

Beyond Potential

The Realities and Future of Iran's Medical Devices Industry



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Beyond Potential: The Realities and Future of Iran's Medical Devices Industry

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- **Executive Summary:** Unveiling the exciting potential of Iran's burgeoning Medical devices industry, this report delves into the key strengths driving its growth. These strengths include robust research capabilities, advanced infrastructure, and a relentless focus on innovation. The report identifies specific areas with high growth potential. We provide an overview, examining Iran's strong foundation within the global health industry.

Additionally, we highlight some prominent Iranian Medical devices companies, empowering potential partners seeking collaboration to capitalize on the remarkable opportunities within Iran's medical landscape.



Trade Promotion Organization of Iran

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Introduction

Iran, a nation steeped in history and cultural richness, boasts a burgeoning health industry poised for significant growth. This dynamic sector, embedded within a rapidly evolving economy, presents a compelling picture of potential and capability.

Standing at the crossroads of East and West, Iran leverages its unique position to combine a rich heritage of medical knowledge with cutting-edge advancements. This strategic location fosters a diverse talent pool and facilitates collaboration with both Eastern and Western partners. Furthermore, Iran's vast reserves of natural resources provide the foundation for a robust pharmaceutical industry, while its well-established scientific community fuels research and development efforts.

This report delves into the heart of Iran's healthcare potential, exploring the strengths and resources that position the country as a major player in the global market. We will meticulously analyze the factors that contribute to Iran's competitive edge, including its highly skilled medical professionals, advanced medical infrastructure, and commitment to innovation.

Specific areas within the healthcare sector with high growth potential will be identified, highlighting opportunities for domestic and international collaboration.

This in-depth analysis will serve as a valuable resource for businesses, policymakers, and investors seeking to explore the untapped potential of the Iranian healthcare market.

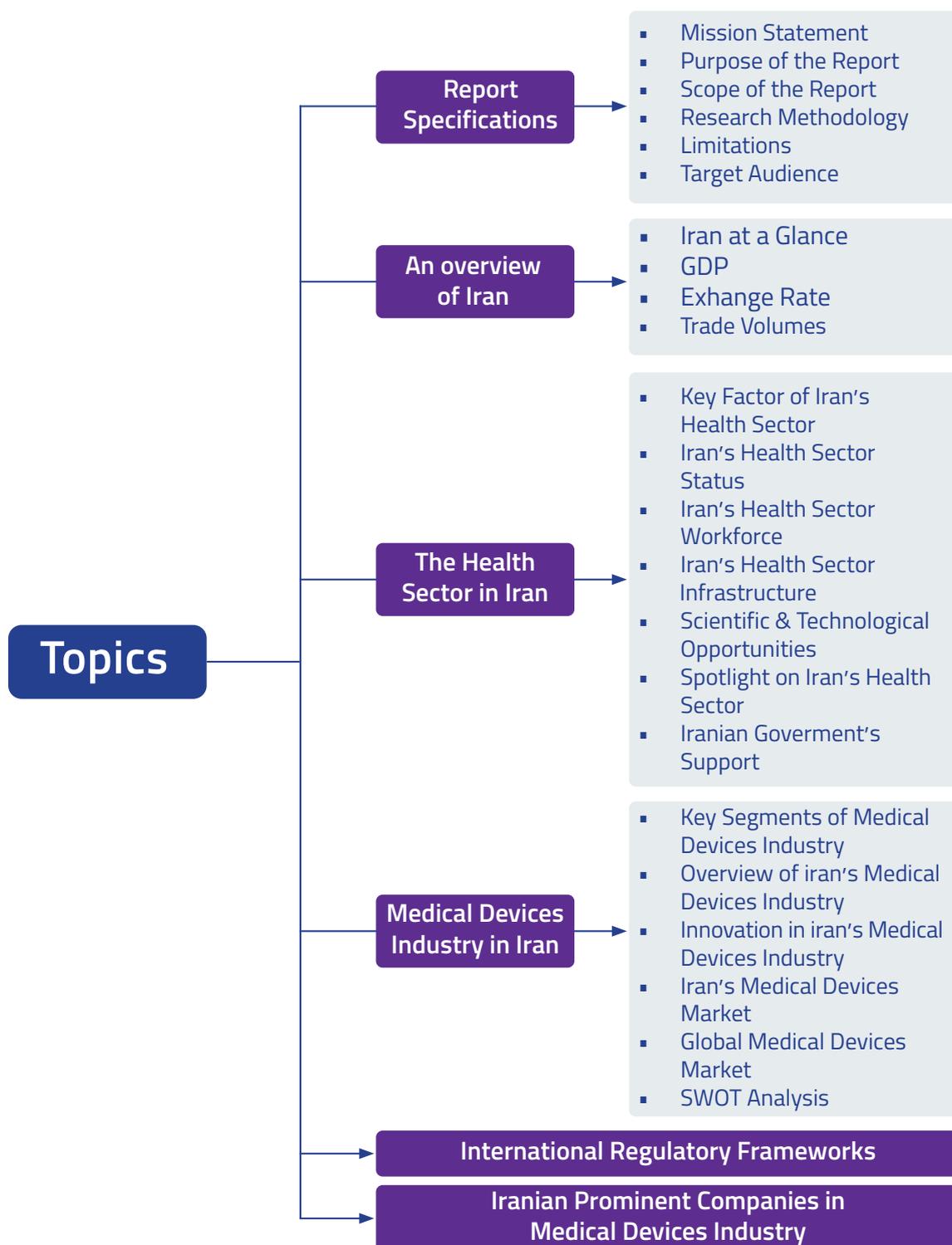
As we delve deeper, you will gain a comprehensive understanding of the factors shaping the future of healthcare trade and collaboration within this dynamic nation.

This report was prepared with the support of the promotion organization of Iran (TPO). The TPO stands as a pivotal force in fostering trade between Iran and other nations. Established in 1966, it carries the crucial mission of promoting and developing Iran's non-oil trade through a comprehensive set of initiatives. The TPO role extends far beyond simply being a mediator. It actively engages in various endeavors to cultivate a thriving trade environment.

Iran Expo Exhibition is one of the TPO plan to facilitate trading with Iran. Iran Expo is a global platform dedicated to showcasing the achievements and exceptional products of Iran, held in Tehran, serves as a bridge, connecting the world with the rich heritage and dynamic industries of this captivating nation.



Structure of the Report



Report Specifications

Mission of the Report

Empowering Iran's Medicine and Healthcare industry for Global Excellence is the main mission of this report. This mission is driven by a commitment to:

- Access to critical market insights
- Direct Access to Potential Partners
- Establish Valuable and Strategic Connections
- Minimize trade Risks

Purpose of the Report

The primary purpose of this report is to serve as a comprehensive resource for foreign businesses and investors interested in exploring export opportunities in Iran's Medicine and Healthcare industry. It aims to provide a holistic understanding of the sector current status, strengths, opportunities, challenges, and future prospects.

Scope of the Report

The report encompasses a broad scope, covering various aspects of the Iranian Medicine and Healthcare industry export potential. It delves into the following key areas:

- Key Export Products
- The most Attractive Target Markets
- Trade Promotion and Investment Opportunities
- Industry Challenges

Research Methodology

This report analyzes the export potential of Iran's Medicine and Healthcare industry for international traders. It employs a three-step approach:

- **Macroeconomic Analysis:** Data on Iran's GDP, trade volume, and major trading partners was gathered from reputable sources such as the World Bank, International Monetary Fund, and International Trade Center (ITC). This data was analyzed to draw a big picture of the overall economic landscape, highlighting market size, growth potential, and relevant consumer trends.

- **Industry-Specific Research:** Information on Iran's Medicine and Healthcare industry exports, key product categories, and major competitors was collected from specialized databases like Trade Map, FAOSTAT, and COMTRADE. Based on this data, specific Medicine and Healthcare industry segments with high export potential were identified for further study.
- **Primary Data Collection & Company Profiling:** Semi-structured interviews were conducted with representatives of prominent Iranian Medicine and Healthcare industry export companies within the chosen segments. Company Profiles were created for key players, highlighting their strengths, target markets, and export capabilities.

Limitations

It is important to acknowledge that this study has limitations. Access to certain primary data, particularly within specific industry segments, might be restricted due to market competitiveness or data availability. Additionally, the dynamic nature of the global economy and trade regulations necessitates continuous updates to maintain the report accuracy.

Target Audience

The report is primarily tailored to foreign businessmen and investors seeking opportunities to collaborate or invest in Iran's Medicine and Healthcare industry. It aims to cater to a diverse range of stakeholders, including:

- Medicine and Healthcare industry producers and processors
- Medicine and Healthcare industry technology companies
- Investment firms and financial institutions
- Consulting firms and advisors



An Overview of Iran

Iran at a Glance

- Area: 1,648,195 square kilometers
- Population: 88,860,005 people
- Capital: Tehran
- Official religion: Islam
- Official language: Farsi (Persian)
- Currency: Rial
- Number of provinces: 31
- Number of industrial parks: 824
- Number of science & technology parks: 54
- Number of technology incubators: 264
- Number of high-tech companies: 9620
- Number of industrial companies: 30400
- Number of universities: 2183
- Number of ports: 12
- 2023 GDP: 368 billion USD
- The export volume in 2023: 81 billion USD
- The import volume in 2023: 59 billion USD

Iran boasts a rich history and a strategic location, fostering a dynamic and diverse economy. This report delves into the nation's flourishing industries, showcasing its vast potential for international collaboration and growth. With a skilled workforce and a strong entrepreneurial spirit, Iran is poised to play a significant role in the global marketplace. Iran's economy is underpinned by a robust mix of industries. This report explores the strengths of each sector. Iran possesses a strategic location and well-developed infrastructure, making it a key player in international trade. This report examines the country's trade landscape, showcasing the opportunities for foreign businesses to partner with Iranian companies and reach new markets.

