In a world of low-cost capital and investor pressure for earnings growth, M&A is still top of the agenda for senior pharmaceutical executives. But it is the more creative world of partnerships – through the likes of licensing, co-development, capability and risk sharing, technology collaborations and joint ventures – that has been a potent force in the industry’s successes in recent years. Partnerships can truly bring out the best in both sides of the deal, if each party is prepared to re-think how they operate and create the right balance of trust and control. In this paper, we explore what companies are spending and getting for their external investments, how they are partnering to create value, and what is required to succeed with partnerships. We conclude by contrasting partnerships with M&A as sources of sustainable business growth.

Pharma is increasingly spending and finding value externally

Following years of diminishing R&D productivity and rising pressure on revenues and margins, most pharma companies have now found ways to downsize their internal R&D activities and experiment with more externalised models, favouring the option of accessing innovation from
outside sources. As early as 2010, investor pressure to disinvest from discovery research became louder, with the example of Morgan Stanley Research publishing an industry viewpoint urging companies to “Exit Research and Create Value”. Companies have consequently reallocated invested capital to external assets, and in-licensed more compounds, particularly after clinical proof of concept.

Five years later, the reality is more complex. As predicted, the drive towards greater externalisation has led to an inflation of the price of acquiring or licensing assets, which has been manifested in deal values over the years.

**Partnership deal values have grown steadily since 2012, while M&A deal values continue to be volatile year on year**

In M&A, from a base of announced deals of $100-$200bn per year between 2011 and 2014, 2015 marked a real spike to more than $600bn of announced deals – with a major contribution from Pfizer-Allergan ($160bn) coupled with other acquisitions designed to keep share prices and post-tax earnings moving upwards for investors, sometimes successfully, sometimes not.

Nevertheless, compared to other investment-heavy major industries such as oil and gas or automotive, the pharma industry remains highly fragmented, with the top 4 pharmas accounting for only 25% of the top 100 pharmas’ revenue in 2014. A purely “buy” model “of driving revenue growth in the short-term through the acquisition of commercial portfolios without investing in R&D does not seem to be as sustainable as a more organic
and focused approach, as explored in our previous white paper ‘Business growth: Bespoke strategists lead the way’. In that paper, we highlighted the key role that focusing on best-in-class capabilities (be they science, commercial or business development) plays in creating sustainable growth. With such focus, high quality partnering is essential.

Yet as capital is flowing towards external sources, the question is always “is it creating value”? Our analysis suggests yes. As one measure of this (not a perfect one, as some approvals are worth more than others), we explored the origin of FDA approvals for New Molecular Entities (NMEs) in the last ten years, and it is clear that the recent growth in number of approvals has been driven more by external R&D activity (including M&A, partnerships and licensing agreements) than by fully internal R&D. From 2006 to 2015, the number of annual approvals from externalised R&D has doubled to 34, now representing 76% of all approvals.

**Acquired and partnered assets are driving the growth of FDA NME approvals**

![Graph showing the origin of FDA NME approvals from 2006 to 2013 and of New Molecular Entity and New Therapeutic Biological Products Approvals for 2014 and 2015 as published by the FDA.](source: Novasecta proprietary analysis of MedTrack and FDA website)

It is worth noting that though a high number of NME approvals is one measure of the success of innovation, it is not necessarily correlated with a high value creation: the ‘fourth hurdle’ of achieving prices and market access that compensate for the investment required to bring products to market is clearly relevant. However, with pharma’s increasing awareness of this, we envisage that the approval number trend is strong enough to demonstrate value creation too.
The question then is what type of external innovation is creating value? Recent research has suggested that it is the myriad forms of partnerships rather than M&A alone that is driving value:

65% of externally-sourced pipeline value comes from co-development, joint ventures and licensing, with only 35% from M&A

The increased number of NME approvals and value generated from partnerships and agreements where both sides share risks and rewards is an encouraging sign for companies with limited cash. Investing further efforts and resources in originating creative deals and building strategic collaborations from early discovery stages can bring value to all involved parties.

We also anticipate that as the prices of quality assets continue to increase, the marginal return on investment in acquisition will reduce, so partnering in a creative way will be a lasting feature in the market for years to come.

Yet partnering well is not easy, especially for ‘MidPharmas’

The scarcity of available assets either on-market or in later confirmatory stages of R&D makes it very difficult for companies that are short on capital and less visible in the market to compete with their larger and more deep-pocketed competitors. For M&A, the appetite for debt in the pursuit of deals often further limits mid-sized companies (‘MidPharmas’), particularly those that are privately held or controlled. Privately held companies do not have the option of issuing stock to do deals, or indeed paying with their own inflated shares for assets. This difficulty feeds into other partnerships too: upfronts for good assets are trending upwards, particularly in “hot” areas.
The difficulties in finding and executing transactions for quality assets mean that companies need to think differently about how to originate deals beyond the traditional approach of operational business development through licensing and M&A. R&D departments too need to respond to pressure to ramp up their efforts in scouting for opportunities to partner, for example through creating dedicated early stage scouting offices within R&D. The challenge now is to widen access to innovation and new drug programs, while limiting the capital, risk and resources required. Partnerships are increasingly key to this.

