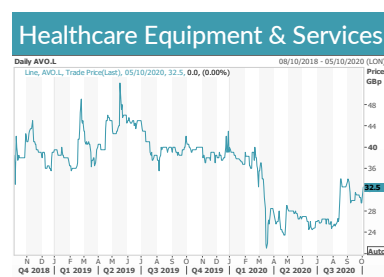




7 October 2020



Source: Refinitiv

Market data

EPIC/TKR	AVO
Price (p)	32.5
12m High (p)	43.0
12m Low (p)	21.0
Shares (m)	306.4
Mkt Cap (£m)	99.6
EV (£m)	140.0
Free Float*	67%
Market	AIM

*As defined by AIM Rule 26

Description

Advanced Oncotherapy (AVO) is developing next-generation proton therapy (PT) systems for use in cancer radiotherapy (RT). Standard radiation procedures have evolved over many years. PT delivers radiation via a beam of proton particles, rather than via a beam of photons used in conventional radiotherapy (X-rays).

Company information

Exec. Chairman Dr Michael Sinclair
CEO Nicolas Serandour

+44 203 617 8728

www.avopl.com**Key shareholders**

Liquid Harmony (Board)	14.7%
Other Board	7.7%
Nerano/Barrimore	9.9%
Celeste	6.5%
P.Glatz	5.1%
Lombard Odier	4.5%

Diary

19 Oct Investor day

Analyst

Martin Hall 020 7194 7622
mh@hardmanandco.com

ADVANCED ONCOTHERAPY

Progress towards commissioning of first LIGHT

AVO's goal is to deliver an affordable and novel PT system, called LIGHT, based on state-of-the-art technology developed originally at the world-renowned CERN. Over the past two years, the project has been significantly de-risked through important technical milestones. AVO is working on the verification and validation phase, prior to LIGHT being used on the first patients to support CE marking. Interim results highlighted the operational and commercial progress that has been made, despite the challenges caused by COVID-19. AVO is holding an investor day on 19 October, where senior management will be available to answer questions.

- **Strategy:** AVO is developing a compact and modular PT system, which is affordable for the payor, financially attractive to the operator, and generating superior patient outcomes. AVO benefits from technology know-how developed by ADAM (CERN spin-off), and relies on a world-class supplier base.
- **Interims:** AVO reduced operating losses in 1H'20 by 11% compared with 1H'19, slightly better than forecast. Drawdown of debt facilities resulted in higher finance charges. At the period-end, AVO had gross cash of £5.8m and net debt of -£40.4m, much of which was finance leases.
- **PT investment:** The attractions of investing in PT companies have been emphasised by the proposed acquisition of Varian for \$16.4bn (5.0x 2019 sales, 32.2x EBITDA, 40% premium to previous close) by Siemens Healthineers to gain access to its innovative solutions in radiation oncology.
- **Risks:** The technology itself is de-risked already, and LIGHT is simply accelerating the proton beam in a different way from conventional PT systems. Upcoming challenges and how they are being mitigated were highlighted in the annual report, and new funding is providing financial flexibility to reach the finishing line.
- **Investment summary:** AVO's £140m EV equates only to the amount invested into LIGHT to date, which reflects neither the enormous technical challenges that have been overcome, nor the market potential – our DCF valuation is 229p. As assembly of the first LIGHT system reaches its conclusion, the market's confidence in AVO is expected to improve considerably. Commercial deals indicate that buyers are comfortable about the timing of LIGHT delivery.

