



bionano™

Q4& FY24 Financial Results Webcast & Call

March 31st 2025



Safe harbor statement - This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as “may,” “will,” “expect,” “plan,” “anticipate,” “estimate,” “intend,” “should,” “believe,” “would,” “could,” “potential,” “outlook,” “guidance,” “goal” and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances and the negatives thereof) convey uncertainty of future events or outcomes and are intended to identify these forward-looking statements. Forward-looking statements include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things: (i) our expectations regarding product uptake, revenue growth, market development and adoption of OGM, including growth in publications highlighting the utility and applications of OGM; (ii) our growth prospects and future financial and operating results; (iii) growth of our OGM system installed base and sales of our flowcells; (iv) increase in the adoption and utilization of OGM and our success in executing on our strategic pillars and key imperatives; (v) efforts to extend our cash runway; (vi) our ability to stay in front of competitors' improvements; (vii) our quarterly and annual revenue outlook; (viii) the ability of OGM to outperform conventional cytogenetic methods, including karyotyping (KT), fluorescent *in situ* hybridization (FISH), chromosomal microarray analysis (CMA) and whole genome sequencing (WGS); (ix) the anticipated benefits of our cost savings initiatives and our ability to realize the planned savings; (x) the anticipated benefits of a CPT 1 code for OGM; and (xi) other statements that are not historical facts.

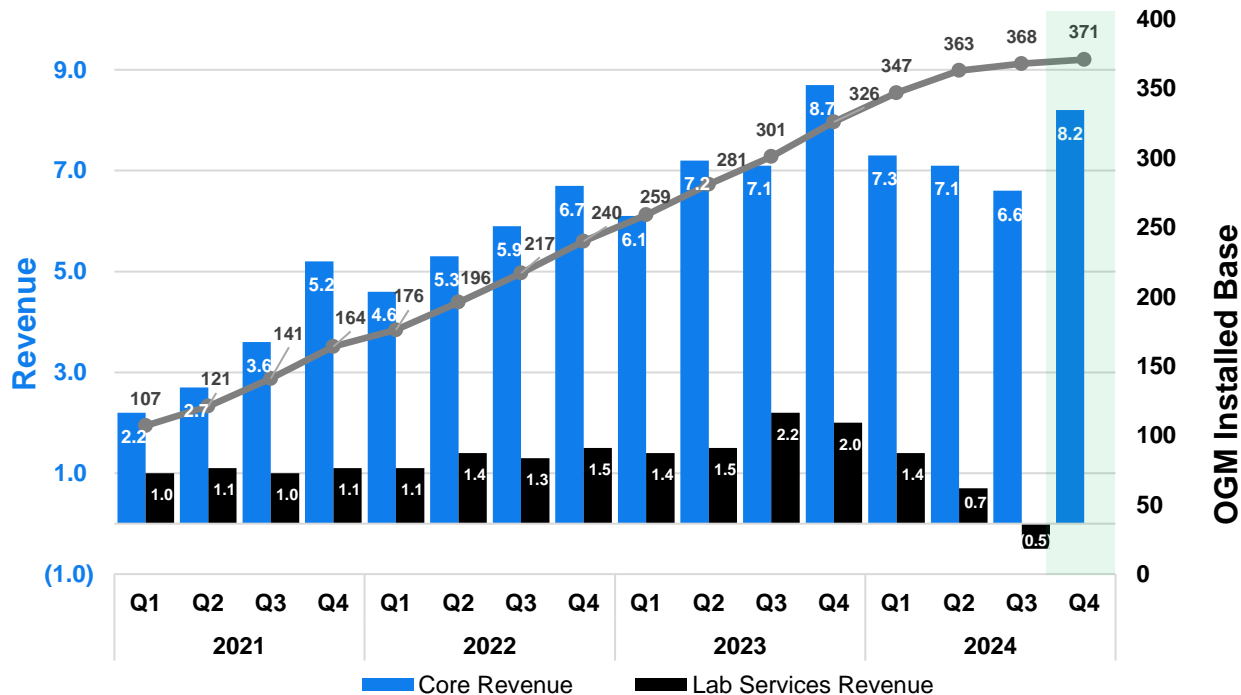
Each of these forward-looking statements involves risks and uncertainties. Actual results or developments may differ materially from those projected or implied in these forward-looking statements. Factors that may cause such a difference include the risks and uncertainties associated with: (i) the impact of global and macroeconomic events, such as recent and potential future bank failures, inflation, supply chain disruptions, and the ongoing conflicts between Ukraine and Russia and in the Middle East, and related sanctions, on our business and the global economy; (ii) challenges inherent in developing, manufacturing and commercializing our products; (iii) our ability to further expand the utilization of our technology platforms and the success of executing on our strategic pillars and key imperatives; (iv) third parties' abilities to manufacture our instruments and consumables; (v) our expectations and beliefs regarding future growth of the business and the markets in which we operate; (vi) the accuracy of our estimates; (vii) our ability to obtain financing to fund our operations and continue as a "going concern" which requires us to manage costs and obtain significant additional financing to fund our strategic plans and commercialization efforts; (viii) our ability to consummate any strategic alternatives; (ix) the risk that if we fail to obtain additional financing we may seek relief under applicable insolvency laws; (x) the success of our cost savings initiatives and our ability to realize the planned savings; (xi) the success of products competitive with our own; (xii) the failure of OGM to outperform conventional cytogenetic methods (xiii) changes in our strategic and commercial plans; and (xiv) the application of generally accepted accounting principles which are highly complex and involve many subjective assumptions. We are under no duty to update any of these forward-looking statements after the date of this presentation to conform these statements to actual results or revised expectations, except as required by law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this presentation. Except as required by law, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements contained in this presentation.