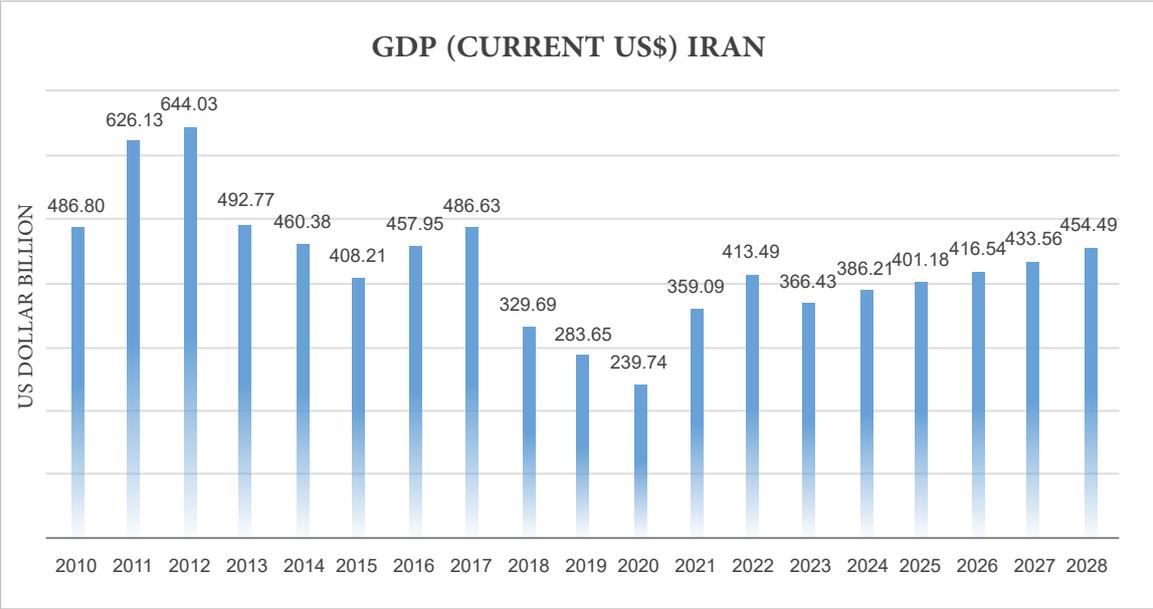
GDP

Exhibit 1 shows the GDP (current USD) of Iran from 2010 to 2028, with projections for 2023 to 2028. The GDP is a measure of the total value of goods and services produced within a country in a given period. The graph shows that the GDP of Iran has been growing steadily in recent years, with an average annual growth rate of around 2%.

In 2022, the GDP of Iran was estimated to be around 414 billion USD. Exhibit 1 shows the forecast for Iran's GDP growth between 2023 and 2028 is for modest growth, in the range of 2% to 3% per year. This means that the Iranian economy is expected to grow slowly but steadily over the next few years.

Exhibit 1: GDP (USD) of Iran from 2010 to 2028

(Source: World Bank)



Exchange Rate

The Iranian Rial has weakened against the US dollar in recent years. This weaker exchange rate, meaning more rials are needed per dollar, can make Iranian exports cheaper on the global market.

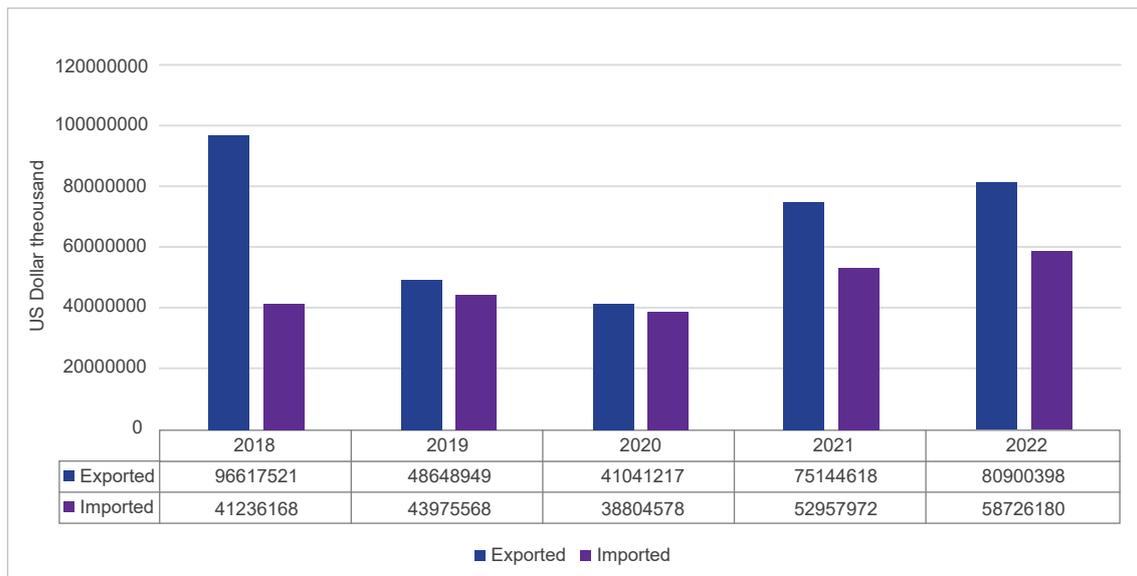
This could potentially lead to increased demand and production due to lower labor costs (in dollar terms) and a decrease in the unit cost of goods.

Trade Statistics

Iran's overall import statistics have experienced an approximate growth of 40% during the last four years.

Iran's largest imports in 2022 are from the United Arab Emirates (UAE) accounting for 30.7%, followed by China at 26.5%, Turkey at 10.4%, and India at 4.6%.

Exhibit 2: Value of Iran's Export and Import from 2018 to 2022 (Source: TRADE MAP)



Iran's overall export statistics are also going through an upward trend, especially in the last two years. Exports from 2020 to 2022 have grown by 100 percent. Iran's largest export in 2022 is to China with 27.7%.

The reason for the drop in exports in 2019 is the withdrawal of the United States from the JCPOA signed by Donald Trump, the former president of this country, and the return of sanctions in 2018, which resulted in a significant drop in Iran's oil exports.

This trend reached its lowest level in 2020 regarding the impact of the Corona pandemic. After that and under the same conditions, Iran was able to increase its exports.

Iran's Health Sector

The healthcare industry, as one of the important and vital areas in any society, plays a very important role in improving the quality of people's lives and economic development. Medical knowledge in Iran has a long history and has trained many skilled scientists and physicians throughout history who have had a profound impact on the advancement of human knowledge. In ancient times, great figures such as «Abu Ali Sina» and «Zakariya Razi» were born in this land.

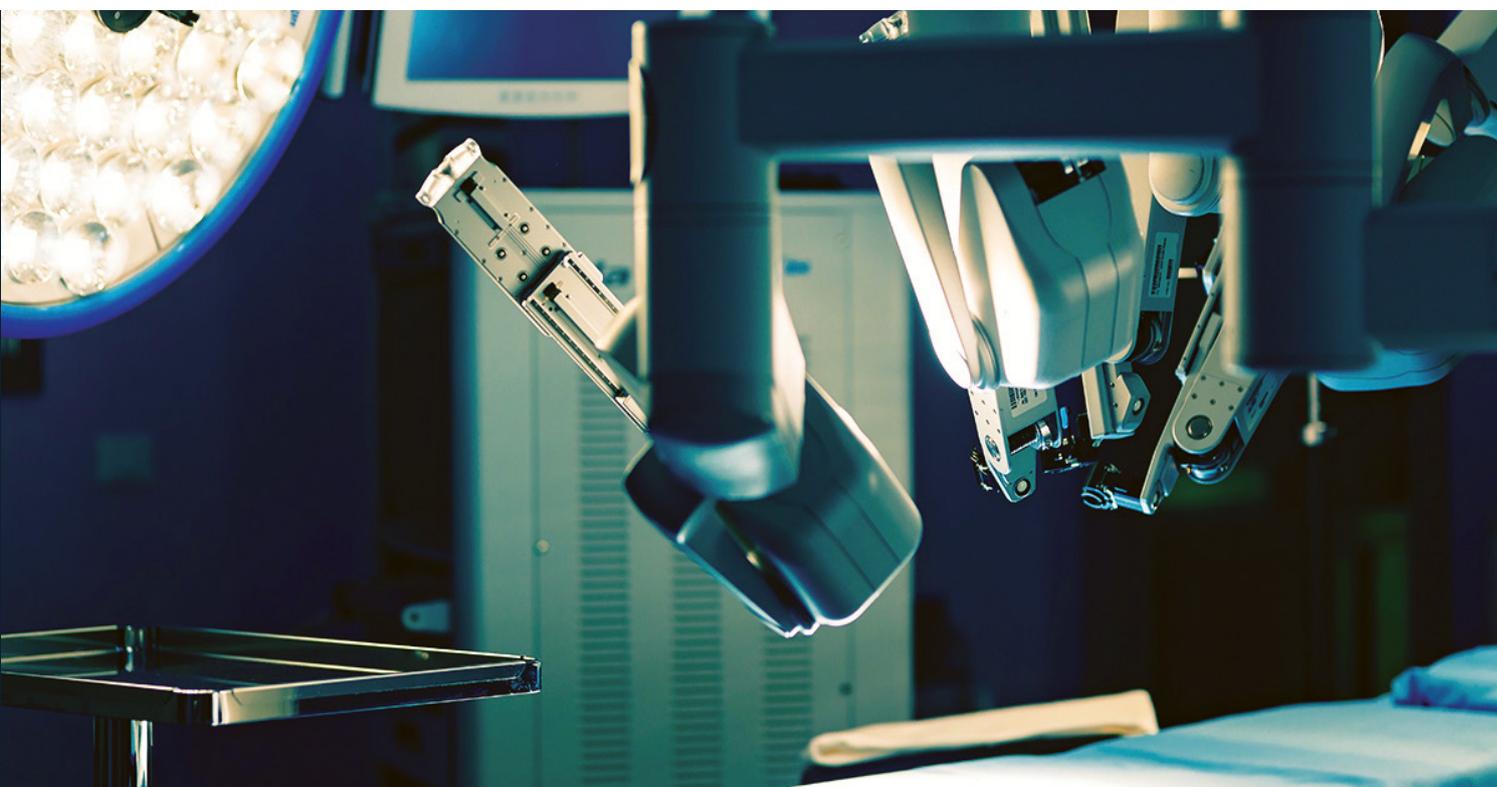
In modern times, prominent figures such as «Professor Samii» (the world's best brain surgeon) and Professor Mussivand (the Iranian Inventor of Artificial Cardiac Pump) have also been raised here.

