

Quantum Genomics

Development update

Additional financing secured

Quantum Genomics recently announced a financing agreement with Negma Group, a London-based specialist financing institution that has provided €500m in capital to companies since inception. As part of the agreement, Negma will provide an €8m interest-free loan, which will be repaid with warrants by Quantum Genomics. The agreement can be renewed two times so Quantum Genomics has access to €24m in total.

Year end	Revenue (€m)	PBT* (€m)	EPS* (€)	DPS (€)	P/E (x)	Yield (%)
12/18	0.0	(13.6)	(0.94)	0.0	N/A	N/A
12/19	0.0	(10.8)	(0.53)	0.0	N/A	N/A
12/20e	0.0	(20.7)	(0.96)	0.0	N/A	N/A
12/21e	0.0	(21.6)	(0.97)	0.0	N/A	N/A

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

Phase III FRESH study launched

The pivotal FRESH study is a three-month, 500-patient study comparing fribastat to placebo in difficult-to-treat or resistant hypertension patients who are already on treatments from two or three anti-hypertensive classes (fribastat and placebo will be added on top of the current treatment) yet still have systolic automated office blood pressure (AOBP) above 140mmHg. The primary endpoint will be a change from baseline in systolic AOBP. Data continues to be expected in H221 despite the current pandemic (we currently believe the impact of coronavirus on clinical trial enrolment generally will be around three months).

Phase IIb QUORUM study enrolment ongoing

The Phase IIb QUORUM study is enrolling 294 subjects from 40 centres in the US and Europe within 72 hours of suffering acute myocardial infarction (AMI), commonly referred to as a heart attack. The primary endpoint will be the change from baseline in the left ventricular ejection fraction (LVEF) after a three-month treatment. The company expects results in H220 though the exact timing may shift depending upon the impact of coronavirus (the company is adding additional sites to try to mitigate any impact).

Partnership discussions continue despite pandemic

The company continues to seek regional partnership deals for fribastat in hypertension. The company has stated that it is in discussions with several potential partners at present with a focus on the Asian region and that these are continuing despite the pandemic (a final agreement though may be postponed).

Valuation: €963m or €51.74 per share

We have adjusted our valuation from €909m or €51.80 per share to €963m or €51.74 per share. The total value increased due to rolling forward our NPVs, while the per share value falls due to a higher number of shares. Additionally, 5m warrants will be issued to Negma Group to cover the initial €8m loan, which would lead to 27% more shares if fully exercised.

Pharma & biotech

9 April 2020

Price €2.04

Market cap €38m

Net cash (€m) at 31 December 2019 11.2

Shares in issue 18.6m

Free float 95.5%

Code ALQGC

Primary exchange Euronext Paris

Secondary exchange OTCQX

Share price performance



%	1m	3m	12m
Abs	(20.0)	(35.8)	(62.4)
Rel (local)	(6.9)	(13.0)	(53.5)

52-week high/low €5.77 €1.88

Business description

Quantum Genomics is a biopharmaceutical company developing fribastat, a brain aminopeptidase A inhibitor for treating hypertension and heart failure. Its mechanism is implicated in the 25% of patients resistant to treatment. The Phase IIb study in hypertension was very positive and a Phase III was recently initiated. Also, a Phase IIb study in heart failure is currently enrolling patients.

Next events

QUORUM heart failure study data H220

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Trials progressing

Quantum Genomics has launched its Phase III programme for fribastat for the treatment of difficult-to-treat or resistant hypertension patients. The FRESH study is a three-month, 500-patient study comparing fribastat (at a dose of 500mg twice a day) to placebo in difficult-to-treat or resistant hypertension patients who are already on treatments from two or three anti-hypertensive classes (fribastat and placebo will be added on top of the current treatment) yet still have systolic automated office blood pressure (AOBP) above 140mmHg. The trial, once all sites are online, is expected to be conducted in approximately 70 hospitals total across Europe (especially France, Germany, Poland, Spain and the Czech Republic), Canada, the United States and Latin America (primarily Brazil and Mexico). The primary endpoint will be a change from baseline in systolic AOBP. Data is expected in H221 and is not likely to be affected by coronavirus according to management.

