

Platinum International Health Care Fund



Bianca Ogden Portfolio Manager

Disposition of Assets

REGION	DEC 2016	SEP 2016	DEC 2015
Europe	41%	41%	36%
North America	34%	39%	27%
Australia	5%	3%	1%
Japan	3%	3%	3%
Asia and Other	2%	0%	3%
South America	0%	0%	1%
Cash	15%	14%	29%
Shorts	0%	<1%	-1%

Source: Platinum. Refer to note 3, page 4.

Top 10 Holdings

STOCK	COUNTRY	INDUSTRY	WEIGHT
Sanofi SA	France	Pharmaceuticals	3.9%
AstraZeneca Plc	UK	Health Equip & Services	3.9%
Roche Holding AG	Switzerland	Pharmaceuticals	3.3%
Qiagen NV	Germany	Health Equip & Services	3.1%
Johnson & Johnson	USA	Pharmaceuticals	2.9%
Ipsen SA	France	Pharmaceuticals	2.7%
Gilead Sciences Inc	USA	Biotechnology	2.7%
MorphoSys AG	Germany	Biotechnology	2.6%
H Lundbeck A/S	Denmark	Pharmaceuticals	2.5%
Imugene Limited	Australia	Biotechnology	2.3%

Source: Platinum. Refer to note 4, page 4.

For further details of the Fund's invested positions, including country and industry breakdowns as well as currency exposures, updated monthly, please visit <https://www.platinum.com.au/fund-updates/#MonthlyUpdatesForThePlatinumTrustFunds>.

Performance and Changes to the Portfolio (compound pa, to 31 December 2016)

	QUARTER	1YR	3YRS	5YRS	SINCE INCEPTION
Platinum Int'l HC Fund	0%	0%	12%	20%	9%
MSCI AC World HC Index	0%	-6%	13%	22%	8%

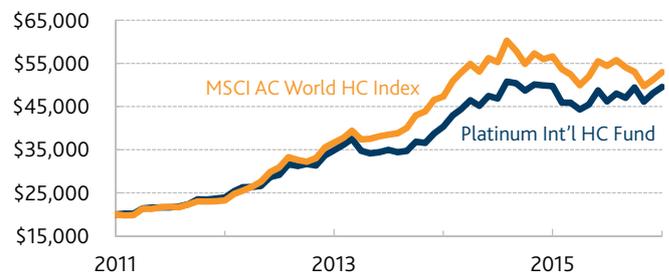
Source: Platinum and MSCI. Refer to note 1, page 4.

2016 has not been an easy year for healthcare investors. We saw some biotech recoveries, but in the end generalist investors turned to other sectors and the excitement fizzled out quickly. Consolidation was limited, high-profile pipeline disappointments dominated (e.g. Eli Lilly's recent failed Alzheimer's drug trial), and big biotech failed to be inspiring. Medtech was the subsector to hide in while specialty pharma was the subsector to avoid.

However, what did one expect? We had had five years of great performance with valuations reaching very high levels in 2015 at a time when the status quo of continuously raising drug prices was finally being challenged. It really is not such a

Value of \$20,000 Invested Over Five Years

31 December 2011 to 31 December 2016



Source: Platinum and MSCI. Refer to note 2, page 4.

surprise that the healthcare industry now has to go through a reflective phase. What is encouraging, however, is the fact that we are in the early innings of a new innovation cycle. Robotics are coming to operating theatres, precision medicine is making big strides, immune therapy in oncology is challenging the methods we have so far used to develop drugs, gene therapy has become real, gene editing companies are becoming listed on stock exchanges and in November biosimilars in the US have become a reality.

The Fund's portfolio is focused on these themes and this year has gone through some transition as we added new biotechs, started to trim or exit long-standing holdings and added exposure to new technologies. We took advantage of the sell-offs and will continue to do so as we focus on long-term performance, as opposed to being distracted by the latest news headlines.

Our focused approach provided the portfolio with a cushion during this year's market corrections, returning +0.3% for the quarter and -0.4% for the year, compared to -0.1% and -6.4% respectively by the MSCI AC World Health Care Net Index (\$A).

Seattle Genetics, a company we added last year, is an example of this strategy. This is a US biotech with a technology platform (antibody drug conjugates), an approved product with expansion potential, established commercial infrastructure (with direct distribution channels in the US and Canada while Takeda distributes it elsewhere), a progressing pipeline as well as partnered assets that are under development. Given that Seattle was not a typical immunology company, it went a little under the radar screen 12 months ago. Today, the expansion opportunity for *Brentuximab Vedotin* is more visible, as are the pipeline efforts, making the company a stellar performer in the stock market over the past 12 months (+18%).

Our European biotech holdings, **Ipsen** (+13%) and **Lundbeck** (+22%), have also done well for the year, each focusing on key assets while making sure their pipeline is being progressed as well.

Actelion (+60% in the past year), another European biotech we have held for some time, is being sought after by several interested parties. The rumoured price looks high to us and confirms that companies with approved products, good commercial infrastructure and depth of research will either thrive by themselves or find a suitor.

Commentary

We are always on the lookout for companies that have a scientific edge that sets them apart from others. New technologies or drugs have to be different to have a commercial future and simply working on the same target as a competitor is no longer enough. At the same time, we are also exploring disease themes. Here we look for advancements in the science which over time will translate into new therapeutic options.

In recent months we initiated a position in a Belgian biotech called **Galapagos**. This company has both an edgy drug discovery engine and a focus on diseases that are gaining scientific traction.

Galapagos was founded in 1999 as a joint venture between Tibotec (an HIV drug company, now part of Johnson & Johnson) and Crucell (a vaccine specialist, now also part of Johnson & Johnson). The joint venture functioned as a drug discovery engine which also included services to third parties. While the service component is still relevant, the more important part now is the progress of Galapagos' own product pipeline.

