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Q1 2024 FINANCIAL RESULTS

PAT MILES, CHAIRMAN & CEO | TODD KONING, EVP & CFO

MAY 7, 2024

FORWARD LOOKING STATEMENTS

This presentation contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainty. Such statements are based on management's current expectations and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. The Company cautions investors that there can be no assurance that actual results will not differ materially from those projected or suggested in such forward-looking statements as a result of various factors. Forward-looking statements include, but are not limited to: references to the Company's revenue, balance sheet, growth, and financial outlook and commitments; planned product launches, introductions, regulatory submissions or clearances; efforts to transform sales channel; the Company's ability to compel surgeon adoption; and the Company's ability to finance its operations and sufficiency of its cash runway. Important factors that could cause actual operating results to differ significantly from those expressed or implied by such forward-looking statements include, but are not limited to: the uncertainty of success in developing new products or products currently in the pipeline; the uncertainties in the Company's ability to execute upon its strategic operating plan; the uncertainties regarding the ability to successfully license or acquire new products, and the commercial success of such products; failure to achieve acceptance of the Company's products by the surgeon community; failure to obtain FDA or other regulatory clearance or approval or unexpected or prolonged delays in the process; continuation of favorable Third-party reimbursement; unanticipated expenses or liabilities or other adverse events affecting cash flow or the Company's ability to achieve profitability; uncertainty of additional funding; product liability exposure; an unsuccessful outcome in any litigation; patent infringement claims; claims related to the Company's intellectual property; and the Company's ability to meet its financial obligations. A further list and description of these and other factors, risks and uncertainties can be found in the Company's most recent annual report, and any subsequent quarterly and current reports, filed with the Securities and Exchange Commission. ATEC disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, unless required by law.

Q1 2024 HIGHLIGHTS

ESTABLISHED FOUNDATION TO DELIVER PROFITABLE LONG-TERM GROWTH

$138M
Total revenue

27%
Total revenue growth

~450
bps adjusted EBITDA margin expansion

30%
Surgical revenue growth with broad contribution

23%
Surgical volume growth

6%
Growth in average surgical revenue / case

ADOPTION

150 surgeon training engagements drove 21% growth in surgeon adoption

REVENUE-GENERATING ASSETS

Deployed ~$60M to enable growing sales team to serve surgeries

SALES TEAM

28% revenue growth in established territories & continuing to leverage industry disruption to expand U.S. footprint

ATEC IS DIFFERENT

100%

Spine focus

KNOWHOW

Unmatched mechanical, imaging, navigation & neuromonitoring expertise

CLINICAL DISTINCTION

Compelling surgeons & talent with innovation that advances spine surgery

PROCEDURALIZATION

Assembling technologies from the ground up to fulfill the specific requirements of each procedure

INFORMATION

Integrating unprecedented, trade-secret protected informatics into spine surgery

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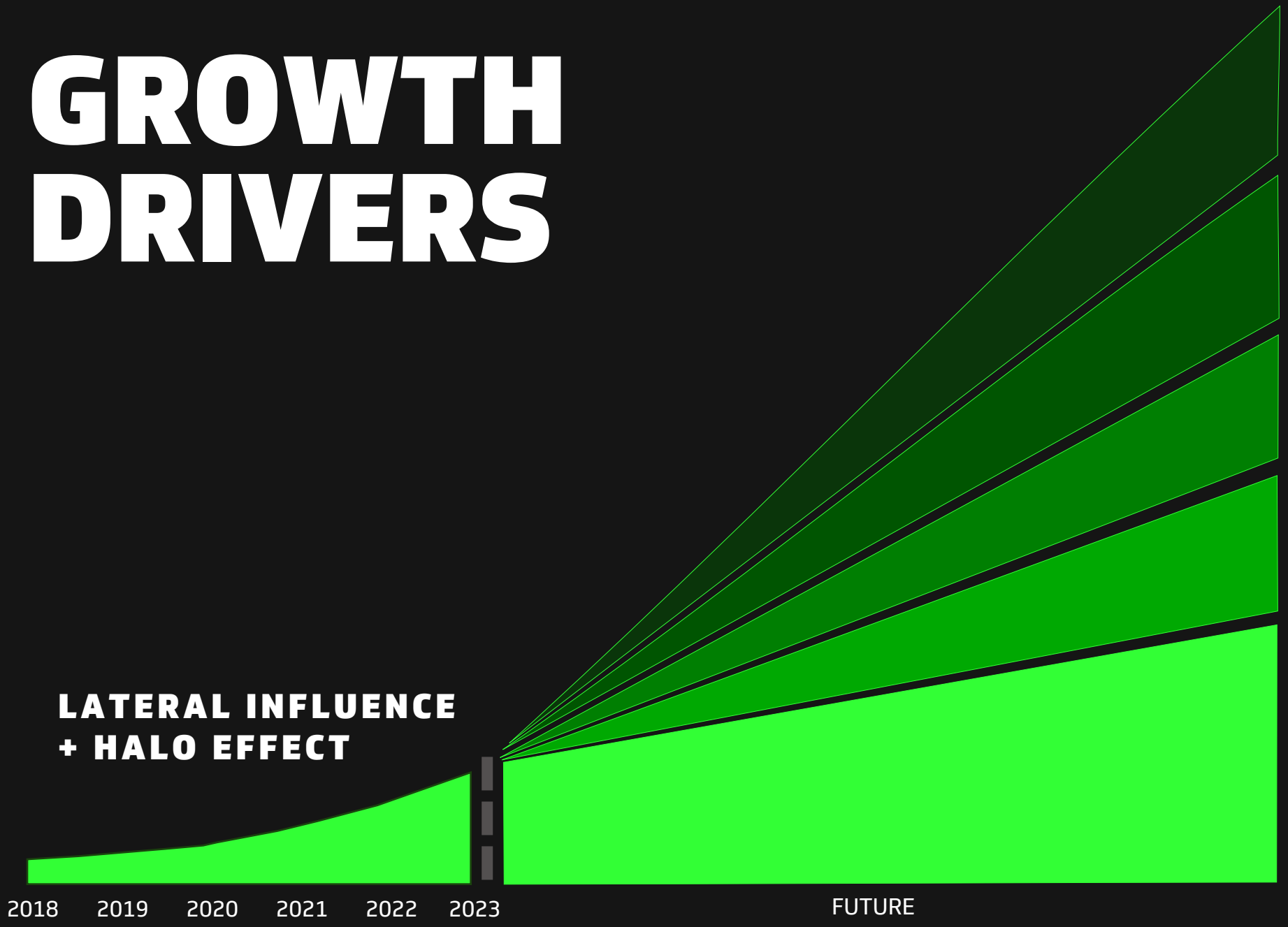
GROWTH DRIVERS



U.S. SALES FORCE

Cherry-picking aligned and disrupted talent

INTERNATIONAL

Narrow & deep strategy beginning to contribute

VALENCE

Workflow-integrated robotic navigation on track for 2025

EOS INFORMATICS

Influence launch soon + expanding deformity presence

LATERAL DOMINANCE

- Strong neuromonitoring moat
- New products: expandable implants, corpectomy, 3D-printed implants
- Broader & deeper sales footprint

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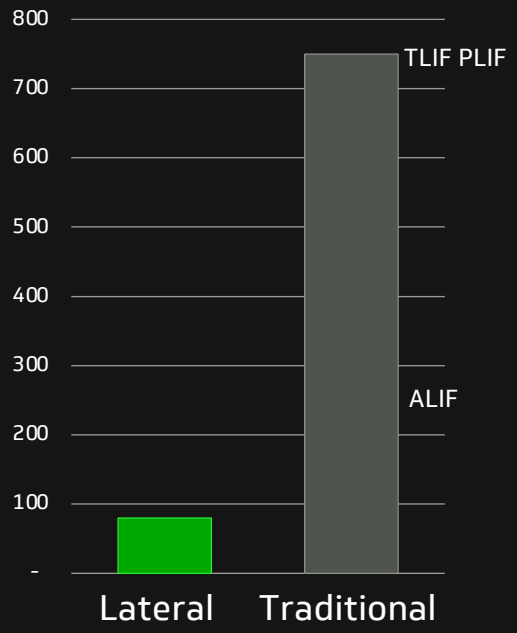
WHY IS LATERAL LEADERSHIP IMPORTANT?

PTP™ | LTP™ Advancing spine surgery by applying **UNRIVALED KNOWHOW** to approaches with significant, clinically validated advantages

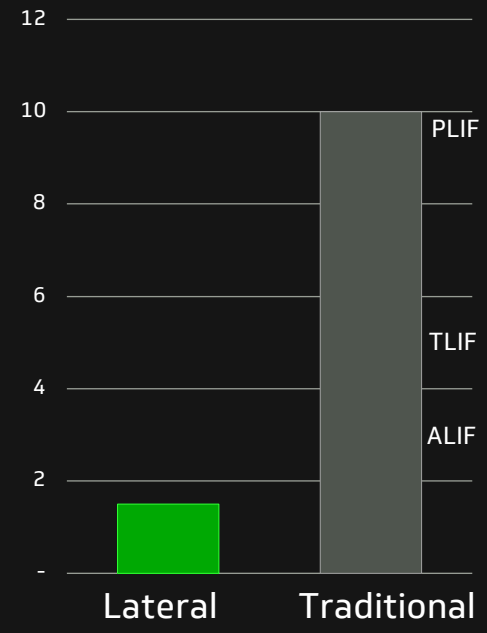
BLOOD LOSS*

cc/ level

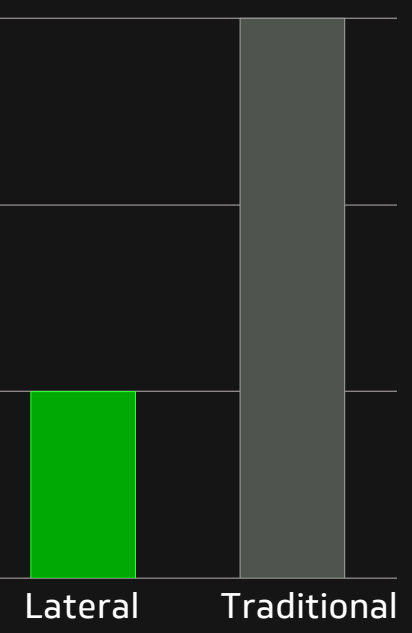


HOSPITAL STAY*

days



DAYS UNTIL WALKING*



* Source data on file

LATERAL REQUIRES NEUROMONITORING, ATEC'S COMPETITIVE EDGE

EMG & SSEP MONITORING IS PIVOTAL TO LATERAL OUTCOMES

Highly enervated psoas muscle must be navigated to safely approach the spine laterally –20-minute retraction standard is **SUBJECTIVE**[1]

