WHY INVEST IN TURKISH MEDICAL TECHNOLOGIES INDUSTRY?
EXECUTIVE SUMMARY

TURKEY IS BECOMING A HUB FOR MEDICAL TECHNOLOGIES BY OFFERING OPPORTUNITIES IN MANY AREAS...

FAVORABLE INVESTMENT ENVIRONMENT

- Strong macroeconomic growth with increasing income per capita and a bourgeoning middle class
- Favorable demographics with a dynamic, young and skilled talent pool supporting the industry
- Increasing life expectancy and spending in healthcare
- Strong government support through manufacturing and R&D incentives

ROBUST GROWTH IN THE SECTOR

- With Healthcare Transformation Program and Universal Healthcare Insurance launched in 2003, Turkish government assures free healthcare coverage to 95% of the population
- Turkish medical devices market has seen a robust growth over the past decade – ranks 3rd in CEE with $2 Billion in value
- Export opportunities due to Turkey’s proximity to regional markets

LUCRATIVE OPPORTUNITIES IN SUB-SECTORS

- Turkey’s localization program in action to reduce import dependency and increase local production
- Heavy investments in healthcare infrastructure and services
- Strong government support for biotechnology
- Ideal location for medical tourism and a favorable regulatory environment aligned with international standards

STRONG INTERNATIONAL PRESENCE

- Global medical technology companies have been present in Turkey with significant manufacturing and management activities, using Turkey as a hub to access regional markets
- Successful partnerships with local companies to grow in the region, capitalizing on locals’ experience and networks
Executive Summary

Turkish MedTech Industry Outlook

Growth Drivers in Turkey

Opportunities in Turkish MedTech Industry

Site Assessment
Turkish medical devices market is worth ~USD 2 billion in 2019.

Turkey stands out as an attractive medical device market being the 2nd and 3rd largest in MENA and CEE respectively.

Turkey is an attractive destination for medical technology companies.

Source: TurkStat, ITC, Fitch Solutions
TURKISH MEDICAL DEVICES MARKET HAS GROWN 3.7 TIMES SINCE 2010 TO REACH 11.2 BILLION TRY

Medical Devices Sales in Turkey

- USD Billion
- TRY Billion

2010-2019

CAGR 14%

Source: TurkStat, ITC, Fitch Solutions

THE MARKET PROTECTED ITS LINE IN USD DESPITE THE DROP IN LCU IN THE LAST YEARS
CONSUMABLES & DENTAL PRODUCTS ARE HIGH-GROWTH PRODUCT AREAS IN THE LAST YEARS

Medical Devices Sales by Product Area
in TRY Billion

Source: TurkStat, ITC, Fitch Solutions
Source: UN Comtrade HS Code 30, Turkey has signed Free Trade Agreements (FTA) with Albania, Bosnia-Herzegovina, Chile, Egypt, Faroe Islands*, Georgia, Ghana*, Iceland, Israel, Jordan, Kosovo*, Lebanon*, Macedonia, Malaysia, Mauritius, Montenegro, Moldova*, Morocco, Norway, Palestine, Serbia, Singapore*, South Korea, Switzerland and Lichtenstein, Syria, Tunisia. (*to be ratified).

Turquoise has geographical proximity to some of the largest markets in medical technologies and is conveniently positioned as a managing and manufacturing hub.

$130bn market size
TURKEY’S MEDICAL DEVICES EXPORTS ALMOST TRIPLED IN USD TERMS SINCE 2009 – WITH 13% CAGR AFTER 2004

MAJOR EXPORT DESTINATIONS

- **China (1)**
  - $52.7 million
- **Germany (2)**
  - $42.8 million
- **Iraq (3)**
  - $24.3 million
- **Netherlands (4)**
  - $19.4 million
- **Azerbaijan (5)**
  - $18.3 million

