### **About The Israel Export & International Cooperation Institute**

The Israel Export & International Cooperation Institute, supported by over 2,600 member firms, private-sector bodies, and the government of Israel, advances business relationships between Israeli exporters and overseas businesses and organizations. By providing a wide range of export-oriented services to Israeli companies and complementary services to the international business community, the Institute helps build successful joint ventures, strategic alliances, and trade partnerships.



### The Israel Export & International Cooperation Institute

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### The Israel Export & International Cooperation Institute

### **Israel's Medical Device and Supplies Industry**

### **Background**

Israel places a high value on the sanctity of human life. So it is no surprise that Israeli physicians, scientists, researchers, and engineers have propelled the country's medical device industry to the leading edge of innovation spanning all fields of medicine.

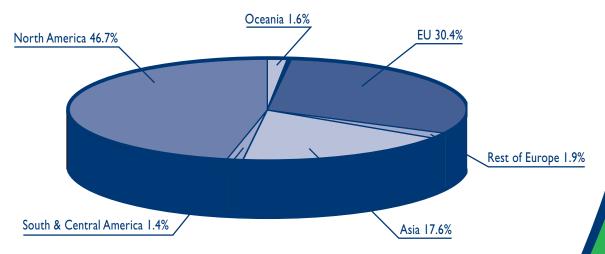
From state-of-the-art surgical lasers and intelligent medical sensors that track and direct instruments to unique computerized monitoring systems, Israeli medical devices aid the medical community in its fight to save lives and improve the quality of life

### Israel's Medical Device Industry by the Numbers

### **Exports for 2002**

Number of companies that export approx. 180
Total exports \$588 million
Increase over 2001 11%

### **Exports by Region for 2002**



### **Exports by Industry Sector for 2002**

Sector	Export Sales (millions)
Electromedical and surgical device	es \$ 521.2
Medical and orthopedic devices	\$ 36.6
Medical supplies/disposables	\$ 29.8
Total	\$587.6

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### Why Israel?

# Inter-industry Collaboration

Israel's medical device industry receives strong support from the country's highly sophisticated and internationally renowned electronics industry. Many of this industry's advanced technologies, especially those related to electro-optics and lasers, find vital applications in medical devices.

# Versatility and Quick Response to Market Needs

Israeli medical device manufacturers prove time and again that they can quickly meet the demands of a dynamic international medical community. Responding to the outbreak of SARS, the deadly virus that surprised medical professionals, Israeli companies such as Dmatek, ELOP Electro-Optics, Medic4All, and Medix Screen Ltd. provided solutions in diagnostics, laboratory testing, patient monitoring, and population quarantine that helped bring the epidemic under control.

# **Streamlined Regulatory Clearance**

Israel's medical device testing is controlled by the country's Ministry of Health, which implements a process that corresponds to that of the FDA. This makes it relatively easy for studies conducted in Israel to qualify as proof for approval to the FDA. In turn, this streamlines regulatory processes and enables new products to reach commercial markets quicker. There are also several GMP (good manufacturing practices) facilities in the country.

# **Ideal Test Bed for Clinical Trials**

Israel is an ideal site for clinical trials leading to regulatory approvals. With over 80% of the population covered by national healthcare organizations, accessing and analyzing healthcare statistics as well as managing trials is relatively easy when compared with other Western countries. There is a tendency, too, for patients to more readily do what their doctors require.

# **Top-notch Professionals**

Many members of Israel's medical community have earned international prestige in their chosen fields of expertise. They routinely collaborate, teach, and lecture at leading medical centers throughout the world. They are both up-to-date on major medical advances and acutely aware of human suffering. This has spurred many innovative medical device developments by Israel medical professionals.

### **Government Support**

The Israeli government actively supports entrepreneurship and private business innovation by provision of grants, loans, and tax benefits through a variety of programs available through the Office of the Chief Scientist and the Israel Export & International Cooperation Institute of the Ministry of Industry, Trade and Labor. Approximately half of all technologies in development at government-supported incubators are related to medicine.

### Investment Incentives

Israel's government supports investment of foreign capital by offering generous incentives and assistance to corporations establishing R&D and manufacturing facilities in Israel. In addition, Israel has free trade agreements with the United States and the European Union.

