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electroCore, Inc. (ECOR - NASDAQ)

2021 Results

Based on our multiple of earnings model and a 20% discount rate, electroCore is valued at approximately $4.75 per share. Our methodology applies a 20x multiple of earnings to 2027 EPS and discounts the result to 2022.

Current Price (3/11/2022)	$0.55
Valuation	**$4.75**

OUTLOOK

electroCore is a commercial company marketing its gammaCore vagus nerve stimulation device in multiple migraine and cluster headache indications. It also has been granted Emergency Use Authorization (EUA) for respiratory-related COVID treatment.

The gammaCore device non-invasively stimulates the vagus nerve which treats headache. The device delivers an electrical pulse to activate the vagus nerve in the neck. Numerous clinical trials have been conducted supporting the efficacy and safety of gammaCore. Additional trials are underway for indications in stroke, PTSD, TBI and PT headache.

Sales are advancing in multiple areas: VA in the US, NHS in the UK, commercial, cash pay & distributors. Low penetration at the VA, expansions of the NHS program and continued efforts with commercial payors support topline advancement. Numerous distribution agreements signed around the globe will also layer on additional sales opportunities.

Associations with the VA, NHS, CVS, Express Scripts & others combined with the strong safety and efficacy data for gammaCore support a long runway for topline growth in the US, European and Asian markets.

Our valuation assumes first positive earnings in 2025 and employs a multiple of 2026 earnings to determine target price.

SUMMARY DATA

52-Week High	**2.44**
52-Week Low	**0.48**
One-Year Return (%)	**-74.8**
Beta	**0.92**
Average Daily Volume (sh)	**2,243,732**
Shares Outstanding (mil)	**70.7**
Market Capitalization ($mil)	**38.5**
Short Interest Ratio (days)	**3.87**
Institutional Ownership (%)	**19.7**
Insider Ownership (%)	**11.5**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2020 Estimate	**N/A**
P/E using 2021 Estimate	**N/A**
Zacks Rank	**N/A**

Risk Level	**Above Average**
Type of Stock	**Small-Growth**
Industry	**Med-Tech Devices**

ZACKS ESTIMATES

Revenue

(In millions of USD)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2020	$0.7 A	$0.8 A	$1.1 A	$0.9 A	$3.5 A
2021	$1.2 A	$1.3 A	$1.5 A	$1.5 A	$5.5 A
2022					$7.6 E
2023					$13.4 E

Earnings per Share

	Q1	Q2	Q3	Q4	Year
2020	-$0.27 A	-$0.13 A	-$0.10 A	-$0.14 A	-$0.60 A
2021	-$0.11 A	-$0.06 A	-$0.06 A	-$0.07 A	-$0.29 A
2022					-$0.31 E
2023					-$0.27 E

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WHAT'S NEW

Fourth Quarter and Fiscal Year 2021 Financial and Operational Results

On March 10, 2022, electroCore Inc. (NASDAQ: ECOR) presented its fourth quarter and fiscal year 2021 financial and operational results in a press release and Form 10-K filed with the SEC. A conference call with investors and analysts was held concurrent with the release. Full year and fourth quarter revenues of $5.5 million and $1.5 million, respectively, met company guidance and our expectations. Full year loss per share of ($0.29) was better than our estimates of ($0.30) due to higher than expected gross margin.

Operational and scientific highlights for the fourth quarter 2021 and to date include:

- Motion to dismiss class action suit accepted - October 2021
- Regulatory approval in Canada to treat adolescent migraine - October 2021
- Publication reviewing gammaCore prescription in cluster headache, England - October 2021
- New patent for stroke and TIA treatment - December 2021
- Post-Traumatic Stress Disorder publication in *Journal of Affective Disorders Reports* - December 2021
- Launch of UK ecommerce shop - December 2021
- Distribution agreements with Melidonia, Cyrus and Medexsol - December 2021
- Publication of PREMIUM II trial results for migraine prophylaxis - January 2022
- Launch of US telehealth portal and online store - January 2022
- nVNS receives Breakthrough Device Designation for Post-Traumatic Stress Disorder - January 2022
- Shareholder letter and 2021 business update - January 2022
- TRANSIT study enrollment completed - February 2022
- Three abstracts presented at International Stroke Conference 2022 - February 2022
- Julie Goldstein and Tricia Wilber join Board - March 2022

In the financial domain, revenues for 2021 were $5.5 million, a 56% increase over the $3.5 million generated in 2020. Net loss was ($17.2) million in 2021 versus ($23.5) million in 2020, or a ($0.29) and ($0.60) per share loss, respectively.