Source: TurkStat, ITC
FOREIGN TRADE: IMPORTS

TURKEY IMPORTS USD 1.7 BILLION – 84% OF THE TOTAL MARKET – AND THE EU CONSTITUTES ~40 PERCENT OF TOTAL IMPORTS

MAJOR IMPORT PARTNERS

The USA (1) $284 million
Germany (2) $237 million
China (3) $221 million
Malaysia (4) $108 million
Ireland (5) $72 million

MORE THAN 80% OF THE MEDICAL PRODUCTS IN EVERY PRODUCT AREA ARE SOURCED THROUGH IMPORTS

IMPORTS

<table>
<thead>
<tr>
<th>Year</th>
<th>TRY Billion</th>
<th>USD Billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>0,9</td>
<td>1,3</td>
</tr>
<tr>
<td>2009</td>
<td>1,5</td>
<td>2,3</td>
</tr>
<tr>
<td>2014</td>
<td>2,2</td>
<td>4,9</td>
</tr>
<tr>
<td>2019</td>
<td>1,7</td>
<td>9,5</td>
</tr>
</tbody>
</table>

Source: TurkStat, ITC
Turkey is becoming a fundamental building block of global value chains in medical technologies.

Major MedTech players benefit Turkey’s strategic location to manufacture, export, innovate, and manage.

<table>
<thead>
<tr>
<th>FRESENIUS MEDICAL CARE</th>
<th>stryker</th>
<th>3M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alvimedica</td>
<td>HITACHI Healthcare</td>
<td>GE Healthcare</td>
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<tr>
<td>aselsan</td>
<td>Medtronic</td>
<td>SET MEDIKAL</td>
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<td>NOVAMED</td>
<td>TST</td>
<td>Corin</td>
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<tr>
<td>MAQUET GETINGE GROUP</td>
<td>BİÇAKCİLAR</td>
<td>CAGDAS MEDİKAL</td>
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</tbody>
</table>

Please note that this list is by no means exhaustive and is only intended to illustrate some of the major players in the ecosystem.
**ROBUST ECONOMY**

13TH LARGEST ECONOMY IN THE WORLD

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**RANKING OF ECONOMIES BY GDP AT PPP**

<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>GDP Rank</th>
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<tr>
<td>2003</td>
<td>1. USA</td>
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<tr>
<td></td>
<td>2. CHINA</td>
<td>2. China</td>
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<tr>
<td></td>
<td>3. JAPAN</td>
<td>3. Japan</td>
</tr>
<tr>
<td></td>
<td>4. GERMANY</td>
<td>4. Germany</td>
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<td>5. INDIA</td>
<td>5. India</td>
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<td></td>
<td>6. RUSSIA</td>
<td>6. Russia</td>
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<td></td>
<td>7. FRANCE</td>
<td>7. France</td>
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<td></td>
<td>8. UK</td>
<td>8. UK</td>
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<tr>
<td></td>
<td>9. BRAZIL</td>
<td>9. Brazil</td>
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<td>10. ITALY</td>
<td>10. Italy</td>
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<td>11. MEXICO</td>
<td>11. Mexico</td>
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<td>12. INDONESIA</td>
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<td></td>
<td>13. SPAIN</td>
<td>13. Spain</td>
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<td>14. CANADA</td>
<td>14. Canada</td>
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<td>15. S.KOREA</td>
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<td>17. IRAN</td>
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<td>18. TURKEY</td>
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<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>GDP Rank</th>
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<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
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<td>16. S.ARABIA</td>
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<td></td>
<td>17. CANADA</td>
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<td>18. IRAN</td>
</tr>
</tbody>
</table>

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**AVG AVERAGE ANNUAL GDP GROWTH (%) 2003-2019**

- TURKEY: 5.3%
- POLAND: 4.0%
- ROMANIA: 4.0%
- CZECHIA: 2.8%
- HUNGARY: 2.2%

**REAL GDP GROWTH (INDEX: 2002=100)**

FAVORABLE DEMOGRAPHICS

Life expectancy at 78 years

Total Dependency Ratio (%: Age 0-14 & 64)/Age 15-64)

Working Age Population (15-64) (Index: 2014=100)

