



# ENDRA Life Sciences Inc.

Q2 about inline and planned FDA submission in Q3. We believe FDA approval and EU/US product launch over the next year to drive stock. Lowering P/T to \$4.50.

**Q2 about inline:** ENDRA recently (on August 15) reported its Q2 2022 (ending June) results. Net loss was \$3.6 million or EPS of \$(0.06) compared with our and consensus estimates of \$(0.06). There was no Q2 guidance. ENDRA is a late stage medical device development/early stage commercialization company so it generates minimal revenues.

**Operating expense:** Operating expenses were \$3.6 million, vs \$3.2 million (y-o-y) as it ramps up R&D and commercialization expenses.

**No 2022 guidance:** Management did not provide specific 2022 guidance.

**Adjusting 2022 estimates:** We are adjusting our 2022 estimates for revenues to \$0.3 million, from \$0.8 million, and for EPS to \$(0.23) from \$(0.21).

**Focused on TAEUS development:** ENDRA has one main medical device candidate, the Thermo Acoustic Enhanced UltraSound (TAEUS) platform to enable clinicians to visualize human tissue composition, function and temperature in ways previously possible only with CT and MRI, but at a fraction of the cost and at the point-of-care.

**EU launched:** In March 2020, ENDRA received CE Mark approval, and is now starting initial commercialization activity in Europe.

**FDA submission planned for current Q3:** In June 2020, ENDRA filed its 501(k) application with the FDA. After extensive dialogue with the FDA, ENDRA is now (as of February 2022) pursuing the De Novo pathway for its TAEUS System (and withdrawing its 501(k) application), which is intended to characterize fatty liver tissue as a non-invasive means to assess and monitor Non-Alcoholic Fatty Liver Disease (NAFLD). ENDRA plans to file its FDA submission in Q3. We note that key commercialization activities have already started, including a major distribution deal in Vietnam.

**10 evaluation sites:** ENDRA has 4 U.S. reference evaluation sites, 5 in the EU, and a site in China. These sites will be used to bolster clinical evidence and further establish the clinical utility of the TAEUS device for assessing NAFLD-NASH. ENDRA remains on track to have 200 total patients scanned by the end of 2022.

**Large market opportunity:** The company is launching its first TAEUS application to measure fat in the liver, which is used for early detection and monitoring of Non-Alcoholic Fatty Liver Disease (NAFLD). In 2011, over 1.4 billion people were affected by NAFLD/NASH around the world. Despite the increased incidence of NAFLD, there are no low-cost, accurate, and safe methods for measuring fat in the liver. TAEUS technology should enable to diagnose NAFLD earlier and monitor patients with related liver diseases more accurately and cost-effectively than is possible with existing technology.

**Capital raise:** In Q2, ENDRA raised \$8 million from its ATM. We believe it has enough cash into late 2023.

**Positive high risks versus rewards:** Though we acknowledge that ENDRA's devices are at/near approvals and launch, there is still a long road to successful commercialization. However, we believe the ~billion dollars market potentials presents a high reward for the high risks.

**Current valuation attractive:** Maintaining our BUY rating, but lowering our 12-month price target to \$4.50 from \$5.00. This is based on a NPV analysis, representing significant upside from the current share price. We believe this valuation appropriately balances out the company's high risks with the company's high growth prospects and large upside opportunities.

## Company Description

Based in Ann Arbor, MI, ENDRA Life Sciences is a medical device company developing enhanced ultrasound technologies (TAEUS) for medical imaging.

United States  
Healthcare

September 7, 2022

Edward Woo, CFA  
(561) 327-9435  
ewoo@ascendant.com

## COMPANY UPDATE

Rating: **BUY**

Ticker: NDRA

Price: \$0.30  
(intraday)

Target: \$4.50  
(from \$5.00)

## Stock Data

Exchange:	NasdaqCM
52-week Range:	\$0.18 – 1.94
Shares Outstanding (million):	64
Market cap (\$million):	\$19
EV (\$million):	\$8
Debt (\$million):	\$0
Cash (\$million):	\$11
Avg. Daily Trading Vol. (\$million):	\$0.4
Float (million shares):	62
Short Interest (million shares):	0.8
Dividend, annual (yield):	\$0 (NA%)

## Revenues (US\$ million)

	<u>2022E</u> (Cur.)	<u>2022E</u> (Old)	<u>2023E</u> (Cur.)	<u>2023E</u> (Old)
Q1 Mar	0.0A		1.0E	
Q2 Jun	0.0A	0.0E	1.0E	
Q3 Sep	0.0E		1.0E	
Q4 Dec	<u>0.3E</u>	<u>0.8E</u>	<u>1.0E</u>	
Total	<b>0.3E</b>	<b>0.8E</b>	<b>4.0E</b>	
EV/Revs	27x		2x	

## Earnings per Share (pro forma)

	<u>2022E</u> (Cur.)	<u>2022E</u> (Old)	<u>2023E</u> (Cur.)	<u>2023E</u> (Old)
Q1 Mar	(0.07)A		(0.04)E	
Q2 Jun	(0.06)A	(0.06)E	(0.04)E	
Q3 Sep	(0.05)E		(0.04)E	
Q4 Dec	<u>(0.05)E</u>	<u>(0.04)E</u>	<u>(0.04)E</u>	
Total	<b>(0.23)E</b>	<b>(0.21)E</b>	<b>(0.17)E</b>	
P/E	N/A		N/A	

## Important Disclosures

Ascendant Capital Markets LLC seeks to do business with companies covered by its research team. Consequently, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making an investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report, beginning on page 11.