More information about these and other statements, risks and uncertainties is contained in our filings with the U.S. Securities and Exchange Commission, including, without limitation, our Annual Report on Form 10-K for the year ended December 31, 2023 and in other filings subsequently made by us with the Securities and Exchange Commission. All forward-looking statements contained in this presentation speak only as of the date on which they were made and are based on management's assumptions and estimates as of such date. We do not undertake any obligation to publicly update any forward-looking statements, whether as a result of the receipt of new information, the occurrence of future events or otherwise, except as required by law.

To supplement our financial results reported in accordance with U.S. generally accepted accounting principles (GAAP), we have provided certain non-GAAP financial measures, including gross margin and operating expense in this presentation. A description of these non-GAAP financial measures as well as a reconciliation to the nearest GAAP financial measures are included at the end of the Company's earnings release issued associated with this presentation, which has been posted on the investor relations page of the Company's website. Because of the non-standardized definitions of non-GAAP financial measures, the non-GAAP financial measures as used in this presentation and the associated reconciliation table have limits in its usefulness to investors and may be calculated differently from, and therefore may not be directly comparable to, similarly titled measures used by other companies. For certain non-GAAP financial measures we do not provide guidance for the most directly comparable GAAP measures and similarly we cannot provide a reconciliation between our most directly comparable GAAP measures without unreasonable effort due to the unavailability of reliable estimates for certain components which are not within our control and may vary greatly between periods and could significantly impact our financial results calculated in accordance with GAAP.

We believe that non-GAAP financial measures in this presentation are useful to investors and analysts as a supplement to our financial information prepared in accordance with GAAP for analyzing operating performance and identifying operating trends in its business. We believe these measures allow for greater transparency with respect to key financial metrics we use in assessing our own operating performance and making operating decisions. These non-GAAP financial measures are not meant to be considered in isolation or as a substitute for comparable GAAP measures and should be read in conjunction with our consolidated financial statements prepared in accordance with GAAP.

