



COMPANY

Rating: BUY

Target: \$2.75

(from \$2.50)

VVOS

\$0.41

Ticker:

Price:

UPDATE

Vivos Therapeutics, Inc.

Acquisition of IP portfolio from AFP great for Vivos' market position. Raising price target to \$2.75. Reiterate BUY

Vivos announced the acquisition of patents, technology, and product rights from Advanced Facialdontics (AFD): AFD has 2 FDA-approved oral appliances, POD and Night Block which are currently used to treat Temporomandibular Joint Dysfunction (TMD) and Bruxism (teeth grinding), respectively. Vivos will be able to market AFD devices to its customers immediately, as well as utilize AFD patents and technology in its current product line.

AFD acquisition complements Vivos' already strong position in sleep-related disorders and should provide additional revenue streams for Vivos: TMD and Bruxism are closely related to obstructive sleep apnea (OSA) and afflict as many as 40 million people in North America. AFD products are not only complementary to the Vivos method, they provide Vivos lower-price point solutions for patients and providers. Over time this will help Vivos expand its revenue and customer base.

Maintaining estimates: We are maintaining our FY23 estimates for revenue of \$20.3 million, and EPS of \$(0.73), pending further guidance.

Vivos offers a breakthrough approach to treating sleep apnea: The Vivos Method, which involves wearing Vivos' patented appliances under the supervision of a trained dentist, works by molding the soft tissues of the airway to permit better air passage. The system is nonsurgical and noninvasive and has demonstrated permanent efficacy in 12-24 months of treatment. OSA is estimated to affect 54 million people in North America and carries the risk of significant comorbidities such as high blood pressure, heart failure, stroke, diabetes, dementia, and chronic pain if left untreated.

Vivos just received FDA 510(k) clearance of its flagship oral appliance for use in treating OSA: On January 4, 2023, Vivos announced that it has received FDA 510(k) clearance of its DNA oral appliance for use in treating OSA. Previous FDA clearances of Vivos' oral appliances were based on their use as orthodontic treatments. This clearance is the first to explicitly recognize a Vivos device for its core application in treating OSA.

Marketing and sales milestones are key catalysts for the stock: Vivos has invested heavily to grow its franchise by training and empowering dentists to treat their patients using the Vivos Method. By Q3 2022, the number of dentists who had enrolled in Vivos' VIP (Vivos Integrated Practice) program exceeded 1,650, up 22% YoY. As the company continues to report rising numbers of new VIPs, higher revenues are likely to follow, which will in turn provide a positive catalyst for the stock.

Cash flow bears monitoring. As of Q3 2022, Vivos had \$6.7 million of cash on the balance sheet. On January 8, the company announced a private placement netting an additional \$7.4m. Given the current burn rate of roughly \$6 million per quarter, the company will likely need to raise additional capital in 2023.

Favorable risk/reward profile: While the market for OSA treatment appliances is highly competitive and Vivos faces commercialization challenges, we believe multi-billion-dollar market potential and favorable economics present high rewards for the risks.

Current valuation attractive: Stock is trading at an EV/sales ratio of only 0.3x. We are maintaining our BUY rating and raising our 12-month price target to \$2.75 from \$2.50 based on an NPV analysis. This represents significant upside from the current share price, and we believe this valuation appropriately balances out the company's high risks with large upside opportunities.

Company Description

Based in Littleton, Colorado, Vivos is a medical technology company focused on innovative solutions for obstructive sleep apnea (OSA) and snoring.

March 7, 2023

Lucas Ward (561) 427-7788 lward@ascendiant.com

Stock Data

Exchange:	NasdaqCM
52-week Range:	\$0.34-3.37
Shares Outstanding (million):	27.9
Market cap (\$million):	\$11.4
EV (\$million):	\$4.7
Debt (\$million):	\$0
Cash (\$million):	\$6.7
Avg. Daily Trading Vol. (\$million):	\$1.2
Float (million shares):	20.0
Short Interest (million shares):	0.28
Dividend, annual (yield):	NA

Revenues (US\$ million)

	2022E	2022E	2023E	2023E
	(Cur.)	(Old.)	(Cur.)	(Old.)
Q1 Mar	3.6A		4.3E	
Q2 Jun	4.2A		4.9E	
Q3 Sep	4.2A		5.0E	
Q4 Dec	<u>5.1E</u>		<u>6.0E</u>	
Total	17.2E		20.3E	
EV/Rev	(0.3)x		(0.3)x	

Earnings per Share (pro forma)

	2022E	2022E	2023E	2023E				
	<u>(Cur.)</u>	(Old.)	<u>(Cur.)</u>	(Old.)				
Q1 Mar	(0.25)A		(0.19)E					
Q2 Jun	(0.33)A	(0.20)E						
Q3 Sep	(0.26)A		(0.19)E					
Q4 Dec	(0.22)E		(0.16)E					
Total	\$(1.06)E		\$(0.73)E					
PE	NM		NM					

Important Disclosures

Ascendiant 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 14.



OVERVIEW

On February 28, 2023, Vivos entered into an Asset Purchase Agreement with Advanced Facialdontics (AFD) to acquire patents, trademarks, product rights, and other IP from AFD, including 3 patents issued in just the past 5 months.

The acquisition will enable Vivos to provide new, complementary products to many OSA patients who experience suffer from TMD and Bruxism. TMD and Bruxism are related to OSA and AFD products are a great fit for the Vivos Method.

The AFD products will fill a crucial gap in Vivos' current product line, as they are simpler and much less expensive to manufacture. This will allow Vivos to offer solutions at lower price points, a significant issue for many of its patients and DSOs, who are sometimes not able to utilize the current Vivos appliances due to cost reasons. Over time, this expanded product line should be accretive to Vivos' revenue and earnings.

