

Reason for report:

PROPRIETARY INSIGHTS

NANOSTRING TECHNOLOGIES

Forecast Adjustments Mixed; Story Intact

• **Bottom Line:** Following recent due diligence, we have reduced our revenue estimates for NSTG's Prosigna breast cancer prognostic test. However, we have increased our estimates for other revenue following the Celgene (OP) companion diagnostics (CDx) announcement. The net effect is little change on numbers but slightly negative on sentiment, as Prosigna comprises an outsized portion of the NSTG investor narrative. Nonetheless, we maintain our Outperform rating on NSTG and \$23 price target.

• **Believe GHDX counter-attack will be more effective than initially thought.** An abstract which illustrated the lack of concordance between GHDX's (OP) Oncotype Dx and NSTG's Prosigna assay was presented last Monday at the American Society of Clinical Oncology (ASCO) annual meeting. The results weren't a surprise (see [our 5/14 note](#)), but after attending the presentation, we felt GHDX could use the data more effectively than we previously thought. The sample size was nearly double that of the abstract (n = 52 vs n = 27). Four of the seven cases deemed high risk by Prosigna were low risk by Oncotype, and these discordant results could lead to dramatically different treatment courses (chemo vs not). Additionally, we continue to believe many physicians will not readily assume that Prosigna is predictive for chemotherapy benefit because it is prognostic for distant recurrence, an important distinction.

• **Prosigna adoption in advance of reimbursement, guidelines could be minimal.** NSTG has consistently cautioned investors to assume that Prosigna uptake is relatively slow for the first 2 – 3 quarters of 2014. We had modeled accordingly, but have reduced our estimates further following conversations in and around ASCO. We think reimbursement and guidelines (both anticipated to some degree in 2H14) will be catalysts for further adoption.

• **Revenue from CELG CDx offsets our Prosigna reduction.** The contribution from NSTG's collaboration with CELG to develop a companion diagnostic for REVLIMID in Diffuse Large B-Cell Lymphoma (DLBCL) offsets the reduction in our Prosigna revenue forecast.

• **Positive feedback in life sciences consistent with growth outlook.** We forecast 39% revenue growth in NSTG's life science business in 2014, and our conviction in this view was recently augmented by customer feedback at a recent regional lab conference. A cancer genomics researcher offered effusive commentary on her experience with NSTG's nCounter, noting that it was the first time in her experience a company delivered what it said it would with the ease of use it promised.

Key Stats:

(NASDAQ:NSTG)

S&P 600 Health Care Index:	1,293.21
Price:	\$15.20
Price Target:	\$23.00
Methodology:	~7.5x EV/2015e revenue
52 Week High:	\$22.44
52 Week Low:	\$7.01
Shares Outstanding (mil):	16.9
Market Capitalization (mil):	\$256.9
Book Value/Share:	\$0.28
Cash Per Share:	\$5.07
Net Debt to Total Capital:	0%
Dividend (ann):	\$0.00
Dividend Yield:	0.0%



Dec Yr	1Q	2Q	3Q	4Q	FY Rev	1Q	2Q	3Q	4Q	FY EPS	P/E
2013A	\$5.7	\$7.2	\$8.4	\$10.1	\$31.4	(\$0.79)	(\$0.78)	(\$0.53)	(\$0.60)	(\$2.70)	NM
2014E - New	\$8.8A	\$10.1	\$12.3	\$16.6	\$47.8	(\$0.68)A	(\$0.72)	(\$0.66)	(\$0.75)	(\$2.81)	NM
2014E - Old	\$8.8A	\$10.2	\$12.4	\$15.7	\$47.1	(\$0.68)A	(\$0.77)	(\$0.67)	(\$0.71)	(\$2.83)	NM
2015E - New	--	--	--	--	\$67.7	--	--	--	--	(\$2.44)	NM
2015E - Old	--	--	--	--	\$66.7	--	--	--	--	(\$2.47)	NM
2016E - New	--	--	--	--	\$91.3	--	--	--	--	(\$1.82)	NM
2016E - Old	--	--	--	--	\$91.7	--	--	--	--	(\$1.83)	NM

Source: Company Information and Leerink Partners LLC Research
Revenues in \$millions

EPS ex-extraordinary 1x items, FAS 123 option expense included

INVESTMENT THESIS

We rate Seattle, Washington-based NanoString Technologies (NanoString) Outperform. The company's proprietary technology fills an important role in the research market by enabling mid-density gene analysis in formalin-fixed, paraffin embedded (FFPE) samples. This capability translates readily to oncology diagnostics, in which NanoString's nCounter Analysis System promises to enable complex molecular testing in a decentralized setting. Our Outperform rating reflects a view that NanoString's revenue growth opportunities, in both life science research and clinical diagnostics, are under-appreciated at current levels.