Key Factors of Iran's Health Sector

Iran's health sector is positioned for growth and international collaboration, fueled by a robust foundation of strengths.

This report explores these key advantages, highlighting the skilled workforce, commitment to self-sufficiency, and strategic government support that drive innovation and position Iran as a competitive player in the global health market. Among the strengths of Iran, the following can be mentioned:

- **Human Capital:** Iran boasts a large pool of highly trained medical professionals, including doctors, pharmacists, researchers, and scientists. This strong human capital base fuels innovation and research and development (R&D) in the health sector.
- **Focus on Self-Sufficiency:** Iran has prioritized self-sufficiency in healthcare, leading to the development of a robust domestic pharmaceutical industry capable of producing a wide range of essential and generic medications.
- **Government Support:** The Iranian government recognizes the importance of the health sector and invests in R&D initiatives, infrastructure development, and promoting domestic production of medical products.
- **Competitive Advantage:** Iranian medical products are often competitively priced due to lower production costs compared to some international counterparts.
- **Growing Domestic Market:** Iran's large and growing population creates a strong domestic market for pharmaceuticals and medical devices, fostering continuous development within the industry.



- **Advancements in R&D:** Iranian researchers and companies are actively engaged in R&D, developing innovative medical technologies and generic drugs.
- **Focus on Specialties:** Iran has established expertise in specific areas like biopharmaceuticals, herbal medicines, and Nano medicine.
- **Patent Activity:** The increasing number of patents registered by Iranian entities in the medical field demonstrates the country's growing technological capabilities.

In the continuation of the report will examine specific examples within the health sector, providing concrete evidence to support the claims made about Iran's strengths and technological advancements. This will give a more comprehensive picture of what Iran has to offer in the global healthcare landscape.

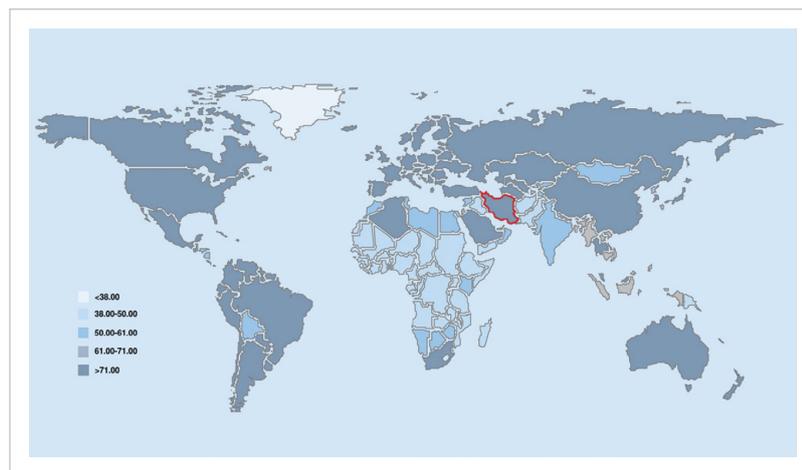
Iran's Health Status

Exhibit 3 displays the Universal Health Coverage (UHC) effective coverage index for various countries worldwide. Iran presently offers over 70% of the essential and impactful health and treatment services.

The concluding part of this text emphasizes the bright future of Iran's health sector due to the strong foundation it possesses. However, simply stating the potential isn't enough. To truly showcase Iran's capabilities, we need to delve deeper.

This index aims to represent how well health services cover a population's needs and the impact these services have on improving overall health. It considers factors like Accessibility, Quality, and Affordability.

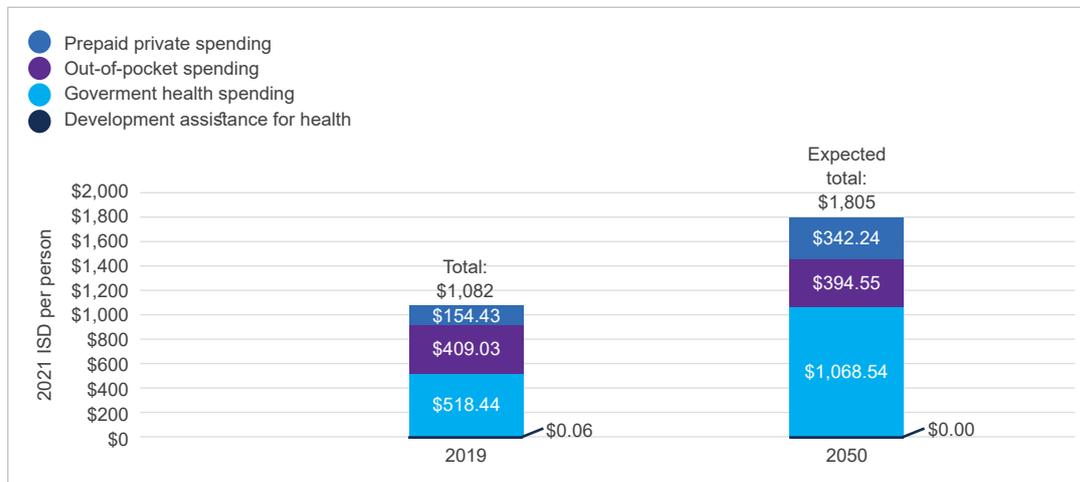
Exhibit 3: Universal Health Coverage Illustration in 2021 (Source: IHME)



A report by the Institute for Health Metrics and Evaluation (IHME) predicts a dramatic shift in Iran's healthcare landscape by 2050.

Government health coverage is expected to more than double, exceeding 100% growth compared to 2019. This translates to a significant decrease in out-of-pocket expenses for citizens, with a projected 4% reduction.

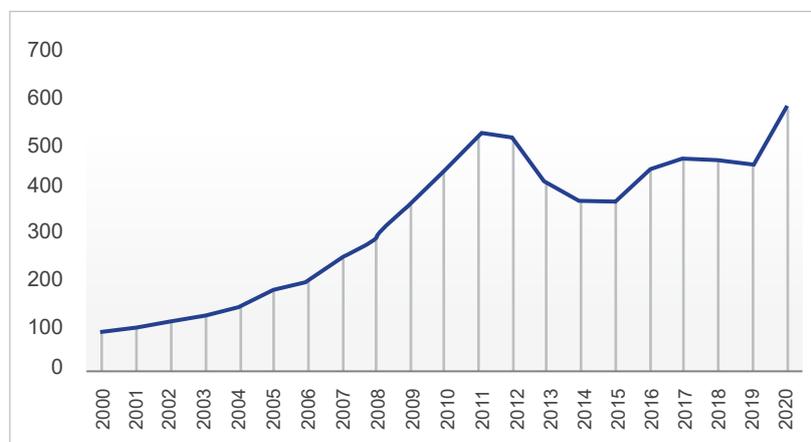
Exhibit 4: Health Coverage in Iran (Source: IHME)



In 2020, according to the World Bank report, Iran's health expenditure per capita reached 573 US dollars, reflecting a significant increase from 94 US dollars in 2001.

This translates to an average annual growth rate of 10.76%. This data highlights Iran's growing investment in healthcare, prioritizing the well-being of its citizens.

