

Insmed Incorporated

Arikayce guidance looks conservative and poised to anchor pivotal '24

Reiterate Rating: BUY | PO: 37.00 USD | Price: 29.13 USD

Arikayce looks solid despite somewhat conservative guide

INSM shares are trading flat this morning after the company provided FY24 guidance for Arikayce that although up an impressive +15% y/y at the midpoint, was still at the lower end of consensus—while also reaffirming timing for key readouts (see below). 2023 revenues were pre-announced at \$305.2M (in-line), with 2024 sales projected to be \$340-360M vs. cons \$361M and our more optimistic \$386M. That said, we note Street forecasts had been trending downwards recently, and with the company historically guiding conservatively, we wouldn't be surprised if investors frame today's numbers as such. Indeed, we'd argue guidance looks beatable, even under non-heroic estimates, especially as global COVID-related and OUS pricing/reimbursement headwinds improve and awareness/ support increases following the robust 1L expansion data (see our takes on ARISE)—supporting our positive, near-term outlook. As a result of today's updates, we are lowering our 2024 Arikayce forecasts to \$377M but continue to see favorable risk/ reward to shares on the basis of potential Arikayce near-term outperformance and a favorable catalyst-rich '24 setup (see our YA24 guide). Maintain Buy and \$37 PO.

ENCORE enrollment continues, pending updates from FDA

While we still see the NTM-PD refractory setting as under-penetrated, easily the greater opportunity is 1L (2030e BofA: \$1.2B vs. cons \$1.1B; see our 1L preview). Updates on label expansion efforts were understandably limited following the relatively recent ARISE readout, but given the strength of the data, we remain optimistic for a nearer-term approval (see our ARISE takes). While the company plans to meet with FDA near-term following "encouraging" written feedback, enrollment in ENCORE is continuing past the 250 target (topline reaffirmed 2025)—a potential signal, in our view, the company may be able to use ARISE for accelerated approval, with the latter used as a confirmatory.

Firing on all pillars, setting up possibly transformative '24

Other pipeline updates were similarly positive, albeit incremental. Notably, the timing of brensocatib's—easily the biggest source of investor debate given the opportunity pivotal ASPEN topline was narrowed to the "latter part" of 2Q24 (2Q prior), enabling a possible US launch mid-25, followed by the EU/ Japan 1H26. Among other encouraging updates, in Nov, the DSMC recommended ASPEN continue, with the company also providing guidance for phase 2b BiRCh readout for CRSsNP (2025) with another phase 2 in HS planned to initiate 2H24. In addition, data from the phase 2 of TPIP in PH-ILD was reiterated for 2Q24, the study exceeding its enrollment goals (39 vs 32) with the phase 2 PAH continuing (topline 2025). (For a recent discussion, click here for our YA24 guide).

| Estimates (Dec) (US\$) | 2021A | 2022A | 2023E | 2024E | 2025E |
|---|--------|--------|--------|--------|--------|
| EPS | (3.88) | (3.91) | (5.20) | (4.70) | (3.48) |
| EPS Change (YoY) | -28.9% | -0.8% | -33.0% | 9.6% | 26.0% |
| Consensus EPS (Bloomberg) | | | (5.16) | (4.50) | (3.51) |
| DPS | 0 | 0 | 0 | 0 | 0 |
| Valuation (Dec) | | | | | |
| Free Cash Flow Yield* | -8.9% | -9.8% | -15.5% | -16.5% | -15.2% |
| * For full definitions of <i>IO</i> method SM measures, see page 6. | | | | | |

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Objective Basis/Risk on page 4. 12641975

05 January 2024

Equity

| Key Changes | | |
|---------------|----------|---------|
| (US\$) | Previous | Current |
| 2023E Rev (m) | 309.5 | 305.1 |
| 2024E Rev (m) | 386.3 | 377.2 |
| 2025E Rev (m) | 821.2 | 684.4 |
| 2023E EPS | -5.17 | -5.20 |
| 2024E EPS | -5.25 | -4.70 |
| 2025E EPS | -3.58 | -3.48 |
| | | |