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### Exhibit 1: Q2 2022 and Recent Highlights

- **Well capitalized through expected key milestones.** With a cash position of approximately \$11 million as of June 30, 2022, management believes ENDRA is capitalized to fund operations through several important expected milestones, including ramping-up commercial activities in Europe and advancing the TAEUS system through the regulatory process in the U.S.
- **Installed TAEUS system at a fourth clinical evaluation site, in the U.S.** Year-to-date, more than 50 TAEUS scans have been performed on study participants, a 25% increase from May 2022, and ENDRA remains on track for at least 200 patients to be scanned by year end. These clinical evaluation sites are being used to generate data to support the commercialization of the TAEUS system, and a subset of the data will be used to support ENDRA's submission of its De Novo request.
- **Targeting submission in the third quarter of De Novo request with the U.S. Food and Drug Administration (FDA).** ENDRA is pursuing the De Novo pathway for its TAEUS liver device, which is intended to characterize fatty liver tissue as a non-invasive means to assess and monitor Non-Alcoholic Fatty Liver Disease (NAFLD). The De Novo pathway will build upon ENDRA's previous 510(k) application and provides ENDRA with the opportunity to set the bar for an entirely new product classification, which should yield important and sustainable commercial advantages for the novel TAEUS platform. The De Novo request will include a subset of the TAEUS human study data from ENDRA's ongoing clinical studies, representing saved costs to ENDRA.
- **Demonstrated the TAEUS liver system in ENDRA's booth at two major hepatology and radiology clinical conferences in Europe.** During the second quarter, the ENDRA team met with prospective customers and key partners at the European Association for the Study of the Liver and at Dreiländertreffen. The commercial team is accelerating its market-awareness activities and is targeting participation in 12 clinical conferences in 2022 compared with seven last year.
- **Bolstered global intellectual property portfolio to 53 issued patents.** In the second quarter and recent weeks, the company was issued 11 patents that protect its thermoacoustic imaging technology and enhance out-licensing opportunities. Of particular note, ENDRA announced several new U.S patents focused on cloud-enabled connectivity of medical devices.

Source: Company reports.

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Exhibit 2: ENDRA Investment Highlights

## ENDRA Life Sciences

ENHANCE ULTRASOUND TO SEE HUMAN TISSUE IN WAYS SIMILAR TO CT-MRI... BUT AT 50X LOWER COST<sup>2</sup>

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## ENDRA Life Sciences: Investment Highlights

### PROPRIETARY SCALABLE PLATFORM

- Thermo Acoustic Enhanced Ultrasound (TAEUS<sup>®</sup>) uses radio frequency pulses to create sonic waves
- TAEUS differentiates tissues similar to MRI but at 50x lower cost,<sup>1</sup> at the point of patient care
- Potential to address multiple unmet clinical needs, and generate diverse revenue streams
- TAEUS CE mark received in Europe, and FDA De Novo request planned for Q3 2022 in the U.S.

### MULTI-BILLION DOLLAR MARKET

- First TAEUS indication focused on NAFLD-NASH with no practical diagnostic tools
- 1.8 billion people<sup>2</sup> affected with excess liver fat. \$12.5 billion global market opportunity<sup>3</sup>

### EXTENSIVE PATENT PORTFOLIO: DEFENSIVE & OFFENSIVE VALUE

- 90 internally-developed global IP assets,<sup>4</sup> including 46 issued patents.

### CAPITAL-EFFICIENT OPERATING MODEL

- Small ENDRA team + world-class technical, clinical and commercial partners

Source: Company reports.

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**Exhibit 3: TAEUS Upcoming Milestones**

**Anticipated Milestones: ENDRA Liver Application**

**2022**

- ✓ Sign high-value China partnership with Shanghai General Hospital
- ✓ Achieve clarity on U.S regulatory strategy
  - Submit De Novo request in Q3 2022
- ✓ Strengthen intellectual property portfolio
- Collect TAEUS clinical evidence from global research partners
- Ramp commercialization efforts & drive sales in Europe
- Forge new alliances with drug developers and med-tech OEMs

Source: Company reports.

**Exhibit 4: ENDRA Partners**

**ENDRA Partners**

SUPPORTING TECHNICAL, CLINICAL & COMMERCIAL DEVELOPMENT OF TAEUS

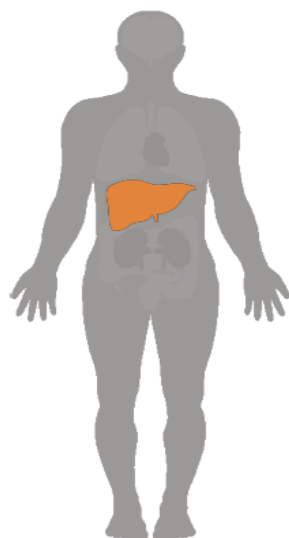
		Value to ENDRA		
Partner's Role		Build Clinical Evidence	Refine Technology	Commercial Support
	8 TAEUS clinical evaluation sites (4 EU, 3 U.S., 1 China)	●	●	●
	Ultrasound leader, supporting ENDRA intros to GE customers			●
	Pharma companies piloting TAEUS for drug trial screening	●		
	Academic lab developing TAEUS artificial intelligence capabilities		●	

Source: Company reports.

