Biotech kibbutz

By Lev Osherovich, Senior Writer

Johnson & Johnson and **Takeda Pharmaceutical Co. Ltd.** have established a beachhead in Israel by partnering with the government and **OrbiMed Advisors LLC** to build **FutuRx Ltd.**, a collectively owned biotech incubator. The incubator is part of a global portfolio of partnerships and investments by Johnson & Johnson Innovation, the pharma's early stage collaborations unit.

FutuRx is the result of efforts by Israel's Office of the Chief Scientist (OCS) to commercialize technology that originates in universities by linking Israeli academics and startups with global pharmas.

Since 1991, OCS has launched 20 incubators that have hosted about 180 companies, half of which are in the biomedical sector. Whereas typical Israeli incubators use nondilutive government financing to help fledgling companies attract venture funding, FutuRx is being launched with pharma partners on board from the start.

"There are other medical technology incubators in Israel, but this is the first dedicated biotech incubator where VCs, pharma and government are working together," said Patrick Verheyen, head of J&J's **London Innovation Center**.

Verheyen is J&J's lead representative in the J&J-Takeda-OrbiMed consortium, which was one of several global pharma teams that competed in OCS's call for biotech incubator proposals.

FutuRx was selected as the winner of that competition last August, and detailed plans for the incubator were unveiled last week.

Erez Chimovits, managing director at OrbiMed Israel Partners, which is an affiliate of OrbiMed Advisors, said that FutuRx will provide new companies with infrastructure, management and access to pharma expertise.

"We wanted a vehicle that provides young companies with infrastructure, so the only thing the scientists need to do is science," said Chimovits. "Second, we wanted to derisk early stage investment by collaborating with the Israeli government with nondilutive funding. Third, and most importantly, we wanted to have two pharmas involved from the start so they can make input in the selection process and later on provide support and advice to the startup companies."

OCS will provide about \$1.9 million per company in nondilutive financing. The three industry partners did not disclose how much they are investing.

Consortium members will each have equal equity in FutuRx companies but will not have rights to first negotiation.

Chimovits said that the government of Israel will not take equity positions in the new companies but will be eligible for repayment of its initial investment plus interest via royalty sharing.

Companies will spend no more than 3 years in the incubator, which will operate for 11 years. The plan is for the incubator to house 8–10 companies at a time.

"There are potentially multiple exits for incubated companies," said Graeme Martin, president and CEO of **Takeda Ventures Inc.**, the venture arm of Takeda. "Assets can mature until they are ready to be licensed or partnered by one of the partners, or these entities could raise third-party capital and continue to build value."

Verheyen and Martin said that FutuRx does not have a specific scientific focus but rather aims to launch viable companies irrespective of whether they fit into the pharmas' strategic aims.

"We do not limit ourselves to companies that fall within the fields of interest of Takeda and J&J," said Chimovits.

A joint managing committee with representatives of the three industry stakeholders will decide which companies to fund. Companies will have access to a scientific advisory board composed of representatives from all three industry partners.

Chimovits said that the rationale for bringing pharmas into the incubator at the ground floor was to bring entrepreneurs into contact with industry-style thinking as early as possible.

"One thing we wanted to avoid was small companies doing experiments and then coming to a pharma that says, 'If you do such and such controls, only then will we look at it,'" said Chimovits. "Instead, the pharmas are involved in the experiment design from the start."

The management "will work with the investors and the companies to provide guidance for technical and strategic development," added Aya Jakobovits, venture partner at OrbiMed Advisors LLC and OrbiMed Israel fund.

"We view providing access to our resources as essential," said Martin. "We are much more relaxed about providing access to technology, proprietary models and screening systems than we were five years ago. If we have a portfolio company that needs help, we will provide whatever resources we can to help it advance."

The location of the facility has not yet been finalized, but Verheyen said that it will be based near the **Weizmann Institute of Science** in Rehovot.

"We will be operational in early 2014 and are already looking at business plans to generate our first new companies by the end of the year," he added.

