

ISRAEL HIGH-TECH & INVESTMENT REPORT

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The Israeli-Chinese Connection



Two items caught our attention recently: one was the announcement that Israeli investors are establishing a \$155 million China fund and the other was our discussion

with Mr. Zhou Hui, Chinese economic and commercial counselor at the Embassy of the People's Republic of China. We were taking part in a visit to the Ashkelon seawater reverse osmosis (SWRO) plant - the largest in the world. Mr. Hui revealed that his country is negotiating the purchase of a desalination plant.

Research reveals that Israel-China trade climbed nearly 30% in 2006, to \$3.8 billion, and is expected to reach \$5 billion this year, catapulting China to the position of Israel's number two trading partner, second only to the U.S.

From 1978 to 2005, China's GDP increased by 11 times, from 200 billion US dollars to 2,200 billion dollars. Its GDP per capita increased from 220 dollars to 1,700 dollars. Last year, China's foreign trade amounted to 1.4 trillion dollars. As of last February, China's foreign reserves stood at 850 billion dollars. This dynamic growth makes China an ideal target for trade.

At first sight, it is difficult to imagine two nations more different to each other than China and Israel. China is four hundred times Israel's size and two hundred times its population. One is the heart of Asia, the other is a bridge between West and East.

Yet, the two countries share a number of similarities. The principal trait is their long history. Both nations span at least four millennia, being the oldest nations on earth who claim such continuous national identity.

The maxim "Don't do to others what you don't want them to do to you" is essential to both civilizations,

Jewish and Chinese, as well as the principle that human nature is basically good.

Both China and Israel started a process of modernizing their economy. The models upon which Mao Zedong and Ben-Gurion conceived the economy was state-oriented, while the more recent leaders of both countries launched a campaign to open their economies to the free market.

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Foreign R&D centers employ 35,000 workers in Israel
New Tool Developed by Researchers at Ben-Gurion
VCs name top startups

Various cooperative forms in the agriculture area, include joint research and development, import of equipment, training, and demonstration farms. Israel has also provided China with military assistance, expertise and technology. According to a report from the US-China Security Review Commission, "Israel ranks second only to Russia as a weapons system provider to China and as a conduit for sophisticated military technology, followed by France and Germany."

Considering that Israeli-China relations began only 15 years ago the achievements have been impressive and appear to have a bright future.

China signs desalination plant order



IDE Technologies Ltd. has signed a \$119 million contract to build a seawater desalination facility in China for the Beijiang power station, 200 kilometers northeast of Beijing. The power station is owned

by Tianjin Ambest International Logistics Co. Ltd.

The facility will be the largest desalination plant in China. It will provide 100,000 cubic meters of fresh water a day for the power station's generators, and drinking water for local residents. The saline water will be used to make salt.

IDE has built hundreds of desalination facilities worldwide, and is building a Hadera, Israel, desalination plant, which will produce 100 million cubic meters of fresh water a year. The Hadera plant is scheduled to go on line in 2010.

Delek Group Ltd. (TASE: DLEKG) and Israel Chemicals Ltd. (TASE: CHIM) own IDE in equal shares.

Retalix wins order from China's HomeBuy

Retail software company Retalix Ltd. (Nasdaq: RTLX; TASE: RTLX) is extending its penetration of the Chinese market. The company announced that HomeBuy Houseware Inc., one of China's home furnishing and do-it-yourself (DIY) retailers, selected its solutions to automate, optimize and synchronize its retail operations. Market sources believe the deal is worth a few million dollars.

HomeBuy operates 60 stores in Shanghai and Eastern China and it plans to open more than 400 stores over

the next five years. It will install a synchronized retail solution from Retalix, comprising Retalix's StoreLine point-of-sale (POS) and back-office applications at the stores, combined with its HQ StoreLine and loyalty and promotions systems at the chain's headquarters. Retalix's partner in China, Shanghai-based Rinpak Technology Ltd., will provide the retail chain with domestic integration and support services.

HomeBuy operations director Lawrence Ye said, "We selected Retalix because we needed a retail management solution that can help us maintain a leading position in the intense competition in China's home furnishings market. The on-line synchronization between Retalix's point-of-sale solution and the headquarters, loyalty and promotions management system enables us to respond faster to customers' expectations and thus improve customer retention and satisfaction levels."



Ofek-7 spy satellite launched

Ofek-7 Israel's second generation spy satellite has begun functioning and is expected to begin

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sending back pictures. Ofek-7 contains notable improvements over the the Ofek-6 satellite, which crashed into the Mediterranean shortly after launch in 2004, costing the Defense Establishment an estimated \$80 million.

