

ProQR Therapeutics N.V. (PRQR)

CF Strategy Detailed at Investor Event Last Night

MARKET OUTPERFORM

Price: \$3.90
Price Target: \$20.00

INVESTMENT HIGHLIGHTS

- ProQR Therapeutics lays out development strategy in CF; we reiterate our Market Outperform rating and \$20 risk-adjusted, DCF-derived price target.** We attended PRQR's investor event yesterday at the NACFC annual meeting where its Phase 1b QR-010 data were discussed in detail (our takeaways remain primarily consistent with our top-line analysis [here](#)) and the development strategy was discussed in detail for the first time.
- Proposed Phase 2 design.** PRQR is attending an end-of-Phase 1 meeting with the FDA shortly to discuss its plans moving forward with QR-010 and management discussed its proposed outline of a Phase 2 program slated to begin in 2H18 pending regulatory and partnership discussions. The goal at this point is to move forward with a partner and therefore these plans are preliminary concepts. Key considerations are that PRQR does not want to change many variables from its Phase 1b study, but will potentially look at weekly dosing (vs. 3x a week in Phase 1b) and a primary endpoint of lung clearance index (LCI) in relatively healthy patients with FEV₁>70% with abnormal LCI. The choice of the population has two benefits: 1) consistency with Phase 1b, and 2) positioning for patients on CFTR modulators having better FEV₁.
- MOA coming along.** QR-010's exact mechanism of action is still under investigation – a common criticism of the program – but the company is working diligently to learn more and confident it has enough information that will be sufficient for regulators while it may be more descriptive than mechanistic at this point in time. We think progress on this front will just provide investors/possible partners more peace of mind, while we continue to be impressed with the data that have unfolded.
- CF pipeline.** Management also discussed in some detail its CF pipeline (Figure 1) going after the 5% of CF patients with Class 1 mutations that do not make any CFTR protein and thus cannot be treated with modulators. PRQR is working on developing leads for five different programs and the company was actually highlighted in the NACFC Day 1 Plenary session for going after this high unmet need population with a novel mechanism. In this patient population, PRQR would be willing to combine with a modulator as there is no downside in the context of no available therapies.
- Thoughts on the stock.** Net-net, we like PRQR's strategy moving forward and over the past year have gained more confidence in QR-010 based on its ability to restore CFTR function as evidenced in NPD studies and improve symptoms in the more recent Phase 1b study. We continue to recommend owning shares of PRQR as we think the stock is significantly undervalued relative to the opportunity at hand in CF, not to mention the rest of the emerging rare disease pipeline (Figure 2) which could begin to bear fruit in 2018.

Liisa A. Bayko

lbayko@jmpsecurities.com
(312) 768-1785

Jonathan Wolleben

jwolleben@jmpsecurities.com
(312) 768-1788

MARKET DATA

Price	\$3.90
52-Week Range:	\$3.65 - \$6.90
Shares Out. (M):	25.1
Market Cap (\$M):	\$97.9
Average Daily Vol. (000):	292.0
Cash (M):	\$48
LT Debt (M):	\$0

Source: Thomson Reuters and JMP Securities LLC

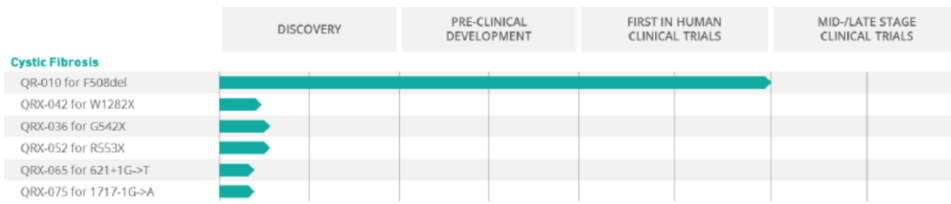
FY DEC		2016A	2017E	2018E
Revenue (\$M)	1Q	\$0.8	\$0.4A	--
	2Q	\$0.6	\$0.3A	--
	3Q	\$0.5	\$0.0	--
	4Q	\$0.1	\$0.0	--
	FY	\$2.0	\$0.7	\$0.0
EPS	1Q	(\$0.50)	(\$0.48)A	--
	2Q	(\$0.45)	(\$0.54)A	--
	3Q	(\$0.49)	(\$0.51)	--
	4Q	(\$0.40)	(\$0.54)	--
	FY	(\$1.77)	(\$2.07)	(\$1.93)

