

Quantum Genomics

Strategic update

Pharma & biotech

Accelerating timelines

Quantum Genomics made a number of announcements when it presented its three-year strategic plan on 19 April 2018. Importantly, it is accelerating both its hypertension and heart failure programmes. The NEW-HOPE study in 250 hypertensive overweight patients is expected to complete patient dosing by the end of the year (previously Q119). It is also moving forward with the Phase IIb trial in heart failure without waiting for the final results due to the safety data seen so far and positive results in recent animal studies. The study is expected to launch in Q418 with results expected in H220.

	Revenue	PBT*	EPS*	DPS	P/E	Yield
Year end	(€m)	(€m)	(€)	(€)	(x)	(%)
12/16	0.0	(6.2)	(0.60)	0.0	N/A	N/A
12/17	0.0	(10.3)	(0.93)	0.0	N/A	N/A
12/18e	0.0	(11.4)	(0.73)	0.0	N/A	N/A
12/19e	0.0	(16.2)	(1.00)	0.0	N/A	N/A

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

NEW-HOPE enrolling faster than expected

In November, Quantum Genomics announced that it had recruited the first patients into the NEW-HOPE trial in 250 hypertensive overweight patients across 25 major US hospitals, with a primary endpoint of change from baseline in office systolic blood pressure (SBP) at week eight. Recruitment is outpacing internal projections and it now believes it can complete patient dosing by the end of 2018 (previously Q119). We now expect data in Q119 (previously H119).

Moving forward with Phase IIb in heart failure

The company will move forward with the Phase IIb in heart failure without waiting for the final results of its Phase IIa trial (QUID-HF) due to the safety data seen so far in humans and positive results from recent animal studies. The trial will include a larger number of patients with heart failure following myocardial infarction. Additional details on the trial design are expected in June.

A new CEO

Earlier in April, the company announced that it is separating the chairman and CEO positions, so Jean-Philippe Milon, who had been the part-time COO, now becomes CEO. Lionel Segard remains as chairman. The new CEO brings over three decades of experience in the biopharmaceutical industry, most notably as president of global licensing and M&A at Bayer Pharmaceuticals. This experience is especially key as Quantum Genomics expects to sign a strategic partnership or licence agreement within the next 24 months.

Valuation: €201m or €18.31 per share

We are maintaining our valuation of €201m or €18.31 per share as we have not changed our estimates following these announcements. We may revisit our valuation following data from the QUID-HF and NEW-HOPE trials.

23 April 2018

Price	€2.60
Market cap	€29m
Net cash (€m) at 31 December 2017	11.1

 Net cash (€m) at 31 December 2017
 11.1

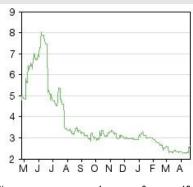
 Shares in issue
 11.0m

 Free float
 84.3%

 Code
 ALQGC

Primary exchange Euronext Paris
Secondary exchange OTCQX

Share price performance



%	1m	3m	12m
Abs	8.6	(13.3)	(43.4)
Rel (local)	5.6	(11.5)	(47.3)
52-week high/low		€8.1	€2.3

Business description

Quantum Genomics is a biopharmaceutical company developing QGC001, a brain aminopeptidase A inhibitor for the treatment of hypertension and heart failure. Its mechanism is implicated in the 25% of patients resistant to treatment

Next events

nitiation of Phase IIb heart failure study	Q418
NEW-HOPE data	Q119

Analysts

Maxim Jacobs +1 646 653 7027 Nathaniel Calloway +1 646 653 7036

healthcare@edisongroup.com

Edison profile page

Quantum Genomics is a research client of Edison Investment Research Limited



Faster development

Quantum Genomics has announced that the NEW-HOPE trial is enrolling very rapidly, exceeding its expectations, with completion of patient dosing expected by the end of 2018 so that we now expect data in Q119 (previously H119). We view this as a positive sign as it is typically a signal of physician confidence in a therapy. As a reminder, the NEW-HOPE trial is on 250 hypertensive overweight (BMI 25-45kg/m²) patients, with a primary endpoint of change from baseline in office SBP at week eight. SBP at screening will have to be 145-170mmHg if previously untreated, or 130-150mmHg if treated. Following a two-week, run-in period in which there would be no treatment, SBP would need to be 145-170mmHg. Patients will start off on 250mg twice a day (BID) for two weeks and then either continue at that dose or increase to 500mg BID for another two weeks. Following that, patients would either be on 250mg BID, 500mg BID or 500mg BID with 25mg of hydrochlorothiazide (HCT), an often-used diuretic, added in.

The company expects that at least 50% of patients will be self-identified as African American or Hispanic. African Americans have a higher prevalence of hypertension compared to other groups, but also, along with Hispanics, are less likely to have their hypertension under control compared to their white counterparts.

