

Heads of Terms



Invention and re-invention

In business standing still is not an option. The pharmaceutical industry ability to survive is dependent on innovation both in the laboratory and in the boardroom. As innovation ploughs forward in an uneven and sometimes unpredictable path, agility is the name of the game. The large pharma companies have moved away from relying on innovation coming from their own labs, but rather from the labs of others. The art of collaborating and licensing of intellectual property is the real way to capitalise on science and to capture it as your own. But lots of good patents are not exploited due to negligence either at a strategic level or just simply due to lack of funding. Finding those lost innovations and trying to re-exploit them is difficult if they have expired or they become 'know-how'. Over the years we have had companies coming to us with just few years of patent life left in their key assets keen to find ways to extend their patents or develop new claims to protect their assets. Licensing-in affiliated patent rights is one way to build a defensive position or simply merging with a company that similar patents can truly make 1+1=3.

The task of re-invention also applies to the strategic direction of the company, re-inventing one's self is just as important as re-inventing patents. Mergers and acquisitions are a powerful way to re-invent a strategic direction. In my experience successful pharma and biotech companies are those who have the agility to re-invent just as much as to invent.

Dr Fintan Walton
Chief Executive,
PharmaVentures Ltd.

Industry Insight

Dancing with the Dragon

Cross-border Transactions between China and the World



Shelly Wang
Associate



Eric Liu
Associate

- ▶ There is strong appetite for cross-border transactions between China and the rest of the world.
- ▶ Improved overall market environment will encourage attractive deal terms and future market potential.
- ▶ Selecting the right partner and effective communication are key for a successful long-term relationship.

Overall Market Landscape

China, with its unrivalled depth of capital resources and ranking as the second largest pharmaceutical market in the world, is a frequently visited topic in the deal space. As the regulatory and market access environment continue to evolve and harmonise with Western markets, the level of interest for cross-border transactions has greatly increased. On 31st October 2019, we saw Amgen (NASDAQ:AMGN) pumping USD 2.7 billion dollars into BeiGene (NASDAQ:BGNE) for a 20.5% stake. Under the agreement, BeiGene will commercialize Xgeva, Kyprolis and Blincyto in China as well as collaborating on 20 of Amgen's pipeline drugs. Apart from the headline generating terms, it was most interesting that Amgen's CFO said that he foresees Asia contributing to 25% of new drug revenues in 5 – 10 years, highlighting the fast growth and the potential lucrative returns from commercialising in this region.

Despite the tremendous market potential and potential synergies in development and commercialisation, landing a deal with a Chinese partner is no walk in the park. With decades of experience in pharma and cross-border transactions, PharmaVentures has insights into best practices and comparable deal terms to help you navigate this complex environment.

Key Points to Consider in China Deals

- 1 Understand the value of the asset you are bringing to the partnership in the context of China: this includes background research into the underlying local epidemiology, treatment paradigms and unmet needs. Speaking to leading KOLs to understand actual clinical practice, market needs and gaining stakeholder endorsement are important.
- 2 Select the right partner that fits with your asset both technically and commercially and maintain a strong relationship throughout the partnership to maximise the chances of success. Be patient, respectful and collaborative. Face-to-face meetings are always well appreciated.
- 3 Understand how processes work in China. They are different from the West and interpretation of actions through a Western lens can lead to misunderstandings and misaligned expectations. Appreciating the differences in corporate governance structures and negotiation approaches are key for successful partnership.
- 4 Get WeChat on your phone! Communication is absolutely key and WeChat is the essential tool for communication with Chinese partners.

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Deal Environment and Comparables

Each deal is unique. Details are extremely important and careful analysis should be carried out to fully understand the context (see PharmaVentures White Paper: How to Interpret and Negotiate Deal Terms for a Life Science Licensing Agreement). We have summarised some of the key trends for China deals from the last few years below.