Exhibit 5: Health Expenditure per Capita (current USD) in Iran (Source: World Bank)



Iran's Health Sector Workforce

- **311,121 Paramedical personnel**
52,050 Physicians
 - 17,433 General practitioners
 - 4,683 Dentists
 - 304 PhDs in laboratory sciences
 - 2,623 Pharmacists
 - 17,967 Medical specialists
 - 2,553 Subspecialists
 - 6,497 PhDs in specialized fields

(Source: Statistical Center of Iran)

Iran's Health Sector Infrastructure

- Total number of hospitals: 1,020
 - Public hospitals: 705
 - Non-public hospitals: 315
- Number of active comprehensive health service centers: 5,881
- Number of active health bases: 5,535
- Number of active health houses: 17,821
- Number of medical diagnostic laboratories: 4,680
- Number of genetic diagnostic laboratories: 128
- Total number of active pharmacies: 13,052
- Number of veterinary pharmacies: 2,330
- Number of private veterinary clinics: 2,058

(Source: Statistical Center of Iran)

Due to Statista, in 2024:

- Estimated number of hospital beds per 1,000 inhabitants: 1.54
- Estimated number of beds per hospital: 131.10 (assuming even distribution across hospitals)
- Number of physicians: 52,050 (as per your previous translation)
- Number of nurses per 1,000 inhabitants: 2.03
- Number of dentists per 1,000 inhabitants: 0.54
- Number of physiotherapists per 100,000 inhabitants: 14.86

It's important to consider that these are estimates and may not reflect the exact situation in every region of Iran. The number of beds per hospital is an estimate based on the total number of beds and hospitals and may not be representative of every hospital.

Scientific and Technological Potential and Opportunities in Iran

Iran boasts a strong position in medical science according to reputable international organizations. The country ranks 17th globally and 1st in the Middle East and North Africa (MENA) region for its overall medical knowledge. This accomplishment is further supported by Iran's 16th place in the world for publishing medical research. However, Iran's performance is even more impressive in specific medical fields. For instance, Iran ranks a remarkable 4th globally in infertility treatment, solidifying its leading position within the MENA region.

Healthcare Research: Over the past three years, 12 Iranian researchers in the field of health have had an h-index of over 40. This indicates a high level of research productivity in the Iranian healthcare sector.

Scientific Publications: There are currently 53 scientific and research journals in the fields of health and hygiene, 180 journals in the fields of medical sciences, 20 journals in the fields of pharmacy, and 14 journals in the fields of paramedical sciences that are approved by the Ministry of Science and Health. This shows a strong commitment to scientific publishing in the Iranian healthcare sector.

Education and Training: In the field of health sciences, there are numerous universities in Iran that offer admission, education, and training for students in various fields, including medicine, dentistry, pharmacy, paramedical sciences, nursing and midwifery, veterinary medicine, biology, rehabilitation and social health, and health and safety. A total of 67 universities and medical schools are active in Iran. This indicates a well-developed healthcare education system in the country.

Knowledge-Based Companies: The number of knowledge-based companies in Iran has reached 9620 by 2023, showing a 17% growth compared to the previous year. Of these, more than 1600 companies operate in the healthcare sector. 30% of knowledge-based companies in the healthcare sector are active in the field of pharmaceutical raw materials, and 24% are involved in the production of medical equipment. This demonstrates the growing importance of the healthcare sector in Iran's knowledge-based economy.

Science and Technology Parks: There are 13 science and technology parks and 95 technology incubator centers in the field of health. This shows a strong infrastructure for innovation and technology transfer in the Iranian healthcare sector.

Licensed Products and Patented Inventions: Iranian scientists and companies are making significant strides in healthcare innovation, as evidenced by the impressive number of patents they've secured – nearly 180 – with the US Patent and Trademark Office (USPTO) and the European Patent Office (EPO).

This surge in intellectual property protection reflects a broad range of advancements across various healthcare fields including Pharmaceuticals (81 patents), Medical Equipment (162 Patents), Biotechnology (27 Patents), Herbal Plants and Medicine (9 patents).

This surge in innovation signifies several positive developments:

- **Scientific Prowess:** The high number of patents demonstrates the strength of Iranian scientific research and development in the healthcare sector.
- **Global Recognition:** Securing patents in prestigious international offices like USPTO and EPO highlights the global significance of Iranian healthcare advancements.
- **Economic Potential:** These patents have the potential to attract foreign investment, foster the growth of Iranian healthcare companies, and create new jobs within the sector.
- **Improved Healthcare:** Ultimately, these innovations offer the potential to improve the quality of healthcare available not only in Iran but potentially worldwide.

Spotlight on Iran's Health Sector

Cell Therapy: Iran has been utilizing cell therapy for nearly two decades, placing it among the top 10 countries to implement this technology. While many nations are still in the research phase, Iran has successfully applied stem cells in various transplants, including cornea, heart, and skin.

Infertility Treatment: Iran stands out as a leading and highly capable nation in assisted reproductive technologies. Royan Infertility Clinic holds the distinction of being Iran's most reputable and well-equipped center for infertility treatment.

Royan not only provides services through specialized centers for infertility, cell therapy, and diabetes, but also actively engages in research through dedicated institutes focused on reproductive sciences, cell and stem cell biology, and biotechnology.

Biotechnology: Iran is now one of the top three producers of biotechnological products in the world. The country produces vaccines for hepatitis B, erythropoietin, interferon, streptokinase, GCSF, and interferon beta.

Largest Anti-Cancer Drug Production Plant in the Middle East: The Actoverco pharmaceutical group has launched nine production lines for anti-cancer drugs with an investment of over 100 million euros. This is the first German-American bioreactor in the Middle East with OFAC and BAFA licenses.

All products from these production lines are evaluated and controlled Actoverco's advanced quality control laboratories. These laboratories are equipped with the latest and most accurate analytical equipment, including 16 HPLC devices, seven UV and IR spectrophotometers, four TOC devices, and three GC devices.

Iran's Pharmaceutical Production: Iran ranks first in pharmaceutical production in the region. 97% of the country's needed medicines are produced domestically. Iran is now the fourth producer of recombinant drugs in Asia. So far, 14 such drugs have been produced in the country. Recombinant drugs are mainly used in the treatment of incurable diseases such as cancers, some viral diseases, multiple sclerosis, and hemophilia.

Medical Equipment: Iran has made significant strides in the development and production of medical equipment in recent years. This progress is driven by a combination of factors, including government investment, a growing knowledge-based economy, and the dedication of researchers and entrepreneurs. Iran has successfully produced image processing equipment for CT scan devices, a vital component for accurate medical imaging.

Medical Plants: Leaning on its rich history of herbal medicine, Iran is experiencing a resurgence in this field. The establishment of refineries for processing medicinal plants alongside the development of innovative extraction methods, like the tripling of rose essence yield, showcases this commitment. Furthermore, AI-powered machines are being built to improve the efficiency and quality of harvesting valuable saffron. This surge in research and development, coupled with the vast array of native medicinal plants in Iran, positions the country as a potential leader in the revitalization of traditional medicine.

Health Tourism: Leveraging its long history of medical excellence and world-class facilities, Iran's health tourism sector is booming. With 247 licensed medical centers catering to over 1.2 million medical tourists from 164 countries in 2023 alone, Iran has secured its place as a leading destination (ranking 46th globally). The recent establishment of two herbal refineries in Razavi Khorasan Province further strengthens this position by providing innovative treatment options, attracting even more international patients seeking high-quality healthcare.

Additional Areas of Focus: Iran is actively researching and developing cutting-edge solutions in areas like nanomedicine, advanced medical imaging, telemedicine, gene therapy, and tissue engineering. These advancements have the potential to revolutionize healthcare delivery, disease detection, and treatment options in Iran and beyond.

Iranian Government's Support for the Health Sector

The Iranian government has implemented a multi-faceted approach to support the growth and innovation of the domestic health industry.

A significant 52% increase in healthcare funding for the Ministry of Health and affiliated organizations was allocated in the 2023 budget. The government prioritizes strengthening infrastructure for the production of high-quality pharmaceuticals, vaccines, medical supplies, and equipment that meet international standards.

This focus aims to reduce reliance on imported medical products and potentially make healthcare more affordable. A specific support package has been developed to incentivize domestic production of medicines and health products. This initiative aims to reduce dependence on foreign imports and potentially lower healthcare costs for the population.

Recognizing the potential of the Iranian health industry, the government provides direct financial support to manufacturing companies to participate in and visit international health exhibitions. This initiative enhances visibility for Iranian healthcare products in the global market and potentially opens doors for export opportunities.

Medical Devices Industry in Iran

Medical devices and equipment have become an indispensable element of modern healthcare. They play a crucial role in every stage of patient care, from preventive measures and diagnosis to treatment, rehabilitation, and monitoring. The importance of medical devices cannot be overstated. They empower healthcare professionals to:

- **Improve diagnostic accuracy:** Advanced imaging technologies like X-rays, MRIs, and CT scans provide detailed insights into the human body, enabling earlier and more precise diagnoses.
- **Enhance treatment efficacy:** From minimally invasive surgical tools to life-saving pacemakers, medical devices offer a wide range of options for treating a multitude of conditions, often with less risk and faster recovery times.
- **Optimize patient monitoring:** Continuous glucose monitors, blood pressure cuffs, and other monitoring devices allow for real-time tracking of vital signs and health parameters, leading to better management of chronic diseases.
- **Facilitate rehabilitation and recovery:** Prosthetic limbs, wheelchairs, and assistive devices empower individuals with disabilities to regain independence and improve their quality of life.