Source: Company reports and JMP Securities LLC

STOCK PRICE PERFORMANCE

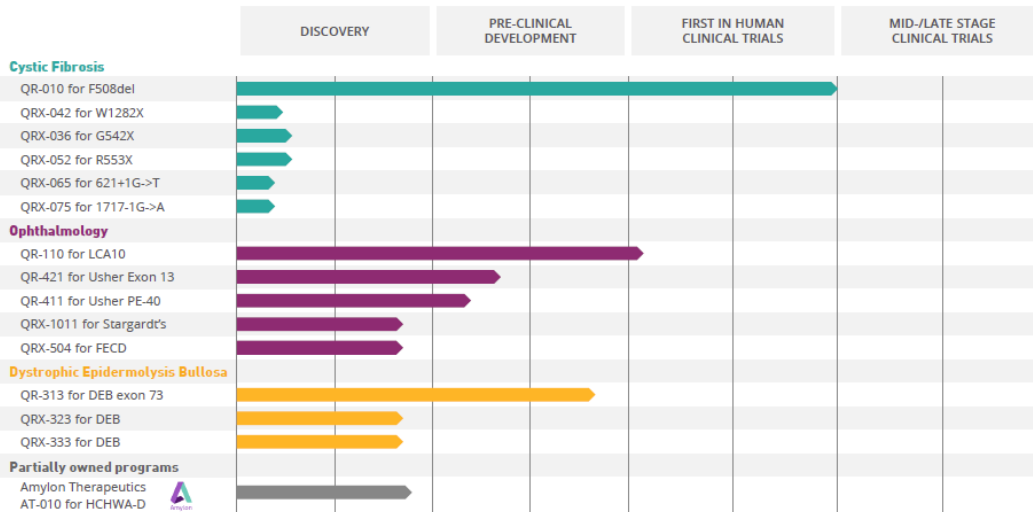


FIGURE 1. PRQR CF Pipeline



Source: Company Presentation

FIGURE 2. PRQR Full Development Pipeline



Source: Company Presentation

Company Description

ProQR Therapeutics is a biopharmaceutical company engaged in building a platform for RNA-based therapeutics for the treatment of severe genetic disorders, with an initial focus on QR-010, a drug candidate for cystic fibrosis (CF). ProQR utilizes its unique proprietary RNA repair technology to develop candidates to specifically target and repair the defective messenger RNA (mRNA), a product of a mutated gene, and to restore the expression and function of normal protein.

Investment Risks

Regulatory risk. ProQR, like all other drug development companies, is reliant on the regulatory pace of evaluating new drugs and clinical plans and also on regulators' willingness to approve new drugs.

Clinical development risk. Drug development is a risky and capital-intensive endeavor. The vast majority of drugs that enter clinical development fail to reach the market.

Funding risk. Reliance on the capital markets poses a risk in terms of investor appetite for biotech stocks and the degree of dilution, depending upon the timing of a deal.

Competitive risk. There are other drugs in development for cystic fibrosis, by companies including Vertex, Galapagos/AbbVie, and Proteostasis. These programs could provide advantages over ProQR's candidate, which could lead to a lower than anticipated market share.

Patent risk. Patent expiration can result in a negative impact to sales. Additionally, generic companies may file abbreviated new drug applications to challenge current products with patent protection.

Sector risk. Valuation of pharmaceutical stocks is subject to both investor assessments of the prospects of the underlying companies, and investor tolerance for risk and confidence in the prospects of pharmaceutical stocks as a group. Therefore, ProQR's stock price may fall, even as the company meets or exceeds investor expectations.

JMP FACTS AND DISCLOSURES

Analyst Certification:

The research analyst(s) who prepared this report does/do hereby certify that the views presented in this report are in accordance with my/our personal views on the securities and issuers discussed in this report. As mandated by SEC Regulation AC no part of my/our compensation was, is or will be directly or indirectly related to the specific views or recommendations expressed herein. This certification is made under the obligations set forth in SEC Regulation AC. Any other person or entity may not use it for any other purpose. This certification is made based on my/our analysis on the date of this report's publication. I/We assume no obligation to update this certification to reflect any facts, circumstances or events that may subsequently come to my/our attention. Signed Liisa A. Bayko and Jonathan Wolleben

JMP Securities Disclosures:

JMP Securities currently makes a market in the security of ProQR Therapeutics N.V.

