

Virtus LifeSci Biotech Clinical Trials ETF Virtus LifeSci Biotech Products ETF

3Q18

COMMENTARY

BBC
BBP

NYSE Arca

PERFORMANCE REVIEW

Through the end of the third quarter, the Virtus LifeSci Biotech ETFs delivered strong year-to-date returns, demonstrating a continued distinction between the performance of early stage biotechnology companies versus that of mature biotechnology companies.

Year to date through September 30, the Virtus LifeSci Biotechnology Clinical Trials ETF (NYSE: Arca: BBC), which comprises typically smaller companies without revenue-generating pharmaceutical sales, was up 22.28%, while the Virtus LifeSci Biotechnology Products ETF (NYSE Arca: BBP), which comprises typically larger companies with FDA-approved drugs for sale, ended the period up 11.91%. By comparison, the S&P 500® Index rose 10.56% for the same period.

The broader biotechnology sector performed well in the third quarter, with BBC up 5.98% and BBP up 3.53% during what is typically a quiet period for biotech stocks. Large-cap company Biogen kicked off the excitement in early July with tantalizing data for its Alzheimer's drug, a disease that has been extremely difficult to show results in but represents an enormous potential market, which moved its stock price from \$290 at the beginning of the quarter to \$380 by mid-July.

After a strong start for biotech M&A activity in the first half of the year (notably, Bioerativ held by BBP, and Juno Therapeutics, AveXis, and Armo BioSciences held by BBP), the third quarter cooled with no notable acquisitions in the public biotechnology space. Through third quarter-end, IPO activity remained extremely strong with the 39 U.S. biotech IPOs raising more than \$4 billion in proceeds and surpassing the prior record of 27 IPOs set in 2014. Looking ahead to the next reconstitution date of the LifeSci Biotechnology Clinical Trials Index in mid-December, we would expect the number of holdings in the BBC ETF to increase as a result of the robust IPO activity.

MARKET OUTLOOK

The biotechnology space began cooling off along with broader equity markets at the beginning of the fourth quarter, catalyzed by global trade wars, rising interest rates, and the unwinding of the big-tech trade. In light of the large number of biotechnology IPOs and secondary offerings hitting the market, many broad-based biotechnology indexes were trading down nearly double-digit percentages at the beginning of October. We view this as a much needed pullback to bring valuations down to more attractive levels.

Looking forward through the end of the year, we do not see a quick end to the current choppiness. Fundamental data at the ESMO conference held in Munich in October—one of the year's largest cancer and immunotherapy medical meetings—was largely disappointing, as updated clinical trial results failed to meet investors' vaunted expectations.

In this environment, large biotech funds are selling into any market up-ticks to try to preserve their gains on the full year. However, we prefer to take advantage of any pullbacks to build or add to positions in the sector, as the fundamental outlook is strong with significant catalysts expected in the coming few months. First, we expect M&A activity to pick up now that valuations are more attractive to big pharmaceutical companies. For example, on October 18, we saw our first notable acquisition since the second quarter: Endocyte (ECYT, a holding in BBC) was acquired by Novartis for a 54% premium, or \$2.1 billion in total. Second, we are awaiting the news to flow from the AASLD medical conference on liver disease in November, and from the ASH medical conference on various blood cancers in December. Finally, J.P. Morgan's healthcare conference in early January—typically the largest annual gathering of healthcare executives, investors, and scientists—could be a major sector catalyst.

The companies represented in the BBC and BBP ETFs remain financially strong as most have taken advantage of investor appetite during the recent quarter to raise cash and fund their clinical trials through key events such as major data releases or drug approvals.

PORTFOLIO MANAGEMENT



BBC and BBP are passively managed, index-based ETFs. Virtus ETF Advisers, LLC is the Funds' adviser and LifeSci Index Partners, LLC is the index provider.

Portfolio Managers

Matthew B. Brown
Executive Managing Director and
Chief Operating Officer
Industry start date: 1999
Start date with Funds: 2017

Seth J. Kadushin
Director of Capital Markets
Industry start date: 1988
Start date with Funds: 2017

Virtus LifeSci Biotech Clinical Trials ETF

Virtus LifeSci Biotech Products ETF

BBC
BBP

BBC Performance—Total Returns (%) as of 9/30/18

	QTD	YTD	1 YR	3 YR	5 YR	10 YR	Since Inception (12/16/14)
NAV	5.98	22.28	20.44	9.98	n/a	n/a	9.47
Market Price	6.07	21.82	19.98	9.93	n/a	n/a	9.43
Benchmark	6.26	23.13	21.53	10.95	n/a	n/a	10.25

BBP Performance—Total Returns (%) as of 9/30/18

	QTD	YTD	1 YR	3 YR	5 YR	10 YR	Since Inception (12/16/14)
NAV	3.53	11.91	9.45	18.51	n/a	n/a	17.47
Market Price	3.62	12.10	9.55	18.57	n/a	n/a	17.49
Benchmark	3.72	12.60	10.30	19.54	n/a	n/a	18.46

Returns for periods of less than one year are cumulative total returns.