Key Segments in Medical Devices Industry

The medical device industry encompasses various segments that cater to different healthcare needs and specialties. Here are some key segments within the medical device industry:

- **Diagnostic Devices:** Diagnostic devices are used to detect and diagnose medical conditions. This segment includes devices such as imaging systems (X-ray, MRI, CT scanners), ultrasound machines, blood analyzers, molecular diagnostic instruments, and point-of-care testing devices. These devices provide healthcare professionals with critical information for accurate diagnosis and treatment planning.
- **Therapeutic Devices:** Therapeutic devices are designed to deliver treatments or therapies to patients. This segment includes devices such as implantable cardioverter-defibrillators (ICDs), pacemakers, insulin pumps, infusion pumps, nebulizers, ventilators, and dialysis machines. These devices aid in managing chronic conditions, delivering medications, providing respiratory support, and performing life-sustaining functions.
- **Monitoring Devices:** Monitoring devices are used to track and measure physiological parameters of patients.



This segment includes devices such as vital signs monitors, electrocardiographs (ECG/EKG), blood pressure monitors, glucose meters, pulse oximeters, sleep apnea monitors, and continuous glucose monitoring systems. These devices provide real-time data on a patient's vital signs, enabling healthcare professionals to monitor their condition and make informed decisions.

- **Rehabilitation and Assistive Devices:** Rehabilitation and assistive devices are designed to aid individuals with disabilities or impairments in their daily activities. This segment includes devices such as prosthetics, orthotics, mobility aids (wheelchairs, walkers), hearing aids, visual aids, and assistive technology for communication and mobility. These devices enhance mobility, sensory functions, and overall quality of life for individuals with disabilities.
- **Implantable Devices:** Implantable devices are surgically placed inside the body to restore or enhance specific bodily functions. This segment includes devices such as cardiac implants (pacemakers, defibrillators), neurostimulators, cochlear implants, artificial joints (hips, knees), and intraocular lenses. Implantable devices aim to improve patient health and function by replacing or augmenting damaged or impaired body parts.
- **Home Healthcare Devices:** Home healthcare devices are designed for use in non-hospital settings, allowing patients to receive care and monitoring in the comfort of their homes. This segment includes devices such as home infusion pumps, home dialysis machines, portable oxygen concentrators, sleep apnea machines, and remote monitoring devices. Home healthcare devices promote patient independence, reduce hospital stays, and enable personalized care.

These segments represent a broad overview of the medical device industry, and there are numerous subcategories and specialized devices within each segment.

An Overview of Iran's Medical Devices Industry

Iran's medical field has relied on imported equipment for decades. However, recognizing the need for domestic expertise, universities established medical engineering programs three decades ago.

These programs, offered by both public and private institutions, focus on three key areas: ioelectronics, biomechanics, and biomaterials. Since then, Iran's medical device sector has witnessed a remarkable surge in recent decades. The market has grown significantly, with broader availability of equipment. This advancement is driven by a robust innovation ecosystem. Policymakers are actively developing frameworks and offering incentives to support research and development.

Additionally, regulatory bodies ensure quality and safety standards. Iran's medical equipment industry boasts a substantial domestic production base with around 2,200 active manufacturing companies. This signifies a remarkable growth within the sector in recent years. Furthermore, a burgeoning high-tech sector is propelling innovation, with about 340 companies focusing on cutting-edge medical equipment solutions. This indicates a strong commitment to developing advanced technologies that can address the evolving needs of the healthcare system.

In 2023, Iran's medical equipment market generated a revenue 5.7 billion USD. Notably, domestic production accounted for a significant portion, reaching around 35% of the total market value. This indicates a growing domestic medical equipment industry in Iran. The remaining 65%, stemmed from imported equipment.

This suggests Iran still relies on external suppliers for some advanced medical technology, but domestic production is on the rise. Iran's medical equipment landscape is vast, encompassing over 105,000 unique identification codes (IRC codes). This diversity reflects a comprehensive system for categorizing medical supplies and equipment. Among these codes, a significant portion, roughly 22,000, represents equipment manufactured entirely within Iran.

The remaining codes pertain to equipment imported from abroad or co-produced through international collaborations. Iran exports medical equipment to 63 countries around the world. Iran's medical equipment industry is concentrated in three key provinces: Tehran, Isfahan, and Alborz. These regions boast the highest number of companies in the sector, with Tehran leading the pack.

Innovation in Iran's Medical Device Industry

From a scientific, technological, and innovative (STI) standpoint, Iran has made impressive strides. They've significantly increased their scientific output in crucial fields like biotechnology, biomedical engineering, and biomaterials. This progress is evident in scientific rankings. For example, in the late 20th century, Iran had little to no presence in these areas (or ranked around 60th). However, according to the SJR scientific ranking in 2022, they've climbed to impressive positions – 12th in Biomedical Engineering, 13th in Biomaterials Science, and a remarkable 7th in Medical Laboratory Technology.

Iranian scientists and companies have registered more than 160 patents in the field of medical devices and equipment in the European and US patent offices. This is a significant achievement for the Iranian medical device industry, as it demonstrates the country's growing capabilities in this field.

The registration of these patents in Europe and the United States is a testament to the quality of Iranian research and development in the medical device and equipment field. It also shows that Iranian companies are increasingly able to compete in the global market. The registration of these patents is also likely to have a positive impact on the Iranian economy. It could lead to increased investment in the medical device sector, as well as the creation of new jobs.

Cases of Medical Devices Innovation and Promotion Centers in Iran

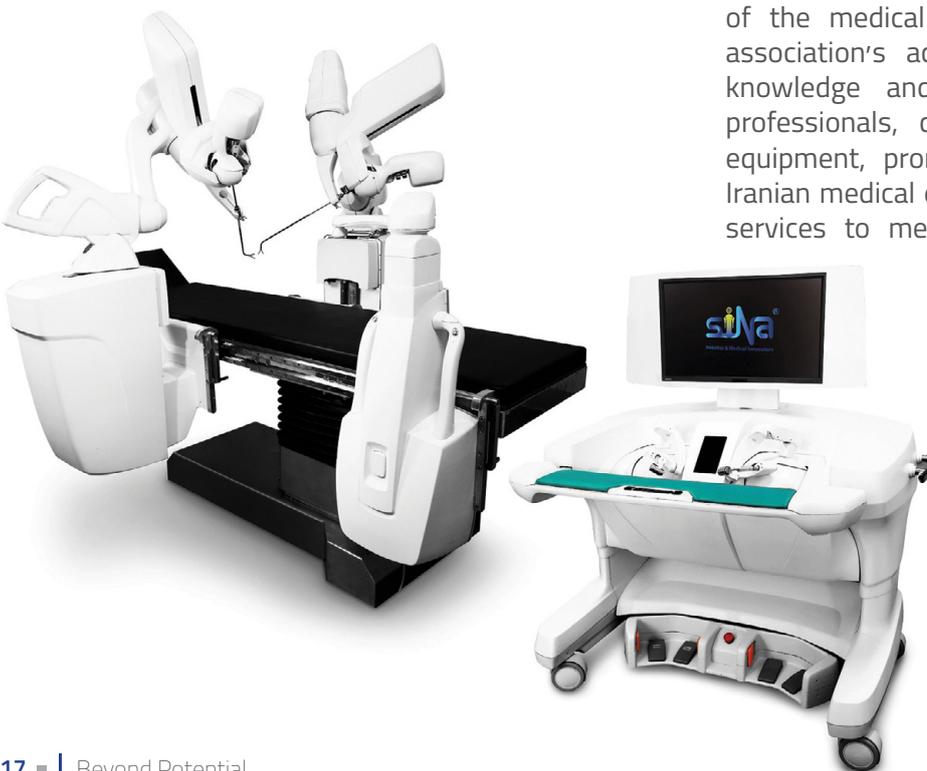
The increasing and developing market for pharmaceuticals and medical equipment—fueled by local technological and innovative efforts, continued public support, and an influx of interested young medical entrepreneurs—reflects the dynamics of medical innovation in Iran. Some noteworthy cases of advanced medical innovation centers are explored below, whilst looking at the main drivers of success and challenges as well as the barriers to further innovation.

Medical Devices and Equipment Incubator:

This center, based at the Imam Khomeini hospital in Iran, hosts several promising firms that are equipped to design and manufacture advanced medical equipment and develop cutting-edge technologies. One of these firms, Sina Robotics and Medical Innovators Co, a KBF, develops Sina, a robotic telesurgery system which assists surgeons in sophisticated surgeries. A guaranteed purchase order by the government in 2009 drove Sina's development, which had commenced in the early 2000s, and by 2013, the first generation of Sina became available. The improved Sina, equipped with added force feedback capability and more, has advantages over similar products on the market and has gained significant international interest.

Iranian Association of Medical Equipment Specialists

The Iranian Association of Medical Equipment Specialists is a professional association that was founded in 2012 to promote the development of the medical equipment sector in Iran. The association's activities include improving the knowledge and skills of medical equipment professionals, conducting research on medical equipment, promoting the development of the Iranian medical equipment industry, and providing services to medical equipment users.



