


Advanced Oncotherapy plc

# Annual Report 2019



## Democratising Proton Therapy

Advancing cancer treatment with innovative,  
cost effective technology





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# STRATEGIC REPORT

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# Advanced Oncotherapy and ADAM at a Glance



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## Company Overview

- Advanced Oncotherapy's purpose is to democratise proton therapy, a fast-growing subset of radiation oncology, by designing, assembling, selling and maintaining proton therapy systems called LIGHT
- ADAM, a spin-off from CERN, the world's most advanced lab for nuclear science, was acquired in 2014
- LIGHT has been designed to accelerate protons in a linear fashion, which has several advantages over circular systems, including a smaller footprint, modular design, ease of installation, fast electronic control of the proton beam and energy, significant cost savings throughout every step of the project
- The production of LIGHT and components is outsourced to established OEMs (such as VDL, Toshiba, Philips)
- Staff: 129 in offices in London, Geneva, Daresbury, the US and the Netherlands

## Investment Highlights

- Growing market with strong needs massively unmet due to costs
- Revolutionary CERN technology applied addressing the current shortcomings in radiation therapy
- Significant commercial traction with three commercial collaborations announced in early 2020
- First commercial system to be installed and operated in London
- Process for scaling-up production well advanced; assembly lines in partnership with STFC (UK governmental organisation)
- Four streams of prospective revenues: sale of LIGHT systems, maintenance, software licence fees, project management fees, which brings a diversified and sustainable source of cash-flows
- Clear achievements with significant catalysts ahead
- A highly recognised and experienced management team with a successful track-record of value creation

## Market Overview

- Second cause of death globally, cancer accounts for 13% of all deaths worldwide
- More than 10 million cases are expected to be diagnosed every year by 2030
- Approximately 14,000 X-rays machines are used in the treatment of up to 60% of cancer cases
- Proton therapy: similar efficacy to X-rays; up to 60% less damage to healthy surrounding tissues
- Installed base growing at 14% CAGR p.a.
- Growing scientific evidence of proton therapy; more than 1,200 papers published every year
- Only 90 proton centres globally
- Price of proton therapy treatment in the UK comprised between £60,000 and £90,000
- Lower costs for setting up proton therapy centres are needed to decrease the cost of treatment

## Strong Social Impact and True Sense of Purpose

**Proton therapy for many, not just a few:** Democratising proton therapy by reducing the treatment cost

**Helping customers:** Business model focused on providing a turnkey solution, including project management, training, maintenance and financing

**Children:** Company committed to support the treatment of children free of charge

**Training:** Company committed to train physicians and engineers

**Access to proton centres (shorter journeys for patients requiring proton therapy):** The uptake of radiotherapy treatment by patients is known to diminish with distance travelled by patients, which should ideally be limited to 45 minutes travel time. LIGHT can be installed in the heart of big cities, allowing patients to be treated at proximity to their family

**No need to transport large equipment:** LIGHT is designed to be transported in standard container and trucks (i.e. no road access blocked, use of cranes, etc.)

**Treating patients in a green environment:** LIGHT is designed to limit induced radiation with building and shielding requirements being significantly less than current machines





## Our Vision, Mission and Values

### **Our vision:**

To develop a more affordable proton-based radiotherapy system, using an innovative and clinically more effective technology, and saving many more lives from cancer

### **Our mission:**

To facilitate the wider use of radiation with protons for treating all forms of cancers by commercialising a novel technology, and building on the success and scientific know-how of CERN (Centre Européen pour la Recherche Nucléaire)



## Our Values:

### SAFETY

We choose the right path, not the easy path. We do the right thing to ensure patient safety, the safety of our users and the safety of our staff. We are rigorous in our research, our development and our testing, never accepting short-cuts.

### LIFE

We collaborate across our professional disciplines, and with our suppliers and investors, to create outcomes that go beyond the sum of the parts. Putting the well-being of patients and staff at the heart of our mission, we change people's lives for good.

### QUALITY

We focus on patient outcomes, on reliability and consistency. Our professionalism, commitment and precision deliver world-class results, meeting the most stringent medical requirements.

### INNOVATION

We push the boundaries of what can be achieved between physics and engineering, creating something that has never been done before. Our agility and entrepreneurial spirit are changing cancer treatment for ever.

# Statement from the Executive Chairman and the Chief Executive Officer

At Advanced Oncotherapy we have a unique opportunity to help democratise proton therapy. We believe the Company's technology is truly disruptive with the ability to bring profound change to the treatment paradigm within the radiation oncology market. That said, we remain cognisant that success in achieving this also requires us to navigate a highly regulated and fast-changing environment.

Over the past year, Advanced Oncotherapy has made significant progress towards achieving our corporate goals. We reflect on these, as well as our financial results for the period, below.

## A DIFFERENTIATED APPROACH TO THE GROWING DEMAND FOR PROTON THERAPY

### *Market dynamics*

Life expectancy around the globe continues to rise. The World Health Organization estimates that there will be more than 800 million people aged 65 or older in the world by 2025. It is well established that accessing provisions for healthcare increases with age. Innovation in healthcare, therefore, needs to be focused on enabling both wider affordability and more efficient delivery. While infrastructure investments, technological advancements and evolving care models all have a role, clinical quality and patient experience also need to be considered.

Nowhere are these challenges more evident than in the radiation oncology market. The World Health Organization has predicted a 60 percent global rise in the incidence of cancer by 2040, with more than 80 percent of that growth expected to occur in low and middle-income countries, where survival rates are currently lowest. Increasing cancer cases and adoption of new procedures in emerging countries are expected to fuel the growth of the radiation oncology market, including the proton therapy market.

At Advanced Oncotherapy we believe that in the next 20 years the industry will need more than 10,000 proton therapy treatment rooms, representing a 50-fold increase over the current global capacity. This, we think, will be driven by the increasing realisation and demonstration that proton therapy allows radiographers to effectively irradiate tumours whilst sparing up to 60 percent of the surrounding healthy tissue. We want to play a fundamental role in the transformation of this market. To truly unlock this potential, the industry needs more precise and cost-efficient proton therapy systems. We believe proton therapy systems based on our proprietary LIGHT technology can achieve this.

### *LIGHT: A disruptive technology*

The core strengths of Advanced Oncotherapy lie in the unique design of our LIGHT system and its versatility. Its technical properties have profound implications for both clinical efficacy as well as affordability. All these attributes are appreciated by both our customers and partners. Our order book is growing, and we believe LIGHT ideally positions us, over time, to gain a significant share of the growing proton therapy market, which in turn bodes well for the creation of sustainable future shareholder value.

The LIGHT system is designed to allow easy installation directly into clinical facilities. It produces proton beams at the required energy level for treatment therefore greatly reducing the need for absorbers and the associated high levels of shielding and cost required for proton beams produced by cyclotrons. By only producing proton beams at the required energy level, the generation of stray radiation is minimised, decreasing the need for expensive shielding and reducing the building and installation cost, which can represent up to two-thirds of the cost of setting up a proton therapy centre.

The LIGHT system allows an ultra-fast delivery of radiation into the tumour, which is designed to be 100-fold quicker than competing systems. This is a particularly attractive medical feature when treating moving organs.

Another feature of LIGHT is that it is intended to provide a smaller proton beam, also called a mini-beam, which can be one tenth of the cross-sectional diameter of a currently available proton beam. This is the basis of the collaboration we announced in December 2019 with the Cleveland Clinic which aims to evaluate the target conformity of proton mini-beams in comparison with X-ray stereotactic body radiation therapy (SBRT) and stereotactic radiosurgery (SRS).

The LIGHT system can easily be used for hypofractionation, a technique in which the treatment is delivered in fewer larger doses, and FLASH, a new technique in which an ultra-high dose of radiation is given in a fraction of a second, for all radio-sensitive tumours irrespective of their location in the body. As a result, LIGHT is well positioned to reduce the number of treatment visits, hence taking advantage of new reimbursement models that favour reimbursement per treatment course as opposed to reimbursement per visit.

### *Potential future applications*

Advanced Oncotherapy's primary business focus continues to be the successful commercial launch of LIGHT. However, our strategy also encompasses several longer-term initiatives including: FLASH, the combination of proton therapy with immuno-therapeutic modalities and the use of protons in a broader range of non-oncological diseases.

FLASH radiotherapy is expected to provide benefits for both patients and clinics. Patients will benefit from being treated in a single visit to a clinic, and clinics can benefit from a higher throughput of patients through their facility. Another advantage of the LIGHT system is that unlike legacy proton therapy systems, there is no need for absorbers to control the energy of the protons; LIGHT accelerates the protons to the required energy level independently of the location of the tumour. The results we have published to date on FLASH are exciting and bode very well for our ambition to provide FLASH on our machines.



*Dr Michael Sinclair, Executive Chairman of Advanced Oncotherapy*



Another area of great interest is the combination of proton therapy with drugs triggering the immune system to attack cancer cells. There is a growing body of research supporting this synergistic effect, which could pave the way for a more effective and efficient treatment of the primary tumour as well as any metastases.

We expect LIGHT to facilitate a wider adoption of proton therapy not only beyond the currently reimbursed cancer indications to other tumour types, but also outside of cancer. For instance, the successful treatment of a patient in Italy for a severe form of arrhythmia in early 2020 highlighted the potential versatility of proton therapy. LIGHT is ideally positioned to meet further medical needs thanks to its differentiating features, including its smaller beam size and greater flexibility to deliver protons at a fast rate.

## OUR STRATEGY AND POSITIONING

### Strategy

The key essence of our strategy is built on four key pillars:

1. the manufacturing and assembly of a commercial instrument that can deliver our breakthrough technology and so penetrate the large radiation oncology market;
2. the implementation of a differentiated customer-oriented business model;
3. the establishment of a large network of stakeholders supporting our vision; and
4. putting in place the financial infrastructure required to support the launch of LIGHT across the globe.

We have made great progress in achieving the first three elements. During the period, we have made significant progress in the commissioning and assembly of the various modules of LIGHT, building a fit-for-purpose assembly site, taking the necessary steps towards the regulatory certification of our system, whilst cementing new commercial and scientific collaborations with prominent hospitals globally.

When it comes to the fourth element of our strategy, laying the financial foundations to support the launch of LIGHT across the globe, we have made clear progress as evidenced by the support of existing and new investors for £44 million in equity and £14 million in debt since the beginning of 2019. That said, we have continued to consider a wide range of financing options to further underpin our balance sheet and enable us to create sustainable long-term value for our shareholders.

### Innovating in sustainability

Being at the forefront of innovation means we also have a responsibility to take a lead in practically applying the technology to the world in which we live. All businesses need to generate value for their shareholders, of course, but a responsible business should also have a clear social purpose. We believe that Advanced Oncotherapy is here to ensure that proton therapy is accessible “by the many, not just a few”. This strong sense of purpose and social impact is reflected in our commitment to install LIGHT near patients and their families, including in the heart of cities, working alongside hospitals to treat children in the relevant catchment

area, free of charge. The LIGHT system also allows customers to treat patients in a facility that requires a lower environmental footprint and a reduced use of transportation of large equipment in comparison to what is necessary with traditional proton therapy systems during construction.

To ensure we can fulfil our purpose, both today and for the years to come, we depend on getting the fundamentals right. This means having a clear, well-executed strategy underpinned by a robust financial position, alongside strong values that help guide each of our decisions.

## OUR PROGRESS

### Technical developments

2019 was marked by the manufacturing of all critical hardware of our LIGHT system. All the accelerating structures required for accelerating protons to their maximal energy have now been manufactured. The patient positioning system, which includes the diagnostic quality CT scanner used to scan patients in a seated position, the real-time X-ray verification system which enables continuous imaging of a moving tumour, and the robotic chair which can move and rotate the patient with high accuracy and precision, have also all now been manufactured.

Whilst all these components have been commissioned, tested as part of our verification and validation process and assembled at our assembly site at the Science and Technology Facilities Council (“STFC”) Daresbury Laboratory, UK, we continue to receive the software components and upgrades which are designed to ensure optimal operational and enhanced clinical performance.

### Regulatory developments

Completing our regulatory plan requires the Board and management team’s relentless focus and is an integral part of developing our infrastructure and the manufacture of our LIGHT System, so that it is safe, effective and reliable. The importance we place on quality requires robust processes across our entire organisation in accordance with the stringent requirements of the regulatory bodies that oversee clearance and approval for use of medical devices.

Our regulatory plan largely revolves around performing verification and validation activities, meaning that each individual part, system and sub-system of LIGHT must be tested and documented with the view of ensuring that our product not only meets all the requirements from a user’s standpoint but also has been manufactured to the specifications provided to suppliers and relevant standards. These activities are being performed in accordance with the standards of excellence required for medical devices and the ISO-13485 certification which we successfully obtained in January 2019.

# Statement from the Executive Chairman and the Chief Executive Officer \_Continued

Proton therapy as a treatment modality has been used for many years. More than 213,000 patients have been treated up to December 2019, increasing by more than 20,000 per year. As we have developed a new way of delivering protons to patients, we have put in place a thorough verification and validation process. This effort is being led by our head of regulatory affairs, who has a wealth of relevant knowledge and experience gained through holding similar responsibilities for 17 years at IBA.

## **Financing developments**

Thanks to the completion of equity investments totalling £44 million since the beginning of 2019, we have been able to continue to make progress with our activities. We have also been looking to secure additional funding for the next stages of this project, which include regulatory approval and commercial roll out.

In order to crystallise the market opportunity, we need to ensure our financing plan considers the needs of our suppliers and customers in the context of funding our working capital requirements and assisting hospitals in their purchase of our system. We believe that to date the industry has failed to do this. The modular design of LIGHT, which can be easily disassembled, means that it can be used as financing security for future partnerships and agreements, therefore putting Advanced Oncotherapy in a unique position to change the financing paradigm.

With that vision in mind, we have separately announced on 29th June 2020 a strategic funding partnership and a debt facility which provide access to up to approximately £42 million in funding:

- Strategic €20 million funding partnership with VDL Groep, which expands our close partnership with our existing supplier, VDL ETG Precision; and
- \$30 million secured debt facility provided by Nerano Capital, an existing shareholder in Advanced Oncotherapy.

These financing arrangements will allow us to further the development of our LIGHT system and to advance our pipeline of

construction opportunities. Details on the key terms of the facilities are contained within the separate announcement released on 29 June 2020.

## **Commercial developments**

Early in 2020 we announced commercial transactions with The London Clinic (TLC), the Mediterranean Hospital of Limassol in Cyprus and University Hospitals Birmingham NHS Foundation Trust (UHB).

In our partnership with TLC, Advanced Oncotherapy will provide the LIGHT proton accelerator and treatment room equipment while TLC will run the day-to-day operational activities for the LIGHT machine at the Harley Street site in London. This partnership has been structured around a profit share arrangement which incentivises both our company and TLC. Building work at the Harley Street site to accommodate our facility has been completed at a £10 million cost borne by the site's freeholder, the Howard de Walden Estate. We will now be working alongside TLC to add a second treatment room on TLC's premises in the adjacent building.

The Mediterranean Hospital of Limassol in Cyprus has agreed a contract valued at €50 million, for the installation of a LIGHT system supporting three treatment rooms. The Company will receive a share of the profit generated from this proton therapy service, the timing and the full execution of the agreement being subject to customary conditions.

We are also collaborating with UHB to install LIGHT on their campus. We have agreed an appropriate revenue sharing arrangement with UHB and we will also work with them to jointly develop further advanced technical and clinical features.

This commercial strategy is underpinned by our robust and highly differentiated business model centred around the needs of



*Nicolas Serandour, Chief Executive Officer of Advanced Oncotherapy*



patients and clinical operators. Our model is built on developing profit sharing arrangements with customers.

This model is a key differentiator for us with prospective customers and we expect it to provide us with a sustainable and profitable source of revenues, whilst accelerating the delivery of our pipeline. Furthermore, this will help us meet our vision of democratising proton therapy and treating more patients in a value-enhancing manner for our shareholders. Ultimately, this is expected to provide customers with a wider range of offerings leading eventually to a pay-per-patient (PPP) model similar to that utilised in the software industry. This is possible because the unique technical features of LIGHT will potentially allow more patients to be treated in fewer visits to the clinic and with more successful medical outcomes.

### OUR PEOPLE

The success of an organisation is dependent on its culture and the people and talent within it. In addition, we believe that innovation and technology are only one part of the story. Our partners want more than our technology skills; they require our insight and business understanding too. That is why we have consistently added more talent to build even greater expertise and know-how. For example, in 2019, we hired Moataz Karmalawy as Chief Commercial Officer and President of US. In his previous role, Moataz led the proton therapy business of Varian, where he built an order book in excess of \$1 billion and achieved a 50 percent market share of the global particle therapy products market.

We will continue to invest in the skills and development of our people. Importantly, we have taken steps to ensure that all our employees share in the success of our performance. In February 2019 we introduced and set the terms of a Save As You Earn plan which helps to align the interests of our employees with the company's stock performance and supports our ambition of having a high-performance culture within the Company.

This year's performance is testament to the hard work and dedication of our employees and partners. We are confident that our colleagues have the skills and commitment required to adapt to whatever 2020 has in store and to continue to deliver for our customers and our shareholders.

### OUR OUTLOOK

2019 highlighted our resilience as a Company and our stature as a technology disruptor as we made significant progress. This resilience, but also our processes, our discipline and our continued ability to think outside of the box will be particularly important to navigate through some of the issues we will face during the year, such as the Covid-19 outbreak that led to the temporary closure of our assembly site in Daresbury and the Harley Street site during the first half of 2020. During these uncertain times, the support of our shareholders, evidenced by the equity fund raising transaction announced on 9th April 2020, showed how AVO and its ecosystem see the future: with confidence in our ability to deliver a breakthrough solution, but also humility and a strong sense of responsibility for all our stakeholders. We believe 2020 will be an important year for Advanced Oncotherapy as we continue to assemble and test our LIGHT system, execute on our announced transactions and expand our order book and set the financing foundations to support our growth. The Company expects to achieve first patient treatment in 2021.

Our key priority remains the successful commercial introduction of a LIGHT-based system to treat patients. We believe this will enable, for the first time, the benefits of this treatment modality to be realised in a truly a cost-effective manner such that the full potential of proton therapy can be made available to all patients that could benefit.

We would like to thank all our customers, suppliers, investors and employees for their support and hard work in 2019 as we look forward to our continued partnership for an exciting year ahead.



**Dr Michael Sinclair**  
Executive Chairman  
29th June 2020



**Nicolas Serandour**  
Chief Executive Officer  
29th June 2020

# Cancer in a Broader Context

## U.S. Incidence

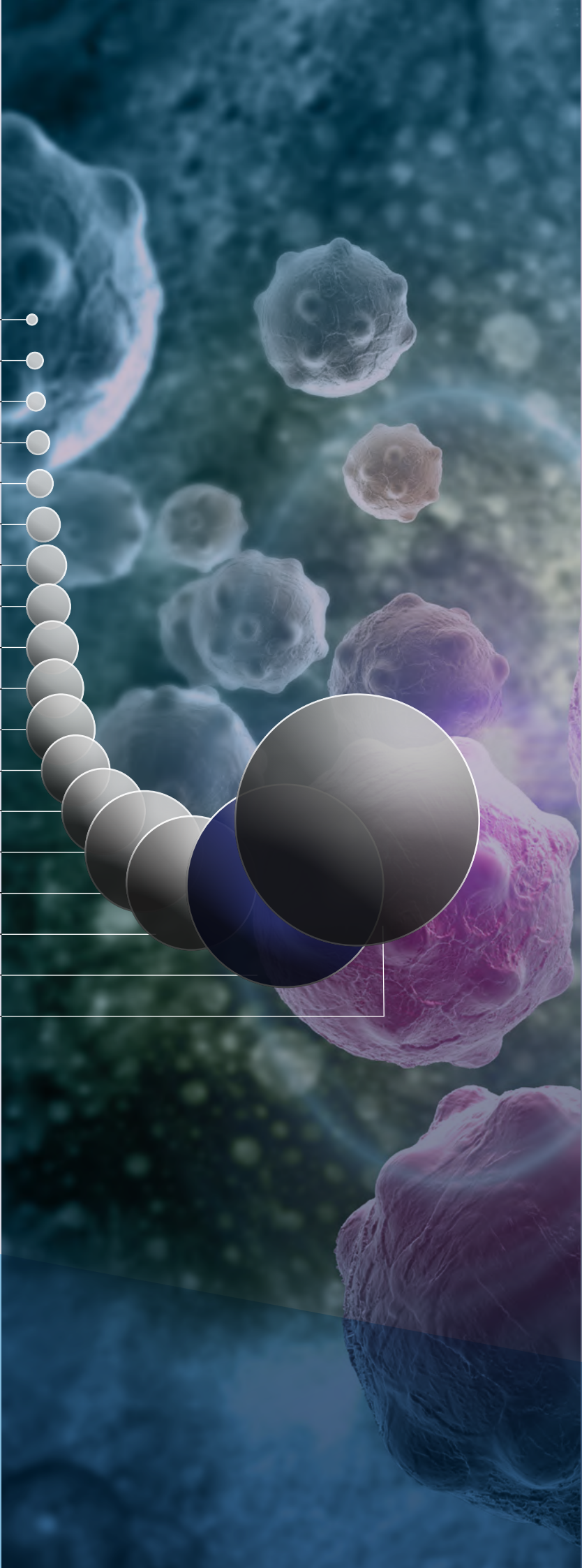
- War
- Pregnancy & birth
- Medical complications
- Murder
- Undetermined events
- Mental health disorders
- Transport accidents
- Suicide
- Musculoskeletal disorders
- Diabetes
- Non-transport accidents
- Infections
- Kidney disorders
- Digestive disorders
- Nervous system disorders
- Respiratory disorders
- **Cancer**
- Heart & circulatory disorders

Cancers are defined by the National Cancer Institute as a collection of diseases in which abnormal cells can divide and spread to nearby tissue. Cancers can arise in many parts of the body – leading to a range of cancer types – and in some cases spread to other parts of the body through the blood and lymph systems.

There are more than 200 different types of cancer.

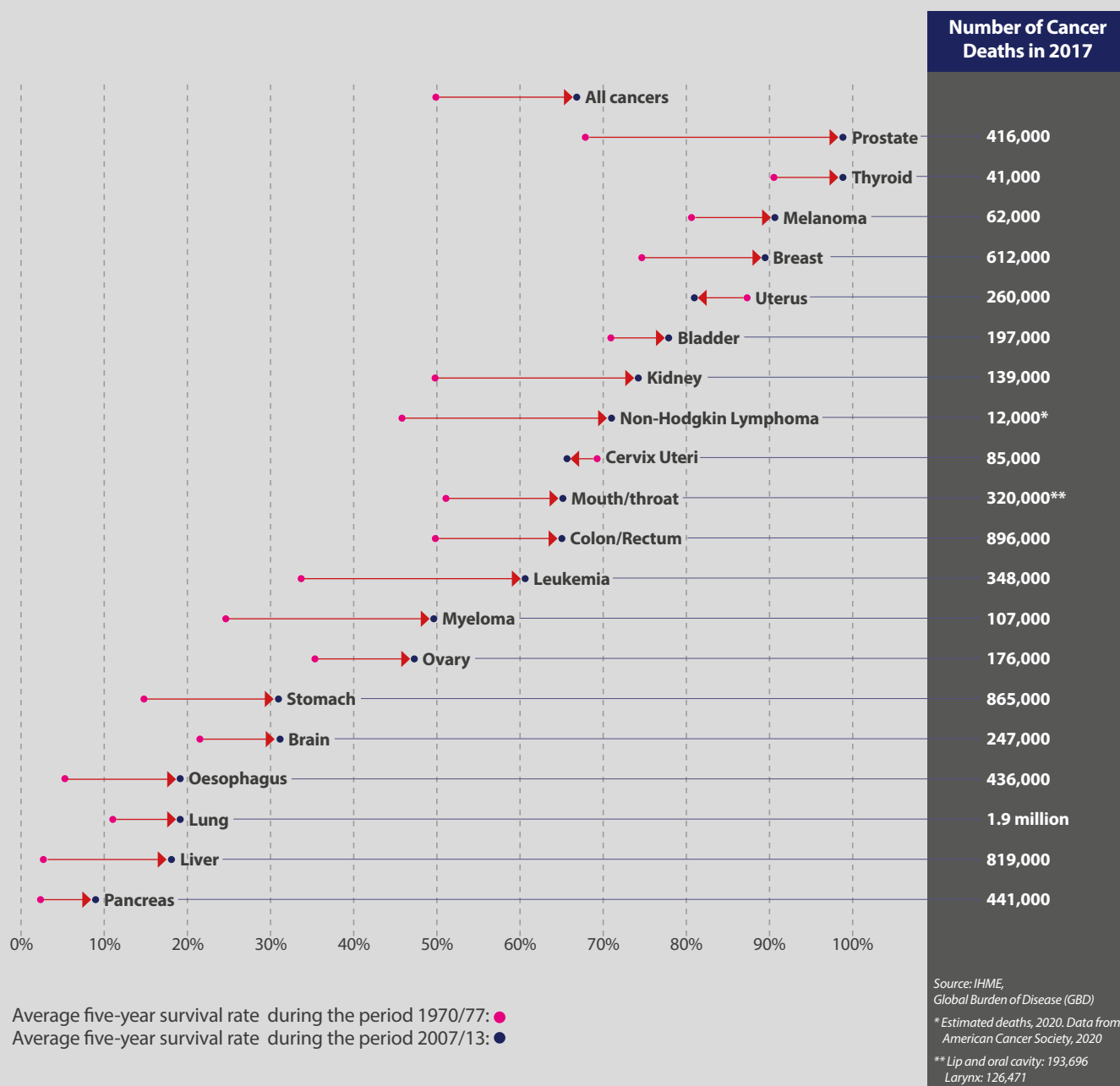
Cancer is one of the world's largest health problems. The Global Burden of Disease estimates that 9.6 million people died prematurely as a result of cancer in 2017. Every sixth death in the world is due to cancer, making it the second leading cause of death – second only to cardiovascular diseases. In fact, cancer is expected to surpass heart dysfunctions as leading cause of death by 2030.

1 in 2 people in the UK will get cancer in their lifetime.





## Five-year Cancer Survival Rates in the U.S.



Average five-year survival rate during the period 1970/77: ●  
 Average five-year survival rate during the period 2007/13: ●

Lung cancers (including tracheal, bronchus) claimed the largest number of lives: 1.9 million in 2017. Next follow colon and rectum, stomach and liver cancer, all claiming between 800,000 and 900,000 globally in 2017.

There are many causes of cancer, and some are preventable. For example, over 480,000 people die in the U.S. each year from smoking cigarettes. In addition to smoking, risk factors for cancer include heavy alcohol consumption, excess body weight, physical inactivity and poor nutrition.

Other causes of cancer are not preventable. Currently, the most significant unpreventable risk factor is age. According to the American Cancer Society, doctors in the U.S. diagnose 87 percent of cancer cases in people aged 50 years or older.

# Radiation Therapy, a Powerful Weapon Against Cancer



Wilhelm Röntgen<sup>(1)</sup>

Radiotherapy uses high-energy rays to treat cancer. The tumour is targeted with a radiation beam made of ionising particles that damage the DNA of cells, causing their death or preventing them to proliferate. The particles used in the case of X-rays, the most common type of radiotherapy today, are photons. A photon is an elementary massless stable particle with no electric charge. Its concept has been developed by Einstein and defines the nature of light. Photons can be ionised<sup>(2)</sup>

and have different energies, ranging from micro-waves, infrared rays, UV radio waves to gamma rays. All of these are invisible light occurrences, some of which can interact with matter, ionise and damage it. This explains how ultraviolet radiation from sunlight causes sunburns (UV photons interact with skin) and why X-ray radiotherapy can irradiate tumours and destroy malignant cells.

<sup>(1)</sup> Picture of Wilhelm Röntgen, German physicist, who, on 8 November 1895, produced and detected electromagnetic radiation in a wavelength range known as X-rays, an achievement that earned him the first Nobel Prize in Physics in 1901.

<sup>(2)</sup> Ionisation is a process by which an atom or a molecule acquires a negative or positive charge by gaining or losing electrons. As a result, the atom or molecule becomes electrically charged.



Because radiotherapy treats a specific area of the body, it is often called a "local" therapy. This is in contrast to systemic therapy, such as chemotherapy, which travels throughout the body. There are two main types of radiation therapy: internal radiation therapy, also called brachytherapy or implant therapy, where a source of radioactivity is placed inside the body near the tumour and external radiation therapy, where a beam of radiation is directed from outside the body. The latter is the most common form of radiation therapy; it is administered using a machine that generates a radiation beam that irradiates the tumour but also healthy tissues on the way to the targeted area. A person receiving external radiation therapy is not radioactive or dangerous to the people around him or her.





A fundamental aspect of radiotherapy relies on the abnormally high rate of division (mitosis) of cancerous cells. This fast growth makes them more susceptible to radiant injury and attacks on DNA. In contrast, normal cells are growing more slowly; they are better able to repair the ionisation damage than are cancerous cells. In order to give normal cells time to heal and to reduce patient's side effects, radiation treatments are typically given in small daily doses called fractions, five days a week, over a 5 to 7-week period.



# Proton Therapy, a More Targeted Approach of Radiation

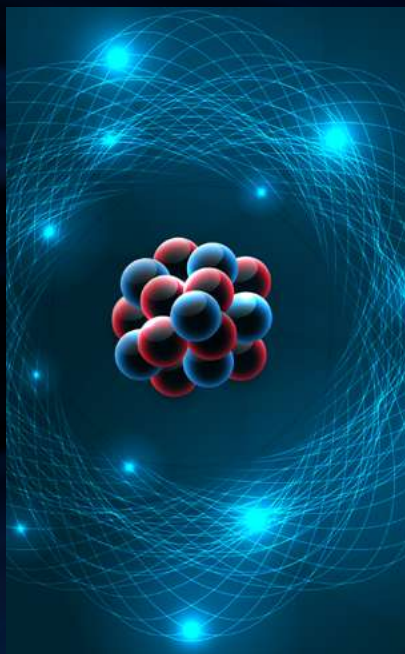
X-rays therapy and proton therapy are both radiation therapy techniques but the former uses photons to irradiate diseased tissues while the latter uses beams of energetic protons, which have very different physical properties.



Protons are sub-atomic particles with a positive electric charge that coexist with neutrons in the nucleus of each atom, around which the electrons revolve. Those charged particles, when isolated and highly accelerated by a particle accelerator such as a cyclotron are able to ionise and damage cells, which constitutes the operating principle of proton therapy. Unlike photons, protons have a mass and are considered as “heavy” particles ( $1.67 \times 10^{-27}$  kg). They are positively charged. Consequently, they interact very differently with matter and human living cells, and that is precisely where the primary advantage of proton therapy relies.



The photon - used in X-rays - is highly penetrating and delivers a dose throughout any volume of irradiated tissue. However, most of the radiation is delivered only 0.5 to 3.0 cm from the patient's skin. It then gradually loses its energy until it reaches the target. As tumours are almost always deeply located, the photon actively interacts with outer healthy cells and drops only a small remaining dose of ionising radiation on the deeper malignant cells. Moreover, as photons are not all stopped by human tissue, they leave the patient's body and continue to emit radiation beyond the tumour (exit dose).

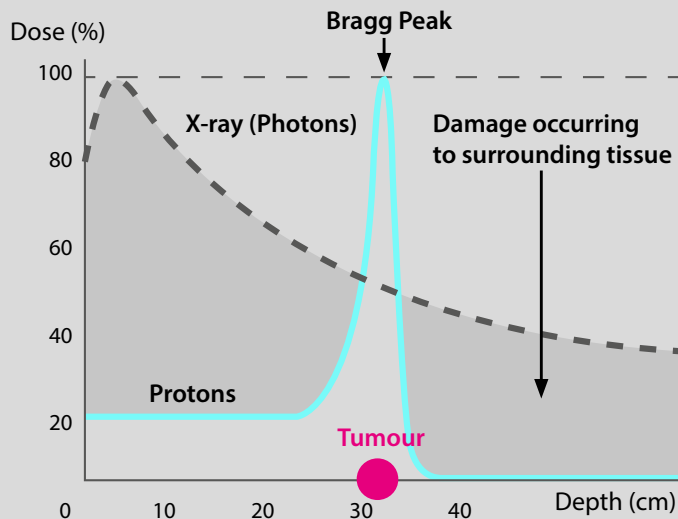


On the contrary, the proton gradually loses its speed as it interacts with human tissue. It is easily controlled and delivers its maximum dose at a precise depth within the body, which is determined by the amount of energy it was given by the proton accelerator, and can go as far as 32 cm. The proton is very fast when it enters the patient's body and deposits only a small dose on its way. The radiation dose absorbed by tissues increases very gradually as the proton moves more deeply, closer to the target and at lower speed, suddenly rising to a peak when the proton is ultimately stopped. This is known as the Bragg peak. The behaviour of the proton and the exact location of the Bragg peak where most radiation is deposited can be precisely determined. Immediately after this burst of energy, the proton completely stops to irradiate.

**“When we look at what we can do with conventional photon therapy, we are at a plateau — or very near — with regard to what we can do to further improve the therapeutic ratio. We made a lot of strides during the past 10 years in image-guided therapy, but further improvement will be limited by simple physics of X-ray beams. Moving to proton beam therapy opens up new possibilities. [...] There are differences in the physical properties of proton therapy that we can exploit for better dose distribution. Radiation therapy is going to be marginalized in future treatment strategies that require us to improve or maintain our effectiveness, but decrease toxicities. Proton therapy is a tremendous way for us to do this.”**

**Mark McDonald, MD**  
Associate Professor, Department of Radiation Oncology of  
Emory University School of Medicine





The proton beam enters the body. The amount of radiation surges at the end of the path in a spot called the Bragg peak. Beyond that point, there is virtually no radiation to the tissue, or no "exit dose". The depth of the Bragg peak in tissue is dependent on the energy of the beam; the higher the energy, the deeper the Bragg peak and therefore, the deeper the radiation dose deposited. This allows the radiation team to calculate the energy required to position the dose at the depth of the cancer and spare the healthy tissues surrounding it. In comparison with current radiation procedures, it preserves healthy tissue in front of the tumour and does not damage healthy tissue behind the tumour at all. These physical properties of the proton beam – low entry dose, maximal dose of energy at the required depth and a zero exit dose – enable extremely precise modulation of dose distribution inside the patient's body and represent the main advantage of proton radiotherapy. Due to this feature it is possible to increase the dose directed at the tumour to a level above that which could be achieved using common, conventional X-rays radiotherapy techniques – and at the same time reduces the dose to surrounding tissues that are sensitive to the harmful effects of radiation.