Based on feedback from the FDA, two studies will be required for approval, one focused on efficacy (FRESH) and one focused on safety. The safety study will enrol 750 patients, with 650 staying on the drug for six months and 100 staying on it for a year. Precise timing for the initiation of the safety study has not been announced.

In terms of the heart failure programme, Quantum Genomics is continuing to enrol the [QUORUM](#) study, which is assessing the safety and efficacy of Quantum's drug fribastat compared to ramipril, an angiotensin-converting enzyme inhibitor, in 294 subjects enrolled within 72 hours of suffering AMI, who were treated with primary percutaneous coronary intervention and have reduced LVEF. There are three arms in this randomised, double-blind, active-controlled study with patients receiving either 100mg of fribastat twice a day, 500mg of fribastat twice a day or 5mg of ramipril twice a day. The primary endpoint is the change from baseline in LVEF after a three-month treatment. Secondary endpoints will include cardiac events, functional status and change in heart failure biomarkers. The subjects will be recruited from 40 centres in the US and Europe and trial results are expected in H220 though the exact timing may shift depending upon the impact of coronavirus (the company is adding additional sites in new countries to try to mitigate any impact).

Quantum Genomics is also conducting a trial in patients with renal failure. Based on analysis of the [NEW-HOPE](#) study, fribastat appears to not have any impact on renal function, which is a problem with many popular treatments such as Diovan. To confirm this finding, the company initiated a small study investigating one 500mg dose of fribastat in 14 healthy volunteers and 14 patients with severe renal failure. Results had originally been expected in April 2020, but trial enrolment was temporarily halted due to the coronavirus after all the patients in the renal failure cohort and about half of the healthy volunteer cohort were enrolled. The company is currently planning to conduct an interim analysis of the patients already enrolled in the study and will conduct a final analysis once it is fully enrolled. If the safety signal is confirmed in renal failure patients, this finding would help expand the market and provide a marketing edge for fribastat.

Valuation

We have adjusted our valuation from €909m or €51.80 per share to €963m or €51.74 per share. The total value increased due to rolling forward our NPVs, while the per share value fell due to a higher number of shares. Additionally, 5m warrants will be issued to Negma Group to cover the initial €8m loan, which would lead to a 27% increase in the number of shares if fully exercised (the exact level of dilution is unclear as it would depend on the share price when warrants are exercised).

Exhibit 1: Quantum Genomics valuation

Product	Main indication	Local	Status	Probability of success	Launch year	Peak sales (\$m)	Patent protection	rNPV (€m)
Firibastat (QGC001)	Hypertension	US	Phase III	50%	2023	1,110	2031	496.57
Firibastat (QGC001)	Hypertension	Europe	Phase III	50%	2023	959	2031	421.31
Firibastat (QGC001)	Development costs							(157.56)
Firibastat (QGC001)	Heart failure	US	Phase IIb	20%	2023	574	2031	126.79
Firibastat (QGC001)	Heart failure	Europe	Phase IIb	20%	2023	687	2031	150.45
Firibastat (QGC001)	Development costs							(85.36)
Total								952.19
Net cash (31 December 2019) (€m)								11.16
Total firm value (€m)								963.35
Total shares (29 February 2020) (m)								18.62
Value per basic share (€)								51.74

Source: Edison Investment Research

Financials

The company reported an operational loss of €10.8m in 2019 compared to €13.6m in 2018, with the decrease primarily driven by the completion of the NEW-HOPE study. The 2019 operating loss was less than our €16.5m estimate as we expected a bigger ramp in R&D expenses at the end of the year. We have kept our 2020 estimates the same with an operating loss of €20.7m expected due to the costs of the FRESH and QUORUM studies. We are also introducing our 2021 estimates with a €21.6m net loss, which reflects a continued high rate of R&D efforts.

