

Pixium Vision

First patient implanted with Iris II retinal prosthesis

First Iris II implant

Medical technology

Pixium has announced it has successfully implanted the first patient with its second-generation epi-retinal implant, Iris II. This is the first patient enrolled in a study of up to 10 patients with retinitis pigmentosa or other retinal dystrophies. Pixium filed for CE mark approval in December 2015 for Iris II.

Year end	Revenue (€m)	PBT* (€m)	EPS* (€)	DPS (€)	P/E (x)	Yield (%)
12/14	2.4	(11.6)	(1.18)	0.0	N/A	N/A
12/15	3.3	(15.6)	(1.23)	0.0	N/A	N/A
12/16e	4.4	(16.5)	(1.29)	0.0	N/A	N/A
12/17e	6.6	(19.9)	(1.56)	0.0	N/A	N/A

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

First perception of light

The pivotal trial for Iris II recently enrolled and successfully implanted its first patient. Iris II is an epi-retinal implant that uses signals from a video camera to stimulate the nerves in the retina to simulate the image captured by the camera. The implant was made into a 58-year-old retinitis pigmentosa patient, who reported first perception of light after many years in the darkness; the patient will now receive training to learn how to interpret the light signals.

Upgraded technology

Iris II is expected to provide greater acuity and more realistic synthetic vision by providing more electrodes (150 vs 50) than the Iris I and incorporating a biomimetic camera, which captures continuous video of the changes in the surrounding environment. Prior cameras captured traditional video frames. Pixium plans to enrol up to 10 patients with retinitis pigmentosa or other retinal dystrophies in its current trial. Iris II was submitted for CE mark in December 2015, and the company expects approval in mid-2016.

Prima on track

Pixium is also advancing its sub-retinal implant (Prima) in preclinical studies. The recently completed chronic thermal safety study was conducted by Pixium's partners at Stanford University, and revealed positive chronic thermal safety. The first-in-man implant is expected in Q316.

Valuation: Adjusted to €10.50 per share

Pixium is well capitalised with €24.4m in cash at FY15, which should be sufficient to progress the Iris programme to CE mark approval and conduct human studies with the Prima implant. We expect additional capital to be required for commercialisation in FY17. We have updated our risk-adjusted NPV model to reflect latest cash (€24m) and rolled it forward to 2016, resulting in a new valuation of €10.50/share (vs €10.27/share). Our model has been updated for FY15 results, with the key change to forecasts being a reduced R&D spend in FY16, to €18m (vs €22m previously), to reflect the current run-rate. R&D in FY17 is forecast at €20m.

25 February 2016

Price €4.76
Market cap €60m

Net cash (€m) at 31 December 2015	24.4
Shares in issue	12.7m
Free float	26%
Code	PIX
Primary exchange	Euronext Paris
Secondary exchange	N/A

Share price performance



%	1m	3m	12m
Abs	(5.2)	(8.8)	(35.2)
Rel (local)	(1.2)	4.8	(24.3)
52-week high/low		€7.40	€4.50

Business description

Pixium Vision is a French medical device company developing retinal implants for patients with retinitis pigmentosa and macular degeneration. A CE mark application was submitted on its lead product, Iris. A sub-retinal implant is being developed simultaneously.

Next events

Q116 results	27 April 2016
Iris II CE mark approval	Mid-2016
Prima human study	Q316

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Pixium Vision is a research client of Edison Investment Research Limited