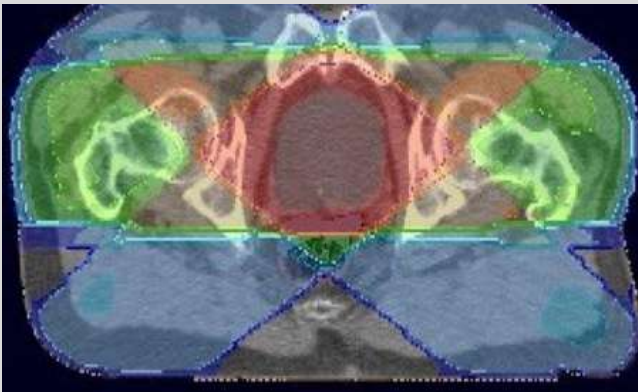
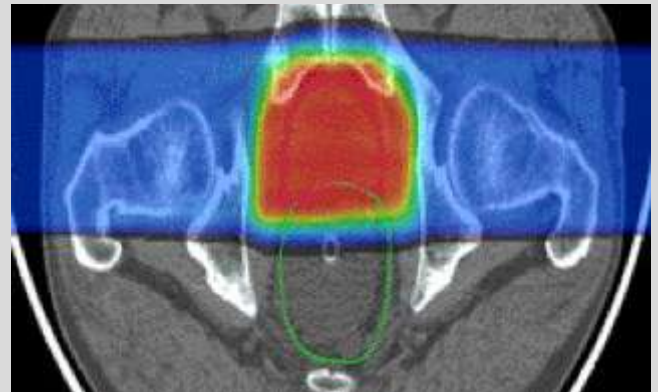


Image from Oncolink



In order to decrease the amount of radiation healthy tissues receive, the beam is given from several different angles, allowing the dose to accumulate in the intended target, but be far less to surrounding healthy tissues. The colourful picture on the left side shows an X-ray treatment plan for a prostate tumour, which utilises 6 beams to get the maximum dose to the prostate (in red), while smaller doses (green and blue, which is the lowest dose) hit the surrounding tissues, as the beams enter and exit the body. In contrast, the illustration on the right side shows significantly less radiation in healthy surrounding tissues when using protons. The two illustrations show that healthy surrounding tissue receives more radiation with X-rays as opposed to proton therapy.

**This ability to additionally spare healthy tissue is the main difference between X-rays and protons. Research has shown that the biologic effect, or the damage to exposed tissues, is essentially the same for both therapies. This means both types of radiation therapies will destroy tumour cells in the same manner, but protons should result in less toxicity to healthy tissues. According to the American Society of Clinical Oncology (ASCO), proton therapy may deliver up to 60 percent less radiation to healthy tissue around the target site, while delivering a higher dose to the tumour itself.**

# The Advantages of Proton Therapy

The key point of proton therapy is superior dose distribution, allowing physicians to precisely aim the highest dose at the tumour and avoid healthy tissues. Consequently, it shows many advantages over X-ray therapy.

## Ultra-Precise

Radiation is delivered directly into the tumour and stops, maximizing cancer cell dosage and minimising damage to healthy tissue.

## Fewer Side Effects

With no exit dose, surrounding healthy tissue and organs are spared from radiation. Proton therapy reduces the probability and/or severity of short- and long-term side effects on surrounding healthy tissues and organs.

## Lower the Risks of Secondary Tumours

Proton therapy reduces the risk of secondary tumours compared to conventional X-rays radiation therapy.

## Fast Treatment with Minimal Recovery Time

Each treatment session lasts between 20 and 25 minutes, and with fewer side effects than standard X-rays and traditional cancer treatments, most patients can continue with their daily lives with little interruption.

## Accelerated Hypofractionation

To lower overall treatment cost





**"There is no advantage whatsoever to irradiating uninvolved healthy tissue; direct radiation complications never occur in unirradiated tissues."**

*Dr. Herman Suit (Harvard / MGH Proton Centre)*

### Ideal for Many Tumour Types

The ultra-precision of proton therapy makes it ideal for the most complex cases or for cancers with limited treatment options and those where conventional X-ray radiotherapy presents an unacceptable risk to the patient. Tumours that are irregularly shaped, difficult-to-reach, close to vital organs or recurrent following prior treatment can be targeted with the utmost accuracy.

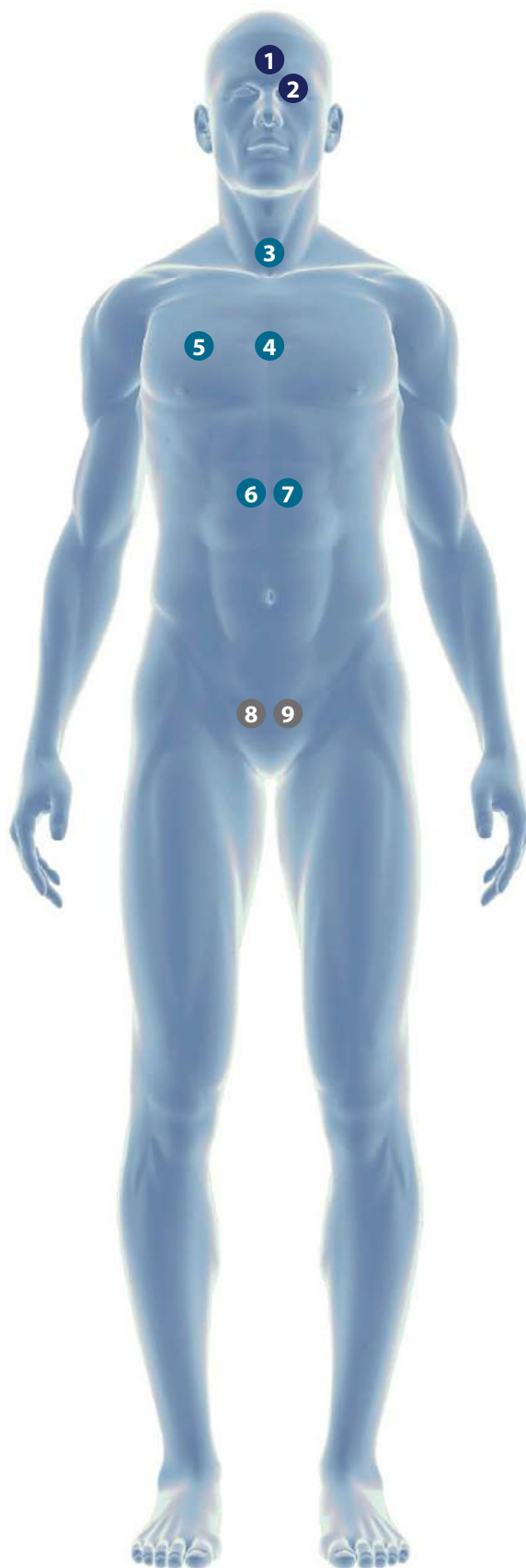
### Can be Used for Recurrent Tumours

Proton therapy can be used to treat recurrent tumours, even in patients who have already received radiation.

### Effective for Children and Adults

Less invasive and with minimal side effects, proton therapy is an effective treatment for both children and adults. As a child's growth implies a constant high rate of mitosis, their cells will be as vulnerable to ionising particles as proliferating cancerous ones. It is therefore crucial to aim the proton beams only at the tumour to avoid damage such as growth abnormalities, cognitive impairments, radiation-induced tumours, cardiac damage, and other complications later in life.

## Where Proton Therapy can add most Value





## Today

## Expanded Uses

1 Head and Neck  
Sarcomas

2 Ocular  
Paediatric CNS

3 Oesophagus

4 Breast

5 Lung

6 Liver

7 Pancreas

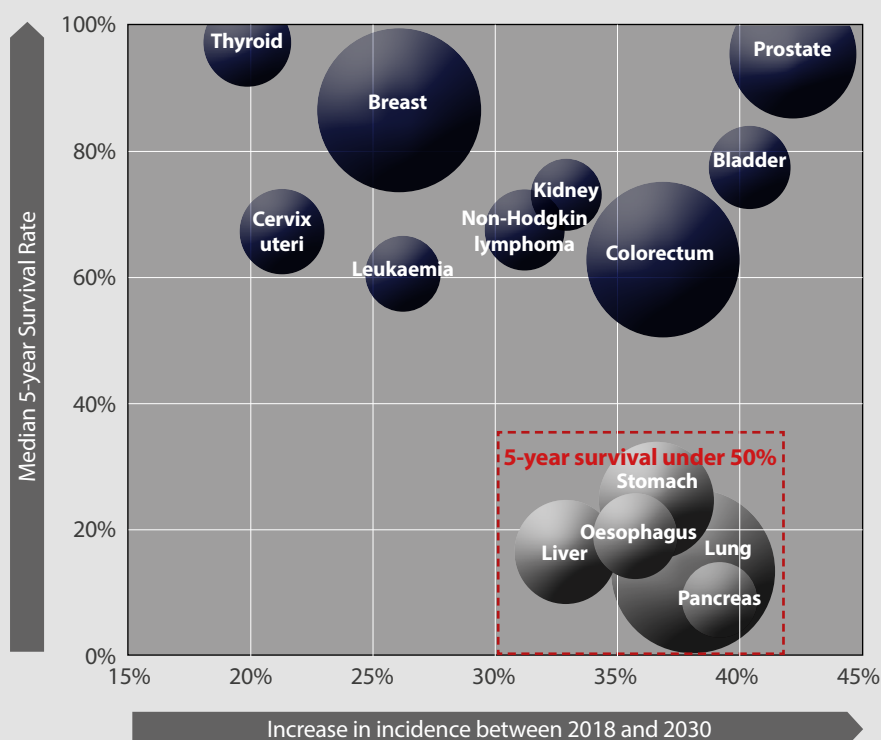
Lymphoma

8 Rectal

9 Prostate

## Occurrence of Cancer Cases vs. Survival Rate

Bubbles represent share of new cancer incidents in the US 2017



Source: Globocan 2018, WHO, Cancer Research UK

## Selected Indications with High Needs

## Lung, Liver, Pancreas

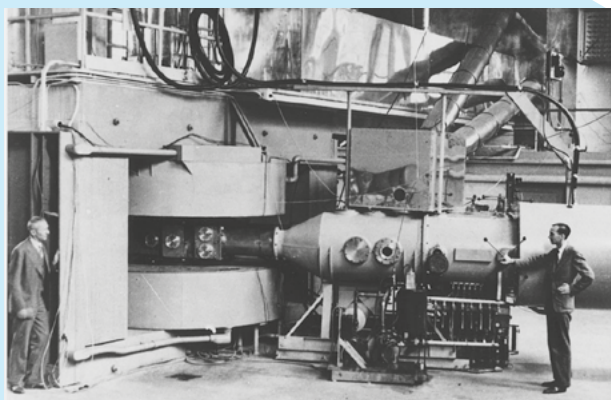
- Low survival rate
- Sensitive to radiation
- Requires high conformal dose, short delivery time and/or accurate motion management tools
- Strong potential for combinational therapy or partnering approach

## Head and Neck

- High unmet medical needs and current treatments associated with significant side-effects
- Indications require highly conformal dose
- Throat and other pharynx cancer: above average growth with severe side effects

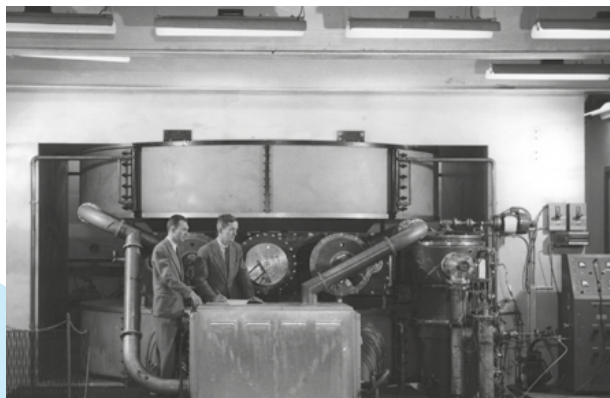
3.2 million patients died of lung, liver or pancreas tumours in the US in 2017

# Offer and Demand - Number of Patients Needing Proton Therapy Outpaces Supply



*The University of California Lawrence Radiation Laboratory, Berkeley, in August, 1939*

The development of proton therapy dates back from 1946 when Robert Wilson recognised the importance of highly localised deposition of energy as a way of increasing the dose to the tumour, while minimising the dose to normal tissues. Two years later, researchers at the Lawrence Berkeley Laboratory conducted extensive studies on protons and confirmed the predictions made by Wilson. The first treatments on humans were delivered based on protons generated and accelerated by a circular accelerator called a cyclotron, a system that is still in service today. The first treatment consisted of radiation to destroy the pituitary gland in patients with hormone-sensitive metastatic breast cancer. This treatment successfully stopped the pituitary gland from making the hormones that stimulated the cancer cells to grow. In the 1950s, the treatments were effectively duplicated on patients at a facility in Uppsala, Sweden.



*The cyclotron during construction in 1948. Shown are Dr. Norman Ramsey (L) and Dr. Lee Davenport (R).*

This led to the Harvard Cyclotron Facility using protons for medical treatments. They began treatment of the pituitary gland and developed specialised techniques for treating other conditions such as arteriovenous malformations. During the 1960s, these facilities worked to expand proton treatments to include choroidal melanomas, chondrosarcomas, chordomas, and various cancers located in the brain. However, this early work was limited due to (i) the inability to perform 3D imaging which allows to match the location of the Bragg peak and the tumour with great accuracy and (ii) the reliance on treatment in facilities primarily dedicated to physics research.

**"New technology is making us realise the magnitude of impact that proton therapy can have on many patients with cancer. Over time, the proportion of patients with cancer who are treated with proton therapy will simply continue to increase. We will see growth in the industry through improved technology and minimisation, smaller footprints, and potential reduction in costs as the footprint downsizes and availability goes up."**

**Minesh P. Mehta, MD**

*Deputy Director of Miami Cancer Institute  
Former Professor, Radiation Oncology of University of Maryland /  
Northwestern University / University of Wisconsin-Madison*





MRI (Magnetic resonance imaging) and PET scanning

The development of the CT scanner in the 1970s allowed for the treatment of almost any site in the body. The subsequent development of new imaging techniques such as MRI, SPECT, and PET scanning has further improved the ability to define the target, allowing even further benefits to proton therapy.

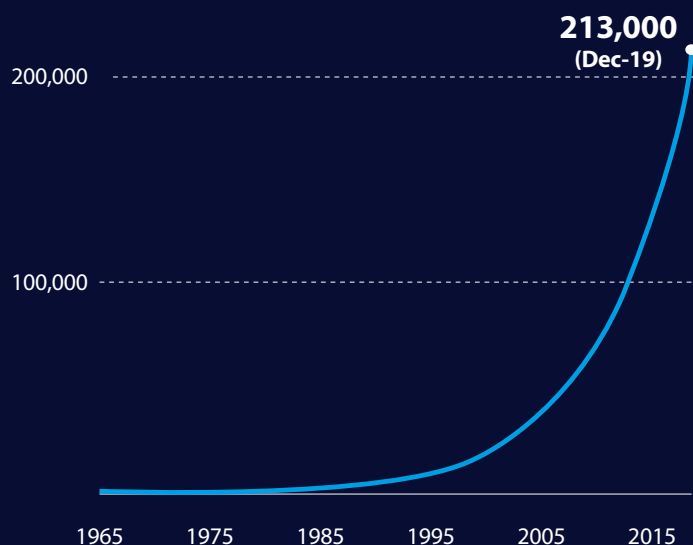


Loma Linda University Medical Centre

In the 1980s, the design and construction began on the first dedicated clinical proton facility at Loma Linda University Medical Center in California. The Proton Therapy Cooperative Group (PTCOG) was also created during the 1980s for scientists to discuss ideas on the development of proton therapy. This group continues to meet on a regular basis to present both clinical and basic science research to the international proton therapy community.

### # Patients Treated with Proton Therapy

# of Patients (Worldwide)



Since 2009, the number of proton therapy centres has significantly increased with 90 facilities as of December 2019 (corresponding to 230 treatment rooms) that have a capacity to treat approximately 70,000 patients<sup>(1)</sup> per year. In contrast, there were 40 centres in 2008.

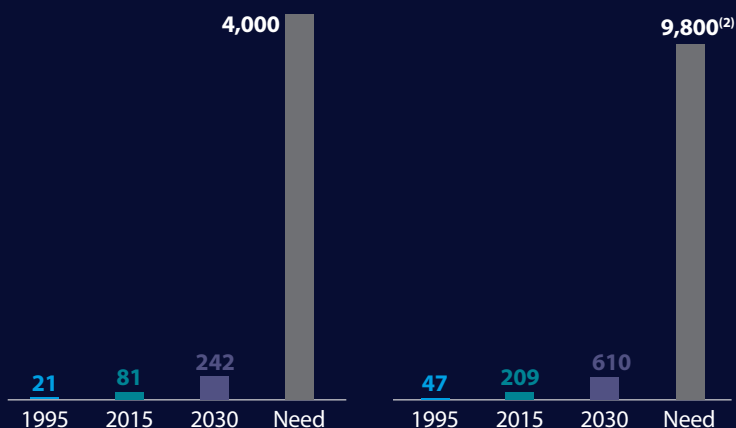
However, this installed base is well below the market needs which are estimated at 10,000 treatment rooms by 2040.

<sup>(1)</sup> Assuming an average of 300 patients can be treated per annum per treatment room

<sup>(2)</sup> There is a need for 9,800 rooms by 2040 (i.e. CAGR 2018-2040: 19%). This assumes 50% of 29 million cancer patients by 2040 get radiotherapy; 20% of patients under radiotherapy receive proton therapy; based on an average number of 300 patients per annum per treatment room; net of the treatment rooms already in operations and ordered

# of Proton Centres

# of Treatment Rooms



# Offer and Demand - Number of Patients Needing Proton Therapy Outpaces Supply\_Continued



The significant gap between the offer and the demand is directly traceable to dependence on legacy accelerators. Such machines have been used since the 50's and although they have been upgraded over time, they remain associated with a series of unsolved technical challenges, which makes the set-up and running of a proton therapy facility and by implications the treatment cost per patient highly

prohibitive. Despite the various technology advancements, the underlying principles of proton acceleration and deceleration have not changed: the industry has failed to introduce a more efficient system. This status quo is about to be disrupted with the introduction of a new accelerator. For the first time, the opportunity to democratise proton therapy is within reach.

- 1 Proton therapy is delivered today through circular accelerators: cyclotron, synchrotron or synchro-cyclotron. These machines accelerate protons in a circular fashion to a speed equal to approximately half the speed of light. This speed determines their energy which is correlated to the depth at which radiation is deposited within the body.
- 2 Current proton therapy facilities have a circular accelerator to produce the beam, which weighs up to 200 tons.
- 3 At the exit of the circular accelerator, proton reach a constant and maximal energy of 230 MeV (mega-electron volts), which enables them to damage tumours at a depth of approximately 32 cm. Given the design of a circular accelerator, the energy of protons must be therefore reduced, allowing the treatment of tumours located at a depth below 32 cm. This is achieved with the use of a rotating disc called Energy Selection System or absorber. The process of energy absorption is very inefficient, resulting in significant induced radiation that is dangerous for the operating staff.
- 4 This process results in more than 98% of particles "lost" as unwanted induced radiation in the accelerator hall. This has direct and severe consequences on the amount of shielding required to protect patients and staff from stray radiation, which in turn increases the project costs associated with the set-up and running of a proton therapy centre.

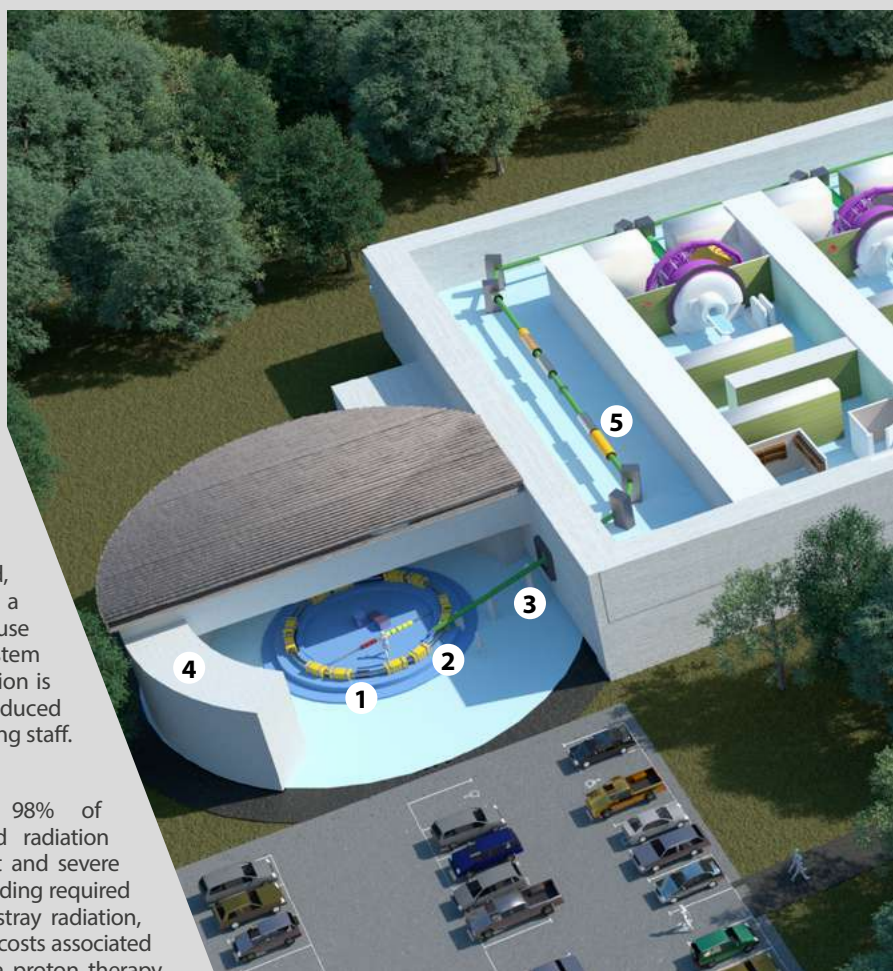


Illustration of Conventional Proton Therapy system

## Installation of Cyclotron in a Large City: Selected Illustrations



80,000 m3 of material excavated



A hole that was 28m deep



128 tonnes door to the concrete maze  
(Representative massive steel doors needed to shield neutron radiation similar to that produced by a high energy cyclotron.)





**"If cost was not an issue, proton therapy would be the treatment of choice for most patients with localised tumours"**

**Dr. Jay Loeffler, MD**

*Herman Suit Professor of Radiation Oncology  
at Harvard Medical School, Boston*



**5** From the accelerator, the beam passes along a beam line, which can be 100 yards long. This beam line reaches all the gantries or fixed beam rooms, where patients are treated. Expensive and heavy magnets are also needed to "transport" the proton beam directly to the patient.

**6** The gantry itself is 3 stories tall and can weigh up to 60 tons.

**7** Once protons have been "set" at the right energy, they are targeted with a strong magnetic field into a very narrow beam (a "pencil beam") and transferred with a high degree of accuracy via a 3D image to the malignant tumour.

**8** Many facilities need to locate the proton centre miles away from the main hospital because of the space that is required. This, together with the time needed to build the facility housing the equipment and the cost implications, are limiting factor for facility development. Smaller, single room facilities are less expensive and require less space; yet, much more needs to be done to make this therapy available in more areas.



3,000 lorry loads of concrete delivered – 10 Olympic pools



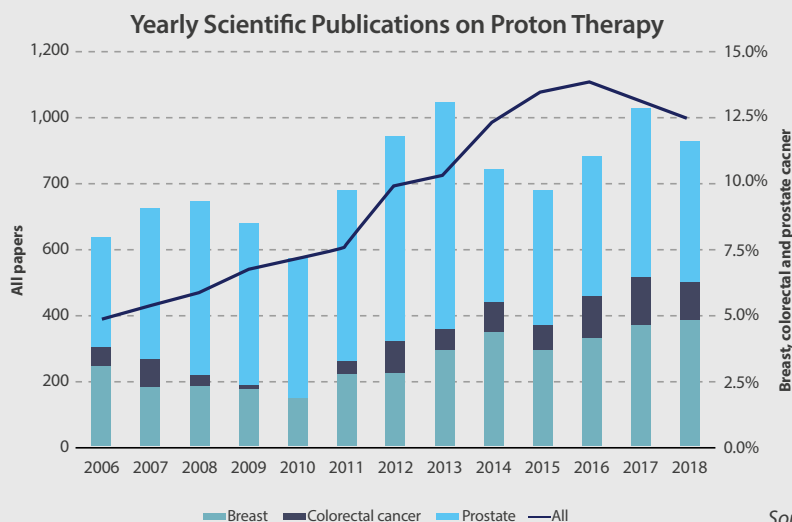
90 tonnes cyclotron – More than a fully loaded Boeing 737



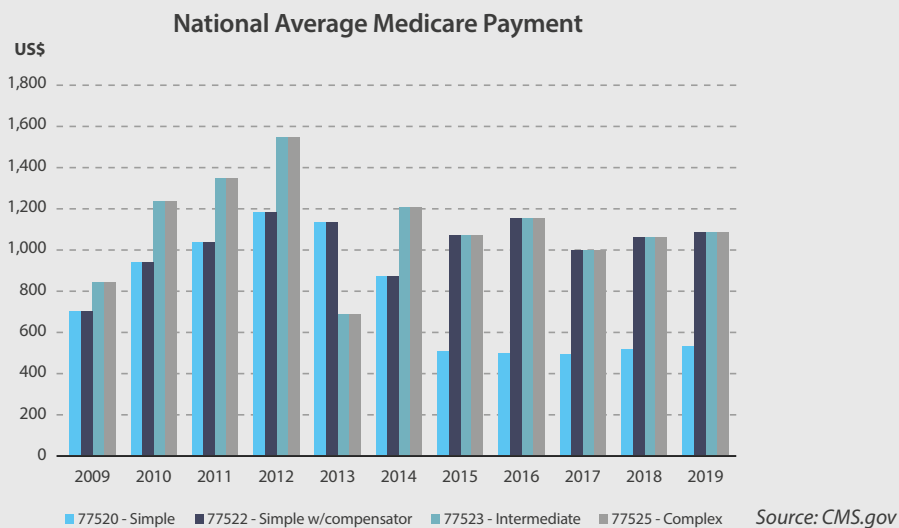
58 tonnes gantry and 300 tonnes of magnets; 83km of cables

# Pricing Environment: Set to See Significant Changes with the Introduction of New Technologies

## Clinical Activity in Proton Therapy



## Hospital Outpatient Department Proton Reimbursement





The reimbursement environment in proton therapy has been characterised by stable reimbursement policies despite the pressures impacting healthcare budgets and by the increasing shift towards value-based care. This follows the increasing body of evidence supporting proton therapy and the ability of manufacturers to decrease their selling price. Yet, these pricing reductions are reaching a limit, which opens the way for new entrants with new technologies.

There is, on average, 15 to 20 new clinical trials per year, a number that has consistently grown over the years.

The evolution of the number of clinical trials currently assessing the efficacy and safety of proton therapy in oncology are testimony to proton therapy's increasing momentum. As such, the body of clinical evidence is set to expand quickly, especially in areas with a higher unmet clinical need, such as lung, liver and pancreatic cancer.

Most trials are assessing the application of proton therapy in various cancers to identify which indications beyond the currently reimbursed cancers proton therapy should initially be used for, before witnessing broader adoption across the wider field of oncology, which is only a matter of time.

The body of evidence and clinical data supporting the use of proton therapy over conventional radiotherapy is continuously expanding. This growing momentum de-risks the clinical utility of proton therapy and may translate into increased reimbursement coverage and adoption in the future. It is anticipated that existing clinical data supporting proton therapy will be increasingly complemented by robust cost-effectiveness analyses, triggering a wave of reimbursement decisions that will benefit both patient and payer.

The wider awareness of the benefits of proton therapy is also increasingly fed by the number of trials that put more and more pressure on insurance groups to consider the ethical consequences of denying the potentially life-saving benefits of proton therapy to patients.

The shift towards value-based care model which encourages the greater use of hypo-fractionation (i.e. fewer patient visits to hospital) - as illustrated by the recent CMS changes - represents a compelling opportunity for companies such as Advanced Oncotherapy.

# LIGHT: Compact and Modular System

## OVERVIEW

LIGHT is an integrated proton therapy system, including a novel and patented linear proton accelerator, an innovative treatment room suite, and the software. Advanced Oncotherapy is the only company using a high frequency linear accelerator in proton therapy, an innovation stemming from years of work at CERN. This technology offers advantages in terms of cost and clinical efficiency against current circular systems on the market.

The resulting LIGHT proton system is constructed in reasonable size modules, requires less shielding (a significant source of cost reduction), is less expensive to install (no expensive cranes or load handling devices) even in a contiguous and densely populated environment and is easier to transport, commission and decommission. Because the LIGHT System is fully modular and designed to be upgraded, initial centres are expected to benefit from the new features as they become available.

## MANUFACTURING

All the critical hardware for the proton accelerating structures to accelerate protons and patient positioning system, required for the certification of the LIGHT System in Daresbury, UK, has been manufactured.

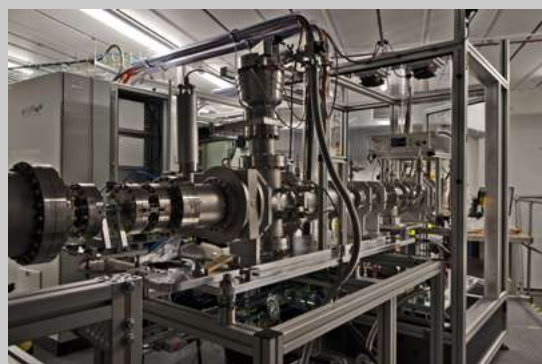
## VERIFICATION AND VALIDATION

The Verification and Validation process is aimed at ensuring that the product meets the specifications provided to the suppliers as well as the system requirements and the users requirements (physicians, health protection, etc.). This process is aimed at producing documentation which then becomes the basis for the technical file and the product certification. The documents provide a review of the system as a whole and as a sum of the sub-systems. These sub-systems include, amongst others, the accelerating system, the Patient Positioning System, the Oncology Information System and the Treatment Plan System.

The activity follows a three-step approach: (1) pre-integration testing and readiness reviews, (2) integration and (3) testing. The testing phase covers the aspects of verification, validation and usability. A lot of the three steps can be done in parallel so that the work is not done sequentially. As an illustration, the assembly site in Daresbury is compartmented, allowing testing of different units in parallel and documentation.



*Illustration of treatment room in Harley street proton centre, London*



*Proton source in Daresbury assembly facility*





*Installation and commissioning of the RFQ in Daresbury assembly facility*

# LIGHT: Myriad of Benefits

**The advanced design of LIGHT provides several opportunities to reduce cost. In particular, the LIGHT System has been designed to address the following cost challenges:**

- smaller, lighter: accelerators, beamlines, and gantries;
- flexible system fitting a range of geometries;
- reduced installation costs (shielding);
- reduced decommissioning cost (up to 3x cost of the installation for legacy systems);
- ease of use; and
- ease of cost-effective upgradeability.

These cost advantages are due to the following technical differentiating features.

## **HIGH EFFICIENCY**

The modulation of energy generated by circular accelerators manufactured by Advanced Oncotherapy's competitors is done by decelerating the proton beam, using a mechanical absorber at the exit of the accelerator. As a result, less than 2% of protons reach the tumour and more than 98% of particles are therefore 'lost' as unwanted induced radiation in the accelerator hall when treating tumours close to the skin. In a linear proton accelerator, protons are gradually accelerated until the desired energy level is reached, without relying on absorbers. The corresponding efficiency is higher than 98%. This allows for higher dose rates and potentially fewer treatment fractions.

## **REDUCED INDUCED RADIATION**

The shielding required to protect patients and staff from stray radiation caused by the absorbers described above is significantly thick and expensive. Using a proton linear accelerator is expected to dramatically decrease the shielding requirements and the maximum required thickness of walls. Maintenance staff can also access the accelerator vault without allowing for days of radiation cool-down, and at the end of the lifecycle of the proton centre, the de-commissioning process is also expected to be much faster and less expensive.

## **SMALL BEAM SIZE**

Because of its linear structure, the LIGHT System is designed to generate the smallest proton beams, which are accelerated in a vacuum tube with the same cross-section as a drinking straw, which in turn reduces the size, the weight and the cost of the magnets in the beam transfer line and in the gantry. It also positions LIGHT as an optimal system for future mini-beam treatments, which are being researched for the potential of producing even greater radiation dose conformity.







During a patient visit (also called a “fraction”), the energy of the proton beam is modulated pulse by pulse to reach the tumour; the underlying principle being to paint the tumour with radiation, dot by dot. The electronic modulation of energy is very fast: up to 200 times per second with a linear accelerator such as LIGHT, vs. 1 to 2 times per second with circular accelerators. This fast change of energy means that linear accelerators are ideally suited for the volumetric repainting of the tumour, the conformity of the radiation dose, the tracking of moving tumours, and eventually the reduced number of fractions (hypofractionation and FLASH). The LIGHT System is designed to offer more conformal treatments for the entire class of moving tumours including lung, pancreatic and liver cancers.

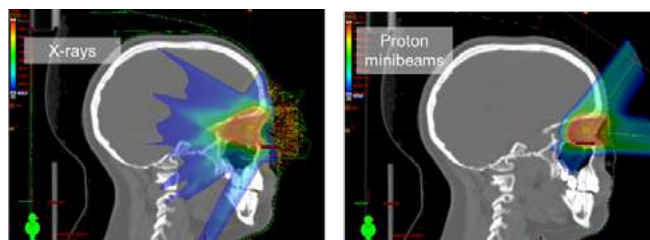
Consequently, the design of the LIGHT System allows to address the areas of needed improvement for proton therapy physical dose optimisation, namely:

- **Static Target Conformity:** Dose gradients must be better than VMAT<sup>(1)</sup> in the high dose region (organ-at-risk sparing);
- **Hypofractionation:** The ability to treat patients with fewer, larger fractions (daily doses) of dose;
- **Moving Target Conformity:** Dose delivery mitigation must be improved against target motion dose related nonuniformities; and
- **Adaptive Therapy:** Treatments need to be further personalised accounting for tumour and patient changes over the course of treatment.

## STATIC TARGET CONFORMITY

Fundamentally, IMPT<sup>(2)</sup> systems depend on spot size (emittance) for conformity. Legacy circular accelerators have reached the limit of emittance quality, about 3 mm sigma. Due to their nature, the transverse dimensions of beams produced by linacs are the smallest amongst all accelerator types. In a major advancement, the LIGHT System is intended to offer the best in class emittance offering a sizeable reduction in spot size for minibeam development. This is required to achieve higher conformity.

An example of a high conformity case planned for scanned proton minibeam is presented below where the ocular tumour is treated with a better conformity using protons (right) than with conventional x-rays (left). This minibeam feature is the basis of the scientific collaboration that Advanced Oncotherapy has forged with the highly prestigious healthcare institution, the Cleveland Clinic, in the US



Treatment Plan for a Paediatric Ocular Tumour with X-rays (Left) and Scanned Proton Minibeams (Right)  
Source: Unpublished study

<sup>(1)</sup> Volumetric Modulated Arc Therapy: A type of Intensity Modulated Radiation Therapy treatment using an accelerator rotating around the patient and changing the conformity of the radiation beam as it moves around the body

<sup>(2)</sup> Intensity Modulated Proton Therapy: The latest conventional technology available today to deliver radiation

## HYPOFRACTIONATION

Historically, treatments of up to 38 fractions delivered over a 6 to 8 weeks period were the norm. In the case of hypofractionation (and FLASH), the number of patient visits (or fractions) is reduced, (potentially to one in the case of FLASH). Hypofractions (large dose fractions) are more convenient for the patients because fewer total treatment sessions are required. It also frees treatment time and allows for an increased throughput of patients per year, thereby reducing the cost per treatment, or increasing the return on investment, or a combination of both.