Q4 2024 Results



- **Q4 Revenues: \$8.2M**
(-24% vs. Q4'23)
- **GAAP Gross margin of 42%;**
non-GAAP gross margin of 42%
- **GAAP OpEx \$15.4M;**
non-GAAP OpEx \$10.6M
- **Q4 OGM installed base: 371**
(+14% vs. Q4'23)
- **Q4 flowcells sold: 8,058**
(+1.0% vs. Q4'23)

\$20.9M* Cash, Cash Equivalents, and Available-for-Sale Securities at YE 2024

2024 Full Year Results

\$30.8 M

2024 Revenues
(vs \$36.1 M in 2023)

\$12.8 M

2024 Consumables
Revenues
(vs \$11.2 in 2023)

+9%

AMR Core Revenue
Growth vs 2023

\$29.1 M

2024 Core Revenues
(vs \$29.0 in 2023)

\$6.2 M

Software Revenue
(vs \$5.6 M in 2023)

+10%

EMEA Core Revenue
Growth vs 2023

\$27.0 M

2024 Product Revenues
(vs \$26.7 in 2023)

30,307

Flowcells Sold 2024
(vs 26,444 in 2023)

-44%

APAC Core Revenue
Growth vs 2023

Strategic Update



bionano™

We believe OGM on Saphyr® & Stratys™ systems is a superior alternative to conventional cytogenetics in four significant areas of clinical research

Heme malignancies

- Blood cancers such as: Leukemias, lymphomas & myelomas
- Cytogenetic analysis (KT & FISH) for all heme malignancies is recommended by NCCN, WHO & NHS
- OGM outperforms KT & FISH with higher sensitivity, specificity & success rates
- OGM is being adopted as an alternative to cytogenetic analysis (KT & FISH)

Publication:  THE UNIVERSITY OF TEXAS
MD Anderson
Cancer Center

Leukemia

“OGM in Myelodysplastic Syndromes”

- OGM provided prognostic scores for 17 to 21% of cases
- OGM revealed additional pathogenic variants in 13% of cases

<https://www.nature.com/articles>

Constitutional genetic disorders

- Genetic conditions such as developmental delay, intellectual disabilities & birth defects
- Current cytogenetic standard is CMA & whole genome sequencing is emerging
- OGM outperforms CMA and WGS for SV detection with higher performance for large variants and for balanced variants
- OGM is being adopted as an alternative to CMA and a complement to WGS

Publication:  Greenwood
Genetic Center

GENOME RESEARCH

“OGM in neural tube defects”

- OGM identified pathogenic variants in 8% of 104 NTD cases
- OGM revealed new candidate genes in up to 22% of 104 NTD cases

<https://pubmed.ncbi.nlm.nih.gov/>

Solid tumors

- Most common cancers including: Breast, prostate, colon, lung, brain, etc.
- FFPE samples are not suitable for cytogenetic analysis, despite it being recommended by NCCN, WHO & NHS
- OGM performs well on fresh/frozen samples for whole genome SV analysis
- OGM is being adopted as an alternative to cytogenetics analysis in solid tumors

Publication:  THE JOHNS HOPKINS
SCHOOL OF MEDICINE

MODERN PATHOLOGY

“OGM & NGS in Bone and Soft Tissue Tumors”

- OGM outperforms traditional cytogenetics in 74% cases
- OGM + NGS improves success rate, identifying pathogenic variants in 98% of cases

<https://www.modernpathology.org/article>

Cell & Gene therapy

- Therapeutics such as stem cells, CAR-T & other gene Rx such as CRISPR-Cas9 editing
- Cytogenetics & NGS are used to test genome stability, on-target edits & off-target effects
- OGM is more cost effective & outperforms cytogenetics or NGS for detection of SVs in stem cells & cells with edited genomes
- OGM is being adopted for use in pre-clinical development and as a potential QC method

