



The European Life Sciences Market – continued growth despite the uncertainties of Brexit?

A Report by Horton International Global Healthcare

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1. Introduction

Welcome to the Horton International European Life Sciences Market Survey for 2019 (the survey was conducted in December 2018).

This is the eighth year that we have conducted our executive survey and, as with previous years, we have surveyed investors, advisors and board members across the industry in an attempt to glean some valuable insights into the coming year in the European Life Sciences sector. Our report last year reflected a general feeling of optimism, suggesting that people thought the sector was in good shape and investment would continue to be healthy; by most measures it is reasonable to conclude that 2018 was, indeed, a good year for the industry across Europe.

In many ways, this year's survey continues the trend of optimism, though not quite at the same positive levels we saw last year. There is little doubt that the state of the Brexit negotiations at the time of the survey had an impact, especially on the views of the UK respondents. We received a lot of comments about the uncertainties of the UK's withdrawal from the EU that can be broken down as follows,

- Academic Researchers expressed the greatest concerns
 - EU grant funding
 - Movement of EU researchers
- The Venture Capital Community expressed least concern
 - Happy to invest where the best opportunities are
- Attracting Overseas talent came over as a general concern
 - Uncertainty of people moving or remaining in the UK
- Manufacturing and Supply Chain – a concern
 - Uncertainty of tariff-free movement of goods

- UK potentially being outside the EMA approval system

Our report last year suggested that people thought the sector was in good shape and that investment would continue to be healthy. This year's report again, suggests that the majority of people anticipate that 2019 will be a good year for the sector. Having said that, however, there were a number of respondents who felt uncertain about the future, mainly driven by Brexit. This was reflected in the survey results, with the confidence indicator (marks out of 10) falling from 7.4 in the previous year to 7.0 this year. To put things into perspective, however, this result was higher than the figure in both the 2015 and 2016 survey.

Given these results, we have entitled the 2019 report, "The European Life Sciences Market – continued growth despite the uncertainties of Brexit?"

This year's report will cover:

- Future Investment Levels
- M&As and Exits
- Raising New Funds
- Resilience and Growth
- Current State and Looking Forward

On a personal level, I remain optimistic about the Life Sciences sector, and I anticipate that the sector will provide good investment opportunities over the coming 12 months.

I hope you find this latest set of insights from Horton International's European Life Sciences Market Survey useful and I would like to welcome further conversations based on the full data sets.



Paul Edwards, MBE

Managing Partner

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2. Summary

To enable us to collect the most comparable data possible, we have maintained the same methodology as in previous iterations of the report.

Data cited in this report is based on the results of a survey conducted by Horton International Global Healthcare. The online survey was conducted across Europe and targeted senior individuals representing the venture capital, private equity, investment banking and corporate sectors within the European Life Sciences market. All respondents are of CEO, Director or Chairman level from a range of Life Sciences companies and investment organisations. We have focused on these people as they are likely to be the most influential in the industry. The research took place during December 2018.

The questions set for this survey were standard across all respondents who were asked to consider 10 statements. A classic Likert Scale (McLeod, 2008) was used offering 5 responses ranging from 'strongly agree' to 'strongly disagree'. We also included an open question relating to future challenges facing the industry to prompt a broader sense of the respondents' views.

All the questions are fundamentally the same as previous years to enable comparability, apart from the first question which relates to the success of the sector compared to people's expectations - the results of which will stand alone. It should be noted that some percentages on charts may not add up to 100% due to rounding.

The questions for this survey are based on those written for the first iteration of this report in 2009.

Future Investment Level

The amount of investment into the Life Sciences industry is probably the single biggest indicator of the health of the sector as a whole, and by this measure 2018 was an incredibly successful year. As 2018 drew to a close, it was looking like funding for European biotech

companies would reach US\$ 8.0 billion; a new record for financing (up from US\$ 6.85 billion in 2017) with financing from the USA being the main driver of growth. There is little doubt that the NASDAQ stock exchange has become the “go-to” market for most major European biotech companies. This is clearly illustrated when we look at the top public offerings for the first half of 2018.

Top 10 follow-on offerings H1 2018

Company	Country	Exchange	Amount (\$ million)
Ascendis Pharma A/S	DK	Nasdaq	258.7
Cellectis SA	FR	Nasdaq	175
DBV Technologies SA	FR	Nasdaq and Euronext Paris	172.5
Uniqure NV	NL	Nasdaq	147.5
Crispr Therapeutics AG	CH	Nasdaq	113.75
Obseva SA	CH	Nasdaq	73.1
Inflarx NV	DE	Nasdaq	62.9
Merus NV	NL	Nasdaq	55.8
Infant Bacterial Therapeutics AB	SE	First North Stockholm	55.7
Celyad SA	BE	Nasdaq, Euronext Brussels and Euronext Paris	54

Source: BioWorld data

Top five IPOs January–June 2018

Company	Country	Exchange	Amount (\$ million)
Morphosys AG	DE	Nasdaq	239
Autolus Therapeutics plc	UK	Nasdaq	172.5
Polyphor Ltd.	CH	Zurich	165
Meiragtx Holdings plc	UK	Nasdaq	75
Calliditas Therapeutics AB	SE	Nasdaq Stockholm	72.5

Source: BioWorld data

It was not just the public markets where we saw serious investments, with approximately US\$3.0 billion being raised via private equity or venture capital. Leading the way at the beginning of the year was the spectacular series-A round by the German biotech company, BioNTech AG, which brought in US\$270 million (the second largest European series-A on record). Other notable private placings included Orchard Therapeutics (US\$150 million – and three months later they raised a further US\$225 million via a NASDAQ IPO), Freeline Therapeutics (US\$116.5) and BenevolentAI Ltd (US\$115 million).

After such a successful 2018, it will clearly be a challenge to expect a higher level of investment into the sector over the next 12 months. It is encouraging, therefore, to find that 51% of our respondents expected there to be more investment into Life Sciences during 2019 with just 23% believing we will see a fall. Similarly, 55% of the people surveyed continued to believe that an IPO will be a viable option for the right companies over the coming year. It appears to most people, that the IPO window will remain open, though it is likely that companies will look to the US when they need to attract money on the public markets, whilst earlier in the year there was much excitement surrounding the potential for Chinese investment to support listings in Hong Kong, with a raft of US banking names set to support the listing of eight biotechnology/ biopharma companies.