Pharma companies and more particularly MidPharmas have the most to benefit from partnerships to generate downstream gain while minimizing up-front risk. Benefits can be shared between partners through finding unique opportunities for value creating partnerships, and building the capabilities to successfully establish, nurture and sustain mutually beneficial relationships with partner organisations.

As the challenges described above are more related to companies with limited funds and visibility in comparison to Big Pharmas, we explore below how various MidPharmas are creatively using the various asset and capability deal types in both corporate and R&D fields.

**MidPharmas are increasingly partnering both assets and capabilities to achieve their strategic goals**

### Strategic Goals

**Assets**
- Late stage investment
- Quick returns
- High probability of success

**Capabilities**
- Early stage investment
- Longer term returns
- Lower probability probability of success

### Deal Type

**R&D in-licensing / Co-development**
- R&D in-licensing
- Co-development

**Commercial in-licensing / Co-promotion**
- Commercial in-licensing
- Co-promotion

**Research collaboration / Share technology and expertise**
- Research collaboration
- Share technology and expertise

**Commercial partnering / Share commercial expertise**
- Commercial partnering
- Share commercial expertise

R&D in-licensing / Co-development: to exploit late stage pipeline assets MidPharmas have collaborated for many years to build value from their own and others’ assets. One of the pioneers was H. Lundbeck, which in 1995 entered into a strategic alliance with Forest Labs (before Actavis acquired Forest) to build value from the US market. Lundbeck followed this deal with a collaboration deal with Merck & Co Inc. in 2004. The deal with Merck was also used as a stepping-stone to build up Lundbeck’s own sales force in the US market.
In Europe, Lundbeck licensed the rights to Memantine from Merz in 2000, in an agreement also comprising the rights to the indications vascular dementia, neuropathic pain and AIDS-related dementia. While Forest Labs held the rights to the US market, Merz also co-developed Memantine in Japan with its partner Suntory. This agreement is a good example of co-development collaborations across different geographies to create value for multiple companies, each with its own unique set of capabilities.

**Commercial in-licensing / Co-promotion: to rapidly expand geographical coverage**

MidPharmas have also been creative in finding more immediate collaboration deals to generate value from assets in non-core geographies. For example, in October 2012, Astellas launched Gonax (degarelix) in Japan after it entered into a license agreement with Ferring in January 2006. The agreement gave Astellas exclusive rights to develop and market degarelix for the treatment of prostate cancer in Japan. Astellas made upfront and milestone payments as well as royalties to Ferring, enabling Ferring to secure value from the Japanese market.

Another example of exploiting the commercial capabilities of others without the need for M&A is that of Teijin and Ipsen, who entered a successful agreement that saw the launch of Somatuline® in Japan in January 2013. The agreement entitles Teijin to develop and commercialise Somatuline in Japan, while Ipsen will manufacture and supply the finished product to Teijin. This partnership allows Ipsen to penetrate the Japanese market through its partner.

In the other direction, in June 2015, Servier bought the rights to TAS-102, an oral anti-cancer drug from Taiho, in a $130m deal made of upfront payments and near-term milestones on top of royalties. Servier will commercialise TAS-102 in Europe and other markets excluding Asia and North America. The two companies will also collaborate on the development of the drug globally, sharing costs and research.

**Commercial partnering: to exploit unique local capabilities**

At the capability end of partnerships, MidPharma Helsinn is a good example of a company that leverages the commercial capabilities of external partners. It in-licenses early-to-late stage new chemical entities, completes their development by performing pre-clinical/clinical studies as well as associated manufacturing activities, and then prepares the necessary regulatory filings in order to achieve marketing approvals worldwide. Helsinn's products are out-licensed to its global network of marketing and commercial partners that have been selected for their local market knowledge.
Through this capability sharing rather than M&A approach, Helsinn has built a large product portfolio of cancer care products that are sold through alliances with around 70 global partners. One of those latest partnerships is Helsinn's collaboration with Mundipharma in March 2015, where it entered into a distribution and license agreement for the exclusive rights to sell anamorelin in China.

**Research collaboration: to create new assets through exploiting shared capabilities**

An earlier stage example of how MidPharmas can work together to create value lies in Orion and Richter, who in March 2013 entered into a comprehensive and long term collaboration agreement for the discovery and development of new chemical entities in the field of cognitive disorders. The partnership agreement provides an opportunity whereby the two companies jointly select and bring forward three discovery phase candidates and share all the development related expenses on an equal base.

This type of partnership will strengthen the research outcome of both companies in a cost and time efficient way, adding to current knowledge and experience, resulting in mutual benefit for both parties. At the time, the Senior Vice President of R&D at Orion stated: “A fundamental pillar of our R&D model is to seek collaborations that leverage the strengths of both organisations, and at Richter we have found scientific skills and an organisational culture that will likely result in a successful partnership. This collaboration increases the probability to succeed in this challenging therapeutic area.”

