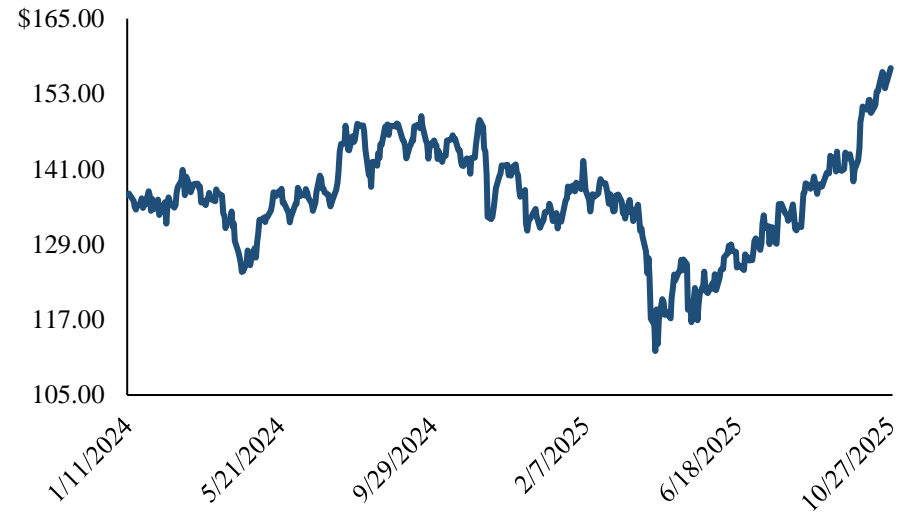


## iShares Biotechnology ETF | One-Year Price Chart



### Position Details

- iShares Biotechnology ETF | IBB U.S. Equity
- Underlying Price: \$157.11
- Bull Call Spread
- Expiration Date: January 16, 2026

### Equity Derivatives Sector

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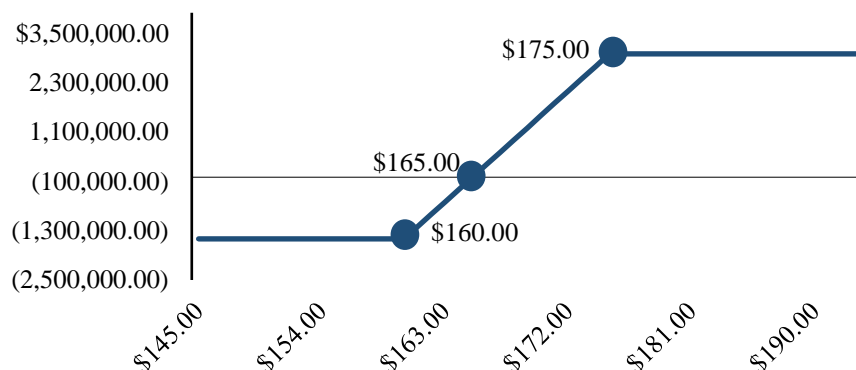
## I. Product & Position Overview

## Product & Position Overview

### Product Description

- **iShares Biotechnology ETF**
  - iShares Biotechnology ETF is an exchange-traded fund incorporated in the U.S. The Fund seeks investment results that correspond to the performance of the NYSE Biotechnology Index, composed of U.S.-listed equities in the biotech sector
  - The top four holdings within IBB are Vertex Pharmaceuticals Inc. (VRTX) 7.71%, Gilead Sciences Inc. (GILD) 7.66%, Amgen Inc. (AMGN) 7.26%, and Regeneron Pharmaceuticals (REGN) 5.48%, all exposed to late-stage development pipelines
    - IBB is mainly made up of large-cap assets but also holds small and mid-cap assets, balancing the ETF

### Payoff Diagram



### Trade Breakdown

- **Bull Call Spread**
  - This strategy benefits from strong bullish movements in the price of the underlying asset, while limiting the downside
- **Setup**
  - We Buy – 3.00 k OTM \$160.00 Calls | IBB U.S. Equity
  - We Sell – 3.00 k OTM \$175.00 Calls | IBB U.S. Equity
  - Max Profit: \$3,000,000.00
  - Max Loss: (\$1,500,000.00)
- **Expiration**
  - Date: January 16, 2026

### Exit Strategy & Potential Hedge Strategy

- **Bull Base & Bear Case**
  - **\$175.00 / \$170.00 / \$160.00**
  - Breakeven – \$165.00
- **Methodology**
  - The Sector seeks to benefit from a ~11.38% bullish movement in the price of the underlying asset by January 16, 2025
- **Hedge Strategy**
  - The Sector will look to reverse trade in the case of an unexpected bearish movement in the price of the underlying asset