### Lung Cancer



### Breast Cancer



### Prostate Cancer



Comparative Length of Treatment Course Time Conventional vs. Hypofractionation for Lung, Breast, and Prostate Indications

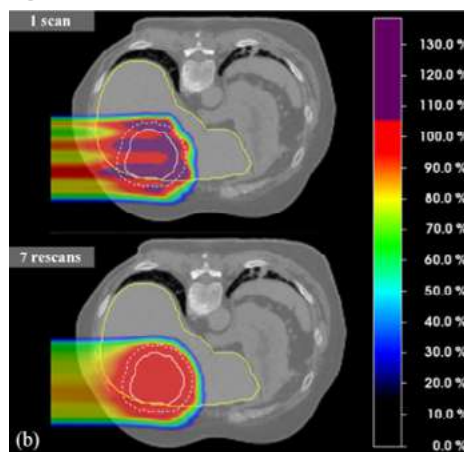


Currently, hypofractionation is not able to be fully realised with legacy proton therapy systems. This is because hypofractionation depends on normal tissue sparing instead of repair, so target conformity is of utmost importance. With a scanning system, the smallest possible beam emittance is required. The LIGHT System is expected to offer a significant advantage in this regard.

#### MOVING TARGET CONFORMITY

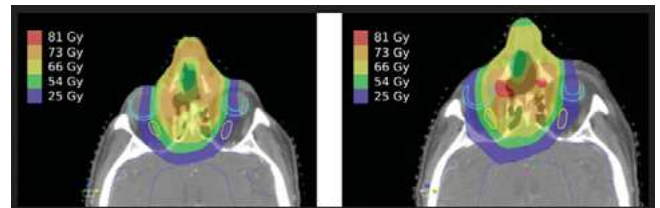
Another challenge in proton therapy is sensitivity to target motion, the "interplay effect". In a further major advancement, the LIGHT System intends to offer more conformal treatments for the entire class of moving tumours (e.g. lung, pancreatic and liver cancers). It is intended to provide this capability by changing the treatment energy on a 5 ms pulse-by-pulse basis, thereby giving a '3D dose paint' very quickly to the target with protons of different doses and energies. The picture below depicts how dose repainting (bottom) provided the intended uniform dose to the tumour in comparison to legacy techniques (top).

#### ADAPTIVE THERAPY



Dose Rescanning for a Liver Tumour  
Source: Knopf, Hong, and Lomax 2011

The accuracy of proton therapy is dependent on patient changes over the course (weeks) of treatment.



Patient Volume Change from Initial (Left) to Several Weeks Later Under Treatment (Right). Due to the Patient Eye Swelling, the Intended Treatment is Compromised (Red Areas of Overdose)

The image above shows how dramatically these changes can be affecting the treatment quality. Because the LIGHT System is highly programmable, it can adjust treatment delivery rapidly by electronic control and there is no need for absorbers to change the beam energy. The LIGHT System offers full integration including all software and hardware making adaptive proton therapy a reality. Included in the software package is on-the-fly patient specific Quality Assurance using fast Monte Carlo.

# FLASH: Golden Opportunity

Radiotherapy is a core modality for cancer treatment, with nearly 50% of patients undergoing radiotherapy as part of their treatment. The goal of radiation therapists and new technologies has been focused on finding the optimal balance between damaging cancerous cells and preserving normal tissue from the harmful effects of ionising radiation. To date, the best methods for achieving this have been precise volume optimisation (i.e. high precision radiotherapy to ensure that the targeted tissue volume is receiving the high dose of radiation and to allow for movements of target and normal tissue) and dose fractionation (i.e. dividing the high dose of radiation into a course of therapy over many visits, each visit being called a fraction). The concept of dose fractionation - which allows healthy cells hit by radiation to repair between sessions - explains why patients can go up to 35/40 times to the hospital and receive dose of radiation during each visit.

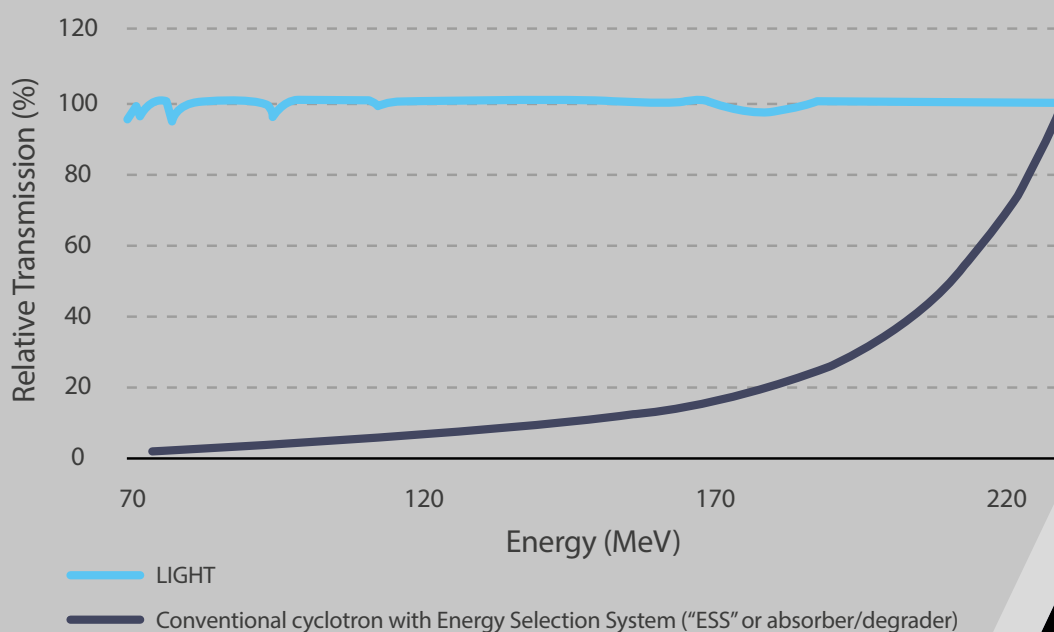
The radiation market could see seismic changes with the introduction of FLASH radiotherapy. FLASH enables a dose increase without additional complications, widening the therapeutic window and virtually reducing the number of fractions to one.

The principles of FLASH relies on the ultra-fast delivery of radiation at dose rates that are orders of magnitude greater than those currently in routine clinical practice, i.e. 40 to 120 Gy per half a second with FLASH vs. 2 Gy per minute with conventional radiotherapy treatment. Recent in vivo studies demonstrated that a high dose of radiation delivered to cancerous tissues in a very short time inhibit tumour growth equally as in conventional therapy, but with significantly more sparing of surrounding healthy tissues.

The energy level of protons directly correlates to the depth at which the radiation is deposited (the Bragg peak effect). Cyclotrons are circular proton accelerators, which generate higher energy levels of protons than required and then use degraders and range shifters for the purpose of reducing the energy to the level required for treatment. A consequence of using these degraders/range shifters is that a large proportion of protons is disseminated in the accelerator hall, creating unwanted radiation that requires large concrete shielding walls, usually in excess of six metres thick. This issue is further compounded by the fact that FLASH requires significantly more protons per fraction (i.e. a dose of 40-120Gy vs. 2Gy per fraction), this situation, and making the use of FLASH an unrealistic goal for cyclotron manufacturers due to the need to have even greater shielding. In addition, customisation of existing cyclotrons and facilities would require considerable operational down-time, which would be counter-productive to the current demand for Proton Therapy, and would not make commercial sense for the operator.

In contrast, the LIGHT System is particularly well suited for being the future system of choice for FLASH treatment. Being linear, the system generates an electronically controlled proton beam of the required energy level. This electronic control of the beam removes the need for absorbers, and hence makes LIGHT is designed to be ideally suited for FLASH at ALL energies and any indicated tumour independent of its depth in the patient.

Transmission of the beam flux in respect to maximum output at the end of the beam delivery system





**"FLASH: one small step for physics,  
one huge leap for cancer therapy"**

**Dr Pollard-Larkin**  
*MD Anderson Cancer Centre*

# Implementing a Value-Enhancing Commercial Model



## Barriers to Entry Associated with Circular Proton Therapy Technologies

### Project Complexity

- Building and installation make up the bulk of the total project cost
- A large set of complex competencies are needed for completing a project (financing, building, project management, training)
- Current industry players have a limited desire or the ability to act as a sponsor for the entire project
- Customers want a turnkey (financial and technical) solution with one single counterparty

### High Upfront Investment

- The number of proton therapy centres is increasing steadily, but the upfront capital and resources are a significant barrier for technology adoption
  - As a result the medical need remains largely unmet
- Large upfront investment + project constraints (significant amount of shielding, equipment dug in the ground and not suited to be used as a security in a financing deal) → technology providers unable to provide a turnkey solution

### High Treatment Cost

- Large investment (see above) → prohibitive treatment cost charged to patients/payers → limits the ability of the centre to maximise patient throughput → reduced ability to service the debt
- By implication, the most common commercial business model (today) is based on a sale/milestone model; this does not meet the customer's needs
  - Only large healthcare institutions can afford proton therapy



## The Advanced Oncotherapy Solution Addresses the Issues Faced by Hospitals

### Features of LIGHT → Decreased Patient Cost + Increased Access to Treatment

- Design of LIGHT → significant reduction in building cost and easier/less expensive installation and dismantling
- Electronic control of beam energy and high particle transmission efficiency → reduced shielding and site footprint
- Implications: More patients treated, increased profitability of the centre, fewer patient visits given high particle transmission efficiency (i.e. higher dose per visit)

... The features of LIGHT put Advanced Oncotherapy in a unique positioning to offer:

### Full Set of Services

- The Company is committed to facilitate the choice of the customer by offering a (technical and financial) turnkey solution
- As a remuneration, the Company receives a share of the profitability of the centre through profit sharing; also incentivises the Company to release product upgrades

### Transactional or Lease PPP

- Modularity of LIGHT → System can be used as security by a financing provider
- Benefits for offering a wider financing offering
  - Longer term revenues for the Company
  - Diversified financial profile
  - Accelerated pipeline
  - Quicker decision process (interests are aligned)



### Providing a Turnkey Solution

#### LIGHT can be part of a fully integrated offering that enables the Company to:

- Grow the market by simplifying project development and financing for the customer
- Protect equipment and service revenue margins
- Participate in the long-term economics through project management

#### BASE PACKAGE *(Traditional Offering)*

#### BASE PACKAGE + FINANCING

#### FULLY INTEGRATED OFFERING

##### EQUIPMENT

Sale of proton therapy equipment and associated software

##### MAINTENANCE

Yearly maintenance services and software upgrades

##### EQUIPMENT FINANCING

Provision of financing option by the Company's financing partners as a lessor or as a lender

##### PROJECT MANAGEMENT / BUILDING

Arrange and manage financing, building development and management services

## The Size of the Opportunity





**Only 90 centres today  
representing 230  
treatment rooms<sup>(1)</sup>**

Only 70,000 patients can be  
treated worldwide based on  
current offering<sup>(2)</sup>

**Installed base currently  
growing at 14% + per  
year<sup>(3)</sup> ....**

128 treatment rooms  
ordered representing an  
additional treatment  
capacity of c.38,000  
patients

**... but more is needed  
to treat 2.9m patients at a  
minimum by 2040<sup>(4)</sup>**

Implied number of  
treatment rooms<sup>(4,5)</sup> to set  
up: more than 9,800 centres  
Implied CAGR 2019-2040:  
+20%

**More than 9,800 additional treatment rooms needed by 2040**

<sup>(1)</sup> Source: PTCOG and corporate releases as of 31 December 2019

<sup>(2)</sup> Assuming an average of 300 patients can be treated per annum per treatment room

<sup>(3)</sup> CAGR 2014-2019

<sup>(4)</sup> Assuming 29m new cancer cases p.a. by 2040, of which 50% get radiotherapy; 20% of patients under radiotherapy receive proton therapy

<sup>(5)</sup> Net of the treatment rooms already in operations and ordered

# Commercial Traction is Gathering Momentum



## Cleveland Clinic

### Two-year collaborative research study with Cleveland Clinic – 14th December 2019

In December 2019, Cleveland Clinic and Advanced Oncotherapy announced a two-year collaboration to evaluate the target conformity of proton minibeam therapy in comparison with X-ray stereotactic body radiation therapy and stereotactic radiosurgery. This study is aimed at capturing the superior benefits of using minibeam therapy over the latest techniques of X-rays.

Cleveland Clinic runs a 170-acre campus in Cleveland, as well as 11 regional hospitals and 19 family health centres in northeast Ohio, and hospitals in Florida and Nevada. It is consistently ranked as one of the best hospitals in the United States. In 2018-2019, the U.S. News & World Report ranked Cleveland Clinic as the number 2 hospital in the Best Hospitals Honor Roll.



## The London Clinic

### Strategic partnership with The London Clinic – 11th February 2020

In February 2020, Advanced Oncotherapy announced a Memorandum of understanding (MoU) with The London Clinic to operate the Company's first commercial LIGHT facility on Harley Street in London. The London Clinic has selected the Company as its partner for proton therapy not only because LIGHT's reduced volume and modularity allow for implementation in existing clinical sites and densely populated areas where space is scarce, but also because the LIGHT System has been designed to generate a much smaller beam and, as such, is able to deliver more precise treatment due to the electronically controllable energy modulation of the proton beams.

Under the terms of the MoU, it is intended that the Company will provide the LIGHT proton accelerator and treatment room equipment and The London Clinic will source and manage staffing, governance and other services necessary for the clinical operation of the facility. The Company and The London Clinic will receive a share of the profit generated by the centre.



## The Mediterranean Hospital of Limassol

### Purchase of a LIGHT proton therapy system – 17th February 2020

In February 2020, Advanced Oncotherapy announced the sale of a three-room system to The Mediterranean Hospital of Limassol for €50 million. In addition, the Company will receive a share of the net profits from the clinical services. The installation of LIGHT System is expected to commence in 2023 following completion of construction at hospital. The timing and the full execution of the agreement remain subject to customary conditions.

The Mediterranean Hospital of Limassol is partly owned by the Mediterranean Hospital of Cyprus in Limassol, one of the largest private hospitals in Cyprus. It is the first health centre integrated with the newly created National Health System of Cyprus whose ambition is to modernise and upgrade the health sector into a more streamlined and cost effective system and bring Cyprus on par with its European peers in terms of efficient and affordable public healthcare. In 2018, the President of Cyprus commented that the Mediterranean Hospital would contribute to the greater goal of making Cyprus a regional hub for medical services, offering high-quality medical services to citizens of Cyprus but also to tourists seeking medical treatment.




## University Hospitals Birmingham

### Strategic collaboration with the University Hospitals Birmingham NHS Foundation Trust – 20th February 2020

In February 2020, Advanced Oncotherapy announced a collaboration with the University Hospitals Birmingham (UHB) NHS Foundation Trust. This is aimed at the installation of a LIGHT System on the UHB campus. The collaboration also includes an agreement that an appropriate revenue sharing arrangement will be implemented. Advanced Oncotherapy and UHB will also work together on various research and development activities associated with the use of LIGHT to increase the awareness of proton therapy for the treatment of cancer.

UHB is one of the largest teaching hospital trusts in England and one of the largest regional centres for non-surgical cancer treatment serving a regional, national and international population. The hospital group sees and treats more than 2.2 million patients every year across its sites, which include Queen Elizabeth Hospital Birmingham, Birmingham Heartlands Hospital, Solihull Hospital and Community Services, Good Hope Hospital in Sutton Coldfield and Birmingham Chest Clinic. From a regional aspect, UHB has established links with surrounding cancer units and runs a number of smaller satellite units, allowing people to be treated as close to home as possible.





"Proton beam therapy is a very exciting new treatment but access has been limited due to the costs and size of equipment. Until now. Advanced Oncotherapy's LIGHT System reduces size and cost, while providing the same high success rate for patients. We're excited to be the first hospital in London to offer this new treatment. The new service will adjoin our main site on Harley Street, and enable The London Clinic to help even more patients fight and survive cancer while furthering our aim of advancing healthcare."

Al Russell  
*Chief Executive Officer of The London Clinic*

"The Mediterranean Hospital of Cyprus is excited that we will be able to provide patients with access to Advanced Oncotherapy's LIGHT System for proton therapy which is designed to increase the efficacy of treatment and improve quality of life for patients through a reduction of side effects.

This transaction highlights our commitment to support not only the Cyprus NHS in its ambition to offer the public the same level of medical care and innovative technologies but also the Cyprus Government which has earmarked medical tourism as an area with economic potential and growing demand from European tourists.

Medical tourism in Cyprus has seen unprecedented growth over the last few years. Furthermore, the government is investing significantly in promoting the country as a key healthcare destination, allocating a significant amount of the GDP. With this agreement we are helping establish Cyprus as a medical hub for the region. We strive to assist in continuously improving public healthcare services whilst providing superior medical services that cater to all regardless of income. Today's agreement is consistent with our humanistic values and social responsibility."

Dr Andreas Panayiotou  
*Founder of the Mediterranean Hospital of Cyprus*

"Our Trust is one of the largest regional centres for non-surgical cancer treatments in the UK, with our highly-specialised consultants working within a professional and well-established team to provide the best possible care to patients, their families and carers. This collaboration will further strengthen our position as a Trust that embraces and develops the next generation of technology to continually improve outcomes and deliver healthcare that is fit for future generations."

Dr David Rosser  
*Chief Executive Officer of  
University Hospitals Birmingham*



# Principal Risks and Risk Management

The Company faces a number of risks on the way to building shareholder value. The Group's principal risks, together with the management actions to mitigate the risks, are set out below. They are not listed in any order of priority and do not comprise

all risks associated with the Group. Further risks not currently known or risks that have been considered to be less material may also have an adverse impact on the business.

## FIRST PRODUCT LAUNCH AND PROGRAMME SCHEDULE

### RELiance ON A LINEAR-BASED TECHNOLOGY AND RISK OF TECHNICAL FAILURE

#### **Description:**

The Group's dependence on technology in its day-to-day business means that systems failure would have a high impact on the operations. Risks of using defectuous parts during the assembly of the LIGHT System can also impact the execution plan of the Company.

#### **Mitigation:**

The research and development team - whose outputs rely on a validated technology (LIBO) - has identified the main technological risks and performed focused studies to ensure the underlying concepts remain viable with improved clinical outcomes. The Group's technology strategy is also regularly reviewed to ensure that the systems it operates across the Group support its strategic direction.

### SCHEDULE RISKS

#### **Description:**

Many complex medical projects are exposed to risks of potential delays.

#### **Mitigation**

The Group is working with well accredited suppliers and building companies, forming a network of close stakeholders, responsible for identifying critical elements of the project and having contingency in place. The Group is also following the well-proven design and development process within the ISO 13485 framework to limit any risks of slippage.

### INTRODUCTION OF A NEW TECHNOLOGY

#### **Description:**

The Group is launching a product that is not already available in the consumer market.

#### **Mitigation:**

The Group has responded to consumer demand by offering a full technical solution, not just a product. Being at the forefront of technology means the Group needs to address and pre-empt any changes of customers' behaviour or changes in the competitive approaches from other suppliers, so the Group will upgrade, modify and expand its offering as the demand evolves through a clear roadmap summarising the main innovations foreseen. Ongoing asset lifecycle management programs also mitigate risks of obsolescence.

## COMMERCIAL STRATEGY

### ABILITY TO SELL EFFECTIVELY

#### **Description:**

The Group's brand does not benefit from a longstanding history in the market place. It is imperative to have effective marketing methods and the appropriate business model to convert a technological breakthrough into commercial success.

#### **Mitigation:**

The Group has strong controls to support the sales functions and has strengthened the management team to add resources to the sales and marketing function. The commercial arrangements announced in 2020 are based on a flexible customer-centric approach.

### REPLICATION OF THE TECHNOLOGY

#### **Description:**

Whilst the business uses its own proprietary technology a competitor could attempt to replicate its linear accelerator technology.

#### **Mitigation:**

The Company's focus on creating a linear-based turn-key system requires a combination of technology and specialised skills which is hard to replicate. The Company continually develop its model to improve the scope and applicability of the technology, adding further value to its clients and differentiating its service from competitors. In addition, the Company's patent portfolio, the know-how and the diversity of the required skills which are complex to develop constitute a further barrier for new entrants.

### INTRODUCTION OF NEW CANCER MODALITIES OR COMPETING TECHNOLOGIES

#### **Description:**

The Group faces a threat to its LIGHT franchise from the development of alternative cancer modalities and technologies by competitors. Competitive threat could erode the sales potential of LIGHT.

#### **Mitigation:**

The Group closely monitors the competitive landscape in key markets to ensure a rapid and appropriate response to changes in competition. In addition, clinical studies and new initiatives are increasingly focused on the synergistic effect of combining cancer modalities, such as the combination of immunotherapy and radiation which is holding great promises.





## REGULATORY AND POLITICAL RISKS

### COMPLIANCE

#### Description:

Failure to proactively identify and comply with industry laws and medical regulatory aspects across the value chain of the Group could result in fines, penalties, business disruption, reduced revenue, and/or potential exclusion from tender processes. The Company operates in numerous countries around the world and its industry is also highly regulated. These circumstances increase its exposure to potential bribery or corruption risks.

#### Mitigation:

The Group has a business and Group-wide compliance structure which is continually assessed. Trainings are provided to employees on a wide range of topics, including good manufacturing practice activities, quality control, legal policies including whistleblowing, and anti-bribery and corruption. In addition, the employee code of conduct reinforces the Group's values of ethics, trust and quality. The Group is also regularly audited by regulatory authorities to ensure compliance with relevant legislation and contractual obligations and acts to address any recommendations. Senior management at the Company has full responsibility for the quality management system undertaking periodic management reviews and maintains a close working relationship with the competent authorities to ensure compliance.

### REGULATION CHANGES

#### Description:

The Company operates in a highly regulated environment. Regulatory and law changes can occur, impacting the approval process of new technical features as well as the key health, safety and regulatory requirements needed for installing and operating a LIGHT System. There is a risk that the business model is impacted by future changes in regulations in the medical industry.

#### Mitigation:

The Company regularly reviews regulations changes through proactive discussions with key industry officials, professional advisors and regulatory bodies where appropriate. Major agencies such as the FDA and MHRA are actively promoting the use of modelling and simulation and issue advisory papers which set out their thinking.

### POLITICAL AND COVID-19 RISK

#### Description:

The Group's focus on the LIGHT System on a global basis increases the exposure to adverse local political decisions and economic events impacting the medical industry, which may affect the ability to supply, local demand and/or pricing. The impact of Brexit and the uncertainty associated with the Covid-19 outbreak since Q1:20 could affect the Group's ability to ship the final product or receive parts of the LIGHT System efficiently in and out of the UK and the EU. The longer-term effects of Brexit and Covid-19 are difficult to predict, but could include financial instability and slower economic growth or economic downturn in the UK, the EU and/or the global economy.

#### Mitigation:

The Group mitigates this risk by having an increasingly broad offering, service and geographical range, limiting the impact of events in any single territory. The Group also takes into account political risk when assessing new contracts or product acquisitions. The IT strategy of the Group and the reliance on multiple supply sources are also of paramount importance.

**"The Group's approach to risk management is to identify principal risks and then to develop actions or processes within the business to eliminate or mitigate those risks to an acceptable level."**

# Principal Risks and Risk Management\_Continued

## HUMAN RESOURCES AND ORGANISATION

### HIRING TALENTS

#### **Description:**

The Company operates in a highly specialised field where there is strong competition for required skills and talent.

#### **Mitigation:**

The Company seeks to recruit talent on a continuous basis and has built a network of contracted specialists who can provide additional resource when required. In order to attract the best talent, the Company offers competitive packages to its staff which includes a share option scheme, private medical insurance and flexible working.

### RETAINING TALENTS

#### **Description:**

The success and future growth of the Company is in part dependent on the continued performance and delivery of certain Directors, managers, key staff and contractors. Key personnel leaving the Company could lead to a short-term reduced capacity to service client projects.

#### **Mitigation:**

The Group has appropriate remuneration packages to help retain key employees. In addition, all permanent employees are given the opportunity to become shareholders of the Company. The Group provides significant opportunities for learning, development and leadership training. A collegiate working environment and opportunities for personal and professional development also help to maintain staff satisfaction. The Group ensures effective and regular internal communications in order to communicate and update on strategy and objectives.

### SUPPLY CHAIN

#### **Description:**

The Group's reputation could be undermined and profits impacted if its LIGHT System and/or parts go into shortage of supply. Inadequate design of processes, quality control and oversight over supply chain can also impact the delivery of strategy and objectives of the Group.

#### **Mitigation:**

The Group mitigates this risk by relying on and accessing industrial/market expertise in this area by outsourcing production to trusted manufacturing and global partners which the Group assesses regularly. The Group also has industry-leading quality management systems and audits supply partners where appropriate. The Group also intends to maintain appropriate stock levels of its key parts of LIGHT, with a focus on long-lead items, allowing to better serve clients' needs.

### SYSTEMS & INFRASTRUCTURE

#### **Description:**

The Company is dependent on its IT technical infrastructure and systems for the management of its core operations and research and development programmes.

#### **Mitigation:**

Continuity of access to data and integrity of data is maintained through the implementation of a system of data storage, offsite backup and monitoring of key coding and modelling data. In the most recent financial year, the company invested further in servers dedicated to high speed computation which has significantly reduced the time required to complete complex simulations.

## FINANCING PLAN

### FINANCING REQUIREMENTS

#### **Description:**

The financial risks faced by the Company include the ability to cover working capital needs, raise sufficient funds to support the Company through to profitability and failure to secure further contracts. The financing requirements of the Group also depend on numerous factors, including the rate of market acceptance of the LIGHT System and the ability to attract and retain customers. The process of winning major contracts is typically protracted and the Company operates in a competitive environment. This means the Company often faces uncertainties in its cash flow till the installed base is large enough.

#### **Mitigation:**

The Company employs tight cost controls across the business and has raised £74 million between December 2017 and December 2019 through equity or debt. The Company seeks to ensure cash availability for working capital purposes through partnerships with specialised funding institutions providing vendor financing and leasing arrangements. It continually monitors opportunities which provide financing flexibility in order to deliver on its strategic priorities. The Group also prepares short term and medium cash flows to ensure that the business has adequate funding to execute its business strategy.

### FOREIGN EXCHANGE

#### **Description:**

The Group has significant operations and activities outside the UK where the Company is listed and outside Switzerland where its engineering and development team is located. The Group is therefore exposed to foreign exchange risk.

#### **Mitigation:**

The Group reduces its exposure to currency fluctuation on translation by having a diversified base of multi-currency accounts, creating a natural financial hedge. The Group does not issue or use financial instruments of a speculative nature and the Group's treasury function does not act as a profit centre.











## **GOVERNANCE REPORT**

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# A Board of Directors Bringing Extensive Market Expertise



**Dr. Michael Sinclair**  
*Executive Chairman*

**Appointment date:**  
June 2006

**Brings to the Board:**

Michael Sinclair brings over 40 years of experience in top executive positions in the healthcare business.

**Past role**

Before creating Care Capital (now Advanced Oncotherapy), Michael Sinclair held various executive positions including Executive Chairman roles at Miranda plc (2001-2009), the Atlantic Medical Group (1994-2001), Lifetime Corporation (1986-1993) and the Hospital Capital Corporation. He also founded Allied Medical Group/Allied Investments. Michael Sinclair previously held a number of appointments at teaching hospitals in London.

**Other key commitments:**

- Trustee of The London Clinic
- Non- Executive Chairman of Symthera Inc
- Non- Executive Director of Opiant Pharmaceuticals Inc.
- Member of the Board of various educational non-profits



**Mr. Michael Bradfield**  
*Non-Executive Director*

**Appointment date:**  
April 2013

**Brings to the Board:**

Michael Bradfield brings over 30 years of experience in direct marketing and the insurance industry.

**Past role:**

In 1971 Michael Bradfield founded Hospital Plan Insurance Services and was CEO of the company until 2006. It was sold to AIG in December 2000. He is currently Chairman of Fairford Medical Ltd, Fairford Medical Services Ltd, Health Imaging Solutions Ltd and Quest Medical UK Ltd, all active in the Diagnostic Medical Imaging field. He is also Chairman of Fairford-Capital Ltd. He was previously Chairman and CEO of Acacia Asset Management Ltd, Hamilton Capital Management Ltd and Acacia Trust Ltd.

**Other key commitments:**

- Director at Stockgain Asset Management
- Director at Henstridge Properties Ltd
- Director at the Vail Foundation
- Chairman at Fairford Capital Ltd
- Director at The Covenant & Conversation Trust (registered charity)



**Mr. Hans von Celsing**  
*Non-Executive Director*

**Appointment date:**  
January 2017

**Brings to the Board:**

Hans von Celsing has over 30 years of experience in the medical technology sector, managing the development of several companies.

**Past role:**

From 2008 to 2016, Hans von Celsing has acted as an adviser to Mevion Medical Systems Inc. Before that he was Executive Vice President responsible for worldwide operations and business of Elekta AB (1985-1999). He is also the co-founder of Neuroventures Capital.

**Other key commitments:**

- CEO of Plasma Surgical
- Executive Chairman of Clinical Laser Thermia Systems AB
- Part-time consultant at Berkshire Investment Management
- Executive Chairman of Gelexir Healthcare Ltd
- Chairman of Peptonic Medical
- Chairman of Partner Fondkommission AB



**Mr. Chunlin Han \***  
*Non-Executive Director*

**Appointment date:**  
August 2018

**Brings to the Board:**

Chunlin Han brings a rich experience in distributing products in the Chinese healthcare market.

**Past role:**

As Head of Investment and Financing for Realcan Pharmaceuticals, a large distributor of medical drugs and equipment in China with access to more than 8,000 hospitals and 33,000 primary medical institutions, Chunlin Han has been instrumental in acquiring more than 50 distribution companies and participated in 3 joint-venture investments. He is a graduate of McGill University.

**Other key commitments:**

- CEO of Plasma Surgical
- Executive Chairman of Clinical Laser Thermia Systems AB
- Part-time consultant at Berkshire Investment mngt.
- Executive Chairman of Gelexir Healthcare Ltd
- Chairman of Peptonic Medical
- Chairman of Partner Fondkommission AB



**Dr. Yuelong Huang \***  
*Non-Executive Director*

**Appointment date:**  
August 2018

**Brings to the Board:**

Yuelong Huang has over 20 years of experience in R&D, manufacturing and operations in high-tech industries.

**Past role:**

Yuelong Huang has been a Senior Scientist of German Julich Research Centre (2006-2008). From 2000 to 2013 he acted as the core technical expert and deputy general manager at Baoding Tianwei Thin Film Photovoltaic Co., Ltd.

**Other key commitments:**

- General manager of Medical Technology Department of Realcan Pharmaceuticals Co.,Ltd, responsible for all M&A activities and medtech R&D/ manufacturing
- General Manager at Jiangyin Sino-German Technology Transfer Centre
- Director at Jiangyin BinLong Technology Co.Ltd
- Executive Director and General Manager of Hangzhou Ynovo Investment Management Co. Ltd



**Prof. Steve Myers, OBE**  
*Executive Director and ADAM Executive Chairman*

**Appointment date:**  
November 2015

**Brings to the Board:**

Steve Myers, a world-class expert in accelerator physics, has vast experience in accelerator physics as CERN Director of Accelerators and Technology.

**Past role**

At CERN since 1972, Steve Myers became the leader of the CERN Accelerator Beams Division in 2000 and the Director of Accelerators and Technology in 2009. From 2014 to 2016 he was the Head of CERN Medical Applications. Steve Myers is an Honorary Member of the European Physical Society and of the Royal Irish Academy; he has won the Duddell Medal, the Prize of the Institute of Physics; he was awarded the EPS Edison Volta Prize and the Prince of Asturias Prize of Spain.

**Other key commitments:**

- Chair of the Advisory Committee for the John Adams Accelerator Institute in Oxford
- Chair of the Advisory Committee for the Cockcroft Accelerator Institute
- Member of the Culham Centre for Fusion Energy (CCFE) Advisory Board
- Member of the EU review Board for the "Russian Mega-Science projects"

**Dr. Nick Plowman**

*Non-Executive Director and Chairman, Medical Advisory*

**Appointment date:**  
February 2017

**Brings to the Board:**

Nick Plowman's experience in new radiation techniques and paediatric radiotherapy is second to none.

**Past role:**

Nick Plowman is a pioneer for the use of lens sparing ocular radiotherapy, linac based radiosurgery, Gamma Knife, IMRT, and Cyberknife. He has written on many critical appraisals of new and existing techniques and has published 20 research papers on intracranial and spinal radiosurgery. Dr Plowman part funds a laboratory project at Brunel University exploring DNA repair mechanisms with particular regard to irradiated tumours.

**Other key commitments:**

- Head of Clinical Oncology at St Bartholomew's Hospital
- Senior Clinical Oncologist to the Hospital for Sick Children at Great Ormond Street ("GOSH") in London
- Director of The CyberKnife Centre London on Harley Street
- Director at Intuition Communication Ltd.

**Mr. Nicolas Serandour**

*Chief Executive Officer*

**Appointment date:**

October 2016 (at Advanced Oncotherapy since 2014 as CFO and then COO)

**Brings to the Board:**

Nicolas Serandour brings over 15 years of experience providing strategic and financial advice to senior executives at leading healthcare companies internationally.

**Past role:**

Nicolas Serandour has vast experience in investment banking and in providing strategic and financial advice to the healthcare industry. He has advised companies from the healthcare industry on Mergers and Acquisitions, from 1999 to 2005 at JP Morgan, from 2005 to 2008 at Lehman Brothers London, and from 2008 to 2014 at Lazard London, where he also became the Head of Healthcare Europe.

**Other key commitments:**

- n.a.

**Dr. Peter Sjöstrand \***

*Non-Executive Director*

**Appointment date:**  
August 2018

**Brings to the Board:**

Peter Sjöstrand has wide experience from top positions in both the pharmaceutical and med tech industry in operative roles as well as representing investors.

**Past role:**

Peter Sjöstrand was Executive Vice President and CFO of the Astra Group and served on the Astra Board (1976-1993) first as Secretary and then as Deputy Member. He also acted as Non-Executive Board member in many public and private companies. He was e.g. the chairman of Gambro (2006-2010) and Meda (2000-2009) and Board member of Pharma Vision (1993-2000) and member of the Carlyle European Advisory Board (1996-2000).

**Other key commitments:**

- Chairman of the Foundation Oscar Hirsch's Memory
- Member of the Board of Acturum
- Member of the Board of Active Biotech
- Member of the Board of SAMF
- Member of the Board of Disruptive Materials

**Prof. Gabriel Urwitz \***

*Non-Executive Director*

**Appointment date:**  
August 2018

**Brings to the Board:**

Gabriel Urwitz has held top executive positions in the financial industry and brings top notch financial management skills.

