

INVESTOR NEWSLETTER

Edition 05, November 2017

Hello to Imugene Shareholders, Supporters and Enthusiasts!

Welcome to this very special edition of our company newsletter! In addition to a new look, this update features exciting information on our current and future activities. As always, Imugene has been working dilligently to forward the company on both the science and business fronts.

It seems as though the immunooncology space is all the rage recently! Coverage of efforts in this industry have been numerous both in the media (see the latest issue of The Economist) and in the business world (big deals and big bucks!) We have provided some recent trend reports and data points in this newsletter in this regard.

Meanwhile, we're pleased to include updates on the clinical study around HER-Vaxx, our leading candidate, which is now underway in Asia. Be sure to check out page 3 for a background primer on the technology behind this innovative immunotherapy.

Also coming this November 13, we are greatly looking forward to an event in Sydney in which esteemed members of Imugene's board and leaders in the field will be gathering to present on the state of oncology and immunotherapy. It's not too late to RSVP!

Once again, we would like to take this opportunity to thank you for your enduring support of Imugene's endeavours. We wish you all the best for this coming holiday season.

Warmest regards, Leslie Chong Chief Executive Officer, Imugene

Dosing Commences for HER-Vaxx Phase 1b/2 Study

Imugene is pleased to announce that it has commenced patients dosing for the Phase 1b/2 clinical study of the HER-Vaxx immunotherapy targeting gastric cancer. According to Imugene CEO, Leslie Chong, "The start of this study represents an important development milestone for our business and for medical professionals seeking new ways to treat patients with gastric cancer." Patients are currently being recruited across eight key cancer sites in Southeast Asia.

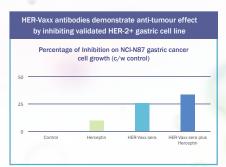
"The start of this study represents an important development milestone for our business..."

- Leslie Chong, CEO, Imugene

Promising Prospects

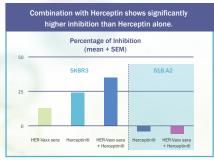
Based on preclinical data that was recently published in BMC Cancer, and a study conducted in collaboration with a US company, Imugene has reason to believe that HER-Vaxx will prove effective in combating HER2+ cancerous cells. HER-Vaxx

is designed to stimulate the body's own natural antibody response against HER2, a growth signal receptor protein that, when "over-expressed" by cancerous cells (as is the case in HER2+ gastric cancers), causes the cancer cells to reproduce at a high rate. Herceptin®, a leading cancer therapy drug that grossed over \$6B in 2016, has met with great success targeting HER2+ cancers although, unlike HER-Vaxx, it involves the synthetic production of antibodies that require repeated injections.



HER-2+ gastric cancer cells*

*Collaboration with US company 2017



HER-2+ breast cancer cells*

*BMC Cancer2017, Wiedermann Feb. 2017

Why Asia?

Asia represents the largest market in the world for gastric cancer treatments. Gastric cancer is the third most common cancer in Asia, and the second most common cause of cancer death after lung cancer. Furthermore, affordable immunotherapy treatments are inaccessible to most cancer patients in Asia, where chemotherapy is currently the standard-of-care. The Phase 1b/2 study is currently recruiting at medical facilities located in Hong Kong, Taiwan and Thailand.

Moving Forward

The Phase 1b lead-in trial, , which is enrolling up to 18 patients, is intended to identify the optimal dosage of HER-Vaxx for the study's Phase 2, and to confirm the drug's safety and immunogenecity. Phase 2 will involve approximately 68 patients and will be an open label study,randomised into two groups: HER-Vaxx plus standard-of-care(chemotherapy) and standard-of-care alone. The endpoints of Phase 2 will be safety, immune response, progression-free survival and overall survival.

Big Deals in Immuno-oncology

The immuno-oncology sector continues to heat up with the recent announcement by Merck & Co that it will be acquiring German biotech Rigontec for €115 million (\$137 million) up front and up to €349 million in future payments. Rigontec, an early-stage company, initiated a Phase I/II study in May of its leading candidate, RGT100, which targets the retinoic acid-inducible gene I (RIG-I) pathway in order to induce both immediate and long-term anti-tumour immunity.

"Rigontec's immuno-oncology approach of engaging the innate immune system to safely eliminate cancer cells complements our strategy and our current pipeline," Eric Rubin, M.D., VP of early-stage development, clinical oncology, Merck Research Laboratories, said in a statement.

