

BUY

TARGET PRICE : 9€  +79%

COMPANY UPDATE

LOOKING BEYOND FIRIBASTAT'S rHTN PROGRAM

The company announced publication of the preclinical data from its best-in-class BAPAI (QGC006), which showed antihypertensive activity in rats. We believe that addition of QGC006 to firibastat's "licensing package" could strengthen the case for potential partner. In-line with the previous guidance, the company plans to initiate the Phase 2 study of firibastat in prevention of LVD post anterior myocardial infraction in 2Q19, and has already received the first regulatory approval to start the trial. Additionally, we expect the company to begin the Phase 3 study of firibastat in resistant hypertension in 2H19. We reiterate our BUY rating and TP of €9.0.

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New preclinical data support the potential of QGC006

QUANTUM GENOMICS announced the publication of the preclinical results from its best-in-class BAPAI program, QGC006. Recall, QGC006 was selected as more potent version of company's lead asset, firibastat. Firibastat, is based on the novel approach to target brain aminopeptidase A (BAPA), an enzyme that is present in the brain and can regulate peripheral blood pressure. It was designed as a prodrug, which consists of 2 inhibitor molecules (E33) that are linked through disulphide bond in order to cross blood-brain barrier and enter the brain. Earlier preclinical studies identified NI929 as a more potent form of E33. The recent publication showed that through the same mechanism (disulphide bond) NI929 could be delivered to the brain. The resulting prodrug (QGC006) showed greater potency as BAPA inhibitor, as well as demonstrated blood pressure normalization in hypertensive rats. Thus, we believe that QGC006 has a potential to become best-in-class BAPA inhibitor. While company doesn't plan to move QGC006 program into the clinic in the recent future, it could be out-licensed together with firibastat, increasing the attractiveness of the later for a potential partner.

Firibastat's HF program to start in 2Q19

In April, the company also announced that it received the approval from the French National Agency for Medicines and Health Products Safety to commence the Phase 2 QUORUM study of firibastat in prevention of left ventricular dysfunction (LVD) after acute anterior myocardial infraction (MI). Acute myocardial infarction (MI) is a leading cause of morbidity and mortality worldwide. While in-hospital death from acute MI decreased to 5-10% in the recent years, the improved in-hospital survival is associated with an increase in incidence of cardiovascular events, mainly due to left ventricular remodeling and subsequent congestive HF. Importantly, MI patients that develop HF have higher mortality risk of 20-30%. Left ventricular remodeling can be monitored through assessing left ventricular ejection fraction (LVEF), which measures a pumping ability of the heart. After anterior MI, the heart often exhibits lower LVEF (lower pumping ability). Thus, increase in LVEF could signal an improvement of left ventricular function and, potentially, lower risk of HF. While currently there is no approved therapy for prevention of LVD post MI, current therapeutic guidelines suggest the initiation of angiotensin-converting enzyme (ACE) inhibitors or angiotensin receptor blockers (ARB) in patients, who had MI and whose LVEF \leq 40% (mild LVD).

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in € / share	2018	2019e	2020e
Adjusted EPS	-0.64	-0.61	-0.24
chg.	n.s.	n.s.	n.s.
estimates chg.	n.s.	n.s.	n.s.
au 31/12	2018	2019e	2020e
PE	n.s.	n.s.	n.s.
EV/Sales	n.s.	n.s.	5.61x
EV/EBITDA	n.s.	n.s.	n.s.
EV/EBITA	n.s.	n.s.	n.s.
FCF yield*	n.s.	n.s.	n.s.
Div. yield (%)	n.s.	n.s.	n.s.

* After tax op. FCF before WCR

Key points			
Share price (€)	5.02		
Number of Shares (m)	16.4		
Market cap. (€m)	82		
Free float (€m)	64		
ISIN	FR0011648971		
Ticker	ALQGC-FR		
DJ Sector	Health Technology		
	1m	3m	Ytd
Absolute perf.	-12.1%	+3.6%	-6.0%
Relative perf.	-10.1%	-1.1%	-17.1%

Source : Factset, Invest Securities estimates

QUANTUM GENOMICS's Phase 2 QUORUM study is designed as a multinational randomized controlled trial, which is expected to enroll 294 patients across the EU and the US, and the French authorities were the first to give a nod on the trial initiation. QUORUM will compare the efficacy of 2 doses of firibastat (BID 100 mg and 250mg) to ramipril (an ACE inhibitor from Boehringer Ingelheim) after 12 weeks of treatment in patients, who received percutaneous coronary intervention (PCI) within 24 hours after MI. The primary efficacy measure is based on the change in LVEF after 84 days of treatment and the secondary outcomes include cardiac events, functional status, safety and change in HF biomarkers. We currently expect Phase 2b QUORUM study to begin in 2Q19, with potential readout in 2H20.