An August 2018 article by **Shawn Manning**, Managing Director of Outcome Capital LLC however, warned that the Chinese stock market potential for Life Science companies was most probably overhyped, a view which was subsequently justified by the continuing poor performances of the first two listings (BeiGene and Asclertis), the introduction of a Chinese government procurement process with higher than expected generic drug price discounting, a subsequent fall in biopharma share prices, and a longer than expected pre-listing vetting process by Chinese regulators. Coupled with a decline in the Hang Seng Index, and the growing awareness of a downturn in the Chinese markets, Manning expects more companies to follow the lead set by Stealth BioTherapeutics, which although originally planning a Hong Kong IPO, recently announced plans to instead list on NASDAQ. However, Manning continues to warn that even in the US biotechnology valuations look relatively high, and although there are still rich pickings to be had from IPOs, the likely most valuable opportunity, mid- to longer-term, is for larger acquirers who are likely to emerge from the wings and take centre stage should capital market valuations begin to wobble and offer attractively discounted new assets.

M&A and Exits

The responses to our questions about potential exits, showed that investors and company executives believe that a significant licensing deal, or a trade sale to a major pharmaceutical company, is still the most likely funding / exit vehicle for the investor. It is worth noticing, however, that the figure of 81% of people either tending to agree or strongly agreeing with the statement is the lowest figure for a number of years, perhaps suggesting that a small number of companies have a belief that they can attract sufficient investment to see themselves through to sustainable profitability.

But with that figure of 81% of respondents still thinking that a pharma deal is the most likely exit route, it remains obvious that an IPO is not, in itself, seen as an exit route for investors, but a route to raise capital that will allow a company to progress its R&D programmes to such a stage that make it attractive for a major transaction / trade sale to be negotiated.

We also asked respondents their opinion on whether exits over the next 12 months would be easier or more difficult. After the 2015 survey result, when the respondents were very bullish about the ability of companies to achieve an exit, the feedback in 2016 and 2017 was more circumspect with similar amounts of people agreeing and disagreeing with the statement, "Exits will prove to be more difficult than they have been this year".

The survey carried out in December 2018, shows respondents believe that 2019 will be a tougher year for exits with 48% agreeing with the statement and just 19% believing that exits will be easier. This may be a reflection of the major M&A deals completed in 2018 (e.g. Tusk Therapeutics/Roche, F-Star/Denali, Wilson Therapeutics/Alexion); the assumption being that it is unlikely that 2019 will be able to beat such an active year.

Raising new funds

Over the past 2-3 years we have seen a number of significant funds raised, and the past 12 months has been no exception, with two of the most notable being Life Science Partners (€410 million) and Forbion (€360 million). With a very active IPO market and some spectacular M&A activity during 2018, it is not surprising that there is a huge appetite amongst the VC community to continue to invest in Life Science companies.

Our survey suggest that 2019 might cool a little with 42% of respondents believing that the coming 12 months will prove more difficult for investors to raise new funds, though it should

be noted that 35% of the respondents disagree with the statement that raising new funds will be more difficult, whilst 23% believe things will be pretty much the same. Overall, therefore it would appear that the general consensus is that there will be little change in 2019.

Resilience and Growth

In our 2016 survey, we slightly re-worded this question to ask whether people believed the European Life Sciences sector was robust and one that offered good returns to investors. There was a strong belief that this was the case with 75% of the respondents being in agreement with the statement. The response last year was even stronger with 91% of the respondents agreeing with the statement. Sentiment has eased off somewhat this year, though it should be noted that only 13% of the respondents disagree with the statement. It is fair to say, however, that the investment community continues to see the European Life Science sector as one that will produce good returns for investors.

A sector that is seen to be robust, and which has the ability to attract continued investment, will certainly need an on-going source of high quality people to sustain that growth, and one would therefore expect to witness a growth in employment in the sector. In recent years, the responses to this question have tended to suggest that the Life Sciences investors anticipated there would be year-on-year increases in employment levels within the sector and this has indeed been borne out. Last year the responses were hugely positive with 59% of respondents anticipating that the industry will employ a greater number of people in 12 months' time, and not a single respondent projecting a fall in employment. The 2018 responses were not as bullish as 2017, but still had 46% of respondents anticipating that the sector would employ more people with only 10% believing that less people will be employed in life sciences. Speaking to the UK respondents, there is little doubt that the uncertainties surrounding Brexit had an impact on the replies we received, with a number of people expressing concern at being able to attract the talent required.

Current State and Looking Forward

Looking forward, we asked people to rate their confidence in the sector on a scale of 1-10 (with 10 being the highest level of confidence). Despite the survey being carried out during Britain's exit negotiations with the EU, the average response of 7.0 suggests that most people within the sector remain broadly optimistic about the coming year. This figure is slightly down

on the responses received just over 12 months earlier, but was higher than the responses received in the two previous years. This is probably consistent with the fact that 2018 was an exceptionally good year for the sector, producing a “feel-good” factor amongst some respondents, tempered by the uncertainties that the Brexit negotiations might bring during 2019. As one UK colleague said last year, “Brexit is a major challenge to the Life Sciences Industry, particularly if the “no deal with EU is preferable to a bad deal” rhetoric is fulfilled. I’m not convinced that the Government fully understands the challenge to medical technology companies of a Brexit deal that does not offer the same access to harmonisation of regulations, patents, grant funding, free movement of skilled people and collaboration with EU centres of clinical and academic excellence as presently enjoyed in this industry sector.”

Another key indicator is, of course, employment trends in the industry. In recent years, the responses to the question, *“Do you believe that the sector as a whole will employ more people?”* have tended to suggest that the sector anticipated there would be year-on-year increases in employment levels and this has indeed been borne out. Last year the responses were hugely positive with 59% of respondents anticipating that the industry would employ a greater number of people in 12 months’ time, and not a single respondent projecting a fall in employment. The 2018 responses were not as bullish as 2017, but still had 46% of respondents anticipating that the sector would employ more people with only 10% believing that less people will be employed in life sciences. Again, speaking to the UK respondents, there is little doubt that the uncertainties surrounding Brexit had an impact on the replies we received, with a number of people expressing concern at being able to attract the talent required.