**Past role:**

He was the CEO of Gota Bank (1989-1992), of Proventus AB (1984-1989), of Richard Hagglof Fondkommission AB (1980-1984), and the Vice-president of the Head office for Domestic Capital at Skandinaviska Enskilda Banken Markets (1977-80). From 1977 to 2002 he was adjunct Professor of Financial Economics at The Stockholm School of Economics.

**Other key commitments:**

- Founder and chairman of AB Segulah
- Founder of Segulah Advisor AB
- Board member of Semantix
- Board member of Segulah Venture AB
- Chairman of several non-profit and academic organisations

**Dr. Enrico Vanni**

*Non-Executive Director*

**Appointment date:**  
October 2013

**Brings to the Board:**

Enrico Vanni has more than 30 years of experience in healthcare management, both as a consultant and a Board member.

**Past role:**

He has acted in various positions at the Geneva office of McKinsey & Co., first as a consultant, then Project Leader, Head of Geneva office and finally Senior Partner specialising in Pharmaceuticals, Consumer goods and Finance. Before that he was a research engineer at IBM (1977-1978) and an assistant in Chemistry at University of Frankfurt (1978-1979).

**Other key commitments:**

- Independent consultant
- Board member of Novartis
- Board member of Lombard Odier
- Board member of Mbp

**Mrs. Renhua Zhang**

*Non-Executive Director*

**Appointment date:**  
August 2018

**Brings to the Board:**

Renhua Zhang has acquired a broad experience in the Chinese medical and pharmaceutical market.

**Past role:**

Renhua Zhang is the Co-Founder, CEO, and Vice Chairman of the Board of Realcan Pharmaceutical, a large distributor of medical drugs and equipment in China with access to more than 8,000 hospitals and 33,000 primary medical institutions. Formerly Director of Nursing of one of China's leading regional Hospital Systems, she graduated in Business Administration from the Shandong Television Broadcast University.

**Other key commitments:**

- Co-founder & CEO of Realcan Pharmaceutical Co., Ltd.
- Supervisor at the Shandong Ruixiang Dental Hospital Co., Ltd.
- Supervisor at Shandong Chengen Invst. Co., Ltd.
- Director and General Manager at Shandong Realcan Pharmaceutical Distribution Co., Ltd.
- Executive Director at Yantai Ruiyou Invst. Co., Ltd.



## Executive Team with a Unique Track-Record



**Dr. Michel Baelen**

*Director, Regulatory Affairs*

- +17 years of experience in Regulatory and Quality for proton therapy
- Former Head of Regulatory Affairs and Quality Assurance at IBA
- Former Quality Coordinator at the University Hospital Saint-Luc at the Catholic University of Louvain



**Bridget Biggar**

*HR Director*

- Fellow of the UK Chartered Institute of Personnel and Development
- Masters in Applied Positive Psychology from the University of Pennsylvania
- 13 years as an employer representative on the Employment Tribunal Board of England and Wales; has been an HR Director in various start-ups



**Dr. Jonathan Farr**

*Chief Clinical Officer*

- +14 years of Radiation Physics experience across USA and Europe
- Former Chief of Radiation physics and Associate Professor at St. Jude Children's Research Hospital
- Current Privat Dozent at University of Essen-duisburg and chief medical physicist at WPE
- Author of many peer-reviewed publications on advances in proton, other particles and photon radiotherapy



**Dr. Manuel Gallas**

*Technical and Engineering Director*

- + 10 years managing high tech product design and development, management of technology innovation and R&D across a broad area of expertise
- Ph.D. in High Energy Physics and an eMBA in Management of Technology, Innovation, and Entrepreneurship
- Fellow then Staff at CERN from 1999 to 2008 working on the PS-DIRAC proton experiment and the ATLAS Large Hadron Collider (LHC), Higgs-searching experiment



**Louise Harley-Smeur**

*Senior Vice-President, Intellectual Property*

- European Patent Attorney and Head of the Intellectual Property Department
- Working in IP since 2001, half the time working on medical inventions; prior to that, during the 1990s, has worked in UK hospitals as a medical physicist, specialising in radiotherapy and imaging



**Moataz Karmalawy**

*Chief Commercial Officer, President US*

- Former General Manager of the Worldwide Particle Therapy Business for Varian Medical Systems, the world's largest manufacturer of radiotherapy equipment
- Grew the order book of Varian to over \$1bn and achieved a 50% market share of the global particle therapy products market
- Also worked at Philips Medical Systems, Inc and won a performance excellence award for quality & customer satisfaction industry wide

**Ed Lee***Chief Operating Officer, President Europe*

- 25 years of experience in operations and manufacturing
- Former Production and Technical Field Service Director at Optivus Proton Therapy
- Manufacturing and operations experience spanning from high-volume/low-mix to low-volume/high-mix industries such as Automotive, Aerospace, Military/Defence, Nuclear, and Medical Device

**Geraldine Poindron***Senior Vice-President, Corporate Finance*

- Manages all aspects of Investor Relations, is closely involved in the execution of financing transactions as well as in the coordination of the business development effort worldwide
- Trained as an investment banking analyst and associate with Lazard working on Industrials and Healthcare projects

**Berengere Pons-Chabord***Senior Vice-President, Corporate Finance*

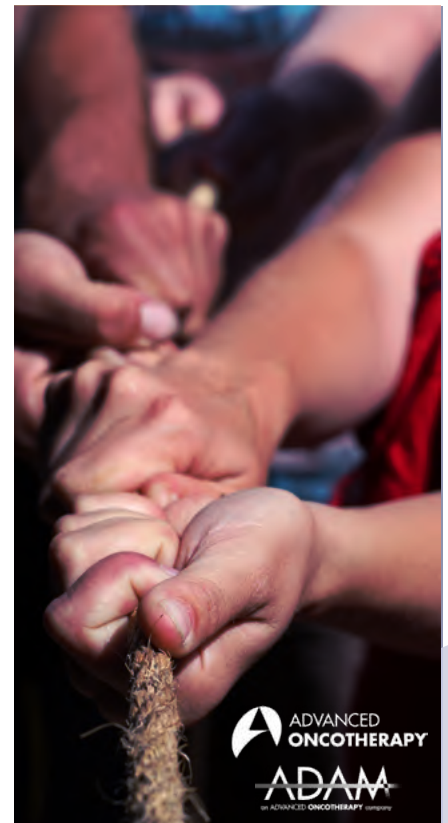
- Strong experience in financial analysis, business planning and Board/management reporting
- Previously worked for Lazard as an M&A Vice-President
- Transaction experience covers a wide range of private and public transactions, including acquisitions, divestitures, and more complex structures

**Graham Pugh***Senior Vice-President, Accounting*

- Seasoned finance professional with a strong technical grounding within all areas of the finance spectrum
- Implemented robust and pragmatic solutions for various industries including newspaper publishing, food manufacturing and building materials

**Julian Tokuta***Director, Supply Chain*

- + 20 years of professional procurement experience at Proxima Group and Accenture
- Substantial achievements in delivering supply chain strategies and procurement excellence that address unanticipated business challenges





# A Mission Supported by Worldwide Experts



**Prof. Ugo Amaldi**

*Adviser*

- Has been working at CERN since the 1970s; founded the DELPHI Collaboration, at CERN's LEP Accelerator; established TERA, the Italian Foundation for Hadrontherapy
- Led the design effort of the Italian National Centre of Oncological Hadrontherapy (CNAO)
- Awarded the Gold Medal for science and culture by the President of the Republic of Italy
- Appointed Fellow of the European Physics Society



**Dr. Jay Loeffler, MD**

*Adviser*

- Herman Suit Professor of Radiation Oncology at Harvard Medical School, Boston
- Chair of the Department of Radiation Oncology at the Massachusetts General Hospital, Boston
- Member of the Institute of Medicine of the National Academies of Science



**Prof. Chris Nutting**

*Adviser*

- World leading consultant oncologist
- Consultant clinical oncologist and chair at The Royal Marsden and The Institute of Cancer Research London; chairman of the National Advisory Board on Head and Neck Cancer to the Cancer Services Collaborative
- President of the British Oncological Association



**Dr. Margaret Spittle, OBE**

*Adviser*

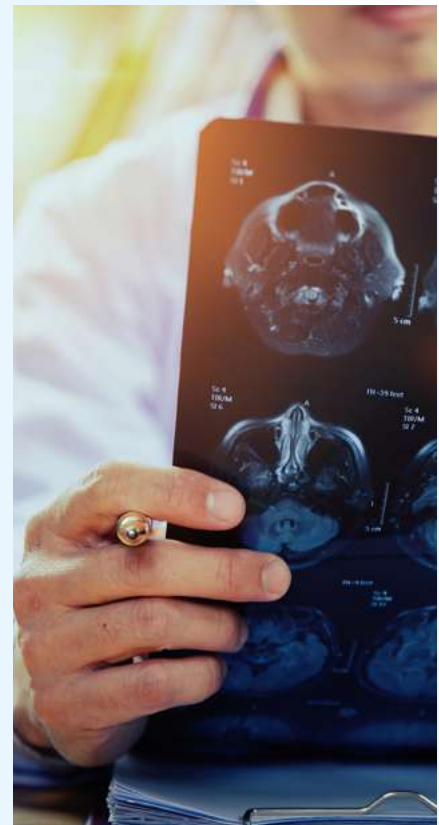
- Clinical oncologist at University College London Hospital (UCLH) and consultant adviser in Radiation Medicine to Royal Navy and the Ministry of Defence
- Member of the Nuclear Safety Committee and Medical Adviser Board member to UK All Party Committee on Breast Cancer



**Dr. Euan Thomson**

*Adviser*

- Trained as a physicist; nearly 20 years of experience in research, clinical practice, consulting and corporate management and more than 14 years of experience as a CEO
- Operating partner at Khosla Ventures; CEO of AliveCor; Director of the Hospice of the Valley
- Served as global lead of R&D, digital technology and advanced innovation for J&J; previously the CEO of Accuray for 10 years; consultant for other medical device companies including Varian Oncology Systems and Radionics; has served as Chair of the California Division of the Entrepreneur of the Year award









# Corporate Governance Report



In April 2018, the Quoted Companies Alliance (QCA) published an updated version of its Code which provides UK small and mid-sized companies with a corporate governance framework that is appropriate for a Company of our size and nature. The underlying principle of the QCA code is that "the purpose of good corporate governance is to ensure that the Company is managed in an efficient, effective and entrepreneurial manner for the benefit of all shareholders over the longer term". The Board considers the principles and recommendations contained in the QCA Code are appropriate and has therefore chosen to apply the QCA Code. The updated 2018 QCA Code has ten principles that should be applied. Each principle is listed below together with an explanation of how the Company applies or otherwise departs from each of the principles. The Company is subject to the City Code on Takeovers and Mergers.

## PRINCIPLE ONE – BUSINESS MODEL AND STRATEGY

The Group's strategy is explained within the previous Strategic Report section, on pages 4 to 44. It intends to invest for growth in the following areas:

- provide a turn-key solution that delivers the best outcome for patients by bundling the LIGHT technology with complementary devices and services, including training, maintenance, financing, and building development/installation;
- build on the LIGHT technology to make the treatment more affordable for patients whilst optimising the financial returns of the operators;
- ensure the Company builds the right network and capabilities to deliver its fast-growing pipeline in a way that aligns the interest of all stakeholders of Advanced Oncotherapy;
- plan and produce a series of product releases with continued technical and medical upgrades through a strong commitment to maintain an active R&D effort; and
- maintain brand awareness and reputation of the Group.

The key challenges to the business and how these are mitigated are detailed on pages 42 to 44.

## PRINCIPLE TWO – UNDERSTANDING SHAREHOLDER NEEDS AND EXPECTATIONS

The Board is committed to maintaining good communication and having constructive dialogue with its shareholders. The Executive chairman and the CEO have a regular dialogue with private and institutional shareholders engaging proactively with them and ensuring their views are communicated back to the Board. The Investor Relations department [ir@advancedoncotherapy.com](mailto:ir@advancedoncotherapy.com) acts as a focal point for contact with investors throughout the year. The website of the Company contains all RNS announcements, share price information, statutory documentation with all annual report documents available for download. In addition, all shareholders are encouraged to attend the Company's Annual General Meeting and ad-hoc shareholder meetings which provide opportunities for shareholders to address any questions on key strategic matters with the Directors and management. The Annual General Meeting was held on 25th July 2019 and the Company also arranged two ad-hoc shareholder meetings on 21st January 2019 and 11th May 2020.

The next Annual General Meeting will take place at the offices of Advanced Oncotherapy plc, Third floor, 4 Tenterden Street, London W1S 1TE on 29th July at 2.00pm. Dr. Michael Sinclair, the Executive Chairman, and Nicolas Serandour, the CEO, are also assisted in their responsibility to liaise with shareholders by the financial investor relation firm FTI, as well as by Allenby, their nominated adviser. Their contact details are available on page 114. The Notice of the Annual General Meeting and all related papers are sent to each shareholder at least 21 clear calendar days before the meeting. The outcomes of the voting on resolutions are announced to the London Stock Exchange via the Regulatory News Service and added to the Company's website. Please see Principle Ten for further details.

The Board believes that appropriate steps are taken to ensure that the Board, and in particular the Non-Executive Directors, develop an understanding of the views of major shareholders.

## PRINCIPLE THREE – CONSIDERING WIDER STAKEHOLDER AND SOCIAL RESPONSIBILITIES

The Board recognises that the long-term success of the Company is reliant upon the efforts of the employees of the Company and its contractors, suppliers, regulators and other stakeholders. This is evidenced and underpinned by the vision and values of the Company, described in pages 6 and 7 of the Strategic Report. The Board has put in place a range of processes and systems to ensure that there is close oversight and contact with its key resources and relationships. For example, a company-wide internal information system shares information on key developments, allowing the Company to efficiently fulfil customer requirements.

Furthermore, all employees of the Company participate in an annual ROADMap assessment process which is designed to ensure that there is an open and confidential dialogue with each person in the Company to promote successful two-way communication with agreement on goals, targets and aspirations of the employee and the Company. These feedback processes help to ensure that the Company can respond to new issues and opportunities that arise to further the success of employees and the Company. The Company has close ongoing relationships with a broad range of its stakeholders and provides them with the opportunity to raise issues and provide feedback to the Company.

Advanced Oncotherapy's website was upgraded in September 2019; this update has taken into account some of the comments provided by shareholders. A corporate video has also been

produced and shown on the website following requests from potential customers. Informal contact is promoted through use of social media such as Facebook, Twitter, LinkedIn and Yammer.

#### PRINCIPLE FOUR – RISK MANAGEMENT

The Group places great importance on the key risks to the business, and how these are mitigated. These are further detailed in the section headed Principal Risks and Risk Management on pages 42 to 44. This is supplemented by a risk log updated internally by the management team. The Board considers risks to the business at every Board meeting. The Company formally reviews and documents the principal risks to the business at least annually. The Board of Directors has overall responsibility for the Group's system of control and for reviewing its effectiveness. Its purpose is to manage rather than eliminate the risk of failure to achieve business objectives; this can only provide reasonable, but not absolute, assurance against material misstatement or loss. The Executive Directors and the senior management team meet on a regular basis to review ongoing performance, discuss budgets and forecasts and new risks associated with ongoing trading.

#### PRINCIPLE FIVE – A WELL FUNCTIONING BOARD OF DIRECTORS

The Board's role is to establish the vision and strategy for the Group and is responsible for the long term success of the Company. At the year-end the Board comprised three Executive Directors and nine Non-Executive Directors. Biographical details of the current Directors are set out in pages 48 and 49. Dr Michael Sinclair, the Executive Chairman, is responsible for the running of the Board. Nicolas Serandour, the Chief Executive Officer, has executive responsibility for running the Group's business and implementing the Group strategy.

The individual members of the Board have equal responsibility for the overall stewardship, management and performance of the Group and for the approval of its long term objectives and strategic plans.

#### Duties

In accordance with the Companies Act 2006, the Board complies with: a duty to act within their powers; a duty to promote the success of the Company; a duty to exercise independent judgement; a duty to exercise reasonable care, skill and diligence; a duty to avoid conflicts of interest; a duty not to accept benefits from third parties and a duty to declare any interest in a proposed transaction or arrangement.

#### Independence

Whilst the Chairman also has an Executive role and it is recognised that a non-executive role for the Chairman is commonly perceived as a more desirable corporate governance standard, the Board feels that the commitment, expertise, industry connections and enthusiasm the Executive Chairman brings to the role offset this.

All Non-Executive Directors serving at the year-end bring an independent judgement. The Board does not consider the shareholdings of the Non-Executive Directors as detailed on page 64 to have any effect on their independence. The biographies on pages 48 and 49 include further disclosures in relation to the directors, their relevant experience, skills and personal qualities and capabilities.

#### Attendance and Access to Information

The Board met seven times in 2019, excluding separate ad-hoc meetings and calls. It has established an Audit Committee and a Remuneration Committee, the particulars of which appear hereafter. All Directors receive regular and timely information on the Group's operational and financial performance. Relevant information is circulated to the Directors in advance of meetings. All Directors have direct access to the advice and services of the Company Secretary and can take independent professional advice in the furtherance of their duties, if necessary, at the Company's expense.

Details of attendance by Directors at meetings during the year are set out in the table below. Directors who were unable to attend specific meetings reviewed the relevant papers and provided their comments to the Chairman of the Board or Committee. Any Director who misses a meeting receive, as a matter of course, the minutes of that meeting for reference.

Director	Scheduled Board meetings	Ad hoc Board meetings*	Audit and Risk Committee	Remuneration & Nomination Committee
Dr Michael Sinclair	7/7	9		
Mr. Michael Bradfield	7/7	1	3	2
Mr. Hans von Celsing	7/7	7	4	2
Mr. Chunlin Han	3/7			
Dr. Yuelong Huang	6/7			
Prof. Steve Myers, OBE	7/7	3		
Dr. Nick Plowman	3/7	1		
Mr. Nicolas Serandour	7/7	9		
Mr. Peter Sjöstrand	7/7	3		
Prof. Gabriel Urwitz	6/7	3		
Dr. Enrico Vanni	7/7	1	4	2
Mrs. Renhua Zhang	1/7			

\* Where often only a quorum is necessary



# Corporate Governance Report \_Continued

## Company Secretary

The Company Secretary, Henry Clarke, ensures the Board is aware of any applicable regulatory changes and updates the Board as and when relevant. Directors are able to take independent professional advice in the furtherance of their duties, if necessary, at the Company's expense. Directors also have direct access to the advice and services of the Company Secretary.

## Reserved Matters

The Board has a schedule of matters specifically reserved for its approval. These matters are delegated to the Board Committees, Executive Directors, executive management team and senior management where appropriate. The schedule of matters reserved for the Board can be found on the website [www.avopl.com](http://www.avopl.com).

## Share Dealing

The Company has established a Group share dealing code which complies with all applicable legislation, and all the Directors of the Group understand the importance of compliance with the Code.

## PRINCIPLE SIX – APPROPRIATE SKILLS AND EXPERIENCE OF THE DIRECTORS

### Composition

The Board comprises the Executive Chairman, the Chief Executive Officer, ADAM's Executive Chairman, and nine Non-Executive Directors (or five Non-Executive Directors after the AGM dated 29 July 2020).

The Board continues to believe that its membership has the right qualities required to operate within a robust governance structure which matches the requirements of the Group. This structure makes the business stronger to ensure the right decisions are made to help support and deliver the Group's strategy, and to protect shareholders interests.

### Services and Re-election

All Executive Directors have service agreements with the Group terminable by either party upon the minimum notice period being met. The notice period is 24 months for Dr. Michael Sinclair and Nicolas Serandour and six months for Prof. Steve Myers. Non-Executive Directors are initially appointed for a three-year term, but their appointment is terminable by either party on three months' written notice. The letters of appointment of all Directors are available for inspection at the Company's registered office during normal business hours.

Name of Directors	Date of Appointment
<b>Executive Directors</b>	
Dr Michael Sinclair	16 June 2006
Mr. Nicolas Serandour	27 August 2014
Prof. Steve Myers, OBE	26 January 2017
<b>Non-Executive Directors</b>	
Mr. Michael Bradfield	26 April 2013
Mr. Hans von Celsing	26 January 2017
Mr. Chunlin Han *	28 August 2018
Dr. Yuelong Huang *	28 August 2018
Dr. Nick Plowman	9 February 2017
Mr. Peter Sjöstrand *	28 August 2018
Prof. Gabriel Urwitz *	28 August 2018
Dr. Enrico Vanni	1 October 2013
Mrs. Renhua Zhang	28 August 2018

\* Will not seek re-election at the AGM held in July 2020.

As a result the Board will decrease from 12 members to eight members.

Executive and Non-Executive Directors retire by rotation in accordance with the Company's Articles of Association which prescribe that at

every Annual General Meeting one third of the Directors shall retire from office. However, to underline their accountability to shareholders and the Board's commitment to appropriate corporate governance, each Director will stand for re-election at the upcoming AGM. The Board has concluded that each Director is eligible for election or re-election. The Executive Chairman and the Chief Executive Officer evaluate succession planning at the Board level and will discuss this with the Non-Executive Directors as appropriate.

## New Appointments

When a new appointment to the Board is made or a removal is being considered, thought is given to the particular skills, knowledge and experience that could be of benefit to the Board. In the case of a new appointment, a formal process is then undertaken, which may involve external recruitment agencies, with appropriate consideration being given, in regard to Executive appointments, to internal and external candidates. Before undertaking the appointment of a Non-Executive Director, the Executive Chairman establishes that the prospective Director can give the time and commitment necessary to fulfil his/her duties, in terms of availability both to prepare for and attend meetings and to discuss matters at other times.

## PRINCIPLE SEVEN – EVALUATION OF BOARD PERFORMANCE

Internal evaluation of the Board, and individual Directors has been undertaken in the form of peer appraisal and discussions to determine the effectiveness and performance as well as the Directors' continued independence. The performance assessment takes into account the Financial reporting Council's Guidance on Board Effectiveness. The criteria against which Board, committee and individual effectiveness is considered comprise the Board structure (its composition, constitution and diversity), the dynamics and functioning of the Board (annual Board calendar, information availability, interactions and communication with CEO and senior executives, cohesiveness and the quality of participation in Board meetings); the Board's role in Company strategy; the financial reporting process, the monitoring, supporting and advisory roles.

The Board is committed to continuous improvement of its functioning. Board performance is considered on an internal basis. The retirement of four directors at the forthcoming Annual General Meeting reduces the size of the Board to eight directors, being more in line with corporate expectations. During the Covid-19 pandemic, the Board has taken advantage of communications technology for conference call board meetings for its continued operation.

## PRINCIPLE EIGHT – CORPORATE CULTURE

The Board recognises that their decisions regarding strategy and risk will impact the corporate culture of the Company as a whole and that this will impact the performance of the Company. The Board is very aware that the tone and culture set by the Board will greatly impact all aspects of the Company as a whole and the way that employees behave. The corporate governance arrangements that the Board has adopted are designed to ensure that the Company delivers long term value to its shareholders and that shareholders have the opportunity to express their views and expectations for the Company in a manner that encourages open dialogue with the Board. A large part of the Company's activities is centred upon what needs to be an open and respectful dialogue with employees, clients and other stakeholders. Therefore, the importance of sound ethical values and behaviours is crucial to the ability of the Company to successfully achieve its corporate objectives. Page 7 of the Strategic Report details the ethical values of Advanced Oncotherapy which include:

- safety;
- life;
- quality; and
- innovation.

The Board places great emphasis on this aspect of corporate life and seeks to ensure that this flows through all that the Company does. The Directors consider that at present the Company has an open culture facilitating comprehensive dialogue and feedback and enabling positive and constructive challenge. The Company has adopted, with effect from the date on which its shares were admitted to AIM, a code for Directors' and employees' dealings in securities which is appropriate for a company whose securities are traded on AIM and is in accordance with the requirements of the Market Abuse Regulation which came into effect in 2016.

### Diversity

The continuing success of the Company is reliant on having the best people in all areas of its operations. The Group considers its people for employment, training, career development and promotion on the basis of their abilities and aptitudes, regardless of physical ability, age, gender, sexual orientation, religion or ethnic origin. The Group's gender split in the period ending December 2019 was 74%:26% (Male:Female) permanent employees with a team of 129 people. The Group applies fair and equitable employment policies, and these ensure that entry into, and progression within, the Group is determined solely by the fair application of relevant job criteria and by personal ability and competence. The Company actively promotes the career development of its employees. Full and fair consideration (having regard to the person's particular aptitudes and abilities) is given to applications for employment and the career development of disabled persons. The Group will take all practicable steps to ensure that if an employee becomes disabled during the time they are employed, their employment can continue. It continues to review both performance and potential as a key part of its annual performance management, career development and succession planning processes. Diversity is at the heart of the Group culture, which is characterised by a meritocratic and collaborative ethos. 26 different nationalities are represented in the Group as at 31st December 2019.

### Whistleblowing Procedures

The Company's management structure emphasises short reporting lines, encouraging its staff to realise their full potential, as well as to raise issues and concerns with senior managers and Directors. In addition, the Group operates a whistleblowing policy which allows all employees to raise concerns to senior management in strict confidence about any unethical business practices, fraud, misconduct or wrongdoing.

## PRINCIPLE NINE – MAINTENANCE OF GOVERNANCE STRUCTURES AND PROCESSES

Ultimate authority for all aspects of the Company's activities rests with the Board, the respective responsibilities of the Executive Chairman and the Chief Executive Officer arising as a consequence of delegation by the Board. The Board has adopted appropriate delegations of authority which set out matters which are reserved to the Board.

The two principal Committees of the Board are the Audit Committee and the Remuneration Committee. Board Committee members are appointed by the Board, which reviews the composition of each Committee regularly. The Committee memberships are spread between the Non-Executive Directors, drawing on each of their relevant skills and experience. Advanced Oncotherapy does not have a separate Nomination Committee to manage the appointment process for new Board directors.

### Audit Committee

Hans von Celsing is Chairman of the Audit Committee which met four times in 2019. Other members of the Audit Committee are Dr Enrico Vanni and Michael Bradfield.

The composition of the Audit Committee is reviewed on an annual basis to ensure that it is comprised of members with

skills and competences relevant to the radiotherapy equipment manufacturers sector and recent and relevant financial experience. The biographies of all the members of the Audit Committee are on pages 48 and 49 and show that the members of the Audit Committee have gained a combination of financial, investment and other relevant experience throughout their careers, which satisfies the provisions of the Quoted Company Alliance ("QCA") Code. The Audit Committee may invite representatives of the management team and other Directors to attend the meetings as appropriate.

It is responsible for making recommendations to the Board on the appointment of auditors, including their scope of work, remuneration, independence and effectiveness and for reviewing the conduct and control of the annual audit. It also has responsibility for the reporting of the financial performance of the Group, including the Company's half-year and annual report and significant financial reporting issues and judgements contained therein. Other responsibilities include the review of the Going Concern Statements presented in the Annual Report, the supporting budgets, forecasts and evidence as well as the performance evaluation process for the Audit Committee and the assessment for the need for an internal audit function.

### Remuneration Committee

The Remuneration Committee has been chaired by Hans von Celsing and he was supported by Dr Enrico Vanni and Michael Bradfield. The Remuneration Committee met twice in 2019.

The primary role of the Committee is to determine and agree the remuneration of the Company's Chairman, CEO, Executive Directors and senior managers, with the objective to ensure there is an appropriate remuneration strategy in place to encourage enhanced performance and reward for individual contributions to the success of the Company. The Committee also reviews the design of all Group share incentive plans and oversees major changes to employee benefit structures across the wider business. The Committee reviews individual performance to ensure that they are both challenging and closely linked to the Group's strategic priorities. The level of remuneration of the Directors is set out in the Group's Remuneration Report on pages 62 and 63. It is a rule of the Remuneration Committee that a Director shall not participate in discussions or decisions concerning his/her own remuneration.

## PRINCIPLE TEN – SHAREHOLDER COMMUNICATION

Formal communication of the Company's financial performance is communicated to the market by RNS announcements on the London Stock Exchange. The Company encourages two-way communication with both its institutional and private investors and responds quickly to all queries received. The Executive Chairman and the Chief Executive Officer talk regularly with the Group's major shareholders and ensure that their views are communicated fully to the Board. The Board recognises the Annual General Meeting as an important opportunity to meet private shareholders. The Directors are available to listen to the views of shareholders during or informally immediately following the Annual General Meeting. The Company discloses outcomes of all votes in a clear and transparent manner by publishing a regulatory announcement or via the Company website. Where a significant proportion of votes (e.g. 20% of independent votes) have been cast against a resolution at any general meeting, the Company will include, in such a regulatory announcement or on the Company's website, the actions it intends to take to understand the reasons behind the vote result and, where appropriate, any different action it has taken, or will take, as a result of the vote. The Company's website includes historical annual reports and other governance related material over the last three years.



# Statement of Directors' Responsibilities



The Directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulations. Company law requires the Directors to prepare group and parent company financial statements for each financial year.

Under that law the Directors have elected to prepare the Group consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union (IFRSs) and elected to prepare the parent company financial statements under United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable laws including FRS 101 Reduced Disclosure Framework).

Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs and of the profit or loss of the Group and the parent company for that period. In preparing each of the Group and parent company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- state whether they have been prepared in accordance with IFRSs as adopted by the EU or UK Accounting Standards have been followed, subject to any material departures disclosed and explained; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and the parent company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the parent company's transactions and disclose with reasonable accuracy at any time the financial position of the parent company and the Group and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also generally responsible for taking such steps as are reasonably open to them to safeguard the assets of the group and to prevent and detect fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Information published on the website is accessible in many countries and legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Each of the Directors confirms that, to the best of their knowledge, the Group financial statements, which have been prepared in accordance with IFRSs as adopted by the EU, give a true and fair view of the assets, liabilities, financial position and profit of the Group; and the Annual Report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal risks and uncertainties that it faces.

By order of the Board

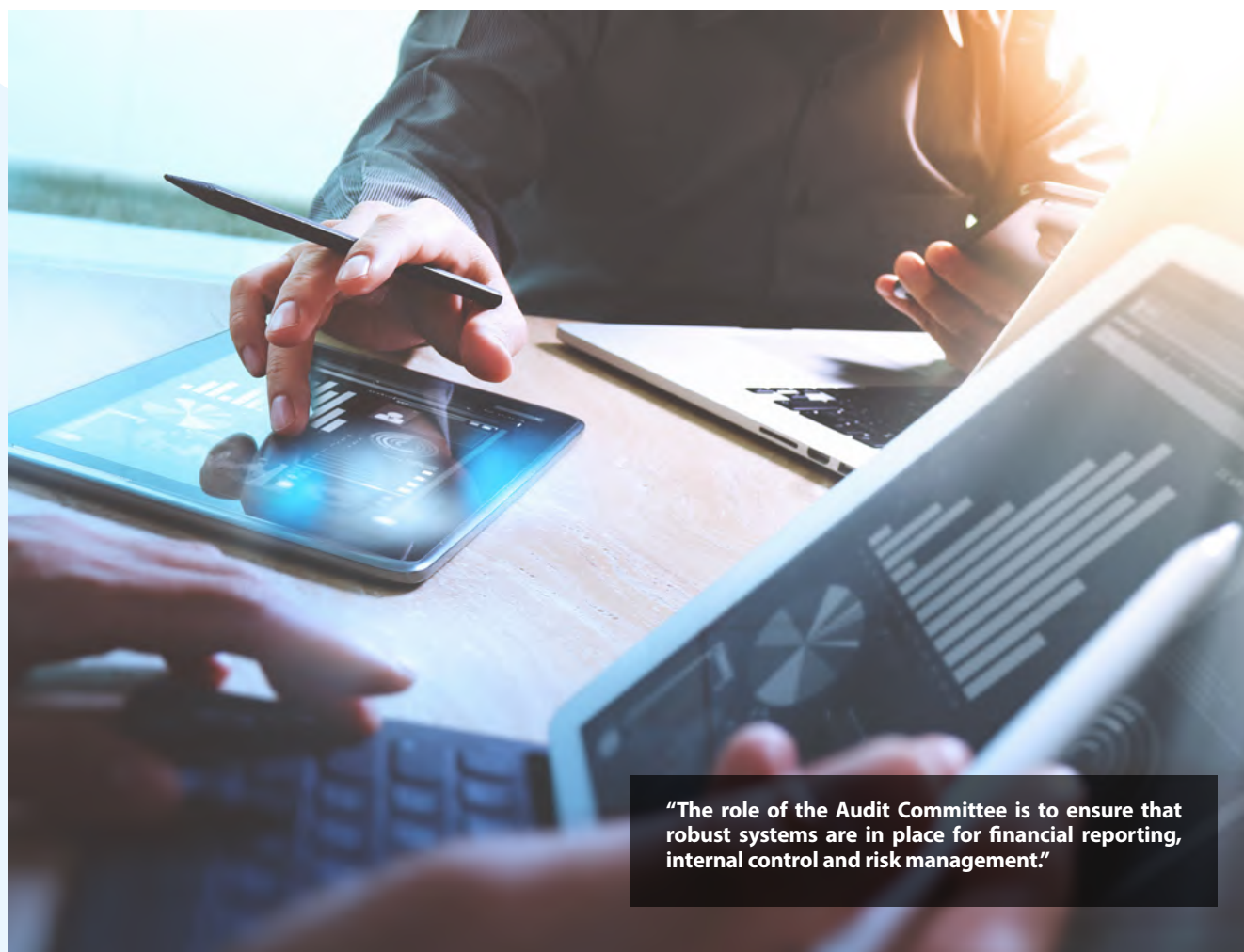
**Dr Michael Sinclair**  
Executive Chairman  
29th June 2020







# Audit Committee Report



**"The role of the Audit Committee is to ensure that robust systems are in place for financial reporting, internal control and risk management."**

## INTRODUCTION

The Board is required to establish formal and transparent arrangements for considering how it should apply required financial reporting standards and internal control principles. The Board is also responsible for maintaining appropriate independent relationships with the Group's external auditors, RPG Crouch Chapman LLP. As a result, a sub-committee of the Board - the Audit Committee - exists to scrutinise and clarify any qualifications, recommendations and observations within the audited accounts and report of the Group's auditors. When satisfied, the Audit Committee presents the audited accounts and report to the Board and reviews the effectiveness of resultant corrective and preventative measures.

## COMPOSITION OF THE AUDIT COMMITTEE AND RESPONSIBILITIES

The composition of the Audit Committee and its responsibilities are set out in page 57. Its terms of reference are available for review on the Company's website at [www.avopl.com](http://www.avopl.com). These are reviewed periodically taking into account relevant legislation and recommended good practice.

## AREAS CONSIDERED IN RELATION TO THE FINANCIAL STATEMENTS

The matters that the Committee considered and made decisions

on during the year and, where appropriate, since the year end, are set out below.

