

ARTIOS PHARMA'S £65M SERIES B TO SPUR DEVELOPMENT OF DDR CANCER THERAPIES

Cambridge-based Artios Pharma recently raised a £65 million Series B round with support from new and existing investors. The biotech is developing a pipeline of DNA Damage Response (DDR) therapies, with the aim of progressing its lead Pol theta programme to Phase 1 clinical trials by 2020. LSX caught up with Niall Martin, Chief Executive Officer, and Nick Staples, Chief Business Officer, to learn more about the finance raise, the advance of the company's pipeline, and developments in the DDR space.





Niall Martin, Chief Executive Officer, and Nick Staples, Chief Business Officer at Artios Pharma

Artios Pharma, a UK biotech company developing DDR therapies targeting cancer, completed a £65 million Series B raise in August 2018. The funding round was led by new investors Andera Partners, formerly EdRIP, and LSP (Life Sciences Partners). In addition to existing investors Arix Bioscience, SV Health Investors, M Ventures, IP Group and Abbvie Ventures, new investors Pfizer Ventures and Novartis Venture Fund (NVF) also participated in the round. The finance raise follows a £25 million Series A round, which was completed in September 2016.

The £65 million Series B round will enable Artios to progress its lead programme targeting DNA polymerase, Pol-theta (PolO), through to clinical proof of concept, while also developing other first-in-class DDR projects in its pipeline.

"It gives us the bandwidth to accelerate our lead asset, PolO, into the clinic, and conduct two or three different Phase 1b proof-of-concept studies in parallel to give maximum exploration of PolO's potential," says Niall Martin, CEO. "We also wanted additional financing to bring forward our pipeline of DDR assets in parallel."

DDR in the spotlight

The substantial raise, which was also oversubscribed, not only highlights investor interest in PolO, which is becoming widely recognised as a very promising cancer target, but is also suggestive of the increasing attention industry is paying to DDR therapies with a broader recognition of the company's other DDR programmes. "It's a very specialist area, and big pharma had not generally been paying a lot of attention to it prior to recent PARP successes.

So, we're one of the leading players in terms of really understanding DDR and its capability," points out Nick Staples, CBO at Artios.

Martin adds: "The success of PARP inhibitors in the clinic at the moment is highlighting the strength of the opportunity within the DNA Damage Response area and that's been a big factor in helping to drive interest in the area. Putting all those factors together creates a particularly hot area of biology that will rapidly impact in the clinic."

"People are starting to look away from [immuno-oncology] (IO) as a panacea and are looking at areas such as DDR as potentially being used in combination with IO," Staples continues. "A lot of big pharma companies now have DDR in their strategy as a standalone area of interest. It doesn't have to be DDR in combination with IO, or combination with PARPs; DDR itself is now becoming an area of interest."

Drawing on industry experience

While Artios' lead programme and advances in the DDR space continue to attract interest, the company's draw can also be attributed to the team's proven track record in the field. Most notably, both Niall Martin and Graeme Smith, Chief Scientific Officer, played key roles in the discovery and development of KuDOS Pharmaceuticals' Lynparza™ (olaparib), the first targeted DDR inhibitor to market. In January 2006, KuDOS was acquired by AstraZeneca for this prized asset but it also gained a pipeline of other DDR programmes.

To oversee the company's corporate development, in February 2018, Artios

welcomed Pierre Legault as Chairman of the Board of Directors. He brings more than 35 years of biopharma leadership experience with him to the role, including multiple chair and board positions.

Following the Series B round, the company's board benefits from the additional expertise of Andera Partners' Raphael Wisniewski, LSP's Rene Kuijten, and Pfizer Ventures' Barbara Dalton, who have joined as directors, as well as NVF's Florian Muellershausen who has joined as an observer.

Artios' experienced investor syndicate provides valuable strategic insights as the company continues to move forward, from further informing its understanding of timelines and milestones, to providing industry perspectives, to support for potential future activities, such as an IPO or acquisition.