Deal Volume

As seen in the graphs below, the number of deals is increasing steadily, both with the Chinese party as the partner (in-licensing) as well as the principal (out-licensing). Chinese companies increasingly also want to establish a presence in Western markets themselves and it is not uncommon to see R&D centres in Boston or San Francisco for leading Chinese firms. An increasing number of cross-border transactions are favouring licensing as form of partnership, particularly as licensing is not under the purview of the Committee on Foreign Investment in the United States (CFIUS).

As China's commercial landscape improves, seeking avenues to explore the China market is something that many companies will now strategically consider. Since having a local partner is often best to extract the full value of assets, we expect licensing partnerships to continue to grow in the coming years. Sentiment certainly reflects this when we speak with local industry leaders, where appetites for assets and deal-making remain high.

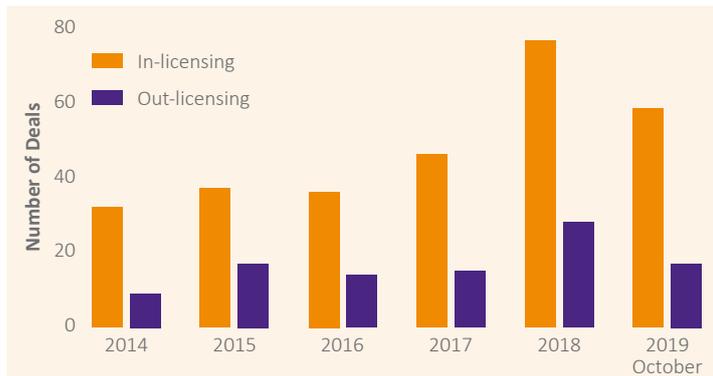


Figure 1
Cross-Border Licensing Transactions

Development Stage of Deals

53% of deals occur when the asset is in Phase 2 or later in in-licensing scenarios. Unsurprisingly, the proportion in each development stage has not changed much over time, despite China having a reputation for favouring late-stage assets. On the out-licensing side, as China's biotech innovation space is still developing, much of the licensing deals understandably happen at an earlier stage of development.

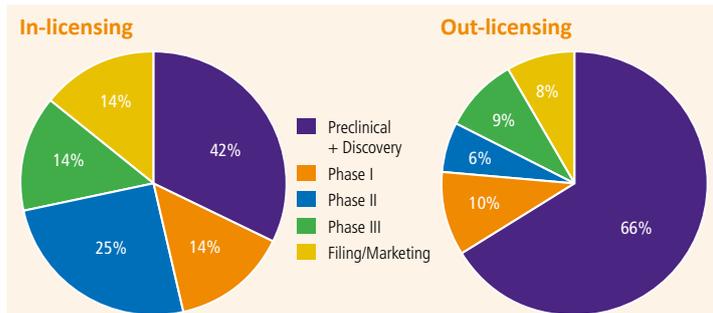


Figure 2
Development Stage

Contrasting with the development stage of global deals, over 55% of licensing deals since 2014 happened at the preclinical/discovery stage globally, whereas 23% happened in the Phase I/II stage and 22% happened in Phase III and beyond. This to a degree provides evidence that China favours late-stage deals for in-licensing. When we speak with local industry players, many indicate that they are willing to engage on preclinical assets for oncology indications but still favour assets with proof-of-concept (POC) data for other indications.

Deal Size

The financial terms of deals involving Chinese companies are beginning to mirror the deal terms given by small-medium size partners in the West, with single digit USD million upfront and large double-digit USD millions as median total deal terms. This generalisation is only useful to an extent as the specifics of the deal are critically important in evaluating financial returns from deals. Royalties, obligations of the parties as well as many other factors would come into play and we always recommend an in-depth analysis. The bar charts below give the upper quartile, median and lower quartile ranges of the respective category. It should be highlighted these are not risk-adjusted nor discounted from a net present value perspective. Pre-POC includes all discovery, preclinical and Phase I assets whereas Post-POC includes Phase II assets and beyond.

