



30 September 2016

**ADVANCED ONCOTHERAPY PLC**  
("Advanced Oncotherapy" or the "Company")

**Half-Year Report**

Advanced Oncotherapy (AIM: AVO), the developer of a next generation proton therapy system for cancer treatment, announces its unaudited results for the six months ended 30 June 2016.

The Company continues progressing the technology development of its LIGHT proton therapy system to be used in Harley Street, the first Proton therapy centre expected in London. As a result, the Company has brought forward its financing plans to support the move to volume manufacturing with key partner Thales.

The LIGHT system accelerates protons to the energy levels achieved in first-generation proton therapy machines but in a system that is a quarter of the size, requires less shielding and is manufactured at a fraction of the cost. It also delivers proton beams with greater control and precision than older technologies.

**Highlights:**

- Positive update on technical development milestones, including the first beam of protons fired at the exit of the proton source and the low energy beam transport
- Industrialisation agreement with Thales
  - (i) Optimisation studies well advanced and good progress towards a full-scale manufacturing base, including the planned building of a manufacturing unit at Thales in its site in Thonon, France, which is capable of producing up to 8 LIGHT systems per year
- Signing of a £24 million convertible loan facility with Metric Capital
- Improved terms agreed with Metric, with the condition to raise £25 million to be waived following:
  - (i) a £10 million equity placing expected to be announced later this morning
  - (ii) the implementation of a financing plan supported by banks and strategic partners, which is non-dilutive to equity investors
- Senior management strengthened with the appointment of Michel Baelen and Gerardo d'Auria as Head of Regulatory Affairs and Technical Director respectively

**Commenting, Michael Sinclair, CEO of Advanced Oncotherapy, said:** *"I am pleased with the progress that we have made in the first half of the year including the installation of key critical components of the LIGHT system in our testing facility. As a result of our successful technical progress we have brought forward our plans to move to volume production with our manufacturing partners Thales, particularly in light of our increasing order book which include purchase orders representing \$150m and exclusivity agreements that cover between \$200m and \$400m of potential sales.*

*"Given this progress it was essential to have maximum flexibility in our financing arrangements and we welcome the waiving of the conditions associated with the Metric facility. "*

This announcement contains inside information for the purposes of Article 7 of EU Regulation 596/2014.

**Advanced Oncotherapy Plc**

Michael Sinclair, CEO

Nicolas Serandour, CFO & COO

[www.avoplc.com](http://www.avoplc.com)

Tel: +44 20 3617 8728

**Stockdale Securities (Nomad & Joint Broker)**

Antonio Bossi / David Coaten

Tel: +44 20 7601 6100

**Beaufort Securities (Joint Broker)**

Jon Belliss / Elliott Hance

Tel: +44 20 7382 8300

**Walbrook PR** (Financial PR & IR)  
Paul McManus / Anna Dunphy

Tel: +44 20 7933 8780 or [avo@walbrookpr.com](mailto:avo@walbrookpr.com)  
Mob: +44 7980 541 893 / Mob: +44 7876 741 001

**About Advanced Oncotherapy plc** [www.avoplc.com](http://www.avoplc.com)

Advanced Oncotherapy is a provider of particle therapy systems with protons that harnesses the best in modern technology. As a result, Advanced Oncotherapy will offer healthcare providers affordable systems that will enable them to treat cancer with an innovative technology providing better health outcomes and fewer treatment related side effects.

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 accelerates protons to the energy levels achieved in legacy machines but in a unit that is a fraction of the size and significantly lower in cost. This compact configuration delivers proton beams in a linear way that facilitates a greater precision and electronic control which is not achievable with older technologies.

The Company has signed two purchase agreements for the LIGHT proton therapy systems to be installed in hospitals in China. There are also four additional framework agreements and further Letters of Intent from other healthcare providers.

The Company has also signed a joint venture agreement with CircleHealth, owned by AIM-listed Circle Holdings plc, to operate the Company's proton beam cancer therapy centre in Harley Street.

Advanced Oncotherapy continually monitors the market for any emerging improvements in delivering proton therapy and actively seeks working relationships with providers of these innovative technologies. Through these relationships, the Company will remain the prime provider of an innovative and cost-effective system for particle therapy with protons.

## **Chairman's & CEO Report**

I am delighted to provide our latest report for the six months ended 30 June 2016. This is our opportunity to update shareholders on our progress in the development and commercialisation of our next generation proton therapy system, LIGHT. We are pleased with our progress to date and believe that we have an excellent opportunity to create significant value for shareholders. At the same time we shall bring the latest treatment technologies to cancer patients in the heart of major cities, such as London.

The Company continues making significant headway in building its first LIGHT proton therapy system. We remain on track to have the first Proton therapy centre in London in Harley Street, through the sponsorship of Howard de Walden and our partner Circle Health. The application is currently being considered by Westminster City Council's Planning Committee with a public hearing scheduled for 18 October 2016. Howard de Walden Estates are managing the planning application on our behalf and they are bearing the redevelopment cost.