For fiscal and calendar year 2021 and versus the same period ending December 31, 2020:

- Net sales were $5.5 million, increasing 56% from $3.5 million driven by increased sales from the US Department of Veterans Affairs, sales outside the US and the US commercial channel;
- Gross margin was 75% versus 50% due to the more favorable absorption of labor and overhead costs, and product mix;
- Research & development expenses totaled $2.5 million, decreasing 40% from $4.2 million primarily due to reduction in R&D activity, offset by investments in trials, publications and product development;
- Selling, general & administrative expenses were down approximately 1% to $21.6 million;
- Net loss was ($17.2) million versus ($23.5) million with loss per share ($0.29) and ($0.60), respectively;

As of December 31, 2021, cash, equivalents and marketable securities on the balance sheet totaled $34.7 million. Cash burn was ($13.6) million; an amount partially offset by financing cash flows of $25.7 million largely related to the July public offering.

Commercial

Distribution Agreements

On December 16, 2021, electroCore announced the addition of three new distribution agreements. electroCore entered into exclusive distribution agreements with Melidonia Health Services (Melidonia), Cyrus Medical Technologies (Cyrus), and Express Medical Solutions LLC (Medexsol) for distribution of gammaCore in Cyprus, the United Arab Emirates and Oman, and Saudi Arabia and Bahrain, respectively. These add to the existing list of international distribution partners spanning North America, Europe, the Middle East, Asia, and Oceania. The initial term of the Melidonia agreement is three years and Cyrus and Medexsol agreements have initial terms of five years. We've summarized the various agreements announced to date in the exhibit below.

Exhibit I – electroCore's International Distributors' Geography List[1]



Exhibit II – Summary of electroCore's Distributors[2]

Announce Date	Partner	Region	Term
December 2020	Pro Medical Baltic	Lithuania, Latvia, Belarus, Kazakhstan, Ukraine	Three Years
January 2021	RSK Medical	Canada	Three Years
February 2021	Medistar	Australia	Three Years
March 2021	Silvert Medical	Belgium, Luxembourg, the Netherlands, France	Three Years
April 2021	East Agency	Qatar	Three Years
June 2021	Kromax	Taiwan, China, Malaysia, Singapore, Indonesia	Three Years
December 2021	Melidonia	Cyprus	Three Years
December 2021	Cyrus	United Arab Emirates, Oman	Five Years
December 2021	Medexsol	Saudi Arabia, Bahrain	Five Years

[1] Compiled by Zacks' analysts using mapchart.net
[2] electroCore, Inc. Provides Update on Global Distribution Partners | electroCore. Compiled by Zack's analysts.

Launch of UK E-Commerce Shop
On December 15, 2021, electroCore announced that it had launched a new online shop in the UK. Through the site, UK patients can purchase gammaCore Sapphire online after completing a questionnaire. The first product launched on the UK online shop will treat menstrual migraine. In addition to the online clinical assessment, the product is delivered to the patient's door and treatment training is conducted via video calls with an electroCore UK customer service team member. The cost of the therapy is borne by the patent and this effort reflects electroCore's concerted effort to provide gammaCore for indications that may not be covered by payors or fall into a reimbursement gap. Pricing for gammaCore Sapphire is £220 for three cycles of therapy.

Launch of US Telehealth Portal and Online Store
The success of the UK e-commerce shop presaged the launch of a similar effort in the United States. On January 11, 2022, electroCore announced the launch of its US website. Through this portal, US patients can complete a telehealth consult in order to receive a prescription to purchase gammaCore Sapphire online. The US online store will feature gammaCore for FDA-cleared indications such as migraine and cluster headache, and is powered by Vytal, LLC that allows patients to obtain a prescription via telehealth consult, purchase the therapy directly from the site delivered to their door, and have a member of the US electroCore customer service team provide video training. The online store continues to advance electroCore's strategic advancement of a cash pay, direct-to-consumer model that provides for more simplicity and less friction than the alternative insurance reimbursement model.