**Exhibit 5: ENDRA's TAEUS Market Opportunity**

**ENDRA Opportunity #1: Non-Alcoholic Fatty Liver Disease (NAFLD)**

QUANTIFY LIVER FAT INEXPENSIVELY & NON-INVASIVELY AT EARLIEST STAGE OF LIVER DISEASE



**1.4 BILLION PEOPLE AFFECTED GLOBALLY<sup>1</sup>**

- Drivers: obesity, diabetes, Hep-C, drugs
- Often asymptomatic, needs to be monitored
- ~30%<sup>2</sup> of NAFLD cases progress to NASH, then Fibrosis, Cirrhosis, Cancer
- Total annual direct medical costs for NAFLD: \$103B in the U.S<sup>3</sup>
- Median Medicare inpatient charge per NAFLD patient: \$36K<sup>4</sup>
- By 2025, NAFLD likely the greatest root cause of liver transplants<sup>5</sup>

**CURRENT DIAGNOSTIC & MONITORING TOOLS ARE IMPRACTICAL**

Expensive MRI, invasive surgical biopsy

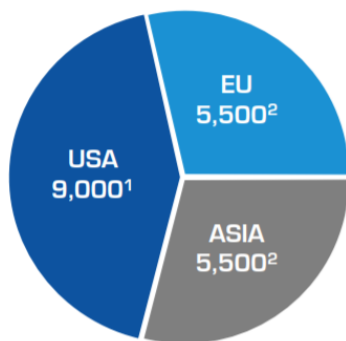
"The ability to accurately quantify fat in the liver, at the point-of-care with ENDRA's TAEUS ultrasound could be revolutionary."

Xiang Jing M.D  
Deputy Chairman, Ultrasound Committee  
China Medical Association

**Total Addressable Market for NAFLD-NASH Fat Measurement Tool**

**\$1 BILLION OPPORTUNITY ... WITH UPSIDE**

Estimated 2019 Number of Facilities<sup>1</sup> Performing Abdominal-Liver Ultrasound Scans



Global **facilities** (primarily radiology) currently doing abdominal-liver ultrasound scans, who could potentially buy 1 unit of ENDRA's liver technology **20,000**

Target average selling **price** per unit of ENDRA's liver technology **x \$50K**

**Sub-Total Addressable Market = \$1 billion**

**Potential Upside**

- Non-radiology facilities focused on liver & metabolism: gastro-hepatology, endocrinology, primary care
- Other global markets: Latin America, Middle East
- >1 ENDRA liver unit sale per facility (E.g. hospital)
- ENDRA licensing, disposables, service



NASDAQ: NDRA 7

Source: Company reports.

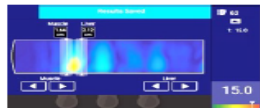
**Exhibit 6: TAEUS**

**ENDRA's TAEUS®: Enhancing Traditional Ultrasound**

RADIO FREQUENCY PULSES CREATE SONIC WAVES THAT QUANTITATE LIVER FAT FRACTION



Illustration of TAEUS probe



Screen shot of TAEUS measurement

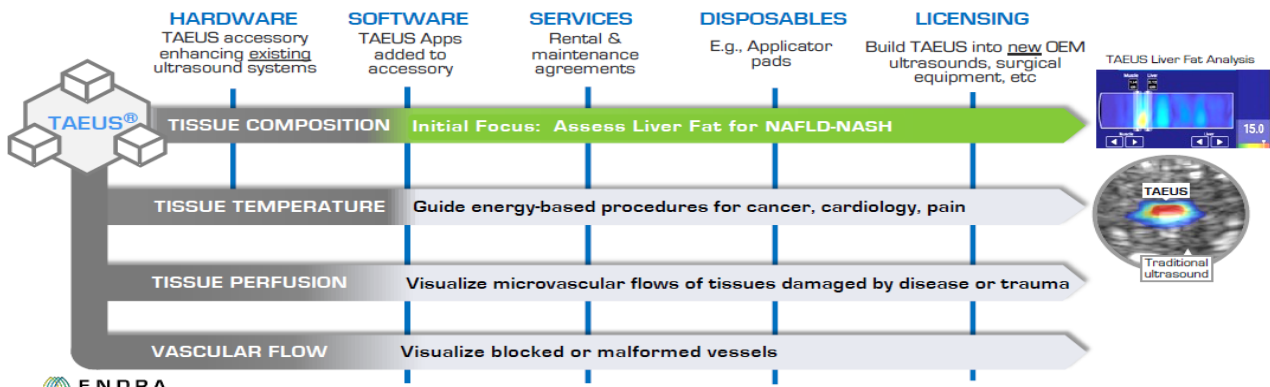
TAEUS is not yet approved for sale in the U.S.