We continue to focus on strengthening our commercial agreements and work with our partners to ensure the LIGHT machines are made as widely available as possible.

Our progress in the first half of 2016 falls into three main areas – all of which are critical to establishing a solid platform for the initial launch and successful future commercialisation of our LIGHT system:

- 1. Industrialisation agreement with Thales**
- 2. Testing of LIGHT components**
- 3. Financing for the initial LIGHT system for Harley Street**

### **1. Industrialisation agreement with Thales**

In February 2016, we signed an industrialisation agreement with Thales to manufacture and build our completed LIGHT systems.

Thales is a global technology leader for the Aerospace, Transport, Defence and Security markets. With 61,000 employees (of which 20,000 are engineers and researchers) in 56 countries, they have a unique capability to design and deploy equipment, systems and services to meet the most complex security requirements. Its unique international footprint allows it to work closely with its customers all over the world. They are a well-established manufacturer of high Radio Frequency energy equipment and can offer access to their unique execution and engineering skills to manage the transition from prototype to a series production manufacturing line, in the most cost efficient way.

The first major step of this partnership – announced earlier in the year – consisted of initial engineering studies undertaken by Thales with the view to commissioning and building two custom-designed series production lines. This phase is well advanced and the future manufacturing hub has now been identified in one of Thales' existing sites at Thonon, France. These are located close to ADAM's Geneva offices. The cost of these activities is being funded by the Company and recovered through the retention of 100% gross margin on the initial LIGHT machines produced. This infrastructure will allow both Advanced Oncotherapy and Thales to mass produce, drive down costs, whilst operating under an appropriate quality framework. As part of this initial phase, both companies have built a strong relationship based upon trust and mutual understanding of how best to align innovation and commercial opportunities.

For the second phase of this collaboration, we continue supporting Thales in the building of two production lines capable of producing 8 machines per year. In addition, we are finalising the arrangements to support the manufacturing strategy of the first LIGHT system. We continue working towards strengthening our collaboration through a focus on risk and rewards sharing. This approach encompasses both operational and financial considerations, a pre-requisite for disrupting the market for proton therapy.

## **2. Testing of the LIGHT components**

In March 2016, the Company provided an update to the market on the development milestones. The Proton Source, which was being constructed by Pantechnik in Bayeux (France), has now been fully assembled and installed in the Company's testing facility in Geneva. We are also pleased to report that in June we fired our first proton beam through the initial low energy beam transport ("LEBT") system.

The four modules that make up the Radio Frequency Quadruple ("RFQ"), a technology licensed from CERN and which first accelerates the protons to 5 Mega-electron Volts ("MeV"), have also been assembled at its facility in Geneva. The integration of the proton source with the RFQ is ongoing.

Following first tests on the Side Coupled Drift Tube Linac ("SCDTL") module, which commenced in July 2015, this unit is now ready for high power testing. The four SCDTL modules used in the LIGHT system accelerate the protons from the 5MeV produced by the RFQ to 37.5MeV. The Coupled Cavity Linac ("CCL") then further accelerates the protons to the speeds needed to effectively treat radiosensitive tumours.

The technical development of the LIGHT system remains on track and the Company will continue to update shareholders on the progress made during the further integration and testing of the modules which is expected to continue up to the end of 2016.

## **3. Financing**

In May 2016, we announced that we had signed an agreement with a fund advised by Metric Capital Partners LLP ("Metric Capital"), a Pan-European private capital fund manager, to invest £24 million in a financing facility to support the Company's provision of vendor financing for the installation of our first LIGHT machine in Harley Street. This facility was conditional upon a future £25 million cash or capital injection to fund the development of a manufacturing base for the LIGHT system.

In the light of our technical progress and the progress made in advancing our relationship with our key manufacturing partner, we have decided to remove the uncertainty of this condition by taking the following actions agreed with Metric:

- the Company is pursuing a £10m financing transaction by way of share issuance and a further announcement is expected to be made later this morning. The Company is mindful of the support of existing shareholders and is committed to allowing full participation in an Open Offer under the same pricing as the placing and details of this will be announced over the next few weeks; and
- the implementation of a financing plan supported by banks and strategic partners which is not dilutive to equity investors.

Metric have confirmed that these arrangements would both obviate the requirement for the Condition Precedent referred to above and trigger the drawdown of 100% of the funding that they have agreed to provide.

We have agreed with our partner CircleHealth to amend the specifications of the proton beam cancer therapy centre in Harley Street to include two treatment rooms, instead of only one as originally planned, reflecting the market need for the treatment and the expected demand.

## **Financials**

Our financial performance reflects the now discontinued activity of Oncotherapy Resources Ltd., which we sold off in November 2015.