The above examples are a very small but illustrative selection of the variety of potential deals that companies can originate. Other paths can be explored that can bring mutual benefits to both parties involved. In the remainder of this paper we therefore explore in more detail the key drivers of successful partnerships.

**Driving sustainable partnering success**

There are plenty of historic deals that went wrong in one way or another, suggesting that many companies have still not reached the point where partnering is a natural and successful complement to internal activity. The first important point is that partnering success is not just about pushing harder on business development. Organisations need to be clear about what partnering is for, why it is essential in their unique context, and how their own organisation can embrace it and benefit from it. This requires attention to three important areas.
For successful partnering, pharma companies need to think differently about what they do and how they work.

**Bespoke Strategy**

Creating excellent partnerships is a highly strategic activity. So a tailored and bespoke partnerships strategy that is rooted in a deep understanding of company’s capabilities and selling points in the eyes of potential partners is essential. Companies must choose their business and product portfolio strategies to match corporate goals and capabilities, and determine the right balance between internal and external sources for their future success: opportunistic deals made with little clear strategic vision have a habit of ending early or being terminated as the realities set in post deal signing.

“Knowing thyself” in a profound way enables companies to understand their own unique and differentiated capabilities and selling points, and thereby be both more attractive to potential partners and able to create synergistic and adjacent opportunities with partners. Articulating this understanding of capabilities and aligning behind the vision for improving it through a bespoke partnerships strategy can create significant benefits downstream.

**Creativity in Deal Making**

Due to the increasing capital required to acquire or license high quality assets, companies need more than ever to think creatively about deal structures and look for non-obvious synergistic and adjacent opportunities with partners. Deal structuring has to set clear win-win deliverables and milestones in partnership agreements, which should be discussed early on during the negotiation phases, with a good assessment of the financial, scientific and clinical risks involved.
Based on their own risk appetite and capital at hand, companies can then identify strategically the best partnership models that fit their needs. Early discovery projects tend to carry more risks and may require specific technologies and capabilities, models such as risk-sharing and capability swapping may be attractive. Exploratory development projects (from preclinical through to clinical proof of concept) are typically less risky than discovery projects, and companies that want to spend more on compounds that have passed the candidate stage can benefit from cost-sharing and asset swap deals in this phase.

Companies can also consider setting up corporate venture funds, when capital is available, to invest in interesting small biotech companies early on, with options to in-license if assets meet key milestones. We show below a non-exhaustive table of potential deal types to illustrate the plethora of possibilities companies can now create. Partners can and should tailor their deal structures based on their synergies and their mutual needs, so creativity in deal-making can be a real source of advantage.

The capital at hand and risk appetite of shareholders should drive the choice of deal type

Re-configured Capabilities

The hardest yet arguably most important part of creating successful partnerships lies in re-configuring internal capabilities. Partnering for many pharma veterans is sadly not a natural act. Culturally, companies can prefer the control and comfort of doing things themselves (or acquiring and absorbing companies to effectively do the same) to the uncertain and more messy world of dealing with other companies and associated stakeholders and investors. For a company to successfully embed a partnership culture
in the organisation it also needs to address its own “silos”, which can have major implications on the internal organisation and the interfaces between major functions such as Commercial, R&D and Business Development.

To add to the complexities of internal cultural issues, “virtual fences” can be inadvertently established between the internal and the internal/external partner’s teams, often driven by a resistance to partnering or outsourcing or lack of trust in the partner’s capabilities. Time should therefore be invested to first remove any internal barriers to collaboration in the organisation, then to genuinely know the partner and build strong inter-organisation bridges to cement ties at all levels of the organisation.

Collaborations can also be used as a platform for the transfer of knowledge in complementary areas, ensuring a constant flow of information and transparency. Consideration of the cultural fit with the partner is therefore also very important for the success of the partnership and for the improvement of internal capabilities that can and should result from good partnerships.

**Partnerships are mission critical and certainly not ‘business as usual’**

In summary, partnerships are both mission critical for the pharmaceutical industry and a potentially stronger alternative to immediate M&A for getting the most out of other companies’ assets and capabilities. Furthermore, companies that engage in partnerships as a potential prelude to a later M&A can get a double benefit from giving the partner company room to develop and giving the acquirer a taste of what they will acquire.

Sadly as yet many pharma/biotech companies, and mid-sized pharma companies in particular, are missing out on potential value-adding strategic partnerships, either because they have not actively considered or found other companies with non-obvious synergies or adjacencies that could be great partners, and/or because they are not visible enough in the right way to other potential partners.

Both short and long term internal changes are required to enable organisations to be ever more successful in partnering. The three foundations for successful partnerships that bring mutual benefits to the parties involved are a bespoke strategy, creative deal making and re-configured capabilities. Companies that get this right will benefit from well-crafted partnerships as an extremely attractive alternative, or at least complement, to organic growth with focused M&A.