Financial summary and valuation

Year-end Dec (£m)	2017	2018	2019	2020E	2021E	2022E
Sales	0.0	0.0	0.0	11.2	57.1	105.8
Gross profit	0.0	-1.9	0.0	1.0	10.0	26.6
Administration costs	-12.9	-15.7	-19.0	-23.1	-23.9	-25.5
EBITDA	-14.1	-21.4	-18.6	-22.7	-16.1	-4.2
Underlying EBIT	-14.5	-21.8	-20.7	-25.0	-20.0	-8.2
Statutory EBIT	-14.5	-21.8	-20.7	-25.6	-19.3	-6.5
Underlying PBT	-16.5	-21.9	-21.8	-27.4	-24.7	-14.2
Statutory PBT	-16.5	-21.9	-21.9	-27.9	-24.0	-12.5
Underlying EPS (p)	-17.6	-14.0	-9.8	-8.9	-7.5	-4.0
Net cash/(debt)	-9.2	-2.0	-43.3	-66.1	-91.9	-88.0
Equity issues	8.1	21.1	25.4	15.1	0.0	25.0
EV/EBITDA (x)	-7.7	-4.7	-7.7	-7.3	-11.9	7.9

Source: Hardman & Co Life Sciences Research

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2020 interim results

Key features

Operational and commercial highlights

- **LIGHT:** All the high precision accelerating structures that form the LIGHT system have been delivered to the Daresbury assembly site. The patient positioning system (PPS) has been manufactured and tested, and is currently in transit.
- **The London Clinic (TLC):** AVO signed a memorandum of understanding with TLC to operate the first commercial LIGHT facility at the Harley Street site. AVO and TLC will receive a share of the profit generated by the centre.
- **First sale:** In February, AVO signed a purchase order for a LIGHT system with the Mediterranean Hospital of Limassol. In addition, the company signed a commercial collaboration with the University Hospitals Birmingham NHS Foundation Trust (UHB) for the provision of PT and clinical services.

Financial highlights

- **EBIT:** Operating losses were slightly better than forecast, at -£9.8m (-£11.0m). Despite the considerable investment being made to complete the first LIGHT system and the unexpected incidence of COVID-19, management has carefully controlled operating costs during the period, which were 3% lower than in 1H'19.
- **Funding:** During 1H'20, AVO strengthened its balance sheet through a Subscription with existing and new shareholders to raise gross new funds of £14.9m. Also, it announced financing agreements with VDL and Nerano Pharma, giving access to up to a further £42m.
- **Net cash/(debt):** At 30 June 2020, AVO had net debt of -£40.4m, which comprised gross cash of £5.7m and debt of -£45.4m, including lease liabilities of -£32.3m.

1H'20 results – actual vs. expectations					
Year-end Dec (£m)	1H'19 actual	1H'20 actual	Change	1H'20 forecast	Delta Δ
Underlying operating costs	-9.2	-8.9	-3%	-9.5	+0.6
Share-based costs	-1.8	-0.9	-50%	-1.0	+0.1
EBITDA	-10.2	-8.6	-16%	-9.5	+0.9
Depreciation/amortisation	-0.9	-1.2	+35%	-1.0	-0.2
Underlying EBIT	-11.0	-9.8	+11%	-10.5	+0.7
Finance costs	-0.6	-2.4	-	-2.0	-0.4
Underlying PBT	-11.6	-12.2	+5%	-12.5	+0.3
Gross cash	3.6	5.8	-	5.0	+0.8
Net cash/(debt)	-17.3	-40.4	-	-40.0	-0.4

Figures may not add up exactly due to rounding
Source: Hardman & Co Life Sciences Research

Post-balance sheet events

- **Loan facilities:** As part of the new debt facilities announced in June 2020, AVO stated that it had drawn down an initial \$10m/£8m from the interest-bearing secured \$30m convertible facility with Nerano Pharma for the further development of the company's LIGHT system.
- **Board of Directors:** At the AGM, the size of the board was reduced from 12 to eight members, with four NEDs not seeking re-election. Alongside the results, AVO announced the appointment of Lori Cross as a new NED. She brings 35 years' experience with global companies in the fields of medtech and life sciences.

Progress despite COVID-19

During 1H'20, AVO raised £14.9m via equity subscriptions...