Israel in fourth place among defense exporters



SIBAT - Foreign Defense Assistance and Defense Export Organization director-general Gen. (Ret.) Yosi Ben-Hanan says that Israel's defense exports to the US grew from \$270 million in 1999 to \$1.2 billion in 2006.

Israeli exports of homeland security and safety equipment, excluding information security, will grow 20% this year, compared with 15% growth in 2006, to \$1.2 billion. 30 new companies entered this field over the past year, to a total of 350 exporters. IT security exports totaled \$2 billion.

Israel Export and International Cooperation Institute chairman David Arzi says that Israeli companies will sign contracts worth \$600-800 million during the Paris Air Show. The global defense and aerospace market will grow by \$1.3 billion this year (3.1%, compared with 0.9% growth in 2006), and will grow by \$1.4 billion in 2009.

Israeli participants at the Paris Air Show will include Aeronautics Defense Systems Ltd., Bental Industries Ltd., Ashot Ashkelon Industries Ltd. (TASE: ASHO), Bet Shemesh Engines Ltd. (TASE: BSEN), Controp Precision Technologies Ltd., Elbit Systems Ltd. (Nasdaq: ESLT; TASE: ESLT), Israel Aerospace Industries Ltd. (IAI), Orbit Alchut Technologies Ltd. (TASE:ORBI), Plasan Sasa Ltd., Rafael Armament Development Authority Ltd., Rada Electronic Industries Ltd. (Nasdaq: RADID), SDS, and Tadiran Communications Ltd.

Israelis develop innovative printing technology



Israeli researchers at the College of Judea and Samaria in the "settlement" of Ariel have developed an innovative new printing technology that could revolutionize the entire printing

industry. Called Jetrix, the technology basically takes the concept behind flat-screen televisions and computer monitors, which use arrays of light-emitting diodes, and applies it to the printing process.

In short, Jetrix uses a page-sized matrix of ink heads to print more than 1,000 pages in less than a minute.

Industrial printers are capable of similar print rates, but are prohibitively expensive. The Israeli invention would conceivably be within the budget of the average home computer user.

But the brains behind Jetrix - Moshe and Nissim Einat - see far more exciting possibilities than simply printing out your homework in half a second.

The extremely rapid print rates Jetrix could facilitate "on demand" printed products, such as books, magazines and newspapers. Customers could theoretically have a book printed for them on the spot while they pay for it. Such an application of the technology could save publishers and book retailers thousands of dollars, as about 40 percent of printed books never leave the store shelf.

It could also give a huge boost to the lagging newspaper industry, which is bleeding subscribers at an incredible rate as more and more people turn to the Internet to get their daily news fix. Jetrix could provide newspaper publishers in a feasible way of printing personally-tailored newspapers for each and every subscriber.

Israeli scientist honored for robotic invention



An Israeli scientist was honored for an invention that allows precise positioning and targeting of neurosurgery probes, needles, or catheters.

Hebrew University of Jerusalem Professor Leo Joskovicz was presented one of this year's Kaye Innovation Awards during the university's 70th board of governors meeting. Joskovicz, a professor of engineering and computer science, is the founder and director of the university's Computer-Aided Surgery and Medical Image Processing Laboratory.

His invention is a tiny robot that can be programmed with detailed information obtained from preoperative electronic scans of a patient. During surgery, the robot is affixed to a head clamp or to the patient's skull. It automatically positions itself with great accuracy and locks itself in place, serving as a guide for insertion by the surgeon of a needle, probe, or catheter to carry out the procedure.

The system was developed by Joskowicz in collaboration with doctoral students Ruby Shamir and Moti Freiman, Professor Moshe Shoham of the Technion-Israel Institute of Technology, and Yigal Shoshan and Professor Felix Umansky of the Hadassah Hebrew University Medical Center.

A novel way to maintain cows healthy

Eight years ago the only animals Eliav Tahar consorted with were fellow marketing sharks on Madison Avenue. These days he hangs with a herd of Holstein dairy cows in the muddy pastures of Galilee in Israel. His company, Veterix of Or Aqiva, has created the world's first wireless diagnostic system for cattle.

Tahar, 36, has exploited the unpredictable twists of his life. Born and raised in Tel Aviv, he studied economics and filmmaking at Tel Aviv University, then became an ad executive with BBDO, campaign manager for the deputy mayor of Acre and a marketing consultant in Manhattan for an Israeli textile company. Lured by the high-tech boom, Tahar returned to Israel in 1999, enrolled in night classes and found work as a hardware engineer for what is now Israel Aerospace Industries.

The idea for Veterix came to him by chance in 2003 when his dog, Bono, was hit by a car. During the pup's lengthy recuperation, Tahar was afraid to leave the dog alone. "I thought there should be a relatively cheap diagnostic tool for monitoring animals," he recalls. First thought: an electronic pet collar. But meetings with veterinarians and scientists convinced him to focus instead on livestock. In December 2003 Tahar quit his job to found Veterix.