The deal is the latest in the growing trend of global pharmaceutical companies looking to bolster their immuno-oncology pipelines through acquisitions and licensing deals involving smaller biotech companies, particularly those who have technologies in preclinical development stages. Incyte recently announced that it will be paying \$150 million upfront for worldwide rights to MacroGenics' PD-1 drug. The deal, which includes \$750 million in milestones, is Incyte's second attempt to land a PD-1 program to pair with its pipeline of oncology prospects. In August, Bristol-Myers Squibb announced that it would be purchasing startup biotech IFM Therapeutics, including full rights to IFM's two leading preclinical

agonist programs, for up to \$2.3 billion. Several pharmaceutical giants, such as Pfizer, Amgen and AstraZeneca, have made similar partnership plays with companies that boast promising technologies.

The numbers confirm that cancer-targeting immunotherapies are attracting lots of attention from Big Pharma. Of the ten biggest pharmaceutical deals of 2015, 20% were in the antibody space, to the tune of \$3.4 billion dollars. According to a recent report from Informa UK Ltd, oncology partnerships represented 26% of the total global pharmaceutical deal volume in H2 2016 and H1 2017, up from 22% from their previous analysis.

Here at Imugene, we like those numbers! Keep your eyes on this space.

Top 10 2015 licensing deals by announced total size

		Licensee	Licensor	Total Size (US \$M)	Upfront (US \$M)
	1	Sanofi	Hanmi	\$4,266	\$445
	2	AstraZeneca	Ionis	\$4,090	\$65
	3	Vertex	CRISPR	\$2625	\$75
	4	Gilead	Galapagos	\$2075	\$300
	5	Pfizer	Heptares	\$1890	Undisclosed
	6	BMS	FivePrime	\$1,740	\$350
	7	Sanofi	Lexicon	\$1,730	\$300
	8	Amgen	Xencor	\$1,702	\$45
	9	Sanofi	Regeneron	\$1,665	\$640
	10	Ultragenyx	Arcturus	\$1,570	\$10

Immuno-oncological antibody development programs = US\$3.4B



Global Data, a well-regarded analytics firm that focuses on major industries, has published a report contending that immuno-oncology is on the road to becoming the fifth pillar among the standard cancer treatments, which are surgery, radiotherapy, chemotherapy, and other targeted therapies.

The report titled "Pharma Focus Visual Analysis of Immuno-Oncology Development and Opportunities," analyzed over 4,000 clinical trials of immuno-oncology compounds, many of which involved the targeting of checkpoint inhibitors.

Checkpoint molecules, such as PD-(L)1 and CTLA-4, help cancer cells to "hide" from the body's immune system. Immunotherapies work to trigger the body's immune response against tumours by blocking the errant signals given off by these molecules.

According to Global Data's report, immunotherapy drugs have not only improved survival rates in comparison or in conjunction with standard therapies, but they've done so with a strong safety profile.

"The future of IO looks brighter than ever," said Maxime Bourgognon, senior healthcare analyst at Global Data, "IO drugs are now in a position to compete as monotherapies against traditional SOC [standard-of-care] chemotherapy regimens in the first line of the metastatic setting."



Pioneering new technologies in immuno-oncology at IMUGENE

The idea of boosting the body's immune system in order

to fight cancer cells isn't a new one. In fact, as far back as the late 1800's, scientists were finding evidence that when a cancer patient's immune system was stronger, they simply lived longer.

However, it wasn't until 2010 that the first immunotherapy drug, Provenge (developed by Dendreon and later purchased by Valeant Pharmaceuticals in 2015) was approved for use in treating prostate cancer. The vast majority of immunotherapies developed and launched since 2010 are a class of drug called monoclonal antibodies.

The numbers speak for themselves: the current monoclonal antibody market as of 2016 is roughly US\$60 billion. These drugs are working, but could they work even better? Monoclonal antibodies must be manufactured synthetically, in a facility rather than naturally inside of the body, and multiple treatments are required.

Enter Imugene.

Imugene's lead product in development, HER-Vaxx, is a B-cell vaccine. B-cell vaccines offer a unique opportunity to intervene at multiple points in the immune system and create immune memory which enhances the durability of response. The vaccine stimulates the immune system to produce natural antibodies, potentially safer without the common side-effects of synthetically manufactured monoclonals (such as Herceptin®). The Phase 1 clinical trial for HER-Vaxx, led by Imugene's Chief Scientific Officer, Prof. Dr. Ursula Wiedermann, was completed at the Medical University of Vienna, and the trial yielded promising results.