Conclusions

The level of optimism in the European Life Sciences sector remains high, coming off the back of 2018 when we saw record levels of investment, some high value M&As and an increase in overall employment. Whilst a number of indicators suggest we are not quite as bullish about 2019 as we were a year ago, there is still an anticipation that the sector will be strong, IPOs will continue and that employment will remain strong.

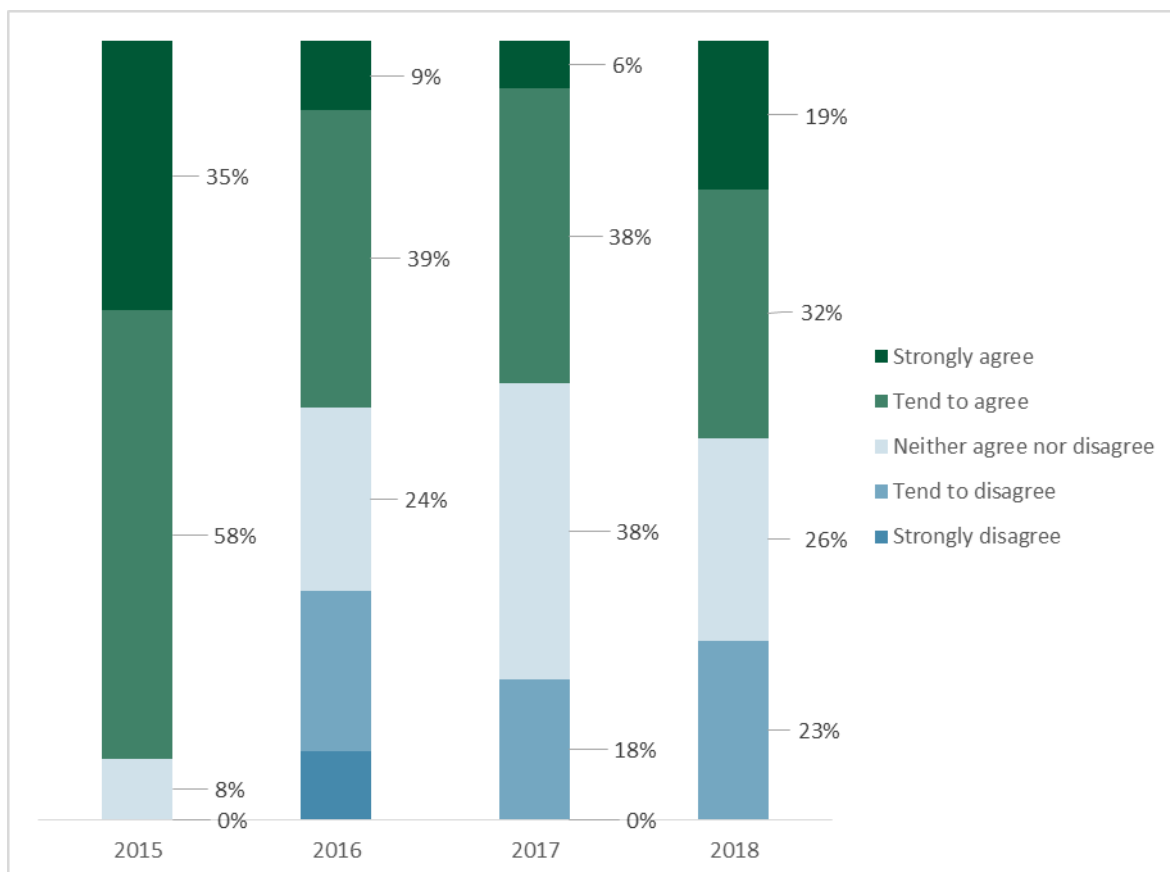
The main findings in this year's survey are as follows:

- There is a belief that investment into the sector is likely to remain healthy, and potentially grow, over the coming 12 months.
- IPOs will continue to be a viable route for companies to raise money in the foreseeable future, though pharma / biotech M&As will continue to be the main exit routes for Life Science companies.
- It is generally felt that exits may prove a little more difficult during the next year.
- There is a general expectation that employment levels within the sector will remain robust.
- Therapeutic proteins, will continue to attract investment with immuno-oncology still being an area of focus (though more than one respondent suggested that this may be a bubble waiting to burst).
- Personalised medicine, the use of AI in R&D and digital health in general will continue to be hot areas.
- There remains a general consensus that the European Life Sciences sector is robust and, notwithstanding a global financial crisis, will continue to offer good returns for investors.

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3. Survey Results

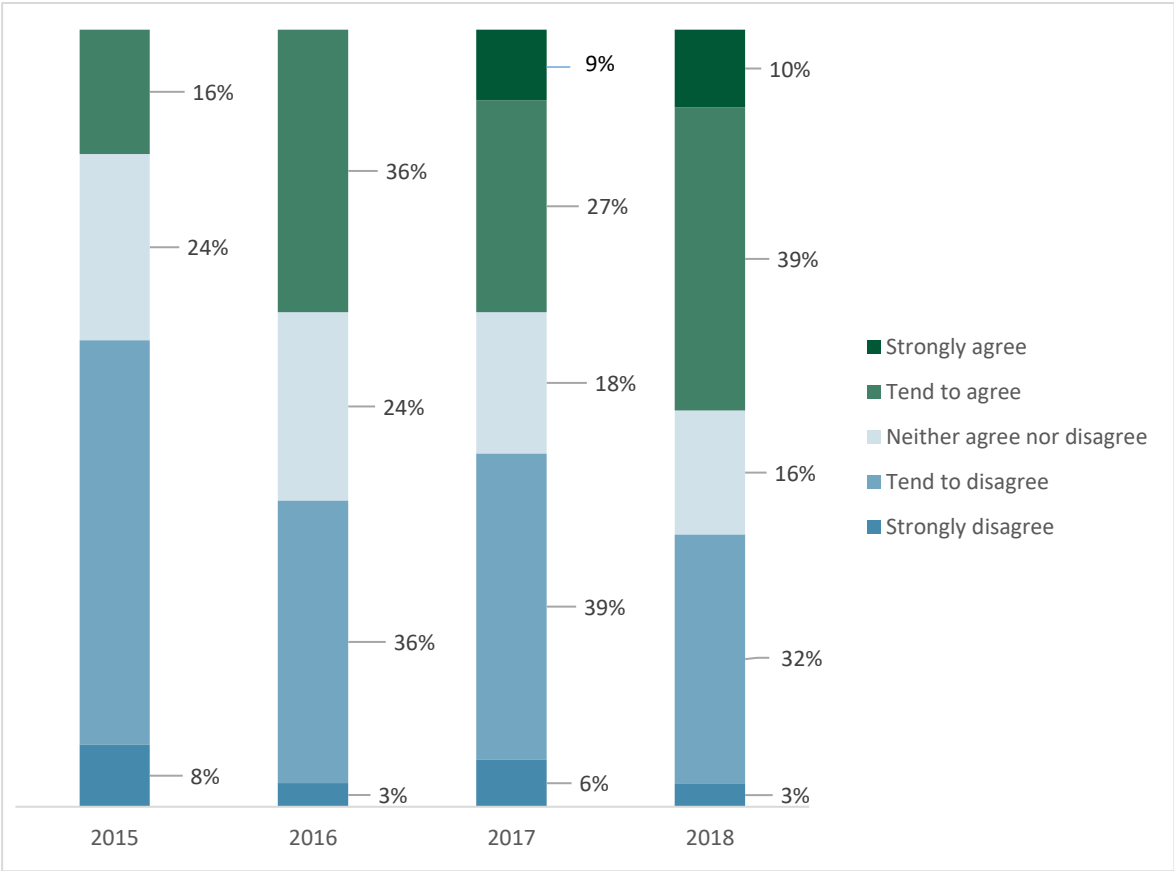
1. ***“Over the next 12 months we are likely to make more investments into Life Sciences than we have done this year”,***