WITHOUT SSEP MONITORING, FEMORAL NERVE COMPLICATIONS ARE A RISK

16% to 36% Thigh paresthesia/ dysesthesia[2]

2% to 5% Quadriceps palsy[2]

up to 60% Residual thigh pain[3]

SAFEOP IS DESIGNED TO ADDRESS THESE RISKS

1. See appendix for recent analysis of 20-minute rule | 2. Lehmen JA, Gerber EJ. MIS lateral spine surgery: a systematic literature review of complications, outcomes, and economics. *Eur Spine J* 2015;24(Suppl 3):S287-313. | 3. Isaac D. Gammal, BA, Jeffrey M. Spivak, MD, and John A. Bendo, MD. 2015; 9: 62. Published online 2015 Nov 12. doi: 10.14444/2062 PMCID: PMC4710156. Systematic Review of Thigh Symptoms after Lateral Transpsoas Interbody Fusion for Adult Patients with Degenerative Lumbar Spine Disease. *Int J Spine Surg.*

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THE NEXT GENERATION OF NEUROMONITORING

The value of intra-operative objective measures

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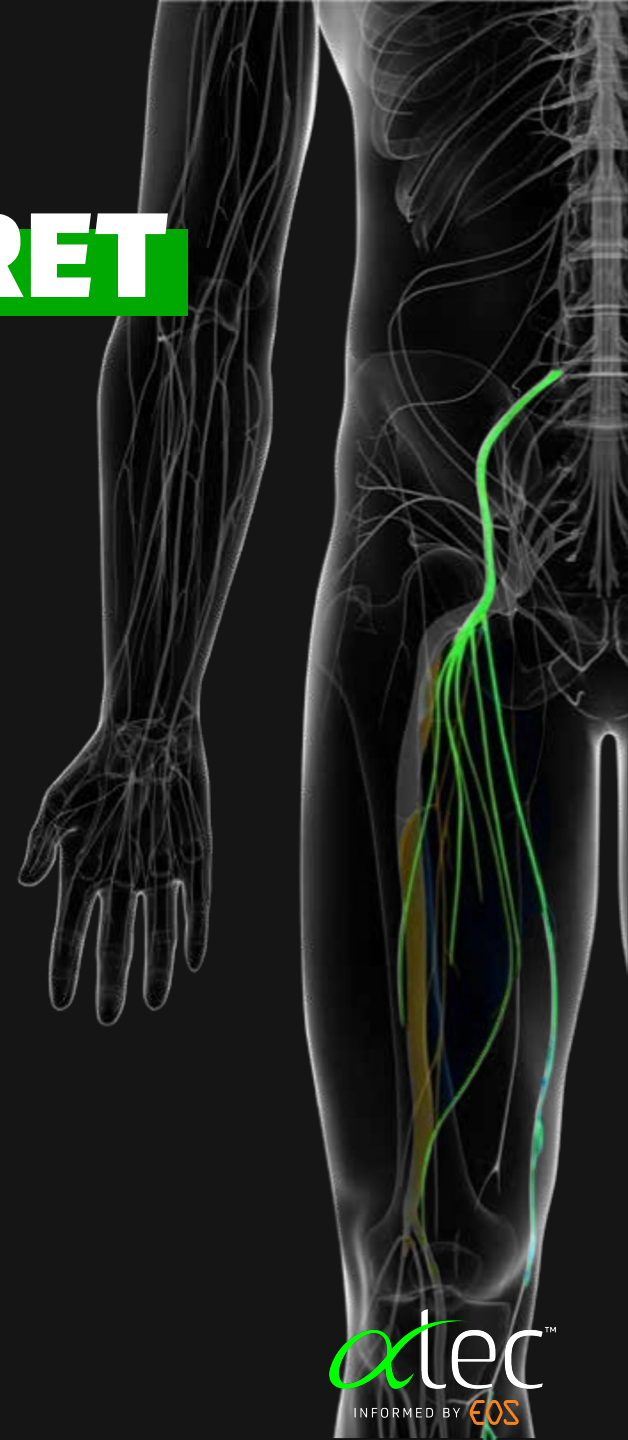
U.S. lateral market share*	~12%	~50%	>30%
Neuromonitoring integrated	✓	✓	✗
Surgeon-directed	✓	✓	✗
EMG (nerve location)	✓	✓	✗
SSEP (nerve health)	✓	✗	✗
Small footprint	✓	✗	✗

 * Management estimate

OUR COMPETIVE MOAT IS A HIGHLY PROTECTED TRADE SECRET



PROPRIETARY ALGORITHM

SSEPs' extremely small signal challenging to find & interpret amid electrical O.R. noise

Automated SSEP provides real-time nerve health assessment vs. delayed information and compromised surgical response

>60 Neuromonitoring experts continually advancing the technology

11 Peer-reviewed clinical publications on SafeOp*

~52 SafeOp patents granted globally

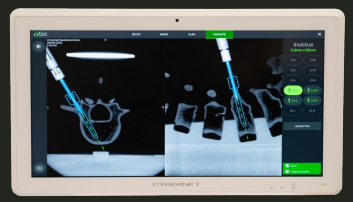
~45 SafeOp patents pending globally

~230 PRODUCT DEVELOPMENT ENGINEERS COMMITTED TO CONTINUED INNOVATION

Innovating beyond our last best effort in lateral

ENABLING TECHNOLOGY DEVELOPMENT

VALENCE™ ROBOTIC NAVIGATION SYSTEM



Lateral workflow-integrated precision, and fluoro reduction

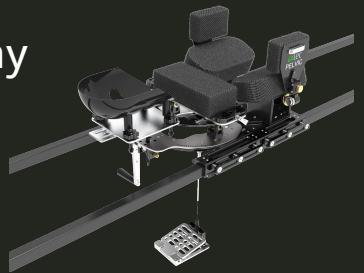
SAFEOP™ NEURAL INFORMATIX SYSTEM

MEP integration will extend SafeOp into deformity & cervical procedures

EOS Insight will automate alignment measurement & surgical planning, reconcile intra-operatively and provide patient-specific rods

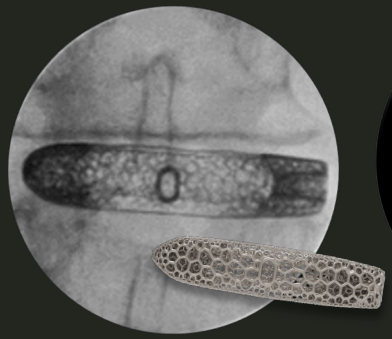
INCREASING PROCEDURAL VALUE

Corpectomy
Multi-level
Deformity
AIS



NEXT-GEN SOPHISTICATION

3-D printed implants
Expandable implants



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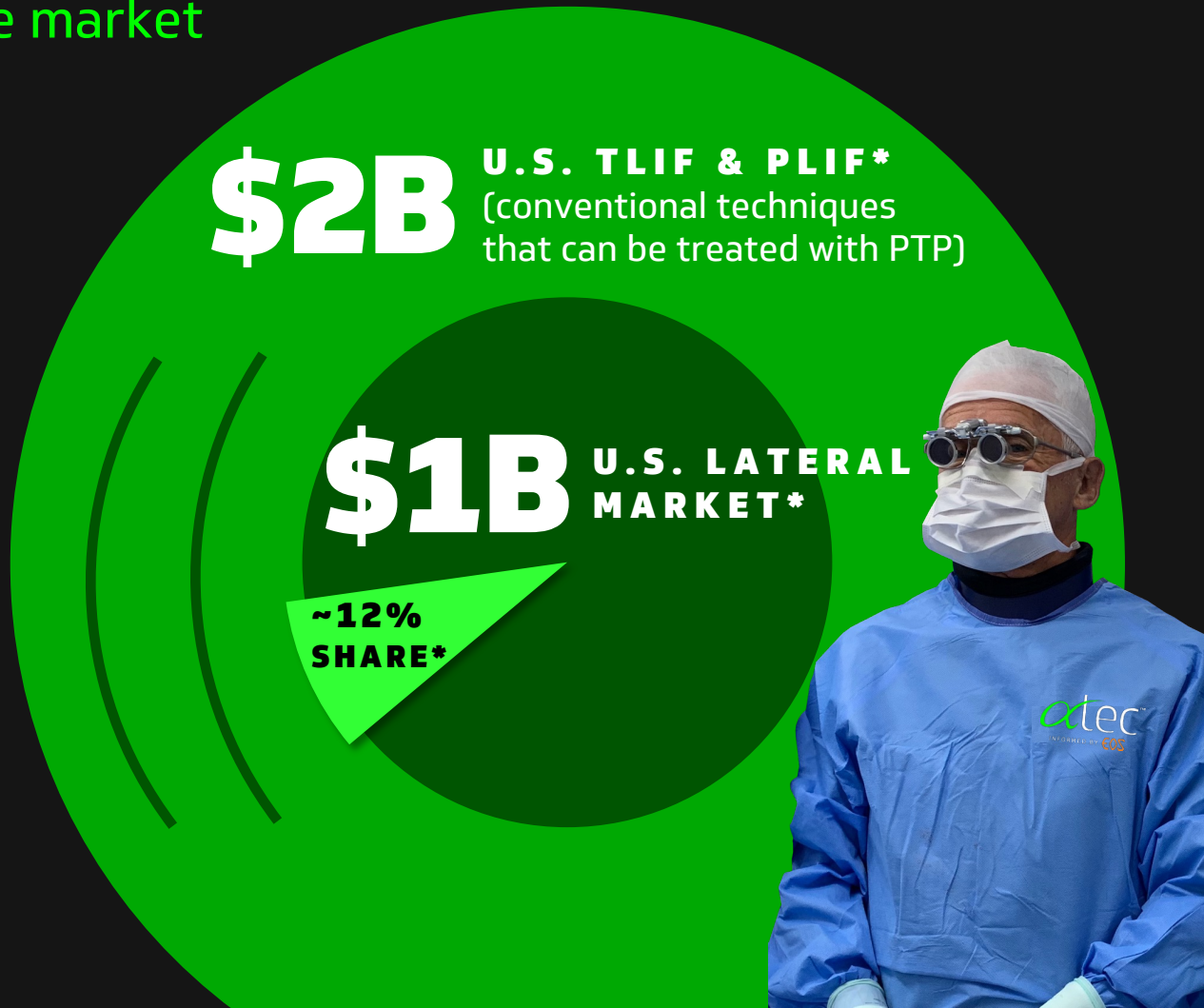
LATERAL MARKET PENETRATION & EXPANSION: PTP™ WILL BE A LONG-TAILED GROWTH DRIVER

Unrivaled investment in the most coveted spine market

ONLY ATEC:

