

## Investment Objective

Essex Global Life Sciences seeks capital appreciation by investing in both long and short positions of medical and life science companies. These companies are focused in the areas of drug discovery and distribution, the production of devices and instrumentation, delivery of health care services, and the development and implementation of medical information technology.

## Essex Global Life Sciences Composite

### Composite Returns as of 12/31/16

	Current Year		Annualized Returns				
	QTD	YTD	1 YR	3 YR	5 YR	10 YR	Since Inception*
Essex Global Life Sciences (Gross)	-2.8%	-4.0%	-4.0%	5.1%	15.5%	10.8%	19.1%
Essex Global Life Sciences (Net)	-3.1%	-5.0%	-5.0%	2.5%	10.9%	7.4%	14.3%
S&P 500 Index	3.8%	12.0%	12.0%	8.9%	14.7%	7.0%	5.8%

(\*Inception: 4/1/98)

## About Essex

Essex Investment Management, founded in 1976, has a singular focus as a boutique growth manager offering portfolio management services to both institutions and high net worth individuals. As of quarter end, Essex has 18 employees of whom 11 are investment professionals.

### Average Quarterly Exposure (12/31/16)

Long Exposure	74%
Short Exposure	23%
Gross Exposure	96%
Net Exposure	51%

Includes option/delta adjustments

### Quarterly Risk Measures (12/31/16)

Average Beta	0.82
Average 5% VaR (1 Day)	1.17
Max Return (1 Day)	3.50
Min Return (1 Day)	-2.28

Data Source: Bloomberg

### Essex Global Life Sciences - Monthly Gross and Net Performance

		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	YTD
2011	Gross	1.3%	0.4%	6.8%	6.3%	1.5%	-0.1%	-4.2%	-7.9%	-6.6%	9.0%	0.1%	0.8%	6.1%
	Net	1.0%	0.2%	5.4%	5.0%	1.1%	-0.2%	-3.4%	-6.4%	-6.2%	8.1%	0.0%	0.5%	4.1%
2012	Gross	11.7%	5.4%	3.8%	0.1%	-3.0%	6.0%	-3.4%	1.6%	5.3%	-6.6%	2.9%	-1.4%	23.0%
	Net	9.3%	4.2%	3.0%	0.0%	-2.5%	4.7%	-2.8%	1.2%	4.2%	-5.4%	2.2%	-1.2%	17.3%
2013	Gross	7.3%	-1.9%	5.2%	3.4%	2.9%	0.4%	6.5%	-1.8%	6.6%	0.1%	5.7%	3.3%	44.2%
	Net	5.8%	-1.6%	4.1%	2.6%	2.3%	0.3%	5.2%	-1.5%	5.2%	0.0%	4.5%	2.5%	33.1%
2014	Gross	7.8%	7.3%	-3.2%	-3.5%	0.7%	4.2%	1.9%	2.7%	0.7%	5.5%	0.5%	-0.3%	26.0%
	Net	6.2%	5.7%	-2.7%	-2.9%	0.5%	3.3%	1.4%	2.1%	0.5%	4.3%	0.3%	-0.3%	19.4%
2015	Gross	2.4%	4.4%	-0.3%	-2.8%	2.8%	-1.0%	1.8%	-6.6%	-5.7%	1.0%	0.1%	0.3%	-4.2%
	Net	1.9%	3.4%	-0.4%	-2.3%	2.1%	-0.8%	1.3%	-5.5%	-5.8%	0.9%	0.0%	0.2%	-5.2%
2016	Gross	-7.6%	-2.6%	1.1%	2.3%	0.8%	0.5%	4.1%	-2.3%	3.2%	-6.8	3.8	0.5	-4.0%
	Net	-7.7%	-2.7%	1.0%	2.2%	0.7%	0.4%	4.1%	-2.4%	3.1%	-6.8	3.7	0.4	-5.0%