VALUATION

Our 12-month price target of \$23 for NSTG reflects an enterprise value (using projected levels of debt and cash) that is ~7.5x our 2015 revenue forecast. We prefer revenue multiples for companies not yet meaningfully profitable. This multiple is a premium to the life science tools and diagnostics peer group median EV/FTM revenue of ~4x, which we believe appropriately reflects NSTG's greater growth prospects.

RISKS TO VALUATION

Risks to our price target for NSTG include, but are not limited to: Prosigna commercialization uncertainty in both the U.S. and Europe, competition, and tightening research budgets. While we model the company raising equity in 2014 to help fund operations, its ability to tap the equity markets or obtain additional funding may be a potential uncertainty.

Change in Prosigna Forecast (dollars in thousands)

Period	Prior	Current	Change
Q1 '14	\$61	\$61	na
Q2 '14e	350	123	(227)
Q3 '14e	1,050	245	(805)
Q4 '14e	2,100	1,750	(350)
2014e	3,561	2,179	(1,382)
2015e	13,125	11,725	(1,400)
2016e	\$26,250	\$23,450	(\$2,800)

Source: Leerink Partners LLC

Oncotype Dx vs Prosigna Discordance, TransATAC Study

		Prosigna			Total
		Low	Intermediate	High	
ODx	Low	318	97	19	434
	Intermediate	113	68	62	243
	High	6	14	42	62
	Total	437	179	123	739

Prosigna vs ODx concordance 58%

Source: Dowsett et al., "Comparison of PAM50 Risk of Recurrence Score With Oncotype DX and IHC4 for Predicting Risk of Distant Recurrence After Endocrine Therapy", Journal of Clinical Oncology, July 2013

Odx = Oncotype Dx

Oncotype Dx vs Prosigna Discordance, Marin Medical, Athens University Study

		Prosigna			Total
		Low	Intermediate	High	
ODx	Low	22	11	4	37
	Intermediate	5	5	2	12
	High	1	1	1	3
	Total	28	17	7	52

Prosigna vs ODx concordance 54%

Source: Prasad C et al., "A Pilot Laboratory Study Comparing the 21-Gene Assay and PAM50-ROR", presented at the ASCO annual meeting, 6/2/2014