The Audit Committee reviewed the draft Annual Report and the Auditors' Report to the Audit Committee, prior to their publication. The external auditors have agreed the list of key areas discussed by the Audit Committee and a particular attention was paid to the following areas in relation to the financial statements:

- carrying value of intangibles;
- carrying value of inventory;
- assumptions IFRS16 implementation;
- going concern; and
- carrying value of intercompany debtors.

For each of the above areas the Audit Committee considered the key facts and judgements outlined by management. Members of management attended the section of the meeting of the Audit Committee where their item was discussed to answer any questions or challenges posed by the Audit Committee. The issues were also discussed with the external auditors. The Audit Committee was satisfied that there are relevant accounting policies in place in relation to these key areas and management have correctly applied these policies.

At the request of the Board the Audit Committee undertook to:

- review the appropriateness of adopting the going concern basis of accounting in preparing the annual financial statements; and
- assess whether the business was viable in accordance with the new requirement of the UK Corporate Governance Code. The assessment included a review of the principal risks facing the Company, their potential impact, how they were being managed, together with a discussion as to the appropriate period for the assessment.

The Audit Committee also ensured that the accounting policies were applied consistently throughout the year and that new policies were adopted as appropriate for new transactions and for application of new financial reporting standards.

At the request of the Board of Directors the Audit Committee also considered whether the 2019 Annual Report and Accounts were fair, balanced and understandable and whether they provided the necessary information for shareholders to assess the Group's position and performance, business model and strategy. The Committee was satisfied that, taken as a whole, the 2019 Annual Report and Accounts are fair, balanced and understandable.

## RISK MANAGEMENT

The Audit Committee oversees the effectiveness of the Group's risk management and reviews and monitors the key risks in order to eliminate or mitigate against those risks. The risk management framework is the mechanism by which the current risks identified are managed and that appropriate procedures are in place to identify emerging risks.

## EXTERNAL AUDITORS

Receiving high-quality and effective audit services is of paramount importance to the Audit Committee who continues to monitor carefully the independence of the external auditors as well as their effectiveness.

### Independence

The Audit Committee carefully reviews on an ongoing basis the relationship with the external auditors to ensure that the auditors' independence and objectivity are fully safeguarded. The external auditors reported on their independence during the year and again since the year end, confirming to the Audit Committee that they have complied with the FRC's Ethical Standard and, based on their assessment, that they were independent of the Group.

This independence review undertaken by the Audit Committee was based on discussions with the auditors, their statements confirming that they remain independent within the meaning of the regulations and their professional standards and a careful assessment of the non-audit services as detailed below.

### Provision of non-audit services

In line with the requirements of the EU Audit Directive and Regulation which came into force on 17 June 2016, the Audit Committee continues to have a robust policy for the engagement of the external auditors' firm for non-audit work. The Audit Committee received a report covering the auditors' fees including details of non-audit fees incurred. Details of the amounts paid to the external auditors during the year for audit and other services are set out in Note 2 to the financial statements. The external auditors were engaged for one non-audit assignment during the year. The use of their knowledge of the facts under consideration was seen as being cost effective for the Group. Their engagement was not deemed to compromise their objectivity.

### Effectiveness

Each year, the Audit Committee assesses the effectiveness of the external audit process which includes discussing feedback from the members of the Audit Committee and stakeholders at all levels across the Company. The work undertaken by the auditors to test management's assumptions and estimates are also challenged by the Audit Committee, which assesses the effectiveness of the audit process. In that context, interviews were held with key senior management within both Advanced Oncotherapy and RPG Crouch Chapman LLP:

- On 08 January 2020, the Audit Committee met with RPG Crouch Chapman LLP to review the 2019 audit plan;
- on 14 May 2020, the Audit Committee met with RPG Crouch Chapman LLP to formally review the outcome of the 2019 audit and to discuss the limited issues that arose. The Audit Committee also discussed the presentation of the Annual Report with the auditors and sought their perspective.

Following the completion of the 2018 year-end audit, the Audit Committee conducted its review and considers that the audit was appropriately planned and scoped efficiently and effectively performed by RPG Crouch Chapman LLP. The Audit Committee is satisfied that RPG Crouch Chapman LLP continued to perform effectively as the external auditor. The reappointment of RPG Crouch Chapman LLP was approved at the Annual General Meeting dated 25th July 2019. Colin Turnbull is the Senior Statutory Auditor and has been in that role since November 2018.

### Auditors' Reappointment

RPG Crouch Chapman LLP have been the external auditor of Advanced Oncotherapy plc since being appointed in 2011. The Audit Committee notes the new requirement of the revised Corporate Governance Code, although not mandatory for AIM listed Companies, that the external audit contract be put out to tender at least every 10 years. RPG Crouch Chapman LLP have indicated their willingness to continue to act as auditors to the Company for the forthcoming year.

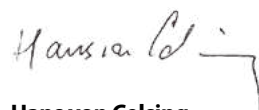
A resolution for their re-appointment will be proposed at the Annual General Meeting.

## INTERNAL AUDIT

The Company does not currently have an internal audit function. The Audit Committee presently considers this to be appropriate given the close involvement of the Executive Directors and senior management on a day-to-day operational basis. However, the need for an internal audit function is kept under regular review by the Audit Committee on behalf of the Board.

## CONCLUSIONS

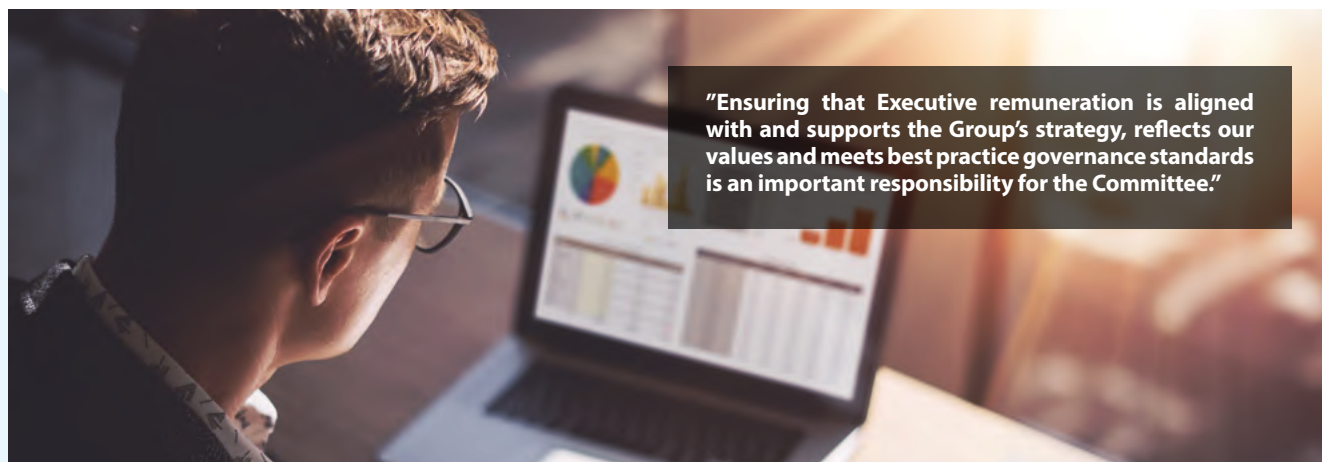
The Audit Committee has had another productive year providing oversight of financial reporting, external audit and the further development of the control and risk environments. This will continue as the Group grows and develops in line with its strategy, ensuring that finance and risk management capability is enhanced to manage in an increasingly complex environment.



**Hans von Celsing**  
Chairman of the Audit Committee  
29th June 2020



# Remuneration Committee Report



"Ensuring that Executive remuneration is aligned with and supports the Group's strategy, reflects our values and meets best practice governance standards is an important responsibility for the Committee."

This report does not constitute a Directors' remuneration report in accordance with the Companies Act 2006. As a company whose shares are admitted to trading on AIM, the Company is not required by the Companies Act to prepare such a report. We do, however, have regard to the principles of the QCA Code which we consider to be appropriate for an AIM company of our size. The report provides a general statement of policy on Directors' remuneration as it is currently applied and details the remuneration for all Directors during the year. It also provides a summary of the LTIP and Save As You Earn plan.

## COMPOSITION OF THE REMUNERATION COMMITTEE AND RESPONSIBILITIES

The composition of the Remuneration Committee and its responsibilities are set out in page 57. Its terms of reference are available for review on the Company's website at [www.avopl.com](http://www.avopl.com). These are reviewed periodically taking into account relevant legislation and recommended good practice.

## REMUNERATION POLICY

The objective of the Company's remuneration policy is to attract, retain and motivate individuals of the quality required to run the Company successfully without paying more than is necessary, having regard to views of shareholders and other stakeholders.

The Remuneration Committee recognises that the remuneration policy should have regard to the risk appetite of the Company and alignment to the Company's long-term strategic goals, with a significant proportion of remuneration being structured so as to link rewards to corporate and individual performance, designed to promote the long-term success of the Company. The Remuneration Committee, when setting the remuneration policy for Executive Directors, also has regard to the pay and employment conditions across the Group, particularly when conducting salary reviews.

The remuneration policy takes into account various factors including:

- the importance of remuneration and the capacity of the Group to successfully attract, retain and motivate Executive Directors and senior management;
- the relevant legal and regulatory requirements and corporate governance guidelines;
- practice and employment conditions, both within the Company as a whole and within the particular countries in which it operates
- the market rate of pay for equivalent roles in similar companies, taking into account their size, business complexity, international scope and relative performance

The main elements of the remuneration packages are as follows.

## BASIC ANNUAL SALARY AND PENSION

Basic annual salary and contribution to pension arrangement or payments in lieu of pensions are reviewed annually by the Remuneration Committee. This takes into account a number of factors, including the current position and progress of the Group, individual contribution and market salaries for comparable organisations.

## OTHER BENEFITS

Medical health insurance, life cover and pension benefits and other benefits may also be provided to employees once they have met eligibility criteria.

## DISCRETIONARY BONUS

At the discretion of the Remuneration Committee, taking into account performance against certain financial and individual targets, an Executive Director and senior manager may be entitled to an annual discretionary cash bonus on such terms and subject to such conditions as may be decided from time to time by the Remuneration Committee. Following the fund raise announced in December 2018, which completed in January 2019, the following Share Options were granted in February 2019 to Directors and key staff as a discretionary bonus in recognition of the huge work in making the fund raise a success:

• Dr Michael Sinclair	545,000
• Nicolas Serandour	1,400,000
• Prof Stephen Myers	215,000
• Members of staff	1,840,000

The Share Options are valid for five years with an exercise price of £1.00 each. Further details are detailed on pages 83 and 93.

## LONG-TERM INCENTIVE PLAN AND SAVE AS YOU EARN SCHEME

Details can be found on page 63.

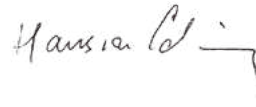
## DIFFERENCES IN THE REMUNERATION POLICY OF THE EXECUTIVE DIRECTORS AND THE GENERAL EMPLOYEES

There are no material differences in the structure of remuneration arrangements for the executive directors and senior management, aside from quantum and participation levels in incentive schemes, which reflect the fact that a greater emphasis is placed on performance-related pay for executive directors and the most senior individuals in the management team. The Group aims to provide remuneration structures for employees which reflect market norms.

**NON-EXECUTIVE DIRECTORS**

Non-Executive Directors receive an annual fixed fee of £30,000 and do not receive any pension payments or other benefits. No additional fees are payable in respect of membership of the Board's Committees. The Non-Executive Directors do not participate in bonus or incentive schemes. Most Non-Executive Directors have historically elected to receive their fees in shares of the Company.

how it underpins the Group's business growth and strategic objectives. The Board considers that the current remuneration policy is fair and is fully aligned with the interests of shareholders.


**CONCLUSION**

This report is intended to explain clearly the remuneration approach adopted by the Company and to enable shareholders to appreciate

**Hans von Celsing**

*Chairman of the Remuneration Committee*

29th June 2020

Element of pay	Purpose and link to strategy	Operation	Maximum opportunity
Base salary	To provide a competitive and appropriate level of basic fixed pay to recruit and retain superior talent and avoid excessive risk taking that might otherwise result from an overreliance on variable remuneration.  Reflects the experience, performance and responsibilities of the individual.	Reviewed periodically.  Takes account of experience, performance and responsibilities as well as the performance of the Group, the complexity of the role within the Group and salary increases for employees generally.  Set with regard to market data for comparable positions in similar companies in terms of size, internationality, business model, structure and complexity, including within the industry.	No maximum or minimum annual increase.  Higher increases than the average percentage for the workforce may be appropriate, for example, where an individual changes role, where the complexity of the Group changes, where an individual is materially below market comparators or is appointed on a below market salary with the expectation that his/her salary will increase with experience and performance.
Annual bonus	Drives and rewards the successful achievement of individuals.	Takes into account Company and individual performance, which are related to the achievement of personal, departmental and/or Group targets/milestones.  An element of bonus can be settled in shares or share options in lieu of cash considerations.	100% of salary payable for maximum performance.  Additional discretionary bonus can be awarded subject to specific contributions, roles and performance of individuals.
Long-Term Incentive Plan ("LTIP")	To incentivise the executives and reward them for meeting stretching targets in the long term which accrue substantial value to and align the directors' interests with shareholders.  Facilitates share ownership to provide further alignment with shareholders.  Annual awards aid retention.	Performance conditions, targets and weightings set at the time of an award to ensure they are stretching and aligned with the Company's strategy to build shareholder value.  First award was announced on 22nd February 2019, under which the Committee awarded four million options with an exercise price of 100 pence per share to Executive Directors and senior management. The options have a five-year term, expiring on 20th February 2024. This award followed the ISO:13485 certification, the "superficial tumour" milestone and the £10 million funding round announced on 21st December 2018.	n.a.
Savings related share option scheme or SAYE (Save As You Earn) plan.	To encourage ownership and align the interests of employees and external shareholders and build long-term value.	Open to all employees with more than one month's service.  Participants can make monthly contributions of up to £500 on a three-year savings account.  SAYE scheme launched on 21st December 2018; first SAYE options were issued post year end, on 22nd February 2019.	Maximum monthly savings of £500. As per this SAYE plan, the Board granted options over a total of 1,449,342 new shares.



# Group Directors' Report



The Directors present their annual report and the financial statements of the Group for the year ended 31st December 2019.

## CORPORATE DETAILS

Advanced Oncotherapy plc is a public limited company incorporated and registered in England and Wales under the Companies Act with registered number 05564418. Its registered office is Level 17, Dashwood House, 69 Old Broad Street, London EC2M 1QS.

Advanced Oncotherapy plc owns 100% of ADAM S.A.

## DIRECTORS AND THEIR INTERESTS

The biographical details of the Directors serving during the year and as at the date of signing the financial statements are set out on pages 48 and 49. The interests of Directors and their immediate families in the shares of Advanced Oncotherapy plc, along with details of Directors' share options, are contained in the Directors' remuneration report set out on pages 62 and 63.

A qualifying third-party indemnity provision as defined in Section 234 of the Companies Act 2006 is in force for the benefit of each of the Directors and the Company Secretary in respect of liabilities incurred as a result of their office, to the extent permitted by law. In respect of those liabilities for which Directors may not be indemnified, the Company maintained a Directors' and Officers' liability insurance policy throughout the financial year.

The beneficial interests of the Directors in the share capital of the Company at 31st December 2019 and 31st December 2018 were as follows:

<i>Holdings by Directors or Holdings Under Their Control</i>	<i>31st December 2019</i>	<i>31st December 2018</i>
Chunlin Han, Renhua Zhang, Yuelong Huang	<b>45,000,000</b>	45,000,000
Michael Bradfield	<b>7,193,240</b>	7,080,740
Dr Michael Sinclair & Family	<b>7,468,178</b>	6,594,660
Gabriel Urwitz	<b>6,551,289<sup>(1)</sup></b>	6,488,789
Dr Nick Plowman	<b>4,042,804</b>	3,930,304
Dr Enrico Vanni	<b>2,126,361</b>	1,926,361
Nicolas Serandour	<b>1,760,467</b>	1,760,467
Prof Steve Myers	<b>783,902</b>	783,902
Hans von Celsing	<b>142,500</b>	30,000

<sup>(1)</sup> Including 6,488,789 shares managed by Segulah Advisor AB and 62,500 shares owned by Gabriel Urwitz

## PRINCIPAL ACTIVITY

Advanced Oncotherapy is a provider of particle therapy with protons that harnesses the best in modern technology. Advanced Oncotherapy's team "ADAM", based in Geneva, focuses on the development of a proprietary proton accelerator called, Linac Image Guided Hadron Technology (LIGHT). LIGHT's compact configuration delivers proton beams in a way that facilitates greater precision and electronic control. Advanced Oncotherapy will offer

healthcare providers affordable systems that will enable them to treat cancer with innovative technology as well as expected lower treatment-related side effects.

## RESEARCH AND DEVELOPMENT

During the year the Group expensed through the income statement £0.1 million (2018: £0.1 million) in relation to research and development costs. These costs are for ADAM physics consultancy costs incurred on research projects, not capitalised as an Intangible asset. In addition, development costs amounting to £9.3 million (2018: £8.8 million) were capitalised within intangible assets.

## LIKELY FUTURE DEVELOPMENTS IN THE BUSINESS OF THE GROUP

The outlook is available on page 11.

## BUSINESS REVIEW

The Directors consider that the results for the year and the closing financial position as shown in the Financial Statements and accompanying notes are satisfactory for the business which is still building its first LIGHT machine and is therefore pre-revenue. It should be noted that the two financial periods are not directly comparable due to the adoption of IFRS 16 Leases from 01 January 2019 using the modified retrospective approach, with recognition of transitional adjustments on the date of initial application (1 January 2019), without restatement of comparative figures. The results for the year include a depreciation charge of £1.3 million and an interest charge of £0.6 million for leases now accounted for under IFRS 16. The prior year included a charge of £0.9m for these leases, the comparable cost for 2019 would have been £1.4m.

The business is still pre-revenue and continues to invest in the development and building of the first LIGHT machine through expenditure on Intangible assets and Inventory. The business has funded this through borrowings and equity raises.

## RESULTS AND DIVIDENDS

The results for the year and the financial position at 31st December 2019 are shown in the Consolidated Statement of Comprehensive Income on page 72 and the Consolidated Statement of Financial Position on page 73.

The Board has decided not to recommend the payment of a final dividend in respect of the year ended 31st December 2019 (2018: nil). The results of the Group for the year are explained further on pages 79 to 101.

## SUBSTANTIAL SHAREHOLDINGS

As of 29th May 2020, the Company had been notified that 6 parties had holdings of 3% or more in the ordinary share capital of the Company. The number of ordinary shares and the percentage of the total shares held by each party is outlined below:

	May 20		Dec 19	
	<i>Number of shares</i>	<i>% of total in issue</i>	<i>Number of shares</i>	<i>% of total in issue</i>
Liquid Harmony Limited	45,000,000	14.7%	45,000,000	18.4%
Nerano Capital Limited(*)	22,500,000	7.3%	-	-
Celeste Mgt SA	20,000,000	6.5%	-	-
Philippe Glatz	15,659,162	5.1%	15,659,162	6.4%
Lombard Odier AM	13,650,284	4.5%	9,893,584	4.0%
DNCA	12,000,000	3.9%	12,000,000	4.9%
Michael Sinclair	8,135,604	2.7%	7,468,178	3.1%
Brahma AG	7,912,000	2.6%	7,912,000	3.2%
Barrymore Investments(*)	7,905,721	2.6%	7,905,721	3.2%
Balthisches Haus	7,500,000	2.4%	7,500,000	3.1%

(\*) Controlled by Mr Seamus Mulligan

### SUPPLIER PAYMENT POLICY AND PRACTICE

The Company does not operate a standard code in respect of payments to suppliers. It agrees terms of payment with suppliers at the start of business and then makes payments in accordance with contractual and other legal obligations.

### DONATIONS

During the year, the Company made no charitable donations (2018: £16,291).

### DISCLOSURE OF INFORMATION TO AUDITORS

Having made the requisite enquiries, the Directors in office at the date of this Annual Report and Financial Statements have each confirmed that, so far as they are aware, there is no relevant audit information (as defined by Section 418 of the Companies Act 2006) of which the Group's auditor is unaware, and each of the Directors has taken all the steps he/she ought to have taken as a Director to make himself/herself aware of any relevant audit information and to establish that the Group's auditor is aware of that information. This confirmation is given and should be interpreted in accordance with the provisions of Section 418 of the Companies Act 2006.

### INDEPENDENT AUDITORS

At the Annual General Meeting held on 25th July 2019, shareholders and Directors of the Company approved the appointment of RPG Crouch Chapman LLP for the period ending 31st December 2019. RPG Crouch Chapman LLP have expressed their willingness to continue in office for the year ending 31st December 2020. Their re-appointment is proposed to shareholders in the Notice of the forthcoming Annual General Meeting through item (10).

### RISK MANAGEMENT

The Group's risk management framework is based on a clear understanding of various risks, disciplined risk assessment and measurement procedures and continuous monitoring. The policies and procedures established for this purpose are continuously reviewed. The key risks facing the business and the processes in place to manage those risks are provided in pages 42 to 44.

### GOING CONCERN

The Group has made a loss after tax of £20.8m (2018: £21.2m) and is presently pre-revenue and, as such, has relied upon equity and debt funding to progress its development plans. Post year end, the Group has successfully raised £15m in equity and secured loan facilities of £42m as detailed further in note 29.

The Directors regularly review cash flow forecasts to determine whether the Group has sufficient cash reserves to meet its future working capital requirements and development plans. The Group plans to raise further finance in the next twelve months and the Directors are confident based on past history of successful fundraising and discussions with investors that the Group will be successful in raising these funds.

Notwithstanding the above and in the case of events impacting the financing plan of the Company such as continued restrictions resulting from Covid-19, the Directors consider that they will be able to take actions to significantly reduce costs, including deferring project costs, and significantly reducing overheads and staff costs in an appropriate timescale and manage their expenditure to reduce the cash requirements within the balances presently held and the secured loan facilities as detailed above. The Directors, therefore consider it appropriate to prepare the Group's financial statements on a going concern basis.

### ARTICLES OF ASSOCIATION

The Company's Articles of Association may only be amended by special resolution at a general meeting of the shareholders.

### ANNUAL GENERAL MEETING

The 2019 AGM will be held on 29th July 2020 at 2.00pm and the Notice of AGM and related papers will, unless otherwise noted,

be sent to shareholders at least 21 clear calendar days before the meeting. Further details on the AGM and the resolutions to be proposed at the forthcoming AGM are set out in the formal notice of the meeting on pages 110 to 112.

### CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

Where this document contains forward-looking statements, these are made by the Directors in good faith based on the information available to them at the time of their approval of this report. These statements should be treated with caution due to the inherent risks and uncertainties underlying any such forward-looking information. The Group cautions investors that a number of factors, including matters referred to in this document, could cause actual results to differ materially from those contained in any forward-looking statement. Such factors include, but are not limited to, those discussed under Principal risks and uncertainties on pages 42 to 44.

### RECOMMENDATION

The Board are of the opinion that all resolutions which are to be proposed at the 2019 Annual General Meeting are in the best interests of its shareholders as a whole and, accordingly, unanimously recommend that they vote in favour of all the resolutions as the Board intends to do in respect of their own holdings.

### EVENTS AFTER THE REPORTING PERIOD

On 11th February 2020, the Company announced a partnership with The London Clinic. Under the terms of the agreement, it is intended that the Company will provide the LIGHT proton accelerator and treatment room equipment and The London Clinic will source and manage staffing, governance and other services necessary for the clinical operation of the facility. Advanced Oncotherapy and The London Clinic will receive a share of the profit generated by the centre.

On 17th February 2020, the Company announced the sale of a LIGHT System to the Mediterranean Hospital of Limassol for €50 million. In addition, Advanced Oncotherapy will receive a share of the net profits from the clinical services. The timing and the full execution of the agreement remain subject to customary conditions.

On 20th February 2020, the Company announced a collaboration with the University Hospitals Birmingham (UHB) NHS Foundation Trust to install a LIGHT System on the UHB premise and undertake joint research and development activities associated with the use of LIGHT to increase the awareness of proton therapy for the treatment of cancer.

On 9th April 2020, the Company announced an equity fund raising of £15 million, which was subsequently approved in a shareholder meeting on 11th May 2020. The Company also informed the market that the Daresbury Laboratory and Harley Street sites were temporarily closed as a result of the COVID-19 outbreak. As a result, the staff at Daresbury employed by the Company had been placed on furlough leave, whilst the closure of these facilities was expected to delay the objective of first patient treatment into 2021.

On 29th June 2020, the Company announced two financing facilities with:

- VDL Groep: €20 million funding partnership to further advance manufacturing of up to 30 LIGHT systems to address a large unmet medical need; and
- Nerano Capital: \$30 million facility to further the development of the first LIGHT system in Daresbury



**Dr Michael Sinclair**

*Executive Chairman*

Registered Office: Level 17, Dashwood House,  
69 Old Broad Street, London EC2M 1QS

29th June 2020



# Independent Auditor's Report to Advanced Oncotherapy plc



We have audited the financial statements of Advanced Oncotherapy PLC (the 'Company') and its subsidiaries (the 'Group') for the year ended 31 December 2019 which comprise the Consolidated statement of profit or loss and other comprehensive Income, the Consolidated and Parent Company Statements of Financial Position, the Consolidated Statement of Cash Flows, the Consolidated and Parent Company Statements of Changes in Equity and the related notes.

The financial reporting framework that has been applied in the preparation of the Group and Company financial statements is applicable law and IFRSs as adopted by the European Union.

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 December 2019 and of the Group's loss for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union;
- The Parent Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practises; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

## **BASIS FOR OPINION**

We conducted our audit in accordance with International Standards on Auditing (ISAs (UK) and applicable law. Our responsibilities under those standards are further described in the Responsibilities for the audit of the financial statements' and section of our report. We are independent of the Group and the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard

as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## **CONCLUSIONS RELATED TO GOING CONCERN**

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the Directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the Directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group or Parent Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

## **KEY AUDIT MATTERS**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters were identified as going concern, intangible asset valuation and implementation of IFRS 16.

In arriving at our opinions set out in this report, we highlight the following risks that, in our judgement, had the greatest effect on our audit:

Audit risk	How we responded to the risk
<p><b>Going concern</b></p> <p>The Directors are required to assess whether the Group will remain a going concern for a period of at least 12 months from the date the financial statements are signed.</p> <p>The Directors have prepared cash flow forecasts for the Group covering a period through to the end of September 2021, which shows that the Group has sufficient working capital over the period, and have made the relevant disclosures in Note 1 to the financial statements in regards to control it's ability to control expenditure to maintain cash within existing cash resources and secured facilities.</p> <p>We have considered Going Concern to be a key audit matter because of the assumptions and judgments made by management in drawing their conclusions.</p>	<p><b>Our audit procedures in response to this key audit matter included:</b></p> <ul style="list-style-type: none"> <li>Analysing Management's and the Directors' cashflow forecast which forms the basis of their assessment that the going concern basis of preparation remains appropriate for the preparation of the Group and Company financial statements for a period of at least twelve months from the date of approval of these financial statements;</li> <li>Testing the mathematical integrity of the cashflow model in order to ensure the basis of preparation of the model;</li> <li>Assessing costs included within the cashflow forecast and where available agreeing these costs to other evidence obtained during the course of our audit work is in line with our expectations;</li> <li>Obtaining details of post year ends fundraisings and secured facilities, agreeing supporting documentation and cash received as necessary;</li> <li>Discussing with Management and the Board the Group's strategy to continue to ensure funds are available to the Group to fund its plans;</li> <li>Discussing with Management their ability to reduce expenditure to maintain cash balances within available cash resources and secured facilities; and</li> <li>Reviewing and considering the adequacy of the disclosure within the financial statements relating to the Directors' assessment of the going concern basis of preparation.</li> </ul>
<p><b>Intangible asset valuation</b></p> <p>The Group's Intangible assets consist of direct costs relating to the internal development of the proton therapy technology and machines. Please refer to note 11.</p> <p>As an intangible asset not yet ready for use Management and the Board are required to perform an annual impairment. Given the materiality of the assets in the context of the Group's consolidated statement of financial position and the judgement involved in making this assessment we consider this to be a key audit matter.</p>	<p><b>Our audit work included, but was not restricted to:</b></p> <ul style="list-style-type: none"> <li>Reviewing the impairment model provided and checking that the value in use model meets the requirements of the accounting standard;</li> <li>Testing the mathematical integrity of the cashflow model in order to ensure the basis of preparation of the model;</li> <li>Discussing with Management the assumptions used and obtaining details to support the key assumptions; and</li> <li>Sensitising the cash flow for assumptions.</li> </ul>
<p><b>Recognition of Right-of-use-assets and leased liabilities in accordance with IFRS 16 (Group and Company)</b></p> <p>The Group adopted IFRS 16 'Leases' with effect from 1 January 2019. IFRS 16 replaces the existing standard IAS17 and specifies how a business should recognise, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessee to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value.</p> <p>Determining the value of the Right-of-use assets and lease liabilities requires management to make judgements over key estimates and assumptions, including the certainty of lease term renewals and determination of appropriate discount rates to be applied.</p> <p>Our specific audit focus was on the recognition of Right-of-use-assets and leased liabilities considering the following areas of risk</p> <ul style="list-style-type: none"> <li>The underlying lease data used to calculate the impact is incomplete and/or inaccurate;</li> <li>Specific assumptions applied to determine the discount rates and lease term renewals; and</li> <li>The disclosures in the financial statements are insufficient especially as to the transitional impact.</li> </ul>	<p><b>Our audit work included, but was not restricted to:</b></p> <ul style="list-style-type: none"> <li>Considering completeness by testing the reconciliation to the Group's operating lease commitments;</li> <li>Verified the accuracy of the underlying lease data by agreeing a sample of leases to original contract or other supporting information, and agreed the integrity and mechanical accuracy of the IFRS 16 calculations for each lease sampled through recalculation of the expected IFRS 16 adjustment;</li> <li>Assessed the appropriateness of the discount rates applied in determining lease liabilities; and</li> <li>Assessed whether the disclosures within the financial statements are appropriate and complete.</li> </ul>



# Independent Auditor's Report to Advanced Oncotherapy plc \_Continued

## OUR APPLICATION OF MATERIALITY AND AN OVERVIEW OF THE SCOPE OF OUR AUDIT

We define materiality as the magnitude of a misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality in determining the nature, timing and extent of our audit work and in evaluating the results of that work.

We determined materiality for the Group and Company financial statements as a whole to be £1,500,000 (2018: £800,000) which represents 1.4% (2018: 1.3%) of the Group's gross assets. This benchmark is considered the most appropriate because assets are the key item for an entity in the development phase.

Materiality for the current year is higher than the level that was determined for the year ended 31 December 2018, reflecting the increase in the Group's gross assets in the year ended 31 December 2019. The rate applied is considered appropriate given the stage of development of the Group and the nature of the assets.

We use a different level of materiality, performance materiality, to drive the extent of our testing and this was set at 50% of financial statement materiality for the audit of high-risk areas and 75% for areas considered to be lower risk. We also determine a lower level of specific materiality for certain areas such as Directors' remuneration and related party transactions.

We determined the threshold at which we will communicate misstatements to the Audit Committee to be £75,000. In addition, we will communicate misstatements below that threshold that, in our view, warrant reporting on qualitative grounds.

Whilst materiality for the financial statements as a whole was £1,500,000 each significant component of the Group was audited to a lower level of £1,125,000 to 400,000 which was used to determine the financial statement areas that were included within the scope of the Component audits and the extent of sample sizes used during the audit.

## OVERVIEW OF THE SCOPE OF OUR AUDIT

Our Group audit scope focused on the Group's principal activities and the reporting entities were held, Advanced Oncotherapy Plc and ADAM SA. We have identified both entities as significant components for the purposes of our financial statement audit, based on their relative share of total assets. We have performed a full scope audit for these components, having performed substantive procedures over 99% of total assets.

The remaining components of the Group were considered non-significant. We performed full scope audit procedures over for UK Group entities subject to audit at the head office location in the United Kingdom where the accounting records of all companies in the group are held. Other insignificant components were subject to substantive testing where considered necessary.

All audit work (full scope audit or review work) was conducted by RPG Crouch Chapman LLP.

## OTHER INFORMATION

The directors are responsible for the other information. The other information comprises the information included in the annual report other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of

assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## OPINIONS ON OTHER MATTERS PRESCRIBED BY THE COMPANIES ACT 2006 ARE UNMODIFIED

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Report of the Directors for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- the Strategic Report and the Report of the Directors have been prepared in accordance with applicable legal requirements.

## MATTER ON WHICH WE ARE REQUIRED TO REPORT UNDER THE COMPANIES ACT 2006

In the light of the knowledge and understanding of the Group and Parent Company and its environment obtained in the course of the audit, we have not identified material misstatements in the Strategic Report or the Report of the Directors.

## MATTERS ON WHICH WE ARE REQUIRED TO REPORT BY EXCEPTION

In the light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we have not identified material misstatements in the strategic report or the directors' report.

We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of Directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.

## RESPONSIBILITIES OF DIRECTORS

As explained more fully in the directors' responsibilities statement set out on page 58 the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's and the Company's ability to continue as

a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Company or to cease operations, or have no realistic alternative but to do so.

#### AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an Auditor's Report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

We are responsible for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error.

Owing to the inherent limitations of an audit, there is an unavoidable risk that material misstatements of the financial statements may not be detected, even though the audit is properly planned and performed in accordance with the ISAs (UK). Our audit approach is

a risk-based approach and is explained more fully in the 'overview of the scope of our audit' section of our Audit Report.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: [www.frc.org.uk/auditorsresponsibilities](http://www.frc.org.uk/auditorsresponsibilities). This description forms part of our Auditor's Report.

#### USE OF REPORT

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed

#### Colin Turnbull ACA

*Senior Statutory Auditor*

for and on behalf of RPG Crouch Chapman LLP

Statutory Auditor, Chartered Accountants

62 Wilson Street

London

EC2A 2BU

29th June 2020







## **FINANCIAL REPORT**

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# Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2019 - Financials in £

	Note	Group 2019	Group 2018
<b>Revenue</b>		-	-
Cost of sales	1	-	(1,908,925)
<b>Gross loss</b>		-	(1,908,925)
Administrative expenses	1	(20,659,460)	(19,938,542)
<b>Operating loss</b>	2	(20,659,460)	(21,847,467)
Finance income	1,3	15,572	13,496
Finance costs	1,4	(1,233,545)	(80,187)
<b>Loss on ordinary activities before taxation</b>		(21,877,433)	(21,914,158)
Taxation	5	1,082,827	759,413
<b>Loss after taxation</b>		(20,794,606)	(21,154,745)
<b>Loss for the period</b>			
Equity of shareholders of the parent company		(20,794,606)	(21,149,964)
Non-controlling interests		-	(4,779)
		(20,794,606)	(21,154,743)
<b>Other comprehensive income</b>			
Items that will or may be subsequently re-classified as to profit or loss:			
Exchange differences on translation of foreign operations		(462,413)	991,530
<b>Total comprehensive loss for the year net of tax</b>		(21,257,019)	(20,163,213)
<b>Total comprehensive loss attributable to:</b>			
Equity of shareholders of the parent Company		(21,257,019)	(20,158,434)
Non-controlling interests		-	(4,779)
		(21,257,019)	(20,163,213)
<b>Loss per ordinary share</b>			
<b>Basic and diluted</b>	9	(9.83)p	(14.05)p
<b>Weighted average number of shares (000's)</b>	9	211,479	150,542

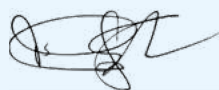
The accompanying Notes on pages 78 to 101 form part of the financial statements.