Iran's Medical Devices Market

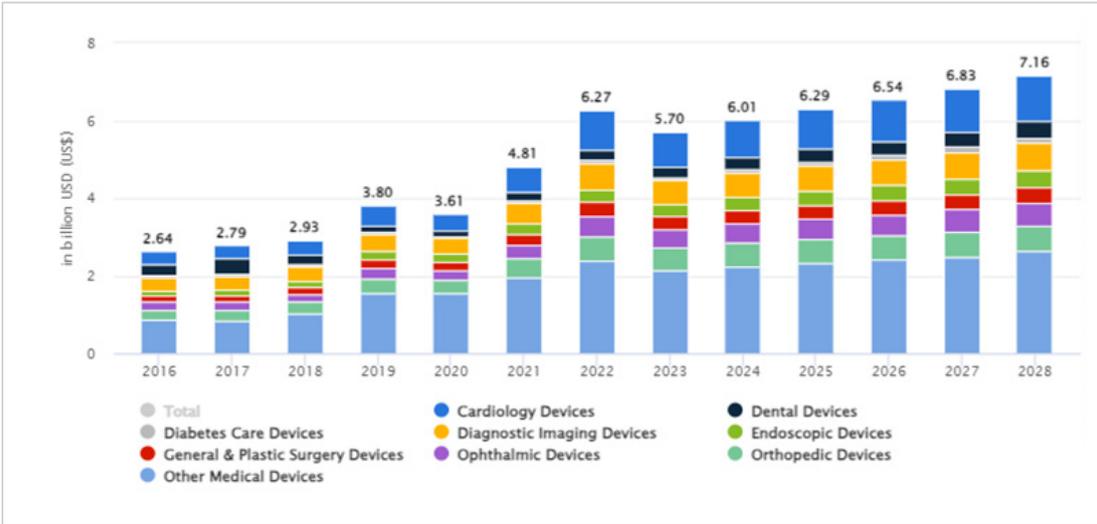
According to the commentary published in 2023 by BMI, a Fitch Solutions company, Iran's medical device market will record double-digit growth in local currency terms. They expect Iran's medical device market to register a 2022-2027 CAGR of 11.3% in local currency terms and 3.9% in US dollar terms. Several factors are fueling this anticipated surge:

- **High Healthcare Expenditure:** Iranians are spending more on healthcare, creating a stronger demand for advanced medical devices.
- **Second Largest MENA Market:** Iran boasts the second-largest healthcare market in the Middle East and North Africa (MENA) region, signifying a substantial patient base and a robust healthcare infrastructure.
- **Large and Growing Population:** With a population of 88 million and projected growth, Iran presents a continuous need for innovative medical equipment.
- **Medical Tourism Boom:** Rising private sector investments in medical tourism are attracting patients seeking affordable and high-quality healthcare, further stimulating the demand for advanced medical devices.

The report identifies specific product categories poised for the fastest growth:

- **Orthopaedics & Prosthetics:** This segment is expected to register the highest CAGR of 15.0%, driven by an aging population and increasing demand for joint replacements and other orthopedic procedures.
- **Patient Aids:** This category, encompassing wheelchairs, walkers, and other assistive devices, is projected to grow at a CAGR of 13.5%, reflecting the focus on improving accessibility and patient care. Although all product areas are expected to experience double-digit growth, orthopaedics and patient aids stand out due to the aforementioned factors.

Exhibit 6: Revenue in the Medical Devices market in Iran (Source: Statista)



Statista's 2024 data paints a promising picture of Iran's medical device market. The market is forecast to reach a value of 6.02 billion USD in 2024, with cardiology devices leading the way at an estimated 0.96 billion USD.

Furthermore, the market is expected to experience steady growth at a Compound Annual Growth Rate (CAGR) of 4.50% between 2024 and 2028, reaching a projected volume of 7.18 billion USD by 2028. This indicates a growing demand for advanced medical equipment in Iran.

Exhibit 7: Estimation of the Global Medical Devices Market (Source: Mordor Intelligence)



Global Medical Devices Market

A recent report by Mordor Intelligence projects the global medical device market to reach 893.07 billion USD by 2029, reflecting a healthy growth rate (CAGR) of 6.99% from its estimated value of 637.04 billion USD in 2024.

While established markets in Europe and North America show steady growth, regions like South Asia and Australia are experiencing a surge in demand. Notably, Iran boasts the highest growth rate within the Middle East and positions itself among the global leaders in this market expansion.

High- Growth Opportunities:

The medical device industry offers numerous high-growth opportunities driven by various factors such as technological advancements, increasing healthcare needs, and evolving market dynamics. Here are some key areas that present significant growth opportunities in the medical device sector:

- **Digital Health and Connected Devices:** The integration of digital technologies and connectivity in medical devices is transforming healthcare delivery. Opportunities exist in the development of wearable devices, remote patient monitoring systems, mobile health applications, telemedicine platforms, and digital therapeutics. These technologies enhance patient engagement, enable real-time monitoring, and facilitate personalized healthcare delivery.
- **Minimally Invasive and Robotic-Assisted Surgery:** Minimally invasive surgical techniques and robotic-assisted surgery have gained significant popularity due to their potential to reduce invasiveness, shorten recovery times, and improve surgical outcomes. The demand for advanced surgical instruments, robotic systems, and imaging technologies for minimally invasive procedures is expected to grow as more healthcare providers adopt these techniques.
- **Personalized Medicine and Point-of-Care Diagnostics:** Advances in genomics, molecular diagnostics, and personalized medicine have created opportunities for the development of innovative diagnostic devices. Point-of-care testing devices, genetic testing platforms, and companion diagnostics are witnessing growth as they enable targeted treatments, improve disease management, and enhance patient outcomes.





- **Artificial Intelligence and Machine Learning:** Artificial intelligence (AI) and machine learning (ML) technologies have the potential to revolutionize medical devices by improving diagnostic accuracy, predicting patient outcomes, and enabling real-time data analysis. AI-powered imaging systems, predictive analytics tools, and decision support systems are emerging as growth areas within the medical device industry.
- **Remote Monitoring and Home Healthcare:** The shift towards patient-centered care and the aging population have fueled the demand for remote monitoring devices and home healthcare solutions. Remote patient monitoring systems, wearable health trackers, and home-based medical devices are expected to experience significant growth as they enable continuous monitoring, early intervention, and personalized care outside traditional healthcare settings.
- **Advanced Implantable Devices:** The market for implantable medical devices, such as cardiac implants, neurostimulators, and orthopedic implants, continues to grow as the aging population increases and the demand for improved quality of life rises. Advancements in materials, biocompatibility, and design are driving the development of next-generation implantable devices with enhanced functionality and durability.
- **Emerging Markets:** Emerging markets, particularly in Asia, Latin America, and Africa, offer substantial growth opportunities for medical device companies. Rising healthcare expenditures, increasing access to healthcare services, and expanding middle-class populations are driving demand for medical devices in these regions. Companies that can effectively navigate regulatory landscapes, adapt to local needs, and provide affordable solutions have the potential for significant growth in emerging markets.

SWOT Analysis



Strengths

- **Growing Domestic Demand:** Iran's population is aging, and there's a rising demand for healthcare services, including medical devices and equipment.
- **Government Support:** The Iranian government has shown interest in developing the domestic medical device industry through financial incentives and research & development initiatives.
- **Skilled Workforce:** Universities in Iran offer programs in bioengineering, biomechanics, and biomaterials, creating a pool of skilled professionals for the industry.
- **High-Tech Companies:** A growing number of high-tech companies are focusing on medical devices, indicating a potential for innovation within the industry.
- **Competitive Production Costs:** Production costs in Iran can be lower compared to some developed countries, potentially making Iranian-made devices more affordable.
- **Established Manufacturing Base:** Iran has a well-established manufacturing sector, which can provide a foundation for medical device production.
- **Export Potential:** Iran has the potential to export medical devices to other countries, particularly those seeking cost-effective solutions.
- **Localization of Production:** The ability to domestically produce key components and materials for medical devices can reduce dependence on imports and improve cost efficiency.
- **Focus on Quality:** Adherence to international quality standards like ISO 13485 is crucial for gaining trust in Iranian-made medical devices.



Weaknesses

- **Limited Access to Technology and Resources:** Iran may rely heavily on international standards (ISO) but lack strong domestic efforts to develop specific standards for its own medical device industry. This could limit innovation and adaptation to local needs.
- **Reliance on imports:** A significant portion of medical devices in Iran may be imported, leading to dependence on foreign technology and potentially higher costs.
- **Limited access to capital:** Iranian companies may face challenges in obtaining funding for research, development, and production of new medical devices.
- **Restricted access to international markets:** Sanctions or other geopolitical factors could limit the ability of Iranian companies to export their products and access global markets.
- **Competition from established players:** The Iranian industry might face fierce competition from well-established international medical device manufacturers.
- **Inefficient infrastructure:** Logistics, transportation, and communication infrastructure challenges could hamper the smooth functioning of the industry.



Opportunities

- **Aging Population:** Iran's population is aging, leading to an increased demand for medical devices and equipment used in geriatric care.
- **Rising Disposable Income:** As the Iranian economy develops, people are likely to have more disposable income to spend on healthcare, including medical devices.
- **Increased Awareness:** Growing public awareness about health issues is expected to drive demand for preventative and diagnostic equipment.
- **Import Substitution:** Sanctions create a unique opportunity for domestic manufacturers to fill the void left by restricted imports by focusing on essential and in-demand devices.
- **Large Untapped Market:** Iran has a large domestic market with a significant unmet demand for medical devices.
- **Growing Regional Influence:** Iran can potentially become a regional hub for medical device manufacturing and distribution, serving neighboring countries.
- **3D Printing and Advanced Manufacturing:** Investment in new technologies like 3D printing can allow for innovative and customized medical devices.
- **Telemedicine and Remote Monitoring:** The development of telemedicine and remote monitoring can improve access to healthcare and create a demand for related equipment.
- **Focus on Cost-Effectiveness:** Developing cost-effective medical devices can make healthcare more accessible to a wider population.



