



Mid-Year Industry Review 2024 Highlights

June 12, 2024

1st Quarter 2024



- Positive Feelings
- Busy with RFPs
- Optimism over funding
- SCOPE and OCT N CAL high attendance
- Fed expected to begin cutting rates

2nd Quarter 2024



- Activity stalled
- No decision on study starts
- Optimism over funding gone
- Conference attendance flattened
- Fed expected to not cut rates until 2025
- June 12 FOMC meeting:

Stock Market Assessment

XLV SPDR Fund

- Eli Lilly and Company 11.99%
- UnitedHealth Group 8.61%
- Johnson & Johnson 6.70%
- Merck & Co. 6.30%
- AbbVie Inc. 5.53%
- Thermo Fisher 4.23%
- Abbott Laboratories 3.54%
- Danaher Corporation 3.12%
- Amgen 2.82%
- Pfizer 2.78%

Overview

- Highly rated
- Good performance
- Short, mid and long term outlook is good

Financial Performance



Health Care Select Sector SPDR Fund

NYSEARCA: XLV

Overview

Market Summary > Health Care Select Sector SPDR Fund

146.36 USD

+7.58 (5.46%) ↑ year to date

Jun 11, 8:00 PM EDT • Disclaimer

1D | 5D | 1M | 6M | **YTD** | 1Y | 5Y | Max



Open	146.20	Mkt cap	27.27B	52-wk high	148.27
High	146.39	P/E ratio	-	52-wk low	122.59
Low	145.67	Div yield	-		

See more details →

Feedback



Health Care Select Sector SPDR Fund

NYSEARCA: XLV

Overview

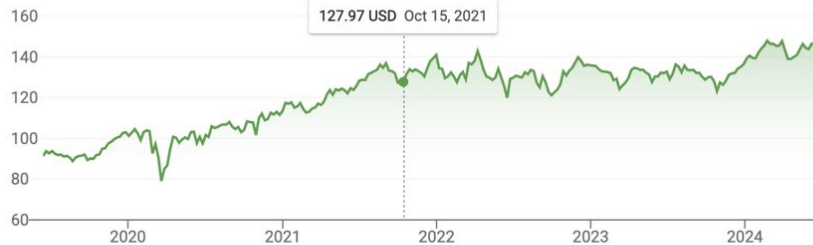
Market Summary > Health Care Select Sector SPDR Fund

146.36 USD

+55.11 (60.39%) ↑ past 5 years

Jun 11, 8:00 PM EDT • Disclaimer

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Feedback

Drug Approvals/Advances - NASH

Rezdiffra

- Madrigal Pharma
- Finally a drug that treats NASH received approval
- Biopsy not required

GLP-1

- Strong phase II evidence for Wegovy like drugs are effective for NASH

Drug Approvals/Advances - Alzheimers

Older approaches

- Cholinesterase Inhibitors
- Glutamate Regulators

Remove Amyloid plaque

- Aduhelm (Biogen) being discontinued
- Leqembi (Eisai, Biogen)
- Eli Lilly (FDA Advisory panel approval recommendation June 11)

Drug Approvals/Advances - Cancer

Genetic determinants of response/Precision medicine

- Genetic testing identifies patients who will respond
- GSK drug: Jemperli (dostarlimab): 100% success rate in 42 patients with rectal cancer; complete eradication of tumors; programmed death receptor - 1 (PD-1)

AI, ML and NLP

Simulation

- ConcertAI - large-scale clinical simulations for trial design, decision-making models, models for precision oncology, and models that retrieve clinical information in real time to rapidly make predictions

Build Clinical Database

- Scan protocol, build eCRFs and edit checks in hours
- Have to build validation methodology into the process

AI, ML and NLP

Amgen

- Scans tons data to identify and rank clinics and doctors based on past performance in recruiting patients.
- AI can 18 month enrollment to 9 months.
- Amgen using AI for most studies in 2024 and expects it to shave off two years of drug development time by 2030

Novartis

- The AI tool they use has made enrolling patients in trials faster, cheaper and more efficient. AI in this context is only as good as the data it gets.

AI, ML and NLP

Bayer

- Bayer used AI to cut the number of participants needed by several thousand for a late-stage trial reducing the long-term risk of strokes in adults.
- It used AI to link mid-stage trial results to real-world data from millions of patients to predict the long-term risks.
- Bayer started the trial with fewer participants, it would have taken up to nine months longer to recruit and millions more in funding.
- For a study to test the drug in children with the same condition, Bayer plans to use real-world patient data to generate an external control arm, potentially eliminating the need for patients taking a placebo.

Input from Audience & Discussion

- Pre-Covid attendance levels has returned
- Recruitment, Hiring, Experience levels
- Lower wage countries for cost control
- Title and Salary Inflation
- Patience is needed to assess, evaluate and incorporate AI, ML, NLP and its impact

Next meeting



1. July 17: Topic TBD
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