# Consolidated Statement of Financial Position

As at 31 December 2019 - Financials in £

	Note	Group 2019	Group 2018
<b>Non-current assets</b>			
Intangible assets	10	49,183,428	40,165,073
Property, plant and equipment	11	6,002,500	4,086,730
Right of use assets	12	32,528,667	-
Investment property	13	-	310,000
Trade and other receivables	14	914,938	1,210,874
		<b>88,629,533</b>	<b>45,772,677</b>
<b>Current assets</b>			
Inventories	16	15,048,228	10,014,086
Trade and other receivables	14	2,140,657	1,964,695
Corporation tax R&D refund	14	1,768,591	685,764
Cash and cash equivalents	15	3,235,167	1,013,053
		<b>22,192,643</b>	<b>13,677,598</b>
<b>Total assets</b>		<b>110,822,176</b>	<b>59,450,275</b>
<b>Current liabilities</b>			
Trade and other payables	17	(4,881,210)	(5,954,777)
Lease liabilities	12	(1,594,691)	-
Borrowings	18	-	(3,000,000)
		<b>(6,475,901)</b>	<b>(8,954,777)</b>
<b>Non-current liabilities</b>			
Licence Fee Received	17	(16,500,000)	(16,500,000)
Lease liabilities	12	(31,046,827)	-
Borrowings	18	(13,864,384)	-
		<b>(61,411,211)</b>	<b>(16,500,000)</b>
<b>Total liabilities</b>		<b>(67,887,112)</b>	<b>(25,454,777)</b>
<b>Net assets</b>		<b>42,935,064</b>	<b>33,995,499</b>
<b>Equity</b>			
Share capital	20	61,105,852	42,391,523
Share premium reserve	22	60,452,065	50,724,177
Share option reserve	23	7,853,803	7,198,580
Reverse acquisition reserve	24	11,038,204	11,038,204
Exchange movements reserve	25	989,526	1,451,939
Accumulated losses		(98,504,386)	(78,808,925)
<b>Equity attributable to shareholders of the Parent Company</b>		<b>42,935,064</b>	<b>33,995,499</b>
<b>Total equity funds</b>		<b>42,935,064</b>	<b>33,995,499</b>

These consolidated financial statements have been approved and were authorised for issue by the Board of Directors on 29th June 2020.



**Dr Michael Sinclair**  
Executive Chairman



**Nicolas Serandour**  
Chief Executive Officer

Registered number: 05564418

The accompanying Notes on pages 78 to 101 form part of the financial statements.



# Consolidated Statement of Changes in Equity

For the year ended 31 December 2019 - Financials in £

	Note	Share capital	Share premium reserve	Share option reserve	Reverse acquisition reserve	Loan note conversion reserve	Exchange movement reserve	Accumulated losses	Equity share holders interest	Non-controlling interest	Total
<b>Balance at 01 January 2018</b>		20,233,799	43,259,389	5,743,609	11,038,204	5,650,631	460,410	(57,724,185)	28,661,858	-	28,661,858
Loss for the year		-	-	-	-	-	-	(21,149,965)	(21,149,965)	(4,779)	(21,154,743)
other comprehensive income exchange movement		-	-	-	-	-	991,531	-	991,531	-	991,530
<b>Total comprehensive income</b>		-	-	-	-	-	991,531	(21,149,965)	(20,158,435)	(4,779)	(20,163,213)
Shares Issued in the period		17,448,866	7,473,151	760,031	-	-	-	-	25,682,048	-	25,682,048
Expenses deducted from share premium		-	(950,135)	-	-	-	-	-	(950,135)	-	(950,135)
Lapsed options		-	-	(34,497)	-	-	-	34,497	-	-	-
Lapsed warrants		-	-	(35,506)	-	-	-	35,506	-	-	-
Conversion of loan notes		4,708,859	941,772	-	-	(5,650,631)	-	-	-	-	-
Share based payments		-	-	-	-	-	-	-	-	-	-
- Share option charge		-	-	49,072	-	-	-	-	49,072	-	49,072
- Share warrants charge		-	-	715,870	-	-	-	-	715,870	-	715,870
Group provision for minority interest		-	-	-	-	-	-	(4,779)	(4,779)	4,779	-
<b>Balance at 31 December 2018</b>		42,391,523	50,724,177	7,198,580	11,038,204	-	1,451,939	(78,808,925)	33,995,499	-	33,995,499
<b>Balance at 01 January 2019</b>		42,391,523	50,724,177	7,198,580	11,038,204	-	1,451,939	(78,808,925)	33,995,499	-	33,995,499
Loss for the year		-	-	-	-	-	-	(20,794,606)	(20,794,606)	-	(20,794,606)
other comprehensive income exchange movement		-	-	-	-	-	(462,413)	-	(462,413)	-	(462,413)
<b>Total comprehensive income</b>		-	-	-	-	-	(462,413)	(20,794,606)	(21,257,019)	-	(21,257,019)
Shares Issued in the period		18,714,329	10,975,557	-	-	-	-	-	29,689,885	-	29,689,886
Expenses deducted from share premium		-	(1,247,669)	81,414	-	-	-	-	(1,166,255)	-	(1,166,255)
Lapsed options		-	-	(1,014,117)	-	-	-	1,014,117	-	-	-
Lapsed warrants		-	-	(85,028)	-	-	-	85,028	-	-	-
Share based payments		-	-	-	-	-	-	-	-	-	-
- Share option charge		-	-	872,539	-	-	-	-	872,539	-	872,539
- Share warrants charge		-	-	800,415	-	-	-	-	800,415	-	800,415
<b>Balance at 31 December 2019</b>		<b>61,105,852</b>	<b>60,452,065</b>	<b>7,853,803</b>	<b>11,038,204</b>	<b>-</b>	<b>989,526</b>	<b>(98,504,386)</b>	<b>42,935,064</b>	<b>-</b>	<b>42,935,064</b>

The accompanying Notes on pages 78 to 101 form part of the financial statements.

# Consolidated Statement of Cash Flows

For the year ended 31 December 2019 - Financials in £

	Group 2019	Group 2018
<b>Cash flow from operating activities</b>		
Loss after taxation	(20,794,606)	(21,154,743)
<b>Adjustments to cash flows from non-cash items</b>		
Depreciation of property, plant and equipment	730,544	411,134
Amortisation of right of use assets	1,294,951	-
Finance income	(15,572)	(13,496)
Finance expense	1,233,545	80,187
Taxation	(1,082,827)	(759,413)
Share based payment expense	2,005,987	4,202,625
Impairment of inventory	-	1,908,925
Foreign exchange	(62,188)	346,285
<b>Cash flows from operations before changes in working capital</b>	<b>(16,690,166)</b>	<b>(14,978,496)</b>
Changes in inventories	(5,034,142)	(4,293,719)
Property deposits made	-	(371,988)
Change in trade and other receivables	(151,080)	97
Change in trade and other payables	(1,517,532)	(1,364,258)
Deferred Licence fees received	-	16,500,000
<b>Cash (used) / generated from operations</b>	<b>(23,392,920)</b>	<b>(4,508,364)</b>
Interest paid	(160,677)	(80,187)
Corporation tax receipt	-	2,923,649
<b>Cash flows from operating activities</b>	<b>(23,553,597)</b>	<b>(1,664,902)</b>
<b>Cash flows from investing activities</b>		
Interest received	15,572	13,496
Purchase of buildings, plant and equipment	(2,658,105)	(3,293,238)
Capital expenditure on intangible assets	(9,344,556)	(8,799,893)
Proceeds from disposal of investment property	310,000	-
<b>Cash flows from investment activities</b>	<b>(11,677,088)</b>	<b>(12,079,635)</b>
<b>Cash flows from financing activities</b>		
Proceeds from issue of ordinary shares	25,692,058	21,052,563
Costs of share issue	(665,125)	(650,135)
Long term loan receipts	13,800,000	-
Lease payments	(1,369,231)	-
Short term loan receipts	-	4,500,000
Short term loan payments	-	(10,247,218)
<b>Cash flows from financing activities</b>	<b>37,457,702</b>	<b>14,655,210</b>
Increase/(decrease) in cash and cash equivalents	2,227,017	910,675
Exchange gain/(loss) on cash and cash equivalents	(4,903)	45,899
Cash and cash equivalents at 01 January 2019	1,013,053	56,479
<b>Cash and cash equivalents at 31 December 2019</b>	<b>3,235,167</b>	<b>1,013,053</b>

The accompanying Notes on pages 78 to 101 form part of the financial statements.

# Notes Forming Part of the Financial Statements

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# Notes to the Accounts – Group

For the year ended 31 December 2019 - Financials in £

## 1. Segment reporting

		2019			
	Notes	Development of Proton Therapy - UK	Development of Proton Therapy - Switzerland	Development of Proton Therapy - USA	Group
<b>Revenue</b>		-	-	-	-
Cost of sales		-	-	-	-
<b>Gross Loss</b>		-	-	-	-
Administrative expenses		(11,853,675)	(7,801,405)	(1,004,380)	(20,659,460)
<b>Operating loss</b>		(11,853,675)	(7,801,405)	(1,004,380)	(20,659,460)
Finance income	3	15,572	-	-	15,572
Finance costs	4	(1,162,437)	(71,108)	-	(1,233,545)
<b>Loss on ordinary activities before taxation</b>		(13,000,540)	(7,872,513)	(1,004,380)	(21,877,433)
<b>Capital Expenditure</b>					
Intangible assets	10	4,250,136	5,094,420	-	9,344,556
Property, plant and equipment	11	2,334,087	324,018	-	2,658,105
Total assets		76,860,329	33,948,751	13,096	110,822,176
Total liabilities		(65,051,976)	(2,805,529)	(29,607)	(67,887,112)
<b>Net assets/(liabilities)</b>		11,808,353	31,143,222	(16,511)	42,935,064

During 2019 the Group operated in two business segments: Proton Therapy and Healthcare related properties. The Healthcare related property UK segment was discontinued during the year with the sale of its remaining asset in order to re-focus resources entirely on the Proton Therapy segment. The Folkestone property was sold in September 2019.

The amounts were not material and are therefore not shown separately

		2018			
	Notes	Development of Proton Therapy - UK	Development of Proton Therapy - Switzerland	Development of Proton Therapy - USA	Group
<b>Revenue</b>		-	-	-	-
Cost of sales		(1,908,925)	-	-	(1,908,925)
<b>Gross Loss</b>		(1,908,925)	-	-	(1,908,925)
Administrative expenses		(13,234,953)	(5,953,420)	(750,169)	(19,938,542)
<b>Operating loss</b>		(15,143,878)	(5,953,420)	(750,169)	(21,847,467)
Finance income	3	13,496	-	-	13,496
Finance costs	4	(80,187)	-	-	(80,187)
<b>Loss on ordinary activities before taxation</b>		(15,210,569)	(5,953,420)	(750,169)	(21,914,158)
<b>Capital Expenditure</b>					
Intangible Assets	10	4,649,608	4,150,285	-	8,799,893
Property, Plant and Equipment	11	57,912	3,234,210	1,116	3,293,238
Total assets		32,661,966	26,751,987	36,321	59,450,274
Total liabilities		(24,387,283)	(1,010,925)	(56,569)	(25,454,777)
<b>Net assets/(liabilities)</b>		8,274,683	25,741,062	(20,248)	33,995,497

## 2. Operating loss

	Note	2019	2018
Operating loss is arrived at after charging:			
Depreciation	11	730,544	411,134
Amortisation of right of use assets	12	1,294,951	-
Foreign exchange loss or (gain)		244,676	346,285
Charitable donations		-	16,291
Inventory provision		-	1,908,925
Amounts payable to the Group's Auditor and their associates for:			
- audit of the Group's annual accounts		17,500	15,000
- audit of the Group's subsidiaries		32,500	32,500
- taxation compliance		5,500	5,500

## 3. Finance income

	2019	2018
Interest receivable on deposits	15,572	13,496
<b>Total</b>	<b>15,572</b>	<b>13,496</b>

## 4. Finance costs

	2019	2018
Interest expense on short term facilities	40,826	80,187
Interest expense on secured loans	509,474	-
Interest expense on lease liabilities	618,861	-
Amortisation of loan costs	64,384	-
<b>Total</b>	<b>1,233,545</b>	<b>80,187</b>

Refer to Note 18 for information on the secured loan interest rates.



# Notes to the Accounts – Group

Continued - Financials in £

## 5. Taxation on profit for ordinary activities

<b>(a) Tax (credit) / charge comprises</b>	<b>2019</b>	<b>2018</b>
<b>Current tax</b>		
UK corporation tax charge/(credit) for the year	-	(685,764)
UK corporation tax charge/(credit) for the previous year	<b>(1,082,827)</b>	(73,649)
<b>Deferred tax</b>		
Origination and reversal of temporary differences	-	-
<b>Total tax credit</b>	<b>(1,082,827)</b>	(759,413)

### (b) Factors affecting tax credit for the year

The tax assessed for the year differs from the standard rate of corporation tax in the UK (19.0%) (2018: 19.0%)

The differences are explained below:

	<b>2019</b>	<b>2018</b>
Loss on ordinary activities before tax	<b>(21,877,433)</b>	(21,914,156)
Loss on ordinary activities multiplied by the standard rate of corporation tax in the UK at 19.00% (2018: 19.0%)	<b>(4,156,712)</b>	(4,163,690)
Effects of:		
Research and Development claim this year	-	(685,764)
Research and Development claim prior year	<b>(1,082,827)</b>	(73,649)
Permanent differences	<b>609,576</b>	820,966
Capital allowances in excess of depreciation	<b>54,412</b>	65,964
Short term timing differences	<b>1,163</b>	-
Unprovided losses carried forward / (utilised)	<b>3,491,561</b>	3,276,760
<b>Tax credit for the year</b>	<b>(1,082,827)</b>	(759,413)

### (c) Unprovided deferred tax assets at 19.0% (2018: 19.0%)

	<b>2019</b>	<b>2018</b>
Losses carried forward	<b>(16,939,236)</b>	(11,364,825)
R&D tax credit on Intangible assets	<b>7,450,525</b>	4,088,285
Accelerated capital allowances	<b>777,690</b>	196,397
<b>Total</b>	<b>(8,711,021)</b>	(7,080,143)

No deferred tax asset has been recognised on the above item on the grounds that it is uncertain when taxable profits will arise against which losses carried forward may be utilised.

## 6. Staff costs

	2019	2018
Wages and salaries	12,339,626	8,913,690
Social security costs	1,257,742	932,806
Pension costs	804,008	677,476
Other benefits	64,285	359,965
Share based payments	1,205,572	3,011,539
<b>Total</b>	<b>15,671,233</b>	<b>13,895,477</b>

Staff costs include amounts of £4,762,191 (2018:£3,624,632) which have been capitalised within development projects during the year.

Details of employee share options are set out in Note 21.

The monthly average number of persons employed during 2019 was 127 (2018: 99), categorised as follows:

	2019	2018
Managerial	10	7
Operational	20	14
Product development	58	45
Administrative	39	33
<b>Total</b>	<b>127</b>	<b>99</b>

The total number of employees at 31 December 2019 was 129 (31 December 2018 - 118)

# Notes to the Accounts – Group

Continued - Financials in £

## 7. Directors' remuneration

The salaries and benefits of the Directors of the Group payable by the Company or any of the Group companies for the year ended 31 December 2019 were as follows:

		2019							Total
	Appointed	Resigned	Base salary	Bonus payment	Pension	Medical Board Fees	Compensation for loss of office	Other benefits	
Dr Michael Sinclair, Exec Chairman	16 Jun 06		203,502	336,955	700	-	-	13,769	<b>554,926</b>
Nicolas Serandour, CEO	27 Aug 14		247,084	124,685	24,708	-	-	4,490	<b>400,967</b>
Michael Bradfield	26 Apr 13		30,000	-	-	-	-	-	<b>30,000</b>
Prof Steve Myers	26 Jan 17		252,205	-	-	-	-	3,483	<b>255,688</b>
Dr Nick Plowman	09 Feb 17		30,000	-	-	6,000	-	-	<b>36,000</b>
Dr Enrico Vanni	01 Oct 13		30,000	-	-	-	-	-	<b>30,000</b>
Hans Von Celsing	26 Jan 17		30,000	-	-	-	-	-	<b>30,000</b>
Renhua Zhang	28 Aug 18		30,000	-	-	-	-	-	<b>30,000</b>
Chunlin Han	28 Aug 18		30,000	-	-	-	-	-	<b>30,000</b>
Yuelong Huang	28 Aug 18		30,000	-	-	-	-	-	<b>30,000</b>
Peter Sjöstrand	28 Aug 18		30,000	-	-	-	-	-	<b>30,000</b>
Gabriel Urwitz	28 Aug 18		30,000	-	-	-	-	-	<b>30,000</b>
<b>Total</b>			<b>972,791</b>	<b>461,640</b>	<b>25,408</b>	<b>6,000</b>	<b>-</b>	<b>21,742</b>	<b>1,487,581</b>

Mr Bradfield, Dr Plowman, Dr Urwitz, Mr Von Celsing and Dr Vanni elected to take their remuneration to June 2019 in shares. The amounts stated above for these payments are at the fair value of the shares based on the share price at the date of the issue. Mrs Renhua, Mr Han and Dr Huang did not take their remuneration and these amounts are included in creditors.

		2018							Total
	Appointed	Resigned	Base salary	Bonus payment	Pension	Medical Board Fees	Compensation for loss of office	Other benefits	
Dr Michael Sinclair, Exec Chairman	16 Jun 06		194,967	958,334	11,044	-	-	12,747	<b>1,177,092</b>
Nicolas Serandour, CEO	27 Aug 14		232,645	958,334	21,525	-	-	2,077	<b>1,214,581</b>
Michael Bradfield	26 Apr 13		30,000	-	-	-	-	-	<b>30,000</b>
Prof Steve Myers	26 Jan 17		221,246	191,667	-	-	-	3,365	<b>416,278</b>
Dr Nick Plowman	09 Feb 17		30,000	-	-	6,000	-	-	<b>36,000</b>
Dr Enrico Vanni	01 Oct 13		30,000	-	-	-	-	-	<b>30,000</b>
Hans Von Celsing	26 Jan 17		30,000	-	-	-	-	-	<b>30,000</b>
Renhua Zhang	28 Aug 18		10,000	-	-	-	-	-	<b>10,000</b>
Chunlin Han	28 Aug 18		10,000	-	-	-	-	-	<b>10,000</b>
Yuelong Huang	28 Aug 18		10,000	-	-	-	-	-	<b>10,000</b>
Peter Sjöstrand	28 Aug 18		10,000	-	-	-	-	-	<b>10,000</b>
Gabriel Urwitz	28 Aug 18		10,000	-	-	-	-	-	<b>10,000</b>
Prof Chris Nutting	25 Oct 13	02 Jul 18	15,000	-	-	3,000	-	-	<b>18,000</b>
Dr Euan Thomson	20 Feb 14	02 Jul 18	15,000	-	-	-	-	-	<b>15,000</b>
Sanjeev Pandya	22 Nov 13	02 Jul 18	124,644	-	39,971	-	275,069	1,039	<b>440,723</b>
<b>Total</b>			<b>973,502</b>	<b>2,108,335</b>	<b>72,540</b>	<b>9,000</b>	<b>275,069</b>	<b>19,228</b>	<b>3,457,675</b>



## 7. Directors' remuneration continued

Michael Sinclair, Nicolas Serandour and Professor Steve Myers elected to take their 2018 bonus in shares. The bonuses were awarded on 7 December 2017 at the same time as the announcement of the exclusive distribution agreement for China and other geographies. The issue of shares was approved by shareholders on 23 January 2018 when the fair value of the bonus was calculated. The completion of the Liquid Harmony agreement was subject to approval from the Government of the People's Republic of China; this was granted on 16 February 2018 and the shares were issued on that day.

	Fair value of the shares measured:		
	At the time of the December 2017 announcement:	At the February 2018 Subscription price	Bonus at fair value
Dr Michael Sinclair, Executive Chairman	550,000	500,000	958,334
Nicolas Serandour, CEO	550,000	500,000	958,334
Prof Steve Myers	110,000	100,000	191,667

None of the non-executive directors took their 2018 salary during the year and are included in creditors.

### Directors' share options

	At 01 Jan 2019	Granted during the year	Lapsed or expired during the year	Exercised during the year	At 31 Dec 2019	Option price pence	Date of grant	Earliest exercise date	Expiry date
Michael Bradfield	266,666	-	(266,666)	-	-	125.0p	01 Oct 14	01 Oct 17	30 Sep 18
	400,000	-	-	-	400,000	200.0p	05 May 15	01 Jul 15	30 Jun 20
Prof Steve Myers	-	215,000	-	-	215,000	100.0p	20 Feb 19	20 Feb 19	20 Feb 24
Nicolas Serandour	400,000	-	-	-	400,000	95.0p	01 Oct 14	01 Oct 16	30 Sep 21
	200,000	-	-	-	200,000	200.0p	05 May 15	01 Jul 15	30 Jun 20
	-	1,400,000	-	-	1,400,000	100.0p	20 Feb 19	20 Feb 19	20 Feb 24
Dr Michael Sinclair	800,000	-	(800,000)	-	-	87.5p	30 Apr 14	30 Apr 14	29 Apr 19
	-	545,000	-	-	545,000	100.0p	20 Feb 19	20 Feb 19	20 Feb 24
Dr Enrico Vanni	100,000	-	-	-	100,000	200.0p	05 May 15	01 Jul 15	30 Jun 20
Hans von Celsing	200,000	-	(200,000)	-	-	250.0p	17 Mar 17	17 Mar 17	31 Mar 19
<b>Total</b>	<b>2,366,666</b>	<b>2,160,000</b>	<b>(1,266,666)</b>	<b>-</b>	<b>3,260,000</b>	<b>120.9p</b>			

As disclosed above 2,160,000 (2018: nil) options have been issued to the Directors during in the year. The fair value of these options has been charged to the Consolidated Statement of Comprehensive Income.

The fair value of options issued in prior years and charged to the Consolidated Statement of Comprehensive Income was £nil (2018: £42,273) for the year.

### Directors' share warrants

	At 01 Jan 2019	Granted during the year	Lapsed or expired during the year	Exercised during the year	At 31 Dec 2019	Option price pence	Date of grant	Earliest exercise date	Expiry date
Dr Enrico Vanni	40,816	-	-	-	40,816	100.0p	31 Aug 18	31 Aug 18	31 Aug 23
Hans von Celsing	6,000	-	-	-	6,000	100.0p	31 Aug 18	31 Aug 18	31 Aug 23
Dr Nick Plowman	61,224	-	-	-	61,224	100.0p	31 Aug 18	31 Aug 18	31 Aug 23
<b>Total</b>	<b>108,040</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>108,040</b>	<b>100.0p</b>			

As disclosed above no warrants (2018: nil) have been issued to the Directors during in the year. In accordance with IFRS these have been valued in accordance with the Group's account-ing policy for share options under Black-Scholes as disclosed in Note 31.

The fair value of warrants issued in this and prior years and charged to the Consolidated Statement of Comprehensive Income was £nil (2018: £nil) for the year.

# Notes to the Accounts – Group

Continued - Financials in £

## 8. Pensions

The Group operates a defined contribution pension scheme. Contributions payable for the period are charged in the statement of comprehensive income. Two Directors (2018: Three) accrued retirement benefits during the year. A charge of £25,408 (2018: £72,540) has been included in the year for the Directors.

## 9. Loss per share

Basic loss per share is calculated by dividing the loss for the period by the weighted average number of ordinary shares in issue during the year. This is disclosed on page 72 on the income statement. An alternative to this is the loss per share based on the comprehensive loss attributable to the equity holders of the group. This is shown below.

	2019	2018
Loss attributable to equity holders of the Group (£'s)	<b>(20,794,606)</b>	(21,149,964)
Weighted average number of ordinary shares in issue (000s)	<b>211,479</b>	150,542
Loss per share (pence per share)	<b>(9.83)p</b>	(14.05)p

### Diluted loss per share

The Group has two categories of dilutive potential ordinary shares - share options and warrants. Both the Group's share options and warrants have been excluded from the calculation of diluted loss per share. These instruments could potentially be dilutive in the future.

### Events after reporting period

As at 29 May 2020, the Company had 306,371,241 ordinary shares in issue. Assuming the same loss for the year ended 31 December 2019, the basic loss per share for the year ended 31 December 2019 divided by the current number of shares in issue would decrease to (6.79) p per share.

## 10. Intangible assets

	LIGHT Accelerator	Treatment Software	Total
<b>Development costs</b>			
At 01 January 2018	24,779,603	5,790,376	30,569,979
Additions	3,979,572	4,820,321	8,799,893
Foreign exchange difference	580,884	214,317	795,201
At 31 December 2018	29,340,059	10,825,014	40,165,073
<b>Development costs</b>			
At 01 January 2019	29,340,059	10,825,014	40,165,073
Additions	4,527,926	4,816,630	9,344,556
Foreign exchange difference	(223,144)	(103,057)	(326,201)
<b>At 31 December 2019</b>	<b>33,644,841</b>	<b>15,538,587</b>	<b>49,183,428</b>

For the purpose of impairment testing of intangible assets, the Group's continuing operations are regarded as a single cash-generating unit relating to the development and operation of the LIGHT machine.

The recoverable amount is based on value in use using discounted risk-adjusted projections of the Group's pre-tax cash flows over 10 years and then at a flat rate into perpetuity which is considered by the Board as a reasonable period given the long development and expected operational life cycle of the LIGHT machine. The projections include assumptions about the number of units to be sold in each financial year, expected unit selling price and production cost, pipeline conversion, competition from rival products and pricing policy as well as the possibility of new technology entering the market. In setting these assumptions the Directors consider their own past experience, external sources of information (including information on expected increases and ageing of the populations in our established markets and the expanding patient population in newer markets), our knowledge of competitor activity and our assessment of future changes in the proton beam industry. The 10 year period is covered by internal budgets and forecasts. Given that internal budgets and forecasts are prepared for all projections, no general growth rates are used to extrapolate internal budgets and forecasts for the purposes of determining value in use. The methods used to determine recoverable amounts have remained consistent with the prior year. The weighted average pre-tax discount rate used was approximately 12.5% (2018: 12.5%).

As a further check, the market capitalisation is compared to the book value of the Group's net assets: as of the date of this report, the market capitalisation is higher than the book value of the net assets.

No impairment was found necessary.

## 10. Intangible assets continued

The Group has also performed sensitivity analysis calculations on the projections used and discount rate applied. By their nature, the value in use calculations are sensitive to the underlying methods, assumptions and estimates. Consistent with prior years, as part of the impairment review process, management has not identified that reasonably possible changes in certain key assumptions may cause the carrying amount of the intangible assets to exceed the recoverable amount. At 31 December 2019, the Group held intangible assets currently still being developed, for which the most sensitive assumption is the probability of final technical success, and given their nature, impairment adjustments triggered by future events that have yet to occur may be material. In addition, there is a significant risk that impairments recognised in any one period may be subject to material adjustments in future periods.

## 11. Plant and equipment

	Leasehold property	Computer hardware and software	Fixtures, fittings and equipment	Total
<b>Cost</b>				
At 01 January 2018	177,251	239,812	1,473,452	1,890,514
Foreign exchange difference on conversion of ADAM assets at closing rate	-	4,307	50,939	55,246
Additions	2,884,874	124,485	283,879	3,293,238
At 31 December 2018	3,062,125	368,604	1,808,270	5,238,998
<b>Depreciation</b>				
At 01 January 2018	-	154,612	554,966	709,577
Foreign exchange difference on conversion of ADAM assets at closing rate	-	3,745	27,812	31,557
Charge for the year	27,932	85,726	297,475	411,134
At 31 December 2018	27,932	244,083	880,253	1,152,268
<b>Net book value</b>				
At 01 January 2018	177,251	85,200	918,486	1,180,937
At 31 December 2018	3,034,193	124,521	928,017	4,086,730
<b>Cost</b>				
At 01 January 2019	3,062,125	368,604	1,808,270	5,238,998
Foreign exchange difference on conversion of ADAM assets at closing rate	7,476	(2,434)	(52,001)	(46,959)
Additions	2,308,358	90,181	259,566	2,658,105
<b>At 31 December 2019</b>	<b>5,377,959</b>	<b>456,351</b>	<b>2,015,835</b>	<b>7,850,145</b>
<b>Depreciation</b>				
At 01 January 2019	27,932	244,083	880,253	1,152,268
Foreign exchange difference on conversion of ADAM assets at closing rate	-	(1,507)	(33,660)	(35,167)
Charge for the year	268,604	64,167	397,773	730,544
<b>At 31 December 2019</b>	<b>296,536</b>	<b>306,743</b>	<b>1,244,366</b>	<b>1,847,645</b>
<b>Net book value</b>				
At 01 January 2019	3,034,193	124,521	928,017	4,086,730
<b>At 31 December 2019</b>	<b>5,081,423</b>	<b>149,608</b>	<b>771,469</b>	<b>6,002,500</b>

The additions to Leasehold property relate to the site at STFC Daresbury, the work is expected to complete in Q3 2019. The work is expected to cost a further £1,141,000 during 2019.



# Notes to the Accounts – Group

Continued - Financials in £

## 12. Leases

### Transition Method and Practical Expedients Utilised

The Group adopted IFRS 16 using the modified retrospective approach, with recognition of transitional adjustments on the date of initial application (1 January 2019), without restatement of comparative figures. The Group elected to apply the practical expedient to not reassess whether a contract is, or contains a lease at the date of initial application. Contracts entered into before the transition date that were not identified as leases under IAS 17 and IFRIC 4 were not reassessed. The definition of a lease under IFRS 16 was applied only to contracts entered into or changed on or after 1 January 2019.

IFRS 16 provides for certain optional practical expedients, including those related to the initial adoption of the standard. The Group applied the following practical expedients when applying IFRS 16 to leases previously classified as operating leases under IAS 17:

- Apply a single discount rate to a portfolio of leases with reasonably similar characteristics;
- Exclude initial direct costs from the measurement of right-of-use assets at the date of initial application for leases where the right-of-use asset was determined as if IFRS 16 had been applied since the commencement date;
- Reliance on previous assessments on whether leases are onerous as opposed to preparing an impairment review under IAS 36 as at the date of initial application; and
- Applied the exemption not to recognise right-of-use assets and liabilities for leases with less than 12 months of lease term remaining as of the date of initial application.

As a lessee, the Group previously classified leases as operating or finance leases based on its assessment of whether the lease transferred substantially all of the risks and rewards of ownership. Under IFRS 16, the Group recognises right-of-use assets and lease liabilities for most leases. However, the Group has elected not to recognise right-of-use assets and lease liabilities for some leases of low value assets based on the value of the underlying asset when new or for short-term leases with a lease term of 12 months or less.

Following the transition requirements, the Right-of-use assets are measured at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments. The lease liabilities are measured at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rate as at 1 January 2019.

The Group's incremental borrowing rate is the rate at which a similar borrowing could be obtained from an independent creditor under comparable terms and conditions. The weighted-average rate applied was 3.0%.

The impact of the adopting IFRS 16 on the statement of financial position as 1 January 2019 is shown below:

	31 December 2018	IFRS16	01 January 2019
Right of use assets	-	9,613,736	9,613,736
Property deposits	1,139,345	(224,407)	914,938
Lease liabilities	-	(9,389,329)	(9,389,329)

There is no impact on retained earnings as a result of the above.

The following table reconciles the minimum lease commitments disclosed in the Group's 31 December 2018 annual financial statements to the amount of lease liabilities recognised on 1 January 2019:

Minimum lease commitment at 31 December 2018	10,872,507
Less: shorter leases not recognised under IFRS 16	(35,077)
Less: low value leases not recognised under IFRS 16	-
Undiscounted lease payments	10,837,430
Less: effect of discounting using the incremental borrowing rate	(1,448,101)
<b>Lease liability at 1 January 2019</b>	<b>9,389,329</b>

**12. Leases** continued

<b>Right-of-Use Assets</b>	<b>Land and buildings</b>
As at 01 January 2019	9,613,736
Additions	24,237,535
Amortisation	(1,294,951)
Effect of modification to lease terms	-
Foreign exchange movements	(27,653)
<b>As at 31 December 2019</b>	<b>32,528,667</b>

<b>Lease liabilities</b>	<b>Land and buildings</b>
As at 01 January 2019	9,389,329
Additions	24,030,212
Interest expense	618,861
Effect of modification to lease terms	-
Lease payments	(1,369,231)
Foreign exchange movements	(27,653)
<b>As at 31 December 2019</b>	<b>32,641,518</b>

**The maturity profile of discounted lease payments**

Repayable within one year	1,594,691
Current liabilities	1,594,691
Repayable in two to five years	7,903,708
Repayable in more than five years	23,143,119
Non-current liabilities	31,046,827
<b>Total borrowings</b>	<b>32,641,518</b>

**Break clauses**

The only lease that provides a break clause that has not already passed is for the property at STFC Daresbury. The earliest date at which the break clause could take effect is July 2023, management currently do not intend to exercise this break option.

**13. Investment property**

	Leasehold over 50 years	Total
<b>Investment properties</b>		
At 01 January 2018	310,000	310,000
At 31 December 2018	310,000	310,000
<b>Investment properties</b>		
At 01 January 2019	310,000	310,000
Disposals	(310,000)	(310,000)
<b>At 31 December 2019</b>	<b>-</b>	<b>-</b>

The medical facility at Folkestone was disposed of in September 2019.

# Notes to the Accounts – Group

Continued - Financials in £

## 14. Trade and other receivables

	2019	2018
<b>Due greater than 1 year</b>		
Property rent deposits	564,938	710,874
Property decommissioning deposits	350,000	500,000
<b>Total due greater than 1 year</b>	<b>914,938</b>	<b>1,210,874</b>
<b>Current receivables</b>		
VAT recoverable	355,919	207,881
Advance payments to suppliers	87,669	576,772
Property and other deposits	9,547	
Prepayments	1,687,522	1,180,042
	<b>2,140,657</b>	<b>1,964,695</b>
Corporation tax	1,768,591	685,764
<b>Total current receivables</b>	<b>3,909,248</b>	<b>2,650,459</b>

The corporation tax debtor recognised at 31 December 2019 was received in May 2020.

