

## Leerink Partners LLC Coverage by Sector



### Diversified Biotechnology

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Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares Outstanding (MM)	Market Cap (\$MM)	
								2018E	2019E		Cap	
1 AbbVie Inc.#^	ABBV	Market Perform	Dec	86.13	5.62	8.05	8.54	10.7	10.1	1,504.2		129,560
2 Acceleron Pharma Inc.	XLRN	Outperform	Dec	45.63	(2.68)	(2.49)	(1.35)	NA	NA	46.2		2,108
3 Alder BioPharmaceuticals, Inc.	ALDR	Outperform	Dec	10.96	(4.95)	(4.73)	(4.07)	NA	NA	68.3		749
4 Alexion Pharmaceuticals, Inc.#+	ALXN	Outperform	Dec	109.99	5.86	7.77	9.18	14.2	12.0	223.1		24,538
5 Amgen Inc.``	AMGN	Market Perform	Dec	192.50	12.58	14.31	14.66	13.5	13.1	637.2		122,665
6 Aptinyx Inc.	APTX	Outperform	Dec	21.52	(1.91)	(2.26)	(2.39)	NA	NA	33.5		721
7 Arcus Biosciences, Inc.	RCUS	Outperform	Dec	12.66	(29.03)	(1.71)	(1.92)	NA	NA	44.5		563
8 Assembly Biosciences, Inc.	ASMB	Outperform	Dec	21.96	(2.41)	(3.93)	(4.44)	NA	NA	25.5		559
9 Biogen Inc.#+	BIIB	Market Perform	Dec	315.41	21.81	26.45	28.52	11.9	11.1	201.5		63,550
10 Celgene Corporation#+	CELG	Outperform	Dec	68.61	7.44	8.84	10.63	7.8	6.5	699.3		47,976
11 Dova Pharmaceuticals, Inc.	DOVA	Market Perform	Dec	15.05	(1.40)	(2.69)	(2.59)	NA	NA	28.2		425
12 FibroGen, Inc.	FGEN	Outperform	Dec	40.05	(1.73)	(1.35)	(0.16)	NA	NA	85.0		3,403
13 Gilead Sciences, Inc.#+	GILD	Market Perform	Dec	65.79	8.84	6.91	6.79	9.5	9.7	1,293.6		85,107
14 Principia Biopharma Inc.	PRNB	Outperform	Dec	28.88	(5.55)	0.28	(1.92)	NA	NA	23.9		689
15 Radius Health, Inc.+	RDS	Outperform	Dec	15.51	(4.89)	(3.79)	(2.89)	NA	NA	45.5		706
16 Regeneron Pharmaceuticals, Inc.<	REGN	Outperform	Dec	380.13	16.31	21.89	26.69	17.4	14.2	106.3		40,417
17 resTORbio, Inc.``	TORC	Outperform	Dec	13.05	NA	(1.60)	(2.34)	NA	NA	28.1		366
18 Theravance Biopharma, Inc.	TBPH	Outperform	Dec	26.94	(5.45)	(4.45)	(5.30)	NA	NA	55.4		1,493
19 Translate Bio, Inc.``	TBIO	Outperform	Dec	8.90	(2.23)	(2.50)	(1.30)	NA	NA	45.1		402
20 Vertex Pharmaceuticals Incorporated#+	VRTX	Outperform	Dec	170.99	1.95	3.80	4.14	45.0	41.3	255.6		43,698

## Leerink Partners LLC Coverage by Sector



### Targeted Oncology

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Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares Outstanding (MM)	Market Cap (\$MM)	
								2018E	2019E		Cap	
1 Agios Pharmaceuticals, Inc.	AGIO	Market Perform	Dec	52.37	(6.75)	(6.40)	(7.13)	NA	NA	58.2		3,047
2 BeiGene, Ltd.~+	BGNE	Outperform	Dec	133.35	(2.23)	(10.42)	(11.60)	NA	NA	59.0		7,867
3 Blueprint Medicines Corporation	BPMC	Outperform	Dec	56.15	(3.89)	(5.32)	(7.93)	NA	NA	44.0		2,468
4 Clovis Oncology, Inc.	CLVS	Outperform	Dec	20.34	(7.36)	(7.02)	(6.93)	NA	NA	52.7		1,072
5 Deciphera Pharmaceuticals, Inc.	DCPH	Underperform	Dec	26.23	(2.99)	(2.70)	(3.21)	NA	NA	37.7		988
6 Epizyme, Inc.	EPZM	Market Perform	Dec	5.89	(2.18)	(1.99)	(2.49)	NA	NA	79.2		466
7 Incyte Corporation	INCY	Market Perform	Dec	66.53	(1.53)	0.41	0.53	NA	NA	212.8		14,157
8 Loxo Oncology, Inc.	LOXO	Outperform	Dec	140.75	(5.31)	(2.33)	(5.07)	NA	NA	30.6		4,309
9 Seattle Genetics, Inc.	SGEN	Outperform	Dec	60.74	(0.88)	(1.07)	(0.87)	NA	NA	160.1		9,727
10 TESARO, Inc.	TSRO	Market Perform	Dec	73.75	(9.17)	(10.93)	(8.62)	NA	NA	55.1		4,061