He spent the next few months touring dairy farms in the Galilee region--and realized that a delicate collar for a bulky bovine neck would never work. Cows did, however, have an anatomical advantage in the form of powerful four-chambered stomachs. Tahar was particularly impressed with a magnet farmers fed cows to collect stray bits of metal the animal picked

up during grazing, preventing infections known as "hardware disease." Inspired, Tahar designed a 3.5-inch electronic capsule--its off-the-shelf parts include a microprocessor, memory and radio chips--inserted with a rod through the esophagus into the cow's reticulum, the second of its four stomachs. At a few grams apiece, the e-capsules settle to the bottom of the stomach, where they can last five years or more, too large and too heavy to move.

The capsule's sensors pick up vibrations, temperature and pressure changes within the reticulum and store them in a microchip, which then processes the data using formulas devised by Tahar and a fellow engineer. The data is then transmitted via a wireless signal to a farmer's PC, where Veterix software analyzes the information. Any major deviations prompt an alert signal, with specific recommendations for the farmer on how to respond. A high temperature reading coupled with high heart and respiratory rates, for example, cause a flashing banner to pop up on the screen, with an advisory to isolate cow number 34 for early fever symptoms; an elevated heart rate and temperature in an otherwise normal beast might alert the farmer that Bessie, number 22, is in heat.

Tahar believes such careful scrutiny will allow for early detection of diseases, more judicious use of antibiotics and a happier quadruped. "An unstressed cow is always going to make for a better product," he says.

Hercules Technology Growth Capital in joint financing effort

Hercules Technology Growth Capital, Inc. (NASDAQ: HTGC), a leading specialty finance company announced an alliance with Market Bridges Ltd.

to bring venture lending opportunities to emerging Israeli and Israeli-related companies in the technology and life sciences sectors.

Market Bridges is a financial services and business-development firm bridging between emerging Israeli growth companies and international capital and markets.

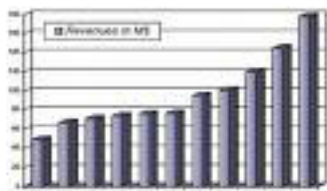
"Israel represents a growing and vibrant market opportunity of leading technology and life science companies," said Manuel A. Henriquez, founder and chief executive officer of Hercules.

Mr. Henriquez added that while traditional equity investments have gained momentum in this market, venture loans, which enable young companies to gain additional financial support with minimal dilution, have traditionally been underutilized.

Gil Sudai, chief executive officer of Market Bridges, said, "Hercules has proven to be a highly experienced, flexible and reliable venture debt provider within the U.S., having committed more than \$570 million of financing to venture capital backed companies since October 2004. By combining Hercules' balance sheet and financing offerings with our experience in the Israeli market, we expect to be able to provide Israeli entrepreneurs with the support and commitment they need to bring their innovations to success."

TASE completes record quarter for IPOs

35 new companies joined the TASE, compared with 37 for the whole of 2006.



The Tel Aviv Stock Exchange (TASE) experienced a record setting number of IPOs and prospectuses in the first quarter of 2007. 201 companies filed

prospectuses of which 141 made it to the finishing line.

Among the leading offerings were those of British-Israel Investments Ltd. (TASE: BRTS), which raised NIS 300 million, Ashdar Building Co. Ltd., which raised NIS 180 million, and Clal Biotechnology Industries Ltd. (TASE: CBI), which raised NIS 200 million.

The latest round of offerings also included eight real estate and seven new R&D companies.

39 established companies issued bonds and/or convertible stock worth a total of NIS 5.5 billion.

The first quarter of the year also saw more bond issues by new companies, with 15 new companies raising a total of NIS 2.3 billion. Past experience has shown that in some cases, companies like these go on to issue shares as well, on the basis of their experience in their initial bond issue.

The most prominent bond issue was that of Israel Aerospace Industries Ltd., which raised NIS 1 billion.

Study may help plants survive scourge of salty soil

A new study by Israeli scientists may help improve the ability of plants to survive in highly saline soil, one of the main threats to agriculture worldwide.

The study, recently published in the Journal of the American Academy of Sciences, describes a method of genetic engineering that may allow a plant to neutralize excess salt.

In Israel in the northern Negev and the Jezreel Valley, large amounts of salt remain in the soil after irrigation water evaporates or is used by the plants.

Salt impairs the supply of water to the plant and causes cell toxicity, and in many places irrigation must be increased so water not utilized by the plants will drain the salt that builds up in them.

Professor Alex Levine and doctoral student Yehoram Leshem of Hebrew University's Silverman Institute studied the effects of exposure to salt in the thale cress (*Arabidopsis thaliana*).