In last year’s report we noted that 44% of respondents in our European Life Sciences survey believed that the following 12 months would see more investment into the sector, as opposed to 18% believing that investment would fall. As 2018 drew to a close, it was looking like funding for European biotech companies would reach US\$ 8.0 billion; a new record for financing (up from US\$ 6.85 billion in 2017) with financing from the USA being the main driver of growth.

After such a successful 2018, it will clearly be a challenge to expect a higher level of investment into the sector over the next 12 months. It is encouraging, therefore, to find that 51% of our respondents expected there to be more investment into Life Sciences during 2019 with just 23% believing we will see a fall.

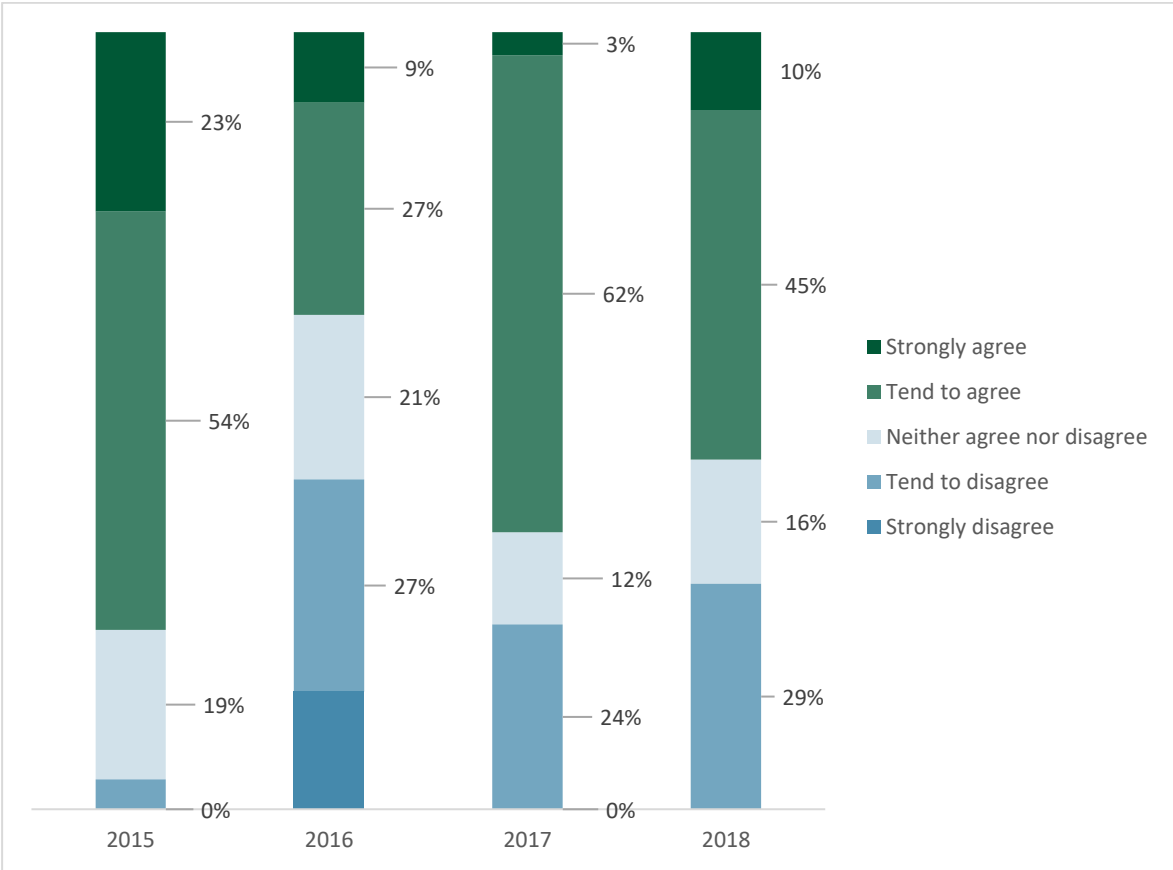
2. “It has been said over the coming 12 months, Life Sciences investors are more likely to concentrate on their existing portfolio than to make new investments.”



From 2015 - 2017, our findings have shown that whilst a majority of people felt that investors would focus more on new investments, there was a year-on-year increase of respondents anticipating that the banks would want to concentrate on their existing portfolios.

