



OptiBiotix Health Plc  
HALFYEARLY REPORT FOR THE 6 MONTHS  
ENDED 31 MAY 2016

Developing a range of products to modify  
the human microbiome and improve human health



# Chairman's and Chief Executive Statement

Half Yearly Report for the six months to 31 May 2016



We are pleased to present OptiBiotix Health plc's Half Yearly report results for the six month period ended 31 May 2016.

OptiBiotix has made strong progress during this period in its strategy of developing compounds which modify the human Microbiome and commercialising these through partnering with food, health, wellbeing, and pharmaceutical companies.

## KEY ACHIEVEMENTS

During the period to date we have achieved a number of key objectives which continue to build shareholder value. These include:

- A fundraising in February 2016 which raised £1m from the placing of 1,282,051 new ordinary shares at 78p to capitalise on the growing number of opportunities arising in the microbiome space.
- A substantive increase in our IP portfolio which now covers 44 patents across 14 families, 8 strain registrations, and 7 trademarks.
- The completion of two commercial agreements with multinationals, the first with KSF, owners of the Slimfast brand; the second with DSM, the world's leading supplier of nutritional ingredients.
- The appointment of Tim Spector, author of the Diet Myth, to our Scientific Advisory Group, opening up opportunities for new collaborations and bringing an ability to communicate complex scientific data to a wider public
- Acquisition of the exclusive rights to intellectual property developed by The University of Manchester in skin health, creating a majority owned joint venture ('JV') called SkinBiotix Limited
- The development of sweet calorie free natural healthy sugars (SweetBiotix®) with safety and sweetness confirmed by human taste studies
- The development of OptiBiotics®, sugars which can modulate the growth rate and biological activity of specific strains in the microbiome accentuating their functional properties and health benefits. This creates the opportunity for targeted modulation of the microbiome and has the potential to substantially increase the company's value.

## RESULTS

OptiBiotix results for the 6 months ended 31 May 2016 are set out in the Consolidated Statement of Comprehensive Income. It shows a loss after tax for the period of £0.61 million. The loss after tax and after adding back the non-cash items, amortisation charge and share based payment expense was £0.55 million. Cashflow remains tightly controlled with a focus on building shareholder value through investment in R&D, IP, and in licensing opportunities. The Group's cash position remains strong at £3.55 million which is sufficient to fund its existing research and development programs.

## BOARD AND MANAGEMENT

We believe that we have a well-balanced Board with a focus on the domain expertise in the founder and Chief Executive Stephen O'Hara, Commercial Director Jim Laird, Non-Executive Director Dr Gareth Barker and Dr Sofia Kolida as Director of Research and Development. This was supplemented in November 2015 with the appointment of Peter Wennström, one of the world's leading experts in functional food innovation and marketing, as a Non-Executive Director. They have been complemented by the CFO Mark Collingbourne, Adam Reynolds and David Evans as Chairman.

We anticipate further additions to the management team and the Board, which will evolve in line with the continued growth and development of the company.

David Evans is stepping down from the Board as of today reflecting a personal desire to reduce his overall number of commitments. Adam Reynolds will assume the role of Chairman in the interim. The board would like to take this opportunity to thank David Evans for his substantial effort, contribution and support since the conception of the company through to its admission to AIM in July 2014.

## OUTLOOK

The last six months has seen increased research interest in the microbiome and a growing number of publications showing its potential to prevent, manage, and treat human disease. With the US Government announcing a \$0.5bn Microbiome initiative in the spring of 2016 we anticipate further discoveries, media interest, and opportunities across a wider range of diseases including cancers, autism, multiple sclerosis, and Alzheimer's disease. This has led to growth forecasts for the Human Microbiome Market of a CAGR of 22.3% (Markets and Markets) with commentators describing the opportunities open to microbiome companies as being in the region of trillion dollars. Whilst accurate figures are not known, these forecasts reflect industry sentiment on the scale of the opportunity.

# Chairman's and Chief Executive Statement (continued)

Half Yearly report for the six months to 31 May 2016

OptiBiotix has benefited from this interest in the microbiome with a number of industry features in the mainstream press. With a growing portfolio of products reaching commercialisation in high public interest areas we anticipate further industry coverage throughout 2016.