Publication:  Hospital Infantil Universitario
Niño Jesús

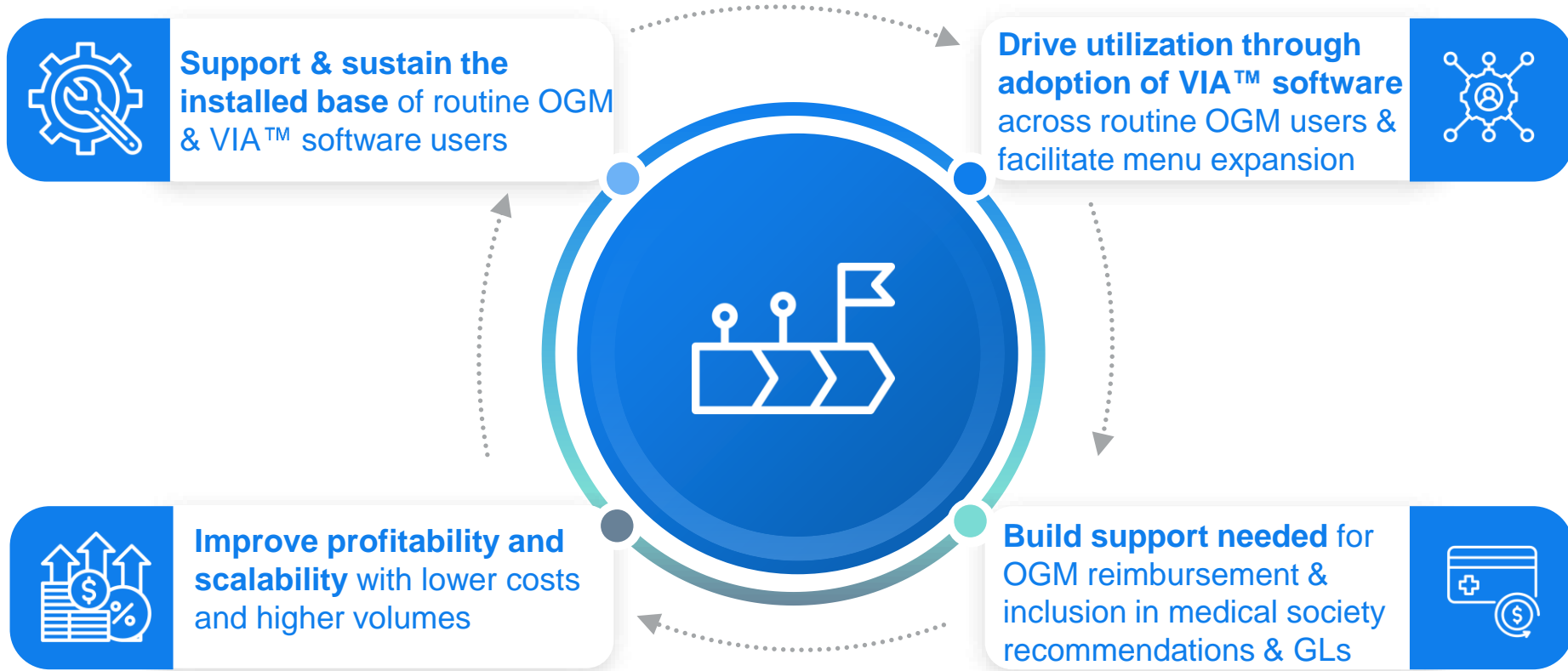
frontiers

“OGM for CAR-T cell activity in Neuroblastoma”