**TAEUS PROCEDURE**

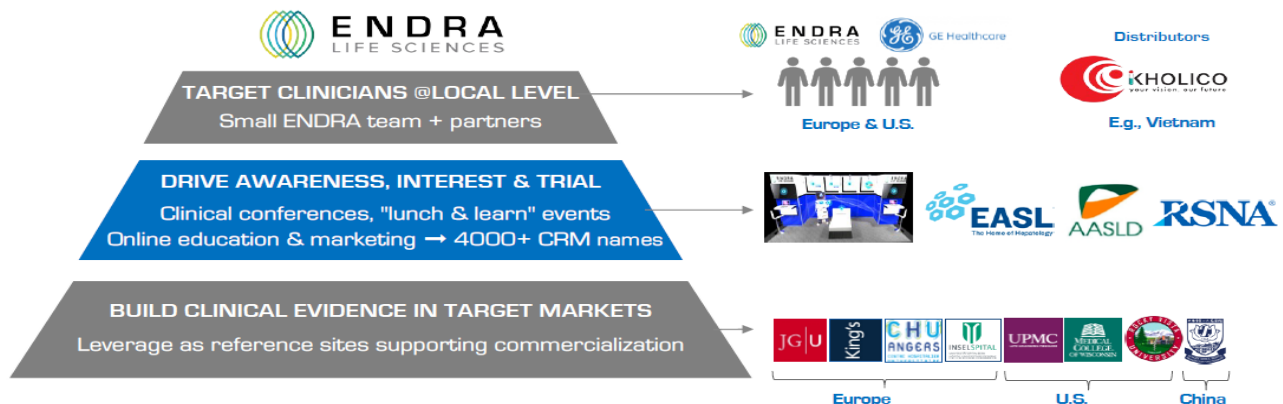
- As little as 15 minutes of user training; easy-to-interpret results
- Locate liver with any traditional B-mode ultrasound
- Apply & activate TAEUS probe; each scan takes 1.5 seconds
- ✓ ENDRA completed first TAEUS human feasibility study (n=19), validated against MRI-PDFF. **Sensitivity 0.88 Specificity 0.82 AUROC 0.91 @ MRI-PDFF 6% steatosis**
- ✓ CE mark received in Europe
- FDA De Novo request planned for Q3 2022

**TAEUS® Platform Evolution<sup>1</sup> & Business Model**

START WITH LIVER-FOCUSED ACCESSORY & SOFTWARE ENHANCING EXISTING ULTRASOUND SYSTEMS, THEN SCALE WITH ADDITIONAL CLINICAL APPLICATIONS & REVENUE STREAMS



**Commercializing TAEUS Liver: 3 Core Elements**



Source: Company reports.

**Exhibit 7: ENDRA Life Sciences Stock Price (5-years)**



Source: <https://bigcharts.marketwatch.com/>

**Exhibit 8: Consensus Expectations (as of August 15, 2022)**

	Revenue (mil)			EPS	
	<u>2022E</u>	<u>2022E</u>		<u>2022E</u>	<u>2023E</u>
Q1 Mar	\$0.0A		Q1 Mar	\$(0.07)A	
Q2 Jun	\$0.0E		Q2 Jun	\$(0.06)E	
Q3 Sep	\$0.0E		Q3 Sep	\$(0.05)E	
Q4 Dec			Q4 Dec		
<b>Total</b>	<b>\$1.1E</b>	<b>\$6.6E</b>	<b>Total</b>	<b>\$(0.20)E</b>	<b>\$(0.13)E</b>

\*Quarterly estimates may not add to annual estimates due to variations in contributing estimates and rounding.

