

## Pharmaceuticals - Generics

### INDUSTRY SUMMARY

**COGENT VALUATION** identified **Pharmaceuticals – Generics** publicly traded companies, IPOs, and recent M&A transactions within the Pharmaceuticals - Generics industry, which provides a basis for market and transaction pricing that can be used by your firm in estimating market sentiment and its impact on your firm's value. Over the last year since December 31, 2017, the median 52-week share price return of the Pharmaceuticals - Generics industry was -24.3%. Between December 31, 2016 and December 31, 2018, the median EV/EBITDA multiple decreased from 12.2 to 9.0. Furthermore, the median price-to-earnings multiple decreased from 31.9 to 19.4 over the same period. The median revenue growth and EBITDA margins for the industry for the quarter were -0.2% and 22.0%, respectively.

### Public Company Key Statistics

Median 52-Week  
Return

-24.3%

Median 3-Year CAGR  
Return

-20.5%

Median EV/Revenue  
Multiple

2.8x

Median EV/EBITDA  
Multiple

9x

Median Price/Earnings  
Multiple

19.4x

Median EV/Gross CF  
Multiple

23.4x

## Comparable Public Company Market Price Returns as of December 31, 2018

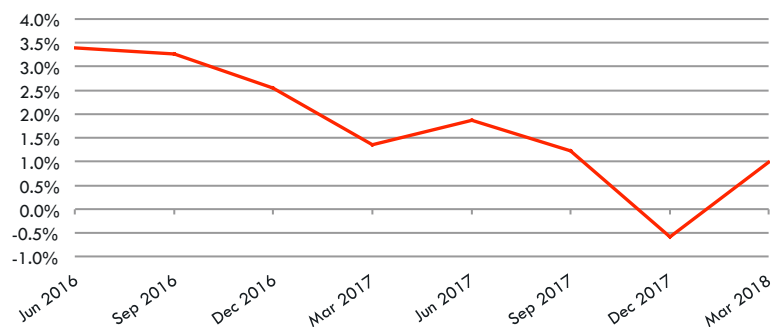
	YTD	3 Month	1 Year	2 Year	3 Year	2016	2015	2014
<b>Abbott Laboratories</b>	6.9%	5.0%	34.9%	-0.5%	5.9%	-14.5%	-0.2%	17.5%
<b>Akorn, Inc.</b>	-48.5%	-41.9%	-22.3%	-12.4%	0.3%	-41.5%	3.1%	47.0%
<b>Allergan plc</b>	26.7%	2.9%	-29.6%	-10.5%	2.9%	-32.8%	21.4%	53.2%
<b>Amphastar Pharmaceuticals, Inc.</b>	-89.5%	-2.5%	29.3%	0.8%	21.3%	29.4%	22.6%	N/A
<b>ANI Pharmaceuticals, Inc.</b>	-18.3%	-9.7%	17.6%	-13.2%	10.8%	34.3%	-20.0%	58.5%
<b>Cambrex Corporation</b>	3.4%	9.0%	-5.0%	16.6%	42.4%	14.6%	431%	21.3%
<b>Cardinal Health, Inc.</b>	-30.1%	2.3%	-23.1%	-3.5%	4.4%	-19.4%	10.6%	20.8%
<b>Concordia International Corp.</b>	-21.3%	-25.3%	-69.9%	-85.3%	-63.5%	-94.8%	0.9%	436%
<b>Dr. Reddy's Laboratories Limited</b>	-27.2%	-15.4%	-21.2%	-13.7%	-1.6%	-3.9%	-8.7%	25.3%
<b>IntelliPharmaCeutics International</b>	-0.6%	-29.3%	-77.6%	-40.8%	-18.7%	-69.0%	35.0%	26.0%
<b>Lannett Company, Inc.</b>	-97.0%	-30.8%	-28.2%	-15.4%	-18.1%	39.8%	-10.5%	-39.5%
<b>Momenta Pharmaceuticals, Inc.</b>	-78.6%	30.1%	36.0%	-41.4%	-25.6%	-45.0%	-6.4%	29.5%
<b>Mylan N.V.</b>	-2.7%	-2.7%	5.6%	-13.9%	11.8%	1.4%	23.3%	-31.9%
<b>Perrigo Company plc</b>	-4.4%	-4.4%	25.5%	-24.4%	-9.0%	-29.4%	-4.1%	29.9%
<b>Teligent, Inc.</b>	-2.0%	-7.4%	-57.0%	0.1%	4.2%	0.6%	3.6%	1.7%
<b>Teva Pharmaceutical Industries</b>	-7.4%	-9.8%	-46.7%	-25.0%	-14.1%	-44.8%	14.1%	43.5%
<b>Median of Industry Public Companies</b>	-24.3%	-5.9%	-21.8%	-13.2%	2.9%	0.6%	3.1%	27.8%

Multiple year periods are calculated as the average annual return.