Quantum had €11.2m in cash and investments at the end of 2019. The company raised €4.0m through an equity line of credit with Kepler Cheuvreux in the second half of the year and drew down the remaining €1.7m in March. The company has now entered into a new financial agreement with Negma Group, a London-based specialist financing institution that has provided €500m to date in capital to companies. As part of the agreement Negma will provide an €8m no-interest loan, which will be repaid with warrants (that will then be exercised by Negma) by Quantum Genomics. The loan will be distributed every 30 trading days in four instalments of €2m each with a 12-month maturity for each instalment. Five million share subscription warrants will be issued to Negma once the first instalment is received (expected shortly). The agreement can be renewed two times, so Quantum Genomics has access to €24m in total financing. The precise level of dilution is unknown as more warrants will be exercised if the share price falls and fewer warrants will be exercised if it rises. Assuming 5m warrants are exercised for every €8m in financing, a total of 15m warrants will be exercised, leading to an 80.6% increase in the number of shares outstanding.

We currently model €36m in financing needs through the end of 2021, €24m of which may be covered by the Negma financing. The rest may be covered through additional financing arrangements or through non-dilutive funding coming from partnerships.

Exhibit 2: Financial summary

	€000s	2018	2019	2020e	2021e
Year end 31 December		PCG	PCG	PCG	PCG
PROFIT & LOSS					
Revenue		0	0	0	0
Cost of Sales		0	0	0	0
Gross Profit		0	0	0	0
EBITDA		(13,598)	(10,760)	(20,704)	(21,572)
Operating Profit (before amort. and except.)		(13,598)	(10,760)	(20,704)	(21,572)
Intangible Amortisation		0	0	0	0
Other		0	(0)	0	0
Exceptionals		0	0	0	0
Operating Profit		(13,598)	(10,760)	(20,704)	(21,572)
Net Interest		0	0	0	0
Other		150	134	0	0
Profit Before Tax (norm)		(13,598)	(10,760)	(20,704)	(21,572)
Profit Before Tax (FRS 3)		(13,448)	(10,626)	(20,704)	(21,572)
Tax		1,458	1,547	2,692	2,804
Deferred tax		0	0	0	0
Profit After Tax (norm)		(12,140)	(9,213)	(18,013)	(18,768)
Profit After Tax (FRS 3)		(11,990)	(9,078)	(18,013)	(18,768)
Average Number of Shares Outstanding (m)		12.8	17.5	18.7	19.4
EPS - normalised (€)		(0.94)	(0.53)	(0.96)	(0.97)
EPS - FRS 3 (€)		(0.94)	(0.52)	(0.96)	(0.97)
Dividend per share (c)		0.0	0.0	0.0	0.0
BALANCE SHEET					
Fixed Assets		626	884	896	904
Intangible Assets		0	360	360	360
Tangible Assets		24	27	39	47
Other		602	497	497	497
Current Assets		17,855	14,222	13,897	15,121
Stocks		422	333	333	333
Debtors		2,636	2,486	2,486	2,486
Cash		14,797	11,164	10,840	12,063
Other		0	239	239	239
Current Liabilities		(5,764)	(4,061)	(4,061)	(4,061)
Creditors		(5,762)	(4,060)	(4,060)	(4,060)
Short term borrowings		(2)	(1)	(1)	(1)
Long Term Liabilities		(849)	(874)	(16,874)	(36,874)
Long term borrowings		(12)	(6)	(16,006)	(36,006)
Other long term liabilities		(837)	(869)	(869)	(869)
Net Assets		11,868	10,171	(6,142)	(24,910)
CASH FLOW					
Operating Cash Flow		(10,901)	(10,665)	(18,006)	(18,759)
Net Interest		0	0	0	0
Tax		0	0	0	0
Capex		(16)	(118)	(18)	(18)
Acquisitions/disposals		0	0	0	0
Financing		15,071	7,382	1,700	0
Dividends		0	0	0	0
Other		(446)	(232)	0	0
Net Cash Flow		3,708	(3,633)	(16,324)	(18,777)
Opening net debt/(cash)		(11,069)	(14,783)	(11,157)	5,167
HP finance leases initiated		0	0	0	0
Exchange rate movements		0	0	0	0
Other		6	7	0	0
Closing net debt/(cash)		(14,783)	(11,157)	5,167	23,944

Source: Quantum Genomics accounts, Edison Investment Research. Note: The Negma Group warrants will be included in shares outstanding only once they are exercised.

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