Source: Company report, Refinitiv, and Ascendant Capital Markets estimates

## FINANCIAL MODEL

### ENDRA Life Sciences Inc.

Income Statement (\$ mils)	Mar-20	Jun-20	Sep-20	Dec-20	2020	Mar-21	Jun-21	Sep-21	Dec-21	2021	Mar-22	Jun-22	Sep-22	Dec-22	2022	Mar-23	Jun-23	Sep-23	Dec-23	2023
Fiscal Year End: December 31	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3E	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E
<b>Total Revenue</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	1.0	1.0	1.0	1.0	4.0
Cost of Revenues	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.5	0.5	0.5	2.0
Gross Profit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	0.5	0.5	0.5	2.0
Research and development	1.5	1.5	1.8	1.1	5.9	1.1	1.7	1.2	1.4	5.5	1.2	1.8	1.5	1.5	6.1	1.3	1.3	1.3	1.3	5.2
Sales and marketing	0.1	0.1	0.1	0.2	0.6	0.2	0.3	0.3	0.4	1.1	0.3	0.3	0.5	0.5	1.7	0.5	0.5	0.5	0.5	2.0
General and administrative	1.5	1.3	1.3	0.9	5.0	1.3	1.2	1.2	1.3	4.9	1.3	1.4	1.4	1.4	5.5	1.4	1.4	1.4	1.4	5.6
Restructuring and other					0.0					0.0					0.0					0.0
Total operating expenses	3.1	2.9	3.3	2.3	11.5	2.6	3.2	2.7	3.1	11.5	2.9	3.6	3.4	3.4	13.2	3.2	3.2	3.2	3.2	12.8
<b>Operating income (loss)</b>	<b>(3.1)</b>	<b>(2.9)</b>	<b>(3.3)</b>	<b>(2.3)</b>	<b>(11.5)</b>	<b>(2.6)</b>	<b>(3.2)</b>	<b>(2.7)</b>	<b>(3.1)</b>	<b>(11.5)</b>	<b>(2.9)</b>	<b>(3.6)</b>	<b>(3.4)</b>	<b>(3.3)</b>	<b>(13.1)</b>	<b>(2.7)</b>	<b>(2.7)</b>	<b>(2.7)</b>	<b>(2.7)</b>	<b>(10.8)</b>
Interest income (expense)	(0.2)	(0.0)		0.0	(0.2)					0.0				(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)
Other income (expense)	0.0	0.0	(0.4)	0.4	0.0	0.2	0.0	(0.0)	(0.0)	0.1	(0.0)	(0.0)		(0.1)	(0.1)					(0.1)
Income before income taxes	(3.3)	(2.9)	(3.7)	(1.9)	(11.7)	(2.4)	(3.2)	(2.7)	(3.1)	(11.4)	(2.9)	(3.6)	(3.4)	(3.3)	(13.2)	(2.7)	(2.7)	(2.7)	(2.7)	(10.9)
Income taxes					0.0					0.0					0.0	0.0	0.0	0.0	0.0	0.0
Net income (loss)	(3.3)	(2.9)	(3.7)	(1.9)	(11.7)	(2.4)	(3.2)	(2.7)	(3.1)	(11.4)	(2.9)	(3.6)	(3.4)	(3.3)	(13.2)	(2.7)	(2.7)	(2.7)	(2.7)	(10.9)
Nonrecurring/noncash adjustments					0.0					0.0					0.0					0.0
<b>Net income (pro forma)</b>	<b>(3.3)</b>	<b>(2.9)</b>	<b>(3.7)</b>	<b>(1.9)</b>	<b>(11.7)</b>	<b>(2.4)</b>	<b>(3.2)</b>	<b>(2.7)</b>	<b>(3.1)</b>	<b>(11.4)</b>	<b>(2.9)</b>	<b>(3.6)</b>	<b>(3.4)</b>	<b>(3.3)</b>	<b>(13.2)</b>	<b>(2.7)</b>	<b>(2.7)</b>	<b>(2.7)</b>	<b>(2.7)</b>	<b>(10.9)</b>
EBITDA																				
Shares, Basic	11.5	14.7	23.9	26.5	19.2	37.8	41.7	41.9	42.3	40.9	43.1	61.6	63.5	63.6	57.9	63.7	63.8	63.9	64.0	63.9
Shares, Diluted	11.5	14.7	23.9	26.5	19.2	37.8	41.7	41.9	42.3	40.9	43.1	61.6	63.5	63.6	57.9	63.7	63.8	63.9	64.0	63.9
EPS Basic (Pro forma)	(\$0.29)	(\$0.20)	(\$0.15)	(\$0.07)	(\$0.61)	(\$0.06)	(\$0.08)	(\$0.06)	(\$0.07)	(\$0.28)	(\$0.07)	(\$0.06)	(\$0.05)	(\$0.05)	(\$0.23)	(\$0.04)	(\$0.04)	(\$0.04)	(\$0.04)	(\$0.17)
EPS Diluted (Pro forma)	(\$0.29)	(\$0.20)	(\$0.15)	(\$0.07)	(\$0.61)	(\$0.06)	(\$0.08)	(\$0.06)	(\$0.07)	(\$0.28)	(\$0.07)	(\$0.06)	(\$0.05)	(\$0.05)	(\$0.23)	(\$0.04)	(\$0.04)	(\$0.04)	(\$0.04)	(\$0.17)
<b>Margins</b>																				
Gross margin													50%	50%	50%	50%	50%	50%	50%	50%
Research and development													#DIV/0!	600%	2424%	130%	130%	130%	130%	130%
Sales and marketing													#DIV/0!	200%	673%	50%	50%	50%	50%	50%
General and administrative													#DIV/0!	560%	2194%	140%	140%	140%	140%	140%
Operating margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-1310%	-5241%	-270%	-270%	-270%	-270%	-270%
Tax rate, GAAP	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Net margin	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	-1330%	-5270%	-270%	-270%	-270%	-275%	-271%
<b>Y/Y % change</b>																				
Total Revenue													#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	300%	1500%
Gross margin													#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	300%	1500%
Research and development	-14%	14%	20%	-44%	-10%	-25%	17%	-34%	24%	-7%	6%	6%	28%	5%	11%	7%	-30%	-13%	-13%	-14%
Sales and marketing	102%	53%	39%	15%	41%	40%	91%	97%	99%	85%	111%	33%	81%	31%	56%	47%	46%	0%	0%	19%
General and administrative	60%	36%	26%	-2%	30%	-13%	-6%	-11%	38%	-1%	2%	15%	16%	11%	11%	7%	1%	0%	0%	2%
Operating income (loss)	13%	24%	23%	-28%	6%	-17%	11%	-19%	36%	0%	11%	12%	28%	7%	14%	-5%	-24%	-21%	-18%	-18%
Net income (loss)	21%	24%	7%	-79%	-33%	-28%	11%	-27%	67%	-3%	20%	12%	28%	7%	16%	-6%	-25%	-21%	-17%	-18%
EPS Diluted (Pro forma)	-22%	-38%	-67%	-94%	-74%	-78%	-61%	-59%	5%	-55%	5%	-24%	-16%	-29%	-18%	-36%	-27%	-21%	-18%	-25%

Source: Company reports and Ascendant Capital Markets estimates.