Regulatory & Clinical

Breakthrough Device Designation for nVNS in Post-Traumatic Stress Disorder (PTSD)
On January 12, 2022, electroCore announced that nVNS had received Breakthrough Device Designation from the FDA for the treatment of PTSD. The Breakthrough Devices Program provides an accelerated development, assessment and review pathway towards approval. The candidate must provide more effective treatment or diagnosis than existing approaches and meet one of the following criteria:

- Represents Breakthrough Technology
- No approved or cleared alternatives exist
- Offers significant advantages over existing approved or cleared alternatives
- Device availability is in the best interest of patients

The designation will help the electroCore team obtain feedback from the FDA in order to gain 510(k) clearance. electroCore will soon hold a meeting with the FDA to discuss the regulatory pathway forward for nVNS. Given both the Breakthrough Designation and the strong data to date, we anticipate that electroCore will pursue its next indication in this disorder.

Receipt of the Designation was supported in part by research by Drs. Bremner and Inan from the Emory University School of Medicine and Georgia Institute of Technology, respectively, showing that nVNS blocks sympathetic and inflammatory responses to memories of traumatic events in PTSD patients, modulates brain responses to traumatic memory, and reduces PTSD symptoms by 31% when compared to sham stimulation. The Breakthrough Device Program features accelerated development, assessment and prioritized review for devices that provide 'more effective treatment or diagnosis for life-threatening or irreversibly debilitating human disease or conditions.

TRANSIT Study in Post-Operative Ileus Enrollment Completed
On February 1, 2022, electroCore announced that it had completed enrollment for its TRANSIT study of nVNS in ileus after colorectal surgery. TRANSIT is a randomized, participant blinded, sham-controlled study that is sponsored by the UK National Institute for Health Research (NIHR). The 97-patient study is led by Dr. Stephen Chapman, Clinical Research Fellow in the University of Leeds School of Medicine and is conducted at St. James Hospital and Bradford Royal Infirmary. Clinical endpoints include the number of postoperative days to first flatus, first stool, first oral intake, hospital discharge, and the GI-2 composite outcome. Daily oral morphine equivalent requirements, as well as a number of safety and feasibility outcomes to inform potential future clinical research and use, will also be assessed. Study results are expected later this year.

Publications & Patents

Abstracts Presented at International Stroke Conference 2022
As we detailed in our last report, electroCore presented posters at the International Stroke Conference 2022 highlighting some early but already statistically significant evidence of nVNS suppression of infarct growth. nVNS was found safe in both types of stroke, hemorrhagic and ischemic, allowing for nVNS to be administered as early as

possible, even before the type of stroke is identified, to maximize its effect. According to the CDC, 795,000 people in the US have a stroke every year. Equipped with early and promising results, electroCore is positioned to move forward in this indication.

nVNS in PTSD

On December 14, 2021, electroCore announced the December 6th publication in the *Journal of Affective Disorders Reports* featuring results from a trial that enrolled 20 patients suffering from PTSD. These subjects were exposed to personalized traumatic scripts and then were immediately treated with active or sham nVNS. Results showed that three months of treatment with nVNS led to a 31% reduction ($p < 0.013$) in PTSD symptoms compared to sham as evaluated by the PTSD Checklist. Results also demonstrated a significant decrease in hyperarousal symptoms ($p = 0.008$) and decrease in overall and somatic anxiety. Patients who continued treatment in the three-month open-label period showed significant improvement in overall symptoms as measured by the Clinical Global Index ($p = 0.003$) and had levels of IL-6 that did not increase ($p < 0.05$). electroCore is conducting two studies of nVNS in PTSD in collaboration with the Department of Veterans Affairs. One of them addresses posttraumatic stress with 88 subjects at the San Diego VA Healthcare System, and the other measures sympathetic overactivity in PTSD with 100 subjects at the Atlanta VA Medical Center.