Leshem said that this plant is able to get rid of excess salt through a special organ.

However, Leshem says that "oxygen coming from the root of the plant to this organ damages its covering and impairs the plant's ability to deal with exposure to salt.

"The damage is cumulative and the plant dies within a few days," he says.

The research followed the movement of the oxygen until it reaches the covering organ and then manipulates the gene allowing the oxygen to reach the covering and impair its function.

Further testing compared genetically manipulated thale cress sprouts exposed to salt with those that were not manipulated. The former survived a few more days than the latter.

Leshem noted that despite the damage the oxygen does to the organ, it has other functions, and the research is preliminary and must still be tested on crops.

Israeli startup Oberon Media buying I-Pay for more than \$100 million



Slowly but surely, an Israeli online gaming startup is turning into a world giant in its field. Oberon Media, which specializes in casual games, is buying the international company I-Play.

Though the companies did not release the scope of transaction and refused to discuss it market sources indicate that the Israeli buyer is paying more than \$100 million.

I-Play is a world leader in cellular gaming applications. To finance the acquisition, Oberon resorted to raising money from existing shareholders and new ones. Its existing shareholders include Goldman Sachs, Morgan Stanley and Oak Investment Partners, among others. They were joined in the last financing round by Lehman Brothers.

The target audience for cellular games is estimated to be a billion people, through cellular providers including Verizon, AT&T and Vodafone. I-Play maintains offices in London, Scotland and California, development centers in Britain and Romania, and sales offices in France, Germany, Spain, the U.S. and Singapore.

This is Oberon's third acquisition. The first two cost it much less. The last was in November 2006, when it bought Blaze of the U.S., which develops and distributes games for cellular applications.

Then too the companies didn't publicize the size of the deal, but industry sources believe it was a few million dollars.

Oberon's first acquisition was at the end of 2005, when it bought C-Mate, an Israeli company working on a platform to create multi-participant cellular games.

Oberon was founded in 2003 by three Israelis - Ofer Leidner, 36, Tomer Ben-Kiki, 37, and Tal Kerret, 37, with the help of Zohar Gilon of Tamar Ventures, who was the first investor and who is today a very active director. The company has 500 employees and maintains offices in New York, Seattle, London, Singapore and South Korea. It also has several development centers, the main one being in Tel Aviv's Ramat Hahayal.

During the year 2006, more than 420 million surfers

visited games based on Oberon systems. Microsoft has even embedded games that Oberon developed in its new operating system, Vista.

Motorola ready to open R&D facility



MOTOROLA

Motorola is preparing to launch a government-backed R&D site that will initially employ 200 engineers and researchers.

Over the next five years, the Israel Investment Center will grant Motorola \$12 million, plus \$900 per employee for up to 60 months, for a maximum of 200 employees.

The researchers will be hired over the next three years, to focus on product development for the group's cellphones, computers and software products lines.

Motorola said it is already looking into the possibility of expanding activities at the facility and hire between 300 and 500 engineers within five years.

The company has maintained a presence in Israel since 1964 and employs 3,500 at several sites, developing a wide range of products and technologies.

Elbit Systems unit wins night vision contracts

EI-Op's CORAL hand-held thermal imaging systems have been sold to the IDF, Canadian Army, and other customers.

Elbit Systems Ltd. (Nasdaq: ESLT; TASE: ESLT) unit Electro-Optics EI-Op Ltd. has won several contracts worth an aggregate \$50 million to supply hand-held night vision thermal imaging systems to the Canadian Army, IDF, and other customers worldwide.

EI-Op general manager Haim Rousso said, "EI-Op's advanced hand-held thermal imaging systems are part of the CORAL family of products. They combine advanced capabilities and high performance with compactness and low energy consumption, providing a considerable advantage to infantry forces." The hand-held night vision thermal imaging unit weighs less than 2.5 kilograms, which infantrymen can carry on a neck-strap.

Where Religion, High-Tech and Family Meet

With an average of more than six children per family, the typical haredi (believing in strict rabbinic law)



Jewish woman has little time to invest in a career.

Haredi Jews adhere to strict traditional rabbinic authority – and that means being a part of Israel’s renowned high-tech industry is all but impossible. The problem for Haredi women, who wish to be part of the industry, is two-fold – the long hours and a working environment which includes men.

A number of outsourcing companies in the local council of Modi’in Illit are trying to overcome these obstacles by creating workplaces which more or less employ only haredi women.

One such company is Talpiot, an offshore development outsourcing center, created by Matrix, an Israeli information technology company.

“The work place of Talpiot is adjusted to fit the Orthodox women,” says Talpiot COO Libby Affen.