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Stock Data

| Price | 29.13 USD |
|-----------------------------|-----------------------|
| Price Objective | 37.00 USD |
| Date Established | 5-Sep-2023 |
| Investment Opinion | C-1-9 |
| 52-Week Range | 16.04 USD - 32.00 USD |
| Mrkt Val (mn) / Shares Out | 4,167 USD / 143.1 |
| (mn) | |
| Free Float | 98.6% |
| Average Daily Value (mn) | 47.23 USD |
| BofA Ticker / Exchange | INSM / NAS |
| Bloomberg / Reuters | INSM US / INSM.OQ |
| ROE (2023E) | NA |
| Net Dbt to Eqty (Dec-2022A) | 58.2% |
| ESGMeter™ | Medium |

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to

Please see page 3 for a list of abbreviations

iQprofile[™] Insmed Incorporated

| iQmethod [™] – Bus Performance* | | | | | |
|---|--|--|---|---|---|
| (US\$ Millions) | 2021A | 2022A | 2023E | 2024E | 2025E |
| Return on Capital Employed | -37.8% | -32.0% | -54.6% | -89.4% | -86.6% |
| Return on Equity | -126.7% | -193.2% | NM | NM | NM |
| Operating Margin | -199.0% | -186.4% | -230.3% | -196.8% | -87.9% |
| Free Cash Flow | (371) | (410) | (646) | (686) | (635) |
| <i>iQ</i> method [™] – Quality of Earnings* | | | | | |
| (US\$ Millions) | 2021A | 2022A | 2023E | 2024E | 2025 |
| Cash Realization Ratio | NM | NM | NM | NM | NM |
| Asset Replacement Ratio | 0.8x | 1.9x | 1.0x | 1.0x | 1.1x |
| Tax Rate | 0.4% | NM | NM | NM | NM |
| Net Debt-to-Equity Ratio | -36.6% | 58.2% | NM | NM | NM |
| Interest Cover | -6.1x | -20.0x | -29.5x | -21.3x | -15.7x |
| Income Statement Data (Dec) | | | | | |
| (US\$ Millions) | 2021A | 2022A | 2023E | 2024E | 2025 |
| Sales | 188 | 245 | 305 | 377 | 684 |
| % Change | 14.6% | 30.2% | 24.4% | 23.6% | 81.4% |
| Gross Profit | 144 | 190 | 242 | 294 | 520 |
| % Change | 15.9% | 31.8% | 27.1% | 21.7% | 76.8% |
| EBITDA | (361) | (447) | (687) | (726) | (585) |
| % Change | -43.7% | -23.9% | -53.7% | -5.7% | 19.5% |
| Net Interest & Other Income | (61) | (23) | (24) | (35) | (38) |
| Net Income (Adjusted) | (435) | (482) | (728) | (777) | (640) |
| | | | | -6.8% | 17.6% |
| % Change Free Cash Flow Data (Dec) | -47.8% | -10.8% | -51.2% | -0.0% | 17.0 % |
| Free Cash Flow Data (Dec) (US\$ Millions) | 2021A | 2022A | 2023E | 2024E | 2025 |
| Free Cash Flow Data (Dec) (US\$ Millions) Net Income from Cont Operations (GAAP) | 2021A (435) | 2022A (482) | 2023E (728) | 2024E (777) | 2025E (640) |
| Free Cash Flow Data (Dec) (US\$ Millions) Net Income from Cont Operations (GAAP) Depreciation & Amortization | 2021A (435) 14 | 2022A (482) 10 | 2023E (728) 16 | 2024E (777) 16 | 2025 (640) |