Quantum Genomics also announced that it is moving forward with the Phase IIb in heart failure without waiting for the final results of its 75-patient Phase IIa trial (QUID-HF) due to the safety data seen so far in humans and positive results from recent animal studies. The trial will include a larger number of patients with heart failure following myocardial infarction. Additional details on the trial design are expected in June.

Other announcements include that the World Health Organization has approved the generic name for QGC001, which is now firibastat. Also, the company is working on developing a controlled-release version of firibastat, which would allow for once-daily dosing (currently, it is twice daily) and make the product more attractive for potential partners and patients. It intends to start a clinical trial of that formulation in healthy volunteers to assess pharmacokinetics by the end of the year.

Finally, earlier in April, the company announced that it is separating the chairman and CEO positions, so Jean-Philippe Milon, who had been the part-time COO, now becomes CEO. Lionel Segard remains as chairman. The new CEO brings over three decades of experience in the biopharmaceutical industry, most notably as president of global licensing and M&A at Bayer Pharmaceuticals (other positions at Bayer include president of general medicine, SVP of global strategic marketing and president of Bayer Healthcare, France). This experience is especially key as Quantum Genomics expects to sign a strategic partnership or licence agreement within the next 24 months.

Valuation

We are maintaining our valuation of €201m or €18.31 per share as we have not changed our estimates following these announcements. We may revisit our valuation following data from the QUID-HF and NEW-HOPE trials.



Exhibit 1: Quantum Go	enomics valuation	table						
Product	Main Indication	Local	Status	Probability of success	Launch year	Peak sales (\$m)	Patent protection	rNPV
Firibastat (QGC001)	Hypertension	US	Phase II	15%	2023	\$1,110	2031	€118.27
Firibastat (QGC001)	Hypertension	Europe	Phase II	15%	2023	\$959	2031	€100.33
Firibastat (QGC001)	Development costs							(€124.76)
Firibastat (QGC001)	Heart failure	US	Phase IIa	15%	2023	\$574	2031	€75.27
Firibastat (QGC001)	Heart failure	Europe	Phase IIa	15%	2023	\$687	2031	€89.31
Firibastat (QGC001)	Development costs							(€68.31)
Total								€190.10
Cash and cash equivalents (31 [December 2017) (€m)							€11.09
Total firm value (€m)								€201.19
Total shares (m)								10.99
Value per basic share (€m)								€18.31
Source: Edison Investmen	t Research							

Financials

Quantum ended 2017 with €11.1m in cash and investments. In March, it announced an equity line of credit with Kepler Cheuvreux, which could raise €24m over three years in four tranches. The initial tranche of €6m does not require shareholder approval, but the final three will be subject to a vote at the next meeting of shareholders later this year (in 2017, the shareholder meeting occurred in June). The company has stated it believes that if the equity line is approved by shareholders, it would be funded through the end of 2020. This will be somewhat dependent on whether additional trials are conducted by the company or a partner. As late-stage cardiovascular trials are extremely expensive to conduct, we expect further development (such as Phase III trials) to be financed via a partnership.