## 15. Cash and cash equivalents

		2019	2018
Cash and cash equivalents		3,235,167	1,013,053
Amounts in foreign exchange denominated by	Swiss Franc	276,162	87,465
	Euro	62,764	63,355
	US Dollar	15,596	23,239
	Sterling	2,880,645	838,994
Cash included above which is pledged as security. (See Note 18)		500,000	-

## 16. Inventories

	2019	2018
Work in progress - LIGHT	15,048,228	10,014,086
<b>Total</b>	<b>15,048,228</b>	<b>10,014,086</b>

All of the above items of Inventory have been valued at cost less an impairment provision considered necessary by the Directors. £nil (2018: £1,908,925) relating to the LIGHT work in progress has been expensed to the income statement.

Costs included in Inventory are for finished components of the LIGHT machine that will be sold as part of the first LIGHT installation.



## 17. Trade and other payables

	2019	2018
<b>Due greater than 1 year</b>		
Licence Fee Received	16,500,000	16,500,000
<b>Total due greater than 1 year</b>	<b>16,500,000</b>	16,500,000

The agreement under which the license fee was received in the prior year from our Chinese partner, Liquid Harmony, a shareholder, requires certain milestones to be met within a five year from receiving the fee including development of the products and obtaining regulatory approval in China within 5 years. If these conditions are not met the amount will be fully repayable.

	2019	2018
<b>Current</b>		
Trade payables	1,854,182	2,775,548
Other taxes and social security	279,106	739,268
Accruals and deferred income	2,747,922	2,439,961
<b>Total</b>	<b>4,881,210</b>	5,954,777

## 18. Borrowings

	2019	2018
<b>Amounts falling due within one year</b>		
Secured loans	-	3,000,000
Leases	1,594,691	-
<b>Total amounts falling due within one year</b>	<b>1,594,691</b>	3,000,000
<b>Amounts falling due over one year</b>		
Secured loans	13,864,384	-
Leases	31,046,827	-
<b>Total amounts falling due over one year</b>	<b>44,911,211</b>	-
<b>Total borrowings</b>	<b>46,505,902</b>	3,000,000
<b>The maturity profile of gross debt is as follows</b>		
Repayable within one year	1,594,691	3,000,000
Repayable in two to five years	22,752,970	-
Repayable in more than five years	22,158,241	-
<b>Total borrowings</b>	<b>46,505,902</b>	3,000,000

The loan in 2018 was secured against an agreement to lease the Harley Street site and was converted into equity during 2019.

A debt facility with Credit Suisse AG ("Credit Suisse") for £10 million is secured against an aggregated amount of £10.5 million, Nerano Pharma Ltd ("Nerano Pharma") acting as Third Party Pledgor having placed £10 million in a pledged account, with the remaining £0.5 million placed in a pledged account by the Company. Interest rate payable on the Loan is 2 per cent. above LIBOR per annum and the Loan is repayable in full in cash at the end of the 24 month period. A loan from Nerano Pharma of £4 million is repayable in full in cash at the end of 60 month period. Interest payable is 12% per annum.

Nerano Pharma has been issued with a legal charge over the lease agreement between the Group and Howard de Walden Estates Ltd for the 141/143 Harley Street site.

# Notes to the Accounts – Group

Continued - Financials in £

## 19. Financial instruments

The Group's principal financial instruments comprise short-term receivables and payables, lease liabilities and borrowings, short-term bank deposits and cash. There is currently no material difference between the carrying value of financial assets and liabilities and their fair value. The prime objectives of the Group's policy towards financial instruments are to maximise returns on the Group's cash balances, manage the Group's working capital requirements and finance the Group's ongoing operations.

### Capital management

The Group's objectives when maintaining capital are:

- to safeguard the entity's ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders, and
- to provide an adequate return to shareholders.

The Group does not yet have any significant recurring revenues and finances its operations through the issue of new shares and loans. The Group's capital resources are managed to ensure it has resources available to invest in operational activities designed to generate future income. These resources were represented by £3,235,167 of cash as at 31 December 2019. During 2019 the Group utilised a number of short and longer term debt facilities in order to provide liquidity to the group.

	2019	2018
<b>Assets</b>		
Total assets	<b>110,822,176</b>	59,450,275
<b>Debt</b>		
Secured loans	<b>13,864,384</b>	3,000,000
Lease liabilities	<b>32,641,518</b>	-
	<b>46,505,902</b>	3,000,000
<b>Equity</b>		
Share capital and share premium	<b>121,557,917</b>	93,115,700
Reserves	<b>(78,622,853)</b>	(59,120,202)
	<b>42,935,064</b>	33,995,498
Total capital	<b>89,440,966</b>	36,995,498
Debt as a % of total capital	<b>52.0%</b>	8.1%
Debt as a % of total assets	<b>42.0%</b>	5.0%

### Management of financial risk

The main risks associated with the Group's financial instruments have been identified as interest rate risk, liquidity risk, exchange rate risk, and credit risk. The Board is responsible for managing these risks and the policies adopted, which have remained largely unchanged throughout the year, are set out below.

#### Interest rate risk

The Group has debts which are the subject of fixed interest rate agreements and, therefore, there is no interest rate risk arising.

#### Liquidity risk

The Group has financed operations to date through the proceeds of the private placement of equity and debt instruments. In connection with its business plan, management anticipates additional increases in operating expenses, working capital requirements, and capital expenditures in line with the growth of its business, relating to the lease for the assembly site, the purchase of additional inventory, the hiring of personnel, and marketing expenses. It expects that those will continue to be funded through a combination of existing funds and further issuances of shares, and debt issuances. Thereafter, it is expected that the Group will need to raise additional capital and generate revenues to meet long-term operating requirements. Additional issuances of equity will result in dilution to current shareholders.

All of the Group's Trade and Other Payables are due within three months.

The Credit Suisse loan of £10m is due for repayment in May 2021.

## 19 . Financial instruments continued

The Licence Fee received will only be repayable if certain milestones, as indicated in note 17, are not met.

The maturity of Liabilities is:

	Due in less than one year	Due between two and five years	Due over five years
Trade and other payables	4,881,210	-	-
Borrowings	-	13,864,384	-
Lease liabilities (undiscounted)	1,821,846	8,888,586	61,068,287
<b>Total</b>	<b>6,703,056</b>	<b>22,752,970</b>	<b>61,068,287</b>

### Exchange rate risk

Foreign exchange risk arises when individual Group entities enter into transactions denominated in a currency other than their functional currency. The Group's policy is, where possible, to allow Group entities to settle liabilities denominated in their functional currency. Where Group entities have liabilities denominated in a currency other than their functional currency (and have insufficient reserves of that currency to settle them), cash already denominated in that currency will, where possible, be transferred from elsewhere within the Group.

As of 31 December 2019 the Group's net monetary assets by functional currency of the Group's entities were as follows.

Currency denomination of monetary assets/liabilities	Functional currency of entity				Total
	GBP	CHF	GBP	USD	
GBP	(27,046,143)	(43,132)	1,114	-	<b>(27,088,161)</b>
CHF	(153,023)	(2,112,806)	-	-	<b>(2,265,829)</b>
Euro	(583,303)	89,172	(12,609)	-	<b>(506,740)</b>
USD	(82,493)	(731)	-	(16,862)	<b>(100,086)</b>
SEK	(2,558)	-	-	-	<b>(2,558)</b>
<b>Total</b>	<b>(27,867,520)</b>	<b>(2,067,497)</b>	<b>(11,495)</b>	<b>(16,862)</b>	<b>(29,963,374)</b>

The Directors consider that a movement of 10% of the Euro and CHF represents the entities exposure to foreign exchange risk and do not consider the impact to be material therefore no sensitivity analysis is presented.

### Credit risk

The Group is not currently trading and has limited financial assets and therefore the Directors' do not consider that that credit risk is material.

Cash at bank is held only with reputable banks with high quality external credit ratings which represents the maximum credit exposure. This represents the maximum credit risk to the Group.

### Fair values of financial assets and financial liabilities

All of the Group's financial instruments are measured at amortised cost. A comparison of the fair value of the Group's financial assets and liabilities is set out below. The fair value of borrowings has been calculated by obtaining estimates of the costs involved in redeeming the current loan arrangements at 31 December 2019 and comparing these with estimates of the present value of the cash flows using market rates as at 31 December 2019.

	2019		2018	
	Book value	Fair value	Book value	Fair value
Trade and other payables	<b>(4,881,210)</b>	<b>(4,881,210)</b>	(5,954,777)	(5,954,777)
Cash and cash equivalents	<b>3,235,167</b>	<b>3,235,167</b>	1,013,053	1,013,053
Borrowings - current	<b>(46,505,902)</b>	<b>(46,505,902)</b>	(3,000,000)	(3,000,000)



# Notes to the Accounts – Group

Continued - Financials in £

## 20. Equity share capital

Ordinary shares of 25p each	2018				
	Number	Share Capital	Share Premium	Total	p/Share
As at 01 January 2018	80,935,194	20,233,799	43,259,389	63,493,188	78.45p
Shares Issued in the period	69,725,102	17,448,866	6,523,016	23,971,882	34.38p
Conversion of loan notes	18,905,796	4,708,859	941,772	5,650,631	29.89p
<b>Total for year 2018</b>	<b>88,630,898</b>	<b>22,157,725</b>	<b>7,464,788</b>	<b>29,622,513</b>	<b>33.42p</b>
<b>As at 31 December 2018</b>	<b>169,566,092</b>	<b>42,391,524</b>	<b>50,724,177</b>	<b>93,115,701</b>	<b>54.91p</b>
Shares Issued in the period	74,857,314	18,714,329	10,975,557	29,689,885	39.66p
Expenses deducted from Share Premium	-	-	(1,247,669)	(1,247,669)	-
<b>Total for year 2019</b>	<b>74,857,314</b>	<b>18,714,329</b>	<b>9,727,888</b>	<b>28,442,216</b>	<b>38.00p</b>
<b>As at 31 December 2019</b>	<b>244,423,406</b>	<b>61,105,852</b>	<b>60,452,065</b>	<b>121,557,917</b>	<b>49.73p</b>

The Directors were authorised at a General Meeting in January 2019 to allot and issue up to 25,000,000 shares. 25,000,000 were issued as shares in January 2019 raising £10 million of equity.

Shares issued in the period	Number	Share Capital	Share Premium	Total	p/Share
Jan-19	25,000,000	6,250,000	3,577,998	9,827,998	39.31p
May-19	5,862,500	1,465,625	785,575	2,251,200	38.40p
Aug-19	29,797,502	7,449,376	3,380,203	10,829,579	36.34p
Sep-19	2,400	600	3,000	3,600	150.00p
Sep-19	7,364,162	1,841,041	958,800	2,799,841	38.02p
Nov-19	6,250,000	1,562,500	937,500	2,500,000	40.00p
<b>Dec-19</b>	<b>580,750</b>	<b>145,188</b>	<b>84,812</b>	<b>230,000</b>	<b>39.60p</b>
	<b>74,857,314</b>	<b>18,714,329</b>	<b>9,727,888</b>	<b>28,442,216</b>	<b>38.00p</b>

The Directors were authorised at the 2019 Annual General Meeting to allot and issue up to 60,128,578 shares. 53,671,883 have been issued as shares and 385,000 issued as warrants. The remaining authority will lapse at the 2020 Annual General Meeting.

At a General Meeting held on 11 May 2020, the directors were authorised to issue a further 152,915,084 shares.

In May 2020, the Group raised additional equity of £15.3 million through the subscription of 61,891,586 new ordinary shares by new and existing shareholders. Further equity of £9,141 was raised by the exercise of warrants for 35,549 shares.

## 21. Share based payments

The Group's shares options are detailed are detailed in note a below. The options in issue are all equity options and vest over a term of 1 to 5 years. They do not have performance conditions attached.

### (a) Share Options

Share options held by Directors are disclosed in Note 8. The total number of options outstanding at the year end are as follows:

Grant date	Maximum date of exercise	Exercise price	Outstanding at start of period 01 January 2019	Issued in the period	Lapsed in the period	Share options as at 31 December 2019
01-Sep-13	06-Jan-20	75.00p	80,000	-	-	80,000
03-Jan-14	02-Jan-19	126.25p	80,000	-	(80,000)	-
20-Jan-14	20-Jan-19	93.75p	100,000	-	(100,000)	-
01-Feb-14	31-Jan-19	87.50p	300,000	-	(300,000)	-
30-Apr-14	29-Apr-19	80.00p	800,000	-	(800,000)	-
30-Apr-14	29-Apr-19	87.50p	1,506,669	-	(1,506,669)	-
30-Sep-14	30-Sep-19	125.00p	266,666	-	(266,666)	-
01-Jul-15	30-Jun-20	200.00p	1,033,334	-	(133,334)	900,000
01-Oct-16	30-Sep-21	95.00p	400,000	-	-	400,000
13-Feb-17	12-Feb-22	200.00p	400,000	-	-	400,000
17-Mar-17	16-Mar-19	250.00p	200,000	-	(200,000)	-
29-Aug-17	28-Aug-22	130.00p	400,000	-	-	400,000
20-Feb-19	20-Feb-24	100.00p	-	4,000,000	(280,000)	3,720,000
01-Mar-19	31-Aug-22	40.00p	-	1,449,342	(45,018)	1,404,324
<b>Total</b>			5,566,669	5,449,342	(3,711,687)	7,304,324

The number and weighted average exercise prices of share options are as follows.

	2019		2018	
	Weighted average exercise price	Number of options	Weighted average exercise price	Number of options
Outstanding at the beginning of the period	127.11p	5,566,669	133.01p	6,217,336
Lapsed during the period	102.75p	(3,711,687)	179.41p	(650,667)
Exercised during the period	-	-	-	-
Issued during the period	84.04p	5,449,342	-	-
Outstanding at the end of the period	107.36p	7,304,324	127.11p	5,566,669
Exercisable at the end of the period	123.39p	5,900,000	127.12p	5,486,669

### (b) Warrants

Warrants held by Directors are disclosed in Note 8. The total number of warrants outstanding at the year end are as follows:

Exercise period	Maximum date of exercise	Exercise price	Share warrants held at 01 January 2019	Issued in the period	Lapsed in the period	Exercised in the period	Share warrants held at 31 December 2019
08-Sep-14	07-Sep-19	150.00p	1,120,254	-	(1,117,854)	(2,400)	-
03-Apr-15	02-Apr-20	177.50p	1,840,000	-	-	-	1,840,000
01-May-15	30-Apr-20	200.00p	535,674	-	-	-	535,674
14-May-15	13-May-20	206.25p	168,652	-	-	-	168,652
22-Feb-17	21-Feb-21	86.00p	302,325	-	-	-	302,325
26-Apr-17	25-Apr-21	36.00p	722,223	-	-	-	722,223
24-May-17	23-May-21	31.00p	838,710	-	-	-	838,710
24-May-17	23-May-21	31.00p	21,800,000	-	-	-	21,800,000
26-Apr-18	23-Mar-22	70.00p	1,000,000	-	-	-	1,000,000
31-May-18	11-Jun-22	50.00p	450,000	-	-	-	450,000
31-Aug-18	31-Aug-23	100.00p	2,617,312	-	-	-	2,617,312
07-May-19	07-May-24	100.00p	-	3,500,000	-	-	3,500,000
31-Oct-19	31-Aug-24	100.00p	-	385,000	-	-	385,000
<b>Total</b>			31,395,150	3,885,000	(1,117,854)	(2,400)	34,159,896

# Notes to the Accounts – Group

Continued - Financials in £

## 21. Share based payments continued

The number and weighted average exercise prices of share warrants are as follows.

	2019		2018	
	Weighted average exercise price	Number of warrants	Weighted average exercise price	Number of warrants
Outstanding at the beginning of the period	51.44p	31,395,210	49.64p	29,827,838
Lapsed during the period	150.00p	(1,117,854)	133.82p	(1,700,000)
Exercised during the period	150.00p	(2,400)	91.28p	(850,000)
Issued during the period	100.00p	3,885,000	86.64p	4,117,372
Outstanding at the end of the period	53.73p	34,159,956	51.44p	31,395,210
Exercisable at the end of the period	53.73p	34,159,956	51.44p	31,395,210

The fair value of services received in return for share options and warrants is measured by reference to the fair value of the share options and warrants granted. This estimate is based upon a Black-Scholes model which is considered most appropriate considering the effects of the vesting conditions, expected exercise period and the payment of dividends by the Group. The inputs into the Black-Scholes model for Options and Warrants granted in the year were as follows:

### Options

Exercise period (years)	First vesting date	Risk free rate	Exercise price	Volatility of share price	Options Vested	Options Granted	Expiry	Fair Value
5	20-Feb-19	2.62%	100.0p	86.10%	4,000,000	4,000,000	20-Feb-24	818,762
0.5	01-Mar-22	2.62%	40.0p	86.31%	-	1,449,342	31-Aug-22	53,777
<b>Total</b>						<b>5,449,342</b>		<b>872,539</b>

### Warrants

Exercise period (years)	First vesting date	Risk free rate	Exercise price	Volatility of share price	Warrants Vested	Warrants Granted	Expiry	Fair Value
5	08-May-19	2.62%	100.0p	86.54%	3,500,000	3,500,000	07-May-24	800,415
5	31-Aug-19	2.62%	100.0p	86.78%	385,000	385,000	31-Aug-24	81,414
<b>Total</b>						<b>3,885,000</b>		<b>881,829</b>

Volatility was determined with reference to the Company's share price movements over a period equivalent to the expected lives of the options and warrants retrospectively from the date of issue.

The Group recognised the following share-based payment expense during the period:

	2019	2018
<b>Charged to the profit and loss account</b>		
Expense arising from fair value of share options currently in issue	872,539	49,072
Expense arising from fair value of warrants currently in issue	800,415	732,752
Expense arising on employee services paid in shares	333,033	2,962,467
Expense on settlement of financial liability	106,335	458,333
<b>Total charge to the profit and loss account</b>	<b>2,112,322</b>	<b>4,202,624</b>

	2019	2018
<b>Charged to share premium</b>		
Expense arising from fair value of warrants issued in period	81,414	760,031
<b>Total</b>	<b>81,414</b>	<b>760,031</b>



## 22. Share premium reserve

Company law restricts the use of the share premium reserve of £60,452,065 (2018:£50,724,177), which may only be applied in paying unissued shares of the Company in respect of capitalisation issues and in writing off the expenses of, or the commission paid or discount allowed on, any issue of shares or debentures of the Company.

## 23. Share option reserve

The share option reserve of £7,853,803 (2018: £7,198,580) arises owing to the provision in respect of IFRS 2 "Share based payments".

## 24. Reverse acquisition reserve

The reverse acquisition reserve of £11,038,204 was created on 31 July 2006 when the Company became the legal parent of CareCapital Limited ("CCL") by way of a share exchange agreement. The business combination was regarded as a reverse acquisition under IFRS 3 whereby CCL, the legal subsidiary, is the acquirer and has the power to govern the financial and operating policies of the legal parent so as to obtain benefits from its activities.

## 25. Exchange movement reserve

The foreign exchange movement reserve comprises all foreign currency differences arising from the translation of the financial statements of the foreign operations.

## 26. Capital commitments

The Group and its subsidiaries had capital commitments of £528,000 (2018: £1,141,000) . This was in respect of the building modifications being undertaken at the STFC Daresbury site.

## 27. Contingent liabilities

The Directors are not aware of any contingent liabilities at the 31 December 2019 (2018: £nil).

# Notes to the Accounts – Group

Continued - Financials in £

## 28. Related party transactions

The following related party transactions are required to be disclosed in accordance with IAS24.

	2019	2018
A family member of Dr Michael Sinclair, Executive Chairman, was employed by the Group. The remuneration and benefits payable under the contract, excluding Company statutory and other costs, were:	231,754	203,774
The Group received services from Berkshire Investment Management Limited, a company controlled by Hans von Celsing, a Group Director	78,871	84,896
The balance due to Berkshire Investment Management Limited as at 31 December 2019 was:	7,244	20,348

	Price	Quantity	
In February 2019, as disclosed in Note 7, the following options were issued:			
Michael Sinclair (Director)	100.0p	545,000	
Nicolas Serandour (Director)	100.0p	1,400,000	
Steve Myers (Director)	100.0p	215,000	
In August 2019, the following shares were issued:			
Michael Sinclair (Director)	Subscription	40.0p	875,000
Enrico Vanni (Director)	Subscription	40.0p	87,500
Enrico Vanni (Director)	NED Fees	40.0p	112,500
Michael Bradfield (Director)	NED Fees	40.0p	112,500
Dr Nick Plowman (Director)	NED Fees	40.0p	112,500
Dr Euan Thomson (former Director)	NED Fees	40.0p	112,500
Gabriel Urwitz (Director)	NED Fees	40.0p	62,500
Prof Chris Nutting (former Director)	NED Fees	40.0p	37,500

The Group has taken advantage of the exemption available under IAS 24 'Related Party Disclosures' not to disclose details of transactions between Group undertakings which are eliminated on consolidation in the Group Financial Statements.

## 29. Post balance sheet events

At a General Meeting held on 11 May 2020, the directors were authorised to issue a further 152,915,084 shares.

In May 2020, the Group raised additional equity of £15.3 million through the subscription of 61,891,586 new ordinary shares by new and existing shareholders. Further equity of £9,141 was raised by the exercise of warrants for 35,549 shares.

On 29th June 2020, the Company announced two financing facilities with:

- VDL Groep: €20 million funding partnership to further advance manufacturing of up to 30 LIGHT systems to address a large unmet medical need
- Nerano Capital: \$30 million facility to further the development of the first LIGHT system in Daresbury

## 30. Supporting statements of cash flows

	Long term loans	Short term loans	Convertible loans	Total
<b>Balance as at 01 January 2018</b>	-	9,247,218	5,650,631	14,897,849
Inflows	-	4,500,000	-	4,500,000
Outflows	-	(10,247,218)	-	(10,247,218)
Reclassification as current liabilities	-	(500,000)	(5,650,631)	(6,150,631)
<b>Balance as at 31 December 2018</b>	-	3,000,000	-	3,000,000
<b>Balance as at 01 January 2019</b>	-	3,000,000	-	3,000,000
Issue of shares	-	(3,000,000)	-	(3,000,000)
Inflows	14,000,000	-	-	14,000,000
Outflows	(200,000)	-	-	(200,000)
Amortisation of costs	64,384	-	-	64,384
<b>Balance as at 31 December 2019</b>	<b>13,864,384</b>	-	-	<b>13,864,384</b>

## 31. Principal accounting policies – Group

### a. Accounting convention

These financial statements have been prepared under International Financial Reporting Standards (“IFRS”) as adopted by the European Union and applied in accordance with the Companies Act 2006. The financial statements have been prepared on the historical cost basis modified to include certain assets and liabilities at fair value.

The preparation of financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and opinions or statements received from competent professional advisors. These advisors include qualified valuers and financial institutions which have provided senior debt and associated facilities. The Directors have taken advantage of the exemption offered by Section 408 of the Companies Act 2006 not to prepare a separate statement of comprehensive income for the Parent Company.

Advanced Oncotherapy plc (“the Company”) is a public limited company incorporated and domiciled in the UK. The nature of the operations and principal activities of the Company and its subsidiary undertakings (the “Group”) are set out in the strategic report and Directors’ report on pages 4 to 65. These consolidated financial statements are presented in pounds sterling because that is the predominant currency of the economic environment in which the Group operates.

Critical judgments in applying accounting policies:

1. The values ascribed to Intangible assets. The Directors carried out an impairment review of the Intangible assets and found that no impairment is necessary. At 31 December 2019, the Group held intangible assets currently still being developed, for which the most sensitive assumption is the probability of technical success and, given their nature, impairment adjustments triggered by future events that have yet to occur which may be material. In addition, there is a significant risk that impairments recognised in any one period may be subject to material adjustments in future periods. See Note 10 and Note u. below.
2. Inventory. The Directors have made significant accounting estimates in respect of the carrying value of inventory at the year-end both in respect of estimated selling prices and costs to complete the inventory. These estimates have been based on quoted amounts from suppliers and on discussions with potential customers. An impairment provision of £nil (2018: 1.9m) has been provided. A decrease of 10% of estimated sales price and an increase in total estimated costs would increase the impairment provision and loss by £3.0m and £3.0m respectively.
3. Incremental interest rates on Leases. On adoption of IFRS 16, the Group recognised lease liabilities in relation to leases which had previously been classified as ‘operating leases’ under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee’s incremental borrowing rate as of 1 January 2019. The weighted average lessee’s incremental borrowing rate applied to the lease liabilities on 1 January 2019 was 3.0%. The determination of applicable incremental borrowing rates at the commencement of new lease contracts also requires judgement. The Group determines its incremental borrowing rates by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease. The Group considers the relevant market interest rate, based on the weighted average of the timing of the lease payments under the lease obligation.

A summary of the Group accounting policies is set out below, together, where relevant, with an explanation of where changes have been made to previous policies on the adoption of new accounting standards in the year. Certain new standards, amendments and interpretations to existing standards have been published that are mandatory for the Group’s accounting periods beginning on or after 01 January 2019 and these have been adopted in the financial statements.

### b. Basis of consolidation and going concern

The Group has made a loss after tax of £20.8m (2018: £21.2m) and is presently pre-revenue and, as such, has relied upon equity and debt funding to progress its development plans. Post year end, the Group has successfully raised £15m in equity and secured loan facilities of £42m as detailed further in note 29.

The Directors regularly review cash flow forecasts to determine whether the Group has sufficient cash reserves to meet its future working capital requirements and development plans. The Group plans to raise further finance in the next twelve months and the Directors are confident based on past history of successful fundraising and discussions with investors that the Group will be successful in raising these funds. Notwithstanding the above and in the case of events impacting the financing plan of the Company such as continued restrictions resulting from Covid-19, the Directors consider that they will be able to take actions to significantly reduce costs, including deferring project costs, and significantly reducing overheads and staff costs in an appropriate timescale and manage their expenditure to reduce the cash requirements within the balances presently held and the secured loan facilities as detailed above. The Directors, therefore consider it appropriate to prepare the Group’s financial statements on a going concern basis.



# Notes to the Accounts – Group

Continued - Financials in £

## 31. Principal accounting policies – Group continued

### c. Basis of consolidation

The consolidated financial information includes financial information in respect of the Group and all of its subsidiary undertakings.

The results of subsidiaries acquired or disposed of during the year are included in the consolidated statement of comprehensive income from the effective date of acquisition or up to the effective date of disposal, as appropriate. All intra-group transactions, balances, income and expenses are eliminated on consolidation.

The consolidated financial statements consolidate the financial statements of the Company and its subsidiary undertakings (together “the Group”) drawn up to 31 December 2019.

A subsidiary is an entity controlled by the Company. Control is achieved where the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns

Consolidation of a subsidiary begins when the Company obtains control over the subsidiary and ceases when the Company loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Company gains control until the date when the Company ceases to control the subsidiary

Where necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those used by the Group.

The purchase method of accounting is used to account for business combinations that result in the acquisition of subsidiaries by the Group. The cost of a business combination is measured as the fair value of the assets given, equity instruments issued and liabilities incurred or assumed at the date of exchange, plus costs directly attributable to the business combination. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. Any excess of the cost of the business combination over the acquirer's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities recognised is recorded as goodwill.

Inter-company transactions, balances and unrealised gains on transactions between the Company and its subsidiaries, which are related parties, are eliminated in full.

### d. Investment properties

Investment properties are properties owned or leased by the Group which are held for long term rental income and capital appreciation. Investment property is initially recognised at cost and revalued at the balance sheet date to fair value as determined by the Directors. The investment property was disposed of in the period, the gain was immaterial and not disclosed separately.

### e. Intangible assets-research and development

Development activities involve a plan or design for the production of new and innovative proton beam cancer therapy machines. Development expenditure is capitalised only if development costs can be measured reliably, the proton therapy machine is technically and commercially feasible, future economic benefits are probable, and the Group has sufficient resources available to complete development and to use, lease or sell the asset. The expenditure capitalised includes only the cost of gross direct labour that is directly attributable to preparing the asset for its intended use or third-party costs incurred directly on the development activities above. Capitalised development expenditure is measured at cost less accumulated amortisation and accumulated impairment losses. Other research and development expenditure not meeting the above criteria is recognised in the income statement as incurred. Capitalised development costs are amortised over the period from the date the development generates revenue. As at 31 December 2019 the proton therapy machines are still in the development phase and therefore no amortisation has been recognised in the income statement. Management estimate the useful economic life of the proton machines to be 20 years once development has been completed.

### f. Property, Plant and Equipment

Depreciation is provided at the following annual rates in order to write off each asset over its estimated useful life:

### 31. Principal accounting policies – Group continued

Fixtures and fittings	20% of cost
Plant - equipment	14 % to 20% of cost
Plant - LIGHT development equipment	20% of cost
Computer equipment	33.3% to 50% of cost
Leasehold Improvements	are written off over the term of the lease

Property, plant and equipment are stated at cost less accumulated depreciation and accumulated impairment losses. Where parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment.

#### g. Cash and cash equivalents

Cash and cash equivalents are carried in the balance sheet at cost. For the purposes of the cash flow statement, cash and cash equivalents comprise cash on hand, deposits with banks and other short-term highly liquid investment maturities of three months or less, net of short term bank overdrafts.

#### h. Trade and other receivables

Trade and other receivables are recognised initially at the transaction price. They are subsequently measured less any provision for impairment in relation to expected credit losses. At each reporting date the Group assesses the expected credit losses and changes in credit risk since initial recognition of the receivable and a provision for impairment is recognised when considered necessary.

#### i. Trade and other payables

Trade and other payables are recognised initially at the transaction price and subsequently measured at amortised cost using the effective interest method.

#### j. Inventories

Stocks are stated at the lower of cost and realisable value. Cost is based on the first-in first-out principle. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of selling expenses. Any write down to net realisable value is recorded in cost of sales.

Work in progress is valued at the cost charged for material supplies and the cost charged by sub-contractors for work completed or in progress with those sub contractors. No element of Group overhead or finance cost has been included.

#### k. Revenue recognition

The Group has not recorded any revenue to date as it remains in the development stage. In future periods, it will recognise revenue in accordance with the respective performance obligations as noted on the contracts with customers.

During the prior period, the company received an amount of £16.5m for an exclusive distribution agreement issued to Liquid Harmony Ltd. This amount is fully repayable if the entity does not complete the development of the products and have regulatory approval in China within 5 years of the signing of the agreement. As a result of the conditions attached requiring full repayment no revenue, has been recognised.

#### l. Income taxes

The charge for current taxation is based on the results for the year as adjusted for items which are non-assessable or disallowed.

Deferred tax is provided using the balance sheet liability method in respect of temporary differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax bases used in computation of taxable profit.

Deferred tax is determined using tax rates that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled. It is recognised in profit or loss except when it relates to items credited or charged directly to equity, in which case the deferred tax is also dealt with in equity.

Deferred tax is determined using tax rates that have been enacted or substantially enacted by the balance sheet date and are expected to

# Notes to the Accounts – Group

Continued - Financials in £

## 31. Principal accounting policies – Group continued

apply when the related, deferred tax asset is realised or the deferred tax liability is settled. It is recognised in profit or loss except when it relates to items credited or charged directly to equity, in which case the deferred tax is also dealt with in equity.

Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary difference can be utilised. Deferred tax assets and liabilities are offset only when they relate to taxes levied by the same authority, with a legal right to set off and when the Group intends to settle them on a net basis.

### **m. Pensions**

The Group makes defined contributions to employees' personal pension plans. Contributions payable to the employees' schemes are recognised as an expense in the statement of comprehensive income as incurred.

### **n. Share based payments**

The cost of granting share options and other share based remuneration to employees and Directors is recognised through the statement of comprehensive income on a straight-line basis over the vesting period, based on the Group's estimate of shares that will eventually vest. These share based payments are measured at fair value at the date of grant by use of an option pricing model known as the Black – Scholes formula.

Issue of shares to employees as remuneration or bonuses are recorded at the share price at date of issue or approval as required by accounting standards.

For equity-settled transactions with non-employees, the costs are recognised through the statement of comprehensive income with measurement based on the fair value of goods or services received.

### **o. Foreign currencies**

Transactions in currencies other than the entity's functional currency are recorded at the exchange rate prevailing at the transaction dates. Foreign exchange gains and losses resulting from settlement of these transactions and from retranslation of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss.

The assets and liabilities of foreign entities are translated into sterling at the rate of exchange ruling at the balance sheet date and their statements of comprehensive income and cash flows are translated at the average rate for the period. Exchange differences arising are transferred to reserves as a separate component of equity.

The Group's presentational currency is GBP.

### **p. Financial instruments**

The Group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates and interest rates.

Loans are initially recognised net of associated transaction costs. Subsequent to initial recognition, they are stated at amortised cost.

### **q. Equity instruments**

Equity instruments issued by the Group are recorded at the proceeds received, net of direct issue costs.

### **r. Financial liability and equity**

Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements entered into. An equity instrument is any contract that evidences a residual interest in the assets of the Company after deducting all of its liabilities.

### **s. Borrowing costs**

All borrowing costs are recognised in profit or loss in the period in which they are incurred.

### **t. Segmental reporting**

As the Group's business activities were not complex, being the development and building of the LIGHT system, and the management of a healthcare related property, management reviews information based on different locations and, accordingly, the operating segments are based on such a geographical split.



## 31. Principal accounting policies – Group continued

### u. Impairment of non-current assets

The Group's main asset is its development costs which are not yet ready for use. As a result an annual impairment review is performed which involves estimating the recoverable amount of the assets, which is the higher of its fair value less costs to sell and its value in use, is estimated in order to determine the extent of the impairment loss. Where the carrying value of an asset exceeds its recoverable amount (i.e. the higher of value in use and fair value less costs to sell), the asset is written down accordingly. Impairment charges are included in profit or loss, except to the extent they reverse gains previously recognised in other comprehensive income.

### v. Leases

The majority of the Group's accounting policies for leases are set out in note 12.

#### *Identifying Leases*

The Group accounts for a contract, or a portion of a contract, as a lease when it conveys the right to use an asset for a period of time in exchange for consideration. Leases are those contracts that satisfy the following criteria:

- (a) There is an identified asset;
- (b) The Group obtains substantially all the economic benefits from use of the asset; and
- (c) The Group has the right to direct use of the asset.

The Group considers whether the supplier has substantive substitution rights. If the supplier does have those rights, the contract is not identified as giving rise to a lease.

In determining whether the Group obtains substantially all the economic benefits from use of the asset, the Group considers only the economic benefits that arise from use of the asset, not those incidental to legal ownership or other potential benefits.

In determining whether the Group has the right to direct use of the asset, the Group considers whether it directs how and for what purpose the asset is used throughout the period of use. If there are no significant decisions to be made because they are pre-determined due to the nature of the asset, the Group considers whether it was involved in the design of the asset in a way that predetermines how and for what purpose the asset will be used throughout the period of use. If the contract or portion of a contract does not satisfy these criteria, the Group applies other applicable IFRSs rather than IFRS 16.

On adoption of IFRS 16, the Group recognised lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of 1 January 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on 1 January 2019 was 3.0%. The determination of applicable incremental borrowing rates at the commencement of new lease contracts also requires judgement. The Group determines its incremental borrowing rates by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease. The Group considers the relevant market interest rate, based on the weighted average of the timing of the lease payments under the lease obligation.