JMP Securities expects to receive OR intends to seek compensation for investment banking services from ProQR Therapeutics N.V. in the next 3 months.

JMP Securities Investment Opinion Definitions:

Market Outperform (MO): JMP Securities expects the stock price to outperform relevant market indices over the next 12 months.

Market Perform (MP): JMP Securities expects the stock price to perform in line with relevant market indices over the next 12 months.

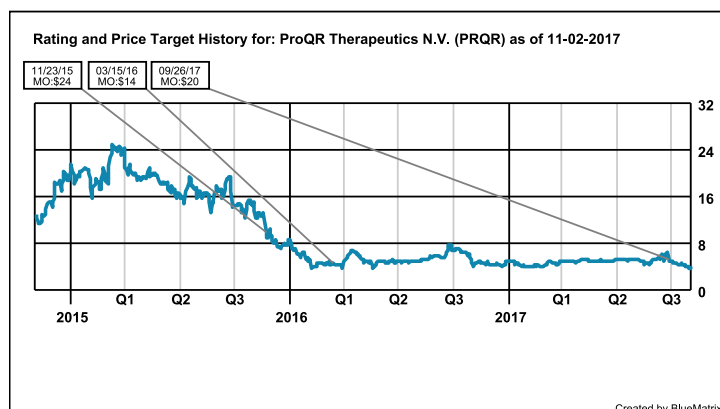
Market Underperform (MU): JMP Securities expects the stock price to underperform relevant market indices over the next 12 months.

JMP Securities Research Ratings and Investment Banking Services: (as of November 3, 2017)

JMP Rating	Regulatory Equivalent	# Co's Under Coverage	% of Total	Regulatory Equivalent	# Co's Under Coverage	% of Total	# Co's Receiving IB Services in Past 12 Months	% of Co's With This Rating
MARKET OUTPERFORM	Buy	272	60.58%	Buy	272	60.58%	72	26.47%
MARKET PERFORM	Hold	168	37.42%	Hold	168	37.42%	30	17.86%
MARKET UNDERPERFORM	Sell	7	1.56%	Sell	7	1.56%	0	0%
COVERAGE IN TRANSITION		0	0.00%		0	0.00%	0	0%
RATING SUSPENDED		0	0.00%		0	0.00%	0	0%
TOTAL:		449	100%		449	100%	102	22.72%

Stock Price Chart of Rating and Target Price Changes:

Note: First annotation denotes initiation of coverage or 3 years, whichever is shorter. If no target price is listed, then the target price is N/A. In accordance with FINRA Rule 2241, the chart(s) below reflect(s) price range and any changes to the rating or price target as of the end of the most recent calendar quarter. The action reflected in this note is not annotated in the stock price chart. Source: JMP Securities.



JMP Disclaimer:

JMP Securities LLC (the “Firm”) compensates research analysts, like other Firm employees, based on the Firm’s profitability, which includes revenues from the Firm’s institutional sales, trading, and investment banking departments as well as on the quality of the services and activities performed that are intended to benefit the Firm’s institutional clients. These data have been prepared by JMP Securities LLC for informational purposes only and are based on information available to the public from sources that we believe to be reliable, but we do not guarantee their accuracy or completeness. Any opinions and projections expressed herein reflect our judgment at this date and are subject to change without notice. These data are neither intended nor should be considered as an offer to sell or a solicitation or a basis for any contract for the purchase of any security or other financial product. JMP Securities LLC, its affiliates, JMP Group LLC, Harvest Capital Strategies LLC, and their respective partners, directors, officers, and associates may have a long or short position in, may act as a market maker for, or may purchase or sell a position in the securities mentioned herein. JMP Securities LLC or its affiliates may be performing, have performed, or seek to perform investment banking, advisory, or other services and may have acted as manager or co-manager for a public offering of securities for any company mentioned herein. The reader should assume that JMP Securities LLC will solicit business from the company covered in this report. Members of our Sales and Trading Department provide oral and/or written market opinions and trading strategies to our clients that reflect their personal opinions about stocks that are the subject of the firm's research reports. Our research analysts discuss trading strategies with clients that sometimes reflect short-term expectations for the price of the securities that are the subject of research reports. These trading strategies are distinct from the analysts' fundamental rating for the stock, which is based upon the analysts' view compared to other stocks under coverage for the relevant time period. © Copyright 2017. All rights reserved by JMP Securities LLC. JMP Securities LLC is a member of FINRA, NASDAQ, and SIPC.

