

# Quantum Genomics

## NEW-HOPE enrolled much faster than expected

Development update

Pharma & biotech

Quantum Genomics announced that it has enrolled the NEW-HOPE trial faster than expected, with data to come around mid-November (previously around the end of Q119). In our opinion, the faster enrolment rate is positive as this is an open-label trial and hence we suspect that results seen by physicians to date are encouraging. As a reminder, NEW-HOPE is a study of firibastat in 256 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.

Year end	Revenue (€m)	PBT* (€m)	EPS* (€)	DPS (€)	P/E (x)	Yield (%)
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.

## Hypertension is a large, pharma-friendly market

A large number of people with hypertension are resistant to treatment with ARBs and ACE inhibitors. One class is so-called low-renin primary hypertension, which is present in 25% of the 70 million hypertension patients in the US, but is endemic among hypertensive African Americans (52%). The brain angiotensin pathway is a central mechanism in this disorder.

## Patient demographics are favourable

Data from the company's 34-patient pilot study of firibastat in hypertension patients indicated that patients with the highest blood pressure when entering the study had the largest response. In that study, the baseline systolic blood pressure (mmHg) for patients was 148, whereas in NEW-HOPE the baseline is 154, indicating a less well-controlled patient population.

## Phase IIb heart failure trial to start by end of year

The QUORUM study will enrol 300 subjects from 40 centres in the US and Europe within 24 hours of suffering acute myocardial infarction (AMI), also known as a heart attack. The primary endpoint will be the change from baseline in left ventricular ejection fraction (LVEF) after a three-month treatment.

## Valuation: €281m or €23.46 per share

We have increased our valuation of Quantum Genomics from €207m or €18.45 per share to €281m or €23.46 per share, mainly due to an increase in the probability of success for firibastat for hypertension from 15% to 20% because of the much faster than expected pace of recruitment. This valuation increase was mitigated in part by a slightly larger number of shares outstanding. Otherwise, our financial forecasts are unchanged.

10 September 2018

Price **€1.76**

Market cap **€21m**

Net cash (€m) at 31 December 2017 11.1

Shares in issue 12.0m

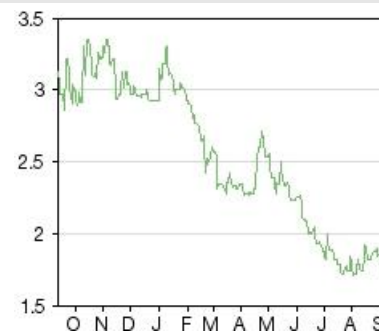
Free float 80.1%

Code ALQGX

Primary exchange Euronext Paris

Secondary exchange OTCQX

### Share price performance



% 1m 3m 12m

Abs (1.7) (16.6) (42.9)

Rel (local) 2.7 (13.9) (44.6)

52-week high/low €3.4 €1.7

### Business description

Quantum Genomics is a biopharmaceutical company developing firibastat, 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. The Phase IIb in hypertension is expected to read out in mid-November and the Phase IIb in heart failure should start by the end of 2018.

### Next events

NEW-HOPE results Mid-November 2018

Initiation of Phase IIb heart failure study Q418

### Analysts

Maxim Jacobs +1 646 653 7027

Nathaniel Calloway +1 646 653 7036

[healthcare@edisongroup.com](mailto:healthcare@edisongroup.com)

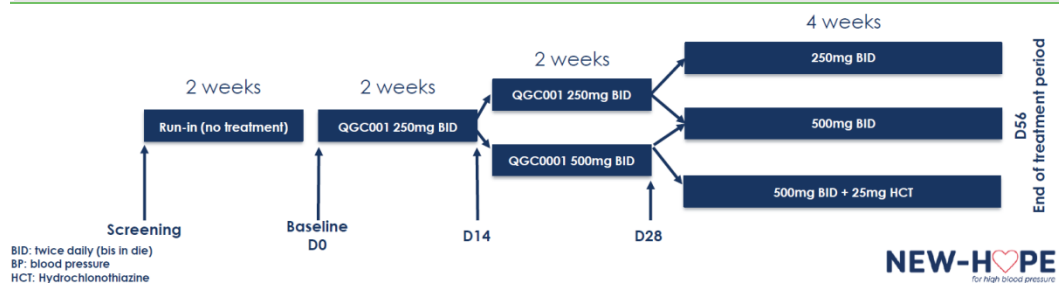
[Edison profile page](#)

**Quantum Genomics is a  
research client of Edison  
Investment Research Limited**

## NEW-HOPE enrolment completion

The company has announced that the NEW-HOPE trial has completed enrolment faster than expected, enrolling 256 patients in just 10 months, with data coming around mid-November. As a reminder, NEW-HOPE focused enrolment on hypertensive overweight (BMI 25-45kg/m<sup>2</sup>) patients, with a primary endpoint of change from baseline in office SBP at week eight. Following a two-week, run-in period in which there would be no treatment, SBP had to be 145-170mmHg. Patients start 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 go on 250mg BID, 500mg BID or 500mg BID with 25mg of hydrochlorothiazide, an often-used diuretic, added in.