...and progressed much of the paperwork required for regulatory approval

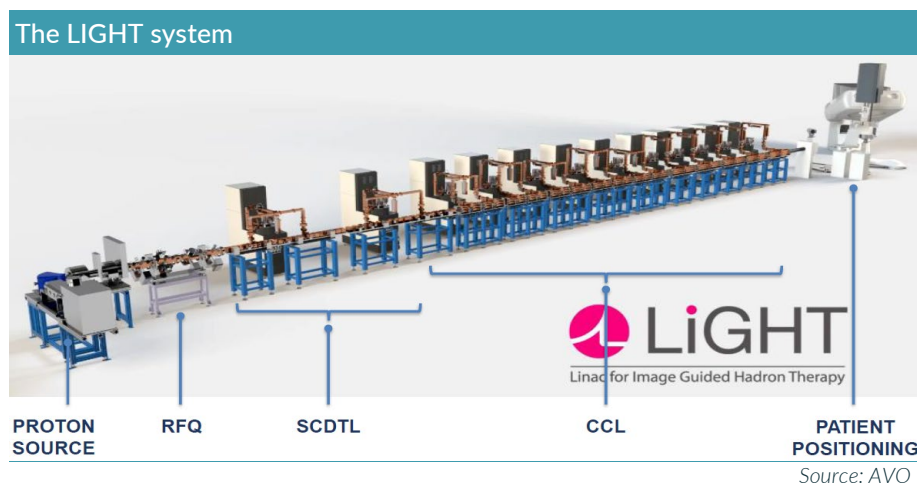
During 1H'20, AVO has made considerable progress towards getting LIGHT financed, operational and ready for CE marking in the coming months, despite the challenges posed by the unforeseeable COVID-19 pandemic. Although the Daresbury assembly was closed during the period of lockdown, AVO used the opportunity to progress the considerable work involved in writing documentation for the workstreams, thereby continuing to advance the LIGHT system.

Technology development update

As a reminder to readers, AVO is developing a PT system whereby the proton beam is accelerated up to a maximum energy (230MeV) by innovative linear accelerators, using validated technology previously developed at Conseil Européen pour la Recherche Nucléaire (CERN). This differs from the conventional systems (cyclotron/synchrotron) that generate a proton beam at a single high energy using circular accelerators, which then needs to be reduced to the working energy required by absorbers (filters).

Consequently, the LIGHT system has a number of cost, operational and clinical advantages, being more compact, modular in design and requiring much lower radiation shielding than conventional systems, and which can be fitted into existing buildings. In addition, it can be readily adapted for use with new technological developments in the field of PT, such as FLASH technology.¹ A summary of the LIGHT system can be seen in the following graphic, with more details on the roles played by the various modules provided in the *Appendix* in this report.

LIGHT system has many cost, operational and clinical advantages



During 1H'20, delivery to Daresbury was completed for all the manufactured and tested modules that comprise the LIGHT accelerator. In addition, the hardware required for the PPS was manufactured and passed factory acceptance testing, and is currently in transit to Daresbury.

LIGHT – Daresbury assembly status

Component	Number	Current status
Proton source	1	✓ Delivered
RFQ	1	✓ Delivered
SCDTL	4	✓ Delivered
CCL	13	✓ Delivered
Patient positioning system	1	✓ Manufactured, tested and in transit
Validation and documentation	-	Ongoing

Source: Hardman & Co Life Sciences Research

¹ <https://www.hardmanandco.com/research/corporate-research/flash-benefits-from-new-us-reimbursement/>

Advanced Oncotherapy

AVO not immune from COVID-19 disruption...

...but disruption limited...

...and by time lockdown eased, development activities were able to resume

Considerable progress made in 1H with commercial partnerships:

As with most companies, AVO was not immune from the disruption caused by the COVID-19 pandemic. However, management introduced flexible working practices to limit the disruption. During the development of medical devices, particularly large equipment, the focus is often on completing the machinery, leaving the documentation required as part of all regulatory submissions lagging behind.

In September 2020, AVO announced that, during the period of lockdown, it had been working with P-Cure, the supplier of the PPS, to upgrade the treatment planning system ("TPS") software and enhance key documentation to ensure the efficient installation of future systems, enabling quicker system start-up and commissioning. This means that its software and documentation are well advanced, in readiness for first patient treatments and for the application for CE certification.

