Advanced Oncotherapy (AVO-GB)

On Track - H1 recovery - solid H2 outlook

KEY TAKEAWAY

AVO reported its H1/2018 results today. The company has managed to turn the corner with a solid financial position and its completion of c.£40m financing round and ending the share overhang from debt equity facilities. The beam testing is progressing and company’s outlook confirmed first patient treatment with LIGHT by H2/2020. The new commercial distribution agreement in Asia with Liquid Harmony put the company in a robust commercial position. LIGHT has a greater potential than PT cyclotrons to replace a significant share of Photon Linacs. We feel that cyclotron manufactures have seen their peak a couple of years ago with a limited chance of recovery. The replacement power from LIGHT is based on technical position, price and easy installment. We maintain and reiterate both our OUTPERFORM recommendation and target price of 155 GBp.

AVO has made significant progress on all fronts in H1/2018 - The company has managed a major turnaround of its dire financial situation from last year. The project is now well financed with its £40m from its recent fund raising. We see progress on the technical side with its first customer well on track and the experimental beam at CERN has reached its milestone of achieving high enough energy levels to treat superficial tumours. We expect the ADAM team to get to the next stage achieving the energy level for its commercial product by year end.

RaySearch partnership is a key achievement in 2018. Software is the key differentiation factor for medical instruments and AVO has chosen the best TPS on the market - We believe LIGHT and laser based PT have the greatest potential to replace a significant share of photon linac and the cyclotron dinosaurs. While laser based technology is a decade away from delivering a commercial product, AVO’s LIGHT enjoys a prime market position. Software is driving the performance of medical instruments and has become the most important differentiation factor for stale hardware innovation.

Accelerated installation of LIGHT could take it to a faster adoption rate. The cyclotron technology involves lengthy and complicated building preparation. Heavy cyclotrons and large concrete bunkers make the installation a major building project, which is, regardless of pricing, often a big hurdle. The advantage of AVO’s technology being faster and less complicated combined with a cheaper production process, could give the company a fast head-start with a future margin expansion opportunity driven by an attractive service revenue stream.

Price of PT machines is not the biggest hurdle. While the current debate in the clinical community is about pricing and clinical evidence, we believe that the above-mentioned installation hurdles are more significant in holding back a faster adoption rate. In our previous update report (23rd July 2018) we compared cost of cancer treatments, which made PT look less expensive over a longer time period compared to drug-based approaches. We feel that the pricing element will become even less of an issue once the read out of trials comparing PT vs. Radiotherapy (“RT”) in 2020 brings clinical evidence to light. Should PT machines stay at the $15m price band by 2030, margins could look significantly more attractive for the whole PT industry.

The Proton therapy industry offers significant structural growth. We assume a PT conversion rate of 15% by 2030, which would make it a c. $8.0bn market ($4.5bn for 380 machines in that year sold and $3.5bn for the service of all machines installed up to 2030 (c.2,900 PT vs. c.16,500 conventional PT machines)). PT is among the most attractive sub-sectors in Medtech, which grows significantly above the sluggish Medtech sector with low single digit top line growth. Medtech as a whole has lost its steam due to lack of innovation, which was followed by price pressure from payers, who no longer pay top dollar for commoditised devices and instruments.

We maintain and reiterate both our OUTPERFORM recommendation and target price of 155 GBp.
COMPANY DESCRIPTION

Advanced Oncotherapy plc, together with its subsidiaries, focuses on providing radiotherapy systems for cancer treatment through the use of a novel proton therapy technology to healthcare providers and hospitals. It is developing Linac Image Guided Hadron technology, a next generation of proton therapy system for treating cancer. The company was formerly known as CareCapital Group plc and changed its name to Advanced Oncotherapy plc in September 2012. Advanced Oncotherapy plc was incorporated in 2005 and is headquartered in London, the United Kingdom.

SCENARIOS

Base Case - GP Investment Case
Proton therapy penetrates the conventional radiation therapy market by 15% in 2030. AVO will be able to get a market share of around 15%. Price per treatment room will come down to $7.5m and accelerates sales growth.

Bluesky Scenario
Proton therapy penetrates at a faster pace and goes up to 30% or higher. AVO will maintain or increase market share in an oligopolistic market. Price per treatment rooms will be as high as $15m - scale effects improve margins.

Downside risk
Proton therapy penetrates at a slower pace and goes up to only 10% by 2030. AVO may have significant delays and its market share in PT remains low as a result (10%) in 2030. Competitors could develop a competing linac with a modular system.

SWOT

Strength - AVO has a promising modular system, which could be cheaper and faster installed in hospitals.
Weakness - The company is small in size, early stage and has a limited financial strength compared to its competitors IBA, Varian, Hitachi, etc.
Opportunity - Growing clinical evidence and patient driven demand could accelerate adoption rate more than expected.
Threat - Capital constraints on healthcare budgets and underwhelming evidence for PT could be replaced by carbon ion RT. Partnerships are instrumental for AVO’s success and there is a significant risk of terminations or delays.

INDUSTRY EXPECTATIONS

The industry is expected to benefit from a higher adoption rate for proton therapy fuelled by growing clinical evidence. Prices for treatment rooms are not that high when broken down on a per patient basis vs. modern drug therapy. Thus, prices for PT treatment rooms are expected to come down only moderately. Software and better of imaging is expected to improve beam delivery and help adoption rates.
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Companies Mentioned in this report
- Advanced Oncotherapy Plc (AVO-GB)
- Medical Technology (MT)

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**Advanced Oncotherapy Plc Rating History as of 28/09/2018**

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