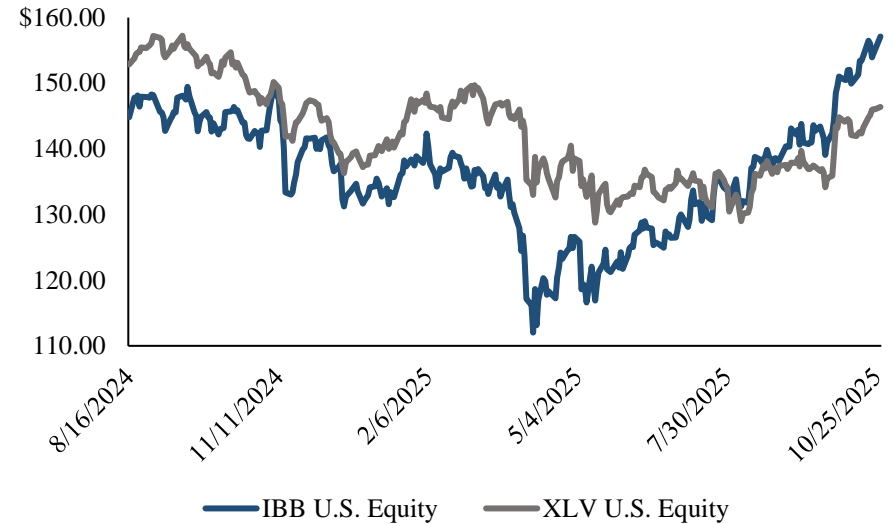
## II. Macroeconomic Thesis

### Macroeconomic Thesis

#### Macroeconomic Summary

- **Fed Easing Reduces Trial Costs and Helps Venture Capital Activity**
  - As the Fed began cutting interest rates in late 2025FY, it became cheaper for venture capital investments in biotech, allowing companies to run early clinical trials and pay for R&D
  - In 3Q2025, venture capital investment in biotech totaled \$5.80 bn across 86.00 deals, bringing YTD funding to \$17.10 bn. As capital flows into biotech startups, it shows that investors are willing to take on risk again. The rotation from safe-haven assets to risk-on investments benefits broader biotech exposure
  
- **Key Biotech Conferences Poised to Influence Sector Performance**
  - In November, the Society for Immunotherapy of Cancer (SITC) Conference will showcase the latest breakthroughs in cancer immunotherapy. The American Society of Hematology (ASH) Annual Meeting will be held on December 7th and is a focal point for blood cancer. In early January 2026, the J.P. Morgan Healthcare Conference will hold a biotech industry gathering
  - Major biotech conferences tend to boost stocks, as they allow for companies to present new medicines and any trial updates
  
- **Patent Cliffs Fuel M&A Activity in Biotech to Secure Future Growth**
  - As large pharmaceutical companies face \$200.00 bn in revenue loss from patent expirations between 2025FY and 2030FY, they are increasingly acquiring small biotech companies to replenish their R&D pipelines. These acquisitions allow pharma to fast-track promising drug candidates through early-stage clinical trials, mitigating revenue declines as generics enter the market
  - \$45.00 bn in pharma sales are expected to face patent expiration in 2025FY alone. Big pharma is targeting biotech firms with innovative drugs to strengthen their portfolios. In 2025FY, 35.00 biopharma deals totaling \$30.80 bn highlight the growing trend of pharma acquiring smaller firms to replace expiring patents

**IBB U.S. Equity vs. XLV U.S. Equity | One-Year Chart**



#### Market Pros & Cons

- Government shutdown ends, ensuring continued FDA approvals
- U.S. pharmaceutical and biotech companies acquire patents from China
- TrumpRx forces firms to sell at lower costs, squeezing margins
- Clinical trial failures cause sharp declines in the holdings



## III. Risk Analysis

## Risk Analysis

### Directional & Magnitude Risk

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- **Delta Analysis**

- The Delta value for this trade is 0.291
- For every \$1.00 increase or decrease in the price of the underlying asset, the contract will gain or lose \$0.291 in value
- Since the strikes are out-of-the-money, the Delta value for this trade is moderate. This trade requires strong upward movement in the price of the underlying as it approaches expiration

- **Gamma Analysis**

- The Gamma value of this trade is 0.007
- For every \$1.00 increase or decrease in the price of the underlying, the Delta value will increase or decrease by 0.007