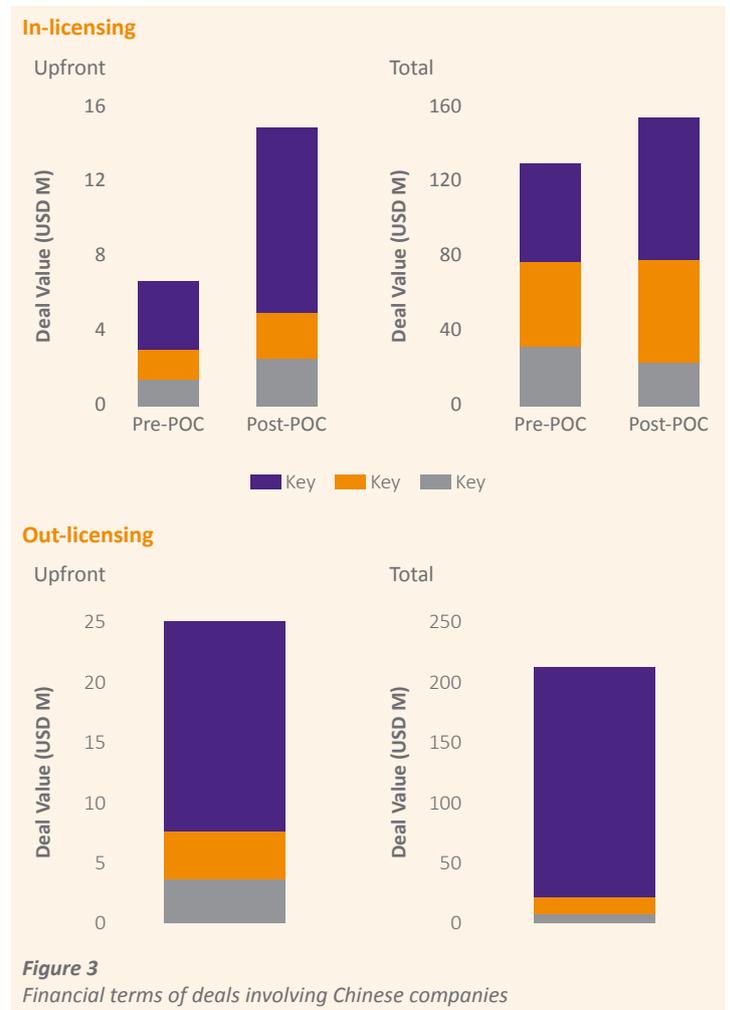


Figure 3
Financial terms of deals involving Chinese companies

People often look at average deal values as seen in the graphs above, but the spread of the values is really quite large and thus relying on median deal values to understand the market may not give full enough picture. Compare these numbers to deals executed across the world, the spread is even greater, and generalisation would be quite challenging. For illustrative purposes, the median upfront are USD 11.3 million and USD 15 million for pre-POC and

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post-POC assets, respectively. The median total deal values are USD 179 million and USD 120 million for pre-POC and post-POC respectively for over 4,500 licensing deals since 2014.

As we noted previously, royalty rates make a significant contribution to the total deal value and we see royalty rates of 10 – 20% for cross-border licensing deals with China. However, the number of deals with royalty rates published is very small and different deal components need to be considered holistically to satisfy the overall considerations and cash flow capabilities of the respective parties. Evaluating market potentials and thus royalty returns by balancing drug pricing differentials versus volume in China is something to be assessed carefully as many of the innovative drugs remain out-of-pocket expenses for patients. China updated the National Reimbursement Drug List with 70 new medicines on 28th November 2019, but it can take considerable time for a drug to benefit from public funding.

Therapy Area

An estimated 4.3 million new cancer cases and 2.9 million cancer deaths occurred in China in 2018. Predictably, cancer is the biggest therapy area in cross-border transactions, but we do see deals across all therapeutic spaces. Many Chinese companies are moving rapidly into new therapeutic areas and new technology spaces such as biologics and cell therapies. Relying purely on Western-style desk research may not reveal your ideal partner and it is always better to speak with people who have local networks and understand the market dynamics.