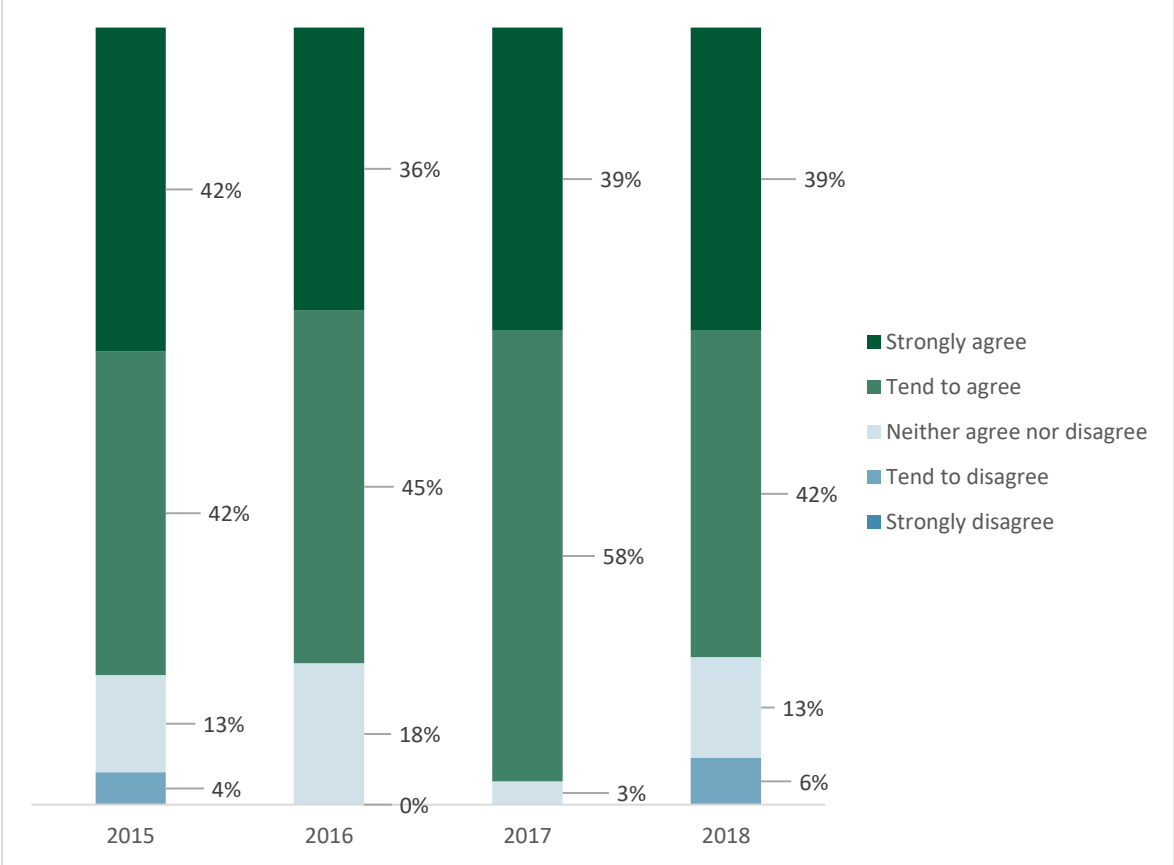
Perhaps it is a reflection of the record year for investment in 2018, that 49% of respondents believe that investors will focus more on their existing investments as opposed to 35% of those answering the survey believing that new investment will be the main focus. This is possibly slightly at odds with the response to the first question, where 51% of respondents believed we would see another increase in life science investments during 2019.

3. “A number of companies have raised money via an IPO during the past 2-3 years. This will continue to be a viable route for the right companies over the coming 12 months.”



The responses to this question appear to reflect the general industry view that the IPO window will remain open during 2019, with 55% of respondents either tending to agree or strongly agreeing with the statement that raising money via an IPO will remain a viable option for the right companies over the coming 12 months (29% of respondents tended to disagree with the statement). It was noted however, that the NASDAQ stock exchange has become the “go-to” market for most major European biotech companies and it is difficult to believe that this situation will change.

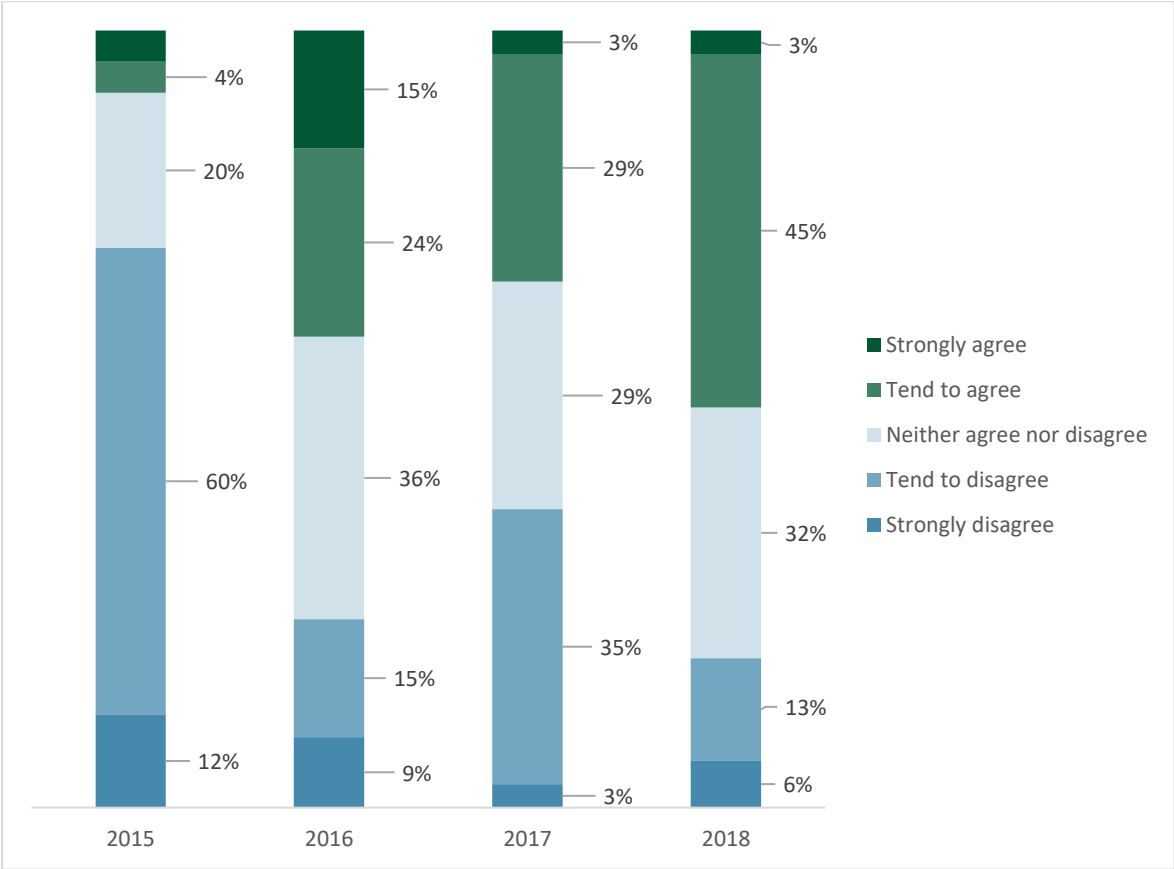
4. “Major pharmaceutical companies are constantly looking for in-licensing opportunities / company acquisitions, thus providing my most likely exit route for fledgling companies.”



