and contribution. Notable segments include healthcare service providers. technology-driven solutions financial support. pharmaceutical manufacturing and distribution, agricultural innovation, biotechnology advancements, and cutting-edge medical technologies. Additionally, consulting and management firms play a pivotal role in enhancing efficiency and strategy. Specialized niches, such as women's health (FemTech), life insurance, and diabetes care, also find their place in this dynamic industry. This snapshot of the UAE's Life Sciences sector showcases its diverse and evolving nature, offering a comprehensive view of its composition and significance.

In the UAE's Life Sciences sector, companies primarily focus on Clinics, Diagnostics, and Healthcare IT Systems (each 16%), while FinTech Services (12%), Pharmaceutical Firms (11%), and AgriTech (10%) make significant contributions. Biotechnology and P4 Medicine (7% each), as well as Medical Technology (6%), play pivotal roles. Management and Consulting (5%), alongside specialized areas like FemTech, Life Insurance, and Diabetes Treatment (3% each), contribute substantially. Smaller segments include Advanced Technologies (2%) and Outsource Research (1%), forming a varied distribution that can be represented in a pie chart.

Distribution of UAE Life Sciences Companies by Category



UAE Life Sciences Industry at a Glance: Companies

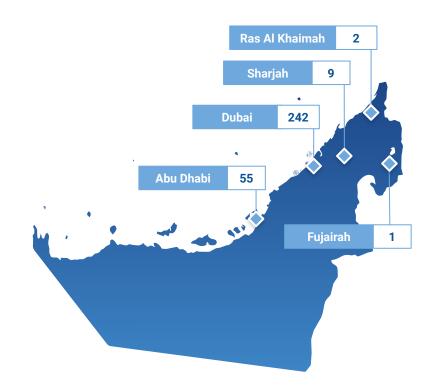
The majority of Life Sciences companies in the UAE are located in the Emirate of Dubai.

The government of Dubai supports innovations and establishes new Life Sciences initiatives on an ongoing basis. For instance, **Dubai Science Park** is a creative environment that fosters development in the medical, wellness and pharma sectors, with medicine, perfumery, and F&B labs manufacturing products locally.

The creation of a robust and resilient health care industry is a key priority for the UAE. One of the most promising methods to achieve this is by increasing research and development (R&D).

Dubai welcomes many next-gen medicine and health care companies to business districts which provide an ecosystem for medical innovation. As the region's HealthTech Industry grows, so will the community of science-backed startups. It will consolidate Dubai's position as a global hub for biotechnology and Life Sciences.

Distribution of UAE Life Sciences-Focused Companies by Emirate



Dubai Industrial Strategy 2030

As the Dubai Plan 2021 begins its implementation phase, the government of Dubai has devised an Industrial Strategy for the emirate alongside other conventional sectors of economy such as commerce, logistics, financial services, and tourism. The strategy aims to turn Dubai into a 'global hub for knowledge-based, innovative, and sustainable industrial activities' by improving industrial coherence and integrating this industrial hub with other economic sectors, particularly strategic ones, and by creating a favorable investment environment through a series of initiatives and incentives. These will help to expand and strengthen selected industries while also attracting new ones with competitive skills.

Six industrial subsectors will be targeted:

- Aerospace
- Maritime
- Pharmaceuticals & Medical Equipment
- Aluminum & Fabricated Metals
- Fast Moving Consumable Goods (FMCG)
- Machinery & Equipment