“When you enter Talpiot, you can see a separate women’s kitchen and a separate men’s kitchen. The women are seated separately from the men. The work hours are a bit more adjusted to what women in the Orthodox community require.”

The women also receive help from the government and the municipality, which subsidizes childcare institutions in Modiin Illit. It is also helpful that the work place is located a short walking distance from home. They can pop in during lunchtime and see the children.

In haredi society, husbands often spend their days studying religious texts, while wives try to provide most of the livelihood. When asked if they would not prefer seeing their husbands working instead of studying Torah, the answer we were given was simple: “Studying Torah is the highest value in our society. I am proud to be able to work in such a job, which enables my husband to concentrate on his studies.”

“They are educated to this end from the very beginning,” Prof. Tamar El-Or from the Hebrew University’s Sociology Department says.

“Their education is meant to make them see their future husband as a Torah-learner. This is what they

fantasize about; this is what they want to have,” says El-Or.

The policy of the local council is to encourage its women to develop careers and contribute to their families’ budgets.

“Haredi women are intelligent and are able to compete in local and international markets,” says head of the Local Council of Modi’in Illit, Ya’akov Guterman.

“These women are better educated than the men in the haredi society, who concentrate their efforts on religious studies,” he explains.

According to Guterman, “the women study English, math, physics, and that is why it is easier to integrate them into the high-tech world.”

Israeli economy in its longest ever expansion

The Israeli economy grew by an annualized 6.3% in the first quarter of 2007, after growing by 7.3% in the preceding quarter, the Central Bureau of Statistics reported today. Business product grew by an annualized 6.5% in the first quarter, and GDP per capita rose by 4.5%.

The main growth engines in the first quarter were the export of goods and services, which rose by an annualized 11.1%, a 23.7% rise in investment in fixed assets, and an annualized 11.8% rise in private consumption. The standard of living rose by an annualized 10%. Purchases of cars, appliances and other durable goods rose by 18.2% in the first quarter, and per capita spending on perishable goods rose by 3.8%.

Unemployment continues to fall, reaching 7.7%, compared to 7.8% reported in the previous qua

Seal of Approval for Adult Stem Cells

 TheraVitae, the leading Israeli-Thai biotechnology company and developer of VesCell therapy, using adult stem cells for the failing heart and PAD, has been awarded the approval of the Office of the Board of Investment (BOI) approval.

The approval paves the way for the company to expand its research and development and provide

therapies using adult stem cells.

President of TheraVitaie Thailand, Mr Narin Apichairuk, said, "We are delighted to gain BOI approval because it means we can continue with our plans to open a laboratory near Bangkok and proceed with expansion of our services. To date over two hundred no-option heart patients have been treated with our patented product, VesCell, here in the kingdom. This approval means that we are seen by the Thailand government as being transparent and accountable in our operations and thus opens up the way for tremendous growth and expansion."

The company can now proceed with planning the world's largest stem cell laboratory. When completed the facility will be able to produce 1000 batches of stem cells per month. At present blood withdrawn from patients has been flown to Israel for the processing of the stem cells into therapeutic numbers.

Stem cell therapy using patients' own blood has been proven beneficial in clinical trials. Around 75 percent of patients are experiencing symptom reduction and are able to take up exercise and activities that were previously denied them because of the nature of their illness. Many have been told that short of a heart transplant there is nothing more that can be done for them. Their recovery stories after adult stem cell therapy are inspiring many others to seek the help that is available to them right now.

"It is a real privilege to be a leader of an industry that is contributing significantly to the growth of medical tourism in Thailand, which is becoming an important source of revenue for the kingdom. Furthermore, it is deeply satisfying to be at the forefront of research and development into therapies that are truly cutting-edge. The future is very exciting as more and more diseases are being added to the list of conditions that stem cell is able to help. Regenerative medicine is the future of medicine and we are proud to play a part in its progress," said Apichairuk.

Theravitae's current list of partner hospitals will certainly expand as the result of BOI approval. At present Thailand partner hospitals include Bangkok Heart Hospital, Chaophya Hospital, the Phaya Thai Hospital group and Praram 9 Hospital. These prestigious hospitals feature eminent medical specialists such as Dr. Kit Arom, Professor Supachai and Dr. Eugene Sim, all keen advocates of adult stem cell therapy.

The company also has a relationship with Singapore's Parkway Hospital group that is using VesCell technology throughout their group.

For a relatively young company at the very cutting edge of regenerative medicine, Theravitae's progress is admirable. Just last year they received the World Economic Forum "Pioneer Award" for their groundbreaking stem cell technology. This award puts them on a par with Google, another recipient of this prestigious award.



Ormat signs 20-year Nevada Power contract

Ormat Industries Ltd.

