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The Future of Healthcare Innovation in Asia-Pacific

At the launch of L.E.K. Consulting's APAC Life Sciences Centre of Excellence, Stephanie Newey, Partner, who co-leads L.E.K.'s Life Sciences and Healthcare practice in Australia, moderated a panel discussion on the future of healthcare innovation in the APAC region.

Panellists shared their perspectives and challenged the audience to think differently about how we find, cultivate and deliver innovation in APAC healthcare. Following are excerpts. Special thanks to our panel members:

- Gordon Cameron, Vice President and Area Head, Asia Pacific, Takeda Pharmaceuticals
- Carl Firth, Founder and CEO, ASLAN Pharmaceuticals
- Dorthe Mikkelsen, President Asia Pacific, MSD
- Julien de Salaberry, CEO and Co-founder, Galen Growth Asia

To kick things off, how do you view APAC and the significance of APAC? Where do you see the real opportunities?

Gordon Cameron: "We see Asia Pacific as hugely important for the future. There is a vast number of the world's population based here, as well as a steady rise in the healthcare burden and the growing need to support that. What we see is that there is a great opportunity in Asia to bring in innovation, and that is the differentiator, and we have taken steps to be at the forefront of this, such as with the development of our vaccines laboratory in Singapore. We are also increasingly bringing innovation to Asia

from overseas, and we can do that very quickly. We are able to get our products registered, diagnose patients in Asia and get the products to patients quickly."

It is interesting when we talk about APAC countries as a whole. What gives it the merit to be called a region other than geography? Are there other commonalities?

Julien de Salaberry: "Other than geography, there's little else. APAC is certainly a region of countries that are disparate in culture, regulations and approach to healthcare investments, as well as approach to innovation. What we are starting to see, though, is that there is more cross-border innovation — it was fascinating to watch Ping An Good Doctor build a relationship with Grab to start consolidating their position in Southeast Asia. Now, Grab is building a partnership with MasterCard for prepaid cards to enable the underserved part of the income pyramid to start accessing services. It is interesting to see the region starting to innovate for itself and building the right partnerships to do so."

Dorthe Mikkelsen: "Let us not overlook that healthcare can be a unifying force. It can bring countries together, because there is a shared cause to improve healthcare across the region. There can be collaboration in this region, such as in the regulatory area. There are diseases that spread across countries, and countries can and should work together to develop new pharmaceuticals and vaccines that can help prevent the spread of diseases, as diseases do not necessarily respect borders."

In what way is APAC delivering innovation for the world, and where is it taking the lead?

Carl Firth: "I think the innovation is going to come from local industries and local companies. If you look at what is going on in



key innovation centres, countries like South Korea and China, it is coming from the local innovators.

When we look at what innovation we, as an industry, are doing in Asia today, I would say from a multinational corporation perspective, and I hope our panellists will disagree, not very much. I think we have to go back to why MNCs came to APAC in the first place. They did not come here for the universities or the clinical trials. They came here as there was a commercial market. They made local investments, as that was also about market access and getting commercial advantages. Companies came as countries offered incentives, and every country, to a certain extent, has to provide incentives for companies to come, but when the incentives run out, companies may leave.

However, beyond incentives, we have to accept and figure out what specific advantage a country offers. We [ASLAN Pharmaceuticals] came to Singapore because it had some of the leading translational medicine centres, and that was a great reason for us to come here. We also came here because we focused on prevalent diseases in Asia, and Singapore is a great centre with some of the world's best experts in diseases like gastric cancer. When we do think about what biotech or multinationals should be doing in Singapore, we must really try to find the edges where Singapore excels, and that is where we should be focusing."

Gordon Cameron: "I think innovation for the industry has always been focused on inventing something in-house, developing it, investing in it and then conducting phase I/II/III trials before launching it. I do not think that model is viable. Innovation for us [Takeda] is working more with local organisations, and we now have over 150 external partnerships that we interact courteously and respectfully with, from digital organisations to universities to smaller biotech companies. To me, the innovation is local, and it is here. What we have failed to do is properly tap into it. We need to think about R&D not just in the classic way; it is more about partnerships to bring people together."