- Committed to improve lateral by better meeting surgical requirements & addressing hurdles
- Integrated SafeOp to avoid the complication most associated with lateral surgery
- Is compelling surgeons accustomed to conventional techniques (PLIF & TLIF)
- Continuously applies learnings to obsolete our last best effort



 | * Management estimate

HALO EFFECT FROM LATERAL DISTINCTION

LATERAL CONFIDENCE CREATION EARNS SURGEON TRUST…

LATERAL

PTP™ LTP™

…and expands utilization of our more conventional approaches

ANTERIOR APPROACHES

POSTERIOR APPROACHES

CERVICAL APPROACHES

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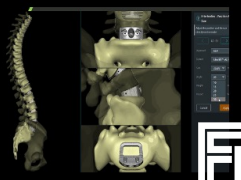
EOS INSIGHT READY FOR LAUNCH, AS COMMITTED – DATA COLLECTION UNDERWAY

Completely unique and completely protected technology

PRE-OP

FDA CLEARED Automated surgical planning



FDA CLEARED Automated alignment reports

INTRA-OP

FDA CLEARED Pre-bent rods

Intra-op alignment/ reconciliation

FDA CLEARED Assessment & follow-up

POST-OP

Collection of data & standardized images to inform future care already underway

✓ SOC 2 ✓ HITRUST

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REPLICATING A PROVEN INFORMATICS PLAYBOOK

Automated neuromonitoring is to lateral what EOS will be to alignment

SAFEOP'S LATERAL INFLUENCE

Procedurally integrated objective information drives surgeon decision making– lateral

EOS WILL INFLUENCE DEFORMITY

Procedurally integrated objective information will drive surgeon decision making - deformity

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PARADIGM-SHIFTING TECHNOLOGY

Controlling variables with objective, efficient pre-operative standard

CURRENT STANDARD:

ALIGNMENT & PLANNING BY GESTAULT

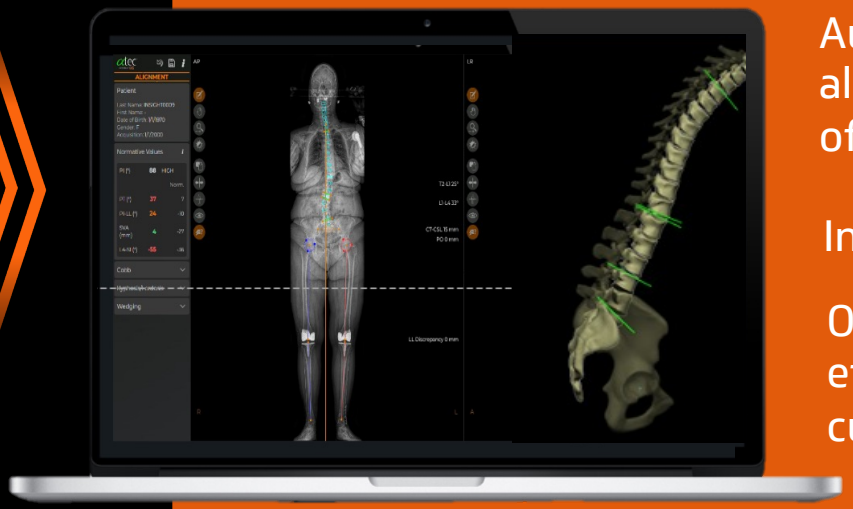
Time-consuming hand-calculations RARELY USED, even though alignment is most correlated to outcome durability

ARDUOUS, UNINFORMED ROD-BENDING

- Either zero or imprecise alignment information
- Rod curvature relies on 2D-segmented image and multi-iterative, subjective process

BONE QUALITY UNKNOWN

THE EOS STANDARD



Automatically calculated alignment & understanding of bone quality

Informed surgical plan

Objectively informed, efficiently pre-bent custom rods

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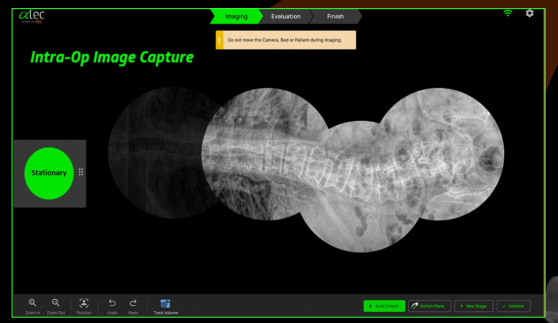
PARADIGM-SHIFTING TECHNOLOGY

Controlling variables with objective, efficient intra- and post-operative standard

CURRENT STANDARD:

NO INTRA-OP / POST-OP RECONCILIATION TO PLAN

Surgeon unsure of execution during and after case – feedback is subjective



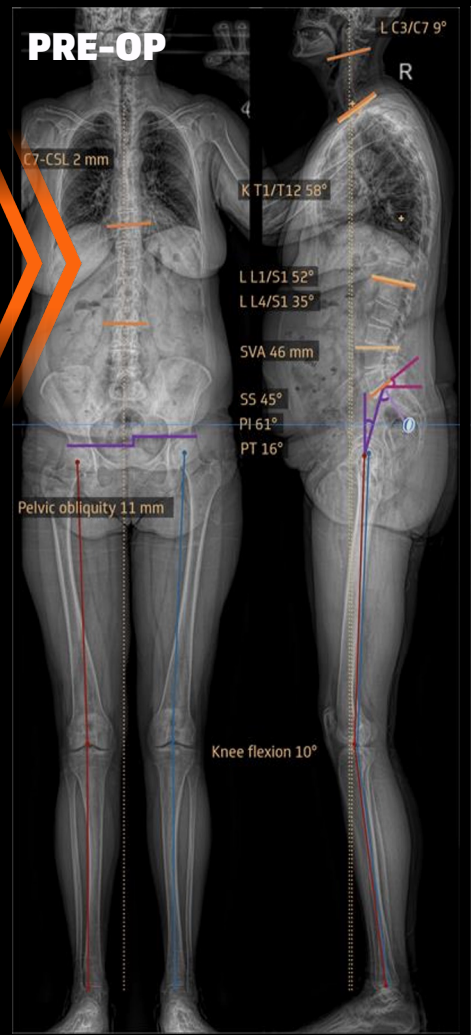
THE EOS STANDARD

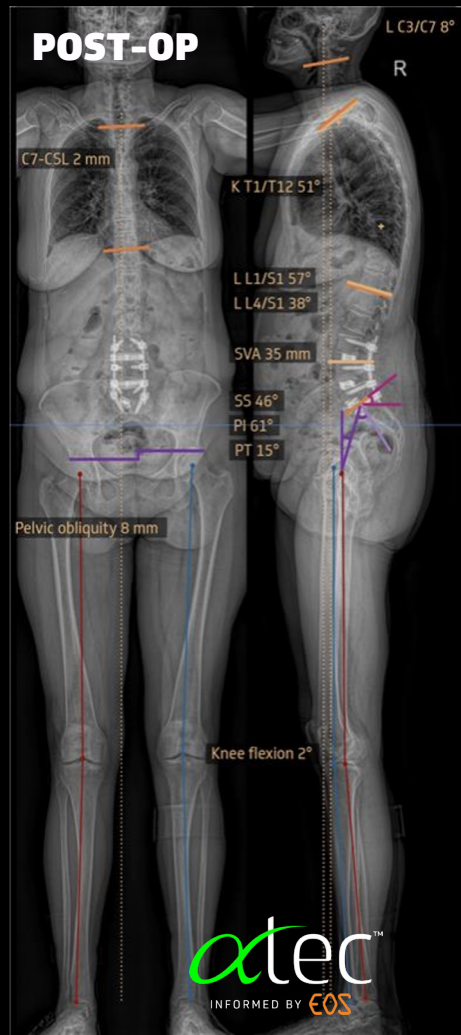
Import surgical plan into O.R.

Measure alignment parameters and refine as surgery progresses

Export data for post-op review

Collect standardized images & data to inform future care





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VALENCE DEVELOPMENT IS ON TRACK

OUR COMMITMENTS

Onboard team with deep expertise to spearhead technological integration and development ✓

Secure clearance for InVictus screw placement ✓

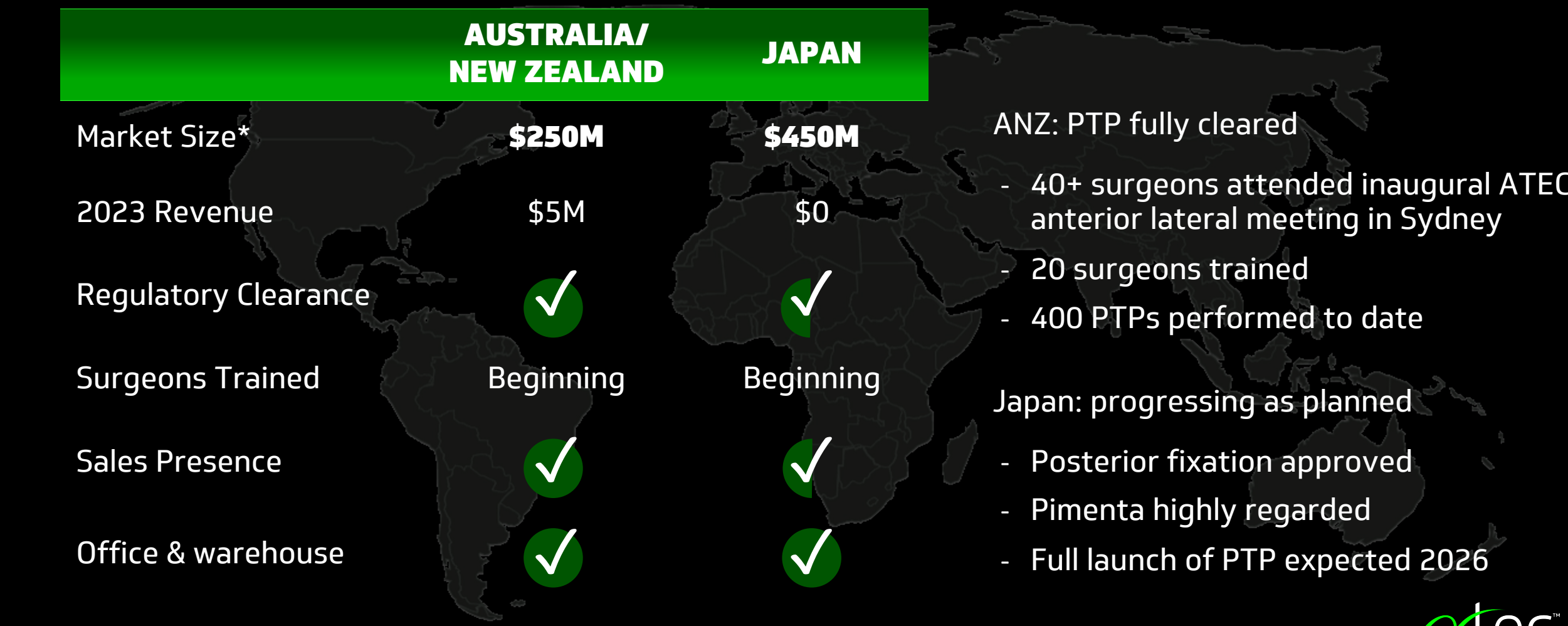
Obtain free-hand navigation clearance **2024**