We are maintaining our estimates of \$20.3 million in revenues and EPS of \$(0.73) for FY2023 pending further guidance but raising our 12-month price target to \$2.75 from \$2.50 on the back of higher conviction. Our price target is based on an NPV analysis. We note that following recent stock price declines, VVOS is now trading at an extremely undemanding EV/sales ratio of just 0.3x.

ADDITIONAL DETAILS

AFD's flagship product, the Preventive Oral Device, (the POD), is a custom single-arch device with an FDA 510(k) clearance for treating Temporomandibular Joint Dysfunction (TMD) and/or Bruxism (teeth grinding or clenching), both known to be closely associated with OSA.

AFD's second FDA 510(k) cleared product, known as the Night Block, is a custom dual-arch mandibular advancement oral appliance designed to alleviate many of the downsides of traditional oral appliance treatment such as inflammation of the TMJ, facial pain, neck pain, headaches, tension, fatigue, clenching, and grinding.

Both products will be able to be marketed by Vivos nearly immediately.

In consideration for the assets purchased, Vivos will pay:

- \$50,000 in cash
- 250,000 shares of unregistered shares of Vivos common stock
- cash earnout payments based on sliding-scale percentages (from low double digits to low single digits) based on future sales volume
- a mid-single-digit royalty on revenue received from licensing the acquired assets to third parties, including low five-digit quarterly minimum royalties starting in 2024
- cash milestone payments of up to \$225,000 total, based upon the achievement of specified milestones related to new FDA authorizations
- a five-year warrant to purchase up to 400,000 shares of Vivos common stock with an exercise price of \$0.61 per share, subject to the achievement of milestones related to new FDA authorizations for the acquired assets.

The Company expects to be able to manufacture AFD products through existing manufacturing relationships.

As part of the transaction, Dr. Scott Simonetti, DDS, the founder and Chief Executive Officer of AFD, has been hired as the Company's part-time Senior Director of Research and Development, helping to commercialize AFD's technology and assist with the FDA approval process.



Exhibit 1: Vivos Therapeutics Inc. Sleep Apnea Technology



Vivos brings to market breakthrough technology in both diagnosis and treatment of dentofacial abnormalities and/ or mild to moderate OSA and snoring.













Source: Company Documents

Exhibit 2: The Vivos Method



is our multidisciplinary treatment protocol that uses

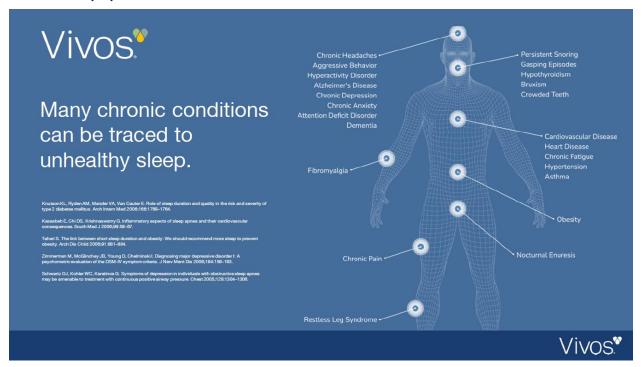
nonsurgical | noninvasive | cost-effective ORAL APPLIANCE TECHNOLOGY

prescribed by trained dentists and medical professionals to treat dentofacial abnormalities and/or mild to moderate OSA and snoring.

Vivos.**



Exhibit 3: Sleep Apnea Comorbidities



Source: Company Documents

Exhibit 4: Vivos Therapeutics, Inc. Dentist Customer Stats

Over 1,450 Dentists Trained

Dentists have hundreds of existing patients of all ages who are suffering from OSA

- Typical VIP Dentist has well over 400 existing patients who may suffer from (undiagnosed) OSA
- Represents a multi-million-dollar revenue opportunity for dental practices

\$9,000
Typical Case Fee to Patient

(\$3,000) Estimated Total Cost to DDS

\$6,000 Estimated Total Margin DDS



Vivos.**



Exhibit 5: Vivos Therapeutics, Inc. Competitive Strengths



Our Competitive Strengths

- FDA registrations and clearances since 2009
- Only appliance of its kind eligible for Medicare reimbursement
- · Significant barriers to entry
- Vivos Method Insurance reimbursement
- · Body of published research and strong patient outcomes
- First mover advantage in Sleep Dentistry Space and Differentiated Products
- Established strategic alliances within the medical and dental community
- Intellectual property portfolio and research and development capabilities
- Extensive Training and Support Systems
- Compelling economics and value-added services to VIPs at all levels of the product and service delivery chain
- Marketplace acceptance approximately 25,000 patients treated – over 1,450 Vivos-trained independent dentists



Source: Company Documents

Exhibit 6: Vivos Therapeutics, Inc. Oral Appliances

Vivos Appliance Systems











The Vivos Guides are registered with the FDA as a Class I devices for orthodontic tooth positioning.



The Vivos DNA appliance is registered with the FDA as a Class I device for palatal expansion.



The Vivos mRNA appliance® has 510(k) clearance from the FDA as a Class II medical device for the treatment of snoring, mild to moderate OSA, and snoring.



The Vivos mmRNA appliance® has a 510(k) clearance from the FDA as a Class II medical device for jaw repositioning and the treatment of snoring, mild to moderate OSA, and snoring.