### Implied Volatility Risk

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- **Vega Analysis**

- The trade has a Vega value of 0.092
- The implied volatility for this trade is 23.00%
- For every 100.00 bps increase or decrease in implied volatility, the contract will gain or lose \$0.092
- The Vega is important for this trade to land ITM, as the upper strike requires a large bullish movement in the price of the underlying asset in a short amount of time

### Time Risk

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- **Theta Analysis**

- The Theta value for this trade is (0.009)
- This trade will lose \$0.009 for every one day that passes. Time decay accelerates as time passes, making Theta increasingly significant as the trade approaches expiration
- The Theta decay has more of an impact on the trade as the time to expiration is only 81.00 days. As the trade approaches its expiration on January 16, 2026, Theta will have a very significant impact as the option is relatively short-term

### Interest Rate Risk

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- **Rho Analysis**

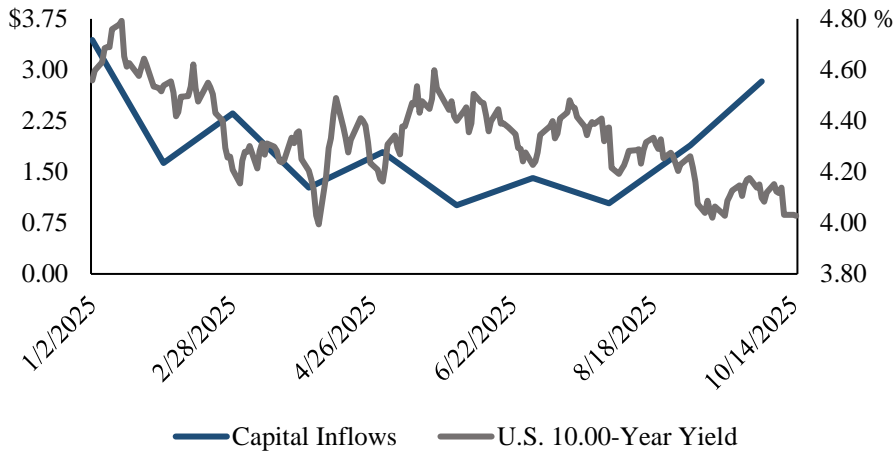
- The Rho value of this trade is 0.092
- For every 100.00 bps increase or decrease in the risk-free interest rate, the trade will gain or lose \$0.092
- Rho has less of an impact on the option's premiums than other Greeks, but due to the short-term duration of this trade, with dovish rhetoric around the Fed, the risk-free rate could reduce the value of the contracts in the coming months