**ENDRA Life Sciences Inc.**

Balance Sheet (\$ mils)	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
Fiscal Year End: December 31	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
<b>Assets</b>																
Cash and cash equivalents	3.1	0.7	3.8	7.2	16.8	14.0	11.8	9.5	7.1	11.3	10.0	8.0	6.9	4.4	1.8	(0.7)
Short term investments											0.0	0.0	0.0	0.0	0.0	0.0
Accounts receivable, net											0.0	0.3	1.1	1.1	1.1	1.1
Inventory	0.2	0.3	0.3	0.6	0.7	1.3	1.5	1.3	1.9	2.4	0.0	0.0	0.1	0.1	0.1	0.1
Deferred income taxes											0.0	0.0	0.0	0.0	0.0	0.0
Prepaid expenses and other	0.5	1.2	0.7	0.4	0.8	1.0	1.2	1.3	1.1	0.8	0.0	0.1	0.5	0.5	0.5	0.5
Total current assets	3.8	2.3	4.8	8.2	18.4	16.3	14.5	12.1	10.1	14.5	10.0	8.4	8.6	6.1	3.5	1.0
Property and equipment, net	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.7	0.7
Intangibles, net											0.0	0.0	0.0	0.0	0.0	0.0
Deferred income tax											0.0	0.0	0.0	0.0	0.0	0.0
Other	0.4	0.4	0.4	0.3	0.3	0.7	0.7	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
<b>Total assets</b>	<b>4.4</b>	<b>2.9</b>	<b>5.4</b>	<b>8.8</b>	<b>18.9</b>	<b>17.2</b>	<b>15.3</b>	<b>12.9</b>	<b>10.9</b>	<b>15.3</b>	<b>10.9</b>	<b>8.7</b>	<b>9.0</b>	<b>6.6</b>	<b>4.2</b>	<b>1.7</b>
<b>Liabilities and stockholders' equity</b>																
Accounts payable	1.4	1.2	1.3	0.9	0.7	1.5	1.4	1.4	1.2	1.4	0.0	0.8	3.0	3.0	3.0	3.0
Accrued expenses											0.0	0.1	0.5	0.5	0.5	0.5
Deferred income tax											0.0	0.0	0.0	0.0	0.0	0.0
Other	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Short term debt	0.0										0.0	0.0	0.0	0.0	0.0	0.0
<b>Total current liabilities</b>	<b>1.6</b>	<b>1.2</b>	<b>1.4</b>	<b>1.0</b>	<b>0.8</b>	<b>1.6</b>	<b>1.6</b>	<b>1.5</b>	<b>1.4</b>	<b>1.5</b>	<b>0.1</b>	<b>1.0</b>	<b>3.6</b>	<b>3.6</b>	<b>3.6</b>	<b>3.6</b>
Deferred income taxes											0.0	0.0	0.0	0.0	0.0	0.0
Warrant liabilities											0.0	0.0	0.0	0.0	0.0	0.0
Other long term liabilities	0.3	0.3	0.3	0.3	0.3	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Long term debt		0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total other liabilities</b>	<b>0.3</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.3</b>	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>
Preferred stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Common stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.9	1.3	1.6	1.9
Additional paid-in capital	51.0	52.2	58.4	64.5	77.5	77.8	78.7	79.5	80.6	88.5	88.5	88.5	88.5	88.5	88.5	88.5
Retained earnings	(48.5)	(51.4)	(55.1)	(57.3)	(59.7)	(62.9)	(65.6)	(68.7)	(71.5)	(75.1)	(78.5)	(81.9)	(84.6)	(87.3)	(90.0)	(92.7)
Accumulated other comprehensive in	0.1	0.2									0.0	0.0	0.0	0.0	0.0	0.0
Other					0.1	0.1	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total stockholders' equity</b>	<b>2.5</b>	<b>1.0</b>	<b>3.3</b>	<b>7.2</b>	<b>17.9</b>	<b>15.0</b>	<b>13.2</b>	<b>10.8</b>	<b>9.1</b>	<b>13.3</b>	<b>10.2</b>	<b>7.2</b>	<b>4.8</b>	<b>2.5</b>	<b>0.1</b>	<b>(2.4)</b>
<b>Total stockholders' equity and liabil</b>	<b>4.4</b>	<b>2.9</b>	<b>5.4</b>	<b>8.8</b>	<b>18.9</b>	<b>17.2</b>	<b>15.3</b>	<b>12.9</b>	<b>10.9</b>	<b>15.3</b>	<b>10.9</b>	<b>8.7</b>	<b>9.0</b>	<b>6.6</b>	<b>4.2</b>	<b>1.7</b>

**Balance Sheet Drivers**

	Mar-20	Jun-20	Sep-20	Dec-20	Mar-21	Jun-21	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3A	Q4A	Q1A	Q2A	Q3E	Q4E	Q1E	Q2E	Q3E	Q4E
Prepaid as % of total rev	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	50%	50%	50%	50%	50%	50%
Accounts payable as % of total rev	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	300%	300%	300%	300%	300%	300%
Inventories as % of cost of rev	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	20%	20%	20%	20%	20%	20%
Accrued expenses as % of total rev	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	50%	50%	50%	50%	50%	50%
<b>Activity Ratios</b>																
A/R Days Sales Outstanding	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	100	100	100	100	100	100
Inventory Turnover	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x	0.0x	#DIV/0!	20.0x	20.0x	20.0x	20.0x	20.0x
A/P Days Payable	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	540	540	540	540	540
<b>Book &amp; Cash Value (per share)</b>																
Book Value per Share (diluted)	\$0.22	\$0.07	\$0.14	\$0.27	\$0.47	\$0.36	\$0.31	\$0.25	\$0.21	\$0.22	\$0.16	\$0.11	\$0.08	\$0.04	\$0.00	-\$0.04
Cash per Share (diluted)	\$0.27	\$0.05	\$0.16	\$0.27	\$0.45	\$0.34	\$0.28	\$0.22	\$0.17	\$0.18	\$0.16	\$0.13	\$0.11	\$0.07	\$0.03	-\$0.01
Net cash per Share (diluted)	\$0.27	\$0.03	\$0.14	\$0.26	\$0.45	\$0.34	\$0.28	\$0.22	\$0.16	\$0.18	\$0.16	\$0.12	\$0.11	\$0.07	\$0.03	-\$0.01