## Leerink Partners LLC Coverage by Sector



### Emerging Oncology

Jonathan Chang, Ph.D., CFA

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Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares Outstanding (MM)	Market	
								2018E	2019E		Cap	(\$MM)
1 Adaptimmune Therapeutics plc#	ADAP	Outperform	Dec	5.15	(0.13)	(0.14)	(0.23)	NA	NA	104.6		539
2 ArQule, Inc.	ARQL	Outperform	Dec	3.27	(0.39)	(0.16)	(0.41)	NA	NA	109.0		356
3 ASLAN Pharmaceuticals Ltd#	ASLN	Market Perform	Dec	4.20	(1.60)	(1.42)	(1.31)	NA	NA	32.0		134
4 Calithera Biosciences, Inc.	CALA	Outperform	Dec	4.71	(0.84)	(1.55)	(1.70)	NA	NA	38.1		180
5 Five Prime Therapeutics, Inc.	FPRX	Outperform	Dec	9.50	NA	(4.28)	(6.58)	NA	NA	35.5		337
6 Immune Design Corp.	IMDZ	Market Perform	Dec	1.62	(1.75)	(1.10)	(1.06)	NA	NA	48.2		78
7 ImmunoGen, Inc.	IMGN	Outperform	Dec	5.17	(1.02)	(1.27)	(1.29)	NA	NA	149.1		771
8 Innate Pharma SA#	IPH FP	Outperform	Dec	7.74	(0.89)	(0.19)	1.13	NA	6.8	63.9		494
9 Karyopharm Therapeutics Inc.	KPTI	Outperform	Dec	9.74	(2.81)	(3.18)	(3.48)	NA	NA	60.7		591
10 Kura Oncology, Inc.	KURA	Outperform	Dec	14.04	(1.52)	(1.76)	(1.87)	NA	NA	38.0		534
11 MacroGenics, Inc.	MGNX	Outperform	Dec	13.78	(0.54)	(4.23)	(2.08)	NA	NA	42.3		582
12 Mersana Therapeutics, Inc.	MRSN	Outperform	Dec	4.77	(3.22)	(2.49)	(2.17)	NA	NA	23.2		111
13 Replimune Group, Inc.	REPL	Outperform	Mar	14.93	(3.96)	(1.34)	(1.31)	NA	NA	31.6		471
14 Rubius Therapeutics, Inc.	RUBY	Outperform	Dec	16.74	(5.55)	(1.16)	(1.33)	NA	NA	79.0		1,323
15 Trillium Therapeutics Inc.	TRIL	Market Perform	Dec	1.66	(4.61)	(3.21)	(1.78)	NA	NA	14.4		24
16 Xencor, Inc.	XNCR	Outperform	Dec	36.75	(1.05)	(1.56)	(2.07)	NA	NA	56.2		2,067
17 Zai Lab Ltd	ZLAB	Outperform	Dec	23.09	(2.32)	(2.29)	(1.40)	NA	NA	58.1		1,342

## Leerink Partners LLC Coverage by Sector



### Neuroscience

Marc Goodman

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Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares Outstanding (MM)	Market	
								2018E	2019E		Cap	(\$MM)
1 ACADIA Pharmaceuticals Inc.#~~	ACAD	Market Perform	Dec	17.83	(2.36)	(2.03)	(1.90)	NA	NA	143.6		2,561
2 AC Immune SA#~~	ACIU	Outperform	Dec	11.36	(CHF 0.46)	(CHF 0.81)	(CHF 0.99)	NA	NA	67.4		765
3 Adamas Pharmaceuticals, Inc.-^~	ADMS	Outperform	Dec	9.65	(3.99)	(5.52)	(3.67)	NA	NA	27.3		264
4 Allergan plc**^	AGN	Outperform	Dec	148.86	16.35	16.54	16.40	9.0	9.1	337.2		50,194
5 Alkermes plc<	ALKS	Market Perform	Dec	32.86	0.17	0.24	0.70	NA	46.9	155.4		5,106
6 Biohaven Pharmaceutical Holding Company Ltd	BHVN	Outperform	Dec	37.91	(5.00)	(6.19)	(6.35)	NA	NA	40.3		1,529
7 GW Pharmaceuticals plc~+	GWPH	Outperform	Dec	119.25	(0.43)	(10.13)	(8.50)	NA	NA	30.4		3,631
8 Intra-Cellular Therapies, Inc.#~~	ITCI	Outperform	Dec	13.75	(2.12)	(2.98)	(4.00)	NA	NA	54.7		752
9 H. Lundbeck A/S^*	LUN-DK	Market Perform	Dec	DKK 286.50	DKK 16.48	DKK 24.32	DKK 19.30	11.8	14.8	199.1	DKK	57,043.58
10 Neurocrine Biosciences, Inc.-#	NBIX	Market Perform	Dec	72.50	(1.62)	0.08	1.40	NA	51.8	90.7		6,574
11 Sage Therapeutics, Inc.#~~	SAGE	Underperform	Dec	100.94	(7.09)	(7.51)	(11.20)	NA	NA	46.9		4,733
12 Zogenix, Inc.#~~	ZGNX	Outperform	Dec	41.80	(4.65)	(3.80)	(4.60)	NA	NA	42.0		1,754