These responses show that investors and company executives believe, that a significant licensing deal, or a trade sale to a major pharmaceutical company, is still the most likely funding / exit vehicle for the investor. It is worth noticing, however, that the figure of 81% of people either tending to agree or strongly agree with the statement is the lowest figure for a number of years, perhaps suggesting that a small number of companies have a belief that they can attract sufficient investment to see themselves through to sustainable profitability.

But with that figure of 81% of respondents still thinking that a pharma deal is the most likely exit route, it remains obvious that an IPO is not, in itself, seen as an exit route for investors, but a route to raise capital that will allow a company to progress its R&D programmes to such a stage that make it attractive for a major transaction / trade sale to be negotiated.

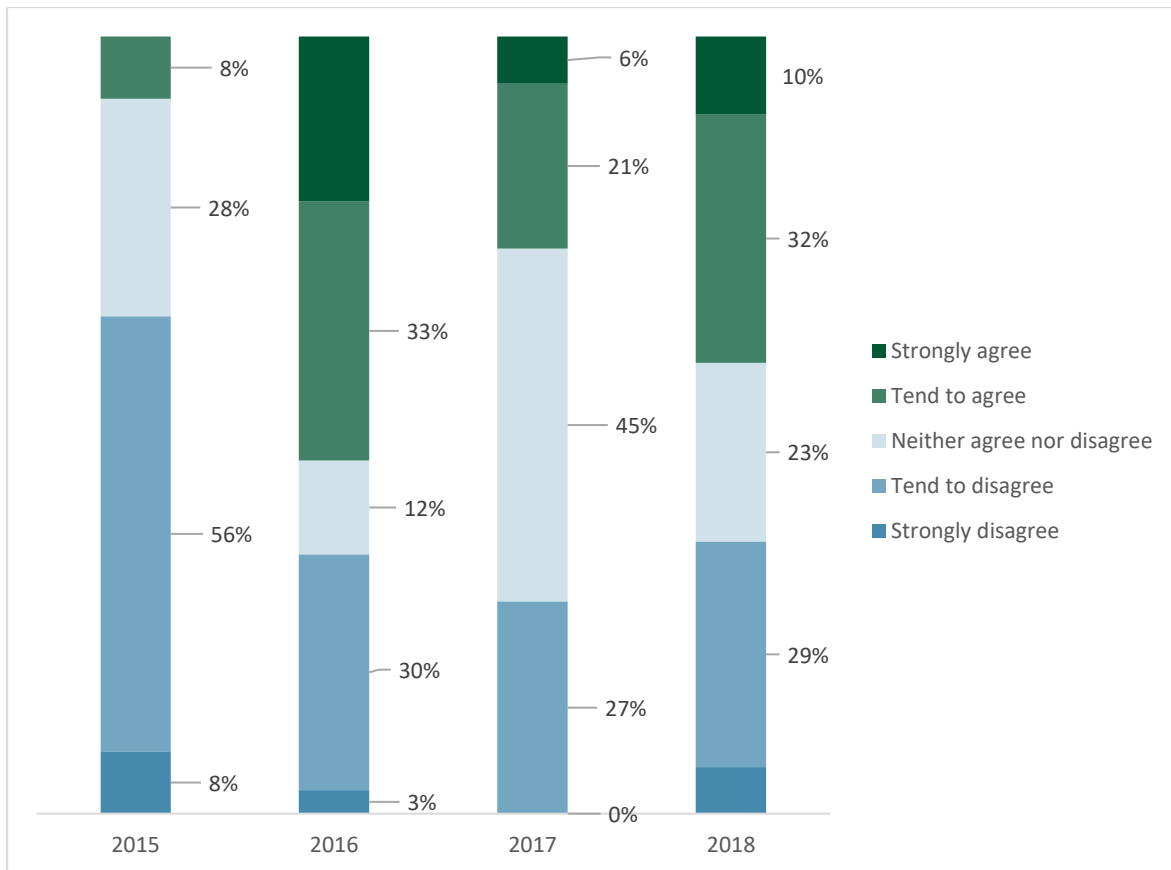
5. “Exits will prove to be more difficult over the next 12 months than they have this year.”



After the 2015 survey result, when the respondents were very bullish about the ability of companies to achieve an exit, the feedback in 2016 and 2017 was more circumspect with similar amounts of people agreeing and disagreeing with the statement, “Exits will prove to be more difficult than they have been this year”.

The survey carried out in December 2018, shows respondents believe that 2019 will be a tougher year for exits with 48% agreeing with the statement and just 19% believing that exits will be easier. This may be a reflection of the major M&A deals completed in 2018 (e.g. Tusk Therapeutics/Roche, F-Star/Denali, Wilson Therapeutics/Alexion); the assumption being that it is unlikely that 2019 will be able to beat such an active year.