HF is a lucrative, albeit fairly competitive space. While generics pressured the sales of ACE inhibitors, NOVARTIS' Entresto, which combines ARB and neprilysin inhibitor, is expected to generate \$4B by 2024 (according to *EvaluatePharma* consensus). The drug is already approved for HF with reduced LVEF and is expected to have a Phase 3 readout in HF with preserved LVEF. We note that in the retrospective study in patients with reduced LVEF, Entresto achieved LVEF increase from the baseline of 5%: from 25% to 30% ($p < 0.001$). We also note that Entresto is being evaluated in another Phase 3 PARADISE-MI study in patients with acute MI and LVD, and the primary endpoint is time to the first occurrence of cardiovascular death or HF. PARADISE-MI study is expected to readout in 2020. Thus, post-MI treatment niche could be tightly occupied as well.

Nonetheless, we believe that firibastat with the novel mechanism of action and potential for combination therapy could have its shot on goal in the prevention of LVD post anterior MI. We also note that recently the company announced the publication of 2 scientific articles that further supported the potential of firibastat in this indication. One of the papers showed that firibastat administered to mice within 48 hours after MI for 4-8 weeks was as effective as enalapril, an earlier generation of ACE inhibitors. We currently expect firibastat to reach the market for HF in 2025, generating risk-adjusted revenues of €25M and growing to €412M by 2031.

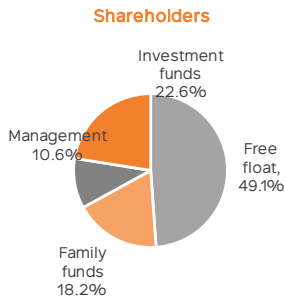
Expecting the start of the Phase 3 study in rHTN in 2H19

In April, QUANTUM GENOMICS also published the full clinical results from the Phase 2b NEW-HOPE study. Recall, the topline data from NEW-HOPE, released in 2018, showed the positive antihypertensive activity of firibastat in high-risk hypertensive patients. We currently expect the company to hold the post-Phase-2b meeting with the FDA to outline the clinical path forward for firibastat in treatment of resistant hypertension (rHTN). We note that the company reiterated its previous intention to initiate the Phase 3 study in 2H19. Additionally, QUANTUM GENOMICS began a clinical study of once-daily formulation of firibastat (compared to previous twice-daily) in healthy volunteers to evaluate the pharmacokinetic profile of this new formulation. The readout of the study could be expected in June, 2019. According to the study results and the feedback from the FDA, the company is planning to use once- or twice-daily formulation of firibastat in the upcoming Phase 3 study in rHTN. We currently project firibastat to be launched in rHTN in the US and the EU in 2023, generating risk-adjusted revenues of €16M and growing to €495M by 2031.

INVESTMENT CASE

The company's most advanced asset, firibastat, achieved positive topline results in the Phase 2b study in high-risk hypertension. The company could initiate the prospective Phase 3 study in resistant hypertension in 2H19. If successful, firibastat could become first-in-class antihypertensive drug with the potential launch in the US and EU in 2023. In our view, Quantum Genomics with the promising mid-stage clinical program, is an attractive option for investors interested in cardiovascular space.

FINANCIAL DATA



Share Information	2013	2014	2015	2016	2017	2018	2019e	2020e
Published EPS (€)	-0.32	-0.32	-0.45	-0.51	-0.58	-0.73	-0.70	-0.27
Adjusted EPS (€)	-0.28	-0.27	-0.38	-0.37	-0.51	-0.64	-0.61	-0.24
<i>Diff. I.S. vs Consensus</i>	<i>n.s.</i>	<i>-31.6%</i>	<i>-21.8%</i>	<i>-30.5%</i>	<i>-47.3%</i>	<i>-25.9%</i>	<i>-33.4%</i>	<i>n.s.</i>
Dividend	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Valuation ratios	2013	2014	2015	2016	2017	2018	2019e	2020e
P/E	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
EV/Sales	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	5.61x
VE/EBITDA	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
VE/EBITA	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Op. FCF bef. WCR yield	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Op. FCF yield	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Div. yield (%)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

NB : valuation based on annual average price for past exercise

Entreprise Value (€m)	2013	2014	2015	2016	2017	2018	2019e	2020e
Share price in €	n.s.	5.2	8.3	6.3	5.0	5.0	5.0	5.0
Market cap.	n.s.	25	58	53	51	79	82	82
Net Debt	1	0	-9	-11	-11	-15	-6	-2
Minorities	0	0	0	0	0	0	0	0
Provisions/ near-debt	0	0	0	0	0	0	0	0
+/- Adjustments	0	0	0	0	0	0	0	0
Entreprise Value (EV)	n.s.	25	49	42	40	64	76	81

Income statement (€m)	2013	2014	2015	2016	2017	2018	2019e	2020e
Sales	0	0	0	0	0	0	0	14
<i>chg.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>
EBITDA	-2	-2	-4	-6	-10	-14	-13	-5
EBITA	-2	-2	-4	-6	-10	-14	-13	-5
<i>chg.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>
EBIT	-2	-2	-4	-6	-10	-14	-13	-5
Financial result	0	0	0	0	0	0	0	0
Corp. tax	0	0	1	1	1	1	2	1
Minorities+affiliates	0	0	0	0	0	0	0	0
Net attributable profit	-2	-2	-4	-5	-9	-12	-11	-4
Adjusted net att. profit	-2	-2	-4	-5	-9	-12	-11	-4
<i>chg.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>	<i>n.s.</i>