Total Dependency Ratio (%: Age 0-14 & 64)/Age 15-64)

Source: Turkstat, Eurostat, UN

Population over 65 to reach 13% by 2030

...HALF OF POPULATION AT AGE 32

TURKEY

EUROPE

Europe

Turkey

Turkey

Europe

Population over 65 to reach 13% by 2030

Source: Turkstat, Eurostat, UN

Life expectancy at 78 years
SKILLED & COST-COMPETITIVE LABOR FORCE

UNDERGRADUATE & GRADUATE ENROLLMENT IN RELATED FIELDS (2019-2020)

NUMBER OF GRADS FROM VOCATIONAL & TECHNICAL HIGH SCHOOLS (in thousands)

LABOR FORCE BY EDUCATION LEVEL

TURKEY’S EDUCATION SYSTEM UPGRADED TO SUPPORT A SKILLED LABOR POOL..

Source: Ministry of National Education, Council of Higher Education, Turkstat
SKILLED & COST-COMPETITIVE LABOR FORCE

AVAILABILITY OF QUALIFIED ENGINEERS, 2020
(10=Available; 0=Unavailable)

LABOR COST PER HOUR IN MANUFACTURING
($), 2018

REMUNERATION OF MANAGEMENT/ENGINEER
Total base salary plus bonuses and long-term incentives
$K, 2018

Source: IMD World Competitiveness Yearbook Executive Opinion Survey based on an index from 0 to 10; Eurostat, OECD, BLS, Turkstat

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### Varous Lucrative Incentives Are Offered for Medical Technology Investments as The Industry Is Prioritized in Support Measures

**Main Incentive Tools**

<table>
<thead>
<tr>
<th>Main Incentive Tools</th>
<th>General Incentives</th>
<th>Regional Incentives</th>
<th>Incentives for Strategic Investments</th>
<th>Project Based Incentives</th>
<th>R&amp;D Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Tax Reduction</td>
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<tr>
<td>VAT/Custom Duty Exemption</td>
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<tr>
<td>Social Security Premium Support</td>
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<tr>
<td>Income Tax Withholding Support*</td>
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<tr>
<td>Interest Support**</td>
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<tr>
<td>Land Allocation</td>
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<tr>
<td>Qualified Personnel Support</td>
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<tr>
<td>Infrastructure Support</td>
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<tr>
<td>Energy Cost Support</td>
<td></td>
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<tr>
<td>Purchasing Guarantee</td>
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</tr>
</tbody>
</table>

*Provided that investments, except R&D, are made in Region 6. **Provided that investment, except R&D, are made in Regions 3, 4, 5 or 6 within the frame of the Regional Incentive Scheme.

Source: Ministry of Science and Technology

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**Tax Deduction:** Reduced tax rates for investor’s income (50-100 %) until the total deduction reaches a certain percentage of capex. (55-70% of capex, in the case of project based incentives up to 200% of capex). For R&D investments, all R&D expenditures are deducted from tax base.

**VAT Exemption:** Investment machinery and equipment imported and/or locally provided within the scope of the incentive certificate will be VAT exempt.

**Customs Duty Exemption:** Investment machinery and equipment imported within the scope of the incentive certificate will be customs duty exempt.

**Interest Rate Support:** For investment loans, a certain portion of the interest share will be covered by government. (5-7 % points for TRY-denominated, 2% points for forex-denominated loans) (1.6M-1.8M TRY).

**Land Allocation:** Government land will be allocated for the investments, if no land is available in OIZs.

Income Tax Withholding Exemption will provide exemption from income tax withholding (only for Region 6).
CRITICAL MEDICAL TECHNOLOGY INVESTMENT PROJECTS CAN BENEFIT FROM TAILOR-MADE PROJECT BASED INCENTIVES