OptiBiotix recognised the potential of the Microbiome and raised additional funding in February 2016 to leverage its existing technology platforms and extend its reach into other application areas and capitalise on developing opportunities. This led to the acquisition of intellectual property developed by The University of Manchester in skin health, creating a majority owned joint venture ("JV") called SkinBiotix Limited. This is expected to create new product opportunities in multi-billion dollar global markets including Skincare (\$121bn), Health Care Acquired Infections (\$82bn), Eczema (\$3.8bn), Psoriasis (\$7.4bn), and Wound care (\$18.3bn). The opportunity in this area was highlighted by Lord O'Neils report into Antimicrobial resistance in May 2016 which identified the high human (50,000 lives) and financial (\$1bn) costs to health services annually. Since the creation of the JV with The University of Manchester, SkinBiotix has identified and patented microbial proteins which have the potential to prevent Health Care Acquired Infections ("HCAI") caused by antimicrobial resistant ("AMR") superbugs such as MRSA. These proteins prevent skin damage, stop pathogenic bacteria from growing, and prevent it from reattaching, reducing the risk of reinfection with AMR superbugs. OptiBiotix's Board see this as an exciting advance on existing therapies and the skin microbiome as a significant growth opportunity.

The addition of skin Microbiome technology creates four divisions each with its own technology platform and development programs designed to create commercial products with an established scientific evidence base and proof of human efficacy. As these divisions grow in substance and start making a significant contribution to group earnings we will consider forming new legal entities with the potential for a separate public listing. The board believe that shareholder value could be maximised by adopting such a strategy whereby existing shareholders could, in the event of a successful flotation, ultimately hold shares directly in OptiBiotix and one or more of its divisions.

## DEVELOPMENT PROGRAMMES

Our cholesterol product successfully completed human studies at the end of 2015 demonstrating commercial potential as a safe, easy to use, low cost cholesterol, and blood pressure reducing supplement. These results create opportunities for a single product for both conditions (high cholesterol and high blood pressure), or two different products targeting separate conditions. Commercial discussions and due diligence with potential partners across both consumer and pharma have indicated a wider range of opportunities than initially envisaged. These include:

- i. Combination products where the additional ingredient provides performance or additional consumer benefits such as reducing multiple cardiovascular risk factors in a single presentation
- ii. The potential to improve statin efficacy potentially allowing lower statin dosage, reducing cost, and limiting side effects whilst improving statin compliance.
- iii. The potential to reduce Clostridium difficile infection by the formation of secondary bile acids which inhibit the vegetative growth of Clostridium

These discussions have increased the number of partnering opportunities and commercial discussions which will allow OptiBiotix to fully exploit the scale of the opportunity. We anticipate reporting on these commercial discussions in the forthcoming months

OptiBiotix's sugar **development platform** has continued to progress rapidly under the leadership of Dr Sofia Kolida and has been extended to include:

- **SweetBiotix®** – sweet natural healthy sugars not digested in the human gut and hence calorie free
- **OptiBiotics®** – a combination of a targeted probiotic and prebiotic which selectively enhances the *in vivo* growth of the probiotic, accentuating its functional properties and health benefits

Work to date has demonstrated our ability to synthesise sweet calorie free natural healthy sugars (SweetBiotix®) with safety and sweetness confirmed by human taste studies.

# Chairman's and Chief Executive Statement (continued)

Half Yearly report for the six months to 31 May 2016

Further work is ongoing to develop other sugars and to modify existing structures to accentuate sweetness further. This is an innovative concept which has the potential to address international concerns over the impact of sugar on obesity, with the prospect of replacing 'unhealthy' sugars in existing products with non digestible, low calorie, healthy, SweetBiotix®. Having demonstrated the synthesis and purification of SweetBiotix® we are now actively engaging with commercial partners looking for safer, healthy alternatives to existing products.

Our R&D teams have made rapid progress with the **OptiBiotic®** concept directed at companies in the probiotics functional food market who have benefited from the global trend for fortified and functional foods, a market that is expected to be worth in excess of \$46.55bn by 2020 (Markets and Markets). Our research has confirmed the ability of a targeted prebiotic to enhance the numbers of a specific microbial strain, and most important its biological activity related to a health benefit. To our knowledge, this is the first time this effect has been demonstrated and creates the opportunity for designer prebiotics which can modulate targeted elements of the microbiome. This is a significant development and has the potential to substantially increase the company's value.