(TASE: ORMT) subsidiary Ormat Technologies Inc. (NYSE: ORA) has signed a 20-year Power Purchase Agreement (PPA) with Sierra Pacific Resources Inc. (NYSE:SRP) subsidiary Nevada Power Company for the sale of energy produced from the Grass Valley Geothermal Power Plant to be built in Lander County in northern Nevada. The PPA is subject to the approval of the Public Utilities Commission of Nevada and is projected to come on line in late 2010.

Ormat predicts that the new plant will increase the total output supplied from Ormat to Sierra Pacific Resources by 18-30 megawatts (MWs).

On the other hand, Citigroup is more wary about Ormat Technologies, in view of its poor financial report for the first quarter. The bank reiterated its "Hold/High risk" and cut its target price to \$37.

EMG closes \$1b gas deal with Dead Sea Works

Israel Chemicals will become Israel's second largest natural gas consumer after IEC, using 600-700 million cubic meters a year, at a cost of \$100-\$150m a year.

Egypt's East Mediterranean Gas Company (EMG) is about to sign a \$1 billion natural gas deal with Israel Chemicals Ltd. (TASE: CHIM) subsidiary Dead Sea Works. The companies have been negotiating for a long time and anticipate the start of deliveries in the first quarter of 2008.

Israel Chemicals will become Israel's second largest natural gas consumer after Israel Electric Corporation

(IEC). The EMG-Dead Sea Works contract will probably include an option to increase natural gas deliveries for other Israel Chemicals subsidiaries in the Negev, including Rotem Amfert Negev Ltd.

Israel Chemicals will probably consume 600-700 million cubic meters of natural gas a year, at a cost of \$100-150 million. Dead Sea Works will need natural gas beginning late 2008 when the natural gas pipeline will reach the area.

Cordis to distribute Medinol bare metal stents



Cordis Corporation, an American medical device corporation and a pioneer in innovative devices and products for interventional vascular medicine and electrophysiology, announced that it has signed a definitive agreement whereby it will become the exclusive global distributor of a family of bare metal stents for coronary applications developed by the Israeli medical company Medinol.



Cordis will have access to Medinol's latest generation stainless steel and cobalt chromium bare metal stents. Medinol's advanced stents balance deliverability, conformability and scaffolding qualities to provide ease of use, safety and long-term results.

Cordis Corporation and Medinol will work together to obtain necessary approvals to market the products globally from U.S. and other regulatory authorities.

"We are pleased to provide physicians with an increasing array of products for their interventional procedures," said Rick Anderson, Company Group Chairman, Cordis Corporation.

"The partnership of Medinol and Cordis, the global leader in interventional cardiology, is ideal for physicians and the patients they treat," said Kobi Richter, Ph.D., Chairman and Chief Technology Officer, Medinol. "With our broad product portfolio, physicians can choose the stent that best meets the needs of each individual patient. We are excited about the opportunity to present our current and future technologies to physicians through our partnership with Cordis."

Cordis Corporation estimates that the first applications for approval of the Medinol bare metal stent products will be filed outside the United States in the second

half of 2007 and in the United States in the first half of 2008.

Pitango closes \$150m fifth fund



Pitango Venture Capital has held the first closing on \$150 million for its fifth fund, half of the \$300 million it plans to raise. The first closing was made within a few months and the company is

likely to make an announcement shortly.

Pitango is the second Israeli venture capital firm to successfully raise capital for a new fund in recent months. Two weeks ago Israel Infinity Venture Capital announced the first closing on \$150 million for its latest fund. Other funds such as Gemini Israel Funds, Carmel Ventures, Genesis Partners, Giza Venture Capital, and Vitalife Life Sciences Venture are also due to raise new funds this year.

Considered Israel's largest venture capital firm, Pitango currently manages four funds totaling \$1 billion. It has 127 portfolio companies in IT, telecommunications, life sciences and Internet. IVC Online rated Pitango the most active fund for 2006 with 10 investments.

Pitango was founded as Polaris in 1993 by Rami Kalish, who was joined three years later by Nechemia (Hemi) Peres. The raising of its third fund totaling \$500 million in 2000 made it one of the leaders on the local market. Among Pitango's key exits are ClearForest, which was acquired by Reuters, CTI2, which was sold to AudioCodes Ltd. (Nasdaq: AUDC; TASE: AUDC), Go Networks, which acquired by NextWave Wireless Inc. (Nasdaq: WAVEV), and Silverback Systems, which was acquired by Brocade Communications Systems Inc. (Nasdaq: BRCD).

Pitango's lighting closing appears to have benefited from strong interest from US. Investment institutions looking for opportunities.

New insulin product via the nose

A young start-up company is gearing up to challenge the likes of Pfizer by developing a new insulin product, based on its novel nano-based intranasal delivery technology.