Performance data quoted represents past results. Past performance is not a guarantee of future results. Current performance may be higher or lower than performance quoted. Investment return and principal value will fluctuate, and shares, when redeemed, may be worth more or less than their original cost. Please visit www.virtus.com for performance data current to the most recent month-end.

BBC/BBP Expense Ratio: 0.79% Gross/Net

The gross expense ratio represents the Fund's management fee, which is structured as a "unified fee," out of which the Fund's adviser pays all routine expenses, except for certain payments as described in the prospectus, which are paid by the Fund.

Each Fund is an exchange-traded fund ("ETF"). The "net asset value" (NAV) of the Fund is determined at the close of each business day, and represents the dollar value of one share of the Fund; it is calculated by taking the total assets of the Fund, subtracting total liabilities, and dividing by the total number of shares outstanding. The NAV of the Fund is not necessarily the same as its intraday trading value. Fund investors should not expect to buy or sell shares at NAV because shares of ETFs such as the Fund are bought and sold at market price (not NAV) and are not individually redeemed from the Fund. Thus, shares may trade at a premium or discount to their NAV in the secondary market. Brokerage commissions will reduce returns. NAV returns are calculated using the Fund's daily 4:00 pm NAV, and include the reinvestment of all dividends and other distributions (reinvested at the Fund's NAV on distribution ex-date). Market price returns are calculated using the 4:00 pm midpoint between the bid and offer, and include the reinvestment of all dividends and other distributions (reinvested at the 4:00 pm bid/offer midpoint on distribution ex-date). Market price returns do not represent the return you would receive if you traded at other times.

BBC Benchmark: The Fund's benchmark is the **LifeSci Biotechnology Clinical Trials Index**, which is designed to track the performance of U.S.-listed biotechnology stocks with a lead drug in the clinical trial stage of development, typically a Phase 1, Phase 2, or Phase 3 trial, but prior to receiving marketing approval.

BBP Benchmark: The Fund's benchmark is the **LifeSci Biotechnology Products Index**, which is designed to track the performance of U.S.-listed biotechnology stocks with at least one drug therapy approved by the U.S. Food and Drug Administration for marketing.

S&P 500® Index: A free-float market capitalization-weighted index of 500 of the largest U.S. companies. The index is calculated on a total return basis with dividends reinvested.

The indexes are unmanaged, their returns do not reflect any fees, expenses, or sales charges, and they are not available for direct investment.

The commentary is the opinion of the Adviser. This material has been prepared using sources of information generally believed to be reliable; however, its accuracy is not guaranteed. Opinions represented are subject to change and should not be considered investment advice or an offer of securities.

IMPORTANT RISK CONSIDERATIONS

Exchange-Traded Funds: The value of an ETF may be more volatile than the underlying portfolio of securities the ETF is designed to track. The costs of owning the ETF may exceed the cost of investing directly in the underlying securities. **Industry/Sector Concentration:** A fund that focuses its investments on a particular industry or sector will be more sensitive to conditions that affect industry or sector than a non-concentrated fund. **Market Price/NAV:** At the time of purchase and/or sale, an investor's shares may have a market price that is above or below the fund's NAV, which may increase the investor's risk of loss. **Correlation to Index:** The performance of the fund and its index may vary somewhat due to factors such as fund flows, transaction costs, and timing differences associated with addition to and deletions from its index. **Non-Diversified:** The fund is non-diversified and may be more susceptible to factors negatively impacting its holdings to the extent that each security represents a larger portion of the fund's assets. **No Guarantee:** There is no guarantee that the portfolio will meet its objective. **Prospectus:** For additional information on risks, please see the fund's prospectus.

Please consider the Fund's objectives, risks, charges, and expenses before investing. Contact us at 1-800-243-4361 or visit www.virtus.com for a prospectus, which contains this and other information about the Fund. Read the prospectus carefully before investing.

Not insured by FDIC/NCUSIF or any federal government agency. No bank guarantee. Not a deposit. May lose value.

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