New Patent for nVNS in Stroke and Transient Ischemic Attack (TIA) Treatment

On December 13, 2021, electroCore announced that it had been granted US Patent No. 11,191,953 relating to the treatment of stroke symptoms. The patent describes methods of treating acute symptoms of stroke and Transient Ischemic Attack (TIA) with the application of a transcutaneous, non-invasive electrical impulse or stimulation. Earlier in 2021, electroCore announced full enrollment for its TR-VENUS study of nVNS in acute treatment of stroke.

PREMIUM II Results, nVNS in Migraine Prophylaxis

On January 10, 2022, electroCore announced the publication of "Non-invasive vagus nerve stimulation for prevention of migraine: The multicenter, randomized, double-blind, sham-controlled PREMIUM II trial" in *Cephalalgia.* The paper reported results of PREMIUM II, a randomized, double-blind, sham-controlled trial conducted at twenty-seven sites across the United States that had originally been powered for 400 subjects, but was closed early due to COVID-19 after enrolling only 231 subjects.

Exhibit III - PREMIUM II Results[3,4]

Metric	Active	Sham	P-value
Mean reduction in migraine days/month*	3.12	2.29	p = 0.23
Responder rate (% with >50% reduction in migraine days)	44.90%	26.80%	p < 0.05
Headache Impact Scale	-4.9	-2.3	p < 0.05
Reduction in number of headache days/month	4.6	-3.0	p = 0.05
Reduction in number of headache days/month**	5.5	2.7	p < 0.05

*Primary endpoint, **Patient subset with aura

Despite lower than intended enrollment, PREMIUM II, which was intended to evaluate the safety and efficacy of nVNS for migraine prophylaxis, achieved statistically significant superiority versus sham on several measures. Statistical significance was not achieved for PREMIUM II's primary endpoint, mean reduction in migraine days per month. No serious device-related adverse events were reported. Migraineurs with aura were of particular interest, experiencing a therapeutic gain of over 100% compared to sham, which further reinforced nVNS' role in this particular patient subtype.

[3] electroCore Announces Publication of PREMIUM II Trial of gammaCore (Non-Invasive Vagus Nerve Stimulation; nVNS) for the Prevention of Migraine | electroCore

[4] Non-invasive vagus nerve stimulation for prevention of migraine: The multicenter, randomized, double-blind, sham-controlled PREMIUM II trial - Umer Najib, Timothy Smith, Nada Hindiyeh, Joel Saper, Barbara Nye, Sait Ashina, Candace K McClure, Michael J Marmura, Serena Chase, Eric Liebler, Richard B Lipton, 2022 (sagepub.com)

Exhibit IV – Anticipated Achievements and Milestones[5]



Corporate

Shareholder Letter and 2021 Business Update

In its January 18th Letter to Shareholders, electroCore's Board provided a review of the company's long-term prospects and update on progress. The Letter reminded investors of the recently launched UK and US e-commerce storefronts that make gammaCore available directly to consumers at a compelling price, and discussed plans to ramp-up advertising spend aggressively to support the channel. In parallel with the online stores, electroCore launched gConcierge and gCDirect programs allowing physicians to prescribe gammaCore therapy for patients who can then directly purchase the product via the doctor's office directly from electroCore. The company also broadened its call points to include a wider range of medical providers who manage headache conditions. 200 prescribers have utilized gConcierge and gCDirect to write scripts. The Department of Veterans Affairs (VA) and DoD channels will receive continued investment and advertising support. The company expects that its newly launched cash-pay programs will address the deterrence posed by high-deductible insurance plans. On the development side of the business, multiple clinical programs are ongoing over the course of 2022. These programs include secondary headache, traumatic brain injury, PTSD, stroke, opioid use disorder, Parkinson's disease, postoperative ileus and others.

Board Changes

On March 9, 2022, electroCore announced the appointment of Julie Bruzzone Goldstein and Tricia Wilber to the company's Board of Directors effective March 15, 2022. The Company also announced that effective March 4, 2022, Dr. Stephen Ondra is resigning from the Board to focus on his new role as Chief Medical Advisor at MITRE, and Michael Atieh will not be standing for re-election to the Board at the 2022 Annual General Meeting.