When thinking about different therapeutic areas, it is vital to examine the underlying unmet medical needs thoroughly, particularly in subgroups. One of the best examples is EGFR mutations in NSCLC where mutation rates in Asia are 3 – 4 x higher than North America. PharmaVentures engages regularly with top key opinion leaders as part of our transaction processes to fully appreciate local treatment paradigms, the potential positioning, and the value proposition. One area that deserves a special mention is rare diseases. China published the first Rare Diseases Catalogue in 2018, which officially recognised 121 rare diseases and created tremendous incentives for assets that target these diseases. This presents significant partnership opportunities for Western companies with assets in these categories. In on a recent trip to China, we discovered the government is working on version 2 of the Rare Disease Catalogue and aiming for publication in 2020.

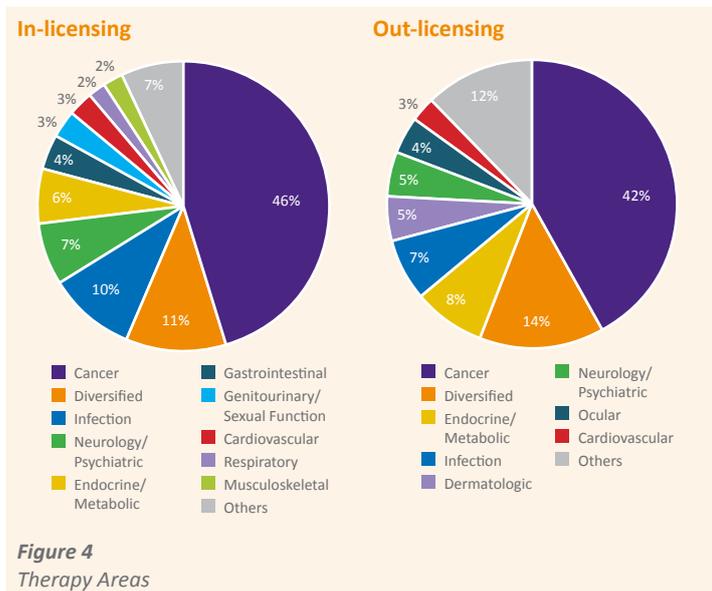


Figure 4
Therapy Areas

When comparing the therapeutic focus of deals with China and deals across the world, we see cancer contributes a lower percentage (around 29%) for deals across the world. All other therapeutic categories contribute between 1 – 5% of all deals, indicating a more even spread in therapeutic areas of licensing deals globally since 2014.

PharmaVentures is here to help

Deal making remains the life blood of the pharma/biotech industry and the China market is a welcome infusion of new possibilities. Successful licensing transactions are best served by selecting the right partner and forming a long-term relationship that allows both sides to achieve their strategic goals. As China continues to become a more attractive market, both for R&D collaboration and market access, it is a territory that should form part of a company’s overall global strategic development plan. In this article, we have given you a flavour of the deal environment in China. Context is everything and advance preparation is key to successful knowledge-based deal making. Of course, many other types of partnerships also flourish, such as VC/PE investments, M&A and JVs, which we will explore further in the upcoming white papers.

Every journey starts with a first step. PharmVentures can help you navigate the route to access the second largest pharmaceutical market in the world.

Graphical data comes from Cortellis Deal Database and PharmaVentures analysis. Data range from 1st January 2014 to 15th October 2019

Team News

PharmaVentures Strengthens its M&A and Fundraising Capabilities

PharmaVentures is pleased to announce the appointment of **Mark Andrews** as a Managing Director. Prior to joining PharmaVentures, Mark was a core member of the Corporate Finance M&A Life Science sector team at BDO in London, where he worked with clients especially in the outsourced pharma services and medical devices sectors.