| Free Cash Flow Data (Dec) (US\$ Millions) Net Income from Cont Operations (GAAP) Depreciation & Amortization Change in Working Capital | 2021A (435) 14 (59) | 2022A (482) 10 7 | 2023E (728) 16 (38) | 2024E (777) 16 (40) | 20256 (640) 17 (134) |
| Free Cash Flow Data (Dec) (US\$ Millions) Net Income from Cont Operations (GAAP) Depreciation & Amortization Change in Working Capital Deferred Taxation Charge | 2021A (435) 14 (59) NA | 2022A (482) 10 7 NA | 2023E (728) 16 (38) NA | 2024E (777) 16 (40) NA | 20258 (640) 17 (134) NA |
| Free Cash Flow Data (Dec) (US\$ Millions) Net Income from Cont Operations (GAAP) Depreciation & Amortization Change in Working Capital Deferred Taxation Charge Other Adjustments, Net | 2021A (435) 14 (59) NA 116 | 2022A (482) 10 7 NA 64 | 2023E (728) 16 (38) NA 115 | 2024E (777) 16 (40) NA 126 | 2025E (640) 17 (134) NA 134 |
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| Free Cash Flow Data (Dec) (US\$ Millions) Net Income from Cont Operations (GAAP) Depreciation & Amortization Change in Working Capital Deferred Taxation Charge Other Adjustments, Net Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase | 2021A (435) 14 (59) NA 116 (7) -371 -64.3% | 2022A (482) 10 7 NA 64 (10) -410 -10.7% | 2023E (728) 16 (38) NA 115 (10) -646 -57.4% 20 | 2024E (777) 16 (40) NA 126 (11) -686 -6.3% | 2025I (640) 17 (134) NA 134 (13) -635 7.4% |
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| Free Cash Flow Data (Dec) (US\$ Millions) Net Income from Cont Operations (GAAP) Depreciation & Amortization Change in Working Capital Deferred Taxation Charge Other Adjustments, Net Capital Expenditure Free Cash Flow % Change Share / Issue Repurchase Cost of Dividends Paid Change in Debt Balance Sheet Data (Dec) (US\$ Millions) Cash & Equivalents Trade Receivables Other Current Assets Property, Plant & Equipment Other Non-Current Assets Short-Term Debt Other Current Debt Other Non-Current Liabilities Long-Term Debt Other Non-Current Liabilities | 2021A (435) 14 (59) NA 116 (7) -371 -64.3% 292 0 337 2021A 717 24 96 53 354 1,244 0 135 567 | 2022A (482) 10 7 NA 64 (10) -410 -10.7% 312 0 0 2022A 1,074 30 170 56 327 1,656 0 190 1,125 253 | 2023E (728) 16 (38) NA 115 (10) -646 -57.4% 20 0 0 2023E 404 34 246 57 292 1,032 0 182 1,133 270 | 2024E (777) 16 (40) NA 126 (11) -686 -6.3% 472 0 0 2024E 159 38 256 58 323 834 0 189 1,143 288 | 2025E (640) 17 (134) NA 134 (13) -635 7.4% 493 0 0 2025E 15 62 337 60 358 832 0 226 1,157 306 1,689 (857) 832 |