Threats

- **High dependence on imports:** A large portion of medical devices in Iran are imported, making the industry vulnerable to fluctuations in foreign exchange rates and international sanctions.
- **Limited access to financing:** Obtaining financing for research, development, and production of domestic medical devices can be difficult.
- **Complex regulatory environment:** Navigating Iran's regulatory framework for medical devices can be challenging, hindering innovation and market entry for new technologies.
- **Rapid technological advancements:** Keeping pace with the rapid advancements in medical technology globally can be a threat for Iranian manufacturers.
- **Brain drain:** Skilled engineers and scientists may be drawn to work in other countries with more resources and opportunities, impacting the industry's talent pool.
- **Infrastructure limitations:** Inadequate infrastructure, such as logistics networks, could hamper the smooth operation of manufacturing facilities.
- **Global pandemics:** Events like the COVID-19 pandemic can disrupt supply chains and create unforeseen market demands, challenging the industry's adaptability.
- **Fluctuations in global oil prices:** Iran's oil revenue significantly impacts its overall economic health, and fluctuations can indirectly affect the medical device industry's resources.

International Regulatory Frameworks

The importance of medical device standards cannot be overstated. Medical devices are among the most sensitive tools that directly affect human life and health. Medical device standards can be divided into several categories, as follows:

ISO Standards

- **ISO 13485:** 2016 (Medical Devices) - Defines requirements for a quality management system for medical device manufacturers.
- **ISO 9001** (General) - International standard for quality management in all industries, including pharmaceuticals.
- **ISO 10002:** 2018 - Provides guidelines for handling customer complaints.
- **ISO 10004:** 2018 - Provides guidelines for monitoring and measuring customer satisfaction.
- **ISO 14971:** 2019 (Risk Management) - Defines a process for risk management throughout the lifecycle of a medical device.
- **ISO 15189:** 2022 (Medical Laboratories) - Applicable to medical laboratories for developing their management systems and assessing competence.
- **ISO/IEC 17025:** 2017 (Testing & Calibration Labs) - Sets the international benchmark for the competence and operation of testing and calibration labs.
- **ISO 14001** (Environmental Management) - International standard for reducing environmental impacts and improving environmental performance (applicable to medical and pharmaceutical industries).

Other Standards and Regulations:

- **OHSAS 18001 (Replaced):** Occupational Health and Safety Management System (replaced by ISO 45001:2018)
- **Current Good Manufacturing Practice (cGMP):** US FDA regulations for safe drug production.
- **IEC 60601 Series:** International Electrotechnical Commission standards for medical electrical equipment safety. (Examples: IEC 60601-1: General requirements, IEC 60601-2-2: High-frequency surgical equipment)
- **EU Medical Devices Legislation:** Regulations (EU) 2017/745 & 2017/746 establishing a legal framework for medical devices in the EU.
- **CE Marking:** Indicates a product meets EU safety, health, and environmental protection requirements.



Some Iranian Prominent Companies in Medical Devices Industry

Pooyandegan Rah Saadat Company

Brief Overview

The company was established in 1999 and operates in the field of designing and manufacturing of vital signs monitoring equipment used in emergency room, general operating room, open heart operating room, and recovery room, ICU in hospitals and medical clinics as well as home care. It is moving towards international success together with the world's top manufacturers in the area of vital signs monitoring equipment.

Products/Services

- Patient care monitor
- ICU ventilator
- Electrocardiograph
- Automated External Defibrillator
- Wearable monitor
- Medical Compressor
- Respiratory Humidifier
- Digital thermometer
- Brain function assessment
- Digital blood pressure Monitor
- Central monitoring system

Industrial achievements and awards and Export

- It has export to 54 countries all over the world including: Italy, Germany, Belarus, Malaysia, Pakistan, Turkey, Iraq, Azerbaijan, Peru, Bolivia, United Emirates: Arabic, Oman and...
- The company has a production line in Malaysia, Turkey, Sweden, Belarus and Iraq
- Cooperation agreement with SIARE Company of Italy and HEYER of Germany and INTEGRAL of Belarus and MESA of Turkey and exchange of products and transfer of technology between these countries.
- Top Exporter of Pardis Technology Park in 2023
- Saadat company was successful in obtaining the rank of exemplary and distinguished exporter of Iran in the years 1387 to 1394
- The high quality of products and services, innovation and diversity are the most important components for the sustainability of this company.
- This company produces equipment with high reliability and based on the national and international standards announced by the Ministry of Health and medical of the Islamic Republic of Iran and the European Union standard regulations, according to the requirements of the ISO 13485 standard and agreed needs with the customers, and we market them with the CE mark.

Certificates & Standards

- This company obtained the approval of the functional standard of its products from the General Directorate of Medical Equipment, and in 1999, it implemented a quality management system in accordance with the international standards ISO 9001 and EN 46001.
- It has ISO13485 and ISO 9001 from QS Institute in the field of designing and manufacturing vital signs monitoring equipment
- It also succeeded in obtaining the CE MARK class IIb European standard.



www.saadatco.com



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Parsis Company

Brief Overview

Founded in 2006, focusing on improving minimal invasive surgeries by designing and manufacturing innovative surgical navigation systems. Parsiss streamlined and user-friendly systems can be used in Neurosurgery, ENT, Spine, CMF, and Orthopedic surgeries. Parsiss conducts advanced research projects with clinical partners to utilize innovative technologies to improve patient treatment planning and surgical procedures more safely and efficiently.

Products/Services

- **IV2:** a high performance surgical navigation system for ENT surgeries
- **OV4:** a comprehensive and high performance surgical navigation system for Neurosurgery and ENT, Spine and Maxillofacial surgeries.
- **Compo™** is a comprehensive surgical navigation system for Neurosurgeries, ENT, and Spine and Maxillofacial surgeries.

Industrial achievements and awards and Export

- More than 10000 surgeries supported by their state-of-the-art Surgical navigation systems have been done at around 95 hospitals. More than 170 surgeons, in the fields of ENT surgery, Neurosurgery, Spinal Cord, CMF have drastically enhanced their operation's accuracy using Parsiss Surgical Navigation Systems.

Certificates & Standards

- CE certificate
- ISO 13485:2016 certification
- Export license



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Kavandish System Engineering Company

Brief Overview

Established in 1995. Today, Kavandish is a well-known science-based company in the field of electronics in general and medical devices in particular with a wide range of the most up-to-date HF Electrosurgical Units (ESU) to meet all requirements of modern surgery and owns close to 70% of national market and focusing on growth of 20% export revenue.

Products/Services

- ICONIC Image1
- ICONIC-IS410/IS410S
- ARGONPLASMASUPPLIER
- MEG2: an electrosurgical generator
- MEG1
- MEG1-R
- MEG1 E is the specialized electrosurgical unit for endoscopic procedures

Industrial achievements and awards and Export

- Kavandish System successfully designed and manufactured the first Iranian-made Electrosurgical Unit. This ESU met the rigorous requirements of international standards and has been approved by the most renowned Iranian surgeons and clinics.
- The company's customers are from Turkey, Syria, Oman, Lebanon, Iraq, Pakistan, India, Mexico, Sweden, Croatia, Chile, Peru, Indonesia, the Philippines, Tunisia, Yemen, Sudan, the Czech Republic, Ukraine, Azerbaijan, Sri Lanka, Malaysia, the Saudi Arabia, Thailand, Belarus, Romania and Sweden, some of which are representatives and loyal customers of the company. It should be also noted that some of their foreign customers do business with them on either OEM or CKD basis.

Certificates & Standards

- The international CE and ISO 13485 certifications,
- All products are designed and manufactured to meet the highest standards related to electrosurgical units: IEC60601-1
- IEC60601-1-2
- IEC60601-2-2



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PEC Company

Brief Overview

PEC was founded in 2001 to manufacture the full range of medical equipment, especially for operation rooms and other wards. We enjoy the facilities of attending Pardis Technology Park as the best R&D center of High Technology Park.

PEC manufactures and distributes products and systems for Anesthesia Machine, Ventilator, Syringe Pump, and Patient Care Monitoring Systems. Quality Systems and products are certified to CE and ISO standards. Supplying reliable products of the highest quality, PEC constantly reviews its product design, manufacturing processes and systems, and training procedures to ensure its customers deliver optimum patient care.

Products/Services

Anesthesia machine:

- VENTOXYN^{plus}
- Vira

Infusion systems:

- Syringe pump
- Infusion pump
- Central workstation

Flow analyzers and patient monitoring

Industrial achievements and awards and Export

Supplying reliable products of the highest quality, PEC constantly reviews its product design, manufacturing processes and systems, and training procedures to ensure its customers deliver optimum patient care.

Certificates & Standards

- Manufacturing systems at PEC are certified to ISO 13485:2016.



www.pechealthcare.com



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Tissue Regeneration Corporation

Brief Overview

TRC (Tissue Regeneration Corporation) is a leading global bio implant processing and producing company providing surgeons with safe biologic implants using its latest technology and advanced processing science.

Two decades' experience and commitment to delivering a higher standard, TRC bio implants are used in a wide variety of applications such as cardiovascular, sports medicine, general surgery, spine, orthopedics, maxillofacial, dental implant and trauma procedures.