Cash flow statement (€m)	2013	2014	2015	2016	2017	2018	2019e	2020e
EBITDA	-2	-2	-4	-6	-10	-14	-13	-5
Theoretical Tax / EBITA	0	0	0	0	0	0	0	0
Capex	0	0	0	0	0	0	0	0
Operating FCF bef. WCR	-2	-3	-4	-6	-10	-14	-13	-5
Change in WCR	1	-1	0	0	1	1	0	0
Operating FCF	-1	-3	-4	-7	-9	-13	-13	-5
Acquisitions/disposals	0	0	0	0	0	0	0	0
Capital increase/decrease	1	4	12	8	8	15	3	0
Dividends paid	0	0	0	0	0	0	0	0
Other adjustments	0	0	1	2	1	1	2	1
Published FreeCash Flow	0	1	8	3	0	4	-9	-4

Balance Sheet (€m)	2013	2014	2015	2016	2017	2018	2019e	2020e
Assets	1	1	1	1	0	1	1	1
Intangible assets/GW	0	0	0	0	0	0	0	0
WCR	-1	-1	-1	-1	-3	-3	-3	-3
Group equity capital	-2	0	8	11	9	12	3	-1
Minority shareholders	0	0	0	0	0	0	0	0
Provisions	0	0	0	0	0	0	0	0
Net financial debt	1	0	-9	-11	-11	-15	-6	-2

Financial ratios	2013	2014	2015	2016	2017	2018	2019e	2020e
EBITDA margin	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
EBITA margin	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Adjusted Net Profit/Sales	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
ROCE	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
ROE adjusted	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Gearing	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
ND/EBITDA (in x)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

Source : company, Invest Securities Estimates

SWOT ANALYSIS

STRENGTHS

WEAKNESSES

- First-in-class mechanism of action
- Mid-stage clinical programs
- Secured financing through equity line

- Competitive market
- More advanced competitor
- Potential dilution

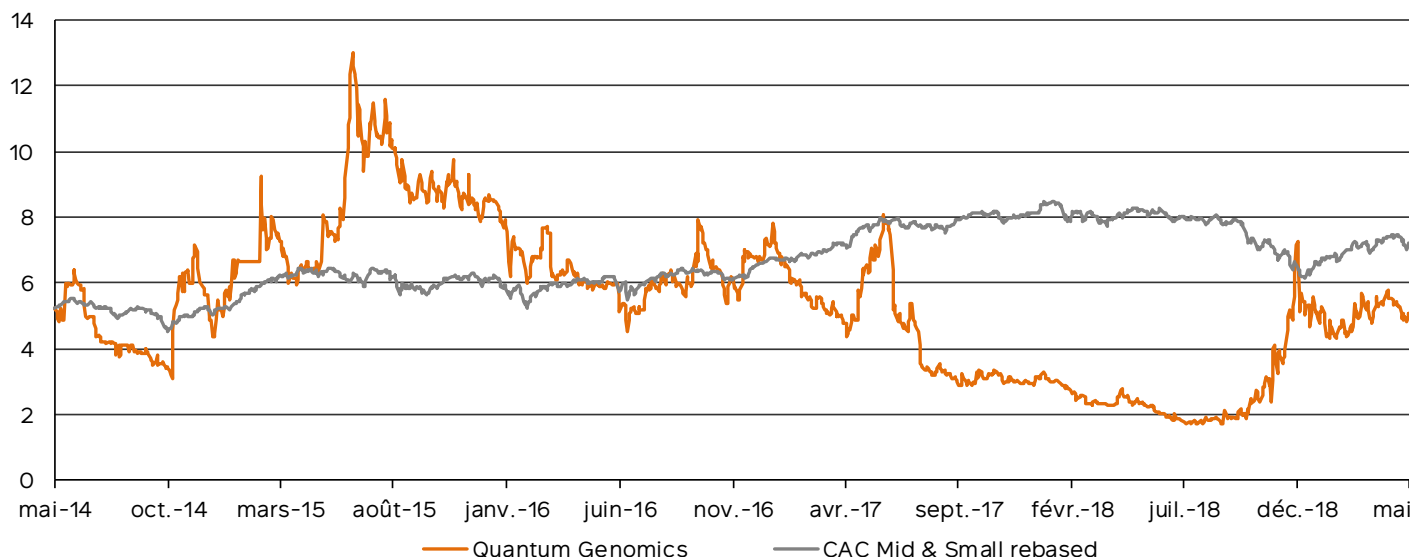
OPPORTUNITIES

THREATS

- Commercialization agreement
- Earlier-than-expected market approvals
- Marketing in other territories

- Clinical and regulatory risks
- Commercial risks
- Legal risks

SHARE PRICE CHANGE FOR 5 YEARS



DETECTION OF CONFLICTS OF INTEREST

	Corporate Finance	Treasury stocks holding	Prior communication to company	Analyst's personal interest	Liquidity contract	Listing Sponsor	Research Contract
Quantum Genomics	Yes	No	Yes	No	No	Yes	Yes

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