Odx = Oncotype Dx

NanoString (NSTG)
Income Statement

Dan Leonard, 212-277-6116
dan.leonard@leerink.com

	2011	2012	Mar-13	Jun-13	Sep-13	Dec-13	2013	Mar-14	Jun-14e	Sep-14e	Dec-14e	2014e	2015e	2016e
Revenue														
Product/service	\$17,800	\$22,973	\$5,676	\$7,218	\$8,389	\$10,120	\$31,403	\$8,751	\$10,011	\$11,598	\$15,323	\$45,683	\$65,323	\$88,882
Other revenue	0	0	0	0	0	0	0	0	100	700	1,300	2,100	2,400	2,400
Total revenue	17,800	22,973	5,676	7,218	8,389	10,120	31,403	8,751	10,111	12,298	16,623	47,783	67,723	91,282
COGS	9,777	12,361	2,882	3,522	3,784	4,821	15,009	4,325	4,772	5,858	7,758	22,713	28,864	36,535
Gross profit	8,023	10,612	2,794	3,696	4,605	5,299	16,394	4,426	5,339	6,440	8,865	25,070	38,859	54,748
SG&A	9,529	15,486	6,126	6,708	7,988	9,090	29,912	10,674	12,133	12,298	14,961	50,066	57,564	62,072
R&D	8,990	11,635	3,059	3,626	3,784	4,510	14,979	4,732	4,853	5,534	6,982	22,101	23,703	23,733
Operating income (loss)	(10,496)	(16,509)	(6,391)	(6,638)	(7,167)	(8,301)	(28,497)	(10,980)	(11,648)	(11,392)	(13,077)	(47,097)	(42,409)	(31,058)
Interest expense (income)	589	783	382	486	516	490	1,874	472	1,430	570	575	3,046	2,345	2,723
Other expense, net	(153)	416	486	9	17	36	548	(30)	0	0	0	(30)	0	0
Pretax income	(10,932)	(17,708)	(7,259)	(7,133)	(7,700)	(8,827)	(30,919)	(11,422)	(13,077)	(11,962)	(13,652)	(50,113)	(44,754)	(33,780)
Taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net income	(\$10,932)	(\$17,708)	(\$7,259)	(\$7,133)	(\$7,700)	(\$8,827)	(\$30,919)	(\$11,422)	(\$13,077)	(\$11,962)	(\$13,652)	(\$50,113)	(\$44,754)	(\$33,780)
Basic shares outstanding		8,018	9,195	9,201	14,616	14,617	11,907	16,917	18,115	18,165	18,215	17,853	18,340	18,540
Diluted shares outstanding		8,018	9,195	9,201	14,616	14,617	11,907	16,917	18,115	18,165	18,215	17,853	18,340	18,540
EPS diluted		(\$2.21)	(\$0.79)	(\$0.78) (1)	(\$0.53)	(\$0.60)	(\$2.70)	(\$0.68)	(\$0.72)	(\$0.66)	(\$0.75)	(\$2.81)	(\$2.44)	(\$1.82)
<i>EPS growth</i>														
Sales growth	51.7%	29.1%	26.1%	21.5%	39.0%	55.9%	36.7%	54.2%	40.1%	46.6%	64.3%	52.2%	41.7%	34.8%
Gross margin	45.1%	46.2%	49.2%	51.2%	54.9%	52.4%	52.2%	50.6%	52.8%	52.4%	53.3%	52.5%	57.4%	58.9%
SG&A % of revenue	53.5%	67.4%	107.9%	92.9%	95.2%	89.8%	95.3%	122.0%	120.0%	100.0%	90.0%	104.8%	85.0%	68.0%
R&D % of revenue	50.5%	50.6%	53.9%	50.2%	45.1%	44.6%	47.7%	54.1%	48.0%	45.0%	42.0%	46.3%	35.0%	26.0%
Operating margin	(59.0%)	(71.9%)	(112.6%)	(92.0%)	(85.4%)	(82.0%)	(90.7%)	(125.5%)	(115.2%)	(92.6%)	(78.7%)	(98.6%)	(62.6%)	(34.0%)
Tax rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
D&A	\$1,454	\$1,947	\$464	\$437	\$459	\$417	\$1,777	\$396	\$334	\$387	\$460	\$1,576	\$1,960	\$2,666
EBITDA	(\$9,042)	(\$14,562)	(\$5,927)	(\$6,201)	(\$6,708)	(\$7,884)	(\$26,720)	(\$10,584)	(\$11,314)	(\$11,006)	(\$12,617)	(\$45,521)	(\$40,449)	(\$28,391)
Free cash flow														
Operarating cash flow	(\$10,692)	(\$14,808)	(\$9,009)	(\$5,233)	(\$7,241)	(\$9,863)	(\$31,346)	(\$13,058)				(\$46,734)	(\$41,847)	(\$30,511)
CapX	(2,688)	(428)	(136)	(118)	(246)	(259)	(759)	(446)				(4,637)	(3,978)	(5,606)
Free cash flow	(\$13,380)	(\$15,236)	(\$9,145)	(\$5,351)	(\$7,487)	(\$10,122)	(\$32,105)	(\$13,504)				(\$51,371)	(\$45,825)	(\$36,117)
Guidance														
Total revenue												\$45 - \$50M		
Gross Margin												55% - 58%		
Net loss												\$40 - \$50M		
Segment revenue														
Life Science Tools	\$17,800	\$22,973	\$5,676	\$7,218	\$8,348	\$9,980	\$31,222	\$8,690	\$9,889	\$11,353	\$13,573	\$43,505	\$53,598	\$65,432
IVD Kits	0	0	0	0	41	140	181	61	123	245	1,750	2,179	11,725	23,450
Total revenue	\$17,800	\$22,973	\$5,676	\$7,218	\$8,389	\$10,120	\$31,403	\$8,751	\$10,011	\$11,598	\$15,323	\$45,683	\$65,323	\$88,882