Exhibit 1: Financial summary

	€000s	2013	2014	2015	2016e	2017e	2018e
Year end 31 December		IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS							
Revenue		1,478	2,427	3,296	4,440	6,628	22,846
Cost of Sales		0	0	0	0	(765)	(2,636)
Gross Profit		1,478	2,427	3,296	4,440	5,863	20,210
R&D expenses		(6,590)	(10,963)	(15,169)	(17,761)	(20,426)	(21,958)
SG&A expenses		(1,035)	(3,111)	(3,824)	(4,015)	(6,023)	(9,034)
EBITDA		(6,147)	(10,834)	(14,553)	(16,203)	(19,392)	(9,485)
Operating Profit (before GW and except)		(6,147)	(11,647)	(15,697)	(16,470)	(19,775)	(10,037)
Intangible Amortisation		0	0	0	(866)	(810)	(744)
Exceptionals		0	0	0	0	0	0
Operating Profit		(6,147)	(11,647)	(15,697)	(17,336)	(20,585)	(10,782)
Other		0	0	0	0	0	0
Net Interest		1	36	52	0	(139)	(139)
Profit Before Tax (norm)		(6,146)	(11,611)	(15,645)	(16,470)	(19,914)	(10,177)
Profit Before Tax (FRS 3)		(6,146)	(11,611)	(15,645)	(17,336)	(20,725)	(10,921)
Tax		0	0	0	0	0	0
Profit After Tax (norm)		(6,146)	(11,611)	(15,645)	(16,470)	(19,914)	(10,177)
Profit After Tax (FRS 3)		(6,146)	(11,611)	(15,645)	(17,336)	(20,725)	(10,921)
Average Number of Shares Outstanding (m)		27.3	9.8	12.7	12.7	12.7	12.7
EPS - normalised (€)		(0.23)	(1.18)	(1.23)	(1.29)	(1.56)	(0.80)
EPS - FRS 3 (€)		(0.23)	(1.18)	(1.23)	(1.36)	(1.63)	(0.86)
Dividend per share (€)		0.0	0.0	0.0	0.0	0.0	0.0
BALANCE SHEET							
Fixed Assets		8,965	9,932	11,087	12,122	13,160	14,160
Intangible Assets		8,277	9,259	8,822	8,104	7,445	6,854
Tangible Assets		641	627	2,072	3,825	5,523	7,113
Other		47	46	193	193	193	193
Current Assets		11,327	44,867	27,682	9,388	12,704	15,863
Stocks		0	0	0	500	1,000	1,500
Debtors		0	0	0	0	0	0
Cash		9,420	42,132	24,354	5,560	8,376	11,035
Other		1,907	2,735	3,328	3,328	3,328	3,328
Current Liabilities		(2,038)	(4,050)	(3,498)	(3,498)	(3,498)	(3,498)
Creditors		(1,379)	(1,729)	(2,159)	(2,159)	(2,159)	(2,159)
Short term borrowings		0	0	0	0	0	0
Short term leases		0	0	0	0	0	0
Other		(659)	(2,321)	(1,339)	(1,339)	(1,339)	(1,339)
Long Term Liabilities		(30)	(245)	(315)	(315)	(25,315)	(40,315)
Long term borrowings		0	0	0	0	(25,000)	(40,000)
Long term leases		0	0	0	0	0	0
Other long term liabilities		(30)	(245)	(315)	(315)	(315)	(315)
Net Assets		18,224	50,504	34,956	17,696	(2,949)	(13,790)
CASH FLOW							
Operating Cash Flow		(5,188)	(8,389)	(15,532)	(16,822)	(20,010)	(10,102)
Net Interest		0	0	0	0	0	0
Tax		0	0	0	0	0	0
Capex		(303)	(1,773)	(2,299)	(2,168)	(2,231)	(2,297)
Acquisitions/disposals		0	0	0	0	0	0
Financing		11,822	42,705	56	0	0	0
Dividends		0	0	0	0	0	0
Other		1	169	(3)	197	58	58
Net Cash Flow		6,332	32,712	(17,778)	(18,793)	(22,184)	(12,340)
Opening net debt/(cash)		(3,088)	(9,420)	(42,132)	(24,354)	(5,560)	16,624
HP finance leases initiated		0	0	0	0	0	0
Other		0	0	0	(1)	0	0
Closing net debt/(cash)		(9,420)	(42,132)	(24,354)	(5,560)	16,624	28,965

Source: Edison Investment Research, Pixium Vision accounts

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