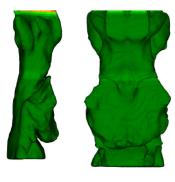


Exhibit 7: 73-Year-Old Male Airway CBT Scan Before and After Vivos Treatment

73-Year-Old Male - 17 Months Treatment

Cone-beam Computed Tomography Scans (Before and After) of Patient Airway (without an appliance in the mouth)





184mm² 22.8cc

Min Area Total Volume 302mm² 46.3cc

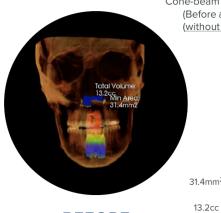
AFTER

Vivos.**

Source: Company Documents

Exhibit 8: 30-Year-Old Male Airway CBT Scan Before and After Vivos Treatment

30-Year-Old Male - 14 Months Treatment



BEFORE

Cone-beam Computed Tomography Scans (Before and After) of Patient Airway (without an appliance in the mouth)

31.4mm²

Min Area

Total Volume

111.6mm² 26.5cc

AFTER

Vivos.**



Exhibit 9: Vivos Therapeutics, Inc. Revenue Model

Our Revenue Model

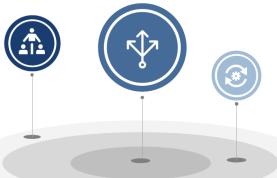
Recurring Product Revenue

Revenue / adult case averages \$1,600/case* Revenue / pediatric case averages \$400/case



One-time Service Revenue

Enrollment and training fees for new VIPs * averages \$37,000/VIP



Recurring Support Services Revenue

> Subscription Fees for Medical Billing & Advanced Training

*Based on Full Pricing and not taking into account promotions or discounts

Vivos.**

Source: Company Documents

Exhibit 10: The Vivos Ecosystem

The Vivos Ecosystem The VIP Program

- Our Secondary source of revenue is our clinical training and practice support programs.
- Our program to train dentists and offer them other value-added services is called the
- Vivos Integrated Practice (VIP) program.
- The VIP program provides dentists with a strong economic incentive to provide this treatment and prescribe the Vivos Method, together with practice support services.



Vivos.**



Exhibit 11: Illustrative Economics for Vivos Dentists



Illustrative Economics for a General Dentist

Number of Active Patients in Typical Dental Practice	Potential patients with OSA	Potential Additional Revenue for Dentist
1,250	375	\$3,375,000
1,500	450	\$4,050,000
1,750	525	\$4,725,000
2,000	600	\$5,400,000
2,250	675	\$6,075,000



Source: Company Documents

Exhibit 12: Sleep Apnea Competitive Landscape

Competitive Landscape

	Treatment Protocol	Target the Underlying Condition	Required Treatment Time to Resolve Symptoms	Overall Efficacy of Treatment	Pain Associated with Treatment	Potential Negative Side- Effects	Average Duration of Treatment/ Intervention	Duration of Benefits	Health Insurance Coverage	Health Insurance Coverage	Est. Average Treatment Cost
atment asive)	Vivos.**	***	Potentially Immediate	****	Minor or None	Minor	12-24 Months	***	Yes	YES In Most Case	\$9,000
Non-Surgical Treatment Options (Non-Invasive)	СРАР	***	Potentially Immediate	****	Minor or None	Moderate	Lifetime	***	Yes	Yes	\$10,000/10 years Plus Consumables
Non-Sur Options	Oral Appliance Therapy	***	Potentially Immediate	***	Minor or None	Moderate	Lifetime	***	No	YES In Most Case	\$3,000 - \$8,000
o t	Inspire Medical®	***	Potentially Immediate	***	In Some Cases	Major	Lifetime	***	No	YES In Most Case	\$30,000- \$40,000
Surgical Treatment Options (Invasive)	Uvulopalatopharygoplasty (UPPP Surgery)	***	Potentially Immediate	****	During Recovery	Major	Surgery+ Healing Time	***	No	Yes	\$2,000 - \$10,000
Surg Opti	Maxillomandibular Advancement Surgery	***	Potentially Immediate	***	During Recovery	Major	Surgery+ Healing Time	***	Yes	Yes	\$70,000





Exhibit 13: Vivos Therapeutics, Inc. Insurance Reimbursement



Commercial Insurance Reimbursement



CODING Cpt Code E0486 Other Cpt Codes Based On Case



PAYMENT Level Of Reimbursement Based On Individual Policy



COVERAGE Many Major Us

Commercial Health Insurance

- · Percentage of claims paid depends on several factors, including: Cost of treatment from individual provider; Patient's Medical Policy; Medical Payer's Guidelines
- Medical insurance is never a guarantee of payment, and patient deductibles may vary by policy

Vivos.**

Source: Company Documents

Exhibit 14: Vivos Executive Leadership Team

Vivos Executive Leadership Team



R. Kirk Huntsman



Brad Amman



Susie McCullough Executive Vice President



Dr. Neil Kline



RaeAnn Byrnes SVP of People Training & Development



Todd Huntsman SVP of Product & Technology



George Gardiner



Nick DeGennaro SVP of Medical Integration Division



Stephanie Huebner



Ruth Hembree SVP of Practice Services



Patrick Kircher



Keith Batcheller VP of Enrollments and Partner Relations



Julie Gannon Chief of Staff and Strategy

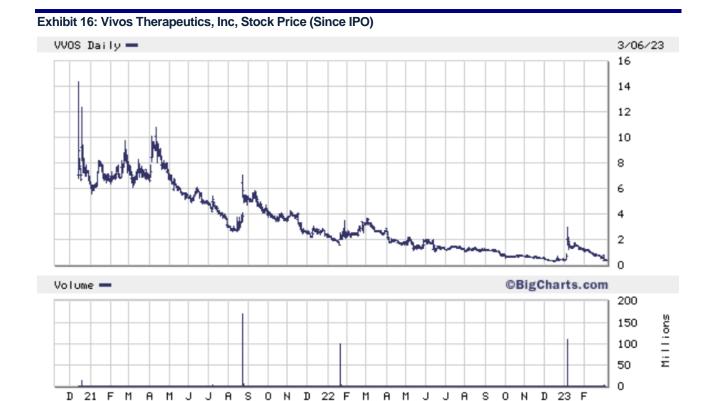
Vivos.*



Exhibit 15: Vivos Therapeutics, Inc. Consensus Estimates									
	Revenue (r	nillion)		EPS					
	<u>2022E</u>	<u>2023E</u>		<u>2022E</u>	<u>2023E</u>				
Q1 Mar	3.6A		Q1 Mar	-0.25A					
Q2 Jun	4.2A		Q2 Jun	-0.33A					
Q3 Sep	4.2A		Q3 Sep	-0.26A					
Q4 Dec	4.6E		Q4 Dec	-0.22E					
Total	16.6E	20.2E	Total	-1.06E	-0.56E				