NanoDerma, a young Israeli company specializing in advanced transdermal and intradermal formulations, has recently been directing its expertise towards an intranasal insulin product amid growing interest in

alternative insulin delivery techniques that avoid the traditional needle-based approach.

Although nasal drug delivery systems have been around for a while, there have been limitations in the technique due to low delivery payload, poor reproducibility and mucosal irritation.

NanoDerma has developed a drug delivery platform based on microemulsion technology that appears to combat these issues and make it a viable option for insulin delivery for treatment of diabetes.

The system is made up of water, oil, surfactant/s and co-surfactant, and is based on nano-droplets of 10-50nm that form a viscous, semi-solid or homogenous liquid gel in the nostril.

The system can incorporate “almost any lipophilic and hydrophilic compound as well as large molecules,” says the company, and also offers other advantages with no chemical penetration/absorption enhancers, no alcohol and no other irritating constituents.

“The NanoEmulsion technology has been shown to successfully deliver various drugs through the skin at higher rates relative to the existing corresponding products in the market,” said Amnon Sintov, NanoDerma vice president of R&D.

“It offers complete incorporation and solubility of large amounts of almost any drug and biopharmaceutical.”

The non-injected delivery of large molecules such as insulin has been NanoDerma’s main objective over the last year. The company has high hopes for its intranasal insulin formulation, having completed pharmacokinetic and pharmacodynamic studies in rabbits, and results for the new formulation are looking very promising:

“We have finalized bioavailability studies in rabbits (diabetic models), which showed the nasal spray application of NanoEmulsion including insulin resulted in a shorter time to reach peak plasma level of insulin than subcutaneous injection,” Dr Haim Levy, NanoDerma CEO told in-PharmaTechnologist.com.

While the average absolute bioavailability of the intranasal formulation is about 43 per cent of injected insulin, this still compares favourably with Pfizer’s

inhalable formulation, Exubera, which only manages around 10 per cent.

Also, due to the high payload possible with the company’s drug delivery technology, there is no need to apply more than 100 microlitres to achieve the required hypoglycaemic effect, a volume unlikely to cause any irritation in users and therefore aid compliance.

Competitors include Bentley Pharmaceuticals which currently has a recombinant intranasal insulin spray for postprandial hyperglycemia in Phase II trials in the US. Unlike the NanoDerma product it contains a physiological absorption enhancer.

US firm Nastech is also in the process of developing a nasal insulin product for type I diabetes, and in December reported positive results from a Phase I trial when compared with Exubera inhalable powder and injectable insulin.

A new non-invasive blood glucose monitor



The Israeli company OrSense has developed a new non-invasive technology for monitoring blood glucose levels for diabetics. The new

technology will completely eliminate the need to draw blood, an ordeal that millions of people suffering from this incurable disease have undergone several times a day.

Over 200 million people suffer from diabetes worldwide, with as much as 20 million diabetics in the United States alone. Years of research have established a strong link between obesity and diabetics (especially Type 2 diabetes). Diabetes occurs when the body is unable to use insulin, or when insulin is insufficiently produced by the pancreas. Insulin is an essential hormone, without which the body cannot process glucose, a necessary fuel for all tissues. Therefore, if left untreated vital organs will be severely affected by the disease.

There is no known cure for diabetes and patients rely on constant monitoring to maintain acceptable blood glucose levels. Depending on the type and severity of each case, therapy may include diet, exercise and other lifestyle changes, medication, and/or insulin

injections. Insulin-dependent diabetics may need to inject themselves several times daily, with blood glucose testing before and/or after each meal. So far, most tests included actual blood tests, usually performed by pricking a finger and testing the blood using a portable device. OrSense's new technology allows for a non-invasive glucose-level blood testing. According to the company the new method is simple and accurate and may help people suffering from diabetes to live their lives in a more comfortable manner.

OrSense's technology, which is known as Occlusion Spectroscopy, uses a non-invasive optical measurement platform combined with a ring-shaped cuff. The pressure applied by the cuff temporarily occludes the blood flow in the finger, creating new blood dynamics which generate a strong optical signal, yielding a high blood specific signal-to-noise ratio. Analysis of the signal provides the information necessary to measure blood glucose levels, hemoglobin and several other measurements.

No pricing has been announced for the device but OrSense claim it will have the first devices on the market sometime in 2008.

India's Sun Pharmaceutical buys Taro

Taro Pharmaceutical Industries (Nasdaq: TARO), an Israeli generic drugs company known for playing its cards close to its chest, won't be dealing in the public arena any more. It has accepted an offer from Mumbai-listed Sun Pharmaceutical Industries in a transaction valued at \$454 million, including debt assumption.