Daresbury

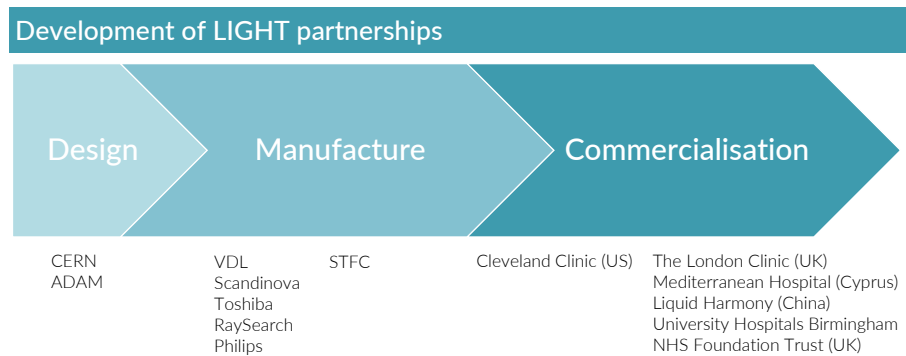
In March, the company transitioned to remote working and established contingency plans to support business continuity. While the UK was in lockdown, the Daresbury Laboratory had to be closed temporarily. By the time lockdown was eased, altered work patterns and social-distancing measures had been introduced to enable development activities to resume.

Regulatory status

Given the history and previous work at CERN, AVO is confident that a completed LIGHT system will work well and will be approved with CE marking in the near future, because the technology is largely de-risked – LIGHT simply accelerates the proton beam in a different way. Moreover, medical equipment used for PT is in the unusual position of being exempt from CE certification prior to being sold. This has enabled AVO to push ahead with its commercial plans.

Partnership update

During the period, AVO made considerable commercial progress by signing a number of commercial partnership agreements and making its first sale, highlighting that the development of LIGHT is approaching its final stages.



Source: AVO, Hardman & Co Life Sciences Research

Birmingham, UK

UHB: provision of PT and clinical services

In collaboration with UHB, AVO has agreed to install a LIGHT system and engage with oncology specialists within the Trust for the development of additional advanced technical features. There are two components to this partnership. First, some of the Trust's clinicians are helping AVO with part of the certification process, and will treat the first patients in Daresbury required for CE marking. Separately, it is envisaged that UHB will install a LIGHT machine in one of its hospital sites. The collaboration between AVO and UHB includes an agreement that an appropriate revenue-sharing arrangement will be implemented.

TLC: to operate first commercial LIGHT facility at Harley Street site

Subsequent to the agreement being signed, UHB is preparing to install LIGHT beam data into its TPS software, and the two teams are cooperating to plan for the initial Daresbury patient indications.

London, UK

A new partnership was announced with TLC with respect to the operational activities at the Harley Street site. Under an initial 10-year new agreement, AVO will supply the LIGHT proton accelerator and treatment room equipment, and TLC will manage the clinical operation of the facility. Moreover, AVO's PT centre adjoins the existing main site of TLC on Harley Street, providing the opportunity for both parties to extend the site and operate a second treatment room, which will have a clear impact on the revenue and profit of this unique location.

Since this agreement was signed, the two groups have been working on the fit-out plans for the Harley Street site, potential patient flows and a business plan. Influential to these discussions was an announcement in September that TLC had signed a separate partnership agreement with the Cleveland Clinic (also see below) to provide medical, radiation and other oncology services to patients having surgery at either its new outpatient centre (24 Portland Place, due to open in autumn 2021) or its new eight-story, 325,000-square-foot hospital (33 Grosvenor Place, due to open in early 2022). The aim of this partnership is to provide the highest-quality patient-centred care and a seamless treatment pathway, which should allow more cancer patients to be treated. Given the charitable status of TLC and non-profit status of the Cleveland Clinic, the partnership will offer TLC's "Moving On" service, a free-of-charge survivorship programme for cancer patients. PT, as part of any treatment programme from this collaboration, will be performed at the Harley Street site.