Note: Quarterly estimates may not add up to annual estimates due to variance in analyst reporting practices

Source: Yahoo Finance, Ascendiant Capital Markets



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



Financial Model

Vivos Therapeutics, Inc.

Product memore 4 Product memore 498 388 378 378 378 378 378 378 3	Vivos Therapeutics, Inc. Income Statement (\$ mils)	2018	2019	2020	2021	Mar-22	Jun-22	Sep-22	Dec-22	2022	Mar-23	Jun-23	Sep-23	Dec-23	2023
Product revenue 498 388 376 398 558 558 478 559 579 579 559 579 579 579 579 579 579						7		-		-					
Service revenue	riscal feat Eliu. Decelliber 31	FT-A	FT-A	FT-A	F1-A	QIA	QZA	ЦЗА	Q4E	F1-E	QIE	ŲŹĖ	ŲJE	Q4E	F1-E
Service revenue	Don't at any and	400/	200/	270/	200/	F.C0/	550/	470/							
Poduct reverue															
Service myenue															
Total revenue	Product revenue	1.8		4.9											
Treatment goods sold 1.1 2.7 2.7 8.3 1.1 1.2 1.8 1.4 5.8 1.1 1.7 1.8 1.4 6. 1.4 6. 1.5 6. 1.8 1.4 5.8 1.1 1.7 1.8 1.4 6. 1.4 6. 1.4 6. 1.5 6. 1.5 1.1 1.7 1.8 1.8 1.4 6. 1.4 6. 1.4 6. 1.4 6. 1.5 6. 1.5 1.1 1.7 1.8 1.8 1.4 6. 1															
Gross profit (Ses) 2.7 8.7 10.4 12.6 2.6 2.6 2.5 3.7 11.4 3.2 3.3 3.2 4.6 14. Decrafiling expenses 6. Ceneral and administrative 9.3 16.2 16.1 25.8 8.3 7.7 6.6 7.0 29.6 6.8 7.0 6.8 7.1 27. Sales and marketing 1.2 2.3 2.3 5.6 0.8 1.7 1.1 1.3 4.9 1.4 1.6 1.6 1.5 1.7 6. Sales and marketing 1.2 2.3 2.3 5.6 0.8 1.7 1.1 1.3 4.9 1.4 1.6 1.6 1.5 1.7 6. Other (S.4) 1.0 19.2 22.5 33.0 9.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0	Total revenue	3.8	11.4	13.1	16.9	3.6	4.2	4.2	5.1	17.2	4.3	4.9	5.0	6.0	20.3
Deerative regionses 0.5 16.2 16.1 25.8 8.3 7.7 6.6 7.0 29.6 6.8 7.0 6.8 7.1 27.0 7	Total cost of goods sold	1.1	2.7	2.7	4.3	1.1	1.6	1.8	1.4	5.8	1.1		1.8	1.4	6.1
Ceneral and administrative	Gross profit (loss)	2.7	8.7	10.4	12.6	2.6	2.6	2.5	3.7	11.4	3.2	3.3	3.2	4.6	14.2
Ceneral and administrative															
Sales and marketing 1.2 2.3 2.3 5.6 0.8 1.7 1.1 1.1 1.3 4.9 1.4 1.6 1.6 1.7 6.0 1.7 1.0 1.0 1.0 1.0 1.0 1.0 1	Operating expenses														
Depresation and amortization O.6 O.8 O.7 O.7 O.2	General and administrative	9.3	16.2	16.1	25.8	8.3	7.7	6.6	7.0	29.6	6.8	7.0	6.8	7.1	27.7
Other (3,4) 10.0 19.2 3.3 3.9 9.2 9.6 7.9 8.5 35.1 8.4 8.8 8.5 9.0 34. Lizis from operating eyennes 11.0 19.2 22.5 33.0 9.2 9.6 7.9 8.5 35.1 8.4 8.8 8.5 9.0 34. Lizis from operating eyennes 10.1 10.1 10.0 10.1 10.0 10.1 10.0 10.0 13.3 10.0 10.0 13.3 10.0 10.0 13.3 10.0 10.0 13.3 10.0 10.0 13.3 10.0 10.0 13.3 10.0 10.0 13.3 10.0 10.0 13.3 10.0 10.0 13.3 10.0 10.0 10.0 13.3 10.0 10.0 10.0 10.0 13.3 10.0 10.0 10.0 10.0 13.3 10.0	Sales and marketing	1.2	2.3	2.3	5.6	0.8	1.7	1.1	1.3	4.9	1.4	1.6	1.6	1.7	6.3
Total Operating expenses 1.0 19.2 22.5 33.0 9.2 9.6 7.9 8.5 35.1 8.4 8.8 8.5 9.0 34.	Depreciation and amortization	0.6	0.8	0.7	0.7	0.2	0.2	0.2	0.2	0.7	0.2	0.2	0.2	0.2	0.6
Loss from operations (8.3) (10.6) (12.0) (20.4) (6.6) (7.0) (5.4) (4.7) (23.7) (5.2) (5.5) (5.3) (4.4) (20.0) (20.	Other (3, 4)			3.3	0.9										
## Dither income (expense) ## Interest income	Total operating expenses	11.0	19.2	22.5	33.0	9.2	9.6	7.9	8.5	35.1	8.4	8.8	8.5	9.0	34.6
## Dither income (expense) ## Interest income															
## Dither income (expense) ## Interest income	Loss from operations	(8.3)	(10.6)	(12.0)	(20.4)	(6.6)	(7.0)	(5.4)	(4.7)	(23.7)	(5.2)	(5.5)	(5.3)	(4.4)	(20.5)
Interest income (expense) (0,1) (0,1) (0,0) (0,1) (0,0) (0,0) (1,0)															
Interest income (expense) (0,1) (0,1) (0,0) (0,1) (0,0) (0,0) (1,0)	Other income (expense)					1									