Previously Mark was at Inventages, the Corporate VC of Nestle, based in both Switzerland & London. During this time, he managed numerous life science investments and took positions on the boards of, or took up board observer rights for, the vast majority of portfolio companies. Prior to that he was at DEWB Venture Capital in Jena, Germany. His experience spans across the investment cycle, from sourcing through investment negotiation to hands-on portfolio management, driving towards exit negotiation.

Fintan Walton, PhD, Chief Executive of PharmaVentures, said: “We are delighted to welcome Mark to PharmaVentures. He has an impressive track record in life science investments and dealmaking. His wealth of experience will add significant value to our clients in their M&A and fundraising activities”.

Team News

BVCA Membership

PharmaVentures is delighted to become a member of the British Private Equity & Venture Capital Association. BVCA is the industry body and public policy advocate for the private equity and venture capital industry in the UK. By becoming a member PharmaVentures is now part of a global network of investment and business leaders.

Team News

PharmaVentures in Action

Dr Fintan Walton, Founder & CEO of PharmaVentures was invited by Seoul Metropolitan Government and Seoul Bio Hub to join a panel of high-profile industry leaders including Carl S. Goldfischer, Bay City Capital LLC, Wouter Meuleman, Illumina Ventures Stephen Lee, Johnson & Johnson.

The Seoul Biomedical International Conference 2019 was held at Seoul City Hall and Seoul Bio Hub on November 4 to 5, 2019. Experts from the United States, the United Kingdom, China and many other countries participated in the event to deliver speeches and conduct in-depth discussions regarding the global strategies and case studies for biomedical start-ups, the promotion of global investment in bio start-ups, and the global development of bio clusters.

The conference provided meaningful opportunities to seek future strategies for the development of the biomedical industry, a driving force behind future innovation and growth. The SBIC celebrating its 4th anniversary this year served as a venue for more than 500 professionals from industries, universities, and research institutes in the world to share the future vision of the bio industry and to establish the basic framework for collaboration among related organizations and businesses.

“The Seoul Metropolitan Government will do its utmost to actively and continuously support bio start-ups, to create a researcher-friendly environment, and to make Seoul the best biomedical venture city in Asia. Your stimulating speech helped the conference become a great success. We are looking forward to meeting you again in the near future and we hope all your wishes come true. Thank you again for your valuable contribution.”

Mr Park Won-soon, Mayor of Seoul

In a letter to our Founder and CEO, Dr. Fintan Walton



Panelists at the Seoul Biomedical International Conference 2019



Dr. Fintan Walton with Mr Park Won-soon, Mayor of Seoul



Dr. Fintan Walton speaking at The Global Innovation Forum

Meet the Team



Sausan Elobeid

Business Development Administrator

Sausan joins PharmaVentures as a Business Development Administrator, bringing strong Business Development, CRM and Marketing experience gained working within the NHS and African Union Mission (New York) and the Medical Devices industry. She is also a native Arabic speaker with an in-depth insight into the Middle Eastern and African culture and has a lot of experience working on several translation projects. Sausan holds a Bachelor of Business Honours in Marketing and Public Relations from the University of Teesside.

sausan@pharmaventures.com

Join the Team

Business Analyst

PharmaVentures is looking to recruit a Business Analyst to provide transactional support for financing, M&A and licensing engagements with pharmaceutical, biotechnology, medtech and diagnostic (Life Sciences) companies, products and technologies, especially in China and Asia-Pacific.

For more information, visit the job page or www.pharmaventures.com

Conference Update

J.P. Morgan 38th Annual Healthcare Conference
13-16 January 2020
San Francisco

LSX World Congress
4-5 February 2020
London

BIO-Europe Spring 2020
23-26 March 2020
Paris

DCAT Week 2020
23-26 March 2020
New York

Bio International Convention
8-11 June 2020
San Diego

If you would like to meet with PharmaVentures at any of these events, please contact Summer Park, Senior Business Development Director: summer@pharmaventures.com