- **Cash grant** up to 25% of machinery and equipment
- **Corporate tax exemption** up to 100 percent and investment support up to 200 percent; or a corporate tax exemption exclusively for the profits derived from the investment for the first 10 years following the commencement of operations.
- **Income tax withholding** support up to 10 years
- **VAT exemption** for imported or domestically purchased machinery and equipment for projects with an investment incentive certificate.
- **Customs tax exemption** for imported machinery and equipment for projects with an investment incentive certificate.
- If the investment is built upon a public immovable property, a right of easement or use on that immovable property can be granted in favor of the investor without consideration for 49 years. On condition that the investment is completed and the envisaged employment is provided for 5 years, ownership of the immovable property can be transferred to the investor without consideration upon request.
- **Social security premium support** for employer’s share for up to 10 years
- Compensation of up to 50 percent for **energy consumption expenses** related to the investment for up to 10 years
- **Interest or dividend support** for the loans extended in order to finance the fixed investment amount for up to 10 years.
- **Salary support for qualified employees** for up to five years; eligible support is capped at twenty times the gross monthly minimum wage. Qualified personnel is the key personnel with great knowledge and experience in the industry. These personnel would be critical in order for the investment to provide the promised outcome. We would expect 50 to 100 employees to be eligible for this support for a 1,600 employment, please note that this number can go up with negotiation.
- The Presidency may allow the **State to become a shareholder** owning up to 49% of the investment amount provided that the acquired shares will be sold back to the investors or be sold via public offer within 10 years.
- The Presidency may decide that all kinds of **infrastructure investment** can be carried out if the project required.
- **Guarantee of purchase** for the project-based investment product can be granted, the duration and amount of which will be determined by the Presidency.
- **VAT refund** for construction expenses
- The Presidency may grant **exemption for permission, assignment, license, registrations** and other restrictive provisions imposed by other laws for project-based investments.
Patent Grants in Medical Technologies in Turkey

*Cumulative*

<table>
<thead>
<tr>
<th>Year</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-2006</td>
<td>757</td>
</tr>
<tr>
<td>2007-2010</td>
<td>1,881</td>
</tr>
<tr>
<td>2011-2014</td>
<td>2,924</td>
</tr>
<tr>
<td>2015-2018</td>
<td>4,832</td>
</tr>
</tbody>
</table>

CAGR 19%

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**INCENTIVES THROUGH INNOVATION LIFECYCLE**

**START**

Technostartup Incentives:
Cash support up to 200K TRY

**PRODUCT / PROJECT DEVELOPMENT**

Call-based Tubitak programs:
Cash support up to 60-80% of the project budget via ARDEB High-Tech Platforms and/or SAYEM

**COMMERCIALIZATION**

Technoparks and R&D Centers:
Income Tax Exemption
Tax cuts up to 20-30% of the personnel cost
Industrial Doctorate Program

**MANUFACTURING**

Technology Focused Industrial Movement Program (HAMLE):
Cash/credit support up to 5 Million TRY for SMEs

**GROWTH & COMPETITION**

Patented sales:
Income Tax & VAT Exemption

---

Source: TurkPatent (Turkish Patent and Trademark Office)
R&D ECOSYSTEM IN MEDICAL TECHNOLOGIES

TURKEY HAS CREATED AN ECOSYSTEM OF R&D AND ENTREPRENEURSHIP...

Please note that this list is by no means exhaustive and is only intended to illustrate some of the major players in the ecosystem.
HEALTTECH ECOSYSTEM

The National Health Information System of Turkey (NHIS) is a nation-wide infrastructure for collecting and to some extent sharing patients’ Electronic Health Records (EHRs) since 2009.

It is a personal health record system where you can manage all your health information, regardless of where your examinations and treatments are conducted, and where you can access your medical background from one place.

SPREAD OF DIGITAL HEALTH SERVICES MOTIVATED BY THE GOVERNMENT’S AMBITIOUS HEALTH TRANSFORMATION PROGRAM …

1 Billion+ Examination In Health Institutions per Year

The National Health Information System (NHIS)

Family Medicine Information System

National Health Data Dictionary

PHARMACEUTICAL TRACK&TRACE SYSTEM

The Pharmaceutical Track & Trace System’s (ITS) aim is to provide drug safety and prevent counterfeiting. System follows the supply chain from the production/importation to the end user – SINCE 2012.