€000s	2016	2017	2018e	2019
Year end 31 December	PCG	PCG	PCG	PC
PROFIT & LOSS				
Revenue	0	0	0	(
Cost of Sales	0	0	0	(
Gross Profit	0	0	0	(
EBITDA	(6,216)	(10,292)	(10,948)	(14,792
Operating Profit (before amort. and except.)	(6,216)	(10,292)	(10,948)	(14,792
Intangible Amortisation	0	0	(10,540)	(14,732
Other	<u></u>	0	0	(
Exceptionals	0	0	0	
	(6,216)	(10,292)	(10,948)	(14,792
Operating Profit Net Interest	(0,210)	(10,292)	(481)	(14,792
Other	18		(401)	
		(176)	-	(40.000
Profit Before Tax (norm)	(6,216)	(10,292)	(11,429)	(16,232)
Profit Before Tax (FRS 3)	(6,198)	(10,468)	(11,429)	(16,232)
Tax	958	1,150	1,486	2,110
Deferred tax	0	0	0	(11.100
Profit After Tax (norm)	(5,258)	(9,142)	(9,943)	(14,122
Profit After Tax (FRS 3)	(5,240)	(9,318)	(9,943)	(14,122)
Average Number of Shares Outstanding (m)	8.7	9.9	13.6	14.1
EPS - normalised (c)	(59.79)	(92.81)	(73.20)	(99.97)
EPS - FRS 3 (€)	(0.60)	(0.95)	(0.73)	(1.00
Dividend per share (c)	0.0	0.0	0.0	0.0
BALANCE SHEET	0.0			
	704	420	40.4	404
Fixed Assets	701	439	434	431
Intangible Assets	142	91	91	91
Tangible Assets	60	52	48	44
Other	500	296	296	296
Current Assets	13,809	13,478	15,540	13,422
Stocks	1,011	189	189	189
Debtors	1,599	2,197	2,197	2,197
Cash	11,198	11,089	13,151	11,033
Other	1	3	3	3
Current Liabilities	(3,481)	(4,572)	(4,572)	(4,572)
Creditors	(3,480)	(4,571)	(4,571)	(4,571)
Short term borrowings	(1)	(1)	(1)	(1)
Long Term Liabilities	(506)	(474)	(6,474)	(18,474
Long term borrowings	(18)	(19)	(6,019)	(18,019
Other long term liabilities	(488)	(454)	(454)	(454
Net Assets	10,524	8,871	4,929	(9,193)
CASH FLOW	-,-	- 7-	,	(1)
Operating Cash Flow	(5,531)	(7,977)	(9,931)	(14,110
Net Interest	(5,551)	(1,911)	(9,931)	
	0	0	0	(
Tax			-	(0)
Capex	(66)	32	(8)	(8)
Acquisitions/disposals	0	0	0	(
Financing	7,744	7,733	6,000	(
Dividends	0	0	0	(
Other	399	104	0	(
Net Cash Flow	2,546	(108)	(3,939)	(14,118
Opening net debt/(cash)	(8,573)	(11,179)	(11,069)	(7,131
HP finance leases initiated	0	0	0	(
Exchange rate movements	0	0	0	(
Other	60	-2	0	(
Closing net debt/(cash)	(11,179)	(11,069)	(7,130)	6,988

Source: Quantum Genomics accounts, Edison Investment Research. Note: We assume €24m additional financing, the amount of the equity credit line, €18m of which is shown as debt for the purpose of our model.



Edison is an investment research and advisory company, with offices in North America, Europe, the Middle East and AsiaPac. The heart of Edison is our world-renowned equity research platform and deep multi-sector Easion in Nesting and advisory of company, with onlines in North America, Europe, the wholide scalar and Assarbac. The heart of Deuson is our wholide-encounted equity research platform to provide expertises. At Edison Advisors leverages our core research platform to provide services including investors, advisors and stakeholders. Edison Advisors leverages our core research platform to provide differentiated services including investors and strategic consulting. Edison is authorised and regulated by the Financial Conduct Authority. Edison Investment Research (NZ) Limited (Edison NZ) is the New Zealand subsidiary of Edison. Edison NZ is registered on the New Zealand Financial Service Providers Register (FSP number 247505) and is registered to provide wholes ale and/or generic financial adviser services only. Edison Investment Research Inc (Edison US) is the US subsidiary of Edison and is regulated by the Securities and Exchange Commission. Edison Investment Research Pty Limited (Edison Aus) [46085869] is the Australian subsidiary of Edison. Edison Germany is a branch entity of Edison Investment Research Limited [4794244]. www.ediso

Copyright 2018 Edison Investment Research Limited. All rights reserved. This report has been commissioned by Quantum Genomics and prepared and issued by Edison for publication globally. All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report. Opinions contained in this report represent those of the research department of Edison at the time of publication. The securities described in the Investment Research may not be eligible for sale in all jurisdictions or to certain categories of investors. This research is issued in Australia by Edison Investment Research Pty Ltd (Corporate Authorised Representative (1252501) of Myonlineadvisers Pty Ltd (AFSL: 427484)) and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. The Investment Research is distributed in the United States by Edison US to major US institutional investors only. Edison US is registered as an investment adviser with the Securities and Exchange Commission. Edison US relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. As such, Edison does not offer or provide personalised advice. We publish information about companies in which we believe our readers may be interested and this refreshed to Consporting State sections stays. As such closes not one to provide personalised advice. Also, our website is not intended to be, and should not be construed in any manner whatsoever as, personalised advice. Also, our website is not intended to be, and should not be construed in any manner whatsoever as, personalised advice. Also, our website and the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. This document is provided for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research. Edison has a restrictive policy relating to personal dealing. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report. affiliates may perform services or solicit business from any of the companies mentioned in this report. The value of securities mentioned in this report can fall as well as rise and are subject to large and sudden swings. In addition it may be difficult or not possible to buy, sell or obtain accurate information about the value of securities mentioned in this report. Past performance is not necessarily a guide to future performance. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (ie without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision. To the maximum extent permitted by law, Edison, its affiliates and contractors, and their respective directors, officers and employees will not be liable for any loss or damage arising as a result of reliance being placed on any of the information contained in this report and do not guarantee the returns on investments in the products discussed in this publication. FTSE International Limited ("FTSE") © FTSE 2018. "FTSE@" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.