Risks of Essex Global Life Sciences: The **Essex Global Life Sciences** portfolio returns may show a high level of variability and volatility. In addition to market risk, additional risks in these portfolios may result from Essex's selection of specific securities, since individual holdings may represent a significant percentage of a portfolio's holdings from time to time. Performance Calculations: performance returns are of the **Essex Global Life Sciences Composite**, inception 04/01/1998. The Essex Global Life Sciences Composite includes all actual, fee-paying, fully discretionary accounts managed by Essex to seek capital appreciation by investing in a portfolio consisting primarily of equity securities of issuers in the Life Sciences area. Accounts in this composite may simultaneously have long and short equities. The use of derivatives may be utilized in the management of the accounts. The S&P 500 index is capitalization-weighted and quoted in USD. The volatility of the index may be materially different from the individual performance attained by a specific investor. In addition, the Composite's holdings may differ significantly from the securities that comprise the indices. The index has not been selected to represent an appropriate benchmark to compare the Composite's performance, but rather are disclosed to allow for comparison of an Composite's performance to that of certain well-known and widely recognized indices. An index is unmanaged, does not incur fees or expenses, and cannot be invested in directly.

Performance Calculation Methodology: Gross performance results presented are net of transaction costs, withholding taxes and direct expenses, but before management fees, custody fees and other indirect expenses. Composite returns include the reinvestment of income and class action proceeds, if applicable. Net performance returns will be reduced by investment advisory fees, administrative fees, and performance fees on net profits. Fees are generally collected quarterly or annually, which produces a compounding effect on the total rate of return net of management, administrative, and performance fees. As an example, the effect of investment advisory fees on the total value of a client's portfolio assuming \$1,000,000 portfolio return of 10% a year, a 1.0% annual investment advisory fee, a .09% annual administrative fee, and a 20% performance fee on net profits would be \$17,611 in the first year, with a cumulative effect of \$101,367 over five years. The five year compounded gross rate of return of 61.1% would be reduced to 40.2% after taking into account investment advisory fees, administrative fees and performance fees on net profits. The actual fee charged to an individual account may differ from the standard schedule depending on a number of factors including account type and size.

Past performance is not necessarily predictive of how an investors' individual account will perform. Wherever the potential for profit exists, there is also a potential for loss.



**Essex Investment Management Company, LLC**  
 125 High St. Suite 1803  
 Boston, MA 02110  
 (617) 342-3200  
 www.essexinvest.com

## Investment Philosophy

Essex Global Life Sciences seeks to isolate the early signs of improving/deteriorating financial estimates and business conditions through a combination of fundamental research and overall industry expertise.

By discovering conditions of asymmetry between market expectations and proprietary models, Essex looks to construct a long/short portfolio between 40-60 positions while continuously monitoring and mitigating risk.

## Investment Process

The objective:

- Determine the catalysts for positive earnings/revenue change
- Assess the sustainability of the change
- Develop internal earnings estimates
- Ascertain whether the anticipated growth is reflected in the current price of the stock

Catalysts give rise to improving/deteriorating situations. Typical catalysts include:

- Demographic change
- Increased utilization
- Support from private/public & R&D spending
- Continued growth in patent applications
- New products and innovations

Seek to build a high conviction portfolio of best ideas:

- Companies in different phases of growth and demonstrating diverse valuation characteristics

Employ a disciplined cover/sell system:

- Catalyst for improved growth has played out
- Price target reached
- Deterioration of company specific fundamentals
- Potentially better opportunities within sector

## Performance Disclosures

*This material is for your private information. The views expressed are the views of Essex only through the period ended 12/31/16 and are subject to change based on market and other conditions. The information above does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. All material has been obtained from sources believed to be reliable, but its accuracy is not guaranteed.*

*Past performance is no guarantee of future results.*

*The Essex Global Life Sciences representative account has been selected on the basis that its investment objective, historical performance record, and growth characteristics are consistent with those accounts in the Essex Global Life Sciences composite. The portfolio's trades are executed in accordance with all other accounts in the composite. The representative account is fully discretionary and has been in the Essex Global Life Sciences composite for at least three years.*



## Portfolio Risk Controls

- Constantly monitor portfolio gross/net exposures, beta, and value at risk.
- Before being added/subtracted to the portfolio, each name is checked against its impact on beta, net exposure, VaR, as well as sub-sector exposure.
- Sell/cover positions where the price target has been achieved with no further catalysts, core investment thesis is not playing out, or potentially better opportunities exist.