Other income (epic taxes (5) (8,4) (10,8) (21) (20,3) (5,3) (7,0) (5,4) (4,7) (22,5) (5,2) (5,5) (5,3) (4,4) (20,6) (21,1) (20,3) (5,3) (7,0) (5,4) (4,7) (22,5) (5,2) (5,5) (5,3) (4,4) (20,6) (10,8) (21,1) (20,3) (5,3) (7,0) (5,4) (4,7) (22,5) (5,2) (5,5) (5,3) (4,4) (20,6) (10,8) (21,1) (20,3) (5,3) (7,0) (5,4) (4,7) (22,5) (5,2) (5,5) (5,3) (4,4) (20,6) (10,8) (11,8) (18,0) (20,3) (5,3) (7,0) (5,4) (4,7) (22,5) (5,2) (5,5) (5,3) (4,4) (20,6) (18,8) (18,0) (20,3) (5,3) (7,0) (5,4) (4,7) (22,5) (5,2) (5,5) (5,3) (4,4) (20,6) (18,8) (18,0) (20,3) (5,3) (7,0) (5,4) (4,7) (22,5) (5,2) (5,5) (5,3) (4,4) (20,6) (18,8) (18,0) (20,3) (5,3) (7,0) (5,4) (4,7) (22,5) (5,2) (5,5) (5,3) (4,4) (20,6) (21,6		(0.1)	(0.1)	(0.0)	0.1	1	(0.0)	0.0		(0.0)					0.0
						13									0.0
Net toss (8.4) (10.8) (12.1) (20.3) (5.3) (7.0) (5.4) (4.7) (22.5) (5.2) (5.5) (5.3) (4.4) (20.8) (20.8) (1.0) (1.									(4.7)		(5.2)	(5.5)	(5.3)	(4.4)	(20.5)
Nonrecurring/noncash adjustments (1,2 (1,0) (1,0) (5,9) (0,0) (1,8		(- /	(/												0.0
Nonrecurring/noncash adjustments (1,2 (1,0) (1,0) (5,9) (0,0) (1,8															
Net income [pro forma]	Net loss	(8.4)	(10.8)	(12.1)	(20.3)	(5.3)	(7.0)	(5.4)	(4.7)	(22.5)	(5.2)	(5.5)	(5.3)	(4.4)	(20.5)
Net income [pro forma]															
EBITDA (8.9) (11.3) (12.8) (21.1) (6.8) (7.1) (5.6) (4.9) (24.4) (5.4) (5.7) (5.5) (4.6) (21. Weighted average common shares outs 11.5 12.3 12.9 21.2 21.2 21.2 21.2 21.2 21.2 21.2	Nonrecurring/noncash adjustments (1,2)	(1.0)	(1.0)	(5.9)	0.0	0.0									
Weighted average common shares outs 11.5 12.3 12.9 21.2 21.2 21.2 21.2 21.2 21.2 21.2	Net income (pro forma)	(9.4)	(11.8)	(18.0)	(20.3)	(5.3)	(7.0)	(5.4)	(4.7)	(22.5)	(5.2)	(5.5)	(5.3)	(4.4)	(20.5)
Weighted average common shares outs 11.5 12.3 12.9 21.2 21.2 21.2 21.2 21.2 21.2 21.2															in the second
Shares, Diluted 11.5 12.3 12.9 21.2 21.2 21.2 21.2 21.2 21.2 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27	EBITDA	(8.9)	(11.3)	(12.8)	(21.1)	(6.8)	(7.1)	(5.6)	(4.9)	(24.4)	(5.4)	(5.7)	(5.5)	(4.6)	(21.1)
Shares, Diluted 11.5 12.3 12.9 21.2 21.2 21.2 21.2 21.2 21.2 27.9 27.9 27.9 27.9 27.9 27.9 27.9 27															in the second
EPS Basic (pro forma) (0.82) (0.95) (1.40) (0.96) (0.25) (0.33) (0.26) (0.22) (1.06) (0.19) (0.20) (0.19) (0.16) (0.7) (0.7) (0.7) (0.7) (0.82) (0.95		-													27.9
Preferred stock accretion (FY18-20) 2 Warrant beneficial conversion feature (Q4 '20) 3 Litigations settlement (Q4 '20) 4 Impairment charge (Q4 '21 opex) 5 PPP loan forgiveness Q1 '22	Shares, Diluted	11.5	12.3	12.9	21.2	21.2	21.2	21.2	21.2	21.2	27.9	27.9	27.9	27.9	27.9
Preferred stock accretion (FY18-20) 2 Warrant beneficial conversion feature (Q4 '20) 3 Litigations settlement (Q4 '20) 4 Impairment charge (Q4 '21 opex) 5 PPP loan forgiveness Q1 '22	555 5 1 1 5 1	(0.00)	(0.05)	(4.40)	(0.00)	(0.05)	(0.00)	(0.05)	(0.00)	(4.00)	(0.40)	(0.00)	(0.40)	(0.46)	(0.70)
1 Preferred stock accretion (FY18-20) 2 Warrant beneficial conversion feature (Q4 '20) 3 Litigation settlement (Q4 '20 opex) 4 Impairment charge (Q4 '21 opex) 5 PPP loan forgiveness Q1 '22 Margins Gross margin 76% 80% 75% 70% 62% 59% 73% 66% 73% 66% 63% 76% 70 General and admin 142% 123% 153% 227% 184% 156% 137% 172% 158% 142% 135% 119% 137 Sales and marketing 20% 18% 33% 21% 41% 26% 26% 28% 33% 32% 32% 22% 28% 31 Operating margin -93% -92% -121% -182% -166% -127% -93% -138% -121% -111% -107% -73% -101 Taxrate, GAAP NM															
2 Warrant beneficial conversion feature (Q4 '20 opex) 4 Impairment charge (Q4 '21 opex) 5 PPP loan forgiveness Q1 '22 Margins Gross margin General and admin Sales and marketing Operating margin Operating operating operating operating margin Operating o	EPS Diluted (pro forma)	(0.82)	(0.95)	(1.40)	(0.96)	(0.25)	(0.33)	(0.26)	(0.22)	(1.06)	(0.19)	(0.20)	(0.19)	(0.16)	(0.73)