Company Sector

Biotechnology

Company Description

Insmed Incorporated is a commercial stage biopharmaceutical company focused on rare diseases. The company is addressing areas of high unmet need, fueled by its four pillars: Arikayce, Brensocatib, TPIP, and translational medicine. With Arikayce already on the market, we see commercial synergies and established physician relationships putting Insmed in a good position for commercialization of the clinical stage pipeline.

Investment Rationale

In our view, Arikayce sales should support near-term revenues, bolstered by potential for growth in Brensocatib and TPIP, where we see good clinical efficacy and tolerability. We recognize a number of commercial challenges, but ultimately view a favorable risk/ reward profile given KOL feedback, promising clinical/preclinical data, and under penetration in these markets with high unmet need, supportive of our Buy rating.

Stock Data

Average Daily Volume 1,621,267

Quarterly Earnings Estimates

| | 2022 | 2023 |
|----|--------|--------|
| Q1 | -0.80A | -1.17A |
| Q2 | -0.80A | -1.78A |
| Q3 | -1.09A | -1.11A |
| 04 | -1 21A | -1 16E |

^{*} For full definitions of \emph{IQ} method $^{\text{SM}}$ measures, see page 6.

Abbreviations:

NTM-PD: nontuberculous mycobacterial pulmonary disease

OUS: outside of the US

1L: frontline

CRSsNP: chronic rhinosinusitis without nasal polyps

HS: hidradenitis suppurativa

TPIP: treprostinil palmitil inhalation powder

PH-ILD: pulmonary hypertension associated with interstitial lung disease

PAH: pulmonary arterial h ypertension

DSMC: Data Safety Monitoring Committee



Price objective basis & risk

Insmed Incorporated (INSM)

Our 12-month PO is based on our NPV analysis of revenue forecasts assumptions. We model sales of Arikayce for refractory NTM-PD and frontline expansion (modified by a LOS of 80%). We assume a collective value for the pipeline: Brensocatib in NCFB (LOS: 65%), with potential expansion into CF (LOS: 20%), CRSsNP, and HS (LOS: 15%) and TPIP for PAH and PH-ILD (LOS: 50%). Given a WACC of 15%, in line with peers of similar size and risk, and a terminal growth rate of -10%, -40%, we estimate a value of \$12/sh for Arikayce, \$18/sh for Brensocatib, \$8/sh for TPIP, \$0.62/sh for the early pipeline, and \$-2/sh for net cash, resulting in \$37/sh.

Upside risks: 1) Arikayce full approval, 2) validation of Brensocatib in phase 3, with strong clinical efficacy and no safety concerns, 3) robust efficacy/ safety profile for TPIP in PAH and PH-ILD, 4) growth of translational medicine pipeline, including on-track IND-approvals, and 5) indications of strong commercial support from payers/ community-based providers.

Downside risks: 1) failure to achieve full approval/ commercial expansion of Arikayce in the EU and Japan, 2) failure to meet safety/ efficacy profile in Brensocatib (phase 3), especially due to meaningful infection risk, 3) marginal tolerability improvements, diminished efficacy, and/ or lack of differentiation of TPIP, 4) competition from disease modifying PAH agents, 5) failure of translational medicine pillar, 6) regulatory delays, and 7) commercial pushback from payers/providers.

Analyst Certification

I, Jason Zemansky, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

US - Biopharmaceuticals Coverage Cluster

| Investment rating | Company | BofA Ticker | Bloomberg symbol | Analyst |
|-------------------|-------------------------------|-------------|------------------|--------------------|
| UY | | | | |
| | 89bio, Inc | ETNB | ETNB US | Geoff Meacham |
| | Acumen Pharma | ABOS | ABOS US | Geoff Meacham |
| | Agios Pharmaceuticals | AGIO | AGIO US | Greg Harrison, CFA |
| | Amylyx Pharmaceuticals | AMLX | AMLX US | Geoff Meacham |
| | BioMarin | BMRN | BMRN US | Geoff Meacham |
| | BioXcel Therapeutics | BTAI | BTAIUS | Greg Harrison, CFA |
| | BridgeBio Pharma | BBIO | BBIO US | Greg Harrison, CFA |
| | Caribou | CRBU | CRBU US | Geoff Meacham |
| | CRISPR Therapeutics | CRSP | CRSP US | Geoff Meacham |
| | Eli Lilly and Company | LLY | LLY US | Geoff Meacham |
| | Gilead Sciences Inc. | GILD | GILD US | Geoff Meacham |
| | HUTCHMED | HCM | HCM US | Alec W. Stranahan |
| | Immatics | IMTX | IMTX US | Alec W. Stranahan |
| | Insmed Incorporated | INSM | INSM US | Jason Zemansky |
| | Intellia Therapeutics | NTLA | NTLA US | Greg Harrison, CFA |
| | Janux Therapeutics | JANX | JANX US | Geoff Meacham |
| | Keros | KROS | KROS US | Greg Harrison, CFA |
| | Kiniksa Pharmaceuticals, Ltd. | KNSA | KNSA US | Geoff Meacham |
| | Krystal Biotech | KRYS | KRYS US | Alec W. Stranahan |
| | Kura Oncology | KURA | KURA US | Jason Zemansky |
| | Liquidia Corporation | LQDA | LQDA US | Greg Harrison, CFA |
| | Lyell Immunopharma | LYEL | LYEL US | Geoff Meacham |
| | MeiraGTx | MGTX | MGTX US | Alec W. Stranahan |
| | Merck & Co. | MRK | MRK US | Geoff Meacham |
| | Mineralys Therapeutics | MLYS | MLYS US | Greg Harrison, CFA |