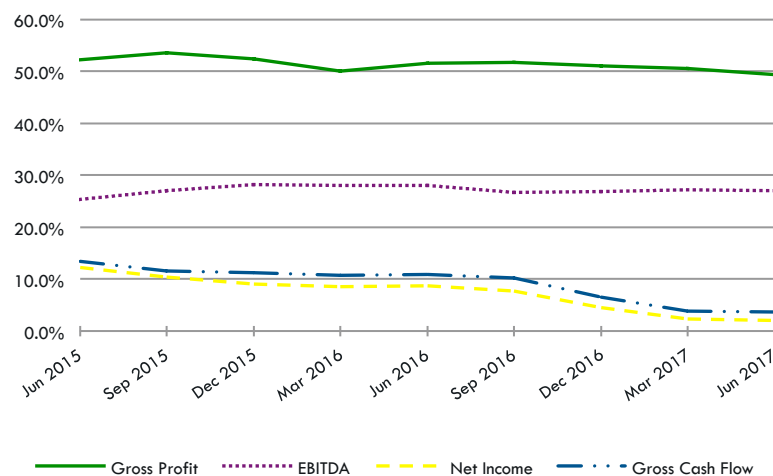
■ Highest Return
 ■ Lowest Return
 ■ Median Return

## Industry Revenue Growth and Profit Margins for the Past Two Years

Median Quarterly Revenue Growth of All Generic Pharma Companies



Median Gross Profit, EBITDA, Net Income, and Gross Cash Flow Margins



## Public Company Median Multiples by Quarter

	12/31/18	9/30/18	6/30/18	3/31/18	12/31/17	9/30/17	6/30/16	3/31/16
<b>EV/Revenues Multiple</b>	2.8x	4.3x	4.2x	3.3x	3.4x	3.6x	3.7x	3.3x
<b>EV/EBITDA Multiple</b>	9.0x	11.4x	12.0x	10.5x	11.2x	11.5x	11.5x	10.6x
<b>Price/Earnings Multiple</b>	19.4x	16.7x	25.5x	32.5x	27.3x	29.2x	27.3x	25.5x
<b>EV/Gross Cash Flows Multiple</b>	33.4x	24.0x	25.8x	26.6x	26.3x	26.9x	27.2x	24.0x

■ Highest Multiple
 ■ Lowest Multiple
 ■ Median Multiple

## Industry Initial Public Offerings—Industry: Pharmaceuticals – Generics

(dollars in millions, except share prices)

Offer Date	Company Name	Offer Price	Shares Offered	Amount Raised	Total Assets	Debt	LTM Revenues	LTM EBITDA	LTM Net Income	LTM Cash Flows
9/20/16	<b>Jacobson Pharma Corporation Limited</b>	\$0.19	437.5	\$84.6	\$2,479.8	\$644.6	\$1,112.5	\$273.5	\$143.6	\$280.7
7/26/16	<b>Kadmon Holdings, Inc.</b>	\$12.00	6.3	\$75.0	\$45.9	\$229.3	\$35.3	(\$74.3)	(\$186.8)	(\$72.8)
2/2/16	<b>Xbrane Biopharma AB (publ)</b>	\$46.31	2.4	\$11.7	\$75.3	\$4.1	\$0.4	(\$10.1)	(\$11.8)	(\$10.1)
6/29/15	<b>Mithra Pharmaceuticals S.A.</b>	\$13.43	6.0	\$80.9	\$92.6	\$30.6	\$18.7	(\$3.6)	(\$5.4)	(\$3.2)
9/20/16	<b>Amphastar Pharmaceuticals, Inc.</b>	\$7.00	8.0	\$56.0	\$345.1	\$41.5	\$222.6	\$26.9	\$7.9	\$38.5
<b>Median of all IPOs</b>		<b>nm</b>	<b>nm</b>	<b>\$75.0</b>	<b>\$92.6</b>	<b>\$41.5</b>	<b>\$35.3</b>	<b>(\$3.6)</b>	<b>(\$5.4)</b>	<b>(\$3.2)</b>

Multiple year periods are calculated as the average annual return.

■ Highest Return
 ■ Lowest Return
 ■ Median Return

## Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

Transaction Date	Target	Acquirer	Transaction Size	% Bought	LTM Revenues	EV/ Revenues
5/31/18	<b>Perrigo API Ltd</b>	ANI Pharmaceuticals, Inc.	\$18.5	100%	N/A	N/A
2/6/18	<b>Decahedron Ltd.</b>	Bora Pharmaceuticals	\$110.0	100%	\$319.0	0.0x
11/21/17	<b>Actavis Ireland Limited</b>	SK Capital Partners	<b>\$1.0</b>	<b>72%</b>	<b>N/A</b>	<b>N/A</b>
2/10/17	<b>SCILEX Pharmaceuticals</b>	Cosmos Holdings Inc.	\$769.3	100%	N/A	N/A
1/9/17	<b>KLUS Pharma, Inc.</b>	Accord Healthcare Ltd.	\$47.6	100%	\$11.1	3.7x
11/8/16	<b>Apex Laboratories</b>	Scintilla Pharmaceuticals	\$12.8	100%	N/A	N/A
10/28/16	<b>Anda, Inc.</b>	Sichuan KELUN PHARMA	\$41.2	100%	N/A	N/A
10/14/16	<b>Invent Farma ehf</b>	<b>Teva Pharmaceutical</b>	\$500.0	51%	\$27.6	0.8x
8/17/16	<b>Generic Partners Pty Ltd</b>	<b>Apax Partners LLP</b>	\$222.9	100%	\$150.0	4.2x
11/21/17	<b>Perrigo API Ltd</b>	<b>Mylan N.V.</b>	\$10.6	100%	\$370.0	2.7x
6/1/16	<b>(Generics Portfolio)</b>	<b>Concordia Healthcare</b>	\$40.2	100%	N/A	N/A
5/25/16	<b>Epic Pharma, L.L.C</b>	<b>PuraCap Pharmaceutical</b>	\$529.0	100%	N/A	N/A
2/29/16	<b>Roxane Laboratories, Inc.</b>	<b>Eurohealth (U.S.A.), Inc.</b>	\$1,927.3	100%	\$676.0	2.9x
2/18/16	<b>InvaGen Pharmaceuticals, Inc.</b>	<b>Cipla (EU) Limited</b>	\$500.0	100%	\$190.0	2.6x
1/22/16	<b>Matawan Pharmaceuticals</b>	<b>Perrigo Company plc</b>	\$415.0	100%	\$287.0	1.4x