Jeffrey H. Spurr
 Director of Research
 (415) 835-3903

RESEARCH PROFESSIONALS

FINANCIAL SERVICES

Alternative Asset Managers

Devin Ryan (212) 906-3578
 Brian McKenna (212) 906-3545

Commercial & Specialty Finance

Christopher York (415) 835-8965
 Thomas Wenk (415) 835-8962

Consumer Finance

David M. Scharf (415) 835-8942
 Jeff Zhang, CFA (415) 835-8948

Financial Processing & Outsourcing

David M. Scharf (415) 835-8942
 Jeff Zhang, CFA (415) 835-8948

Insurance

Matthew J. Carletti (312) 768-1784
 Karol Chmiel (312) 768-1786

Investment Banks & Brokers

Devin Ryan (212) 906-3578
 Brian McKenna (212) 906-3545

Mortgage Operating Companies

REITs: Agency, Hybrid, & Commercial Mortgage

Steven C. DeLaney (212) 906-3517
 Trevor Cranston, CFA (415) 869-4431
 Mikhail Goberman (212) 906-3543
 Benjamin Zucker (212) 906-3529

Regional Banks

Emlen Harmon (212) 906-3547
 Chris Muller (212) 906-3559

HEALTHCARE

Biotechnology

Liisa A. Bayko (312) 768-1785
 Amy Wang (312) 768-1796
 Jonathan Wolleben (312) 768-1788
 Jason N. Butler, PhD (212) 906-3505
 Roy Buchanan (212) 906-3509
 Michael G. King, Jr. (212) 906-3520
 Konstantine Aprilakis, MD (212) 906-3503
 Michael Englander (212) 906-3540
 Simon Gruber (212) 906-3538

Healthcare Services & Facilities

Peter L. Martin, CFA (415) 835-8904
 Brian Riley (415) 835-8908

Medical Devices & Supplies

David Turkaly (212) 906-3563
 John Gillings (212) 906-3564

Specialty Pharmaceuticals

Donald Ellis (212) 906-3507
 Nazibur Rahman (212) 906-3519

REAL ESTATE

Housing & Land Development

Peter L. Martin, CFA (415) 835-8904
 Aaron Hecht (415) 835-3963
 Doug Hansen (415) 835-8934

Property Services

Mitch Germain (212) 906-3546
 Corey DeVito (212) 906-3525

REITs: Healthcare, Residential, & Specialty

Peter L. Martin, CFA (415) 835-8904
 Aaron Hecht (415) 835-3963
 Brian Riley (415) 835-8908

REITs: Diversified, Industrial, Office, & Retail

Mitch Germain (212) 906-3546
 Corey DeVito (212) 906-3525

Residential Services

Peter L. Martin, CFA (415) 835-8904
 Aaron Hecht (415) 835-3963

TECHNOLOGY

Energy Technology & Services

Industrial Technology

Joseph Osha (415) 835-8998

Internet Security, Communications Infrastructure, & Storage

Erik Suppiger (415) 835-3918
 Michael Berg (415) 835-3914

Internet & Digital Media

Ronald V. Josey III (212) 906-3528
 Andrew Boone, CFA (415) 835-3957
 Shweta Khajuria (415) 835-8916

Software

Patrick Walravens (415) 835-8943
 Mathew Spencer (415) 835-8930
 Greg McDowell (415) 835-3934
 Rishi Jaluria (415) 835-3961

ADDITIONAL CONTACTS

Thomas R. Wright
 Director of Equities
 (212) 906-3599

Charles Sweeney
 Director of Sales & Trading
 (212) 906-3573

600 Montgomery Street, Suite 1100
 San Francisco, CA 94111
www.jmpsecurities.com