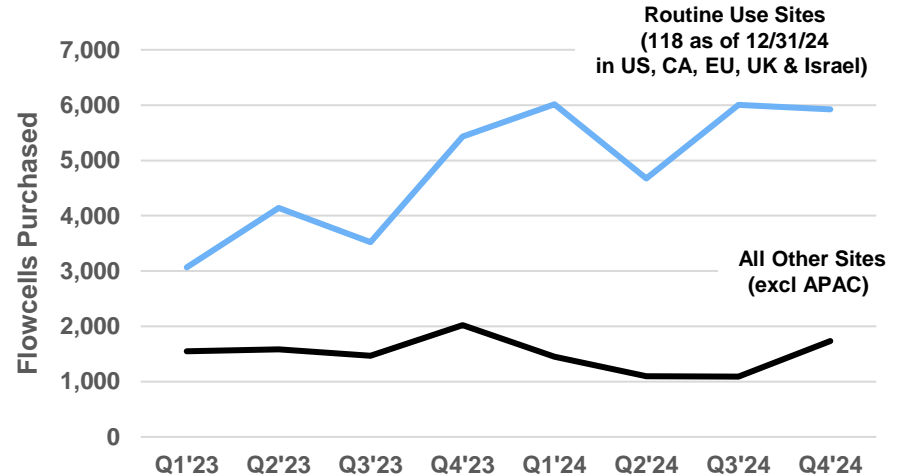
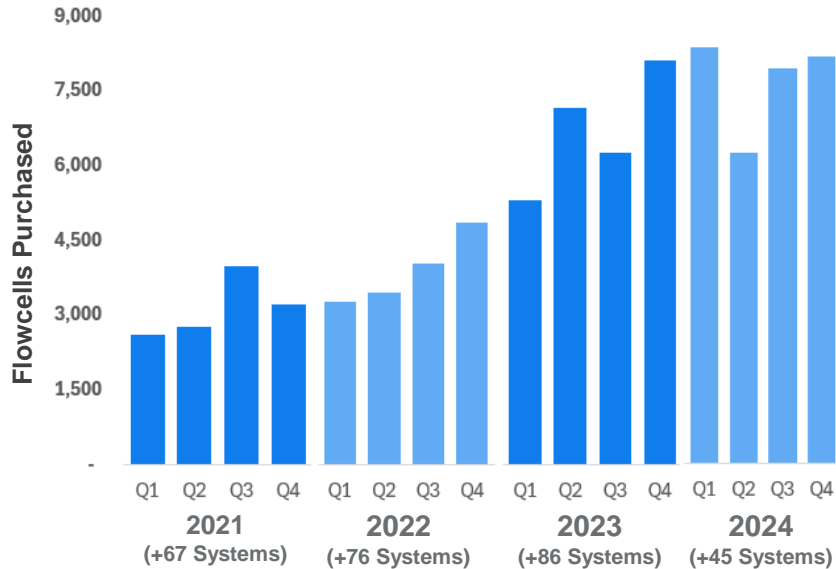
- OGM to evaluate off target effects of CAR-T therapies
- Comprehensive unbiased approach for SVs in low-frequency clones

<https://www.frontiersin.org/journals/immunology>

Strategic Pillars and Key Imperatives for 2025

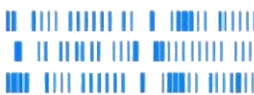
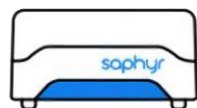


Strong flowcell purchases in '24 despite adding fewer systems; Routine use sites are the ones driving growth & our focus

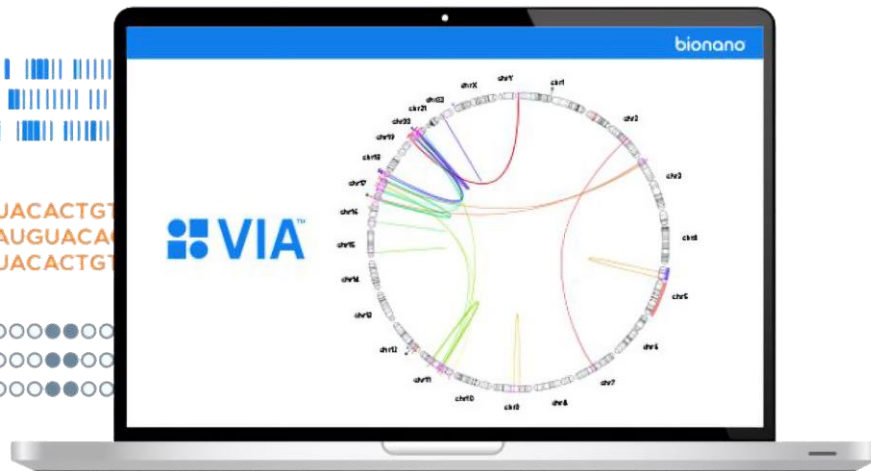
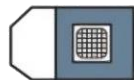


