



Biotech Innovation Fund

Overview

According to “EY 2023 Biotechnology Report 2023”, Biotechnology, a dynamic and rapidly evolving field, presents a compelling landscape for investment opportunities. Although the COVID-19 spillover effects have ended, investors are drawn to the promise of revolutionary treatments for diseases, improved crop yields, and sustainable solutions. With the potential for significant returns, the biotech sector remains a compelling option. This fund focuses on public Biotech companies to build this portfolio which includes a portfolio derived from 16 stocks.

Fund Holdings

The final updates at 2/22/2024, selected by the MVO model.

Code	Stock	Weight(%)
BSX	Boston Scientific Corp.	47.02
VRTX	Vertex Pharmaceuticals Inc.	29.47
KRTX	Karuna Therapeutics Inc.	11.37
REGN	Regeneron Pharmaceuticals Inc.	7
NBIX	Neurocrine Biosciences Inc.	5.11

Strategies

This fund is exclusively dedicated to investments in the United States. Employing the MOV model, it identifies the combination of 16 stocks all of which belong to biotechnology companies. The optimization process utilizes 1-year return data and covariance to determine the optimal holding weights to predict the best "Sharp Ratio". This strategic approach aims to maximize returns while considering the inherent risks associated with the specific characteristics of each biotech company. The comparative benchmark in the biotech industry is the Nasdaq Biotechnology Index (NBI Index). Compared to the benchmark, our fund's performance is shown in the following table:

	NBI INDEX	MVO FUND
Annualized return	8.79%	46.87%
Annualize Stdev	0.168	0.16
Sharp Ratio	0.255	2.63
Update: 2/22/2024		

According to the historical data from the past year, our model indicates not only higher annual returns but also nearly identical volatility levels. Of utmost significance, the Sharpe Ratio highlights that our fund can generate superior returns while maintaining an equivalent level of risk. This underscores the effectiveness of our investment strategy in achieving a favorable balance between risk and return, reinforcing the attractiveness of our fund in comparison to alternative investment options.

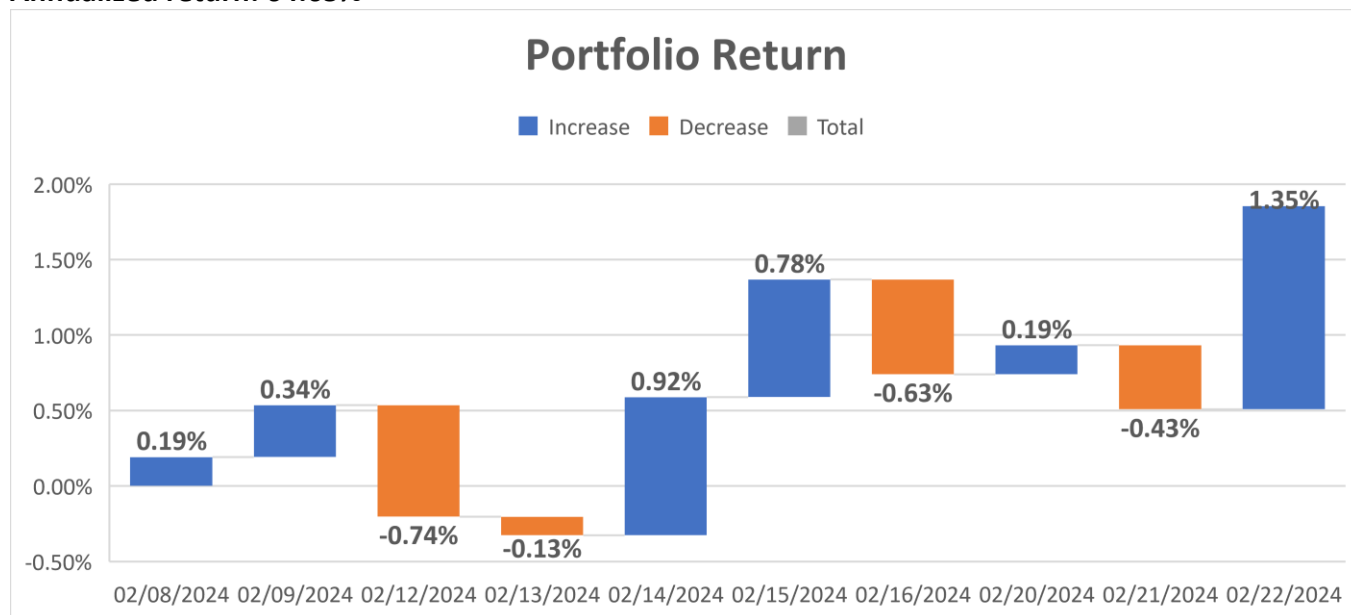
Forecast

While historical data strongly suggests that our fund has outperformed the benchmark, it is imperative to continuously monitor the Mean-Variance Optimization (MVO) model with a dynamic adjustment approach. Given the inherent extreme volatility in the biotech industry, our primary focus is on the rate of change in Standard Deviation as a key variable for adjustments. The strategic approach moving forward involves dynamically fine-tuning our portfolio holdings to ensure a consistent level of return and managing risk effectively in response to the dynamic nature of the biotech sector.

Performance

Two weeks return: 1.35% (10 days)

Annualized return: 64.65%



Watching List:

Stock	CODE
UnitedHealth Group Inc.	UNH
Moderna, Inc.	MRNA
Alnylam Pharmaceuticals, Inc.	ALNY
Neurocrine Biosciences, Inc.	NBIX
Karuna Therapeutics	KRTX
Pfizer Inc.	PFE
Regeneron Pharmaceuticals Inc.	REGN
Gilead Sciences Inc	GILD
VRTX	GMAB
Vertex Pharmaceuticals Inc.	VRTX
Johnson & Johnson	JNJ
Danaher Corp.	DHR
Abbott Laboratories	ABT
Amgen Inc.	AMGN
Merck & Co. Inc.	MRK
Boston Scientific Corp.	BSX
AbbVie Inc.	ABBV