Notes:

Source: Company reports and Leerink Partners estimates

(1) Excludes accretion of mandatorily redeemable convertible preferred stock and change in fair value of preferred stock warrant liability

Disclosures Appendix

Analyst Certification

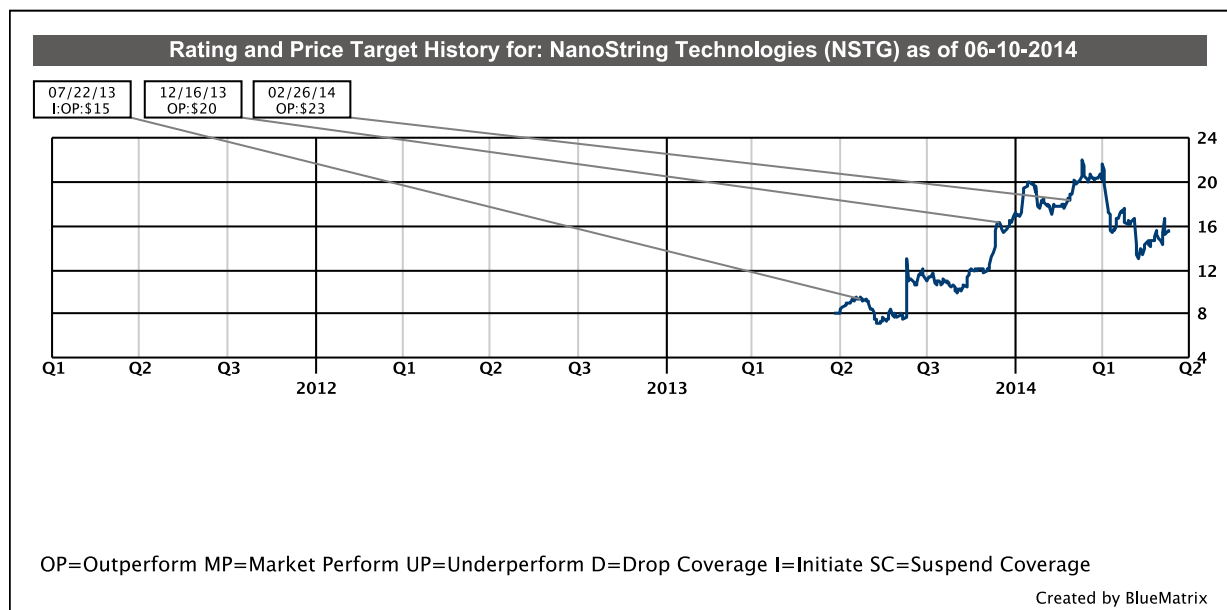
I, Dan Leonard, certify that the views expressed in this report accurately reflect my views and that no part of my compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

Valuation

Our 12-month price target of \$23 for NSTG reflects an enterprise value (using projected levels of debt and cash) that is ~7.5x our 2015 revenue forecast. We prefer revenue multiples for companies not yet meaningfully profitable. This multiple is a premium to the life science tools and diagnostics peer group median EV/FTM revenue of ~4x, which we believe appropriately reflects NSTG's greater growth prospects.

Risks to Valuation

Risks to our price target for NSTG include, but are not limited to: Prosigna commercialization uncertainty in both the U.S. and Europe, competition, and tightening research budgets. While we model the company raising equity in 2014 to help fund operations, its ability to tap the equity markets or obtain additional funding may be a potential uncertainty.

