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HTEC Index 2Q24 Commentary

June 30, 2024

The year 2024 began with a general expectation of greater stability and fewer unknowns. This sentiment has been reflected in a significant improvement in biotech funding, which rose to approximately \$23 billion in Q1 2024, the fourth highest quarter on record. As supply chain, credit, and worker shortages ease, new legislation might introduce additional pressures The impact of the BIOSECURE Act remains uncertain, but it is expected to provide a tailwind for US manufacturing by bolstering biomanufacturing capabilities and enhancing the production of critical medical supplies and technologies domestically. Changes to Medicare Advantage are putting pressure on payers, though there is no clear indication of systemic effects on healthcare yet. We anticipate accelerated recovery in the second half of the year, building towards a strong 2025.

In Q2 2024, the **ROBO Global Healthcare Technology & Innovation Index (HTEC)** underperformed the VettaFi Full World Index, with a return of -3.74% compared to the benchmark's 2.87%. While Genomics and Precision Medicine showed strong performance, gains were offset by headwinds in Medical Instruments and Process Automation. This quarter, 69% of the companies in the index beat EPS expectations, with a weighted average surprise of 10.45%. Valuation remains attractive, with the index trading at 4.26x EV/Sales, close to the pandemic low of 4.37x. This presents an opportunity, especially with the expected double-digit growth in EPS, sales, and EBITDA in 2025.

Genomics (+15.55%) saw the resolution of the **Illumina** (+5.72%) saga. Following legal challenges in both the US and Europe, Illumina's acquisition of **Grail** culminated in Grail being spun off and added to the index as a standalone company. This move allows Illumina to resume its leadership in DNA sequencing, while Grail joins the thriving liquid biopsy field. The subsegment continued its strong momentum with notable performances from **Twist Bioscience** (+43.57%), **CareDX** (+35.88%), **Natera** (+17.44%), and **Guardant Health** (+41.01%), whose Shield product remains on track to become the first FDA-approved blood test to meet Medicare coverage performance requirements. All this highlights the growing relevance of cancer diagnosis via blood tests.

Alnylam Pharmaceuticals (+49.15%) led the way in **Precision Medicine** after announcing the success of its Amvuttra drug in treating ATTR-CM, a serious heart disease. For context, a Pfizer drug for the same condition is expected to generate over \$4 billion in sales this year. Other highlights included **United Therapeutics** (+38.84%), a Q1 24' addition to the index, which continued its 2024 rally after announcing the first-ever transplant of a Xenothymokidney (a genetically modified pig kidney into a living human recipient. **Moderna, Vertex, Roche, Incyte**, and **Regeneron** also saw gains above 10%, capping a strong Q2 for the subsegment.

On the downside, **Process Automation** (-15.54%) and **Medical Instruments** (-7.12%) underperformed. The market responded unfavorably to **Ginkgo Bioworks'** (-68.43%) business model restructuring, which focused on front-loading revenues vs their previous long terms bets approach. **Eurofins** (-25.64%) faced a short report alleging accounting anomalies, though the company responded stating that they maintained confidence in its accounts. **Align Technology**, makers of Invisalign, fell -27.7% for the quarter, despite remaining the main player in clear



aligners and laying foundations for next-generation products with its acquisition of **Cubicure** earlier in the year.

Diagnostics (-6.33%) lagged but saw the resolution of **Royal Philips'** (+34.95%) class action suit over some of their CPAP, ventilators, and BiPAP machines with a \$1.1 billion settlement. **Exact Sciences** (-36.29%) presented data showing that earlier and more personalized treatment interventions lead to better outcomes for cancer patients, supporting the idea that regular cancer screening should become part of traditional medical maintenance.

In conclusion, 2024 has shown promising signs of recovery and growth in healthcare, highlighted by significant funding increases and easing supply chain and credit issues. Despite underperformance in certain subsegments, the overall market conditions and attractive valuations indicate a potential for robust recovery and growth in the latter half of the year, setting a positive tone for a strong 2025. With upcoming legislation like the BIOSECURE Act and ongoing changes to Medicare, the landscape remains dynamic, yet filled with opportunities for innovation and advancement in healthcare technology.

Top Contributors (Return / Contribution)

Alnylam Pharmaceuticals +60.69%/+0.53%

Alnylam Pharmaceuticals, a leader in RNA interference (RNAi) therapeutics, focuses on treating various genetic, cardio-metabolic, infectious, central nervous system, and ocular diseases. They pioneered the first RNAi-based therapy, ONPATTRO, in 2018. Recently, their drug Amvuttra showed success in treating ATTR-CM, boosting their stock by nearly 50%. With four drugs on the market and a robust pipeline making them the clear market and technology leader in this space.

Guardant health +42.9% / +0.80%

Guardant Health (GH) is a leader in liquid biopsy testing, known for Guardant 360, the first FDAapproved comprehensive liquid biopsy test for late-stage cancer across 50 types. In 2021, they launched Guardant Reveal for detecting residual disease in colorectal cancer. This quarter saw their Shield blood test for colorectal cancer screening approved as a primary non-invasive option, keeping it on track to be the first FDA-approved blood test meeting Medicare coverage requirements. Guardant aims to provide comprehensive cancer testing for both liquid and tissue samples.