"Having a good cross-section of investors has been beneficial - having people with experience of [working with] a number of highly successful biotech companies and who have seen how those companies have evolved and grown," notes Martin. "We're quite an early[-stage] company and the experience these investors bring is important as we move into the clinical phase and establish ourselves as a world-leading DDR company."

Progressing PolΘ

The biotech company, which is based at Cambridge's Babraham Research Campus, aims for its lead programme to enter Phase 1 clinical trials by 2020. "We're in the final throes of lead optimisation in terms of identifying our candidates," says Martin. "We'll identify those candidates in the next several months and drive them through preclinical evaluation."

"There is a lot of industry focus on PolO at the moment, it has been recognised as a very exciting target," adds Staples. "We're making strong progress on the chemistry. Importantly, we now have the chemical tools to really understand the biology and we're seeing some exciting biology that's validating a lot of that lindustry and investor! interest."

The coming 12 months will also see Artios bring forward the other assets in its pipeline. "However, it's not all about PolO. We are working

hard to develop a clear line of sight to the clinic for all of our pipeline programmes and a good DDR platform to build the drug discovery around," notes Martin. To support these activities, the company continues to grow the team and expand its internal capabilities.

Building on academic expertise

In March 2018, Artios exercised its option to in-license its first nuclease programme as part of its research and development collaboration with Masaryk University, Czech Republic. Due to the role of DNA nucleases in DDR, nuclease inhibitors have potential applications in the treatment of cancer. Artios and Masaryk University, which have been collaborating since June 2017, are working in partnership to identify and progress several nuclease inhibitors towards the clinic.

In addition to the team at Masaryk University, Artios works with various DDR experts as it builds its pipeline. This includes a partnership with Cancer Research UK, from which it in-licensed its PolO programme.

"The UK is particularly rich in academic work in the DNA repair field," says Martin, noting that the company will continue to tap into that expertise as part of its strategy to exploit the full potential of DDR and to remain at the forefront of the field.

"The whole DNA repair field will evolve," he adds. "There will be more information coming out about PARP and PARP combination within the immuno-oncology setting, for example. We need to make sure we're aligning with what the current thinking is in the clinic."

Finance raise recognition

Last month, Artios' oversubscribed £65 million Series B round was shortlisted in the EU Private Finance Raise of the Year (>£30m) category at the Lifestars Awards 2018, hosted by LSX (formerly Biotech and Money) in partnership with Jefferies. The biotech company has also made the shortlist for the EU Private Company of the Year Award, sponsored by MSD. This follows a double win at LSX's Biotech and Money Awards 2017, when Artios took home the UK Life Science Young Company of the Year (1-3 years old) Award, sponsored by Clinigen, and the UK Private Finance Raise of the Year (≤£25 million) Award for its Series A round.

After leading the company through two funding rounds that have received industry recognition, Martin underlines the importance for companies to begin their finance raising process as early as possible. "Fundraises do take time, even when there is high interest, and so you've got to make sure you start early," he says. This includes speaking with potential investors and establishing a clear understanding of the types of investor that can provide the best support for the company and its strategic goals, while also maintaining clear lines of communication with existing investors.

As Martin points out, fundraising is also a timeintensive process that requires considerable internal bandwidth. Having a good team around you to support financing-related activities while not disrupting the ongoing business and scientific developments is key.

Funding rounds also bring with them additional scrutiny, although this can be a positive experience, says Staples. "You do look at yourself hard, you get new ideas, you are challenged by experts asking good questions, so it is actually a robust test. We came out of it having learnt a lot."

Interestingly, Artios had not originally envisaged commencing its Series B round quite as soon as it did, explains Martin, but it leveraged the opportunity presented by the current environment and level of interest in the company. "It was a big undertaking, and that was part of the reason why we decided to raise more money now. This gives us funding for several years so, in many respects, we can focus on delivering the science." With the Series B round now underpinning and accelerating its efforts, the company forges ahead with its ambition of building a world-class DDR company and pipeline.

Written by Louise Fordham, Editor at LSX, formerly Biotech and Money. This article was first published in October 2018 on www.lsxleaders.com.

Feature image © annavideo – <u>stock.adobe.com.</u>