Mediterranean: purchase order for a LIGHT system

Limassol, Cyprus

In February, AVO announced the sale of a LIGHT system to the Mediterranean Hospital of Limassol (Mediterranean), one of the largest private hospitals in Cyprus, for a consideration of €50m/£45m. Although the financial terms were not disclosed, AVO will additionally receive a share of the profits generated by this new PT facility, which will have three treatment rooms.

Completion of construction work being carried out at the hospital is expected before the end of 2023. The timing of LIGHT installation and full execution of the partnership remain subject to other agreements, which are related to operational management.

Cleveland Clinic: aim is to demonstrate benefits of using mini-beams

Cleveland Clinic, US

Late in 2019, AVO announced a research collaboration with the Cleveland Clinic, which provides clinical and hospital care, and is a leader in research, education and health information. The aim of this partnership is to demonstrate the benefits of using mini-beams, which is particularly relevant for delivering a more conformal treatment to patients. This is a key technical differentiating feature of LIGHT, which – together with the potential use of ultra-efficient hypofractionation (FLASH technology) at any energies – bodes well on the positioning of LIGHT and the ability of the company to capture significant market shares going forward.

The Cleveland Clinic has installed the LIGHT TPS software and started a two-year study to evaluate the target conformity of proton mini-beams in comparison with X-ray stereotactic body radiation therapy and stereotactic radiosurgery.

The triumvirate of companies – AVO, TLC and the Cleveland Clinic – are all committed to technical innovation in cancer care, with the aim of treating more patients and obtaining better clinical outcomes.

Financing achieved through combination of equity and debt

Financing the project

Financing a technically complex project is capital-intensive and has been a challenge in difficult markets. However, given the significant technical progress and considerable de-risking of the LIGHT project, the end-goal is now very much in sight. This allowed AVO to strengthen its balance sheet during 1H'20 and access capital resources to fund completion of the project. This was achieved through a combination of equity and debt, culminating in two new loan facilities.

As stated earlier, in August, AVO announced that it had drawn down an initial \$10m of the interest-bearing secured convertible facility with Nerano Pharma.

Doing good as part of ESG

AVO's ultimate goal is to develop an affordable PT system, accessible to many, with a strong commitment to "doing good"

Publication of guidance on Environmental, Social and Corporate governance (ESG) by a number of regulatory bodies in recent years highlights the growing importance of this subject. AVO has signed up to the Quoted Companies Alliance (QCA), and complies with its codes and principles. With respect to ESG, the QCA provides guidance on environmental stewardship agendas, equitable distribution of benefits, and transparent accounting practices.

Over the past six months, AVO has implemented a number of initiatives as part of its ESG considerations. There has been a re-evaluation of the Board of Directors, with an initial reduction from 12 to eight at the AGM. This number and skillset of non-executive directors have subsequently been strengthened with the appointment of Lori Cross as a NED.

The ultimate goal of AVO is to develop an affordable PT system, which is financially attractive to the operator, and generating superior patient outcomes. Importantly, it is aiming to democratise PT by reducing the treatment cost, thereby making it accessible to many.

The availability of PT around the world has been limited by price. The average cost of treatment in the UK is estimated at \$120k/€100k/£90k. The only way of reducing this cost is to lower the price of the proton beam accelerator, and this can only be achieved by changing the method of acceleration. LIGHT is the only system under development that can achieve this and reach that goal to reduce treatment costs.

In addition to its goal to make PT more affordable and accessible, as part of its ESG considerations and highlighting its commitment to doing good, AVO is encouraging its clinical partners to treat children at cost in its centres (i.e. zero margin).