2 Warrant beneficial conversion feature (Q4 '20 opex) 4 Impairment charge (Q4 '21 opex) 5 PPP loan forgiveness Q1 '22 Margins Gross margin General and admin Sales and marketing Operating margin Operating operating operating operating margin Operating o	1 Broforrod stock accretion (EV18 30)														
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A Impairment charge (Q4 '21 opex) 5 PPP loan forgiveness Q1 '22		c (Q+ 20)													
Margins															
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General and admin Sales and marketing Operating margin Tax rate, GAAP NM	_		76%	80%	75%	70%	62%	59%	73%	66%	73%	66%	63%	76%	70%
Sales and marketing Operating margin 20% 18% 33% 21% 41% 26% 26% 28% 33% 32% 32% 28% 31 Operating margin -93% -92% -121% -182% -166% -127% -93% -121% -111% -107% -73% -101 Tax rate, GAAP NM 121% -121% -121%	· ·														137%
Operating margin 1-93%															31%
Tax rate, GAAP NM	-														-101%
Net margin -94% -92% -120% -146% -167% -128% -93% -131% -121% -111% -107% -73% -101 Y/Y change Revenue COGS -3% 61% 44% 83% 28% 5% 35% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5% 5															NM
Y/Y % change Revenue 15% 29% 6% -7% -7% 16% 2% 18% 24% 22%	· ·														
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COGS Gross Profit 20% 21% -5% -29% -22% 21% -10% 24% 26% 27% 23% 25 General and Admin Sales and marketing 0% 140% -12% 22% -44% 5% 5% 5% 5% 5% 5% 5% 5% 30 Total operating expenses 0perating Income 14% 69% 95% 71% -2% -36% 11% -2% -21% -21% -1% -7% -9 EPS 47% -32% 35% 69% -2% -36% 11% -26% -40% -25% -29% -31	Y/Y % change														
Gross Profit General and Admin Sales and marketing Total operating expenses Operating Income Departing Income Department Income Departing Inco	Revenue			15%	29%	6%	-7%	-7%	16%	2%	18%	18%	18%	18%	18%
General and Admin -1% 60% 64% 26% 2% 30 Total operating expenses 17% 47% 51% 24% -9% -19% 6% -9% -8% 8% 6% -1 Operating Income 14% 69% 95% 71% -2% -36% 11% -2% -21% -2% -7% -9	COGS			-3%	61%	44%	83%	28%	5%	35%	5%	5%	5%	5%	5%
Sales and marketing 0% 140% -12% 22% -44% 5% <th< td=""><td>Gross Profit</td><td></td><td></td><td>20%</td><td>21%</td><td>-5%</td><td>-29%</td><td>-22%</td><td>21%</td><td>-10%</td><td>24%</td><td>26%</td><td>27%</td><td>23%</td><td>25%</td></th<>	Gross Profit			20%	21%	-5%	-29%	-22%	21%	-10%	24%	26%	27%	23%	25%
Total operating expenses 17% 47% 51% 24% -9% -19% 6% -9% -8% 8% 6% -1 Operating Income 14% 69% 95% 71% -2% -36% 16% -21% -21% -1% -7% -14 Net income 53% 13% 57% 73% 0% -36% 11% -2% -21% -2% -7% -9 EPS 47% -32% 35% 69% -2% -36% 11% -26% -40% -25% -29% -31	General and Admin			-1%	60%	64%	26%	2%	2%	2%	2%	2%	2%	2%	-6%
Total operating expenses 17% 47% 51% 24% -9% -19% 6% -9% -8% 8% 6% -1 Operating Income 14% 69% 95% 71% -2% -36% 16% -21% -21% -1% -7% -14 Net income 53% 13% 57% 73% 0% -36% 11% -2% -21% -2% -7% -9 EPS 47% -32% 35% 69% -2% -36% 11% -26% -40% -25% -29% -31	Sales and marketing			0%	140%	-12%	22%	-44%	5%	5%	5%	5%	5%	5%	30%
Operating Income 14% 69% 95% 71% -2% -36% 16% -21% -21% -1% -7% -14 Net income 53% 13% 57% 73% 0% -36% 11% -2% -21% -2% -7% -9 EPS 47% -32% 35% 69% -2% -36% 11% -26% -40% -25% -29% -31	-														-1%
Net income 53% 13% 57% 73% 0% -36% 11% -2% -21% -2% -7% -9 EPS 47% -32% 35% 69% -2% -36% 11% -26% -40% -25% -29% -31															-14%
EPS 47% -32% 35% 69% -2% -36% 11% -26% -40% -25% -29% -31															-9%
															-31%
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22/0 12/0 12/0 12/0 12/0 12/0 12/0 12/0	D&A as a % of PPF and Good will		15%	10%	21%	11%	11%	12%	12%	12%	12%	12%	12%	12%	11%
	San Casa / O O F F E affa Good Will		13/0	15/0	2170	11/0	11/0	14/0	12/0	12/0	12/0	12/0	12/0	12/0	11/0