Source: Company reports and Ascendant Capital Markets estimates

**ENDRA Life Sciences Inc.**

Cash Flow Statement (\$ mils)	Mar-20	Jun-20	Sep-20	Dec-20	2020	Mar-21	Jun-21	Sep-21	Dec-21	2021	Mar-22	Jun-22	Sep-22	Dec-22	2022	Mar-23	Jun-23	Sep-23	Dec-23	2023	
Fiscal Year End: December 31	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3A	Q4A	FY-A	Q1A	Q2A	Q3E	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E	
<b>Cash flow from operating activities</b>																					
Net income	(3.3)	(2.9)	(3.3)	(2.3)	(11.7)	(2.3)	(3.2)	(2.7)	(3.1)	(11.2)	(2.9)	(3.6)	(3.4)	(3.3)	(13.2)	(2.7)	(2.7)	(2.7)	(2.8)	(10.9)	
Depreciation	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	
Amortization	0.0	(0.0)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	
Debt related amortization exper	0.2	0.0	0.0	0.0	0.2	(0.3)				(0.3)					0.0					0.0	
Stock comp	0.6	0.5	0.5	0.5	2.1	0.4	0.3	0.3	0.4	1.4	0.3	0.3	0.3	0.3	1.2	0.3	0.3	0.3	0.3	1.2	
Deferred income taxes					0.0					0.0					0.0					0.0	
Change in fair value of warrant liability					0.0					0.0					0.0					0.0	
Writedowns and impairments					0.0				0.0	0.0					0.0					0.0	
Other gains/losses					0.0					0.0					0.0					0.0	
Other	(0.0)	0.0	(0.0)	0.0	0.0					0.0					0.0					0.0	
<b>Changes in operating assets and liabilities:</b>																					
Accounts receivable					0.0					0.0				(0.3)	(0.3)	(0.8)	0.0	0.0	0.0	0.0	(0.8)
Inventory	(0.1)	(0.2)	0.0	(0.3)	(0.5)	(0.1)	(0.6)	(0.2)	0.2	(0.7)	(0.6)	(0.4)	2.4	(0.0)	1.3	(0.1)	0.0	0.0	0.0	0.0	(0.1)
Prepaid expenses & other curre	(0.3)	(0.7)	0.5	0.3	(0.1)	(0.4)	(0.2)	(0.2)	(0.2)	(1.0)	0.3	0.2	0.8	(0.1)	1.2	(0.4)	0.0	0.0	0.0	0.0	(0.4)
Income tax					0.0					0.0					0.0					0.0	
Other assets	0.0	(0.0)	0.0	(0.0)	(0.1)					0.0				0.6	0.6	0.0	0.0	0.0	0.0	0.0	
Accounts payable	(0.3)	(0.2)	0.0	(0.4)	(0.9)	(0.2)	0.8	(0.1)	(0.0)	0.5	(0.2)	0.1	(1.4)	0.8	(0.7)	2.3	0.0	0.0	0.0	2.3	
Accrued expenses					0.0					0.0				0.1	0.1	0.4	0.0	0.0	0.0	0.4	
Other liabilities					0.0	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)	(0.0)	(0.0)	0.0	0.0	(0.1)	0.0	0.0	0.0	0.0	0.0	
<b>Net cash (used in) provided by</b>	<b>(3.1)</b>	<b>(3.5)</b>	<b>(2.1)</b>	<b>(2.1)</b>	<b>(10.8)</b>	<b>(2.9)</b>	<b>(2.8)</b>	<b>(2.7)</b>	<b>(2.7)</b>	<b>(11.1)</b>	<b>(3.1)</b>	<b>(3.3)</b>	<b>(1.2)</b>	<b>(2.0)</b>	<b>(9.6)</b>	<b>(1.0)</b>	<b>(2.4)</b>	<b>(2.4)</b>	<b>(2.4)</b>	<b>(8.2)</b>	
<b>Cash flow from investing activities</b>																					
Purchases of property and equi	(0.0)		0.0	(0.0)	(0.1)	(0.0)				(0.0)	(0.1)	(0.1)	(0.0)	(0.1)	(0.3)	(0.0)	(0.1)	(0.3)	(0.0)	(0.5)	
Purchases of short-term investments					0.0					0.0					0.0					0.0	
Acquisitions					0.0					0.0					0.0					0.0	
Other					0.0					0.0					0.0					0.0	
<b>Net cash used in investing acti</b>	<b>(0.0)</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.0)</b>	<b>(0.1)</b>	<b>(0.0)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>(0.0)</b>	<b>(0.1)</b>	<b>(0.1)</b>	<b>(0.0)</b>	<b>(0.1)</b>	<b>(0.3)</b>	<b>(0.0)</b>	<b>(0.1)</b>	<b>(0.3)</b>	<b>(0.0)</b>	<b>(0.5)</b>	
<b>Cash flow from financing activities</b>																					
Issuance of debt		0.3			0.3					0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Repayment of debt		(0.0)	0.0	0.0	0.0					0.0				0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Issuance of stock		0.8	0.5	5.5	6.8	9.8		0.5	0.3	10.6	0.9	7.5	0.0	0.0	8.4	0.0	0.0	0.0	0.0	0.0	
Proceeds from stock option exe	0.0	0.0	4.6	0.1	4.8	2.8				2.8					0.0					0.0	
Other					0.0					0.0					0.0					0.0	
Dividends and distributions					0.0					0.0					0.0					0.0	
<b>Cash provided by (used in) fina</b>	<b>0.0</b>	<b>1.1</b>	<b>5.2</b>	<b>5.6</b>	<b>11.9</b>	<b>12.6</b>	<b>0.0</b>	<b>0.5</b>	<b>0.3</b>	<b>13.4</b>	<b>0.9</b>	<b>7.5</b>	<b>0.0</b>	<b>0.0</b>	<b>8.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	
Effect of exchange rate on cash					0.0					0.0					0.0					0.0	
<b>Net increase (decrease) in cash</b>	<b>(3.1)</b>	<b>(2.4)</b>	<b>3.0</b>	<b>3.4</b>	<b>1.1</b>	<b>9.6</b>	<b>(2.8)</b>	<b>(2.3)</b>	<b>(2.3)</b>	<b>2.2</b>	<b>(2.3)</b>	<b>4.2</b>	<b>(1.3)</b>	<b>(2.1)</b>	<b>(1.5)</b>	<b>(1.1)</b>	<b>(2.5)</b>	<b>(2.7)</b>	<b>(2.5)</b>	<b>(8.6)</b>	
<b>Beginning cash and equivalents</b>	<b>6.2</b>	<b>3.1</b>	<b>0.7</b>	<b>3.8</b>	<b>6.2</b>	<b>7.2</b>	<b>16.8</b>	<b>14.0</b>	<b>11.8</b>	<b>7.2</b>	<b>9.5</b>	<b>7.1</b>	<b>11.3</b>	<b>10.0</b>	<b>9.5</b>	<b>8.0</b>	<b>6.9</b>	<b>4.4</b>	<b>1.8</b>	<b>8.0</b>	
<b>Ending cash and equivalents</b>	<b>3.1</b>	<b>0.7</b>	<b>3.8</b>	<b>7.2</b>	<b>7.2</b>	<b>16.8</b>	<b>14.0</b>	<b>11.8</b>	<b>9.5</b>	<b>9.5</b>	<b>7.1</b>	<b>11.3</b>	<b>10.0</b>	<b>8.0</b>	<b>8.0</b>	<b>6.9</b>	<b>4.4</b>	<b>1.8</b>	<b>(0.7)</b>	<b>(0.7)</b>	