118 Bionano customers use OGM for routine work & accounted for 80% of flowcells purchased in 2024

Our VIA™ software is used by non-OGM sites for analysis of NGS & microarray data and by OGM sites for analysis of all three



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**Non-OGM
VIA Customers**

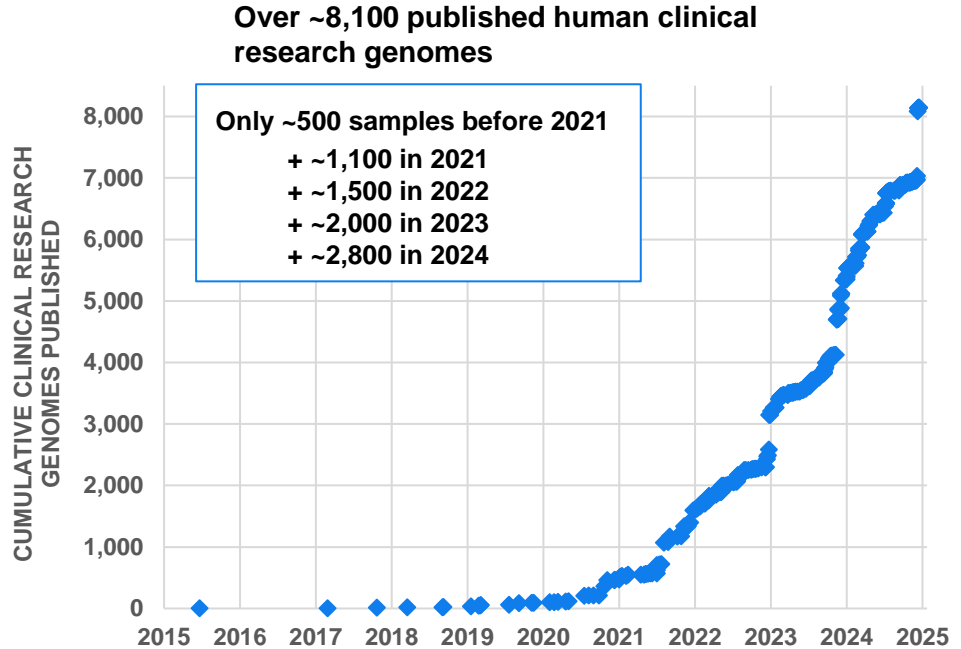
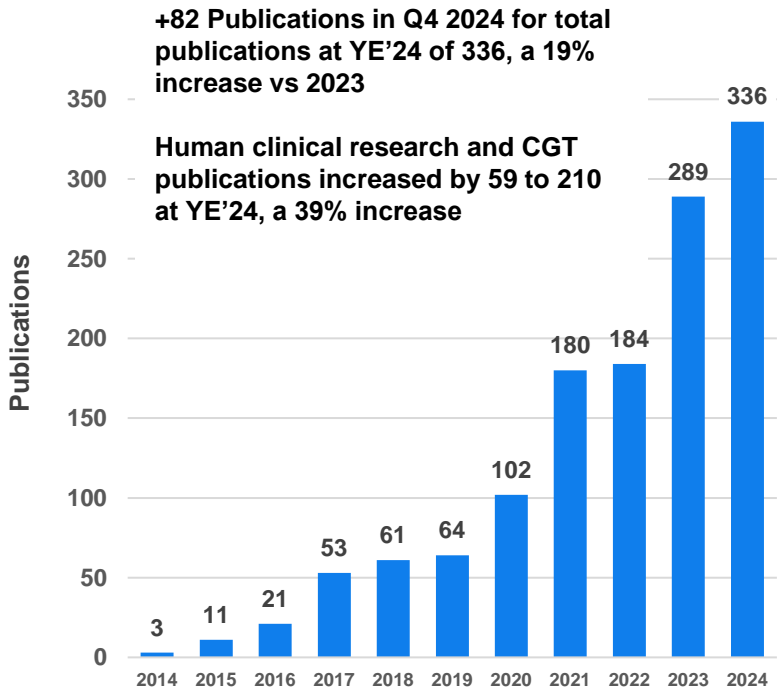
56,000