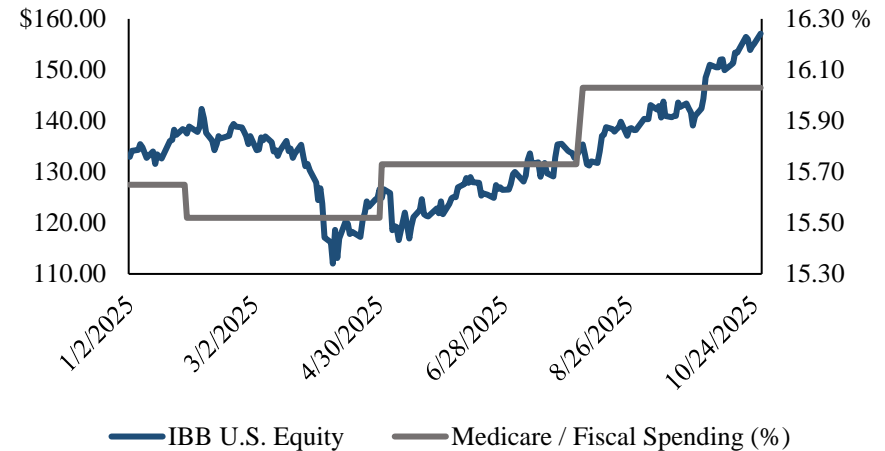
## IV. Technical Bias & Fair Value

## Technical Bias & Fair Value

Monthly Biotech Capital Inflows (bn) vs. 10.00-Year Yield | YTD Chart



IBB U.S. Equity vs. Medicare / Fiscal Spending (%) | YTD Chart



### Monte Carlo

Output	Long Call	Short Call
Value	\$ 7.7443	\$ 2.1618

### Synopsis

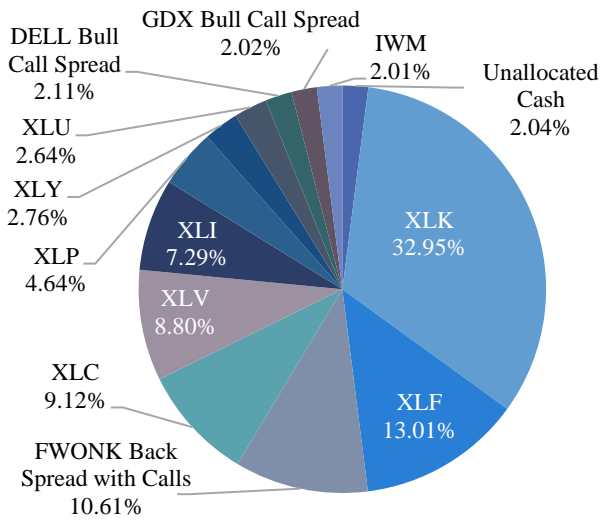
- As the 10.00-year Treasury Yield has fallen, the cost of capital decreases and investors become more willing to take on additional risk, both of which are key for the biotech sector, where companies often have long time horizons and high funding needs. Lower yields increase the present value of future biotech cash flows and make equity and investments in biotech more attractive relative to bonds. As a result, venture capital and private equity cash into biotech tend to improve when bond yields drop, fueling early-stage funding, M&A activity, and overall sector momentum
- IBB demonstrates a strong correlation with increasing Medicare fiscal spending, suggesting that higher government healthcare expenditures can positively influence biotech sector performance. As IBB has grown and the U.S. government has continued to increase healthcare expenditures, more capital flowed into the biotech sector. Major holdings in IBB, which rely heavily on Medicare volume, benefitted from this increased funding



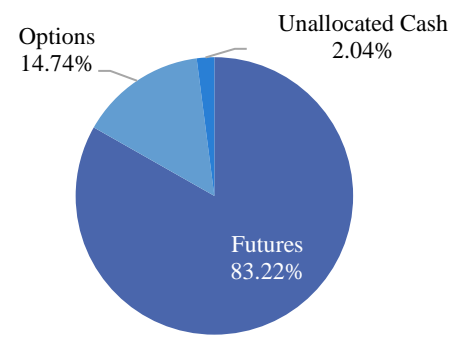
## V. Capital Allocation

### Capital Allocation

#### Current Portfolio Allocation



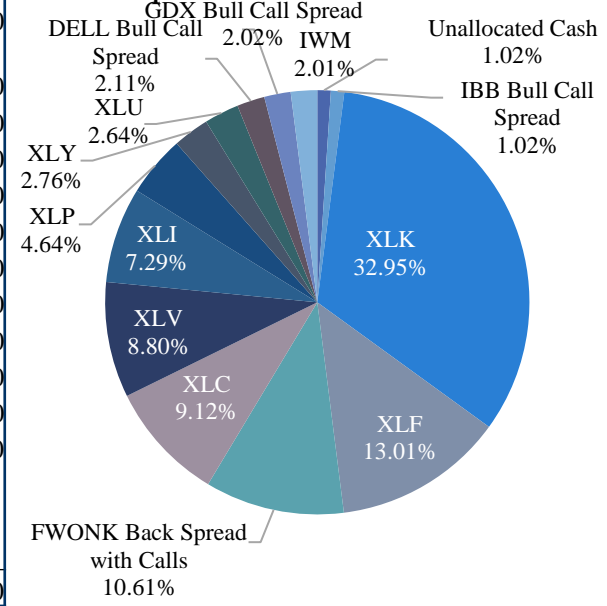
#### Current Position Allocation



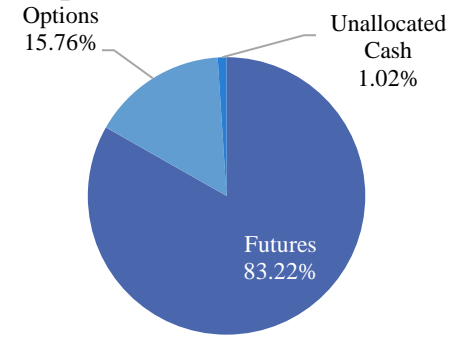
### Transaction Summary

Ticker	Position Change	
	Contracts	Allocation
XLK	0	\$0.00
XLF	0	\$0.00
FWONK Back Spread with Calls	0	\$0.00
XLC	0	\$0.00
XLV	0	\$0.00
XLI	0	\$0.00
XLP	0	\$0.00
XLY	0	\$0.00
XLU	0	\$0.00
DELL Bull Call Spread	0	\$0.00
GDX Bull Call Spread	0	\$0.00
IWM	0	\$0.00
IBB Bull Call Spread	+6000	\$1,500,000.00
Allocation Change		\$1,500,000.00

#### Proposed Portfolio Allocation



#### Proposed Position Allocation



### Benchmark Allocation