Ministry of Health Tele-medicine System

Public & Private Telemedicine Platforms

1st in Europe in the adoption of health informatics systems

Invest.gov.tr

Source: HIMMS Analytics, Ministry of Health, Investment Office Study

HIMMS: Healthcare Information and Management Systems Society
Hospital Information Systems  
- SisSoft  
- MedData  
- KARDELEN Software  
- Molekül  
- interMEDIA

Appointment Scheduling  
- eniyihekim.com  
- randevuAI.com  
- iylesescem.com  
- ozel.doktoru1.com  
- doktorakimi  
- doktortorul.com  
- doktorbul.com

Wearables & IoT  
- hayriya  
- infron  
- dama  
- tohibios  
- osteoic  
- erbul  
- Corlam  
- Hiwell

Online Consultation  
- ordinatum  
- hemen.gorus  
- hiddenslate  
- Klinik

... IS PAVING THE WAY FOR HUNDREDS OF HEALTHTECH VENTURES

and Hundreds of others in Healthtech Entrepreneurship Ecosystem

Source: StartupsWatch, Investment Office Study
IP PROTECTION IN TURKEY

Turkey has been accepting patent applications since 1996, in compliance with the WTO’s Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement.

As a candidate country, Turkey has significantly aligned its technical and IPR legislations with the European Union *acquis communautaire*


- Simplifies proceedings, adopting tighter regulations for the protection & enforcement of IPR.
- Aligns the Turkish patent regime with its obligations as part of the European Patent Convention

Specialized Courts on IPR

- There are 9 criminal and 13 civil specialized IP courts functioning in Ankara, Istanbul and Izmir

### IPR PROTECTION IN TURKEY HAS SIGNIFICANTLY IMPROVED OVER THE PAST DECADE..

(Score: 10=Best, 0=Worst)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>2007</th>
<th>2019</th>
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<tbody>
<tr>
<td>Overall</td>
<td>4.39</td>
<td>5.58</td>
</tr>
<tr>
<td>Perception of IP Protection</td>
<td>3.80</td>
<td>4.58</td>
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<tr>
<td>Patent protection</td>
<td>7.75</td>
<td>5.71</td>
</tr>
<tr>
<td>Copyright piracy</td>
<td>4.40</td>
<td>1.60</td>
</tr>
</tbody>
</table>

Source: Property Rights Alliance International Property Rights Index, 2019
TURKEY INTRODUCED HEALTH TRANSFORMATION PROGRAM IN 2003 TO PROVIDE ACCESS FOR ALL CITIZENS – HEALTHCARE SPENDING DOUBLED TO REACH $369 PER CAPITA IN 2019

Universal Coverage

UNIVERSAL HEALTH INSURANCE INTRODUCED IN 2006

Localization Program

LOCALIZATION PROGRAM LAUNCHED IN 2016

Improving Infrastructure

NUMBER OF HOSPITALS INCREASED FROM 1,156 IN 2002 TO 1,534 IN 2018 (BED CAPACITY 165K TO 232K)

Increasing # of Healthcare Professionals

NUMBER OF DOCTORS INCREASED FROM 92K IN 2002 TO 153 IN 2018 (FROM 1.4 TO 1.8 PER 1000)

Spread of Primary Care

MoH INITIATED FAMILY PHYSICIANS PROGRAM IN 2005; 26K UNITS SERVES IN 8K FAMILY HEALTH CENTERS BY 2018

Source: Turkstat, Ministry of Health
CONSUMABLES

KEY FACTS

• The consumables market is to expand by a 2019-2025 CAGR of 9% in TRY terms and 3% in US dollar terms.

• This growth will take the market to TRY5.5bn (USD637.3mn) by 2025, making consumables the fastest growing product area.

• An increase is expected in demand for Personal Protective Equipment due to Covid-19 pandemic.