Sun is paying \$7.75 per Taro share in cash, conferring a premium of 27% over Taro's closing price of \$6.10 per share on May 18, 2007. The equity value of the transaction is therefore \$230 million, the companies said.

The multinational Indian firm, founded in 1994, will also refinance about \$224 million of Taro's net debt, hence the nearly half-billion dollar transaction value.

Taro and Sun also announced that they have entered into a separate definitive agreement for Sun to hand over \$45 million interim equity financing, immediately, by acquiring 7.5 million of Taro's stock. Otherwise Taro would have had trouble meeting bond and interest payments on time.

As said Sun will pay all shareholders, including the Levitt and Moros families who founded Taro, \$7.75 for each ordinary share. But Dr. Barrie Levitt will get nothing for the founders' shares he possesses, which granted him a third of the voting power.

Taro began the process of takeover two months ago, bowing to its protracted losses and liquidity crunch. It solicited offers from more than 20 potential buyers.

Technically, Sun will be establishing an Israeli subsidiary that merges with Taro, subject of course to the approval of Taro's shareholders and of regulators in the countries where Taro operates, mainly Israel and the United States.

Foreign R&D centers employ 35,000 workers in Israel

At least 110 foreign research and development centers, employing over 35,000 workers, are active in Israel, according to the Israel Venture Capital Research Center.

Most of these R&D centers are part of international technology firms that acquired Israeli companies and transformed them into local research facilities. For example, Cisco Inc. has bought at least nine Israeli companies.

Electronics multinationals in Israel include Intel, Applied Materials, Motorola, Freescale, Texas Instruments, IBM, SanDisk, Hewlett Packard, Sanmina-SCI, KLA-Tencor, General Electric, Philips Medical and others.

New Tool Developed by Researchers at Ben-Gurion University Offers a Better Diagnosis for Infectious Diseases

A new tool being developed by BGU scientists has the potential to revolutionize diagnostic and prognostic medicine and save lives.

Phagolum is the name of the simple diagnostic/prognostic system, which offers accurate and comprehensive assessments of patient conditions and can precisely identify the type and severity of infections attacking their body. In addition, it can monitor and assess whether the medical

treatment they receive is effective.

PhagoLum will be able to make information available to hospitals, laboratories and clinics, which today may only be obtained by several different diagnostic tests. It is superior than other technologies because it is simple to use, inexpensive and utilizes existing lab equipment instead of requiring additional purchases.

The system is being developed in the Biosensors Laboratory at the National Institute for Biotechnology at BGU by a multidisciplinary team which includes, Dr. Moni Magrisso, Prof. Robert Marks, and Dr. Avi Reinhartz and two Department of Biotechnology Engineering students, Daria Prilutsky and Avi Ashkenazi, with the help of Soroka Hospital physicians Dr. Ohad Etzion and Boris Rogachev.

The Phagolum system is a functional blood cell- based in vitro assay that utilizes a unique metabolic signature of blood Neutrophils (the first defense cell line to fight intruders) to define clinical pathology, particularly those caused by infection. It can identify the cause of a disease by detecting and distinguishing between types of infectious agents (viral, bacterial, and fungal), as well as the severity of infections and the ability of the patient to recover after treatment more effectively than any other existing system.

The kit is expected to be produced in 2008 following a R&D prototype and clinical evaluation. In its first incarnation, Phagolum will be a diagnosis/prognosis assay system for Acute Inflammation Response, known as sepsis.

Currently, sepsis related healthcare costs are estimated at \$16 billion per year; 18 million cases are tested worldwide and there are 1,400 deaths per year. To save lives, detection needs to be both as early as possible and accurate.

A single Phagolum test will be used for early detection and identification of the cause of the disease, the stage of disease and will allow follow up of treatment efficiency.

The sepsis application is only the beginning. In the future, Phagolum kits will be assessing respiratory

infection and severity, monitoring patients who have undergone organ transplants or cancer treatments, estimating diabetes levels, diagnosing appendicitis and pancreatitis, and measuring the severity of rheumatism.

Prof. Robert Marks is the head of the Nano-Medicine group and an expert on biosensors at the National Institute for Biotechnology in the Negev. He leads a multidisciplinary group that addresses all aspects of biosensor technology, with applications in medicine, security and the environment.

VCs Name top Israeli Startups

Safend, Uniper, G.I. View picked as best venture backed companies.

Three Israeli startups—Safend, Uniper and G.I. View—received first prizes Monday as the best young companies in their respective sectors at the Israel Venture Association's annual meeting in Tel Aviv.

The competition, co-sponsored by Red Herring and the Israel Venture Association, was limited to early stage companies with revenues of up to \$10 million in 2006 supported by venture funds associated with the IVA.



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