The loss after taxation from continuing operations for the period to 30 June 2016 was £5.93m loss (H1 2015: £4.59m loss).

Total assets at 30 June 2016 were £28.56m (H1 2015: £30.58m) with net assets at 30 June 2016 of £22.62m (H1 2015: £27.48m).

At the end of the period the Company held cash and cash equivalents of £0.66m (H1 2015: £15.64m).

## **Outlook**

The Company remains optimistic for the future and we will continue to pursue the commercial roll-out of the technology through our existing partnerships and forge relationships in new territories to further expand our reach.

Working closely with our partners Howard de Walden Estates at the Harley Street site, we are satisfied that progress for the new facility remains on track. We have made good progress in advancing our relationship with Thales and expect to provide news on a new manufacturing agreement shortly. We believe that a number of commercial opportunities in the US, outside of our existing agreement with SUNY Upstate Medical University Hospital in Syracuse, Central New York State, will come to fruition in the first half of next year.

In connection with our collaboration with PRaVDA (Proton Radiotherapy Verification and Dosimetry Applications), we are going to have a prototype accelerator operating in our R&D centre at CERN, in order to facilitate the regulatory approval process and technological upgrades. Supported by the Wellcome Trust and Elekta amongst others and led by Professor Nigel Allinson, the PRaVDA project works to combine the most innovative imaging techniques and detectors to develop a unique medical imaging technology that will provide accurate proton therapy doses and real time 3D images of where radiation is absorbed at a tumour site.

Once again I would like to thank our teams across the world for their hard work over the last six months and for their dedication and commitment to the Company.

Dr Michael Sinclair  
Chief Executive Officer and Executive Chairman  
30 September 2016

## Consolidated statement of comprehensive income

	Unaudited 6 months to 30 June 16	Unaudited 6 months to 30 June 15	Audited Year to 31 Dec 2015
	£	£	£
<b>Revenue</b>	-	-	-
Cost of sales	-	-	-
<b>Gross profit</b>	-	-	-
Administrative expenses	(5,897,535)	(3,570,038)	(7,617,944)
Impairment charge for investment properties	-	(200,000)	(887,094)
<b>Operating loss</b>	<b>(5,897,535)</b>	<b>(3,770,038)</b>	<b>(8,505,038)</b>
Finance income	9,219	-	26,805
Finance costs	(47,843)	(117,280)	(151,154)
<b>Loss on ordinary activities before taxation</b>	<b>(5,936,159)</b>	<b>(3,887,318)</b>	<b>(8,629,386)</b>
Taxation	-	-	2,784,231
<b>Loss after taxation from continuing operations</b>	<b>(5,936,159)</b>	<b>(3,887,318)</b>	<b>(5,845,155)</b>
Discontinued operations			
Loss for the period from discontinued operations	-	(709,833)	(710,336)
Loss after discontinued operations	(5,936,159)	(4,597,151)	(6,555,491)
Loss for the period			
Equity shareholders of the parent company	(5,936,159)	(4,597,151)	(6,555,491)
Non-controlling interests	-	-	-
<b>Other comprehensive income</b>			
Exchange differences of the parent company	598,218	-	286,125
Total comprehensive loss for the period net of tax	(5,337,941)	(4,597,151)	(6,269,366)
<b>Total comprehensive loss attributable to:</b>			
Equity shareholders of the parent company	(5,337,941)	(4,597,151)	(6,269,366)
Non-controlling interests	-	-	-
	(5,337,941)	(4,597,151)	(6,269,366)

## Consolidated statement of financial position

	Unaudited 6 months to 30 June 16	Unaudited 6 months to 30 June 15	Audited Year to 31 Dec 2015
	£	£	£
<b>Non-current assets</b>			
Investment properties	310,000	997,093	310,000
Investments	-	-	-
Intangible assets	14,785,591	10,298,085	12,743,951
Plant and equipment	1,139,607	329,837	1,002,409
	16,235,198	11,625,015	14,056,360
<b>Current Assets</b>			
Trade and other receivables	1,043,693	665,926	521,733
Corporation tax R&D refund	1,978,251	-	2,784,231
Cash and cash equivalents	665,311	15,639,563	8,958,135
Inventories	8,641,122	2,651,130	4,418,289
	12,328,377	18,956,619	16,682,388
<b>Total assets</b>	<b>28,563,575</b>	<b>30,581,634</b>	<b>30,738,748</b>
<b>Current liabilities</b>			
Trade and other payables	(4,933,638)	(2,103,366)	(2,458,855)
Borrowings	(1,000,000)	(996,952)	(1,000,000)
	(5,933,638)	(3,100,318)	(3,458,855)
<b>Non-current liabilities</b>			
Borrowings	-	-	-
Deferred tax	-	-	-
	-	-	-
<b>Total liabilities</b>	<b>(5,933,638)</b>	<b>(3,100,318)</b>	<b>(3,458,855)</b>
<b>Net assets</b>	<b>22,629,937</b>	<b>27,481,316</b>	<b>27,279,893</b>
<b>Equity</b>			
Share capital	14,214,924	13,479,227	14,183,284
Share premium reserve	32,815,856	32,535,214	32,815,156
Share option reserve	3,828,971	2,318,717	3,045,779
Reverse acquisition reserve	11,038,204	11,038,204	11,038,204
Acquisition reserve	-	-	-
Exchange movements reserve	515,051	(129,023)	(83,166)
Accumulated losses	(39,783,069)	(31,761,023)	(33,719,363)
<b>Equity attributable to shareholders of the Parent Company</b>	<b>22,629,937</b>	<b>27,481,316</b>	<b>27,279,893</b>
<b>Non-controlling interests</b>	-	-	-
<b>Total equity funds</b>	<b>22,629,937</b>	<b>27,481,316</b>	<b>27,279,893</b>