Source: Company reports , Ascendiant Capital Markets estimates



Vivos Therapeutics, Inc.

Balance Sheet (\$ mils)	Dec-20	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
Fiscal Year End: December 31		Q4A	Q1A	Q2A	Q3A	Q4E	Q1E	Q2E	Q3E	Q4E
<u>Current assets</u>										
Cash	18.2	24.0	17.8	12.7	6.7	1.3	4.2	(1.4)	(6.6)	(11.8)
Accounts receivable, net	1.4	1.2	1.0	0.8	0.9	1.1	0.9	1.0	1.0	1.2
Current portion of note receivable - related part	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deferred offering costs			0.0			0.0	0.0	0.0	0.0	0.0
Tenant improvement allowance receivable		0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prepaid expenses and other assets	0.7	1.6	2.3	2.1	2.1	2.6	2.2	2.5	2.5	3.0
Total current assets	20.4	27.3	21.6	15.5	9.7	5.0	7.3	2.1	(3.0)	(7.5)
Goodwill	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Property and equipment, net	0.9	2.8	2.9	3.1	3.0	2.9	2.7	2.5	2.4	2.2
Operating lease right-of-use asset			1.5	2.2	2.1	2.1	2.1	2.1	2.1	2.1
Intangible assets, net	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Note receivable, net - related party	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deposits	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5
Total assets	25.3	33.7	29.6	24.4	18.4	13.6	15.7	10.4	5.1	0.5
Current liabilities Accounts payable Payable to related party for redemption of Serie Accrued expenses Contract liability Current portion of long-term debt Current portion of deffered rent	0.8 1.5 1.7 2.9 0.9	0.9 0.0 2.9 2.4 1.3 0.0	0.9 0.0 3.2 2.3 0.0 0.0	1.3 0.0 2.6 2.1 0.0 0.0	0.6 0.0 2.2 2.4 0.0 0.0	0.5 0.0 2.2 2.4 0.0	0.5 0.0 2.2 2.4 0.0 0.0	0.7 0.0 2.2 2.4 0.0 0.0	0.7 0.0 2.2 2.4 0.0 0.0	0.6 0.0 2.2 2.4 0.0 0.0
Current portion of defrered refit Current portion of lease incentive liability		0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0
Other current liabilities		0.0	0.1	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Total current liabilities	7.8	7.5	6.9	6.7	6.0	5.9	5.8	6.0	6.1	5.9
Long-term debt	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deferred rent	0.2	0.3	0.0	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Lease incentive liability, net of current portion	0.2	0.3	1.9	2.5	2.4	2.4	2.4	2.4	2.4	2.4
Total liabilities	8.4	8.2	8.7	9.5	8.5	8.4	8.4	8.6	8.6	8.5
Commitments and Contingencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stockholders' Equity										
Preferred stock	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
Additional paid-in capital	52.3	81.2	82.0	82.8	83.2	83.2	90.6	90.6	90.6	90.6
Accumulated deficit	(35.3)	(55.6)	(61.1)	(67.9)	(73.4)	(78.1)	(83.3)	(88.8)	(94.2)	(98.6)
Total stockholders' equity	16.9	25.5	20.9	14.8	9.9	5.1	7.3	1.8	(3.5)	(7.9)
Total liabilities and stockholders' equity	25.3	33.7	29.6	24.4	18.4	13.6	15.7	10.4	5.1	0.5

Balance Sheet Drivers

Bulance Sheet Brivers	Dec-20	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
	Jan-00	Q4A	Q1A	Q2A	Q3A	Q4E	Q1E	Q2E	Q3E	Q4E
Book & Cash Value (per share)										
Book Value per Share (diluted)	1.31	1.20	0.98	0.70	0.46	0.24	0.26	0.06	(0.13)	(0.28)
Cash per Share (diluted)	1.47	1.21	0.95	0.69	0.42	0.18	0.23	0.04	(0.14)	(0.31)
Net cash per Share (diluted)	1.31	1.07	0.84	0.60	0.32	0.06	0.15	(0.05)	(0.24)	(0.42)

Source: Company reports, Ascendiant Capital Markets estimates



Vivos Therapeutics, Inc.