Strategic Objectives

Growth Engine



Increase total GDP and value-added of manufacturing

Innovation-Based



Enhance depth of knowledge and innovation

Home for Global Business



Become the preferred manufacturing platform for global business

Environmentally Sustainable



Promote eco-friendly and energy-efficient manufacturing

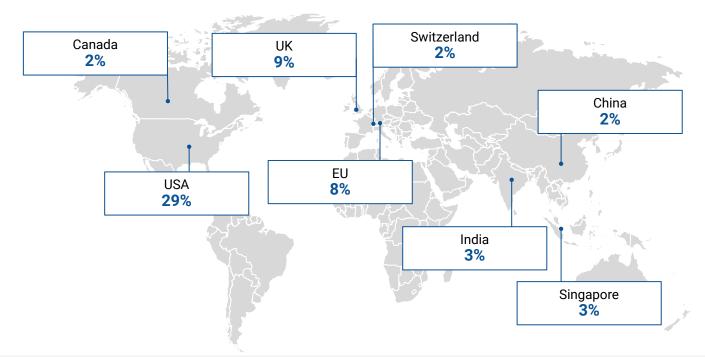
Adopting Islamic Standards



Become a centre for the global Islamic products market

Source: Dubai Industrial Strategy 2030

The UAE Investors Life Sciences: Regional Proportion



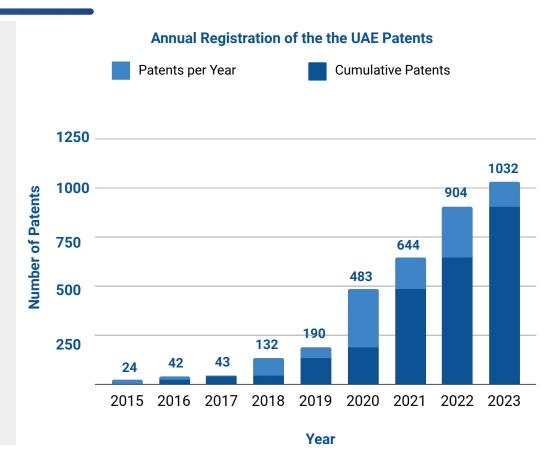
In the field of investments into life sciences in the UAE, the United States emerges as the leading source, contributing a substantial 29% of investments. The United Kingdom and the European Union follow with significant 9% and 8% shares. Notably, Singapore, Switzerland, Canada, China, India each account for 2% to 3% of the investments flowing into the UAE. This diverse spectrum of regions participating in investments reflects the global interest and collaboration in advancing life sciences within the UAE.

Increased International Collaboration in the UAE Patents in Life Sciences

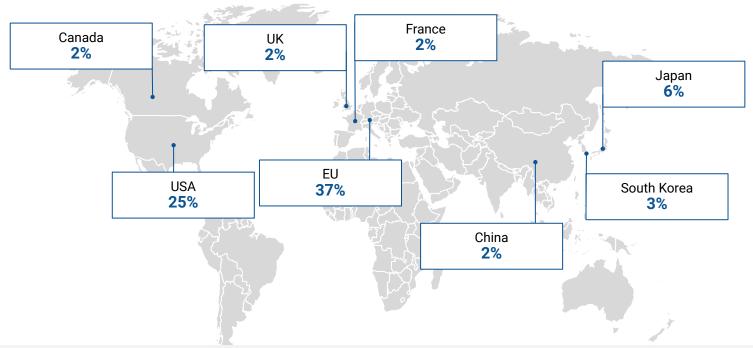
In recent years, the **UAE** has witnessed a significant rise in international collaboration for **life sciences** patents. This underscores the country's commitment to becoming a **global hub** for innovation. The surge in patent registrations reflects an expanding network of global partnerships, highlighting the **UAE**'s resolve to address complex life sciences challenges.

While variations in the number of newly registered **UAE** patents are natural and expected, the average number of patents during last 4 years is very much higher than during previous years.

Looking ahead, the UAE's trajectory of increased global collaboration and annual patent registrations promises a bright future in innovation. It reaffirms the UAE's dynamic role in life sciences, driving groundbreaking discoveries and nurturing borderless partnerships. The nation's dedication to scientific progress will continue shaping the patent and life sciences landscape, ultimately benefiting the global community.



Increased International Collaboration in the UAE Patents in Life Sciences



In the field of life sciences, the **UAE** boasts a significant **1,032** patents, notable for their robust international collaborations. A substantial **37%** of these patents involve partnerships with **European Union** entities, highlighting a strong global knowledge exchange. The **United States** also plays a leading role with **25%** of patents, while **Japan** (**6%**), **South Korea** (**3%**), and **Canada** (**2%**) actively contribute. This international cooperation reflects the **UAE**'s commitment to advancing global life sciences.