Integrate into lateral workflow for improved predictability and efficiency **2025**

INTERNATIONAL IS PROGRESSING

Applying learnings to ensure integrity of ATEC proceduralization

	AUSTRALIA/ NEW ZEALAND	JAPAN
Market Size*	**$250M**	**$450M**
2023 Revenue	$5M	$0
Regulatory Clearance	✓	✓
Surgeons Trained	Beginning	Beginning
Sales Presence	✓	✓
Office & warehouse	✓	✓



ANZ: PTP fully cleared

- 40+ surgeons attended inaugural ATEC anterior lateral meeting in Sydney
- 20 surgeons trained
- 400 PTPs performed to date

Japan: progressing as planned

- Posterior fixation approved
- Pimenta highly regarded
- Full launch of PTP expected 2026

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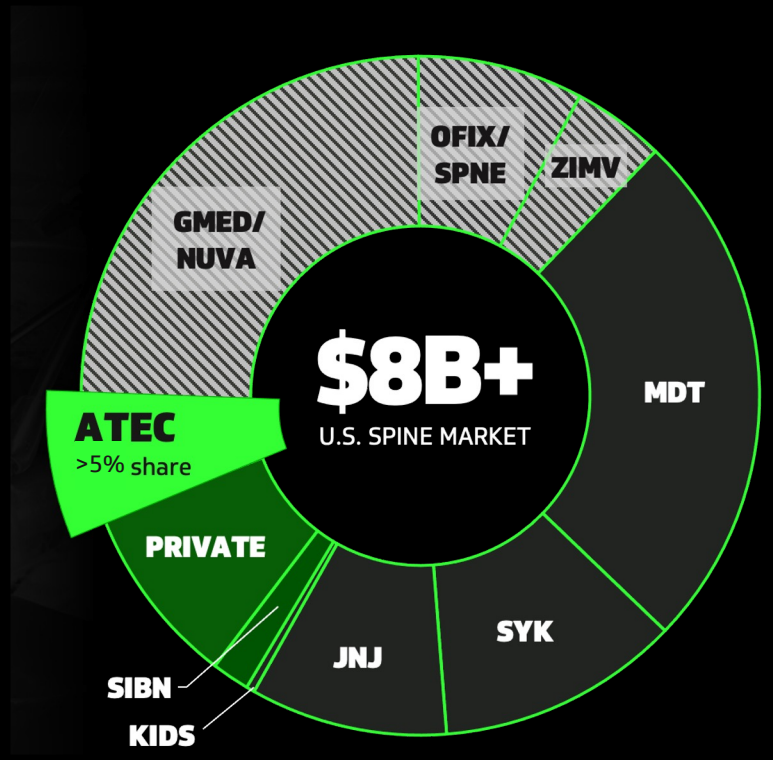
DISRUPTION: A 2-3 YEAR TAILWIND

Capitalizing on opportunity to accelerate & improve caliber of our U.S expansion



~35% of U.S. market recently disrupted

- Quality & quantity of funnel consistently strong
- Strategically filling in major markets and adjacent geographies, some talent upgrades
- Path to productivity will vary

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INFLUENCE IN MAJOR MARKETS EXPANDING

>5% Share of U.S. market overall*

6% Share of top 10 U.S. markets*

~25% Share in well-covered territories*

TOP 10 U.S. SPINE GEOGRAPHIES			
		2021 share*	2023 share*
1	New York, NY	--	4%
2	Los Angeles, CA	1%	3%
3	Dallas, TX	2%	6%
4	Houston, TX	3%	8%
5	Phoenix, AZ	3%	12%
6	Chicago, IL	5%	14%
7	Washington, DC	--	2%
8	Philadelphia, PA	--	1%
9	Miami, FL	1%	4%
10	Detroit, MI	1%	4%
AVERAGE		**2%**	**6%**

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WELL-POSITIONED TO CREATE VALUE NEXT SEVERAL YEARS (AND BEYOND)

	2023	2027
Revenue	$482M	**$1B**
Adjusted EBITDA*	($9M)	**$180M**
Adjusted EBITDA Margin*	(2%)	**18%**
Free Cash Flow	($159M)	**$65M**

20%
REVENUE CAGR

2,000
BPS MARGIN EXPANSION

CASH FLOW BREAK-EVEN 2025

 * See Adjusted EBITDA reconciliation in appendix.

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FINANCIALS

Q1’24 REVENUE

Portfolio-wide momentum with greatest contribution to growth from lateral

	Q1 2024	YOY	QOQ
Surgical Revenue	$123M	**30%**	0%
EOS Revenue	$16M	5%	3%
TOTAL REVENUE	**$138M**	**27%**	**0%**

23%
YoY surgical volume growth

6%
YoY growth in avg revenue/ case

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NON-GAAP P&L HIGHLIGHTS*

Revenue growth fueling significant operating leverage

	Q1 2024	YOY
Total Revenue $	$138M	+27%
Gross margin %	71%	+50 bps
R&D %	10%	(100) bps
SG&A %	73%	(90) bps
Total Operating Expense	83%	(200) bps
OPERATING MARGIN %	**(12%)**	**+240 bps**

- Gross margin % increased with EOS margin improvement and volume-driven leverage of Memphis distribution center
- R&D levering while furthering innovation & Valence development
- SG&A leverage driven by improvement in infrastructure & variable selling expense, offset by 200 bps of YoY depreciation impact related to step-up in revenue-generating assets

	Q1 2024	YOY
ADJUSTED EBITDA $	**($3M)**	**+$4M**
% of sales	(2%)	**+450 bps**

- AEBITDA leverage of 450bps driven by:
  - 300 bps of SG&A leverage (ex depreciation)
  - 100 bps of R&D leverage
  - 50 bps of GM% improvement

* May not foot due to rounding. | Non-GAAP GM excludes intangible amortization, purchase accounting impacts and SBC. Non-GAAP operating expenses exclude intangible amortization, SBC and litigation, transaction, restructuring-related expenses, and other non-recurring expenses. Additional detail in the appendix or at https://investors.alphatecspine.com/investors.

BALANCE SHEET

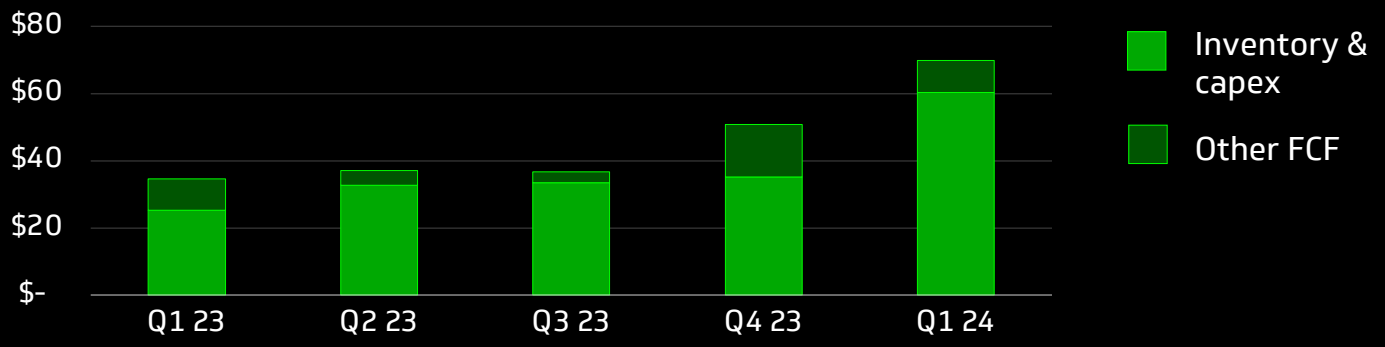
Cash and liquidity to support path to cash flow break-even

CASH & DEBT	Q1 2024
Cash	$144M
Debt (at face value)[1]	$527M

CASH USE	Q1 2024
Inventory & capital expenditures[2]	$58M
Free cash use[3]	$70M

- Free cash use $70M
- Deploying capital as planned to invest in revenue-generating assets
- Continue to expect FY 2024 cash use of ~$100M to be front-end loaded

COMPOSITION OF FCF USE

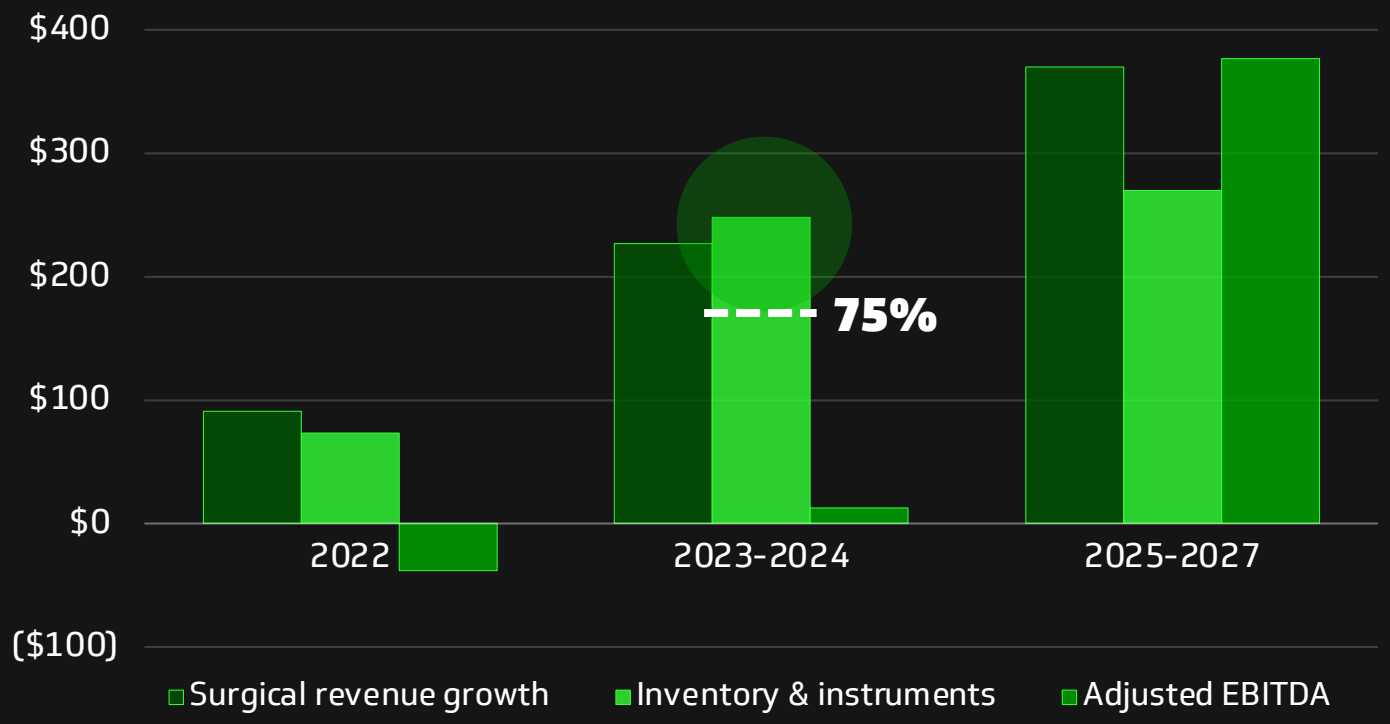


1. Detailed components as defined in 10Q for corresponding period. | 2. $58M in inventory and capital expenditures for Q1'24 inclusive of instrument and inventory increases reflected in A/P balance | 3. Free Cash Use defined as GAAP Net cash used in operating activities and GAAP PP&E.