Galapagos' expertise is to find new targets by replicating the disease biology as closely as is possible in a Petri dish using either stem cells or primary cells from patients to make "organoids". Over the years Galapagos has improved its drug discovery engine and today the company has a decent sized pipeline.

Partnerships have always been part of Galapagos' culture, and the company makes sure that it retains part of the downstream economic benefits and promotion rights in Europe.

Galapagos' lead drug is *filgotinib*, a selective, oral JAK1 inhibitor that is in late-stage testing for several inflammatory diseases, including inflammatory bowel disease (IBD) and rheumatoid arthritis.

IBD is ideal for biotech. It is a slow-motion epidemic with incidence rates rising particularly fast in parts of Asia and South America. Current treatment is suboptimal and the disease is not well characterised on the molecular or microbial level.

The gastrointestinal (GI) tract is gaining quite a bit of attention by scientists. Good bacteria (over 100 trillion microbes) live in a happy symbiotic relationship with their host's immune system, protecting the GI tract from damage. However, once this relationship gets out of balance, such as when "symbiotic" bacteria turn "pathobiotic", the immune system starts to overreact and chronic inflammation occurs which over time damages – and in the end – destroys the intestinal wall.

The majority of IBD cases can be classified as either Crohn's Disease or Ulcerative Colitis. Both diseases exhibit GI tract inflammation, albeit each shows a different inflammation pattern of the intestinal wall and inflammation occurs at different locations of the GI tract.

Scientists are deciphering more and more of the nature of the immune overreaction while at the same time our understanding of the complex microbial GI environment is improving, offering pathways to new drug targets in the years to come.

Today, treatment of IBD depends on the severity of the disease and ranges from symptomatic over-the-counter drugs to injectable antibody drugs that suppress the immune system. The aim is to relieve symptoms, allow the GI tract to heal and achieve long-lasting remission. However, over a third of patients fail to respond and many relapse over time, thus we are only at the start of successfully treating this complex disease.

Oral alternatives to antibody drugs will be the next phase and here Galapagos' *filgotinib* is showing promising efficacy. Given the complex nature of IBD, combination therapies will start to emerge and this is where Galapagos' alliance with Gilead (Gilead owns over 14% of Galapagos) will be advantageous. Last year Gilead licensed *filgotinib* and is putting significant resources behind the asset.

IBD and rheumatoid arthritis are one part of the Galapagos story; the company also has a focus on fibrosis, a complex disease area where science is advancing and combination therapies will be most important.

Thanks to Gilead, Galapagos is well financed with nearly €1 billion of cash on its balance sheet (it has a market capitalisation of €2.8 billion), has a decent pipeline and boasts of a strong scientific foundation.

Outlook

The healthcare industry is heading into the new year with a great deal of uncertainty owing, first and foremost, to the uncertainties around the Trump administration's policy direction. In such an unpredictable political and macro environment it is all the more important to focus on the science and research that underpin individual companies, which in the long-term will lead to fruition and positive stock performance.

Biotechs are the life blood of drug development and we believe that excitement will return to the sector.

Notes

1. The investment returns are calculated using the relevant Fund's unit price and represent the combined income and capital return for the specified period. They are net of fees and costs (excluding the buy-sell spread and any investment performance fee payable), are pre-tax, and assume the reinvestment of distributions. The investment returns shown are historical and no warranty can be given for future performance. You should be aware that historical performance is not a reliable indicator of future performance. Due to the volatility in the underlying assets of the Funds and other risk factors associated with investing, investment returns can be negative (particularly in the short-term).

The inception dates for each Fund are as follows:

- Platinum International Fund: 30 April 1995
- Platinum Unhedged Fund: 28 January 2005
- Platinum Asia Fund: 4 March 2003
- Platinum European Fund: 30 June 1998
- Platinum Japan Fund: 30 June 1998
- Platinum International Brands Fund: 18 May 2000
- Platinum International Health Care Fund: 10 November 2003
- Platinum International Technology Fund: 18 May 2000

(NB: The gross MSCI Index was used prior to 31 December 1998 as the net MSCI Index did not exist.)

2. The investment returns depicted in this graph are cumulative on A\$20,000 invested in the relevant Fund over the specified five year period relative to the relevant benchmark index (in A\$) as per below (the "Index"):
 - Platinum International Fund – MSCI All Country World Net Index
 - Platinum Unhedged Fund – MSCI All Country World Net Index
 - Platinum Asia Fund – MSCI All Country Asia ex Japan Net Index
 - Platinum European Fund – MSCI All Country Europe Net Index
 - Platinum Japan Fund – MSCI Japan Net Index
 - Platinum International Brands Fund – MSCI All Country World Net Index
 - Platinum International Health Care Fund – MSCI All Country World Health Care Net Index
 - Platinum International Technology Fund – MSCI All Country World Information Technology Net Index

The investment returns are calculated using the relevant Fund's unit price. They are net of fees and costs (excluding the buy-sell spread and any investment performance fee payable), pre-tax and assume the reinvestment of distributions. It should be noted that Platinum does not invest by reference to the weightings of the Index. Underlying assets are chosen through Platinum's individual stock selection process and as a result holdings will vary considerably to the make-up of the Index. The Index is provided as a reference only.

3. Regional exposures (i.e. the positions listed other than "cash" and "shorts") represent any and all physical holdings, long derivatives (stock and index), and fixed income securities as a percentage of net asset value.
4. The table shows the relevant Fund's top ten long stock positions as a percentage of net asset value as at 31 December 2016. Long derivative exposures are included. However, short derivative exposures are not.

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