[5] electroCore Corporate Presentation November 2021

Exhibit V – electroCore Pipeline & Partnerships[6]



Summary

On March 10, 2022, electroCore presented its fourth quarter and fiscal year 2021 financial and operational results Full year and fourth quarter revenues of $5.5 million and $1.5 million, respectively, met company guidance and our expectations. Full year loss per share of ($0.29) was better than our estimates of ($0.30) due to higher than expected gross margin. Guidance for the first quarter calls for revenues of at least $1.7 million.

2021 was a strong year of growth for electroCore with a topline increase of 56% driven by successes at the VA, NHS and commercial businesses. A number of distribution partners have been secured that span the globe and augment electroCore's presence in the United States and United Kingdom. Distribution is global and varied, and while we may see some disruptions in Europe in the near term, growth in the largest segment, VA and DoD, continues to be strong. New opportunities in commercial and cash pay markets also are showing substantial promise.

electroCore has many factors in its favor which are helping to expand its presence globally to support its attractive profile. Additional indications are also longer-term opportunities such as those in Parkinson's disease, opioid use disorder, respiratory distress, post-traumatic headache, mild traumatic brain injury, PTSD, inflammatory diseases, and now stroke, with supportive preliminary results. Based on the expedited treatment and the data available to date, the most likely indication to be pursued next is PTSD. The material and broad initiatives being advanced by electroCore support continued strong topline growth and our price target of $4.75 per share.

[6] electroCore Corporate Presentation November 2021

PROJECTED FINANCIALS

electroCore, Inc. - Income Statement

electroCore, Inc.	2020 A	Q1 A	Q2 A	Q3 A	Q4 E	2021 E	2022 E	2023 E
Total Revenues ($US '000)	**$3,496**	**$1,203**	**$1,269**	**$1,487**	**$1,491**	**$5,451**	**$7,590**	**$13,434**
YOY Growth	46%	64%	69%	38%	61%	56%	39%	77%
Cost of Goods Sold	$1,738	$364	$374	$355	$292	$1,385	$1,898	$3,359
Product Gross Margin	50.3%	70%	71%	76%	80%	75%	75%	75%
Research & Development	$4,201	$499	$825	$470	$742	$2,536	$2,916	$3,022
Selling, General & Administrative	$21,841	$5,725	$5,273	$4,647	$5,929	$21,573	$24,809	$26,050
Restructuring & Other	$465	$0	$0	$0	$0	$0	$0	$0
Income from operations	($24,749)	($5,385)	($5,203)	($3,985)	($5,472)	($20,043)	($22,033)	($18,996)
Operating Margin	*-708%*	*-448%*	*-410%*	*-268%*	*-367%*	*-368%*	*-290%*	*-141%*
Other Expense	($67)	$0	($1,424)	$0	($551)	($1,974)	$0	$0
Pre-Tax Income	($24,682)	($5,385)	($3,779)	($3,985)	($4,921)	($18,069)	($22,033)	($18,996)
Provision for Income Tax	($1,171)	$0	($885)	$9	$26	($851)	$0	$0
Tax Rate	*4.7%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*4.7%*	*0.0%*	*0.0%*
Net Income	**($23,511)**	**($5,385)**	**($2,894)**	**($3,994)**	**($4,947)**	**($17,218)**	**($22,033)**	**($18,996)**
Net Margin	*-673%*	*-448%*	*-228%*	*-269%*	*-332%*	*-316%*	*-290%*	*-141%*
Reported EPS	**($0.60)**	**($0.11)**	**($0.06)**	**($0.06)**	**($0.07)**	**($0.29)**	**($0.31)**	**($0.27)**
YOY Growth	*-61%*	*-57.7%*	*-53.9%*	*-43.6%*	*-49.7%*	*-52%*	*6%*	*-14%*
Basic Shares Outstanding	38,999	47,653	48,520	69,511	70,660	59,178	71,250	71,588