See page 5 for more information on Dr. Wiedermann and her partner lead in B-cell technology development, Dr. Christoph Zielinski.

in 2016 = US\$60 billion

\$6.7 billion\$1.8 billion

> \$7.3 billion

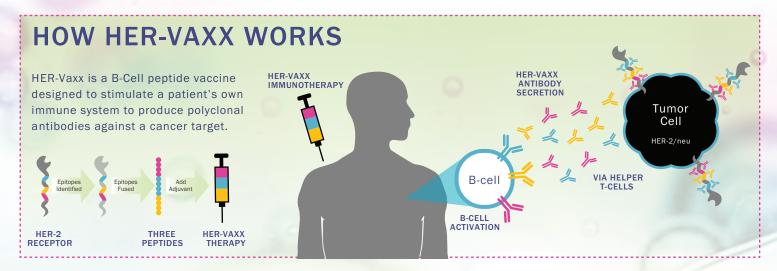
> \$1.0 billion

> \$3.7 billion

> \$1.4 billion

Safety, Efficacy, Durability, Usability, Cost.

Unlike Herceptin®, and for that matter other T-cell derived cancer vaccines, HER-Vaxx stimulates the body's own natural immune response against tumours. The antibodies are continuously produced generating a lasting immune response that may inhibit tumour recurrence. Furthermore, it doesn't involve multiple treatments, which makes for a safer, less invasive, and far less costly treatment. For cancer patients in Asia, where the HER-Vaxx Phase 1b/2 gastric cancer study is currently underway and where immunotherapies such as Herceptin are often too scarce and too expensive for patients to access, this could prove to be very welcome news.



IMUGENE in the media

"'Imugene is active in the new area of cancer immunology,' says Platinum Asset Management's Bianca Ogden. "We look at the area in the same way as Axel Hoos, who is on the [Imugene] board. It is a new way of approaching cancer. We have several of these plays in our portfolio.'"

The Sydney Morning Herald
"Breakthrough for Local Biotech as
an Influential Backer Emerges"
5 March 2017

"'[Life sciences businesses of tomorrow] will be constantly looking for new cultural ways to evolve in the "dinosaur" industry which is pharmaceuticals. In fact, that's happening now.'"

Leslie Chong quoted by
The Australian Financial Review
"Innovating the Businesses of Tomorrow"
7 April 2017

"Professor Thomas Yau Chung-cheung, an oncologist at the Queen Mary Hospital in Hong Kong assisting with IMU's HER-Vaxx trials, is highly optimistic. Yesterday, he was quoted saying immunotherapy 'is likely to replace chemo gradually and become the cornerstone of treating tumours.'"

Finfeed.com

"Immuno-oncology: A New Horizon in the Fight Against Cancer 3 October 2017



DATE: November 13, 2017

TIME: 3:00 pm
LOCATION:
Primus Hotel,
339 Pitt Street in Sydney
Meeting Room 3
(on the mezzanine level,

2nd floor)

Reception to follow at 4:00pm just outside conference Meeting Room 3 on the mezzanine. Imugene is honoured to invite you to a presentation on the immuno-oncology landscape by globally renowned clinicians, oncologists and the Senior VP of Oncology from a world leading pharmaceutical company.

RSVP by November 6 to ensure available seats

To RSVP and/or for further information, contact:
Leslie Chong
+61 (0) 458 040 433
Leslie.Chong@Imugene.com

FEATURED PRESENTERS

Axel Hoos, MD, PhD presents "THE STATE OF PLAY OF IMMUNO-ONCOLOGY"

Dr. Hoos is the Senior Vice President,
Therapeutic Area (TA) Head for Oncology
Research & Development and Head of
Immuno-Oncology at GlaxoSmithKline
Pharmaceutical, Non-Executive Director
of Imugene, former Clinical Lead on
Ipilimumab (Yervoy) at Bristol-Myer Squibb
and Co-Director of the think tank Cancer
Immunotherapy Consortium.

Prof. Dr. Christoph Zielinski presents "IMMUNO-ONCOLOGY: TRENDS AND DEVELOPMENTS ON THE HORIZON"

Univ. Prof. Dr. Christoph Zielinski is the Chairman of the Comprehensive Cancer Centre in Vienna and Chairman of the Centre for Eastern European Organisation for Research and the Treatment of Cancer (CEEORTC) and Editor in Chief and President nominee for European Society of Medical Oncology (ESMO) with over 20,000 members across 130 countries. Dr. Zielinski is the chairman of Imugene's Scientific Advisory

Prof. Dr. Ursula Wiedermann presents "THE FUTURE OF VACCINES AGAINST CANCER"

Univ. Prof. Dr. Wiedermann is Imugene's Chief Scientific Officer, Co-inventor of HER-Vaxx, Co-inventor of the Mimotope platform, Professor of Vaccinology at the Medical University of Vienna.