## Leerink Partners LLC Coverage by Sector



### Genetic Medicine

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Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares Outstanding (MM)	Market	
								2018E	2019E		Cap	(\$MM)
1 Alnylam Pharmaceuticals, Inc. @*	ALNY	Market Perform	Dec	76.96	(5.42)	(7.70)	(7.24)	NA	NA	101.0		7,775
2 AVROBIO, Inc. @*	AVRO	Market Perform	Dec	24.97	(CHF 8.38)	(CHF 3.35)	(CHF 2.74)	NA	NA	24.0		598
3 bluebird bio, Inc. @*	BLUE	Outperform	Dec	101.99	(7.71)	(10.93)	(9.13)	NA	NA	54.7		5,578
4 Dicerna Pharmaceuticals, Inc. @*	DRNA	Outperform	Dec	12.19	(2.11)	(1.36)	(0.56)	NA	NA	62.7		765
5 Eidos Therapeutics, Inc. @*	EIDX	Outperform	Dec	15.85	(3.32)	(2.14)	(1.27)	NA	NA	36.7		582
6 Intellia Therapeutics, Inc. @*	NTLA	Outperform	Dec	15.75	(1.88)	(2.13)	(2.11)	NA	NA	43.4		684
7 Ionis Pharmaceuticals, Inc. @*	IONS	Market Perform	Dec	53.17	0.05	(0.51)	0.25	NA	NA	137.6		7,315
8 REGENXBIO Inc. @*	RGNX	Underperform	Dec	45.43	(2.45)	2.37	(2.52)	19.2	NA	35.8		1,628
9 Rocket Pharmaceuticals, Inc. @*	RCKT	Outperform	Dec	15.41	(219.49)	(1.66)	(1.65)	NA	NA	44.4		683
10 Wave Life Sciences Ltd. @*	WVE	Outperform	Dec	49.39	(3.85)	(5.07)	(2.93)	NA	NA	29.5		1,455

## Leerink Partners LLC Coverage by Sector



### Rare Disease

Joseph P. Schwartz

Dae Gon Ha, Ph.D.

Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares		Market Cap (\$MM)
								2018E	2019E	Outstanding (MM)	Cap	
1 Achillion Pharmaceuticals, Inc.	ACHN	Outperform	Dec	3.14	(0.62)	(0.53)	(0.60)	NA	NA	138.6		435
2 Amicus Therapeutics, Inc.	FOLD	Outperform	Dec	10.56	(1.85)	(1.73)	(0.96)	NA	NA	189.3		1,999
3 Arena Pharmaceuticals, Inc.	ARNA	Outperform	Dec	41.48	(2.78)	(2.76)	(2.86)	NA	NA	49.4		2,049
4 Ascendis Pharma A/S	ASND	Market Perform	Dec	65.52	(3.68)	(3.45)	(4.51)	NA	NA	41.5		2,721
5 Audentes Therapeutics, Inc.	BOLD	Outperform	Dec	23.19	(3.40)	(3.44)	(3.90)	NA	NA	42.7		990
6 Aurinia Pharmaceuticals Inc.	AUPH	Outperform	Dec	6.04	(0.92)	(0.78)	(0.90)	NA	NA	85.3		515
7 BioMarin Pharmaceutical Inc.	BMRN	Outperform	Dec	93.15	(0.67)	(0.72)	(0.09)	NA	NA	178.1		16,586
8 Clementia Pharmaceuticals Inc.#	CMTA	Outperform	Dec	11.79	(7.71)	(1.78)	(2.13)	NA	NA	37.8		446
9 Crinetics Pharmaceuticals, Inc.	CRNX	Outperform	Dec	33.79	NA	(2.38)	(1.62)	NA	NA	24.0		812
10 CymaBay Therapeutics, Inc.	CBAY	Outperform	Dec	8.71	(0.79)	(1.28)	(1.55)	NA	NA	59.4		518
11 DBV Technologies S.A.#	DBVT	Outperform	Dec	14.78	(5.97)	(5.61)	(5.44)	NA	NA	60.3		891
12 inflaRx N.V.#	IFRX	Outperform	Dec	27.61	(2.58)	(1.09)	(1.37)	NA	NA	25.9		716
13 Insmed Incorporated	INSM	Outperform	Dec	14.61	(2.89)	(4.12)	(5.03)	NA	NA	77.1		1,126
14 Intercept Pharmaceuticals, Inc.	ICPT	Market Perform	Dec	108.66	(14.38)	(10.76)	(8.70)	NA	NA	29.7		3,222
15 Millendo Therapeutics, Inc.	MLND	Outperform	Dec	10.52	NA	(2.93)	(3.45)	NA	NA	14.0		147
16 Nightstar Therapeutics plc#*	NITE	Outperform	Dec	11.30	(1.63)	(1.44)	(1.41)	NA	NA	32.1		363
17 Protagonist Therapeutics, Inc.	PTGX	Outperform	Dec	6.88	(2.09)	(1.84)	(2.58)	NA	NA	24.1		166
18 Proteostasis Therapeutics, Inc.	PTI	Outperform	Dec	4.94	(2.34)	(1.78)	(2.35)	NA	NA	49.2		243
19 Reata Pharmaceuticals, Inc.	RETA	Outperform	Dec	60.50	(1.99)	(3.01)	(4.28)	NA	NA	24.0		1,451
20 Regulus Therapeutics Inc.	RGLS	Market Perform	Dec	1.43	(0.96)	(0.75)	(2.80)	NA	NA	8.7		12
21 Retrophin, Inc.	RTRX	Outperform	Dec	24.30	(1.54)	(2.95)	(2.59)	NA	NA	41.2		1,002
22 Sarepta Therapeutics, Inc.	SRPT	Outperform	Dec	121.13	(0.86)	(4.27)	(1.63)	NA	NA	70.5		8,541
23 Solid Biosciences Inc.	SLDB	Outperform	Dec	23.69	(2.88)	(2.21)	(2.48)	NA	NA	35.4		839
24 Spark Therapeutics, Inc.	ONCE	Market Perform	Dec	40.00	(7.63)	(0.75)	(4.02)	NA	NA	37.2		1,489
25 Synlogic, Inc.	SYBX	Outperform	Dec	7.71	(6.00)	(2.11)	(2.54)	NA	NA	25.4		196
26 The Medicines Company	MDCO	Outperform	Dec	18.88	(9.79)	(1.74)	(1.64)	NA	NA	73.9		1,395
27 Ultragenyx Pharmaceutical Inc.	RARE	Outperform	Dec	45.86	(7.12)	(4.06)	(6.92)	NA	NA	50.6		2,320
28 uniQure N.V.	QURE	Outperform	Dec	28.06	(2.94)	(2.45)	(2.64)	NA	NA	30.8		864
29 Zafgen, Inc.	ZFGN	Market Perform	Dec	5.33	(1.90)	(1.97)	(1.78)	NA	NA	36.9		197

## Leerink Partners LLC Coverage by Sector



### Biopharma and Generics

Ami Fadia

Eason Lee

Updated on: 12/14/2018

#### Generics

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares	Market	
								2018E	2019E	Outstanding (MM)	Cap	(\$MM)
1 Amneal Pharmaceuticals, Inc.*#	AMRX	Outperform	Dec	15.92	0.63	0.91	1.38	17.5	11.5	298.5		4,751
2 Endo International plc##	ENDP	Outperform	Dec	10.49	3.85	2.72	2.95	3.9	3.6	224.3		2,353
3 Mylan N.V.	MYL	Outperform	Dec	29.37	4.56	4.68	5.34	6.3	5.5	515.6		15,144
4 Perrigo Company plc	PRGO	Market Perform	Dec	57.63	4.93	4.60	4.85	12.5	11.9	135.9		7,829
5 Teva Pharmaceutical Industries Ltd.*#	TEVA	Market Perform	Dec	18.63	4.01	2.92	2.87	6.4	6.5	1,018.7		18,974

#### Infectious Disease

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares	Market	
								2018E	2019E	Outstanding (MM)	Cap	(\$MM)
1 Achaogen, Inc.	AKAO	Outperform	Dec	1.64	(3.17)	(3.90)	(1.09)	NA	NA	46.1		75
2 Iterum Therapeutics plc	ITRM	Outperform	Dec	7.56	(170.84)	(11.04)	(5.76)	NA	NA	14.2		107
3 Paratek Pharmaceuticals, Inc.	PRTK	Outperform	Dec	6.13	(3.32)	(3.29)	(3.46)	NA	NA	32.1		197

#### Pain

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares	Market	
								2018E	2019E	Outstanding (MM)	Cap	(\$MM)
1 Heron Therapeutics, Inc.	HRTX	Outperform	Dec	25.60	(3.65)	(2.18)	(0.98)	NA	NA	78.0		1,997
2 Pacira Pharmaceuticals, Inc.+	PCRX	Market Perform	Dec	45.33	0.19	0.82	1.56	55.3	29.1	41.1		1,864