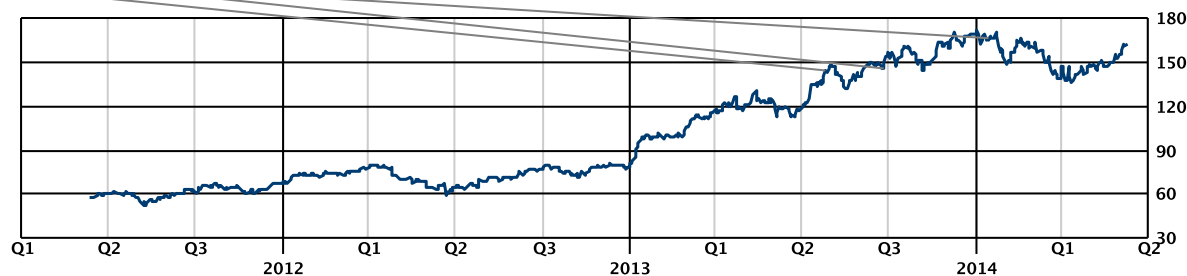


Rating and Price Target History for: Celgene, Inc. (CELG) as of 06-10-2014

07/26/13
OP:\$165

09/25/13
OP:\$177

01/14/14
OP:\$197



Leerink Swann initiated coverage of CELG with an Outperform rating on February 7, 2003. On June 11, 2013, Leerink Swann began a transition to specific price targets for the stocks under its coverage, replacing valuation ranges.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

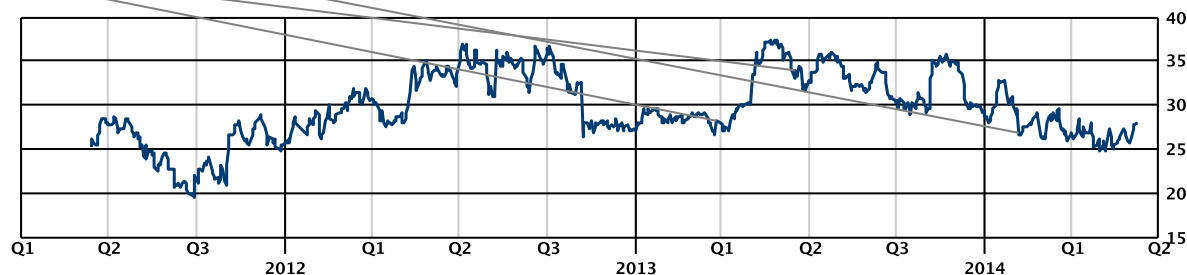
Created by BlueMatrix

Rating and Price Target History for: Genomic Health, Inc. (GHDX) as of 06-10-2014

03/27/13
OP

06/18/13
OP:\$41

02/05/14
OP:\$37



Leerink Swann placed a Market Perform rating on GHDX on January 17, 2008. On June 11, 2013, Leerink Swann began a transition to specific price targets for the stocks under its coverage, replacing valuation ranges.

OP=Outperform MP=Market Perform UP=Underperform D=Drop Coverage I=Initiate SC=Suspend Coverage

Created by BlueMatrix

Distribution of Ratings/Investment Banking Services (IB) as of 03/31/14				
Rating	Count	Percent	IB Serv./Past 12 Mos.	
			Count	Percent
BUY [OP]	131	68.23	46	35.11
HOLD [MP]	61	31.77	3	4.92
SELL [UP]	0	0.00	0	0.00

Explanation of Ratings

Outperform (Buy): We expect this stock to outperform its benchmark over the next 12 months.

Market Perform (Hold/Neutral): We expect this stock to perform in line with its benchmark over the next 12 months.

Underperform (Sell): We expect this stock to underperform its benchmark over the next 12 months. The degree of outperformance or underperformance required to warrant an Outperform or an Underperform rating should be commensurate with the risk profile of the company.

For the purposes of these definitions the relevant benchmark will be the S&P 600® Health Care Index for issuers with a market capitalization of less than \$2 billion and the S&P 500® Health Care Index for issuers with a market capitalization over \$2 billion.

Important Disclosures

This information (including, but not limited to, prices, quotes and statistics) has been obtained from sources that we believe reliable, but we do not represent that it is accurate or complete and it should not be relied upon as such. All information is subject to change without notice. This is provided for information purposes only and should not be regarded as an offer to sell or as a solicitation of an offer to buy any product to which this information relates. The Firm, its officers, directors, employees, proprietary accounts and affiliates may have a position, long or short, in the securities referred to in this report, and/or other related securities, and from time to time may increase or decrease the position or express a view that is contrary to that contained in this report. The Firm's salespeople, traders and other professionals may provide oral or written market commentary or trading strategies that are contrary to opinions expressed in this report. The Firm's proprietary accounts may make investment decisions that are inconsistent with the opinions expressed in this report. The past performance of securities does not guarantee or predict future performance. Transaction strategies described herein may not be suitable for all investors. Additional information is available upon request by contacting the Editorial Department at One Federal Street, 37th Floor, Boston, MA 02110.