The presentation will be followed by a panel Q&A session with Imugene's internationally acclaimed scientific, medical and executive oncology team.

Live video feed available at facebook.com/Imugene | Archived video available at Imugene.com

IMUGENE'S CARACTE B-CELL TEAM

When it comes to the exploration and development of B-cell technologies, Imugene is bringing the best of the best to the table. Professor Dr. Ursula Wiedermann, a leader in the field of immunology and Professor Dr. Christoph Zielinski, a leader in the field of oncology, have teamed up to advance HER-Vaxx, the B-cell vaccine which is Imugene's leading immunotherapy candidate. Professors Zielinski and Wiedermann are both esteemed members of Imugene's Scientific Advisory Board and Dr. Wiedermann serves as Imugene's Chief Scientific Officer. "We are extremely pleased that two scientists of such substantial international calibre, Professors Zielinski and Wiedermann, have joined the Imugene Scientific Advisory Board," says Dr. Nick Ede, Imugene's Chief Technology Officer.

PROFILE:

Prof. Dr. Ursula Wiedermann



Professor Ursula
Wiedermann is
Professor of
Vaccinology and
Head of the Institute
of Specific Prophylaxis
and Tropical Medicine
of the Medical
University Vienna.
She is also currently
Visiting Professor at

the University of Gothenburg, Sweden. She has authored more than 100 peer-reviewed publications and is a frequent presenter at national and international conferences.

Professor Wiedermann was the Principal Investigator for the preclinical development of HER-Vaxx. She performed the Phase I clinical trial of HER- Vaxx in metastatic breast cancer patients along with Dr. Zielinski's team in Vienna. In addition, she has led the design of the Phase II study for gastric cancer which commenced recently.

Professor Wiedermann studied Medicine in Vienna,
Austria. She earned her PhD from the Institute of Clinical
Immunology at the University of Gothenburg in Sweden,
focusing her research on mucosal immunity and
vaccination. Eventually, she enlarged her research areas
to include vaccine development against infectious
diseases and tumours, focusing on clinical vaccine trials.

She is a member of the Supreme Board of Health and the Chairman of the National Committee of Immunization Practice of the Austrian Ministry of Health. She's also been the Speaker of the Centre for Geographic Medicine at the Medical University Vienna since 2009.

PROFILE:

Prof. Dr. Christoph Zielinski



Professor Zielinski is the director of the Clinical Division of Oncology and Chairman of the Department of Medicine at Medical University of Vienna. He also serves as Coordinator of the Comprehensive

Cancer Centre at Medical University of Vienna (www.ccc.ac.at) and the General Hospital in Vienna and is President of the Central European Cooperative Oncology Group (CECOG, www.cecog.org). Professor Zielinski completed his medical training at the University Hospital Vienna and began his career with a position as a research fellow at the Cancer Research Center at Tufts University, Boston. His recent clinical research activities cover a wide range of cancer therapies, with particular focus on clinical trials, breast cancer research and treatment and development of targeted drugs.

Professor Zielinski is a member of the American Society of Clinical Oncology (ASCO), the American Association for Cancer Research (AACR) and the European Society for Medical Oncology (ESMO). Additionally, he serves on a series of committees of the European Society of Medical Oncology (ESMO) and is the current President nominee of ESMO.

He has published more than 420 original research papers and reviews in peer-reviewed journals.

IMUGENE LEADERSHIP



Ms. Leslie Chong

Chief Executive Officer leslie.chong@imugene.com

Mr. Paul Hopper

Executive Chairman paulhopper@lifescienceportfolio.com

Dr. Axel Hoos

Non-Executive Director

Mr. Charlie Walker

Non-Executive Director

Prof. Ursula Wiedermann

Chief Scientific Officer

Dr. Nick Ede

Chief Technology Officer

We invite you to the Imugene Annual General Meeting

Date: Tuesday 14 November 2017

Time: 9:45 am (AEDT)

Registration from 9:30 am

Place: Seagrass Room

Grant Thornton Australia

Level 17

383 Kent Street, Sydney NSW 2000

IMUGENE FINANCIALS

Market Cap (26/Oct/17) \$52M AUD / 39.9 USD

12 month price range 0.8 cents - 2.2 cents AUD

Avg daily volume
2.7M shares
(July-September 2017)

Investment to Date
~\$15.2 m (public)
~\$ 5.5 m (VC)

Cash & Equivalents \$5.3M (as of September 2017)

IMUGENE

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