### w. Changes in Accounting Policy

#### *i) New standards, interpretations and amendments effective from 1 January 2019*

The company adopted IFRS 16 Leases in the current period. The policy adopted is disclosed in note 12 and the impact on the financial statements is detailed in note 12.

There are no other new standards which have had a material impact in the annual financial statements for the year ended 31 December 2019.

#### *ii) New standards, interpretations and amendments not yet effective*

There are a number of standards, amendments to standards, and interpretations which have been issued by the IASB that are effective in future accounting periods that the Group has decided not to adopt early.

# Company Statement of Financial Position

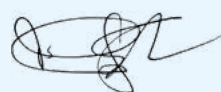
As at 31 December 2019 - Financials in £

	Notes	2019	2018
<b>Non-current assets</b>			
Intangible assets	B	19,267,379	15,017,243
Property, plant and equipment	C	5,159,144	3,146,338
Right of use assets	D	30,982,270	-
Investment in subsidiaries	E	8,052,458	8,052,458
Trade and other receivables	F	45,108,723	34,050,623
		<b>108,569,974</b>	60,266,661
<b>Current assets</b>			
Inventories	H	15,048,228	10,014,086
Trade and other receivables	F	1,934,765	1,719,001
Corporation tax R&D refund	F	1,768,591	685,764
Cash and cash equivalents		2,979,668	897,274
		<b>21,731,252</b>	13,316,125
<b>Total assets</b>		<b>130,301,226</b>	73,582,787
<b>Current liabilities</b>			
Trade and other payables	G	(3,534,627)	(4,847,555)
Lease liabilities	D	(916,567)	-
Borrowings	I	-	(3,000,000)
		<b>(4,451,194)</b>	(7,847,555)
<b>Non-current liabilities</b>			
Licence Fee Received	G	(16,500,000)	(16,500,000)
Lease liabilities	D	(30,206,903)	-
Borrowings	I	(13,864,384)	-
		<b>(60,571,287)</b>	(16,500,000)
<b>Total liabilities</b>		<b>(65,022,481)</b>	(24,347,555)
<b>Net assets</b>		<b>65,278,745</b>	49,235,232
<b>Equity</b>			
Share capital		61,105,852	42,391,523
Share premium reserve		60,452,065	50,724,177
Share option reserve		7,853,803	7,198,580
Accumulated losses		(64,132,975)	(51,079,048)
<b>Total equity</b>		<b>65,278,745</b>	49,235,232

The Company's loss for the financial year was £14,363,483 (2018: £13,778,869 loss).

These financial statements have been approved and were authorised for issue by the Board of Directors on 29th June 2020.

Signed on behalf on the Board of Directors by



**Dr Michael Sinclair**  
Executive Chairman



**Nicolas Serandour**  
Chief Executive Officer

Registered number: 05564418

The accompanying Notes on pages 104 to 109 form part of the financial statements.

# Company Statement of Changes in Equity

For the year ended 31 December 2019 - Financials in £

	Share capital	Share premium reserve	Share options reserve	Loan note conversion reserve	Accumulated losses	Total
<b>Balance as at 31 December 2017</b>	20,233,799	43,259,389	5,743,609	5,650,631	(37,370,182)	37,517,246
Loss for the year	-	-	-	-	(13,778,869)	(13,778,869)
Total comprehensive income	-	-	-	-	(13,778,869)	(13,778,869)
Shares Issued in the period	17,448,866	7,473,151	760,031	-	-	25,682,048
Expenses deducted from share premium	-	(950,135)	-	-	-	(950,135)
Lapsed options	-	-	(34,497)	-	34,497	-
Lapsed warrants	-	-	(35,506)	-	35,506	-
Conversion of loan notes	4,708,859	941,772	-	(5,650,631)	-	-
Share based payments						
- Share option charge	-	-	49,072	-	-	49,072
- Share warrants charge	-	-	715,870	-	-	715,870
<b>Balance at 31 December 2018</b>	<b>42,391,523</b>	<b>50,724,177</b>	<b>7,198,580</b>	<b>-</b>	<b>(51,079,048)</b>	<b>49,235,232</b>
<b>Balance at 01 January 2019</b>	<b>42,391,523</b>	<b>50,724,177</b>	<b>7,198,580</b>	<b>-</b>	<b>(51,079,048)</b>	<b>49,235,232</b>
Loss for the year	-	-	-	-	(14,153,072)	(14,153,072)
Total comprehensive income	-	-	-	-	(14,153,072)	(14,153,072)
Shares Issued in the period	18,714,329	10,975,557	-	-	-	29,689,885
Expenses deducted from share premium	-	(1,247,669)	81,414	-	-	(1,166,255)
Lapsed options	-	-	(1,014,117)	-	1,014,117	-
Lapsed warrants	-	-	(85,028)	-	85,028	-
Share based payments	-	-	-	-	-	-
- Share option charge	-	-	872,539	-	-	872,539
- Share warrants charge	-	-	800,415	-	-	800,415
<b>Balance as at 31 December 2019</b>	<b>61,105,852</b>	<b>60,452,065</b>	<b>7,853,803</b>	<b>-</b>	<b>(64,132,975)</b>	<b>65,278,745</b>

The accompanying Notes on pages 104 to 109 form part of the financial statements.



# Notes to the Accounts – Company

As at 31 December 2019 - Financials in £

## A. Principal accounting policies

### (i) Company

The separate financial statements of the Company are presented as required by the Companies Act 2006 and in accordance with FRS 101 United Kingdom generally accepted accounting practice.

In these financial statements, the company has applied the exemptions available under FRS 101 in respect of the following disclosures:

- Disclosures regarding revenue;
- Disclosures regarding the cash flow statement;
- Disclosures in respect of transactions with wholly owned subsidiaries ;
- Disclosures in respect of capital management;
- The effects of new but not yet effective IFRSs; and
- Disclosures in respect of the compensation of Key Management Personnel

### (ii) Investment in subsidiaries

Investments in subsidiaries are carried in the Company's statement of financial position at cost less, where appropriate, accumulated impairment.

### (iii) Amounts owed by subsidiaries

Amounts owed by subsidiaries are held at amount remitted less an allowance for expected credit losses.

## B. Intangible assets

### Development Costs

At 01 January 2018	10,367,635
Additions	4,649,608
<b>At 31 December 2018</b>	<b>15,017,243</b>
At 01 January 2019	15,017,243
Additions	4,250,136
<b>At 31 December 2019</b>	<b>19,267,379</b>

In accordance with IAS 38, £4,250,136 (2018: £4,649,608) of costs relating to the development of the LIGHT proton therapy machine were capitalised during the year.

## C. Property, plant and equipment

	Leasehold property	Computer hardware and software	Fixtures, fittings and equipment	Total
<b>2018</b>				
<b>Cost</b>				
At 01 January 2018	177,251	126,271	121,339	424,861
Additions	2,884,874	57,296	985	2,943,155
<b>At 31 December 2018</b>	<b>3,062,125</b>	<b>183,567</b>	<b>122,324</b>	<b>3,368,016</b>
<b>Depreciation</b>				
At 01 January 2018	-	89,702	38,128	127,830
Charge for the year	27,932	41,651	24,265	93,848
<b>At 31 December 2018</b>	<b>27,932</b>	<b>131,353</b>	<b>62,393</b>	<b>221,678</b>
<b>Net book value</b>				
At 01 January 2018	177,251	36,569	83,211	297,031
<b>At 31 December 2018</b>	<b>3,034,193</b>	<b>52,214</b>	<b>59,931</b>	<b>3,146,338</b>
<b>2019</b>				
<b>Cost</b>				
At 01 January 2019	3,062,125	183,567	122,324	3,368,016
Additions	2,115,756	23,872	194,459	2,334,087
<b>At 31 December 2019</b>	<b>5,177,881</b>	<b>207,439</b>	<b>316,783</b>	<b>5,702,103</b>
<b>Depreciation</b>				
At 01 January 2019	27,932	131,353	62,393	221,678
Charge for the year	264,805	18,345	38,131	321,281
<b>At 31 December 2019</b>	<b>292,737</b>	<b>149,698</b>	<b>100,524</b>	<b>542,959</b>
<b>Net book value</b>				
At 01 January 2019	3,034,193	52,214	59,931	3,146,338
<b>At 31 December 2019</b>	<b>4,885,144</b>	<b>57,741</b>	<b>216,259</b>	<b>5,159,144</b>

# Notes to the Accounts – Company

Continued - Financials in £

## D. Leases

The Company has applied IFRS from 1 January 2019 using the policies and transition method noted in note 12. The impact of the adopting IFRS 16 on the statement of financial position as 1 January 2019 is shown below:

	31 December 2018	IFRS16	01 January 2019
Right of use assets	-	7,356,429	7,356,429
Property deposits	783,245	(175,692)	607,553
Lease liabilities	-	(7,180,737)	(7,180,737)

There is no impact on retained earnings as a result of the above.

The following table reconciles the minimum lease commitments disclosed in the Company's 31 December 2018 annual financial statements to the amount of lease liabilities recognised on 1 January 2019:

Minimum lease commitment at 31 December 2018	8,677,302
Less: shorter leases not recognised under IFRS 16	(108,940)
Undiscounted lease payments	8,568,362
Less: effect of discounting using the incremental borrowing rate	(1,387,625)
<b>Lease liability at 1 January 2019</b>	<b>7,180,737</b>

<b>Right-of-Use Assets</b>	<b>Land and buildings</b>
As at 01 January 2019	7,356,429
Additions	24,237,536
Amortisation	(611,695)
<b>As at 31 December 2019</b>	<b>30,982,270</b>

<b>Lease liabilities</b>	<b>Land and buildings</b>
As at 01 January 2019	7,180,737
Additions	24,030,211
Interest expense	563,248
Lease payments	(650,726)
<b>As at 31 December 2019</b>	<b>31,123,470</b>

<b>The maturity profile of discounted lease payments</b>	<b>Land and buildings</b>
Repayable within one year	916,567
Current liabilities	916,567
Repayable in two to five years	6,662,547
Repayable in more than five years	23,544,356
Non-current liabilities	30,206,903
<b>Total borrowings</b>	<b>31,123,470</b>

### Break clauses

The only lease that provides a break clause that has not already passed is for the property at STFC Daresbury. The earliest date at which the break clause could take effect is July 2023, management currently do not intend to exercise this break option.

## E. Investment in subsidiaries

	2018
At 01 January 2018	8,052,458
<b>At 31 December 2018</b>	<b>8,052,458</b>
	2019
At 01 January 2019	8,052,458
<b>At 31 December 2019</b>	<b>8,052,458</b>



## E. Investment in subsidiaries continued

The Company owned the following principal subsidiary companies as at 31 December 2019:

Subsidiary Company	Country of Incorporation	Share class	% Holding
ADAM S.A.	Switzerland	Ordinary	100%
Advanced Oncotherapy Resources Ltd	<sup>1</sup> United Kingdom	Ordinary	100%
APTS Harley Street Ltd	<sup>1</sup> United Kingdom	Ordinary	100%
Advanced Oncotherapy (China) Ltd	<sup>1</sup> United Kingdom	Ordinary	100%
Advanced Oncotherapy Proton Therapy Services Ltd	<sup>1</sup> United Kingdom	Ordinary	100%
CareCapital (Southampton) Ltd	<sup>1,2</sup> United Kingdom	Ordinary	100%
CareCapital Ltd	United Kingdom	Ordinary	100%
Oncotherapy UK Ltd	<sup>1</sup> United Kingdom	Ordinary	100%
The London Proton Therapy Centre Ltd	<sup>1</sup> United Kingdom	Ordinary	100%
The Women's Cancer Centre Ltd	<sup>2</sup> United Kingdom	Ordinary	100%
Advanced Oncotherapy Americas Inc	USA	Ordinary	100%
CareCapital Gesundheitsimmobilien GmbH	<sup>1,2</sup> Germany	Ordinary	90%
CareCapital Gesundheitsimmobilien Verwaltungs GmbH	<sup>1,2</sup> Germany	Ordinary	90%
Gesundheitszentrum Adlershof 2 Minderheitsbeteiligungs GmbH	<sup>1,2</sup> Germany	Ordinary	100%
Gesundheitszentrum Königs Wusterhausen 2 GmbH and Co. KG	<sup>1,2</sup> Germany	Ordinary	100%
Advanced Oncotherapy B.V.	<sup>3</sup> The Netherlands	Ordinary	100%

### Notes

<sup>1</sup> Dormant

<sup>2</sup> Indirectly held

<sup>3</sup> Registration completed in February 2019

## F. Trade and other receivables

	2019	2018
<b>Due greater than 1 year</b>		
Property rent deposits	257,553	501,870
Property decommissioning deposits	350,000	350,000
Amounts owed by subsidiary undertakings	44,501,170	33,198,753
<b>Total</b>	<b>45,108,723</b>	<b>34,050,623</b>

In accordance with IFRS 9, the Company has considered the impairment of loans due from its primary subsidiary company and has made the following provisions in 2019:

	2019	2018
<b>Increase in provision during the year</b>	<b>1,664,000</b>	468,298
	2019	2018
<b>Current</b>		
VAT recoverable	221,768	107,868
Advance payments to suppliers	87,669	576,772
Property rent deposits	3,150	141,819
Other debtors	30,009	19,794
Prepayments	1,592,169	872,748
	1,934,765	1,719,001
Corporation Tax	1,768,591	685,764
<b>Total</b>	<b>3,703,356</b>	<b>2,404,765</b>

# Notes to the Accounts – Company

Continued - Financials in £

## G. Trade and other payables

	2019	2018
<b>Non current</b>		
Licence Fee Received	16,500,000	16,500,000
<b>Total</b>	<b>16,500,000</b>	<b>16,500,000</b>
<b>Current</b>		
Trade payables	936,556	2,786,029
Social security and other taxes	91,769	80,130
Other creditors	58,611	43,745
Accruals and deferred income	2,447,691	1,937,651
<b>Total</b>	<b>3,534,627</b>	<b>4,847,555</b>

## H. Inventories

	2019	2018
<b>Inventories</b>		
Work in progress - LIGHT	15,048,228	10,014,086
<b>Total</b>	<b>15,048,228</b>	<b>10,014,086</b>

All of the above items of Inventory have been valued at cost less an impairment provision considered necessary by the Directors. £nil (2018: £1,908,925) relating to the LIGHT work in progress has been expensed to the income statement.

Costs included in Inventory are for finished components of the LIGHT machine that will be sold as part of the first LIGHT installation.

## I. Borrowings

	2019	2018
<b>Amounts falling due within one year</b>		
Secured loans	-	3,000,000
Unsecured loans	-	-
<b>Total</b>	<b>-</b>	<b>3,000,000</b>
	<b>2019</b>	<b>2018</b>
<b>Amounts falling due over one year</b>		
Secured loans	13,864,384	-
Unsecured loans	-	-
<b>Total</b>	<b>13,864,384</b>	<b>-</b>

The loans are ultimately secured against the Harley Street lease, as disclosed in May 2019.

## J. Related party transactions

The following related party transactions are required to be disclosed in accordance with IAS24.

	2019	2018
A family member of Dr Michael Sinclair, Executive Chairman, was employed by the Group. The remuneration and benefits payable under the contract, excluding Company statutory and other costs, were:	<b>231,754</b>	203,774
The Company received services from Berkshire Investment Management Limited, a company controlled by Hans von Celsing, a Group Director.	<b>78,871</b>	84,896
The balance due to Berkshire Investment Management Limited as at 31 December 2019 was:	<b>7,244</b>	20,348

		Price	Quantity
In February 2019, as disclosed in Note 7, the following options were issued:			
Michael Sinclair (Director)		100.0p	545,000
Nicolas Serandour (Director)		100.0p	1,400,000
Steve Myers (Director)		100.0p	215,000
In August 2019, the following shares were issued:			
Michael Sinclair (Director)	Subscription	40.0p	875,000
Enrico Vanni (Director)	Subscription	40.0p	87,500
Enrico Vanni (Director)	NED Fees	40.0p	112,500
Michael Bradfield (Director)	NED Fees	40.0p	112,500
Dr Nick Plowman (Director)	NED Fees	40.0p	112,500
Dr Euan Thomson (former Director)	NED Fees	40.0p	112,500
Gabriel Urwitz (Director)	NED Fees	40.0p	62,500
Prof Chris Nutting (former Director)	NED Fees	40.0p	37,500

The Company has taken advantage of the exemption available under IAS 24 'Related Party Disclosures' not to disclose details of transactions between Group undertakings which are eliminated on consolidation in the Group financial statements.

## K. Financial instruments

The Company's activities expose it primarily to the financial risks of changes in foreign currency exchange rates and interest rates.

### Management of risks

Credit risk is managed as follows:

Cash at bank is held only with reputable banks with high quality external credit ratings. The Company's financial assets and liabilities are classified as follows:

	Amortised cost	
	2019	2018
Cash and cash equivalents	<b>2,979,668</b>	897,274
Borrowings	<b>(13,864,384)</b>	(3,000,000)
Trade and other payables	<b>(3,534,627)</b>	(4,847,555)
Total	<b>(14,419,343)</b>	(6,950,281)

	Fair value	
	2019	2018
Cash and cash equivalents	<b>2,979,668</b>	897,274
Borrowings	<b>(13,864,384)</b>	(3,000,000)
Trade and other payables	<b>(3,534,627)</b>	(4,847,555)
Total	<b>(14,419,343)</b>	(6,950,281)

Regarding liquidity risk, the Company, in the future, need to raise further equity or debt funds to fulfil its objectives and/or finance working capital requirements through future stages of development.



# Notice of Annual General Meeting

**NOTICE IS HEREBY GIVEN** that the Annual General Meeting ("AGM") of Advanced Oncotherapy plc, registered in England and Wales with the registered number 05564418 (the 'Company'), will be held at the offices of Advanced Oncotherapy plc, Third Floor, 4 Tenterden Street, London W1S 1TE on Wednesday, 29 July 2020 at 2.00pm for the following purposes:

## ORDINARY RESOLUTIONS

To consider, and if thought fit, to pass the following resolutions which will be proposed as Ordinary Resolutions:

1. To receive the audited financial statements and the Auditor's and Directors' reports for the year ended 31st December 2019.
2. To re-appoint Michael Bradfield as a Director of the Company.
3. To re-appoint Hans von Celsing as a Director of the Company.
4. To re-appoint Prof. Steve Myers as a Director of the Company.
5. To re-appoint Dr Nick Plowman as a Director of the Company.
6. To re-appoint Nicolas Serandour as a Director of the Company.
7. To re-appoint Dr Michael Sinclair as a Director of the Company.
8. To re-appoint Dr Enrico Vanni as a Director of the Company.
9. To re-appoint Renhua Zhang as a Director of the Company.
10. To re-appoint RPG Crouch Chapman LLP as Auditors of the Company to hold office until the conclusion of the next AGM at which accounts are laid before the Company.
11. To authorise the Directors to determine the remuneration of the Auditors.
12. THAT the Directors be and are hereby generally and unconditionally authorised for the purposes of section 551 of the Companies Act 2006 ("the Act"), to exercise all the powers of the Company to allot shares in the Company and/ or to grant rights to subscribe for, or to convert any securities into shares in the Company, and/or the grant of rights to subscribe for or to convert any securities into Ordinary Shares up to a maximum aggregate nominal amount of £22,977,843 (the equivalent of up to 91,911,372 Ordinary Shares), this authority to expire on the earlier of fifteen months from the date of the passing of this resolution or the conclusion of the next AGM of the Company to be held in 2021 unless previously renewed, varied or revoked by the Company in general meeting, save that the Company may before such expiry make any offer or agreement which would or might require shares in the Company to be allotted and/or rights to subscribe for or to convert any securities into shares in the Company to be granted after such expiry and the Directors may allot shares in the Company, or grant rights to subscribe for or to convert any securities into shares in the Company, in pursuance of any such offer or agreement as if the authority conferred hereby had not expired.

## SPECIAL RESOLUTION

13. THAT, subject to the passing of Resolution 12 above, in substitution for all previous powers to the extent unused, the Directors be and are hereby unconditionally empowered pursuant to sections 570 and 571 of the Act to allot equity securities (as defined in section 560 of the Act) pursuant to the authority granted to the Directors pursuant to Resolution 12 above as if section 561 of the Act did not apply to any such allotment, provided that this power shall be limited to:
  - a) the allotment of equity securities in connection with a rights issue, open offer or equivalent offer in favour of the holders of Ordinary Shares and such other equity securities of the Company as the Directors may determine in which such holders are offered the right to participate in proportion (as nearly as may be) to their respective holdings of such equity securities or in accordance with the rights attached thereto but subject to such exclusions or other arrangements as the Directors may consider necessary or expedient in connection with shares representing fractional entitlements or on account of either legal or practical problems arising in connection

with the laws of any territory, or of the requirements of any recognised regulatory body or stock exchange in any territory;

- b) other than pursuant to sub-paragraph 13(a) above, the allotment of equity securities up to an aggregate nominal amount of £22,977,843 (the equivalent of up to 91,911,372 Ordinary Shares). This power shall expire on the earlier of fifteen months from the date of passing of this Resolution and upon the conclusion of the next AGM of the Company to be held in 2021 unless previously renewed, varied or revoked by the Company in general meeting, save that the Company may before such expiry make any offer or agreement which would or might require equity securities to be allotted after such expiry and the Directors may allot equity securities in pursuance of any such offer or agreement as if the power conferred hereby had not expired.

By order of the Board



**Dr Michael Sinclair**  
*Executive Chairman*

Registered Office: Level 17, Dashwood House,  
69 Old Broad Street, London EC2M 1QS  
29th June 2020

## NOTES

1. COVID-19  
The board takes its responsibility to safeguard the health of its shareholders, stakeholders and employees very seriously and so the following measures will be put in place for the AGM in response to the COVID-19 pandemic and the current measures being implemented by the Government in the United Kingdom, such measures being expected to continue until after the date of the AGM.

The formal business of the General Meeting will only be to consider and vote upon the resolutions set out in the notice of meeting. The holding of the meeting will be kept under review in line with Public Health England guidance. However, based on current measures implemented by the Government in the United Kingdom attendance at the meeting will be limited to two persons, which will be sufficient to make it a quorate meeting. The meeting will not be attended by other Directors of the Company and other officers and professional advisers will not be in attendance. Shareholders are actively discouraged from physically attending the AGM given the current measures being implemented by the Government in the United Kingdom. Shareholders seeking to attend the AGM, beyond those selected in advance to satisfy the quorum requirement, will be refused entry. The Company is taking these precautionary measures to safeguard its shareholders', stakeholders' and employees' health and make the General Meeting as safe and efficient as possible.

Shareholders wishing to vote on any of the matters of business are urged to do so through completion of a proxy form online which can be completed and submitted in accordance with the instructions thereon. We strongly recommend voting electronically at [www.signalshares.com](http://www.signalshares.com) as your vote will automatically be counted. To be effective, the proxy vote must be submitted at [www.signalshares.com](http://www.signalshares.com) so as to have been received by the Company's registrars, not less than 48 hours (excluding weekends and public holidays) before the time appointed for the meeting or any adjournment of it. By registering on the Signal shares portal at [www.signalshares.com](http://www.signalshares.com), you can manage your shareholding, including:

- cast your vote
- change your dividend payment instruction
- update your address
- select your communication preference.

It is strongly recommended that the Chairman of the meeting is appointed as proxy by shareholders as it is unlikely that any other persons will be admitted to the meeting other than the second participant in the quorum based on the current measures being implemented by the Government in the United Kingdom.

In normal conditions the completion and return of a proxy vote does not preclude a shareholder from attending a general meeting in person and voting should the shareholder wish to do so. However, whilst restrictions remain in place in the United Kingdom relating to the COVID-19 pandemic along with applicable Public Health Guidance, shareholders should not assume an ability to attend the AGM in person to vote. As mentioned above, shareholders are actively discouraged from attendance at the meeting as part of the Company's compliance with the current measures being implemented by the Government in the United Kingdom.

If you need help with voting online, or require a paper proxy form, please contact our Registrar, Link Asset Services by email at enquiries@linkgroup.co.uk, or you may call Link on 0371 664 0391. Calls are charged at the standard geographic rate and will vary by provider. Calls outside the United Kingdom will be charged at the applicable international rate. We are open between 09:00 - 17:30, Monday to Friday excluding public holidays in England and Wales. Submission of a Proxy vote shall not preclude a member from attending and voting in person at the meeting in respect of which the proxy is appointed or at any adjournment thereof.

2. The AGM is to be held at the Company's administrative head office at Level 3, 4 Tenterden Street, London W1S 1TE.
  3. Please indicate on your proxy how you wish your votes to be cast in respect of the resolutions to be proposed at the said meeting. If you do not indicate how you wish your proxy to use your votes, the proxy will exercise his/her discretion both as to how he votes and as to whether or not he abstains from voting. Your proxy will have the authority to vote at his/her discretion on any amendment or other motion proposed at the meeting, including any motion to adjourn the meeting. Any power of attorney or other authority under which the proxy is submitted must be returned to the Company's Registrars, Link Asset Services, PX51, 34 Beckenham Road, Beckenham, Kent, BR3 4ZF. If a paper form of proxy is requested from the registrar, it should be completed and returned to Link Asset Services, PX51, 34 Beckenham Road, Beckenham, Kent, BR3 4ZF to be received not less than 48 hours before the time of the meeting.
  4. In the case of joint holders, the signature of the holder whose name stands first in the relevant register of members will suffice as the vote of such holder and shall be accepted to the exclusion of the votes of the other joint holders. The names of all joint holders should, however, be shown.
  5. If a member is a corporation, the form must be executed either under its common seal or under the hand of an officer or agent authorised in writing. In the case of an individual the proxy must be signed by the appointor or his/her agent, duly authorised in writing. CREST members should use the CREST electronic proxy appointment service and refer to Note 6 below in relation to the submission of a proxy appointment via CREST.
- In each case the proxy appointment must be received with any authority (or a notarially certified copy of such authority) under which it is signed.
6. CREST members who wish to appoint a proxy or proxies through the CREST electronic proxy appointment service may do so for the AGM to be held on the above date and any adjournment(s) thereof by using the procedures described in the CREST manual. CREST personal members or other CREST sponsored members who have appointed a voting service provider(s), will be able to take the appropriate action on their behalf.

In order for a proxy appointment or instruction made using the CREST

service to be valid, the appropriate CREST message (a "CREST proxy instruction") must be properly authenticated in accordance with Euroclear UK and Ireland Limited's specifications and must contain the information required for such instructions as described in the CREST manual. The message, regardless of whether it constitutes the appointment of a proxy or an amendment to the instruction given to a previously appointed proxy must, in order to be valid, be transmitted so as to be received by the Company's agent (ID: RA10) by the latest time(s) for receipt of proxy appointments specified in the notice of meeting. For this purpose, the time of receipt will be taken to be the time (as determined by the time stamp applied to the message by the CREST applications host) from which the Company's agent is able to retrieve the message by enquiry to CREST in the manner prescribed by CREST. After this time any change of instructions to proxies appointed through CREST should be communicated to the appointee through other means.

CREST members and, where applicable, their CREST sponsors or voting service providers should note that Euroclear UK and Ireland Limited does not make available special procedures in CREST for any particular messages. Normal system timings and limitations will therefore apply in relation to the input of CREST proxy instructions. It is the responsibility of the CREST member concerned to take (or, if the CREST member is a CREST personal member or sponsored member or has appointed a voting service provider(s), to procure that his/her CREST sponsor or voting service provider(s) take(s) such action as shall be necessary to ensure that a message is transmitted by means of the CREST system by any particular time. In this connection, CREST members and, where applicable, their CREST sponsors or joint service providers are referred, in particular, to those sections of the CREST manual concerning practical limitations of the CREST system and timings.

The Company may treat as invalid a CREST proxy instruction in the circumstances set out in regulation 35(5) (a) of the Uncertificated Securities Regulations 2001.

Pursuant to regulation 41 (1) of the Uncertificated Securities Regulations 2001 (2001 No. 3755) the Company has specified that only those members registered on the register of members of the Company at close of business on 27 July 2020 shall be entitled to attend and vote at the AGM in respect of the number of Ordinary Shares registered in their name at the time. Changes to the register of members after close of business on 27 July 2020 shall be disregarded in determining the rights of any person to attend and vote at the AGM.

7. Under Section 319 of the Act, the Company must answer any question relating to the business being dealt with at the meeting put by a member attending the meeting unless:
  - a. answering the question would interfere unduly with the preparation for the meeting or involve the disclosure of confidential information;
  - b. the answer has already been given on a website in the form of an answer to a question; or
  - c. it is undesirable in the interests of the Company or the good order of the meeting that the question be answered.
8. The following documents will be available for inspection at the Company's registered office during normal business hours on any weekday (Saturdays, Sundays and English public holidays excluded) from the date of this notice of the Annual General Meeting until the date of the Annual General Meeting and at the place of the meeting at least 15 minutes prior to the commencement of the Annual General Meeting until its conclusion:
  - a. copies of the Directors' contracts of service;
  - b. copies of the Non-Executive Directors' letters of appointment;
  - c. a copy of the Articles of Association of the Company is available on the Investor Relations section of the Advanced Oncotherapy website (www.avopl.com) on the Company Documents page.

# Explanatory Notes to the Notice of Annual General Meeting

This year, Resolutions are proposed at the Annual General Meeting and the purpose of each of the Resolutions is as follows:

## ORDINARY BUSINESS

### ***Resolution 1: The Report and Accounts***

The Directors will present their report and the audited financial statements to 31st December 2019, together with the auditors' report therein.

### ***Resolutions 2-9: Re-appointment of retiring Directors***

The Articles of Association of the Company stipulate that any Director shall only hold office until the conclusion of the next annual general meeting following the date of his/her appointment. Furthermore, the articles require that one third of the Directors retire at each Annual General Meeting. Corporate Governance guidance recommends that each of the Directors retire and offer themselves for re-appointment. Biographical details relating to each of the Directors can be found on the Group's website: [www.avopl.com](http://www.avopl.com)

### ***Resolution 10: Appointment of Auditors***

The Company is required to appoint auditors at each Annual General Meeting at which accounts are laid before shareholders, to hold office until the next such meeting. This Resolution proposes RPG Crouch Chapman LLP be re-appointed as auditors for the current year.

### ***Resolution 11: Auditors' remuneration***

This Resolution authorises the Directors to determine the auditors' remuneration.

## SPECIAL BUSINESS

### ***Resolution 12: Authority to allot shares***

Section 549 of the Companies Act 2006 stipulates that Directors cannot allot shares or rights to subscribe for shares in the Company (other than the shares allotted in accordance with an employee share scheme) unless they are authorised to do so by the shareholders in general meeting. The Directors' general authority to allot shares was granted at the General Meeting held on 11 May 2020 which will expire at the conclusion of this AGM. Resolution 12 seeks a new general authority from shareholders for the Directors to allot Ordinary Shares or to grant rights to subscribe for and/or to convert any securities into Ordinary Shares up to an aggregate nominal value of £22,977,843. The Directors consider it desirable that the specified number of Ordinary Shares and/or rights to subscribe for and/or to convert any securities into Ordinary Shares be increased by 30% so that they can satisfy existing warrants and options and allow headroom to more readily take advantage of possible equity raising opportunities. Unless renewed, revoked, varied or extended, this authority will expire at the conclusion of the next AGM of the Company to be held in 2021 or fifteen months from the date of the passing of the resolution, whichever is the earlier.

## SPECIAL RESOLUTION

### ***Resolution 13: Disapplication of pre-emption rights***

If the Directors wish to allot any Ordinary Shares for cash in accordance with the authority proposed in Resolution 12, the Companies Act 2006 requires that new Ordinary Shares must generally be offered first to shareholders in proportion to their existing holdings. These are the pre-emption rights of shareholders. In certain circumstances, it may be in the interest of the Company for the Directors to be able to allot some shares for cash without having to offer them first to existing shareholders. In line with

common practice, Resolution 13 therefore seeks authority to empower the Directors to allot equity securities for cash other than in accordance with the statutory pre-emption rights, in connection with a rights issue and other pre-emptive offers and otherwise up to a maximum nominal amount of £22,977,843. In addition, there are legal, regulatory and practical reasons why it may not always be possible to issue new shares under a rights issue to some shareholders, particularly those resident overseas. To cater for this, this Resolution also permits the Directors to make appropriate exclusions or arrangements to deal with such difficulties. Unless renewed, revoked, varied or extended, this authority will expire at the conclusion of the next Annual General Meeting of the Company to be held in 2021 or fifteen months from the date of the passing of the resolution, whichever is the earlier.





# Company Information

## DIRECTORS

Mr. Michael Bradfield <sup>*†</sup>	<i>Non-Executive Director</i>
Mr. Hans von Celsing <sup>*†</sup>	<i>Non-Executive Director</i>
Mr. Chunlin Han <sup>Δ</sup>	<i>Non-Executive Director</i>
Dr. Yuelong Huang <sup>Δ</sup>	<i>Non-Executive Director</i>
Prof. Steve Myers	<i>Executive Chairman of ADAM</i>
Dr. Nick Plowman	<i>Non-Executive Director</i>
Mr. Nicolas Serandour	<i>Chief Executive Officer</i>
Dr. Michael Sinclair	<i>Executive Chairman</i>
Mr. Peter Sjöstrand <sup>Δ</sup>	<i>Non-Executive Director</i>
Prof. Gabriel Urwitz <sup>Δ</sup>	<i>Non-Executive Director</i>
Dr. Enrico Vanni <sup>*†</sup>	<i>Non-Executive Director</i>
Mrs. Renhua Zhang	<i>Non-Executive Director</i>

<sup>\*</sup> Member of the Audit Committee

<sup>†</sup> Member of the Remuneration Committee

<sup>Δ</sup> Stepped down from the Board on the date of the AGM

## COMPANY SECRETARY

Henry Clarke

## REGISTERED OFFICE

Level 17, Dashwood House  
69 Old Broad Street  
London, EC2M 1QS

## TRADING AND CORRESPONDENCE ADDRESS

Third Floor, 4 Tenterden Street  
London, W1S 1TE

## REGISTERED NUMBER

05564418 (England and Wales)

## WEBSITE

This annual report and other information about Advanced Oncotherapy plc, including share price information and details of results announcements, are available at [www.avopl.com](http://www.avopl.com)

## AUDITORS

RPG Crouch Chapman LLP  
62 Wilson Street  
London, EC2A 2BU

## NOMINATED ADVISER AND JOINT BROKER

Allenby Capital Limited  
5th Floor, 5 St Helen's Place  
London, EC3A 6AB

## SOLICITORS TO THE COMPANY

Faegre Baker Daniels LLP  
7 Pilgrim Street  
London, EC4V 6LB

David Conway and Co  
1 Great Cumberland Place  
London, W1H 7AL

Dechert LLP  
160 Queen Victoria St  
London, EC4V 4QQ

## PUBLIC RELATIONS

FTI Consulting  
200 Aldersgate  
Aldersgate Street  
London, EC1A 4HD

## REGISTRARS

Link Asset Services  
The Registry  
34 Beckenham Road  
Beckenham, BR3 4TU





# Annual report 2019

Powerful technology to treat cancer  
with pinpoint precision