Increased International Collaboration in the UAE Patents in Life Sciences

UAE became the first Arab country to begin manufacturing a Covid-19 vaccine with **Hayat-Vax**, a joint collaboration between **Sinopharm CNBG** and **Abu Dhabi's G42**.





MBZUAI and Quris-AI partner to launch world-class Bio-AI center to accelerate the development of new personalized medications using AI





Burjeel Holdings partners with **BridgeBio Pharma** to collaborate in developing therapeutics for rare diseases





Nov 2019

Apr 2021

Jul 2022

Jan 2023

Jun 2023

Jul 2023

Mayo Clinic partners with UAE healthcare network SEHA to bring innovations such as robotic surgery to Shaikh Shakhbout Medical City





AD Ports Group and Hayat Biotech partner to boost global logistics through AD Ports Group's advanced pharmaceutical network, including KIZAD's cold storage hub.





Sheba Medical Center (Israel largest medical center, one of the world's top hospitals and medical research institutions) partners with PureHealth, largest UAE healthcare system



PURΣHΣALTH

Life Sciences in the UAE Focused Platforms



Diabetes in GCC Region Industry Platform

This platform discusses the diabetes situation in the Gulf Cooperation Council (GCC), including countries like the UAE, Saudi Arabia, Oman, Kuwait, Qatar, and Bahrain. Despite efforts to combat fast-food and sedentary lifestyles, the GCC has high rates of diabetes and obesity, largely due to poor dietary habits. In 2020, nearly 73% of GCC deaths were from noncommunicable diseases (NCDs). This report explores genetic factors in Arab diabetes, the healthcare market, and key players serving diabetes patients in the region.

Of the 149,600 deaths in the GCC during 2020, nearly 73% were due to noncommunicable diseases (NCDs). In this report, we reviewed genetic background of diabetes among Arab populations, analyzed healthcare market and key market players that offer services to diabetes patients. https://www.global-diabetes.health/gcc



FemTech Industry in the UAE Landscape Overview

The 'FemTech Industry in the UAE' report provides insights into the local FemTech market's recent developments, current status, and short-term projections. It covers data from 56 organizations, including 30 companies and 26 investors, in various sectors. The report highlights industry trends, innovations, technologies, market size, and top influencers contributing to the growth of FemTech in the UAE.

The report covers core and non-core UAE FemTech companies with a direct and indirect focus on advancing women's well-being. https://www.femtech.health/femtech-uae-2021

About Aging Analytics Agency

Aging Analytics Agency is the world's premier provider of industry analytics on Longevity, Precision Preventive Medicine, the economics of ageing, and the convergence of technologies such as AI, blockchain, and digital health and their impact on the health care industry.



About Deep Pharma Intelligence

<u>Deep Pharma Intelligence</u>, an analytical subsidiary of Deep Knowledge Group, specializes in biotech innovation profiling, market intelligence, and development advisory. They create advanced tools and reports for deep insights in high-growth areas.



About Deep Knowledge Group

<u>Deep Knowledge Group</u> is a data-driven consortium of commercial and non-profit organizations active on many fronts in the realm of DeepTech and Frontier Technologies (Al, Longevity, BioTech, Pharma, FinTech, GovTech, SpaceTech, FemTech, Data Science, InvestTech), ranging from scientific research to investment, entrepreneurship, analytics, consulting, media, philanthropy and more.



About FemTech Analytics

<u>FemTech Analytics (FTA)</u> is a specialized agency focusing on the emerging FemTech sector. They offer insights into various FemTech subsectors, such as Reproductive Health, Mental Health, Menstrual Health, and more. FTA provides research, company profiling, and consulting services to support and advance the FemTech industry.



About NeuroTech Analytics

<u>NeuroTech Analytics</u> is the leading provider of analytics, forecasting, and benchmarking for the NeuroTech industry, founded by Alon Braun of Riverbanks Solutions and Dmitry Kaminskiy from Deep Knowledge Group.



About Longevity International

<u>Longevity.International</u> is a pioneering non-profit platform that promotes collaboration and knowledge-sharing in the Longevity Industry among various stakeholders, including companies, investors, academic labs, and government bodies.







Deep Knowledge Group Website: www.dkv.global

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