AVO – aiming to “do good”	
Aim	Comment
Children	AVO has committed to treat children at cost in its centres
Access to many, not few	Ambition to democratise PT by reducing the treatment cost
Helping customers	AVO's business model is focused on leasing arrangements in order to widen access and facilitate operators to use LIGHT
Training	AVO is committed to train physicians and engineers through partnerships with universities
Local facilities	Being modular, LIGHT can be installed in city centres, allowing patients to be treated near to their homes/family and reduce the need for long journeys
Modular	LIGHT is designed to avoid the issues associated with the transportation of heavy equipment (e.g. blocked road access, use of cranes, etc.)
Treating patients in green environments	LIGHT is designed to limit induced radiation, with building and shielding requirements being significantly lower than current machines

Source: AVO presentations, Hardman & Co Life Sciences Research

Financial summary

- **Sales:** First sales are expected in fiscal 2020 (Cyprus contract), although they are likely to be invoiced in a tranching manner against construction milestones.
- **Administration costs:** Continued development of the organisation is expected to see a controlled increase in underlying administration costs.
- **Profit share:** Details of profit share arrangements with some of AVO's commercial partners have not been disclosed. Consequently, they have not been included yet, suggesting that there is upside potential to our forecasts.
- **Interest charges:** Net financial costs are rising to reflect the drawdown of new loan facilities, although only some of these are cash payments; the remainder are accrued and will be repaid when loans mature.

Profit & Loss						
Year-end Dec (£m)	2017	2018	2019	2020E	2021E	2022E
GBP:USD	1.289	1.335	1.278	1.278	1.278	1.278
Profit & Loss						
Sales	0.00	0.00	0.00	11.25	57.08	105.77
COGS	0.00	-1.91	0.00	-10.25	-47.11	-79.13
Administration	-12.95	-15.69	-18.99	-23.08	-23.90	-25.51
Marketing	0.00	0.00	0.00	-0.54	-2.70	-4.79
R&D	0.00	0.00	0.00	-0.54	-1.35	-2.20
Underlying EBIT	-14.49	-21.80	-20.66	-25.01	-19.99	-8.18
JV profit/loss	0.00	0.00	0.00	-0.56	0.70	1.67
Net financials	-1.99	-0.07	-1.15	-2.35	-4.67	-5.99
Underlying PBT	-16.49	-21.87	-21.81	-27.37	-24.67	-14.18
Share-based costs	-1.99	-0.07	-1.15	-2.35	-4.67	-5.99
Exceptionals	0.00	0.00	0.00	0.00	0.00	0.00
Reported pre-tax profit	-16.49	-21.87	-21.88	-27.92	-23.97	-12.51
Taxation	2.83	0.76	1.08	2.00	1.50	1.10
Underlying net income	-13.66	-21.11	-20.73	-25.37	-23.17	-13.08
Reported net income	-14.73	-20.16	-20.79	-25.92	-22.47	-11.41
Weighted shares (m)	77.8	150.5	211.5	285.2	309.9	325.2
Underlying EPS (p)	-17.55	-14.02	-9.80	-8.90	-7.48	-4.02
Reported EPS (p)	-18.92	-13.39	-9.83	-9.09	-7.25	-3.51
Balance sheet						
Share capital	20.2	42.4	61.1	76.6	78.3	84.3
Reserves	8.4	-8.4	-18.2	-44.5	-68.7	-61.0
Working capital facility	0.0	0.0	13.9	37.9	64.9	66.9
Debt	9.2	3.0	0.0	0.0	0.0	0.0
Cash	0.1	1.0	3.2	2.8	2.4	6.7
Invested capital	37.85	52.48	102.71	114.70	118.03	127.75
Net cash/(debt)	-9.2	-2.0	-43.3	-66.1	-91.9	-88.0
Cashflow						
Trading profit	-14.5	-21.8	-20.7	-25.0	-20.0	-8.2
Working capital	2.0	-5.7	-5.7	-3.6	-4.5	-13.9
Interest & tax	2.56	2.86	-0.15	-0.59	-2.67	-4.49
Co. operating cashflow	-8.86	-1.15	-22.96	-26.67	-22.87	-21.83
Capital expenditure	-0.1	-3.3	-2.7	-1.0	-1.1	-1.3
Capitalised intangibles	-8.4	-8.8	-9.3	-10.0	-5.0	0.0
Free cashflow	-17.42	-13.24	-34.97	-37.67	-28.99	-23.08
Equity issues	8.05	21.05	25.43	15.10	0.00	25.00
Forex	0.00	0.05	0.00	0.00	0.00	0.00
Change in net debt	-10.10	7.20	-41.28	-22.82	-25.79	3.87

