LSP Life Sciences Fund - 2017 in review

In 2017, the LSP Life Sciences fund performed extremely well. Such in spite of the continued political and market turmoil which impacted the healthcare sector, although fortunately a lot less extreme than in 2016, the worst year we have experienced to date. The fund delivered – on a net basis e.g. after management and performance fees - a stellar return of **+39%** for the year. This represents not the best, but one of the best returns we have achieved across our entire public investment franchise managing the LSP Life Sciences Fund and a number of individual mandates during the past 10 years. Only 2010 and 2014 were better with returns of **+63%** and **+48%** (gross) respectively. Our commitment to our long held strategy to focus on the companies with the potential to deliver true innovation and significant benefit to patients, was again proven to be the winning strategy in 2017. Below you will find our yearly returns investing in public equity since 2008, with an annual gross return of **+25%** per year. This represents our return not only for the LSP Life Sciences Fund but also for a number of mandates we have been running simultaneously. It represents the most accurate and longest-term measure of our performance as a public equity fund manager.

Period	Gross Return (%)
2017	41.5%
2016	-18.6%
2015	20.3%
2014	48.4%
2013	32.8%
2012	25.4%
2011	1.9%
2010	62.5%
2009	22.6%
2008	29.5%
Since Inception (annualized)	**25.5%**

The table below shows the returns of the LSP Life Sciences Fund only, on a net basis, over the past 5 years as per 31/12/2017.

1 month	3 months	1 year	2 years	3 years	5 years
+5.7%	+9.9%	+38.8%	+10.9%	+27.6%	+25.9%

So what happened in 2017? The first quarter of the year saw the fund deliver a strong outperformance due to several notable developments in the portfolio. In January, portfolio company Colucid Pharma was acquired by Eli Lilly for $960m in an all cash deal for its novel migraine treatment. Interestingly, the compound was originally developed at Eli Lilly and acquired by Colucid management some 12 years ago. Following the announcement of positive Phase III clinical trial results – Lilly was willing to pay a significant premium to regain the asset. Another of the fund's investments, Danish company Forward Pharma, was the subject of a $1.25bn deal with Biogen whereby Biogen needed access to patents held by Forward Pharma to protect its multiple sclerosis franchise.

The acquisition of portfolio company Neuroderm by Mitsubishi Tanabe Pharma Corp for $1.1bn in cash, solidified the strong performance of the fund in July. Prior to the acquisition, Neuroderm reported excellent clinical data for its next-generation wearable device, which is capable of delivering continuous levels of Parkinson's Disease medication to the most severely-affected patients. Some more information on these M&A transactions can be found in our publication of July 2017 published on our website and via this link. Also, the leading publication on our sector called BioCentury, published a note on our performance and can be found here.

But the stellar performance of the fund was not solely dependent on mergers and acquisitions. The results of clinical trials are a key valuation trigger for biotechnology companies. In the past year, the fund invested in 8 Phase III clinical trials – in other words, based on our due diligence we concluded that the risk/reward for these trials presented interesting investment opportunities. We are very pleased to report that 7 of the 8 trials announced positive results. The one significant miss was the Versartis run Phase III trial for Somavaratan, human growth hormone. The company was attempting to replace the current use of daily injections with a new formulation which would allow children to be treated with once monthly injections. Unfortunately, the study barely missed reaching statistical significance. The wins included Ablynx drug Caplacizumab (for a rare bleeding disorder), Aerie drugs Roclatan and Rhopressa (glaucoma), Tetraphase drug Eravacycline (anti-infective), Paratek with Omadacycline (anti-infective). Last but not least was Kite Pharmaceuticals, with one of the most important new treatments for cancer. Kite was subsequently acquired by Gilead in a $12bn deal – arguably the most exciting deal of the year. The Kite technology is a personalised treatment whereby the patient's own cells are armed to detect and fight the cancer. The results have stunned the medical community.

There were several other companies in the portfolio during the year, which were not dependent on binary events. German companies Evotec and Morphosys delivered very strong performances in 2017 through a series of deals and clinical data which caused the market to revalue the shares. Belgian companies Ablynx, ArgenX and French Erytech all benefited from NASDAQ IPOs to complement their European listings and encourage US investor interest. ArgenX is worthy of an extra comment having appreciated some 220% in the year following a well-timed NASDAQ IPO and positive clinical trials results from two Phase II clinical programs. We anticipate additional news-flow in 2018.

So what do we anticipate for 2018? The past year has been described as a breakthrough year for biotechnology. We are inclined to agree. Whereas 2016 and the first half of 2017 was dominated by the US elections, talk of drug pricing and repeal and replace of Obamacare – it now looks more likely that changes will be gradual and less dramatic and sudden than previously feared. The new chief at the FDA is regarded by most as a great success – a forward thinker who is keen to expedite the approval of new breakthrough treatment and his 'solution' to drug pricing is not to hamper research and innovation but to facilitate in the approval of generics for older drugs thereby increasing competition.

Changes at the FDA are very real – consider the truly breakthrough treatments approved and launched this year. Spark Therapeutics launched Luxturna, the first gene therapy approved in the U.S. that targets a disease caused by a specific gene mutation. Luxturna can literally restore sight to the blind! In a single injection it can correct a very specific gene mutation – truly astounding. Researchers are finally making strides against cancer as evidenced by two new treatment launched this year by Novartis and Kite Pharmaceuticals (Gilead). Trials of these treatments produced nearly miraculous results for patients who had failed to respond to other treatments. The therapy re-engineers a patient's white blood cells and the so called CAR-T cells are given back to the patients. The modified cells have the ability to detect and alert the immune system to the cancer cells.

And there are several more examples to demonstrate the renewed vigour and enthusiasm at the FDA and indeed at the European equivalent the EMA. Optimism for faster drug approval combined with favourable tax reform in the US should free up more cash for research and encourage investors back to the sector. This will ultimately lead to accelerated development of innovations to improve and save lives. Taken together these factors make us optimistic for the years ahead. No matter what the year will bring, we will adhere to our fundamental and long term stock picking strategy of selecting a concentrated basket of 15 to 20 companies that we believe present outstanding investment opportunities.