Source: Company reports and Ascendant Capital Markets estimates

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## ENDRA Life Sciences Inc.



Source: <https://bigcharts.marketwatch.com/>

Report	Report Date	Rating	Price Target
1	4/10/2019	Buy	4.50
2	5/15/2019	Buy	4.25
3	8/12/2019	Buy	3.25
4	11/18/2019	Buy	2.75
5	1/28/2020	Buy	3.00
6	3/29/2020	Buy	2.50
7	5/19/2020	Buy	2.75
8	8/18/2020	Buy	3.25
9	11/21/2020	Buy	3.50
10	4/4/2021	Buy	5.50
11	5/31/2021	Buy	6.00
12	8/23/2021	Buy	6.50
13	11/17/2021	Buy	6.25
14	4/12/2022	Buy	5.50
15	6/5/2022	Buy	5.00

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**BUY:** We expect the stock to provide a total return of 15% or more within a 12-month period.

**HOLD:** We expect the stock to provide a total return of negative 15% to positive 15% within a 12-month period.

**SELL:** We expect the stock to have a negative total return of more than 15% within a 12-month period.

Total return is defined as price appreciation plus dividend yield.

### Ascendant Capital Markets, LLC Rating System

*Prior to January 31, 2014, ASCM used the following rating system:*

**Strong Buy:** We expect the stock to provide a total return of 30% or more within a 12-month period.

**Buy:** We expect the stock to provide a total return of between 10% and 30% within a 12-month period.

**Neutral:** We expect the stock to provide a total return of between minus 10% and plus 10% within a 12-month period.

**Sell:** We expect the stock to provide a total return of minus 10% or worse within a 12-month period.

**Speculative Buy:** This rating is reserved for companies we believe have tremendous potential, but whose stocks are illiquid or whose equity market capitalizations are very small, often in the definition of a nano cap (below \$50 million in market cap). In general, for stocks ranked in this category, we expect the stock to provide a total return of 50% or more within a 12-month period. However, because of the illiquid nature of the stock's trading and/or the nano cap nature of the investment, we caution that these investments may not be suitable for all parties.

Total return is defined as price appreciation plus dividend yield.

### Ascendant Capital Markets, LLC Distribution of Investment Ratings (as of July 14, 2022)

Rating	Count	Percent	Investment Banking Services Past 12 months	
			Count	Percent
Buy	41	98%	15	37%
Hold	0	0%	0	0%
Sell	1	2%	0	0%
Total	42	100%	15	36%

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