• Imports supply around 80% of the market, with over a quarter sourced from the EU in 2019. Malaysia (25%) was the leading supplier, followed by China (15%) and the US (10%).

• Among major players, Doğsan (non-/absorbable sutures), Biçakçılar (disposables like catheters) and Set Medikal (syringes, needles and catheters) are domestic producers.

• Growing use of suture products; the increasing outpatient visit rate, bolstering the use of syringes, needles & catheters; and demand for ostomy and first-aid products can be named as the drivers for increase in consumables.

Source: Fitch Solutions, Investmnt Office Study
GROWTH IN DIAGNOSTIC IMAGING MARKET IS ESTIMATED TO BE VISIBLE THROUGH 2019-2025 – SPREAD OF PRIMARY CARE & HIGH PREVALENCE OF CARDIAC DISEASES WILL DRIVE GROWTH

**KEY FACTS**

- The diagnostic imaging market is set to expand by a 2019-2025 CAGR of 6% in TRY terms.

- This growth will take the market to TRY2.6bn (USD302mn) by 2025, making it the 3rd fastest growing product area.

- Imports supply ~95% of the market, over 50% coming from the EU in 2019. Germany (25%) was the leading supplier, followed by the US (15%) and China (10%).

- Global high-tech giants have been looking for production bases and Turkish partners to enter the $6 billion market in Turkey, supported by localization efforts and Industry Collaboration Project (SİP) launched by the government.

- Among major players in the market; GE Healthcare, Medtronic, and Hitachi Healthcare positioned their offices in Turkey as their regional headquarters.

- Growing numbers of public/private health providers, high prevalence of cardiovascular diseases and cancer, and spread of primary care centers is expected to drive sales.

Source: Fitch Solutions, Investment Office Study

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**Diagnostic Imaging Sales**

<table>
<thead>
<tr>
<th>Year</th>
<th>TRY Million</th>
<th>USD Million</th>
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<tbody>
<tr>
<td>2019</td>
<td>1,768</td>
<td>1.979</td>
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<tr>
<td>2020f</td>
<td>1,932</td>
<td>2.105</td>
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<tr>
<td>2021f</td>
<td>2,269</td>
<td>2.454</td>
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<tr>
<td>2022f</td>
<td>2,634</td>
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</table>

CAGR 6%
ORTHOPAEDICS & PROSTHETICS

RELATIVELY HIGH DISABILITY PREVALENCE AND GROWTH IN MEDICAL TOURISM, CREATE GROWTH OPPORTUNITIES IN ORTHOPEDIC IMPLANTS AND ARTIFICIAL JOINTS

KEY FACTS

• The orthopaedics & prosthetics market is expected to expand by a 2019-2025 CAGR of 6.8% in TRY terms.

• This growth will take the market to TRY1.96bn (USD224mn) by 2025, making it the 2nd fastest growing product area.

• Imports supply over 80% of the market, with 40% coming from the EU-28 in 2019. The US was the leading import supplier (~25%), followed by Ireland (~20%) and Germany (~10%).

• UK-based Corin (hip & knee implants), TST (external fixtators & spinal systems), Tipsan (joint prostheses, trauma implants, a spine system), Bama Technology (exoskeleton), and Aysam (orthopedic implants) represent some product areas.

• Especially, the medical cluster in Samsun specialized in orthopedic implants. Supplier industries like electro-mechanicals also have strong companies.

• Medical tourism leads to an increase in hip and knee replacement surgeries. Relatively high disability prevalence by global standards are driving the dynamism in the market.

Source: Fitch Solutions, Investment Office Study

ORTHOPAEDICS & PROSTHETICS Sales

CAGR 7%

Orthopaedics & Prosthetics

TRY Million USD Million

2020f 1.015 147
2021f 1.294 169
2022f 1.454 184
2023f 1.639 195
2024f 1.822 210
2025f 1.958 225

Source: Fitch Solutions, Investment Office Study
GIVEN THE INCREASING DEMAND FACILITATED BY PANDEMIC, PORTABLE AIDS & THERAPEUTIC APPLIANCES ARE POTENTIAL GROWTH AREAS

KEY FACTS

• The patient aids market will expand by a 2019-2025 CAGR of 6% in local currency terms.