Source: Hardman & Co Life Sciences Research

Company matters

Registration

Incorporated in the UK with company registration number 05564418

Registered office: Third floor, 4 Tenterden Street, London, W1S 1TE

Board of Directors

Board of Directors	
Name	Position
Dr Michael Sinclair	Executive Chairman
Nicolas Serandour	Chief Executive Officer
Prof. Steve Myers	Executive Director, ADAM executive Chairman
Michael Bradfield	Non-executive Director
Hans von Celsing	Non-executive Director
Lori Cross	Non-executive Director
Dr Nick Plowman	Non-executive Director, Chairman Medical Advisory
Dr Enrico Vanni	Non-executive Director
RenHua Zhang	Non-executive Director

Source: Company reports

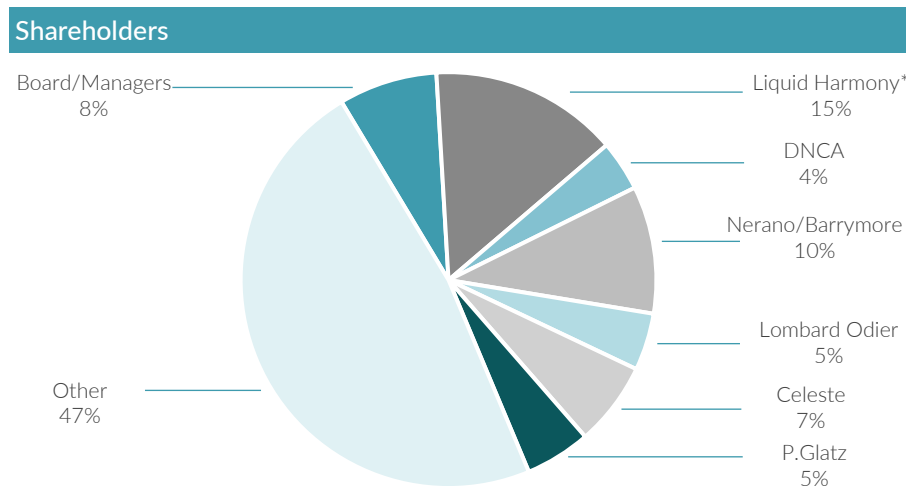
Medical Advisory Board

Medical Advisory Board (post-AGM)	
Name	Affiliation
Prof. Ugo Amaldi	Founder and President of the TERA Foundation
Dr Jay S Loeffler	Professor of Radiation Oncology at Harvard Medical School and Chair of Radiation Oncology at Massachusetts General Hospital
Prof. Chris Nutting	Clinical oncologist and Chair at The Royal Marsden and ICR London
Dr Margaret Spittle OBE	Clinical oncologist at University College Hospital London
Dr Euan Thomson	Operating partner at Khosla Ventures, CEO of AliveCor and Director of the Hospice of the Valley

Source: Company reports

Share capital

There are 306,371,241 Ordinary shares of 25p in issue. In addition, there are currently 29.9m options and 39.2m warrants outstanding.