Products/Services

- The company's products have been distributed in nearly 20 countries for more than 1 million patients.
- Its products are processed in Kish island; a 10,000 square meter plant with 1,800 square meter clean rooms which are class 10 to 10,000.
- The company has an official distributor in Turkey with trade name of BIOGENIX BONE

Industrial achievements and awards and Export

- ISO13485:2016 ISO1400:2015 OHSAS18001:2015.
- FDA QSR 21 CFR 820 (cGMP)
- and creating drugs with higher half-life with increased efficacy.



www.trcir.com



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Ehya Darman Pishrafteh Company

Brief Overview

Ehya Darman Pishrafteh Co is the first manufacturer of anaesthesia Machines and Ventilators in IRAN. In 2012, they started designing ventilators and Anesthesia Machines, and after that, they successfully manufactured their first Ventilator (EDP-TS) and Anesthesia Machine (EDP-Neptune).

These are not the only products of Ehya Darman Pishrafteh; in 2016, the company started transferring the production technology of medical imaging devices, such as CT Scans, from NEUSOFT and succeeded in obtaining the license to assemble this product in Iran.

Products/Services

- Anesthesia Machine
- ICU Ventilator
- Pulse Oximeter & Capnograph
- Portable Ventilator
- MRI Ventilator
- Video Laryngoscope
- Compressor & Compressed Air
- CPAP Devises
- BiPAP Devises
- CT Scan Systems
- MRI Systems

Industrial achievements and awards and Export

Ehya Darman Pishrafteh Co. designed and manufactured the first high-technology ventilator, Diomede, in Iran.

Certificates & Standards

- CE certificate

احیا درمان پیشرفته
Ehya Darman Pishrafteh



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Avecinna Company

Brief Overview

Avecinna Co. was established in 2005 with the aim of improving the provision of products and services to the medical community.

Products/Services

The company products include Cardiac Stress Test System, Cardiac Rehabilitation System, Medical treadmills, Defibrillator Machine, Automated External Defibrillator, Electrocardiograph Machine, Ambulatory Blood Pressure Machine, Patient Cable, Limb Clamp Electrodes and Suction Bulb Electrodes, and Disposable Chest Electrode.

Industrial achievements and awards and Export

- All products of this company have a license from the General Directorate of Medical Supplies of Iran. Currently, Avecinna products are installed and used in over 1500 Iranian medical centers.
- The company products exported due to their high quality and potential to compete with authentic European and American products. Persian Gulf, CIS, and a number of African and European countries like: Iraq, Azerbaijan, Syria, Netherlands, Turkey, and Oman are among the customers of this company.
- Avecinna Co. has actively attended healthcare fairs like the MEDICA trade fair in Germany, Russian Health Care Week 2022 trade fair.

Certificates & Standards

- ISO10004: 2018
- ISO 9001: 2015
- ISO13485: 2016
- ISO10002: 2018
- Obtaining
- CE



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Pishtaz Teb Zaman Diagnostics Company

Brief Overview

Pishtaz Teb Zaman Diagnostics, started its research, development, and marketing activities in 1998, and rapidly grew to be an international brand specialized in In-Vitro Diagnostics Medical Devices and Clinical research.

Committed to participate in the improvement of the wellbeing on the society and the world's healthcare, the company has built a strong relationship amongst research, technology, and market requirements by implementing constant market studies and continuous R&D. Pishtaz Teb is devoted to fulfil customer requirements in the area of Medical and Laboratory equipment along with its dedication to the IVD market.

Products/Services

- **Molecular Kits:** This kit is used for nucleic acid detection of novel coronavirus (SARS-CoV-2), the results can be used for auxiliary diagnosis of patients with new coronavirus infection or patients suspected of new coronavirus infection.
- **ELISA Kits:** ELISA kits are a quick, convenient, and accurate research tool for the detection and quantitation of targets of interest in cultures and samples.
- **Lateral Flow Tests:** Lateral flow tests, also known as lateral flow immunochromatographic assays or rapid tests, are simple devices intended to detect the presence of a target substance in a liquid sample without the need for specialized and costly equipment.
- **Biochemistry Kits:** Biochemistry Kits are the branch of diagnostics science that explores the chemical processes within and related to living organisms.

Industrial achievements and awards and Export

- distribution channel all over Iran and in more than 25 countries around the globe.
- The Exemplary Exporter for several times.

Certificates & Standards

- ISO 13485: 2016, ISO 10002: 2014, and CE mark accreditation for most of the products.
- FDA QRS 21 CFR 820 (cGMP)



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Nano Hesgar Sazan Sehat Arya Company

Brief Overview

Nano Hesgar Sazan Sehat Arya is an enterprise that has started working in the field of Designing and Manufacturing medical equipment and products with advanced technology in cancer diagnosis and treatment (including microfluidic chips, nano biosensors, graphene-based sensors, diagnostic probes, nanowires, and nanotubes).

The company's primary goal is to develop and commercialize innovative, science-based products in medical equipment.

Products/Services

- Cancer Diagnostic Probe (CDP)
- RDSS (ROS Detection in Sputum Sample)
- ITDP (Impedimetric Tumor Detection Probe)
- PECT (Positive Electrostatic Charge Therapy)
- BROSS (Blood ROS Sensor)
- ECHT (Electrochemical Therapy)

Industrial achievements and awards and Export

- The company's lead product, CDP (Cancer Diagnostic Probe), is an advanced technology developed for breast cancer surgery. It helps cancer surgeons to detect and remove cancer cells in the inner margins in a real-time manner during the surgery.
- The distinctive ability of CDP to detect cancer cells in the internal margins (after tumor dissection) during surgery has been obtained for more than 1000 clinical breast margin samples with sensitivity and selectivity of 97% and 94%, respectively. This achievement marks the beginning of the introduction of electrotechnical onco-surgery in the clinical field.

Certificates & Standards

- Publication of many US patents in different products



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Mersa Medical Devices Company

Brief Overview

As a pioneer in the medical devices industry, Mersa started its activity more than a decade ago by designing and producing professional aesthetic and treatment devices in the fields of dermatology and gynecology. Mersa's innovative and safe technologies have redefined medical treatment methods in the global markets by the acquisition of the highest levels of international technological and clinical standards.

Products/Services

- **Firebolt™ Plasma Device:** skin rejuvenation and removing skin lesions by plasma technology
- **Nettle™ Fractional & Multipolar RF Device:** skin rejuvenation by radiofrequency technology
- **Madame X™ Vaginal RF (Radio Frequency) Device:** vaginal rejuvenation and treatment of women's diseases by radiofrequency technology
- **Solatrix™ Thermal Fractional Device:** skin rejuvenation by direct heat transferring technology
- **Hurricane™ Carboxytherapy Device:** skin rejuvenation by injecting CO2 gas

Industrial achievements and awards and Export

- The high quality of products and services, innovation and diversity are the most important components for the sustainability of Mersa company.
- Mersa company produces equipment with high reliability and based on the national and international standards announced by the Ministry of Health of the Islamic Republic of Iran and the European Union standard regulations, according to the requirements of the ISO 13485 standard.
- Export to European Union countries including Italy and Spain and other countries including Australia, Türkiye, UAE, Oman and Iraq.

Certificates & Standards

- CE/EC MARK according to Annex II of Directive 93/42/EEC of European standard.
- ISO13485 from US Cert Institute in the field of designing and manufacturing Aesthetic Medicine devices.
- ISO 9001 for quality management system of organization
- ISO 9001:2008



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Parto Negar Persia (PNP) Company

Brief Overview

Parto Negar Persia (PNP) Company was established and registered in Tehran on 2010 which specializes in design, production, installation and maintenance of medical imaging equipment.

Products/Services

- Whole Body SPECT Imaging System (inSIGHT)
- Cardiac SPECT (ProSPECT II)
- Cardiac SPECT (ProSPECT)
- Animal PET Imaging System (Xtrim)
- Small Animal SPECT (HiReSPECT)
- Small Animal SPECT (HiReSPECT II)
- Gamma Probe (GammaPen)
- Hand Held Gamma Camera (SURGEOSIGHT)
- Gamma Probe (SURGEOGUIDE II)
- Urea Breath Test (HeliGuide)

Industrial achievements and awards and Export

- Publication of 8 US patents

Certificates & Standards

- CE
- ISO 13485:2016
- ISO 9001:2015



Parto Negar Persia Co. Ltd



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Dahian Pezeshki Pishro Company

Brief Overview

Dahian Pezeshki Pishro is a professional manufacturer of medical devices in the field of Electrocardiographs.

Dahian was founded in 2008 with the goal of offering high quality, economical and trustable products for patient care and continues improving. Years of expertise researching, developing and manufacturing electrocardiograph provides the ideal background for satisfying market needs. Dahian's dedication to technological leadership, precision manufacturing and uncompromised customer support ensures quality products and service our customers can expect.

Products/Services

- YASHAM 635 (6 channels electrocardiograph)
- YASHAM 310 (3 channels electrocardiograph)
- YASHAM 110 (single channel electrocardiograph)
- ECG VIEWER (software pc based ecg viewer)

Certificates & Standards

- The company products meet the requirements of MDD/93/42/EEC and CE
- EN ISO 13485 : 2012 Issued by QS, 2014 – 2017



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The Realities and Future of Iran's
Medical Devices Industry