## Consolidated statement of cash flows

	Unaudited 6 months to 30 June 16 £	Unaudited 6 months to 30 June 15 Continuing operations £	Unaudited 6 months to 30 June 15 Discontinued operations £	Audited Year to 31 Dec 2015 Continuing operations £	Audited Year to 31 Dec 2015 Discontinued operations £
<b>Cash flow from operating activities</b>					
Loss after taxation	(5,936,159)	(3,887,318)	(709,833)	(5,845,155)	(710,336)
<b>Adjustments:</b>					
Taxation	-	-	-	(2,784,231)	-
Finance costs	47,843	99,780	-	151,154	(17,500)
Finance income	(9,219)	-	-	(26,805)	-
Depreciation	127,090	61,732	-	33,754	145,881
Impairment charge for investment properties	-	200,000	-	887,094	-
Loss on disposal of subsidiary	-	-	537,075	-	367,080
Waiver of mortgage debt	-	-	-	-	-
Share based payments	783,192	498,033	-	1,025,098	-
<b>Cash flows from operations before changes in working capital</b>	<b>(4,987,253)</b>	<b>(3,887,318)</b>	<b>(709,833)</b>	<b>(6,559,092)</b>	<b>(214,875)</b>
Changes in inventories	(4,222,833)	(1,539,080)	-	(3,136,739)	30,500
Change in trade and other receivables	(521,960)	(74,240)	-	(57,145)	100,891
Change in trade and other payables	2,471,340	184,322	(321,396)	220,345	(80,225)
<b>Cash (used) / generated from operations</b>	<b>(7,260,706)</b>	<b>(4,456,771)</b>	<b>(494,154)</b>	<b>(9,532,631)</b>	<b>(163,709)</b>
Interest paid	(24,747)	(101,059)	-	(148,388)	-
Corporation tax receipt	805,980	-	-	-	-
<b>Cash flows from operating activities</b>	<b>(6,479,473)</b>	<b>(4,557,830)</b>	<b>(494,154)</b>	<b>(9,681,019)</b>	<b>(163,709)</b>
<b>Cash flows from investing activities:</b>					
Disposal of subsidiary undertaking	-	-	-	-	101,207
Disposal of plant and equipment	-	-	-	-	462,412
Cash disposed with subsidiary	-	-	-	-	(92)
Capital expenditure on intangible assets	(1,625,585)	(853,700)	-	(3,526,097)	-
Purchase of plant and equipment	(229,325)	(46,516)	-	(762,329)	-
Interest received	9,219	-	-	-	-
<b>Cash flows from investment activities</b>	<b>(1,845,691)</b>	<b>(900,216)</b>	<b>-</b>	<b>(4,288,426)</b>	<b>563,527</b>
<b>Cash flows from financing activities:</b>					
Equity share capital raised	32,340	20,126,614	-	21,062,614	-
Other short term loans	-	-	-	-	-
Intra Group Cash Transfers	-	(493,098)	493,098	400,874	(400,874)
<b>Cash flows from financing activities</b>	<b>32,340</b>	<b>19,633,516</b>	<b>493,098</b>	<b>21,463,488</b>	<b>(400,874)</b>
Decrease in cash and cash equivalents	(8,292,824)	14,175,470	(1,056)	7,494,043	(1,056)
Cash and cash equivalents at the beginning of the period	8,958,135	1,464,093	1,056	1,464,093	1,056
<b>Cash and cash equivalents at the end of the period</b>	<b>665,311</b>	<b>15,639,563</b>	<b>-</b>	<b>8,958,135</b>	<b>-</b>

A copy of the unaudited interim accounts for the six months ended 30 June 2016 is available from the Company's website at [www.advancedoncotherapy.com](http://www.advancedoncotherapy.com)