EQUIPPING EXPANDING SALES TEAM

Surgery –serving asset investments generate 3X ROI

INVESTMENT VS REVENUE GROWTH & AEBITDA*



- Investment in sets & inventory to support future growth generally at rate of 75% of sales growth
- 2025 to 2027 AEBITDA will exceed investment requirements

 * See Adjusted EBITDA reconciliation in appendix.

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UPDATED 2024 GUIDANCE

Continued market share expansion driving sector-leading growth & operating leverage

	FY 2024 PREVIOUS	FY 2024 UPDATED	YOY
Surgical Revenue	$530M	$536M	**27%**
EOS Revenue	$65M	$65M	9%
TOTAL REVENUE	**$595M**	**$601M**	**25%**
ADJUSTED EBITDA	**$22M**	**$23M**	**+ 570 bps**

LOW 20's%
Surgical volume growth

MSD%
Rev / surgery growth

Growth momentum fueling AEBITDA progress

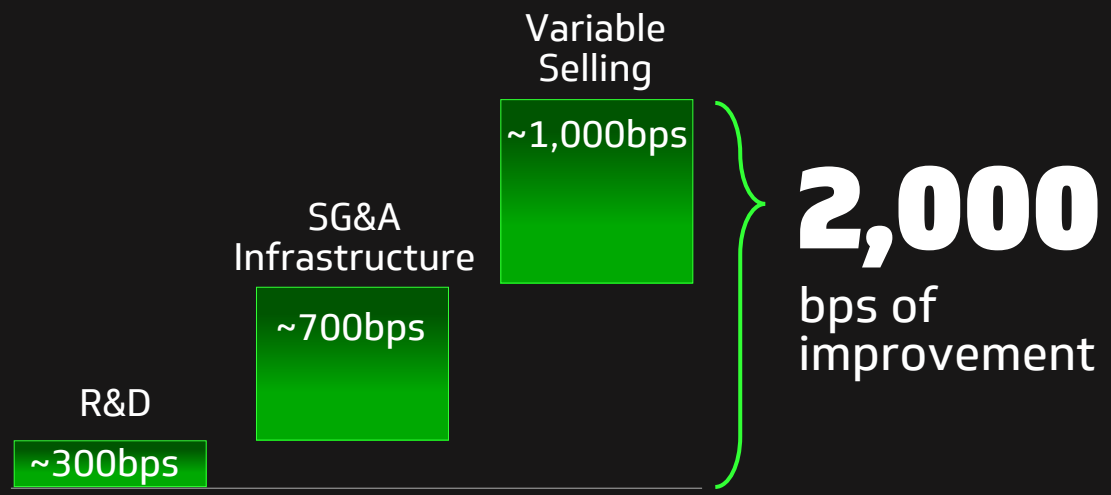
Drop through of YoY sales growth accelerating to 27% vs 22% in 2023

Reference non-GAAP reconciliation in appendix.

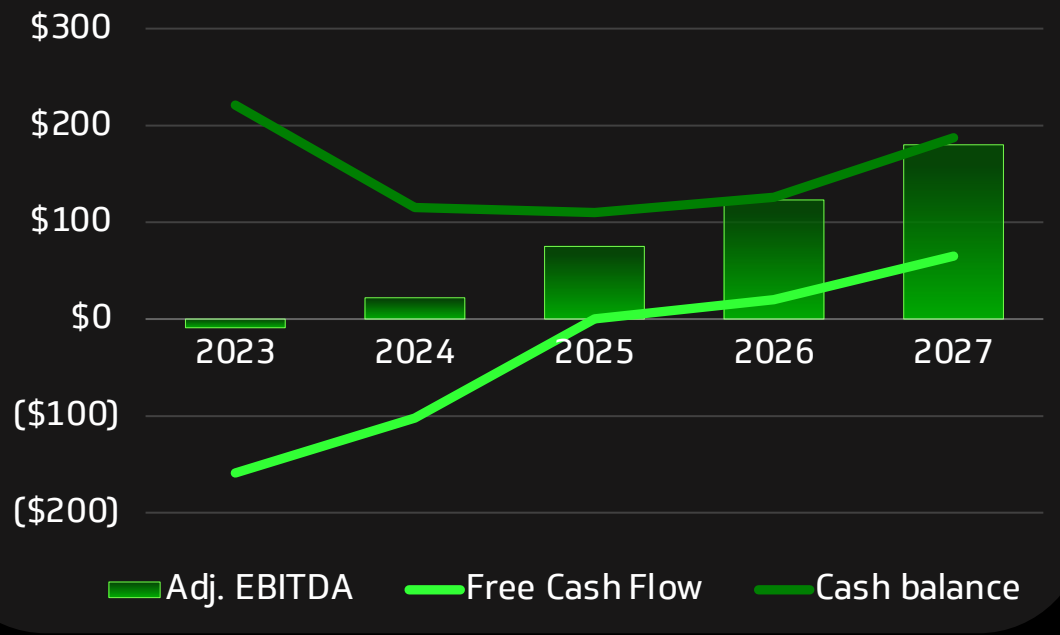
OPERATING LEVERAGE FUELS OUR INFLECTION TO CASH GENERATION

Well-defined path to self-funded growth ahead

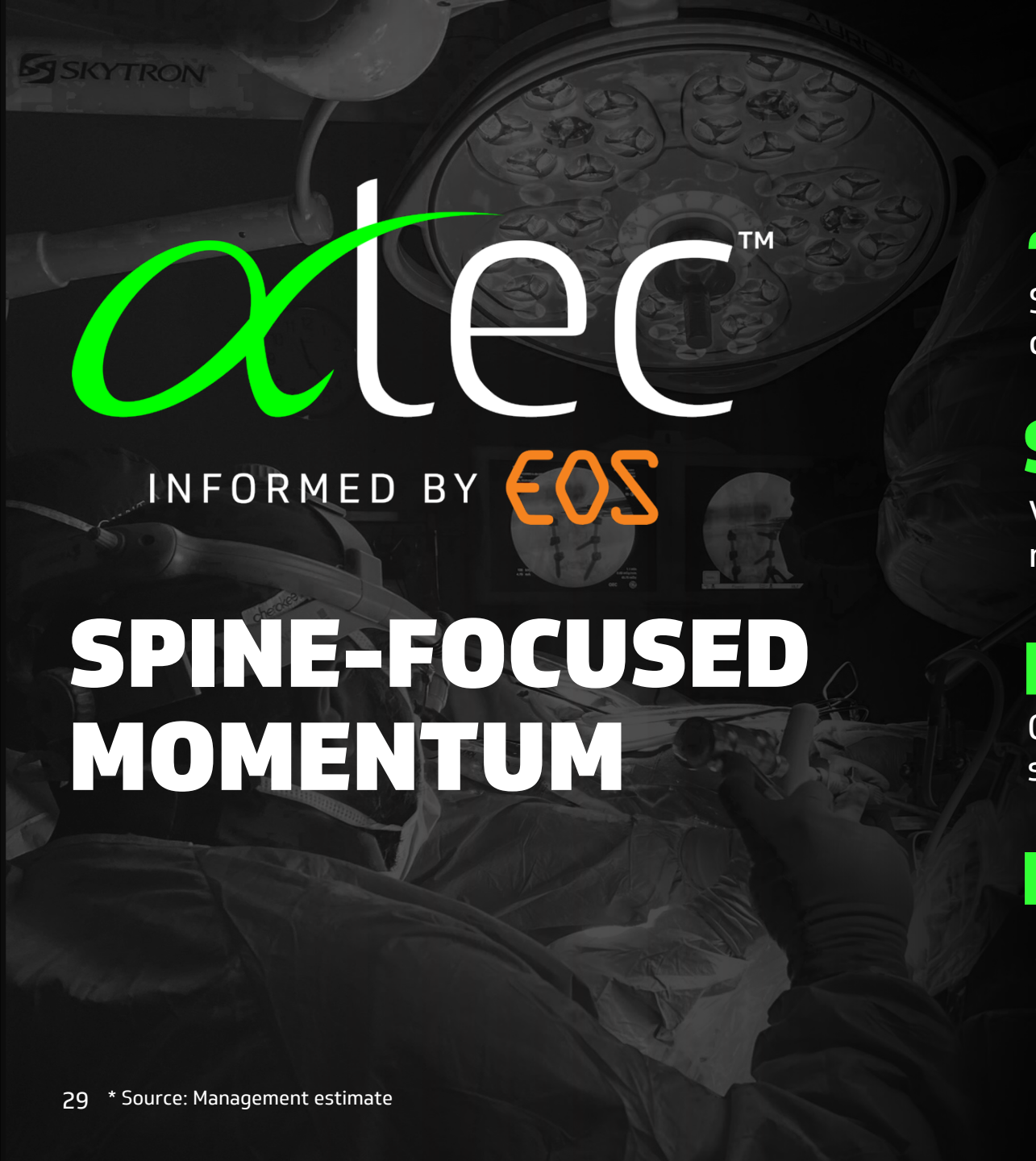
DRIVERS OF OPERATING LEVERAGE FROM 2023 TO 2027



ADJUSTED EBITDA, FREE CASH FLOW & CASH BALANCE ($M)



Reference non-GAAP reconciliation in appendix.