The aim of all these development programmes is to establish a scientific evidence base for mechanism of action, proof of safety and human efficacy, and low cost manufacturability. As products move through the development process risk is reduced leading to both an increase in value and greater interest from corporate partners. In the last six months this has led to completion of two commercial agreements with multinationals, the first with KSF, owners of the Slimfast brand; the second with DSM, the worlds leading supplier of nutritional ingredients. These agreements bring in short term revenue to cover development costs and create a route to market for our products with established brand suppliers and the potential to generate multiple future revenue streams. They often involve extensive due diligence and their successful conclusion demonstrates industry interest and confidence in OptiBiotix's technology platforms. As our development programmes progress we anticipate further commercial deals with global partners leading to the development of new products creating multiple revenue streams across all divisions.

In the last six months we have added substantially to our existing IP portfolio which now covers 44 patents across 14 families, 8 strain registrations, and 7 trademarks. We anticipate filing further patents and internationalising our IP portfolio where we feel there is commercial value. We will continue to explore opportunities to in-license or acquire new technologies or IP to support our continued growth.

The Board believes OptiBiotix is at the leading edge of an emerging market, forecast to become one of the world's fastest growth areas. OptiBiotix has made good progress in the last six months and now has a broad range of platforms with numerous product and numerous partnering opportunities. This builds company value and de-risks the company as if one platform or product was unsuccessful the company would simply shift its focus to other platforms and products.

The Board believes we are building a microbiome business with significant value for shareholders with a strategy which best maximise's the value in each division and a diversity of IP and Commercial relationships which provides shareholders with multiple opportunities.

On behalf of everyone at OptiBiotix Health plc we thank you for your support and look forward to an exciting future.

**D Evans and S O'Hara**  
25 August 2016

# Consolidated Statement of Comprehensive Income

For the period to 31 May 2016

Continuing Operations	Notes	6 months to 31 May 2016 Unaudited £	6 months to 31 May 2015 Unaudited £	Year to 30 November 2015 Audited £
Revenue		88,252	–	28,200
Cost of sales		–	–	–
Gross Profit		88,252	–	28,200
Administrative expenses		(802,083)	(514,431)	(1,451,451)
Operating loss		(713,831)	(514,431)	(1,423,251)
Finance income / (costs)		59	7	28
Loss before Income tax		(713,772)	(514,424)	(1,423,223)
Income tax		98,529	–	142,594
Loss for the period		(615,243)	(514,424)	(1,280,629)
Other Comprehensive Income		–	–	–
Total comprehensive income for the period		(615,243)	(514,424)	(1,280,629)
Total comprehensive income attributable to the owners of the company		(615,243)	(514,424)	(1,280,629)
Loss per share				
Basic & Diluted loss per share – pence	4	0.796	0.708	1.75

# Consolidated Statement of Financial Position

For the period to 31 May 2016

ASSETS	Notes	As at 31 May 2016 Unaudited £	As at 31 May 2015 Unaudited £	As at 30 November 2015 Audited £
<b>Non-current assets</b>				
Intangibles		2,089,916	2,259,369	2,146,401
Property, plant & equipment		2,012	2,472	2,012
		<b>2,091,928</b>	<b>2,261,841</b>	<b>2,148,413</b>
<b>CURRENT ASSETS</b>				
Trade and other receivables		304,331	28,596	62,597
Current tax asset		207,232	94,107	120,000
Cash and cash equivalents		3,556,264	2,470,577	2,040,888
		<b>4,067,827</b>	<b>2,593,280</b>	<b>2,223,485</b>
<b>TOTAL ASSETS</b>		<b>6,159,755</b>	<b>4,855,121</b>	<b>4,371,898</b>
<b>EQUITY</b>				
<b>Shareholders' Equity</b>				
Called up share capital	6	7,192,455	7,100,284	7,117,315
Share premium		6,199,192	3,812,596	3,863,687
Share based payment reserve		398,441	218,698	383,435
Non Controlling Interest		480	–	–
Merger relief reserve		1,500,000	1,500,000	1,500,000
Accumulated deficit		(9,662,885)	(8,281,437)	(9,047,642)
<b>Total Equity</b>		<b>5,627,683</b>	<b>4,350,141</b>	<b>3,816,795</b>
<b>LIABILITIES</b>				
<b>Current liabilities</b>				
Trade and other payables		114,089	53,106	125,823
		<b>114,089</b>	<b>53,106</b>	<b>125,823</b>
<b>Non-current liabilities</b>				
Deferred tax liability		417,983	451,874	429,280
		<b>417,983</b>	<b>451,874</b>	<b>429,280</b>
<b>TOTAL LIABILITIES</b>		<b>532,072</b>	<b>504,980</b>	<b>555,103</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>6,159,755</b>	<b>4,855,121</b>	<b>4,371,898</b>