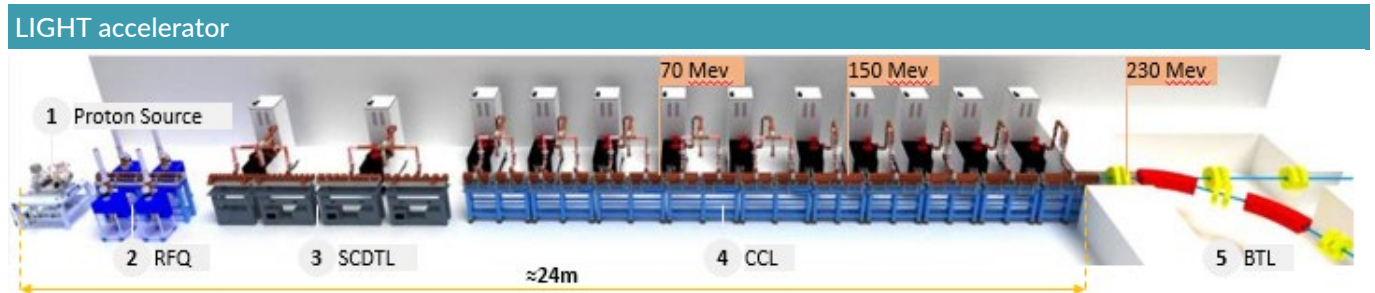
*Also a board member

Source: Company announcements, Hardman & Co Life Sciences Research

Appendix

The LIGHT accelerator

The LIGHT system is comprised of a proton source, which generates a proton beam that is accelerated by four different main structures to a maximum energy of 230MeV. These are integrated with delivery and patient positioning systems.



Source: AVO investor presentation

- ▶ **Proton source:** The proton source generates a very high rate of up to 200 pulses of protons per second (a rate higher than that of any competitor) from a source of hydrogen gas. The protons are accelerated to an energy level of 40keV.
- ▶ **Radio Frequency Quadrupole (RFQ):** This focuses the beam and accelerates the protons from 40keV to 5MeV. The RFQ structure is composed of four units, each designed to match the proton velocity. The RFQ unit has been designed by CERN. It operates at the highest frequency in the world, at 750MHz (compared with the closest RFQ at 400MHz), which allows the wavelength to be much shorter; this, in turn, allows the RFQ component to be shorter and more affordable.
- ▶ **Side Coupled Drift Tube Linac (SCDTL):** Manufactured by TSC and VDL, the SCDTLs, each with their own power unit, sit between the RFQ and the CCL components. The four low-speed accelerating units aim to accelerate the protons from 5MeV to 37.5MeV. Again, each unit is different, so that it matches the increasing velocity of the protons.
- ▶ **Coupled Cavity Linac (CCL):** This structure of high accelerating units is composed of up to 15 separate units to accelerate the proton beam from 37.5MeV to the clinically relevant energy of up to 230MeV (0.6x the speed of light).
- ▶ **Dose Delivery System (DDS, or “nozzle”):** Once fully accelerated, the high-energy beam passes into the DDS, which ensures that the proton beam is both measured and targeted to maximise its effectiveness in cancer treatment.
- ▶ **Patient Positioning System (PPS):** This represents the end-part of the system and comprises several components that allow the optimal positioning of the patient for both imaging and therapy.

Glossary

The following terms are important and used regularly in our reports on AVO, but all of them might not have been used in this particular report.

CCL	Coupled Cavity Linac – accelerate the proton beam to the clinically relevant energy
CERN	Conseil Européen pour la Recherche Nucléaire
DDS	Dose Delivery System
ESG	Environmental, Social and Corporate governance
Hypofractionation	Delivery of higher doses of radiation in fewer fractions than are used in conventional radiation therapy.
ISO	International Organisation for Standards
Linac	Linear accelerator
MeV	Mega-electron Volts
PPS	Patient positioning system
PT	Proton therapy
PTCOG	Particle Therapy Co-Operative Group
RFQ	Radio Frequency Quadrupole – focuses the proton beam and accelerates the protons up to 5MeV
RT	Radiotherapy
SCDTL	Side Coupled Drift Tube Linac – low-speed accelerating units that accelerate the protons from 5MeV to 37.5MeV
STFC	Science and Technology Facilities Council
TLC	The London Clinic
TPS	Treatment planning system
UHB	University Hospitals Birmingham NHS Foundation Trust

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