#### Women's Health

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares	Market	
								2018E	2019E	Outstanding (MM)	Cap	(\$MM)
1 AMAG Pharmaceuticals, Inc.	AMAG	Market Perform	Dec	17.00	4.56	1.94	(2.21)	8.8	NA	34.5		587
2 ObsEva SA*#	OBSV	Outperform	Dec	15.63	(2.27)	(1.96)	(1.85)	NA	NA	42.8		669

#### Biopharma: Other Therapeutics

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares	Market	
								2018E	2019E	Outstanding (MM)	Cap	(\$MM)
1 Ardelyx, Inc.	ARDX	Outperform	Dec	2.15	(1.36)	(1.53)	(1.58)	NA	NA	62.1		134
2 Jazz Pharmaceuticals plc*#	JAZZ	Outperform	Dec	141.15	11.04	13.00	14.00	10.9	10.1	60.3		8,514
3 Mallinckrodt plc	MNK	Market Perform	Dec	19.44	5.80	7.10	7.07	2.7	2.7	83.3		1,620
4 scPharmaceuticals Inc.*#	SCPH	Outperform	Dec	4.86	(8.04)	(1.78)	(2.23)	NA	NA	18.6		90
5 Xeris Pharmaceuticals, Inc.*#	XERS	Outperform	Dec	20.10	(13.09)	(9.16)	(3.24)	NA	NA	20.9		419

## Leerink Partners LLC Coverage by Sector



### Life Science Tools and Diagnostics

Puneet Souda

David Delahunt

Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares	Market	
								2018E	2019E	Outstanding (MM)	Cap	(\$MM)
1 Agilent Technologies, Inc.**	A	Outperform	Oct	69.58	2.36	2.79	3.04	24.9	22.9	318.8		22,180
2 Bio-Techne Corporation**	TECH	Outperform	Jun	152.37	3.72	4.54	4.42	33.6	34.5	37.8		5,754
3 Bruker Corporation**	BRKR	Market Perform	Dec	30.62	1.20	1.37	1.50	22.4	20.4	156.6		4,794
4 EXACT Sciences Corporation^	EXAS	Outperform	Dec	67.00	(0.99)	(1.50)	(1.51)	NA	NA	122.9		8,234
5 HTG Molecular Diagnostics, Inc.``	HTGM	Outperform	Dec	2.95	(1.90)	(0.82)	(0.69)	NA	NA	28.5		84
6 Guardant Health, Inc.**^	GH	Outperform	Dec	39.50	NA	(1.07)	(1.21)	NA	NA	85.8		3,387
7 Illumina, Inc.**	ILMN	Outperform	Dec	327.91	4.00	5.74	6.28	57.1	52.2	147.0		48,202
8 Invitae Corporation	NVTA	Outperform	Dec	12.20	(2.66)	(1.97)	(1.15)	NA	NA	74.6		910
9 Myriad Genetics, Inc.~	MYGN	Market Perform	Jun	30.97	1.03	1.47	1.71	21.1	18.1	74.8		2,315
10 NeoGenomics, Inc.+*	NEO	Outperform	Dec	13.26	0.13	0.18	0.28	73.7	47.4	94.0		1,247
11 Quanterix Corporation*#	QTRX	Outperform	Dec	18.96	(1.22)	(1.28)	(0.99)	NA	NA	22.2		421
12 Thermo Fisher Scientific Inc.**	TMO	Outperform	Dec	234.94	9.47	11.05	12.44	21.3	18.9	402.6		94,581
13 T2 Biosystems, Inc.	TTOO	Outperform	Dec	3.99	(1.94)	(1.22)	(1.10)	NA	NA	44.0		175
14 Veracyte, Inc.	VCYT	Outperform	Dec	12.41	(0.91)	(0.66)	(0.39)	NA	NA	40.5		503
15 Waters Corporation**	WAT	Market Perform	Dec	189.37	7.49	8.02	8.84	23.6	21.4	75.7		14,344