Source: Company Filing // Zacks Investment Research, Inc. Estimates

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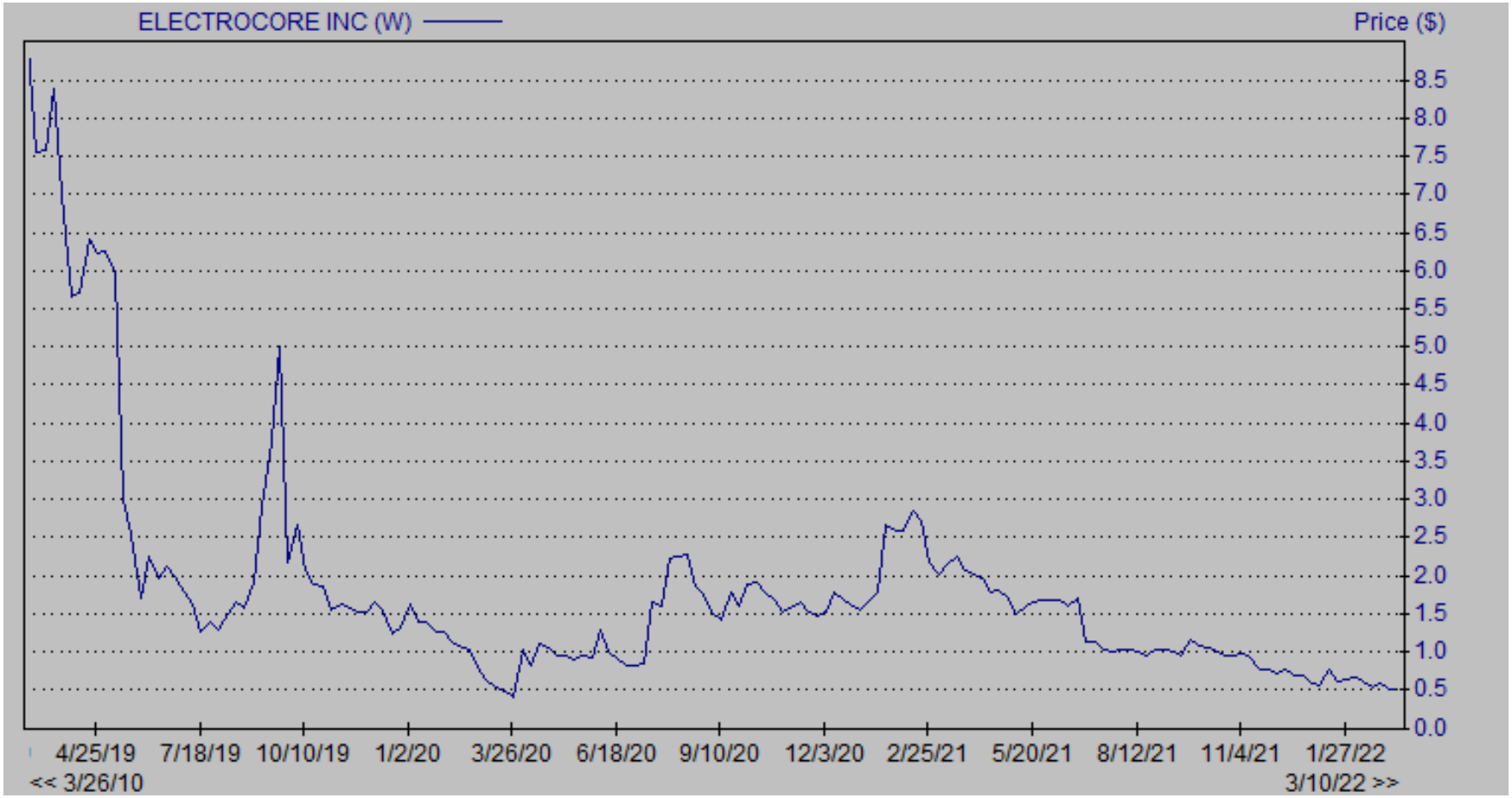
HISTORICAL STOCK PRICE

electroCore – Share Price Chart[7]



[7] Source: Zacks Research System

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