## **Key Segments**

# **Electromedical Products**

Products in this category can be found in all segments of the medical device industry. Israeli-developed devices enjoy an international reputation for advanced technologies in state-of-the-art applications. These devices and systems provide highly sophisticated solutions for improved diagnostic tools, function-assessment equipment, fetal and patient monitoring, cardiac therapies, laser surgery, dialysis equipment, respiratory equipment, x-ray technology, and infusion systems.

# **Rehabilitation Equipment**

Israel's rehabilitation equipment market has long been at the forefront of innovation, largely due to the wars that have provided Israeli researchers and rehabilitation companies with sufficient opportunities for hands-on experience. There have been highly acclaimed solutions in orthopedics, visual and audio devices, mobility aids and devices, homecare equipment, and computer aids for the physically challenged.

There are more than 30 companies manufacturing and exporting dental products in Israel. They include young companies just out of high-tech incubators as well as internationally recognized established companies. An extensive product range includes advanced intraoral cameras, image-guided implantation systems, pneumatic dental tools, drills and accessories, laboratory equipment, implants, and adhesive products.

### Medical Supplies

Israeli medical supply companies have established reputations for manufacturing and exporting high-quality products to markets that adhere to the highest medical standards. Products range from simple bandages and wound dressings to disposables for operating rooms, laboratories, and all types of clinics.

### lelemedicin

Non-electronic Diagnostics

Not surprising due to Israel's prominence in the global telecom industry, the country is home to some of telemedicine's most advanced technologies. Telemedicine solutions developed in Israel include homecare cardiological services, GSM-based patient monitors, interactive video-based telemedicine consultation, teleradiology services via the Internet, satellite-based education, and 3D medical imaging.

In non-electronic diagnostics there is general agreement that the vast amount of research knowledge rapidly accumulating in toxicology, chemistry, parasitology, immunochemistry, microbiology, and bacteriology have not yet met their commercialization potential. There are many new products to be added to the already impressive list of kits produced by Israeli companies for diagnosing and testing of genetic and infectious diseases, allergies, fertility, and DNA.

# **Hospital Planning and Engineering Consulting Services**

Israel is gaining an international reputation for being at the forefront of high-technology hospital design, construction, equipping, and management. Israeli firms are providing services in countries around the world, including Turkey, Russia, Azerbaijan, Uzbekistan, Kazakhstan, Poland, Romania, Cyprus, Jordan, Egypt, South Africa, Kenya, Nigeria, and Morocco.

# Academia Meets Industry

The medical device and healthcare products industry is at the intersection of technology and medicine. As a small country, Israel's tight network of universities, research institutions, and medical centers fosters cooperation and the flow of ideas to allow for innovative technologies to reach physicians — and their patients — faster than anywhere else in the world.

Each of Israel's universities and research centers has an entrepreneurial authority that assists researchers through all phases of commercialization: grant applications, investor searches, regulatory processes, licensing agreements, and patent submissions. Some of these entrepreneurial authorities are profiled below:

- Ben-Gurion Negev Technologies and Applications Ltd. at the Ben-Gurion University of the Negev currently has 26 projects in medical-related fields.
- Bar-Ilan Research and Development Co. Ltd. at Bar-Ilan University currently hosts 23 projects in biotechnology, pharma.
- Hadasit Medical Research Services and Development Ltd. at Hadassah Medical Center boasts a patent portfolio that contains over 200 families of patent applications.
- **Technion Research and Development Foundation** at the Technion-Israel Institute of Technology was established to promote research, technology transfer, industrial testing and services, and commercialization of inventions and ideas.
- **Biomedical Incubator Rad-Ramot** at Tel Hashomer Hospital at Tel Aviv University establishes companies in such diverse fields as drug development, drug delivery, platform biotechnologies, noninvasive diagnostic and prognostic technologies, and medical devices

# **World Markets**

Israel's medical device companies find their most receptive markets in North America and the European Union, primarily because these markets enjoy high healthcare growth rates and demand cutting-edge technological solutions. Often Israel-based companies partner with global medical device leaders in win-win alliances that enable Israeli companies to expand into global markets while enhancing their partners' offering to help them capture a greater market share.

# International Cooperation

Several global medical companies have found Israel an attractive place to do business. They find Israelis ideal partners for research, development, and implementation of breakthrough technologies in the medical device industry. Leading multinationals with a presence in lergel:

- GE Medical
- Johnson & Johnson 

  Boston Scientific
- entific
- MedtronicMarconi

Philips