Julien de Salaberry: "In the past four years, we have seen phenomenal growth and innovation in APAC. APAC entrepreneurs are taking ownership of their own healthcare ecosystems in developing solutions for them. This is showcased by the funding activity. The year 2017 saw US\$3 billion of venture capital funding deployed in health tech. We have already surpassed that in H1 2018 and are at the US\$5 billion mark in Q3. The forecast for 2018 was US\$5 billion, but we now expect the year to close at US\$6 billion. Therefore, 2018's funding will double that of 2017's and quadruple that of 2014's. So there is a lot of innovation in the space in Asia by Asian entrepreneurs. Now we are starting to see a huge appetite from both industry, as in big pharma, and investors for that level of innovation."

Where are you seeing the hotspots of innovation around unmet needs? Where is the innovation going and being directed towards?

Julien de Salaberry: "Earlier on, in 2013 and 2014, we saw many B2C models around how to find a doctor, how to rate a doctor, etc. Now, we see funding go more into areas of research, such as drug discovery, leveraging artificial intelligence in genomics and clinical trial management. We see huge investments in the space of real-world evidence, but the more specific question is how we could start coalescing the various sources of real-world evidence to start generating interesting insights — China is a major force in this space. We have also seen many investments in the area of diagnosis, more specifically known as diagnosis support. This ranges from AI to CT scans [to] triage and helping patients take ownership of their own health through early-stage diagnosis."

Health tech is one vector of innovation. What are the other vectors of innovation that we are seeing?

Carl Firth: "When we look at Asia, we start thinking about what makes Asia different. One of the obvious things that we noticed is the difference in diseases that you find. I think some of the most exciting innovative developments are really occurring in that space. At ASLAN, we work on diseases that are more prevalent in Asia, such as biliary tract cancer, with 12,000 patients every year in the U.S. but over 200,000 in Asia. Gastric cancer has 30,000 patients in the U.S. but over a million in Asia

Now we are starting to learn more about these different patterns, and also through initiatives such as precision medicine. For example, there are certain technological initiatives ongoing in Singapore and China — Singapore announced an initiative to sequence and collate data on a million Singapore citizens, and China has done the same for about 100,000 people. The U.S. also has a parallel model, but it is through these technological initiatives that we are really going to understand what is different about the Asian phenotype today. You go into a genomics data bank and it will tell you what a typical 50-year-old Caucasian man is suffering from and some of his risk factors, but we know very little about the Asian phenotype. So I think for us that is one of the most exciting technological areas, which is going to unleash a completely new area in the future."

If APAC is to become a globally dominant region, what are some of the challenges that we have to overcome?

Julien de Salaberry: "On digital and health tech, there are three headwinds. The first one would be funding; we are certainly seeing a substantial change in that, as I demonstrated in the numbers earlier, but it is still insufficient. It is still leaving a lot of early-stage innovation starving of the necessary cash to grow. The second one will be the regulations for this space. Now, that is changing as well. The Singapore regulator now has a regulatory

sandbox. We are starting to see some experimenting going on safely around two or three areas of digital innovation. In addition, the Chinese government released its guidelines last April, which are substantial, and they are looking for industry feedback. The third significant headwind is around the adoption of innovation by healthcare professionals."

Dorthe Mikkelsen: "One additional area we cannot overlook is intellectual property rights. That is the required nutrition for any innovation when you have such a long development cycle, as we often see in the area of healthcare. For example, intellectual property rights in other areas, such as song writing are 70 years of copyright from when the creator dies. For furniture design, many countries have rights for 30 years from when the designer dies. In contrast, we only have 20 years of IP protection for innovative medicines that will help save millions of lives. Therefore, we have to keep those 20 years as an incentive for innovation in this area and investments for many years."

Gordon Cameron: "The biggest frustration for us is the inability of the huge APAC population of 3 billion people to obtain safe and quick diagnoses. It is not enough to come up with schemes where patients get access to medicines or can improve their quality of life, when patients are not obtaining a diagnosis in the

first place. They do not know what they are dying of, and they may be very sick when they actually get to the medicine. What we can do is work with other organisations that have an interest in helping patients obtain diagnoses. The partners could be patient groups, other medical device companies, all types of different interest groups. Improving diagnosis rates is the key, and we recognise you have to work with partners to make it happen."