# Consolidated Statement of Changes in Equity

For six months to 31 May 2016

	Called up Share capital £	Share Premium £	Share- based Payment reserve £	Non controlling interest £	Merger Relief Reserve £	Accu- mulated deficit £	Total Equity £
<b>Balance at 30 November 2014</b>	7,078,346	3,746,781	90,970	–	1,500,000	(7,767,013)	4,649,084
Loss for the period	–	–	–	–	–	(514,424)	(514,424)
Issue shares during the period	21,938	65,815	–	–	–	–	87,753
Share based payment	–	–	127,728	–	–	–	127,728
<b>Balance at 31 May 2015</b>	7,100,284	3,812,596	218,698	–	1,500,000	(8,281,437)	4,350,141
Loss for the period	–	–	–	–	–	(766,205)	(766,205)
Exercise of warrants	17,031	51,091	–	–	–	–	68,122
Grant of share options and warrants	–	–	164,737	–	–	–	164,737
<b>Balance at 30 November 2015</b>	7,117,315	3,863,687	383,435	–	1,500,000	(9,047,642)	3,816,795
Loss for the period	–	–	–	–	–	(615,243)	(615,243)
Issue shares during the period	65,641	2,434,359	–	–	–	–	2,500,000
Skinbiotix	–	–	–	480	–	–	480
Exercise of warrants	9,499	28,496	–	–	–	–	37,995
Share based payment	–	–	15,006	–	–	–	15,006
Share issue expenses	–	(127,350)	–	–	–	–	(127,350)
<b>Balance at 31 May 2016</b>	<b>7,192,455</b>	<b>6,199,192</b>	<b>398,441</b>	<b>480</b>	<b>1,500,000</b>	<b>(9,662,885)</b>	<b>5,627,683</b>

# Consolidated Statement of Cash Flows

For the period to 31 May 2016

Notes	6 months to 31 May 2016 Unaudited £	6 months to 31 May 2015 Unaudited £	Year to 30 November 2015 Audited £
<b>Reconciliation of loss before income tax to cash outflow from operations</b>			
Operating loss	(713,831)	(565,284)	(1,423,251)
(Increase)/decrease in trade and other receivables	(241,734)	(23,944)	(57,946)
Decrease/(increase) in trade and other payables	(11,730)	(24,507)	48,210
Share Option expense	15,003	127,728	292,465
Depreciation	–	347	808
Amortisation of patents	56,484	–	112,968
<b>Net cash outflow from operations</b>	<b>(895,808)</b>	<b>(485,660)</b>	<b>(1,026,746)</b>
Interest received	59	7	28
<b>Net cash outflow from operating activities</b>	<b>(895,749)</b>	<b>(485,653)</b>	<b>(1,026,718)</b>
<b>Cash flows from investing activities</b>			
Purchases of property, plant and equipment	–	(1,965)	(1,965)
Acquisition of subsidiary net of cash	480	–	–
<b>Net cash (outflow)/inflow from investing activities</b>	<b>480</b>	<b>(1,965)</b>	<b>(1,965)</b>
<b>Cash flows from financing activities</b>			
Share issues	2,410,645	87,753	155,875
<b>Net cash inflow from financing activities</b>	<b>2,410,645</b>	<b>87,753</b>	<b>155,875</b>
<b>Taxation</b>	<b>–</b>	<b>–</b>	<b>43,254</b>
<b>Increase/(decrease) in cash and equivalents</b>	<b>1,515,376</b>	<b>(399,865)</b>	<b>(829,554)</b>
Cash and cash equivalents at beginning of year	2,040,888	2,870,442	2,870,442
Cash and cash equivalents at end of year	3,556,264	2,470,577	2,040,888



# Notes to the Half Yearly report

For the period to 31 May 2016

## 1. General Information

Optibiotix Health Plc is a company incorporated and domiciled in England and Wales. The company's offices are in York. The company is listed on the AIM market of the London Stock Exchange (ticker: OPTI).

The financial information set out in this Half Yearly report does not constitute statutory accounts as defined in Section 434 of the Companies Act 2006. The group's statutory financial statements for the year ended 30 November 2015, prepared under International Financial Reporting Standards ("IFRS"), have been filed with the Registrar of Companies. The auditor's report on those financial statements was unqualified and did not contain statements under Sections 498(2) and 498 (3) of the Companies Act 2006.