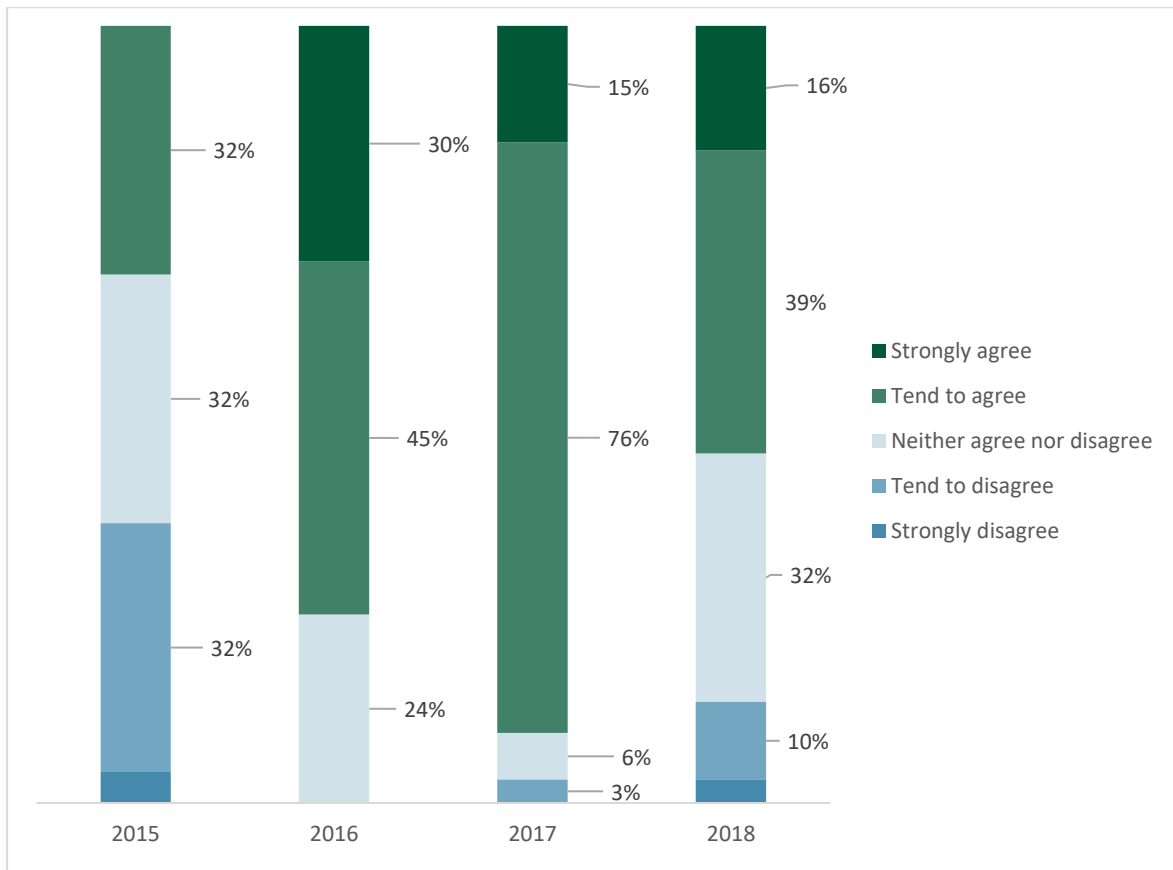
6. “Raising new Life Sciences funds over the next 12 months will be more difficult than it has been in the past.”



Over the past 2-3 years we have seen a number of significant funds raised, and the past 12 months has been no exception, with two of the most notable being Life Science Partners (€410 million) and Forbian (€360 million). With a very active IPO market and some spectacular M&A activity during 2018, it is not surprising that there is a huge appetite amongst the VC community to continue to invest in Life Science companies.

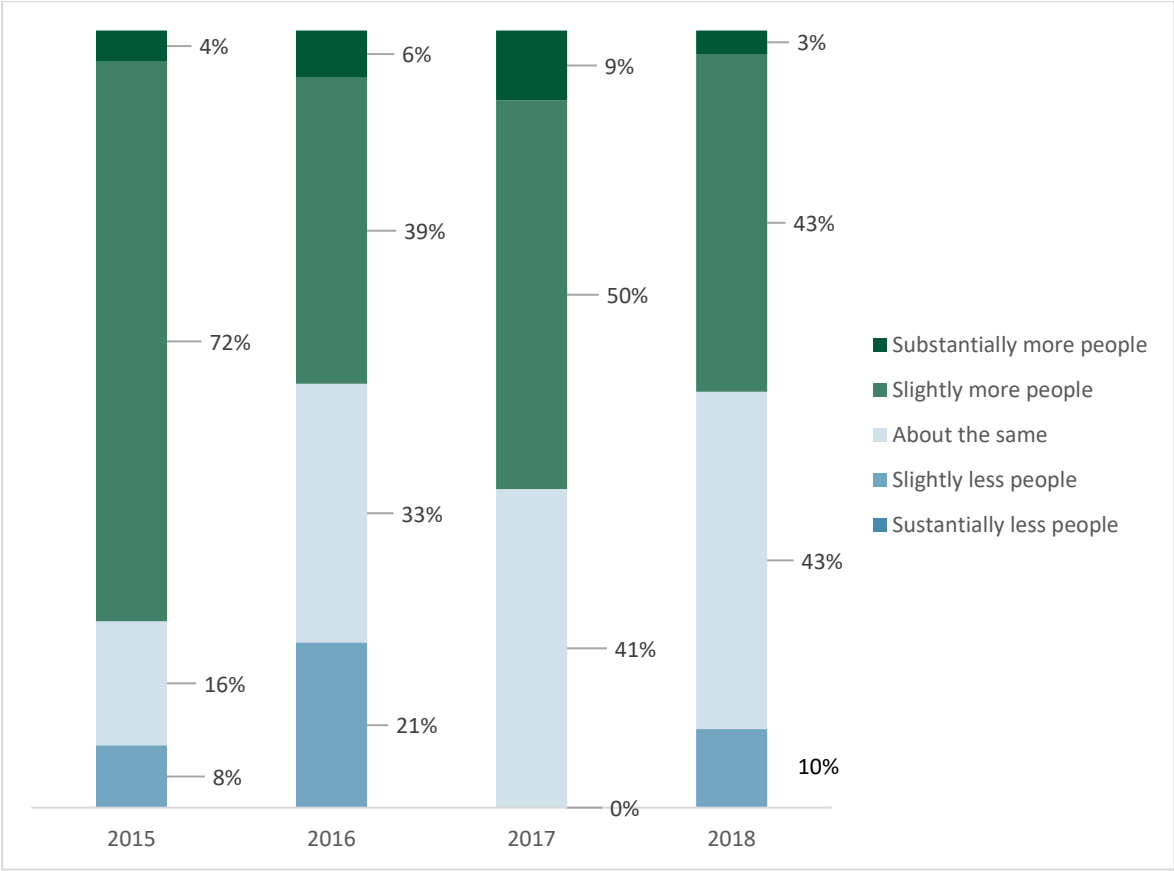
Our survey suggests that 2019 might cool a little with 42% of respondents believing that the coming 12 months will prove more difficult for investors to raise new funds, though it should be noted that 35% of the respondents disagree with the statement that raising new funds will be more difficult, whilst 23% believe things will be pretty much the same. Overall, therefore it would appear that the general consensus is that there will be little change in 2019.