US - Biopharmaceuticals Coverage Cluster

| | Neumora Therapeutics Rani Therapeutics | NMRA | NMRA US | Geoff Meacham |
|-------------|---|----------|---|--------------------|
| | | DANII | | |
| | 5 1 | RANI | RANI US | Geoff Meacham |
| | Regenxbio, Inc. | RGNX | RGNX US | Alec W. Stranahan |
| | Revolution Medicines | RVMD | RVMD US | Alec W. Stranahan |
| | Rocket Pharmaceuticals, Inc. | RCKT | RCKT US | Greg Harrison, CFA |
| | Royalty Pharma | RPRX | RPRX US | Geoff Meacham |
| | Sana Biotechnology | SANA | SANA US | Geoff Meacham |
| | SpringWorks | SWTX | SWTX US | Alec W. Stranahan |
| | Syndax Pharmaceuticals | SNDX | SNDX US | Jason Zemansky |
| | Travere Therapeutics Inc | TVTX | TVTX US | Greg Harrison, CFA |
| | Turnstone Biologics | TSBX | TSBX US | Geoff Meacham |
| | Vertex Pharmaceuticals Inc. | VRTX | VRTX US | Geoff Meacham |
| | Werewolf Therapeutics | HOWL | HOWL US | Jason Zemansky |
| | Xencor | XNCR | XNCR US | Alec W. Stranahan |
| | , c. ree. | , a tert | 7 ii Veli V ee | , nee v. Saananan |
| EUTRAL | | | | |
| | AbbVie | ABBV | ABBV US | Geoff Meacham |
| | Alector, Inc | ALEC | ALEC US | Greg Harrison, CFA |
| | Amgen Inc. | AMGN | AMGN US | Geoff Meacham |
| | Arcus Biosciences | RCUS | RCUS US | Jason Zemansky |
| | Beam Therapeutics | BEAM | BEAM US | Greg Harrison, CFA |
| | Biogen Inc. | BIIB | BIIB US | Geoff Meacham |
| | Bristol-Myers Squibb | BMY | BMY US | Geoff Meacham |
| | Cytokinetics, Incorporated | CYTK | CYTK US | Jason Zemansky |
| | Editas Medicine | EDIT | EDIT US | Greg Harrison, CFA |
| | Erasca | ERAS | ERAS US | Alec W. Stranahan |
| | Esperion | ESPR | ESPR US | Jason Zemansky |
| | Exscientia | EXAI | EXALUS | Alec W. Stranahan |
| | IGM Biosciences | IGMS | IGMS US | Greg Harrison, CFA |
| | Johnson & Johnson | JNJ | JNJ US | Geoff Meacham |
| | Kymera Therapeutics | KYMR | KYMR US | Geoff Meacham |
| | Moderna | MRNA | MRNA US | Geoff Meacham |
| | Pfizer | PFE | PFE US | Geoff Meacham |
| | Recursion Pharmaceuticals, Inc. | RXRX | RXRX US | Alec W. Stranahan |
| | Tyra Biosciences | TYRA | TYRA US | Greg Harrison, CFA |
| | Vir | VIR | VIR US | Geoff Meacham |
| | Y-mAbs Therapeutics, Inc | YMAB | YMAB US | Alec W. Stranahan |
| | · ··· iss merapeaus, me | 1111/10 | 111111111111111111111111111111111111111 | , acc Suamanan |
| NDERPERFORM | | | | |
| | AlloVir, Inc. | ALVR | ALVR US | Jason Zemansky |
| | CureVac | CVAC | CVAC US | Geoff Meacham |
| | Day One Biopharmaceuticals | DAWN | DAWN US | Alec W. Stranahan |
| | LianBio | LIAN | LIAN US | Geoff Meacham |
| | Novavax | NVAX | NVAX US | Alec W. Stranahan |
| | Regeneron Pharmaceuticals Inc. | REGN | REGN US | Geoff Meacham |
| | Reneo Pharmaceuticals | RPHM | RPHM US | Jason Zemansky |
| | TG Therapeutics | TGTX | TGTX US | Alec W. Stranahan |
| | United Therapeutics Corporation | UTHR | UTHR US | Greg Harrison, CFA |