Let the deals flow

FutuRx will help kick-start Takeda's efforts to establish a foothold in Israel and is the company's first foray into the pharma-backed incubator space.

"We don't have any other incubators right now, but we continue to explore opportunities in this space," said Martin. FutuRx was a logical

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Johnson & Johnson**

Table 1. Johnson & Johnson Innovation's deal pipeline. *Source: Johnson & Johnson press release*

J&J site	Partner	Disease area	Project
Boston Innovation Center	The University of Texas MD Anderson Cancer Research Center	Cancer	Translational oncology research alliance for personalized immunotherapy
	Intrexon Corp. (NYSE:XON)	Dermatology	Skin and hair care products
	Scholar Rock LLC	Autoimmune disease; cancer	Transforming growth factor- β 1 (TGFB1) activators
California Innovation Center	Assembly Pharmaceuticals Inc.	Infectious disease	Curative therapies for HBV
	Nodality Inc.	Autoimmune disease	Pharmacogenetics and companion diagnostics for rheumatoid arthritis (RA) and inflammatory bowel disease (IBD)
	SutroVax Inc.	Infectious disease	Joint venture with Sutro Biopharma Inc. to develop a cell-free platform for vaccine synthesis
London Innovation Center	Bioceros B.V.	Cancer	mAb against an undisclosed immune checkpoint regulator to enhance antitumor immunity
	TopiVert Ltd.	Inflammation	Kinase modulators for ophthalmic and GI inflammatory diseases

place to set up shop because “we long recognized that we don’t have enough visibility in Israel, which is a life science cluster that no pharma should be absent from.”

For J&J, FutuRx is the latest in a series of incubators, which are key components of its focus on external regional partnerships to help fuel its early R&D pipeline.

J&J’s innovation access strategy, first announced in 2011, aims to increase early stage deal flow by building a network of incubators and partnering hubs that cultivate connections with academics in research hubs throughout the world.

Last month, J&J Innovation and J&J’s Janssen Inc. unit partnered with two Canadian research hubs—**MaRS Innovation** and the **Neomed Institute**—to establish a Canadian presence.

MaRS Innovation is a technology transfer consortium that aims to commercialize discoveries from 16 Ontario research organizations. MaRS has an ongoing development partnership with **GlaxoSmithKline plc** under a 2011 deal.¹

Neomed is a not-for-profit institution that spun out of a shuttered **AstraZeneca plc** R&D site in Quebec.² J&J joined AstraZeneca and **Pfizer Inc.** as partners in Neomed’s industry consortium to develop assets emerging from Quebec’s academic research centers.

Financial terms of J&J’s deals with MaRS and Neomed were not disclosed.

Since 2012, J&J Innovation has launched a trio of U.S. regional incubators—the flagship Janssen Labs site in San Diego, a facility at

the **University of California, San Francisco**’s Institute for Quantitative Biology and the LabCentral facility in Boston.

J&J Innovation also operates three partnering hubs in Boston, Menlo Park and London. A fourth center in Shanghai is expected to open this year. Last week, J&J Innovation announced details of the three hubs’ translational research deals (*see Table 1, Johnson & Johnson Innovation’s deal pipeline*).

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2. Osherovich, L. *SciBX* 5(48); doi:10.1038/scibx.2012.1249

COMPANIES AND INSTITUTIONS MENTIONED

AstraZeneca plc (LSE:AZN; NYSE:AZN), London, U.K.

FutuRx Ltd., Rehovot, Israel

GlaxoSmithKline plc (LSE:GSK; NYSE:GSK), London, U.K.

Johnson & Johnson (NYSE:JNJ), New Brunswick, N.J.

London Innovation Center, London, U.K.

MaRS Innovation, Toronto, Ontario, Canada

Neomed Institute, Montreal, Quebec, Canada

OrbiMed Advisors LLC, Herzliya, Israel

Pfizer Inc. (NYSE:PFE), New York, N.Y.

Takeda Pharmaceutical Co. Ltd. (Tokyo:4502), Osaka, Japan

Takeda Ventures Inc., Palo Alto, Calif.

University of California, San Francisco, Calif.

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