### Exhibit 1: NEW-HOPE study design



Source: Quantum Genomics

The baseline patient demographics appear to be favourable (see Exhibit 2). In the company's small, 34-patient hypertension study, those with the highest baseline blood pressure responded best to the drug. In that study, the baseline SBP (mmHg) for patients was 148, whereas in NEW-HOPE the baseline is 154, indicating a less well-controlled patient population.

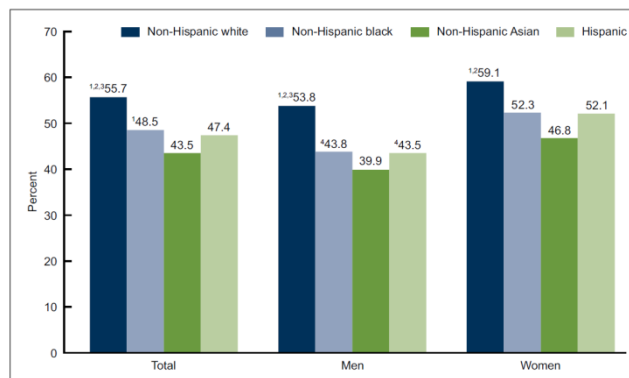
### Exhibit 2: Baseline demographics differences between Phase IIa and NEW-HOPE

	Phase IIa pilot study	NEW-HOPE
Office systolic blood pressure (mmHg)	148	154
Body mass index (kg/m <sup>2</sup> )	27	33
% minorities	12	54

Source: Quantum Genomics

Importantly, NEW-HOPE also had a much higher percentage of minorities, 54% versus 12% in the pilot study. 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. The demographics of this study also indicate a much more obese patient population.

### Exhibit 3: Percentage of adults with hypertension who have it controlled, by race and sex



Source: Yoon S et al., NCHS Data Brief. 2015 Nov;(220):1-8

## Valuation

We have increased our valuation of Quantum Genomics from €207m or €18.45 per share to €281m or €23.46 per share, mainly due to an increase in the probability of success for firibastat for hypertension from 15% to 20% because of the much faster than expected pace of recruitment. In our opinion, the faster recruitment is a sign that physicians were happy with the results they saw (the trial is open label so physicians are not blinded to the results), otherwise they would not have enrolled additional patients at such a pace. This valuation increase was mitigated in part by a slightly larger number of shares outstanding.

**Exhibit 4: Quantum Genomics valuation table**

Product	Main Indication	Local	Status	Prob. of success	Launch year	Peak sales (\$m)	Patent protection	rNPV (m)
Firibastat (QGC001)	Hypertension	US	Phase II	20%	2023	\$1,110	2031	€162.13
Firibastat (QGC001)	Hypertension	Europe	Phase II	20%	2023	\$959	2031	€137.54
Firibastat (QGC001)	Development costs							(€128.49)
Firibastat (QGC001)	Heart Failure	US	Phase IIb	15%	2023	\$574	2031	€77.52
Firibastat (QGC001)	Heart Failure	Europe	Phase IIb	15%	2023	\$687	2031	€91.98
Firibastat (QGC001)	Development costs							(€70.28)
Total								€270.40
Cash and cash equivalents (31 December 2017) (€m)								€11.09
Total firm value (€m)								€281.49
Total shares (31 August 2018) (m)								12.00
Value per basic share (€m)								€23.46
Source: Edison Investment Research								

## Financials

Quantum ended 2017 with €11.1m in cash and investments (H118 results are expected on 4 October). In March, it announced an equity line of credit with Kepler Cheuvreux, which could raise €24m over three years in four tranches. The company has stated that it believes the equity line would fund it 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.

**Exhibit 5: Financial summary**

	€000s	2016	2017	2018e	2019e
Year end 31 December		PCG	PCG	PCG	PCG
<b>PROFIT &amp; LOSS</b>					
Revenue		0	0	0	0
Cost of Sales		0	0	0	0
Gross Profit		0	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	0	0
Other		1	0	0	0
Exceptionals		0	0	0	0
Operating Profit		(6,216)	(10,292)	(10,948)	(14,792)
Net Interest		0	0	(481)	(1,440)
Other		18	(176)	0	0
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	0
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
<b>BALANCE SHEET</b>					
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)
<b>CASH FLOW</b>					
Operating Cash Flow		(5,531)	(7,977)	(9,931)	(14,110)
Net Interest		0	0	0	0
Tax		0	0	0	0
Capex		(66)	32	(8)	(8)
Acquisitions/disposals		0	0	0	0
Financing		7,744	7,733	6,000	0
Dividends		0	0	0	0
Other		399	104	0	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	0
Exchange rate movements		0	0	0	0
Other		60	-2	0	0
Closing net debt/(cash)		(11,179)	(11,069)	(7,131)	6,988

Source: Edison Investment Research, company reports

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 expertise. At Edison Investment Research, our research is widely read by international investors, advisers and stakeholders. Edison Advisors leverages our core research platform to provide differentiated services including investor relations 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 wholesale 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.edisongroup.com](http://www.edisongroup.com)

#### DISCLAIMER

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 information reflects our sincere opinions. The information that we provide or that is derived from 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. Edison or its 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.