## Leerink Partners LLC Coverage by Sector



### Medical Supplies and Devices

Danielle Antalffy

Rebecca Wang

Dylan J. Gantley

Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares Outstanding (MM)	Market	
								2018E	2019E		Cap	(\$MM)
1 Abbott Laboratories##	ABT	Market Perform	Dec	71.06	2.52	2.89	3.20	24.6	22.2	1,756.3		124,805
2 ABIOMED, Inc.	ABMD	Outperform	Mar	320.06	1.16	2.45	A 5.00	NA	64.0	45.0		14,416
3 AtriCure, Inc.~	ATRC	Outperform	Dec	30.26	(0.83)	(0.73)	(0.39)	NA	NA	38.5		1,166
4 Baxter International Inc.^	BAX	Outperform	Dec	65.80	2.48	3.00	3.30	21.9	19.9	532.1		35,015
5 Boston Scientific Corporation^	BSX	Outperform	Dec	35.90	1.26	1.40	1.60	25.6	22.4	1,383.8		49,679
6 Cardiovascular Systems, Inc.	CSII	Outperform	Jun	28.40	(0.05)	0.05	A (0.11)	NA	NA	34.7		986
7 DexCom, Inc.^	DXCM	Outperform	Dec	121.76	(0.58)	0.69	0.33	NA	NA	88.8		10,818
8 Edwards Lifesciences Corporation^	EW	Market Perform	Dec	161.09	3.80	4.71	5.15	34.2	31.3	209.0		33,676
9 Inogen, Inc.	INGN	Outperform	Dec	130.20	0.96	2.11	2.17	61.7	60.0	21.5		2,802
10 Insulet Corporation~	PODD	Outperform	Dec	79.70	(0.46)	(0.08)	0.52	NA	NA	59.1		4,708
11 Johnson & Johnson^	JNJ	Outperform	Dec	135.12	7.30	8.15	8.75	16.6	15.4	2,682.0		362,389
12 Medtronic plc^	MDT	Market Perform	Apr	93.75	4.60	4.78	A 5.14	19.6	18.2	1,343.0		125,911
13 Neovasc Inc.	NVCN	Outperform	Dec	0.66	(0.28)	(1.25)	0.01	NA	66.3	25.0		17
14 Nevro Corp.	NVRO	Outperform	Dec	39.85	(1.25)	(1.34)	0.01	NA	NA	30.2		1,202
15 NxStage Medical, Inc.	NXTM	Market Perform	Dec	28.48	(0.05)	E 0.13	NA	NA	NA	66.7		1,899
16 Senseonics Holdings, Inc.	SENS	Outperform	Dec	2.88	(0.51)	(0.70)	(0.33)	NA	NA	176.9		509
17 Vericel Corporation	VCEL	Outperform	Dec	17.15	(0.51)	(0.28)	0.05	NA	NA	43.3		743

## Leerink Partners LLC Coverage by Sector



### Medical Supplies and Devices - Capital Equipment, Aesthetic Devices and Orthopedics

Richard Newitter

Jaime L. Morgan

Dylan J. Gantley

Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares Outstanding (MM)	Market	
								2018E	2019E		Cap	(\$MM)
1 Align Technology, Inc.	ALGN	Outperform	Dec	215.09	2.83	4.85	6.08	44.3	35.4	80.0		17,204
2 AxoGen, Inc.	AXGN	Outperform	Dec	28.93	(0.31)	(0.58)	(0.53)	NA	NA	38.7		1,119
3 Becton, Dickinson and Company^	BDX	Market Perform	Sep	232.97	9.48	11.01	12.09	21.2	19.3	268.3		62,496
4 CONMED Corporation	CNMD	Market Perform	Dec	63.91	1.89	2.16	2.40	29.6	26.6	28.1		1,798
5 Endologix, Inc.^	ELGX	Market Perform	Dec	0.75	(0.47)	(0.56)	(0.40)	NA	NA	103.5		77
6 Globus Medical, Inc.^	GMED	Outperform	Dec	44.94	1.31	1.62	1.78	27.7	25.2	99.9		4,489
7 Hologic, Inc.^	HOLX	Market Perform	Sep	42.22	2.03	2.23	2.40	18.9	17.6	289.2		12,211
8 Intersect ENT, Inc.^	XENT	Outperform	Dec	31.16	(0.56)	(0.75)	(0.47)	NA	NA	30.6		952
9 Inspire Medical Systems, Inc.	INSP	Outperform	Dec	41.44	(14.88)	(1.48)	(1.44)	NA	NA	22.9		949
10 Intuitive Surgical, Inc.^	ISRG	Outperform	Dec	498.47	9.09	11.07	12.48	45.0	39.9	114.2		56,925
11 NuVasive, Inc.^	NUVA	Market Perform	Dec	56.38	1.89	2.19	2.42	25.7	23.3	51.4		2,899
12 Sientra, Inc.	SIEN	Outperform	Dec	15.83	(3.34)	(3.12)	(2.43)	NA	NA	28.6		453
13 Stryker Corporation^	SYK	Outperform	Dec	168.51	6.50	7.27	8.00	23.2	21.1	374.2		63,054
14 Teleflex Incorporated^	TFX	Outperform	Dec	245.22	8.40	9.88	11.12	24.8	22.1	46.0		11,276
15 Wright Medical Group N.V.^	WMGI	Outperform	Dec	27.63	(0.22)	(0.09)	0.19	NA	NA	125.1		3,456
16 Zimmer Biomet Holdings, Inc.^	ZBH	Outperform	Dec	109.44	7.98	7.63	7.87	14.3	13.9	204.0		22,323

## Leerink Partners LLC Coverage by Sector



### Healthcare Services

#### Managed Care

Ana Gupte, Ph.D.

Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares Outstanding (MM)	Market	
								2018E	2019E		Cap	(\$MM)
1 Anthem, Inc.^	ANTM	Outperform	Dec	274.56	11.99	15.70	18.00	17.5	15.3	269.9	74,104	
2 Centene Corporation^	CNC	Outperform	Dec	128.65	5.03	7.05	8.35	18.2	15.4	205.4	26,418	
3 Cigna Corporation^	CI	Outperform	Dec	203.95	10.46	14.30	17.81	14.3	11.5	243.5	49,669	
4 CVS Health Corporation	CVS	Outperform	Dec	72.07	5.90	7.05	7.70	10.2	9.4	1,293.2	93,200	
5 Humana Inc.^	HUM	Outperform	Dec	300.99	11.71	14.50	18.25	20.8	16.5	137.2	41,292	
6 Magellan Health, Inc.^	MGLN	Market Perform	Dec	60.64	4.51	3.11	2.70	19.5	22.5	24.3	1,471	
7 Molina Healthcare, Inc.^	MOH	Outperform	Dec	132.07	(8.72)	9.05	9.00	14.6	14.7	62.4	8,240	
8 UnitedHealth Group, Inc.^	UNH	Outperform	Dec	265.29	10.07	12.97	14.77	20.5	18.0	962.0	255,214	
9 WellCare Health Plans, Inc.^	WCG	Outperform	Dec	237.28	8.52	11.24	14.55	21.1	16.3	50.0	11,862	

### Healthcare Facilities

Ana Gupte, Ph.D.

John Sourbeer

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares Outstanding (MM)	Market	
								2018E	2019E		Cap	(\$MM)
1 American Renal Associates Holdings, Inc.	ARA	Outperform	Dec	14.08	0.59	0.51	0.43	27.6	32.7	32.5	458	
2 Acadia Healthcare Company, Inc.	ACHC	Market Perform	Dec	29.47	2.25	2.25	2.42	13.1	12.2	88.3	2,600	
3 Community Health Systems, Inc.^	CYH	Market Perform	Dec	3.94	(1.19)	(2.16)	(0.83)	NA	NA	116.3	458	
4 HCA Healthcare, Inc.^	HCA	Outperform	Dec	126.88	5.99	9.38	10.17	13.5	12.5	344.2	43,667	
5 MEDNAX, Inc.``	MD	Outperform	Dec	36.78	3.34	3.83	4.36	9.6	8.4	89.4	3,289	
6 Surgery Partners, Inc.**^	SGRY	Outperform	Dec	12.66	(0.33)	(0.37)	0.76	NA	16.7	48.9	619	
7 Tenet Healthcare Corporation^	THC	Outperform	Dec	21.41	0.79	1.58	2.16	13.6	9.9	102.5	2,194	
8 Universal Health Services, Inc.^	UHS	Outperform	Dec	121.72	7.54	9.51	9.55	12.8	12.7	85.3	10,380	

### Payor Services

Ana Gupte, Ph.D.

Daniel Grosslight

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares Outstanding (MM)	Market	
								2018E	2019E		Cap	(\$MM)
1 HMS Holdings Corp.^	HMSY	Outperform	Dec	32.27	0.97	1.04	1.19	31.0	27.1	83.9	2,708	
2 Teladoc Health, Inc.<	TDOC	Outperform	Dec	51.33	(1.93)	(1.48)	(1.05)	NA	NA	70.1	3,599	

## Leerink Partners LLC Coverage by Sector



### Healthcare Services

David Larsen, CFA  
Jonathan McGraw Bentley

#### Healthcare Distribution

Updated on: 12/14/2018

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares	Market	
								2018E	2019E	Outstanding (MM)	Cap	(\$MM)
1 AmerisourceBergen Corporation	ABC	Outperform	Sep	80.06	5.88	6.49	6.80	12.3	11.8	211.9		16,967
2 Cardinal Health, Inc.	CAH	Market Perform	Jun	50.63	5.40	5.00	A 5.00	10.1	10.1	297.9		15,085
3 Henry Schein, Inc.~	HSIC	Outperform	Dec	81.43	3.61	4.15	4.55	19.6	17.9	152.4		12,413
4 McKesson Corporation~	MCK	Market Perform	Mar	118.54	12.54	12.62	A 13.30	9.4	8.9	195.4		23,160
5 Owens & Minor, Inc.	OMI	Market Perform	Dec	6.61	1.61	1.20	1.05	5.5	6.3	62.3		412
6 Patterson Companies, Inc.<	PDCO	Market Perform	Apr	21.99	2.34	1.68	1.40	13.1	15.7	95.0		2,088

#### Pharmacy Benefit Management

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares	Market	
								2018E	2019E	Outstanding (MM)	Cap	(\$MM)
1 Diplomat Pharmacy, Inc.***	DPLO	Outperform	Dec	14.46	0.84	0.83	1.02	17.4	14.2	74.5		1,077
2 Express Scripts Holding Company*	ESRX	Market Perform	Dec	97.99	7.10	9.10	9.50	10.8	10.3	563.9		55,253
3 Walgreens Boots Alliance, Inc.	WBA	Market Perform	Aug	79.03	5.10	6.02	A 6.50	13.1	12.2	945.8		74,746