Carl Firth: "In precision medicine, as we develop therapeutics for specific and small subsets of patients, the challenge is to find a relevant and commercially viable model to bring the drugs to these patients. For a rare disease in Asia, no one would be able to afford what the latest CAR-T therapy would cost you if it were priced at US\$1 million. We are struggling to figure out a model in the U.S. and Europe, and APAC is even further behind. We need to come up with new commercial, manufacturing and delivery models. We also need new R&D clinical development and regulatory models to get the appropriate drugs to patients as soon as possible after relevant studies. We have to bring these drugs to the market, deliver them to patients, educate doctors and get access to the market in a way that allows us to lower the prices dramatically, so patients are able to obtain the drugs."

Moderator



Stephanie Newey is a Partner at L.E.K. Consulting and co-lead of Australia's Life Sciences & Healthcare practice. She has more than 17 years of experience in strategy and consulting, with experience across biopharmaceuticals, life sciences, med tech and healthcare services. Stephanie's expertise is in working closely with organisations to design and deliver transformational growth strategies and performance improvement outcomes. Stephanie's insights into biopharmaceuticals and healthcare are supported by experience working in a multinational pharmaceutical company.

Panellists



Gordon Cameron joined Takeda in 2009 and has been Vice President and Area Head, Asia Pacific since January 2015, covering Australia, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan, Thailand and Vietnam. Prior to his current role, Gordon held the positions of Head of Pipeline Opportunities and Launch, as well as Head of South Asia at Takeda. Gordon has a wealth of experience across Asia Pacific and a deep understanding of the intricacies of the healthcare industry, having held various posts across the region, including a number of years at Quintiles and as the company's Vice President of Global Operations.



Dr. Carl Firth is Founder and Chief Executive Officer of ASLAN Pharmaceuticals. Dr. Firth founded ASLAN in 2010, which became the first Singaporean publicly listed biotech and is currently trading on Nasdaq and the Taipei Exchange. Prior to ASLAN, Carl was Head of Asia Healthcare at Bank of America Merrill Lynch and has worked for AstraZeneca for 10 years in various roles. Carl is a member of Singapore's Health and Biomedical Sciences International Advisory Council. He is also an Independent Director of Singapore's Exploit Technologies and is an Adjunct Professor at Duke-NUS Medical School.



Dorthe Mikkelsen is MSD's President for Asia Pacific, Senior Vice President and a member of the MSD International Leadership Team. She is an executive ambassador for MSD for Mothers, MSD's 10-year, \$500 million initiative that focuses on improving maternal health. Dorthe began her career at Novo Nordisk and joined MSD in Denmark in 1997. She has served as Senior Vice President for MSD's Mid-Europe region and for MSD's Global Diversified Brands. From 2010 to 2016, she served as Chairman of the Board of The Danish Industry Association of the Pharmaceutical Industry and as a member of the Board of the American Chamber of Commerce (AmCham) in Denmark. Dorthe is also a member of the board of directors of Falck, the world's largest international ambulance company.



Julien de Salaberry is the CEO and co-founder of Galen Growth Asia, whose mission it is to build a sustainable and vibrant HealthTech ecosystem across Asia by scaling digital health innovation through industry partnerships. Julien is a healthcare change catalyst and evangelist who has 20 years of experience with leading global pharmaceutical and medical device companies across Europe, the Middle East and Asia. Julien also founded The Propell Group, a boutique venture investor and advisory firm, in 2012, and co-founded the Global Cancer Research & Commercialisation Fund in 2016.

About the L.E.K. Life Sciences Centre of Excellence

The APAC Life Sciences Centre of Excellence is an initiative developed by L.E.K. and supported by Singapore's Economic Development Board to drive thought leadership and innovation to elevate the APAC life sciences ecosystem. It will leverage both L.E.K.'s expertise in life sciences and Singapore's strong research ecosystem for the co-development of intellectual property and knowledge. For more information, visit: www.lek.com/apaccoe.

About L.E.K. Consulting

L.E.K. Consulting is a global management consulting firm that uses deep industry expertise and rigorous analysis to help business leaders achieve practical results with real impact. We are uncompromising in our approach to helping clients consistently make better decisions, deliver improved business performance and create greater shareholder returns. The firm advises and supports global companies that are leaders in their industries — including the largest private and public sector organizations, private equity firms and emerging entrepreneurial businesses. Founded in 1983, L.E.K. employs more than 1,400 professionals across the Americas, Asia-Pacific and Europe. For more information, go to www.lek.com.