Copies of the annual statutory accounts and the Half Yearly report can be found on the Company's website at <http://www.optibiotix.com/>.

## 2. Basis of preparation and significant accounting policies

This Half Yearly report has been prepared using the historical cost convention, on a going concern basis and in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union, using accounting policies which are consistent with those set out in the financial statements for the year ended 30 November 2015.

### New and amended standards adopted by the group

There are no IFRSs or IFRIC interpretations that are effective for the first time in this financial period that would be expected to have a material impact on the group.

## 3. Segmental Reporting

In the opinion of the directors, the group has one class of business, being that of research and development. The group's primary reporting format is determined by the geographical segment according to the location of its establishments. There is currently only one geographic reporting segment, which is the UK. All costs are derived from the single segment.

## 4. Earnings per Share

Basic earnings per share is calculated by dividing the earnings attributable shareholders by the weighted average number of ordinary shares outstanding during the period.

Reconciliations are set out below:

	6 months to 31 May 2016 Unaudited	6 months to 31 May 2015 Unaudited	Year to 30 November 2015 Audited
<b>Basic and diluted EPS</b>			
Earnings attributable to ordinary shareholders	(615,243)	(514,424)	(1,280,629)
Weighted average number of shares	77,261,548	72,684,379	73,167,562
<b>Loss per-share – pence</b>	<b>0.796p</b>	0.708p	1.75p

Basic and diluted earnings per share are the same, since where a loss is incurred the effect of outstanding share options and warrants is considered anti-dilutive and is ignored for the purpose of the loss per share calculation. As at 31 May 2016 there were 10,345,237 outstanding share options and 1,618,036 outstanding share warrants.

# Notes to the Half Yearly report (continued)

For the period to 31 May 2016

## 5. Investments

On 17 March 2016 the group reduced its shareholding in its subsidiary, SkinBiotix Limited, as a result of acquiring the exclusive rights to intellectual property developed by The University of Manchester in skin health and creating a majority owned joint venture ('JV'). Under the terms of the agreement, the group has invested £260,000 into the JV by subscribing for ordinary shares and will own 52% of SkinBiotix Limited, with the remaining 48% owned by the University of Manchester and key researchers. The JV did not have any profits or losses for the period.

## 6. Share Capital

Issued share capital comprises:

	6 months to 31 May 2016 Unaudited £	6 months to 31 May 2015 Unaudited £	Year to 30 November 2015 Audited £
Ordinary shares of 2p each – 77,986,509	1,559,730	1,467,560	1,484,591
Deferred shares of 19p each – 26,001,739	4,940,330	4,940,330	4,940,330
Deferred shares of .90p each – 63,373,961	570,366	570,366	570,366
Deferred shares of 0.09p each – 135,587,293	122,028	122,028	122,028
	<b>7,192,454</b>	7,100,284	7,117,315

During the six months to 31 May 2016 the company issued ordinary shares of £0.02 each listed, exercised at a price of £0.08 per share in the capital of the company following the exercise of warrants:

Date issued	Number
26/01/2016	125,000
12/02/2016	150,107
19/02/2016	65,500
26/02/2016	44,959
24/03/2016	5,000
20/04/2016	53,125
25/05/2016	31,250
	<b>474,941</b>

On 4 December 2015 the company issued and allotted 2,000,000 ordinary shares of £0.02 each respectively, exercised at a price of £0.75 per share in the capital of the company in a share placing.

On 4 February 2016 the company issued and allotted 1,282,051 ordinary shares of £0.02 each respectively, exercised at a price of £0.78 per share in the capital of the company in a share placing.

# Notes to the Half Yearly report (continued)

For the period to 31 May 2016

## 7. Post balance sheet events

On 30 June 2016 the company issued and allotted 29,975 ordinary shares of 2 pence each exercised at a price of 8 pence per share in the capital of the Company following the exercise of warrants.

On 26 July 2016 OptiBiotix completed an investment to acquire 51% of The Healthy Weight Loss Company, and see this as a platform to incubate new technological solutions and develop wider product applications in weight management. Under the terms of the agreement, the group has invested £75,000 into the Joint Venture by subscribing for ordinary shares and will own 51% of The Healthy Weight Loss company, with the remaining 49% owned by the founding members.

On 12 August 2016 the company issued and allotted 100,000 ordinary shares of 2 pence each exercised at a price of 8 pence per share in the capital of the Company following the exercise of warrants.



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