• This growth will take the market to TRY1.47bn (USD168mn) by 2025, with an expected 4-year uninterrupted growth after 2021.

• The extremely positive expectations in 2020 is explained by the increase in demand for therapeutic respiratory apparatus such ventilators and other breathing aids due to Covid-19.

• ~40% sourced from the EU-28 in 2019. Switzerland, China, Germany and the US were the leading suppliers, with import shares of around 15% each.

• Alvimedica (endovascular and interventional cardiology devices), Bıçakçılar (respiratory care products), and Çağdaş ElektronikMed. (oxygen supply units) stand out as competent manufacturers.

• Since the beginning of the pandemic, Aselsan, Biosys, Baykar and Arçelik developed and mass produce ventilators.

Source: Fitch Solutions, Investment Office Study
Turkey aims to attract 2 million visitors for health purposes by 2023, which contributes to the growth in medical technology market.

Turkey's medical tourism revenue reached USD1.1bn in 2019 and the government aims to increase it by 9 times until 2023.

Affordable services on offer, high-end facilities, cutting-edge technology, competent staff and short waiting times brings high growth to the market.

Treatment for cardiovascular diseases, organ transplants, dentistry, and plastic surgery are the most common health services provided by the authorized health providers.

Authorized ~1,000 health providers and 140 agents offer services for medical tourism.

MoH established a subsidiary, International Health Services Company (USHAŞ), to help the country reach its medical tourism goals.

Istanbul, Ankara, Antalya, and Izmir are popular destinations for treatment, as they are tourist destinations and home to private hospital groups.

Source: TurkStat, Ministry of Health, USHAŞ, Investment Office Study

MoH: Ministry of Health
MORE THAN 1,000 MANUFACTURERS ARE CLUSTERED ACROSS THE COUNTRY

ISTANBUL & TEKIRDAG REGION
Existing medical device clusters; easy access to talent; export hub

ISTANBUL

SAMSUN REGION
Easy access to universities, hospitals and technoparks; hub for orthopaedic products, lower costs in land and wages

SAMSUN

IZMIR & MANISA REGION
Industrial clusters with international companies; export hub with easy access to logistics

IZMIR

ANKARA REGION
Easy access to universities, hospitals and technoparks; lower costs in land and wages

ANKARA

Source: Investment Office Study, Tüder
ORGANIZED INDUSTRIAL ZONES:

- Access to high-quality land at subsidized rates in underdeveloped regions (land or building available)
- One-stop-shop where licenses and permits are issued by professional OIZ managements
- Electricity, water and waste treatment at lower rates
- Compliance with environmental regulations is easier where EIA is jointly conducted
- Cluster enhancing services like vocational training, logistics, business development services, technoparks etc.

FREE ZONES:

- Special sites that are considered as outside the customs area even though they are within the border
- Designed to promote export-oriented investment and production
- A very high level of incentives such as:
  - 100% exemption from corporate income tax, customs duties, VAT and special consumption taxes etc.
  - 100% exemption from employee income tax if at least 85% of the production is exported
3M entered the Turkish market in 1987 and opened its first production facility in Çerkezköy in 1992. The company started to produce healthcare products at the facility in 2009. 3M Turkey, which already had a production facility on 60,000 square meters of land in Çerkezköy, Tekirdağ broke ground in Çoruh, Tekirdağ for a USD 500 mn investment in 2012. At the time this was 3M’s third Super Hub globally, and the facility became operational in 2015. 3M chose Turkey for a Super Hub as the country’s strategic location provides unfettered access to the Middle Eastern, North African, Russian, and European markets.

Biçakçılar is a leading manufacturer and distributor of medical equipment and disposable products. It has been serving the healthcare industry for 60 years. The company is active in Turkey and 300 other countries. It has its manufacturing plant and headquarters in Istanbul. It has over 800 employees. Biçakçılar designs, produces and distributes 300 different kinds of medical equipment and over 2,500 sterile, disposable medical products. The company was acquired by Global Capital Management Ltd., asset management unit of Global Investment House of Kuwait in 2011.