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SPINE-FOCUSED MOMENTUM

~40% REVENUE CAGR

Sector-leading, 5-year revenue CAGR fueled by clinical distinction-driven market share expansion

$8B MARKET *

Vast need for effective care & predictable outcomes not being met by unfocused conglomerateurs

PROFITABLE SALES GROWTH

Clear line of sight to cash flow break-even in 2025, which, with strong balance sheet, will support self-funded future growth

INCREMENTAL CATALYSTS

- Lateral expansion
- Market disruption
- Enabling tech launches
- International
- Deformity influence

* Source: Management estimate

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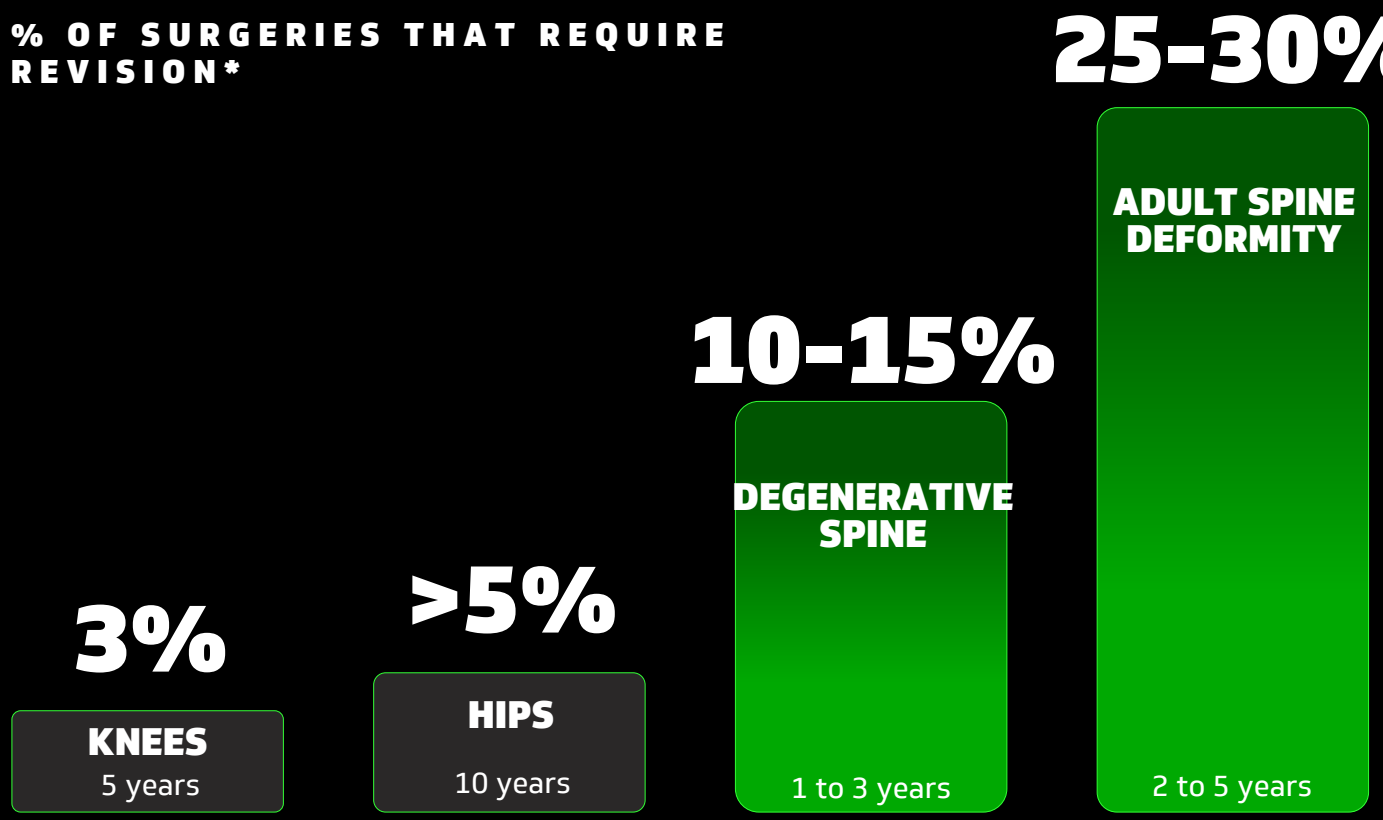
THE OPPORTUNITY TO IMPROVE SPINE SURGERY IS SIGNIFICANT

% OF SURGERIES THAT REQUIRE REVISION*



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UNIQUELY POSITIONED TO LEAD

 | * Sources in appendix

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APPENDIX

SUPPLEMENTAL FINANCIAL INFORMATION

HISTORICAL GAAP P&L TREND – CONSOLIDATED ($000's)

	2020	2021	Q122	Q222	Q322	Q422	2022	Q123	Q223	Q323	Q423	2023	Q124
Revenues:													
Revenue from products and services	141,079	242,258	70,918	84,151	89,839	105,944	350,852	109,110	116,920	118,262	137,970	482,262	138,477
Revenue from Int'l supply agreement	3,782	954	15	-	-	-	15	-	-	-	-	-	-
TOTAL REVENUE	**144,861**	**243,212**	**70,933**	**84,151**	**89,839**	**105,944**	**350,867**	**109,110**	**116,920**	**118,262**	**137,970**	**482,262**	**138,477**
Cost of revenue	42,360	85,450	21,717	28,675	30,323	37,093	117,808	38,685	52,379	38,215	42,780	172,059	41,126
Total gross profit	**102,501**	**157,762**	**49,216**	**55,476**	**59,516**	**68,851**	**233,059**	**70,425**	**64,541**	**80,047**	**95,190**	**310,203**	**97,351**
Operating expenses (GAAP):													
Research & development	18,745	32,015	9,722	10,596	12,111	11,604	44,033	13,260	14,571	20,000	22,284	70,115	18,012
Sales, general & administrative	129,156	229,271	69,471	72,668	75,954	81,920	300,013	91,262	87,287	91,411	104,120	374,080	113,727
Litigation-related	8,552	11,123	7,532	5,495	3,602	7,314	23,943	3,192	6,908	2,715	9,472	22,287	4,428
Amortization of acquired intangible assets	688	5,348	2,230	2,177	2,774	2,934	10,115	2,883	3,705	3,873	3,823	14,284	3,854
Transaction-related expenses	4,223	6,365	120	-	-	-	120	-	1,900	278	(65)	2,113	(117)
Restructuring expenses	-	1,697	1,370	289	45	106	1,810	175	29	129	386	719	788
Total operating expenses (GAAP)	**161,364**	**285,819**	**90,445**	**91,225**	**94,486**	**103,878**	**380,034**	**110,772**	**114,400**	**118,406**	**140,020**	**483,598**	**140,692**
TOTAL OPERATING LOSS	**(58,863)**	**(128,057)**	**(41,229)**	**(35,749)**	**(34,970)**	**(35,027)**	**(146,975)**	**(40,347)**	**(49,859)**	**(38,359)**	**(44,830)**	**(173,395)**	**(43,341)**
Other income (expense):													
Interest and other income (expense),net	(12,374)	(8,671)	(1,486)	(1,368)	(1,900)	(280)	(5,034)	(3,168)	(1,568)	(4,412)	(4,372)	(13,520)	(5,223)
Loss on debt extinguishment	(7,612)	(7,434)	-	-	-	-	-	-	-	-	-	-	-
Total other income (expense), net	**(19,986)**	**(16,105)**	**(1,486)**	**(1,368)**	**(1,900)**	**(280)**	**(5,034)**	**(3,168)**	**(1,568)**	**(4,412)**	**(4,372)**	**(13,520)**	**(5,223)**
Income (loss) from continuing operations (GAAP)	**(78,849)**	**(144,162)**	**(42,715)**	**(37,117)**	**(36,870)**	**(35,307)**	**(152,009)**	**(43,515)**	**(51,427)**	**(42,771)**	**(49,202)**	**(186,915)**	**(48,564)**
Income tax provision	145	(1,130)	(99)	(16)	(77)	(524)	(716)	14	(50)	(117)	(124)	(277)	(69)
Net loss	**(78,994)**	**(143,032)**	**(42,616)**	**(37,101)**	**(36,793)**	**(34,783)**	**(151,293)**	**(43,529)**	**(51,377)**	**(42,654)**	**(49,078)**	**(186,638)**	**(48,495)**
Net loss per share	**(1.18)**	**(1.49)**	**(0.43)**	**(0.36)**	**(0.35)**	**(0.33)**	**(1.46)**	**(0.40)**	**(0.43)**	**(0.35)**	**(0.37)**	**(1.54)**	**(0.34)**
Weighted avg shares outstanding, basic & diluted	**67,020**	**96,197**	**99,978**	**102,849**	**104,804**	**105,835**	**103,373**	**109,751**	**118,719**	**122,468**	**133,750**	**121,243**	**140,980**

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NON-GAAP RECONCILIATION - CONSOLIDATED ($000's)

NON-GAAP GROSS PROFIT & GROSS MARGIN	2020	2021	Q122	Q222	Q322	Q422	2022	Q123	Q223	Q323	Q423	2023	Q124
Gross Profit, GAAP	102,501	157,762	49,216	55,476	59,516	68,851	233,059	70,425	64,541	80,047	95,190	310,203	97,351
+ Amortization of intangible assets	1,075	1,075	-	9	28	27	64	220	220	221	278	939	307
+ Stock-based compensation	512	737	256	449	735	1,157	2,597	6,006	16,226	2,369	481	25,082	483
+ Purchase accounting adjustments on acquisitions	-	6,423	-	437	347	565	1,349	195	-	-	198	393	-
Non-GAAP Gross Profit	**104,088**	**165,997**	**49,472**	**56,371**	**60,626**	**70,600**	**237,069**	**76,846**	**80,987**	**82,637**	**96,147**	**336,617**	**98,141**
Gross Margin, GAAP	**70.8%**	**64.9%**	**69.4%**	**65.9%**	**66.2%**	**65.0%**	**66.4%**	**64.5%**	**55.2%**	**67.7%**	**69.0%**	**64.3%**	**70.3%**
+ Amortization of intangible assets	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
+ Stock-based compensation	0.4%	0.3%	0.4%	0.5%	0.8%	1.1%	0.7%	5.5%	13.9%	2.0%	0.3%	5.2%	0.3%
+ Purchase accounting adjustments on acquisitions	0.0%	2.6%	0.0%	0.5%	0.4%	0.5%	0.4%	0.2%	0.0%	0.0%	0.1%	0.1%	0.0%
Non-GAAP Gross Margin	**71.9%**	**68.3%**	**69.7%**	**67.0%**	**67.5%**	**66.6%**	**67.6%**	**70.4%**	**69.3%**	**69.9%**	**69.7%**	**69.8%**	**70.9%**