Qmethod ³⁴ Measures Definitions

| Business Performance | Numerator | Denominator |
|----------------------------|--|---|
| Return On Capital Employed | NOPAT = (EBIT + Interest Income) \times (1 - Tax Rate) + Goodwill Amortization | Total Assets — Current Liabilities + ST Debt + Accumulated Goodwill Amortization |
| Return On Equity | Net Income | Shareholders' Equity |
| Operating Margin | Operating Profit | Sales |
| Earnings Growth | Expected 5 Year CAGR From Latest Actual | N/A |
| Free Cash Flow | Cash Flow From Operations — Total Capex | N/A |
| Quality of Earnings | Numerator | Denominator |
| Cash Realization Ratio | Cash Flow From Operations | Net Income |
| Asset Replacement Ratio | Capex | Depreciation |
| Tax Rate | Tax Charge | Pre-Tax Income |
| Net Debt-To-Equity Ratio | Net Debt = Total Debt - Cash & Equivalents | Total Equity |
| Interest Cover | EBIT | Interest Expense |
| Valuation Toolkit | Numerator | Denominator |
| Price / Earnings Ratio | Current Share Price | Diluted Earnings Per Share (Basis As Specified) |
| Price / Book Value | Current Share Price | Shareholders' Equity / Current Basic Shares |
| Dividend Yield | Annualised Declared Cash Dividend | Current Share Price |
| Free Cash Flow Yield | Cash Flow From Operations – Total Capex | Market Cap = Current Share Price × Current Basic Shares |
| Enterprise Value / Sales | EV = Current Share Price × Current Shares + Minority Equity + Net Debt + | Sales |

EV / EBITDA Enterprise Value Basic EBIT + Depreciation + Amortization

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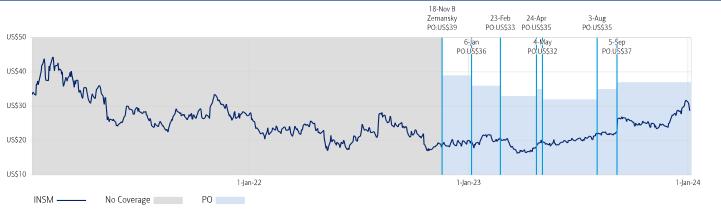
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Insmed (INSM) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Equity Investment Rating Distribution: Health Care Group (as of 31 Dec 2023)

| Coverage Universe | Count | Percent | Inv. Banking Relationships R1 | Count | Percent |
|-------------------|-------|---------|-------------------------------|-------|---------|
| Buy | 234 | 60.94% | Buy | 115 | 49.15% |
| Hold | 80 | 20.83% | Hold | 36 | 45.00% |
| Sell | 70 | 18.23% | Sell | 29 | 41.43% |

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

| Coverage Universe | Count | Percent | Inv. Banking Relationships R1 | Count | Percent |
|-------------------|-------|---------|-------------------------------|-------|---------|
| Buy | 1895 | 53.62% | Buy | 1083 | 57.15% |
| Hold | 832 | 23.54% | Hold | 454 | 54.57% |
| Sell | 807 | 22.84% | Sell | 383 | 47.46% |

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| Investment rating | Total return expectation (within 12-month period of date of initial rating) | Ratings dispersion guidelines for coverage cluster ^{R2} |
|-------------------|---|--|
| Buy | ≥ 10% | ≤ 70% |
| Neutral | ≥ 0% | ≤ 30% |
| Underperform | N/A | ≥ 20% |

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