■ USA
 ■ International
 ■ Highest
 ■ Lowest
 ■ Median

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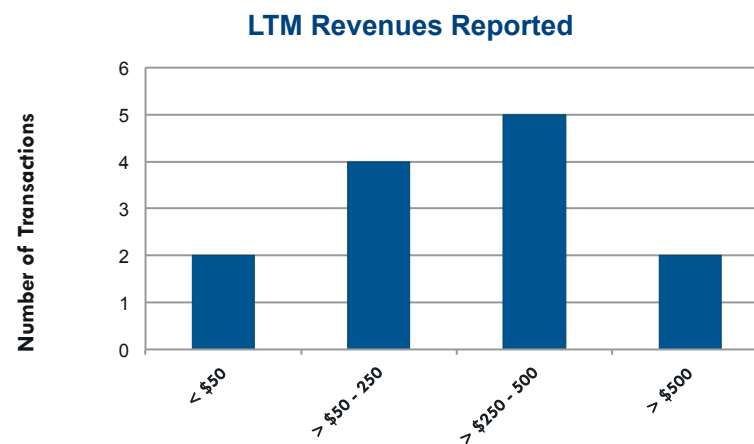
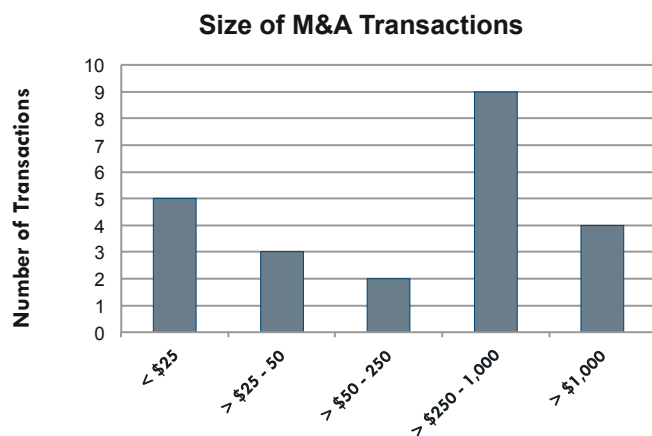
## Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions)

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Transaction Date	Target	Acquirer	Transaction Size	% Bought	LTM Revenues	EV/ Revenues
2/18/16	Pharmathen S.A.	BC Partners	\$522.6	80%	\$200.1	3.3x
1/22/16	Kremers Urban Pharma	Lannett Company, Inc.	\$1,230.0	100%	\$413.0	3.0x
12/31/15	Amdipharm Mercury	Concordia Healthcare	\$3,531.2	100%	\$446.0	7.9x
11/25/15	Par Pharmaceutical Hldg.	Endo International plc	\$10,388.4	100%	\$1,378.8	7.4x
10/21/15	Aspen Pharmacare Hldg.	Scentia Pharmaceuticals	\$299.7	100%	\$94.6	3.2x
9/18/15	(Generics Portfolio)	ANI Pharmaceuticals, Inc.	\$25.0	100%	N/A	N/A
7/6/15	Growth House Holding	Orifarm Generics A/S	\$66.7	100%	N/A	N/A
6/15/15	Prosonix Ltd.	Circassia Limited	\$157.8	100%	N/A	N/A
Median of the 28 M&A Transaction Targets			\$415.0	100%	\$287.0	3.0x

USA
  International
  Highest
  Lowest
  Median

## Recent Merger and Acquisition Transactions for a Majority Stake (dollars in millions) as of December 31, 2018





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**Definitions of Financial Terms Used in this Quarterly Industry Update:**

**Enterprise Value (EV):** Market Value of Equity + Market Value of Debt —Cash

**Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA):** Profitability metric sometimes also referred to as operating profit or operating earnings.

**Gross Cash Flows:** Net Income + Depreciation and Amortization Expense

**Latest Twelve Months (LTM):** Financial information is as of the latest twelve months through the date of this Quarterly Industry Update.

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