Like all Firm employees, analysts receive compensation that is impacted by, among other factors, overall firm profitability, which includes revenues from, among other business units, Institutional Equities, and Investment Banking. Analysts, however, are not compensated for a specific investment banking services transaction.

MEDACorp is a network of healthcare professionals, attorneys, physicians, key opinion leaders and other specialists accessed by Leerink and it provides information used by its analysts in preparing research.

In the past 12 months, the Firm has received compensation for providing investment banking services to NanoString Technologies .

Leerink Partners LLC makes a market in NanoString Technologies, Celgene, Inc. and Genomic Health, Inc.

Leerink Partners LLC has acted as a co-manager for a public offering of NanoString Technologies in the past 12 months.

©2014 Leerink Partners LLC. All rights reserved. This document may not be reproduced or circulated without our written authority.

Leerink Partners LLC Equity Research

Director of Equity Research	John L. Sullivan, CFA	(617) 918-4875	john.sullivan@leerink.com
Associate Director of Research	Alice C. Avanian, CFA	(617) 918-4544	alice.avanian@leerink.com
Healthcare Strategy	John L. Sullivan, CFA	(617) 918-4875	john.sullivan@leerink.com
	Alice C. Avanian, CFA	(617) 918-4544	alice.avanian@leerink.com
Biotechnology	Howard Liang, Ph.D.	(617) 918-4857	howard.liang@leerink.com
	Joseph P. Schwartz	(617) 918-4575	joseph.schwartz@leerink.com
	Marko Kozul, M.D.	(415) 905-7221	marko.kozul@leerink.com
	Michael Schmidt, Ph.D.	(617) 918-4588	michael.schmidt@leerink.com
	Gena Wang, Ph.D., CFA	(212) 277-6073	gena.wang@leerink.com
	Jonathan Chang, Ph.D.	(617) 918-4015	jonathan.chang@leerink.com
	Paul Matteis	(617) 918-4585	paul.matteis@leerink.com
	Richard Goss	(617) 918-4059	richard.goss@leerink.com
Life Science Tools and Diagnostics	Dan Leonard	(212) 277-6116	dan.leonard@leerink.com
	Justin Bowers, CFA	(212) 277-6066	justin.bowers@leerink.com
Pharmaceuticals/Major	Seamus Fernandez	(617) 918-4011	seamus.fernandez@leerink.com
	Ario Arabi	(617) 918-4568	ario.arabi@leerink.com
	Aneesh Kapur	(617) 918-4576	aneesh.kapur@leerink.com
Specialty Pharmaceuticals	Jason M. Gerberry, JD	(617) 918-4549	jason.gerberry@leerink.com
Medical Devices, Cardiology & Orthopedics	Danielle Antalffy	(212) 277-6044	danielle.antalffy@leerink.com
	Richard Newitter	(212) 277-6088	richard.newitter@leerink.com
	Ravi Misra	(212) 277-6049	ravi.misra@leerink.com
Healthcare Services	Ana Gupte, Ph.D.	(212) 277-6040	ana.gupte@leerink.com
Healthcare Technology & Distribution	David Larsen, CFA	(617) 918-4502	david.larsen@leerink.com
	Christopher Abbott	(617) 918-4010	chris.abbott@leerink.com
Sr. Editor/Supervisory Analyst	Mary Ellen Eagan, CFA	(617) 918-4837	maryellen.eagan@leerink.com
Supervisory Analysts	Robert Egan		bob.egan@leerink.com
	Amy N. Sonne		amy.sonne@leerink.com
Editorial	Cristina Diaz-Dickson	(617) 918-4548	cristina.diaz-dickson@leerink.com
Research Assistant	Carmen Augustine	(212) 277-6012	carmen.augustine@leerink.com

New York
299 Park Avenue, 21st floor
New York, NY 10171
(888) 778-1653

Boston
One Federal Street, 37th Floor
Boston, MA 02110
(800) 808-7525

San Francisco
201 Spear Street, 16th Floor
San Francisco, CA 94105
(800) 778-1164