Cash Flow Statement (\$ mils)	2020	2021	Mar-22	Jun-22	Sep-22	Dec-22	2022	Mar-23	Jun-23	Sep-23	Dec-23	2023	2024
Fiscal Year End: December 31	FY-A	FY-A	Q1A	Q2A	Q3A	Q4E	FY-E	Q1E	Q2E	Q3E	Q4E	FY-E	FY-E
Cash flow from operating activities													
Net loss	(12.1)	(20.3)	(5.5)	(6.8)	(5.4)	(4.7)	(22.5)	(5.2)	(5.5)	(5.3)	(4.4)	(20.5)	(18.7)
Net loss from discontinuing operations							-						
Adjustments:													
Stock-based compensation expense	2.2	2.7	0.6	0.7	0.4		1.6						
Depreciation and amortization	0.7	0.7	0.04	0.3	0.18	0.2	0.7	0.2	0.2	0.2	0.2	0.6	0.6
Fair value of warrants issued for services	0.0	0.2	0.2	0.1	0.1		0.5						
Common stock issued for services and se	0.5	0.0	0.0	0.0	0.0		0.0						
Accretion of discount on note receivable	(0.0)	(0.0)	0.0	0.0	0.0		0.0						
Impairment on note receivable	1.9	0.9	0.0	0.2	0.1		0.4						
Common stock issued in litigation settlem	1.5	0.0	0.0	0.0	0.0		0.0						
Forgiveness of indebtness income	0.0	0.0	(1.3)	1.3	0.0		0.0						
Loss on sale of business	0.0	0.0	0.0	0.0	0.0		0.0						
WC changes													
Accounts receivable	(0.6)	0.2	0.2	0.2	(0.1)	(0.2)	0.1	0.2	(0.1)	(0.0)	(0.2)	(0.2)	(0.2)
Prepaid expenses and other	(0.1)	(0.9)	(0.7)	0.2	(0.1)	(0.5)	(1.0)	0.4	(0.3)	(0.0)	(0.5)	(0.5)	0.0
Deposits	(0.0)	(0.0)	0.0	(0.0)	(0.0)	(0.1)	(0.1)	0.1	(0.1)	(0.0)	(0.1)	(0.1)	
Accounts payable	(0.3)	0.1	(0.0)	0.4	(0.6)	(0.1)	(0.4)	(0.1)	0.2	0.1	(0.2)	0.0	0.0
Accrued expenses	0.5	1.1	0.4	(0.5)	(0.5)	0.0	(0.6)	0.0	0.0	0.0	0.0	0.0	0.0
Contract liability	(0.0)	(0.5)	(0.1)	0.3	(0.0)	0.0	0.2	0.0	0.0	0.0	0.0	0.0	
Deferred rent and lease incentive liabili	0.1	0.5	(0.0)	(1.5)	0.1		(1.4)						
Tenant improvement allowance	0.0	(0.5)	0.0	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Net cash used in operating activities	(5.7)	(15.7)	(6.1)	(4.7)	(5.8)	(5.4)	(22.0)	(4.5)	(5.6)	(5.2)	(5.2)	(20.5)	(18.4)
nectus ascam operating activities	(5.7)	(15.7)	(0.2)	()	(5.5)	(5.1)	(22.0)	(-1.5)	(5.0)	(5.2)	(5.2)	(20.5)	(2011)
Investing Activities													
Purchase of property and equipment	(0.1)	(2.4)	(0.1)	(0.5)	(0.1)	0.0	(0.7)	0.0	0.0	0.0	0.0	0.0	0.0
Cash acquired from acquisition	0.0	(0.2)	0.0	0.0	0.0		0.0						
Principal collections under note receivable	0.0	0.0	0.0	0.0	0.0		0.0						
Net cash used in investing activities	(0.1)	(2.6)	(0.1)	(0.5)	(0.1)	0.0	(0.7)	0.0	0.0	0.0	0.0	0.0	0.0
3	. ,	` '	,	,			,						
er a a de la Austria													
Financing Activities	22.2	27.0		0.0			0.0	7.4	0.0	0.0			
Proceeds from sale of common stock, net	22.3	27.9	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.0	7.4	0.0
Series A Preferred Stock redemption pay	(2.2)	(1.5)	0.0	0.0	0.0		0.0						
Payments for issuance costs	(0.2)	(2.2)	0.0	0.0	0.0		0.0						
Principal payments on debt	(0.1)	(0.0)	0.0	0.0	0.0		0.0						
Proceeds from issuance of preferred stock	2.5	0.0	0.0	0.0	0.0		0.0						
Proceeds from issuance of debt	1.3	0.0	0.0	0.0	0.0	•	0.0						
Net cash provided by financing activities	23.5	24.2 5.8	0.0 (6.2)	0.0 (5.2)	0.0 (5.9)	0.0 (5.4)	(22.7)	7.4 2.9	(5.6)	0.0 (5.2)	0.0 (5.2)	7.4	(18.4)
Net cash increase (decrease)	17.7	_						-				(13.1)	
Cash balance at beginning of period	0.5	18.2	24.0	17.8	12.7	6.7	24.0	1.3	4.2	(1.4)	(6.6)	1.3	(11.8)
Cash balance at end of period	18.2	24.0	17.8	12.7	6.7	1.3	1.3	4.2	(1.4)	(6.6)	(11.8)	(11.8)	(30.2)

Source: Company reports, Ascendiant Capital Markets estimates



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Each analyst hereby certifies that the views expressed in this report reflect the analyst's personal views about the subject securities or issuers. Each analyst also certifies that no part of the analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendations or views expressed in this report. The analyst who prepared this report is compensated based upon the overall profitability of Ascendiant Capital Markets, LLC, which may, from time to time, include the provision of investment banking, financial advisory and consulting services. Compensation for research is based on effectiveness in generating new ideas for clients, performance of recommendations, accuracy of earnings estimates, and service to clients.

Vivos Therapeutics, Inc.

 Ascendiant Capital Markets, LLC has not received compensation for advisory or investment banking services from the company in the past 12 months.

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Ascendiant Capital Markets, LLC Rating System

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.

Ascendiant Capital Markets, LLC Distribution of Investment Ratings (as of January 15, 2023)

			Past 1	.2 months
Rating	Count	Percent	Count	Percent
Buy	44	98%	18	41%
Hold	0	0%	0	0%
Sell	1	2%	0	0%
Total	45	100%	18	40%

Other Important Disclosures

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