GETINGE operates in Turkey through the manufacturers Trans Medikal Aletler and Maquet Antalya. Trans Medikal Aletler was established in 1970 and produces and distributes steam sterilisers. It was the first manufacturer of sterilisers to conform to international standards in Turkey. Trans Medikal Aletler has carried out operations at its own production facilities in Ankara since 2002. Maquet Antalya started production in 2007. It manufactures disposable products for cardiac surgery and catheters assisting respiration in intensive care. Maquet Antalya’s 14,000sq m factory has a 3,600sq m cleanroom.

Alvimedica is a manufacturer of endovascular and interventional cardiology devices that was founded in 2007. The company owns Centres of Excellence in R&D in Turkey, Italy and the Netherlands. In 2009, Alvimedica acquired In-Vivo, a US manufacturer of diagnostic and guiding catheters. In 2013, Alvimedica acquired the Italian company Carbostent & Implantable Devices (C-ID), one of the leading developers and manufacturers of medical devices used in interventional cardiology. Alvimedica currently has two manufacturing plants located at the Trakya Free Trade Zone in Istanbul, and in Sakarya, Italy. The company was due to open a third plant in Catalca, Istanbul, in March 2019. The new 7,500sq m facility will be used to produce the company’s Cre8 range of drug eluting stents and balloons. It will produce around 900,000 stents annually and create 1,000 new jobs.

Fresenius Medical Care (FMC) has operated in Turkey since 2000 through the company Novamed. Fresenius Medical Hürmetler is based in Istanbul; the subsidiary employed 189 people in 2019. The company also operates 44 dialysis centres across Turkey, which have received investment in excess of EUR125mn. Novamed in Turkey produces a range of arterial vein sets for haemodialysis. Novamed’s production facility is located in the Antalya Free Zone. Arterial vein sets are produced in a 1,700sq m cleanroom.

In 2015, Stryker acquired Muka Metal, a Turkish manufacturer of medical beds, stretchers, and other hospital furniture. Stryker stated that Muka Metal’s products would complement its patient-handling equipment and that the deal would drive growth in Turkey and other regions around the world. Muka Metal began producing medical furniture in 2004. Muka Metal’s product range includes motorised beds, paediatric beds, stretchers, patient transporters, blood collection chairs, over-bed tables, cabinets and a serum stand. It’s 50,000sq m production facility is located in Kayseri. Muka distributes its products in over 50 countries, including the US.

3M, a globally diversified technology company, had been the first to establish a facility in Turkey in 1987, and this has become the hub for the company’s manufacturing in Europe, the Middle East and Africa. The company has a strong presence in the Turkish healthcare sector.

GE has been powering, improving, and constructing with its activities in Turkey for nearly 70 years. In 2008, GE Healthcare’s Eastern and Africa Growth Markets (EAGM) region selected Turkey for its headquarters. GE chose Istanbul as its international base of operations. GE split a major part of its operations from its London headquarter to Istanbul for the EAGM region. It manages its operations in 84 countries from Turkey.

Hitachi started its activities in Turkey with the Hitachi Construction Machinery office in Istanbul in 1986, and as of 2019 the Hitachi Group in Turkey has around 300 employees. Hitachi Healthcare acquired 75 percent of the shares of Kurtt&Kurt Inc. in April 2017. Hitachi Healthcare Turkey was named as one of the five worldwide management centers of Hitachi in the healthcare sector. This new company has become a local base managing the healthcare operations of a total of 20 countries, covering parts of the CIS, Africa, and the Middle East.

Source: Investment Office Study, Fitch Solutions

SUCCESS STORIES

TURKEY HOSTS MANY MULTINATIONAL MEDTECH PLAYERS FOR MANUFACTURING, MANAGEMENT, AND INNOVATION PURPOSES

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