#### Healthcare Information Technology

Company	Ticker	Rating	Year	Closing Price (\$)	2017A (\$)	2018E (\$)	2019E (\$)	P/E		Shares	Market	
								2018E	2019E	Outstanding (MM)	Cap	(\$MM)
1 Allscripts Healthcare Solutions, Inc.*	MDRX	Market Perform	Dec	10.42	0.62	0.70	0.70	14.9	14.9	174.7		1,821
2 athenahealth, Inc.*	ATHN	Market Perform	Dec	132.85	2.49	4.07	4.80	32.6	27.7	40.6		5,395
3 Cerner Corporation*	CERN	Outperform	Dec	56.52	2.38	2.46	2.75	23.0	20.6	329.5		18,623
4 Computer Programs and Systems, Inc.*	CPSI	Market Perform	Dec	25.80	1.77	2.31	2.20	11.2	11.7	14.1		363
5 Evolent Health, Inc.~	EVH	Outperform	Dec	18.90	(0.35)	(0.08)	0.35	NA	54.0	78.3		1,481
6 NextGen Healthcare, Inc.~	NXGN	Market Perform	Mar	16.66	0.82	0.70	A 0.72	23.8	23.1	64.7		1,077
7 Premier, Inc.*##	PINC	Outperform	Jun	38.34	1.89	2.31	A 2.70	16.6	14.2	134.1		5,141
8 Veeva Systems Inc.<	VEEV	Outperform	Jan	91.64	0.73	0.94	1.60	97.5	57.3	125.1		11,467
9 Vocera Communications, Inc.	VCRA	Market Perform	Dec	40.91	0.44	0.49	0.55	83.5	74.4	30.5		1,250

Notes: GAAP presented unless noted; ^ EPS excludes 1x items & other charges; + EPS excludes stock option expense & other stock charges; ~operating EPS excludes 1x items & other charges; \* operating EPS excludes stock option expense & other charges; ^pro forma EPS excludes 1x items and other charges; \*\* EPS excludes 1 time charges & amortization of intangibles; ## EPS excludes amortization of intangibles; # EPS IFRS; ~ EPS from continuing operations; \*\*\* EPS excludes deal-related amortization only; ^^ EPS excludes upfront milestone payments from Astellas, stock-based compensation, & various one-time & non-cash expenses; +++ EPS net of royalties; ~~~ EPS excludes stock comp, transaction expenses, & purchase accounting adjustments; @ @ EPS excludes changes in fair value of derivative instruments; < Pro forma non-GAAP diluted EPS; #+ EPS diluted, excludes option expense; `` EPS diluted non-GAAP, excludes option expense; ```` EPS diluted non-GAAP including excluded items; ^\* EPS fully diluted, as converted; ### Non-GAAP EPS excludes stock-based comp, amortization & non-cash expenses; \* @ EPS includes 2.29:1 stock split & new share issuance of 8.625 MM through IPO; #^ EPS excludes 1x items & other charges, but includes option expense; \*\* weighted average diluted, unadjusted GAAP, #\* Semi-annual reporting in 2018 before adopting quarterly results in 2019 onwards; \*# Adjusted non-GAAP EPS; \*## Non-GAAP Adj. EPS Fully Distributed' ~+ GAAP EPS per ADS; #~ EPS Basic; ~#~ EPS Non GAAP Basic; < EPS Non GAAP Diluted; ^\*\* EPS Fully Diluted; ~# USDEPS Fully Diluted; @\* Diluted EPS

Notes: P/E calculated using prior day closing price and EPS in local

Source: Leerink Research Estimates, Company Information

# Disclosure Appendix

## Analyst Certification

Each analyst certifies that the views expressed in this report accurately reflect their views and that no part of their compensation was, is, or will be directly related to the specific recommendation or views contained in this report.

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## Rating Distribution as of 9/30/2018

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Coverage Universe	Count	Percent
Outperform (Buy)	128	71.5%
Market Perform (Hold/Neutral)	49	27.4%
Underperform (Sell)	2	1.1%

Rec'd Inv. Banking Serv. in Prev. 12 months	Count	Percent
Outperform (Buy)	51	39.8%
Market Perform(Hold/Neutral)	2	4.1%
Underperform (Sell)	0	0.0%

## 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<sup>®</sup> Health Care Index for issuers with a market capitalization of less than \$2 billion and the S&P 500<sup>®</sup> Health Care Index for issuers with a market capitalization over \$2 billion.

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A member of Mr. Schwartz's family participated in a blinded clinical study of a DBVT-sponsored drug candidate. The study has been completed and results have been made public.

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