Twist Bioscience +42.06% / +0.55%

Twist Bioscience pioneers DNA writing for synthetic biology, using a proprietary silicon chip platform to manufacture a wide range of synthetic DNA products, including custom genes, oligonucleotides, NGS library prep tools, and antibody libraries for drug discovery. Serving thousands of customers across sectors like academia, pharma, and agriculture, Twist also engages in drug discovery with its own proprietary candidates and partners with biopharma to develop antibody therapies. This year saw them increase revenue fueled by loosening pharma budget a successful rollout of their Express Genes.



Bottom Contributors (Return / Contribution)

Ginkgo Bioworks -64.77% / -0.74%

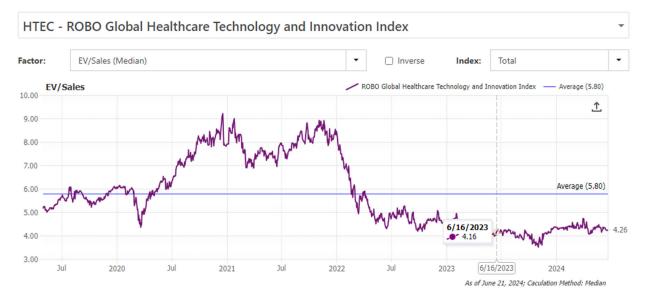
Ginkgo Bioworks provides AI-driven automation for cell engineering R&D, aiming to "make biology easier to engineer." They offer platform services enabling customers to bring products to market, earning through fees and downstream value shares like milestones, royalties, or equity. Facing revenue pressures, they shifted to frontloading contracts but still missed analyst estimates by 18%. Despite this, Ginkgo forecasts 24% annual growth over the next three year and burn rate has been extended.

Exact Sciences -36.29% / -0.60%

Exact Sciences pioneered colorectal cancer screening with their non-invasive Cologuard Stool DNA test, the first multi-target stool DNA test for colorectal cancer covered by Medicare and included in American Cancer Society guidelines. Despite meeting estimates, there's concern that new liquid biopsies might replace Cologuard. Despite this, the company has no long-term debt, maintained 2024 guidance with expected screening revenues of \$2.16-\$2.18 billion, and is developing their own liquid biopsy therapies. Cologuard remains preferred for patients avoiding clinics or blood draws.

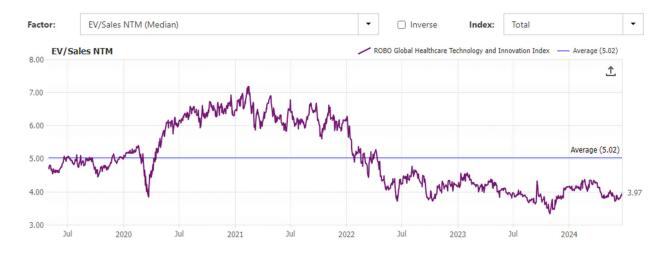
Teladoc Health -35.43 / -0.36%

Teladoc Health, a US-based telemedicine provider, offers remote doctor consultations and virtual mental health services through BetterHelp. This quarter, revenue declined by 3.7%, following a previous miss in sales estimates. The decline is attributed to reduced ad spending and fewer paying users. However, the company added 2.2 million members since Q4, creating future cross-sell opportunities. Teladoc plans to target overseas markets to lower customer acquisition costs as well as AI powered member engagement.



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Weighted Average OMedian



HTECTR Attribution by Index Category 2024-03-29 to 2024-06-21	Avg. Wgt	Return ↓	Contribution	Currency Impact
Genomics	11.12%	15.55%	1.76%	0.00%
Precision Medicine	15.59%	6.42%	0.99%	0.01%
 Robotics 	7.82%	2.00%	0.18%	0.00%
Regenerative Medicine	2.98%	-0.25%	-0.02%	0.00%
 Diagnostics 	20.59%	-5.77%	-1.17%	-0.05%
Medical Instruments	20.27%	-6.28%	-1.38%	-0.05%
 Process Automation 	15.11%	-13.34%	-2.18%	0.01%
 Data Analytics 	2.97%	-17.59%	-0.58%	0.00%
 Telehealth 	3.56%	-18.79%	-0.73%	0.00%
TOTAL	100.00%	-3.14%	-3.14%	-0.08%

Earnings Analysis

Growth Revisions Reports

	2024 Q1	2024 Q1	2024 Q1	2024 Q1		FY 2023		FY 2024		FY 2025		FY 2026		3-Year
	Growth	Surprise	% Beat	% Miss		Growth	Est	t Growth	Es	t Growth	Est	t Growth	Es	t Growth
EPS	-13.86%	10.45%	69.01%	22.80%	•	-0.86%		5.84%		65.92%		20.61%		60.34%
SALES	1.97%	1.32%	67.24%	28.43%		5.31%		4.86%		10.26%		11.23%		29.40%
EBITDA	5.47%	20.83%	68.06%	23.75%	•	-7.32%		10.81%		24.39%		16.93%		55.97%
PROFITABLE	72.46%	_	_	—		75.13%		76.63%		80.04%		82.70%		_

For 2024 Q1, 62 of 68 companies (91%) have reported. 37 companies (60%) have reported positive YoY EPS growth. 38 companies (61%) have reported positive YoY sales growth.



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