NON-GAAP OPERATING EXPENSES	2020	2021	Q122	Q222	Q322	Q422	2022	Q123	Q223	Q323	Q423	2023	Q124
Research & Development, GAAP	**18,745**	**32,015**	**9,722**	**10,596**	**12,111**	**11,604**	**44,033**	**13,260**	**14,571**	**20,000**	**22,284**	**70,115**	**18,012**
- Stock-based compensation in R&D	2,074	4,056	972	1,362	1,653	1,029	5,016	1,317	1,480	6,790	9,154	18,741	4,315
Non-GAAP R&D	**16,671**	**27,959**	**8,750**	**9,234**	**10,458**	**10,575**	**39,017**	**11,943**	**13,091**	**13,210**	**13,130**	**51,374**	**13,697**
Sales General & Administrative, GAAP	**129,156**	**229,271**	**69,471**	**72,668**	**75,954**	**81,920**	**300,013**	**91,262**	**87,287**	**91,411**	**104,120**	**374,080**	**113,727**
- Stock-based compensation in SG&A	15,073	31,657	8,956	7,392	8,689	7,906	32,943	9,139	6,488	10,914	10,880	37,421	12,524
+ Other non-recurring expenses	-	-	-	-	-	-	-	1,349	-	-	-	1,349	-
Non-GAAP SG&A	**114,083**	**197,614**	**60,515**	**65,276**	**67,265**	**74,014**	**267,070**	**80,774**	**80,799**	**80,497**	**93,240**	**335,310**	**101,203**
Other Operating Expense, GAAP	**13,463**	**24,533**	**11,252**	**7,961**	**6,421**	**10,354**	**35,988**	**6,250**	**12,542**	**6,995**	**13,616**	**39,403**	**8,953**
- Litigation-related expenses	8,552	11,123	7,532	5,495	3,602	7,314	23,943	3,192	6,908	2,715	9,472	22,287	4,428
- Amortization of intangible assets	688	5,348	2,230	2,177	2,774	2,934	10,115	2,883	3,705	3,873	3,823	14,284	3,854
- Transaction-related expenses	4,223	6,365	120	-	-	-	120	-	1,900	278	(65)	2,113	(117)
- Restructuring expenses	-	1,697	1,370	289	45	106	1,810	175	29	129	386	719	788
Non-GAAP Other Operating Expense	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Non-GAAP Operating Expenses	**130,754**	**225,573**	**69,265**	**74,510**	**77,723**	**84,589**	**306,087**	**92,717**	**93,890**	**93,707**	**106,370**	**386,684**	**114,900**
Non-GAAP Operating Expenses % of Revenue													
Research & development	11.5%	11.5%	12.3%	11.0%	11.6%	10.0%	11.1%	10.9%	11.2%	11.2%	9.5%	10.7%	9.9%
Sales, general & administrative	78.8%	81.3%	85.3%	77.6%	74.9%	69.9%	76.1%	74.0%	69.1%	68.1%	67.6%	69.5%	73.1%
Total Non-GAAP Operating Expenses % of Revenue	**90.3%**	**92.8%**	**97.6%**	**88.5%**	**86.5%**	**79.9%**	**87.2%**	**84.9%**	**80.3%**	**79.2%**	**77.1%**	**80.2%**	**83.0%**

ADJUSTED EBITDA	2020	2021	Q122	Q222	Q322	Q422	2022	Q123	Q223	Q323	Q423	2023	Q124
Net loss, GAAP	(78,994)	(143,032)	(42,616)	(37,101)	(36,793)	(34,783)	(151,293)	(43,529)	(51,377)	(42,654)	(49,078)	(186,638)	(48,495)
Interest Expense	12,374	8,671	1,486	1,368	1,900	280	5,034	3,168	1,568	4,412	4,372	13,520	5,223
Loss on debt extinguishment	7,612	7,434	-	-	-	-	-	-	-	-	-	-	-
Income tax provision (benefit)	145	(1,130)	(99)	(16)	(77)	(524)	(716)	14	(50)	(117)	(124)	(277)	(69)
Depreciation	9,186	20,332	7,085	7,506	8,010	8,388	30,989	8,589	9,758	10,651	11,918	40,916	13,724
Amortization of intangible assets	1,763	6,424	2,230	2,186	2,802	2,961	10,179	3,103	3,925	4,094	4,101	15,223	4,161
Total EBITDA	**(47,914)**	**(101,301)**	**(31,914)**	**(26,057)**	**(24,158)**	**(23,678)**	**(105,807)**	**(28,655)**	**(36,176)**	**(23,614)**	**(28,811)**	**(117,256)**	**(25,456)**
+ Stock-based compensation	17,659	36,450	10,184	9,203	11,077	10,092	40,556	16,462	24,194	20,073	20,515	81,244	17,322
+ Purchase accounting adjustments on acquisitions	-	6,423	-	437	347	565	1,349	195	-	-	198	393	-
+ Litigation-related expenses	8,552	11,123	7,532	5,495	3,602	7,314	23,943	3,192	6,908	2,715	9,472	22,287	4,428
+ Transaction-related expenses	4,223	6,365	120	-	-	-	120	-	1,900	278	(65)	2,113	(117)
+ Restructuring expenses	-	1,697	1,370	289	45	106	1,810	175	29	129	386	719	788
+ Other non-recurring expenses	-	-	-	-	-	-	-	1,349	-	-	-	1,349	-
Total Adjusted EBITDA	**(17,480)**	**(39,243)**	**(12,708)**	**(10,633)**	**(9,087)**	**(5,601)**	**(38,029)**	**(7,282)**	**(3,145)**	**(419)**	**1,695**	**(9,151)**	**(3,035)**
Adjusted EBITDA as a % of Revenue	***-12.1%***	***-16.1%***	***-17.9%***	***-12.6%***	***-10.1%***	***-5.3%***	***-10.8%***	***-6.7%***	***-2.7%***	***-0.4%***	***1.2%***	***-1.9%***	***-2.2%***

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NON-GAAP P&L TREND - CONSOLIDATED ($000's)

	2020	2021	Q122	Q222	Q322	Q422	2022	Q123	Q223	Q323	Q423	2023	Q124
Revenue	**144,861**	**243,212**	**70,933**	**84,151**	**89,839**	**105,944**	**350,867**	**109,110**	**116,920**	**118,262**	**137,970**	**482,262**	**138,477**
Non-GAAP cost of sales	40,773	77,215	21,461	27,780	29,213	35,344	113,798	32,264	35,933	35,625	41,823	145,645	40,336
Non-GAAP gross profit	**104,088**	**165,997**	**49,472**	**56,371**	**60,626**	**70,600**	**237,069**	**76,846**	**80,987**	**82,637**	**96,147**	**336,617**	**98,141**
Non-GAAP Gross Margin	*71.9%*	*68.3%*	*69.7%*	*67.0%*	*67.5%*	*66.6%*	*67.6%*	*70.4%*	*69.3%*	*69.9%*	*69.7%*	*69.8%*	*70.9%*
Operating expenses (Non-GAAP):													
Research & development, Non-GAAP	16,671	27,959	8,750	9,234	10,458	10,575	39,017	11,943	13,091	13,210	13,130	51,374	13,697
Sales, general & administrative, Non-GAAP	114,083	197,613	60,515	65,276	67,265	74,014	267,070	80,774	80,799	80,497	93,240	335,310	101,203
Total operating expenses (Non-GAAP)	**130,754**	**225,572**	**69,265**	**74,510**	**77,723**	**84,589**	**306,087**	**92,717**	**93,890**	**93,707**	**106,370**	**386,684**	**114,900**
R&D as % of revenue	*11.5%*	*11.5%*	*12.3%*	*11.0%*	*11.6%*	*10.0%*	*11.1%*	*10.9%*	*11.2%*	*11.2%*	*9.5%*	*10.7%*	*9.9%*
SG&A as % of revenue	*78.8%*	*81.3%*	*85.3%*	*77.6%*	*74.9%*	*69.9%*	*76.1%*	*74.0%*	*69.1%*	*68.1%*	*67.6%*	*69.5%*	*73.1%*
Total OPEX as % of revenue	*90.3%*	*92.7%*	*97.6%*	*88.5%*	*86.5%*	*79.8%*	*87.2%*	*84.9%*	*80.3%*	*79.2%*	*77.1%*	*80.2%*	*83.0%*
Non-GAAP operating loss	**(26,666)**	**(59,575)**	**(19,793)**	**(18,139)**	**(17,097)**	**(13,989)**	**(69,018)**	**(15,871)**	**(12,903)**	**(11,070)**	**(10,223)**	**(50,067)**	**(16,759)**
Op loss as % of revenue	*-18.4%*	*-24.5%*	*-27.9%*	*-21.6%*	*-19.0%*	*-13.2%*	*-19.7%*	*-14.5%*	*-11.0%*	*-9.4%*	*-7.4%*	*-10.4%*	*-12.1%*
Less: Depreciation	9,186	20,332	7,085	7,506	8,010	8,388	30,989	8,589	9,758	10,651	11,918	40,916	13,724
Adjusted EBITDA	**(17,480)**	**(39,243)**	**(12,708)**	**(10,633)**	**(9,087)**	**(5,601)**	**(38,029)**	**(7,282)**	**(3,145)**	**(419)**	**1,695**	**(9,151)**	**(3,035)**
Adj EBITDA as % of revenue	*-12.1%*	*-16.1%*	*-17.9%*	*-12.6%*	*-10.1%*	*-5.3%*	-10.8%	-6.7%	-2.7%	-0.4%	1.2%	-1.9%	-2.2%