**Non-OGM Samples
Processed on VIA in 2024**

161

**OGM Customers
with VIA installed
(as of 12/31/24 up from 40 12/31/23)**

We believe the growth in publications and clinical research genomes published are important for building support for widespread use of OGM



Category I CPT code for OGM in hematological malignancy analysis effective on CLFS January 1, 2025

- **New Category I Current Procedural Terminology (CPT) code for the use of OGM** in cytogenomic genome-wide analysis to detect structural and copy number variations related to hematological malignancies
- 81195 CPT effective January 1, 2025
- Customers utilizing OGM CPT code for reimbursement

American Medical Association (AMA) CPT Code for OGM

Code #	81195
Description:	cytogenetic testing for hematological malignancies
CMS Price:	\$1263

Important steps to help us deliver against our vision



Gross Margin Improvement

- ✓ Gross Margin for the core business (non-GAAP) has improved over the previous 8 Qtrs from 22% in Q1 2023 to 42% in Q4 2024



Projected Cost Savings

- ✓ Over \$100M projected cumulative annual non-GAAP operating expense reduction by Q1 2025, compared to Q1 2023



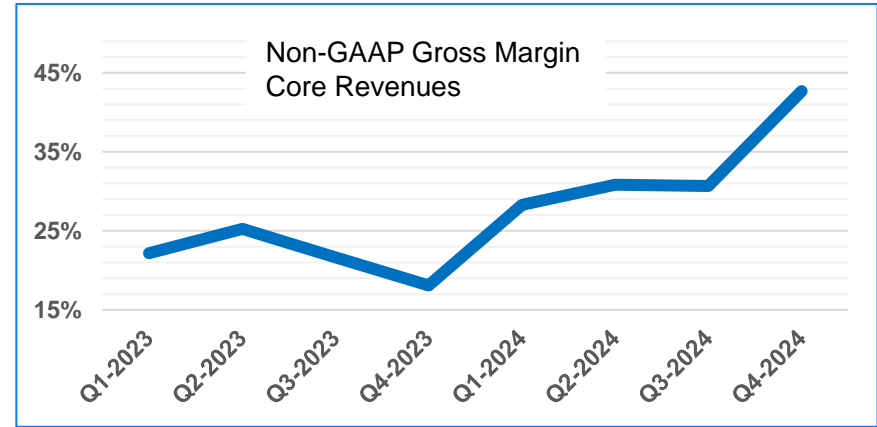
Head Count Reduction

- ✓ Reduced headcount from 423 people in May 2023, to 100 people as of December 31, 2024



Equity Capital Financing

- ✓ \$10 M registered direct offering completed Jan 3, 2024; we believe cash runway extends into Q1 2026



A highly disciplined approach will position company for future streamlined growth

Financial Overview

bionano™



Bionano is focused on driving existing customer sites that are expanding capacity and in key target geographies

Streamlined Business Focus



- **Support & sustain the installed base** of routine OGM & VIA™ software users
- **Drive utilization through adoption of VIA™ software** across routine OGM users & facilitate menu expansion
- **Build support** needed for OGM reimbursement & inclusion in medical society recommendations & Guidelines
- **Improve profitability and scalability** with lower costs & higher volumes

2025 Guidance



OGM FY'25 Total Revenue Guidance:
\$29 – \$32M



New OGM Installations YE'25:
15 – 20 systems



1Q'25 Revenue Guidance:
\$6.2 – \$6.3M

Questions & Answers



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Thank you.

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