7. “The European Life Sciences sector is a robust sector that, notwithstanding a global crisis such as a financial crash, will continue to offer good returns for investors.”



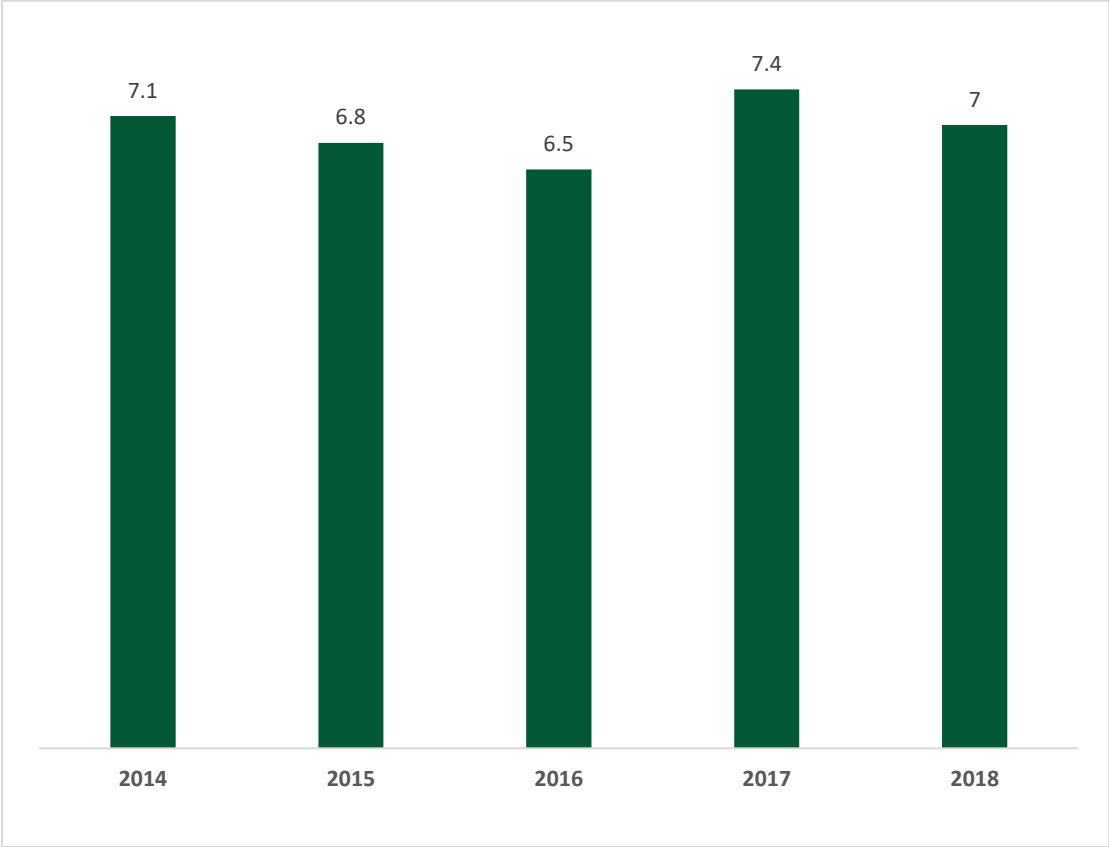
In our 2016 survey, we slightly re-worded this question to ask whether people believed the European Life Sciences sector was robust and one that offered good returns to investors. There was a strong belief that this was the case with 75% of the respondents being in agreement with the statement. The response last year was even stronger with 91% of the respondents agreeing with the statement. Sentiment has eased off somewhat this year, though it should be noted that only 13% of the respondents disagree with the statement. It is fair to say, that the investment community continues to see the European Life Science sector as one that will produce good returns for investors.

8. “Taken as a whole, in 12 months’ time, do you believe that most companies in the sector will employ”



In recent years, the responses to this question have tended to suggest that the Life Sciences investors anticipated that there would be year-on-year increases in employment levels within the sector and this has indeed been borne out. Last year the responses were hugely positive with 59% of respondents anticipating that the industry will employ a greater number of people in 12 months’ time, and not a single respondent projecting a fall in employment. The 2018 responses were not as bullish as 2017, but still had 46% of respondents anticipating that the sector would employ more people with only 10% believing that less people will be employed in life sciences. Speaking to the UK respondents, there is little doubt that the uncertainties surrounding Brexit had an impact on the replies we received, with a number of people expressing concern at being able to attract the talent required.

9. “On a scale of 1 to 10, how do you feel about the current state of the Life Sciences sector? (1 = very negative and 10 = very positive)”



This question gauges the level of confidence in the sector over the coming 12 months asking people to score their level of confidence on a 1-10 scale, with 10 being the most confident. Despite the survey being carried out during Britain’s exit negotiations with the EU, the average response of 7.0 suggests that most people within the sector remain broadly optimistic about the coming year. This figure is slightly down on the responses received just over 12 months earlier, but was higher than the responses received in the two previous years.

Horton International Global Healthcare

Horton International Global Healthcare is a UK based, specialist Executive Search company, focusing solely on pharmaceutical and Life Sciences organisations. Founded in 1992 (as Ruston Poole International), the company has been active in the UK and European biotech arena since its inception, and has become one of Europe's leading recruitment organisations. We count amongst our clients several of the top ten global pharmaceutical companies as well as many other organisations in the bioscience sector. We have a portfolio of government agency and not-for-profit clients, as well as strong relationships with the private equity and venture capital community. We are able to source candidates globally through our presence in the UK and mainland Europe, as well as through our affiliates in North America and the Pacific Rim.

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Entrust Resource Solutions

Entrust Resource Solutions is an umbrella corporation offering a group solution to talent sourcing. The group owns specialist life science recruitment company, Entrust People and Executive Search providers, Horton International (UK).

www.entrustpeople.co.uk