REVENUE SUPPLEMENT

	2020	2021	Q122	Q222	Q322	Q422	2022	Q123	Q223	Q323	Q423	2023	Q124
Revenues:													
Products and services - Surgical	141,079	212,240	60,649	72,343	78,727	91,322	303,041	94,040	102,306	103,823	122,594	422,763	122,617
Products and services - Imaging	-	30,018	10,269	11,808	11,112	14,622	47,811	15,070	14,614	14,439	15,376	59,499	15,860
Revenue from products and services	141,079	242,258	70,918	84,151	89,839	105,944	350,852	109,110	116,920	118,262	137,970	482,262	138,477
Revenue from Int'l supply agreement	3,782	954	15	-	-	-	15	-	-	-	-	-	-
TOTAL REVENUE	**144,861**	**243,212**	**70,933**	**84,151**	**89,839**	**105,944**	**350,867**	**109,110**	**116,920**	**118,262**	**137,970**	**482,262**	**138,477**
Constant currency adjustments:													
Products and services - Surgical	-	-	-	-	-	-	-	17	(6)	4	42	57	15
Products and services - EOS	-	-	292	618	746	1,012	2,668	363	15	(319)	(266)	(207)	(88)
Revenue from products and services	-	-	293	615	807	1,012	2,668	380	9	(315)	(224)	(150)	(73)
Revenue from Int'l supply agreement	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL ADJUSTMENTS	**-**	**-**	**293**	**615**	**807**	**1,012**	**2,668**	**380**	**9**	**(315)**	**(224)**	**(150)**	**(73)**
Revenues at constant currency:													
Products and services - Surgical	141,079	212,240	60,649	72,343	78,727	91,322	303,041	94,087	102,300	103,827	122,636	422,820	122,632
Products and services - EOS	-	30,019	10,561	12,426	11,858	15,634	50,479	15,403	14,629	14,120	15,110	59,292	15,772
Revenue from products and services	141,079	242,259	71,210	84,769	90,585	106,956	353,520	109,490	116,929	117,947	137,746	482,112	138,404
Revenue from Int'l supply agreement	3,782	954	15	-	-	-	15	-	-	-	-	-	-
TOTAL REVENUE AT CONSTANT CURRENCY	**144,861**	**243,213**	**71,225**	**84,769**	**90,585**	**106,956**	**353,535**	**109,490**	**116,929**	**117,947**	**137,746**	**482,112**	**138,404**
YOY GROWTH %	**2020**	**2021**	**Q122**	**Q222**	**Q322**	**Q422**	**2022**	**Q123**	**Q223**	**Q323**	**Q423**	**2023**	**Q124**
Products and services - Surgical	30.3%	50.4%	38.7%	29.7%	52.6%	49.3%	42.8%	55.1%	41.4%	31.9%	34.2%	39.5%	30.4%
Products and services - Imaging				93.1%	-0.2%	14.5%	59.3%	46.5%	23.8%	29.9%	5.2%	24.4%	5.2%
Revenue from products and services	30.3%	71.7%	62.2%	36.0%	43.2%	43.3%	44.8%	53.9%	38.9%	31.6%	30.2%	37.5%	26.9%
Revenue from Int'l supply agreement	-27.1%	-74.8%	-96.3%	-100.0%	-100.0%	-100.0%	-98.4%	-100.0%	0.0%	0.0%	0.0%	-100.0%	0.0%
TOTAL REVENUE	**27.7%**	**67.9%**	**60.8%**	**35.2%**	**42.9%**	**43.2%**	**44.3%**	**53.8%**	**38.9%**	**31.6%**	**30.2%**	**37.4%**	**26.9%**
YOY growth % at constant currency:													
Products and services - Surgical	30.3%	50.4%	38.7%	29.7%	52.6%	49.3%	42.8%	55.1%	41.4%	31.9%	34.3%	39.5%	30.3%
Products and services - EOS				103.2%	6.5%	22.4%	68.2%	45.9%	17.7%	19.1%	-3.4%	17.5%	2.4%
Revenue from products and services	30.3%	71.7%	62.9%	37.0%	44.4%	44.7%	45.9%	53.8%	37.9%	30.2%	28.8%	36.4%	26.4%
Revenue from Int'l supply agreement	-27.1%	-74.8%	-96.3%	-100.0%	-100.0%	-100.0%	-98.4%	-100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
TOTAL REVENUE GROWTH % AT CONSTANT CURRE	**27.7%**	**67.9%**	**61.4%**	**36.2%**	**44.1%**	**44.6%**	**45.4%**	**53.7%**	**37.9%**	**30.2%**	**28.8%**	**36.4%**	**26.4%**

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SLIDE 31 – DURABILITY OF ORTHOPEDIC SURGERY

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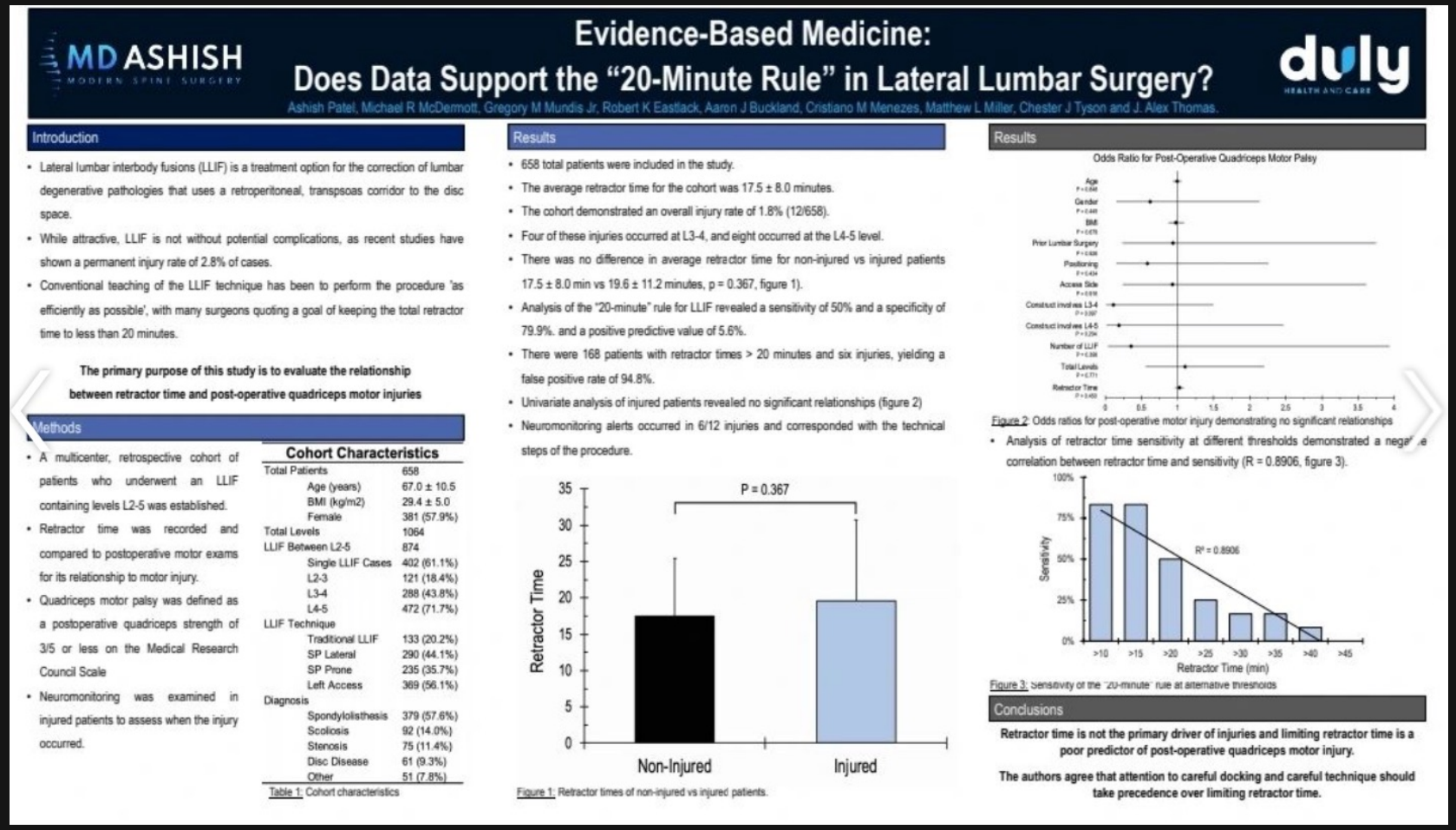
DOES DATA SUPPORT THE "20-MINUTE RULE" IN LATERAL SURGERY?

SafeOp obviates the 20-minute rule with objective SSEP information



MD ASHISH MODERN SPINE SURGERY

Evidence-Based Medicine: Does Data Support the "20-Minute Rule" in Lateral Lumbar Surgery?

duly HEALTH AND CARE

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Introduction

- Lateral lumbar interbody fusions (LLIF) is a treatment option for the correction of lumbar degenerative pathologies that uses a retroperitoneal, transpsoas corridor to the disc space.
- While attractive, LLIF is not without potential complications, as recent studies have shown a permanent injury rate of 2.8% of cases.
- Conventional teaching of the LLIF technique has been to perform the procedure 'as efficiently as possible', with many surgeons quoting a goal of keeping the total retractor time to less than 20 minutes.

The primary purpose of this study is to evaluate the relationship between retractor time and post-operative quadriceps motor injuries

Methods

- A multicenter, retrospective cohort of patients who underwent an LLIF containing levels L2-5 was established.
- Retractor time was recorded and compared to postoperative motor exams for its relationship to motor injury.
- Quadriceps motor palsy was defined as a postoperative quadriceps strength of 3/5 or less on the Medical Research Council Scale
- Neuromonitoring was examined in injured patients to assess when the injury occurred.

Cohort Characteristics

Total Patients	658
Age (years)	67.0 ± 10.5
BMI (kg/m2)	29.4 ± 5.0
Female	381 (57.9%)
Total Levels	1064
LLIF Between L2-5	874
Single LLIF Cases	402 (61.1%)
L2-3	121 (18.4%)
L3-4	288 (43.8%)
L4-5	472 (71.7%)
LLIF Technique	
Traditional LLIF	133 (20.2%)
SP Lateral	290 (44.1%)
SP Prone	235 (35.7%)
Left Access	369 (56.1%)
Diagnosis	
Spondylolisthesis	379 (57.6%)
Scoliosis	92 (14.0%)
Stenosis	75 (11.4%)
Disc Disease	61 (9.3%)
Other	51 (7.8%)

Table 1: Cohort characteristics

Results

- 658 total patients were included in the study.
- The average retractor time for the cohort was 17.5 ± 8.0 minutes.
- The cohort demonstrated an overall injury rate of 1.8% (12/658).
- Four of these injuries occurred at L3-4, and eight occurred at the L4-5 level.
- There was no difference in average retractor time for non-injured vs injured patients 17.5 ± 8.0 min vs 19.6 ± 11.2 minutes, p = 0.367, figure 1).
- Analysis of the "20-minute" rule for LLIF revealed a sensitivity of 50% and a specificity of 79.9%. and a positive predictive value of 5.6%.
- There were 168 patients with retractor times > 20 minutes and six injuries, yielding a false positive rate of 94.8%.
- Univariate analysis of injured patients revealed no significant relationships (figure 2)
- Neuromonitoring alerts occurred in 6/12 injuries and corresponded with the technical steps of the procedure.

Figure 1: Retractor times of non-injured vs injured patients.

Results

Figure 2: Odds ratios for post-operative motor injury demonstrating no significant relationships

- Analysis of retractor time sensitivity at different thresholds demonstrated a negative correlation between retractor time and sensitivity (R = 0.8906, figure 3).

Figure 3: Sensitivity of the "20-minute" rule at alternative thresholds

Conclusions

Retractor time is not the primary driver of injuries and limiting retractor time is a poor predictor of post-operative quadriceps motor injury.

The authors agree that attention to careful docking and careful technique should take precedence over limiting retractor time.

"Retractor time is not the primary driver of injuries and limiting retractor time is a poor predictor of post-operative quadriceps motor injury."

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