NEWS RELEASE

INOVIO Reports First Quarter 2023 Financial Results and Operational Highlights

5/10/2023

- Announced additional positive data from Phase 1/2 trial for INO-3107 in recurrent respiratory papillomatosis patients
    - Second cohort of trial showed 10 of the 11 (91%) patients saw a reduction in surgical interventions in the year following initial treatment
    - New combined safety and immunological data showing tolerability and durable immune response presented at ABEA/COSM
- Announced positive data from Phase 1b trial with INO-4201 as an Ebola booster for ERVEBO®
    - INO-4201 was well-tolerated and boosted humoral responses in 36 of 36 (100%) treated participants
    - New safety and immunological data indicating potential to extend protection against Ebola presented at ECCMID
- Announced topline results for REVEAL2, the second Phase 3 trial for VGX-3100 as a treatment for cervical high-grade squamous intraepithelial lesions
    - Analysis of clinical characteristics of biomarker population is ongoing; findings to be shared in third quarter 2023
    - Trial results achieved statistical significance in all-participants population
    - Trial results did not meet primary endpoint in biomarker-selected population
- Enhanced product development team with appointment of Dr. Cheryl Elder as Senior Vice President, Regulatory Affairs
- Ended the first quarter 2023 with $223.8 million in cash, cash equivalents and short-term investments
- Company maintains cash runway projection into first quarter 2025
- Management will host conference call today at 4:30 p.m. EDT

PLYMOUTH MEETING, Pa., May 10, 2023 /PRNewswire/ -- INOVIO (NASDAQ:INO), a biotechnology company focused on developing and commercializing DNA medicines to help treat and protect people from HPV-related diseases,

cancer, and infectious diseases, today announced financial results and operational highlights for the first quarter of 2023. INOVIO's management will host its quarterly conference call and webcast today at 4:30 p.m. EDT. The live webcast and replay may be accessed by visiting INOVIO's website at **http://ir.inovio.com/events-and-presentations/default.aspx**.

"In the first quarter of 2023 we made solid progress with several key pipeline candidates, including important headway in our development plans for INO-3107, our DNA medicine candidate for the treatment of RRP," said INOVIO's President and Chief Executive Officer, Dr. Jacqueline Shea. "From our ongoing discussions, we believe we are in alignment with the FDA on several critical design elements for our planned Phase 3 program for INO-3107, as we continue to work through a number of their questions. Additionally, we were also encouraged to receive a positive opinion from the European Committee for Orphan Medicinal Products on our application for orphan drug designation for INO-3107. The final determination is now with the European Commission, which will decide on our application this month. We believe the committee's opinion is another step in the right direction for the development of this candidate on a global basis."

Dr. Shea continued: "Since our last quarterly report, INOVIO has presented at several scientific and medical conferences, including presentations by lead investigators from our RRP and Ebola booster studies sharing important new immunological and safety data that shows the immense potential and versatility of our candidates. At the same time, we continued our focus on operational excellence, taking steps to build upon the strong team we have in place by the hiring of Dr. Cheryl Elder as Senior Vice President of Regulatory Affairs. Cheryl's considerable regulatory expertise and track record of successfully bringing products through licensure will help us implement efficient regulatory strategies as we work to advance our promising candidates through development and the regulatory approval process."

Organizational and Clinical Highlights

INO-3107 – Recurrent Respiratory Papillomatosis (RRP)

- During the quarter, INOVIO **announced** data from the second cohort of its Phase 1/2 clinical trial **(NCT:04398433)** that was statistically significant and showed 10 of the 11 (91%) patients saw a reduction in surgical interventions in the year following initial treatment, with measurement beginning at Day 0, the start of trial therapy. Of these 10 patients, four did not require surgery. There was a statistically significant median decrease of three surgical interventions when comparing the year following treatment to the year prior. In the year prior to treatment, the number of surgical interventions for these 11 patients ranged between 2 and 8, and the median was 5. INO-3107 was well-tolerated and immunogenic among patients in the second cohort. The safety and efficacy results for the second cohort were consistent with results announced for the first cohort in October 2022.

- Following quarter end, data from the entire study, including new combined safety and immunology data not previously announced, were presented by lead investigator Dr. Ted Mau at the scientific program of the American Broncho-Esophagological Association (ABEA) at the Combined Otolaryngology Spring Meetings (COSM) in Boston, Massachusetts. The presentation highlighted the safety profile of INO-3107, which continued to be well-tolerated and elicited mostly low-grade (Grade 1) treatment-emergent adverse effects (TEAEs) such as injection site pain and fatigue. There were no high-grade TEAEs deemed related to treatment and no TEAEs leading to treatment discontinuation. The new data also showed that INO-3107 provoked a strong immune response, inducing activated CD4 T cells and activated CD8 T cells with lytic potential. T-cell responses were also observed at Week 52, indicating a persistent cellular memory response. Additional analyses are ongoing to determine a possible relationship between specific CD4 and CD8 phenotypes and clinical outcomes. The new data also included a marked improvement after treatment in the RRP staging assessment score. We believe these encouraging data indicate that INO-3107 could provide clinical benefit to adults with RRP.
- Following quarter end, INOVIO **announced** that the European Committee for Orphan Medicinal Products issued a positive opinion on INOVIO's application for orphan drug designation for INO-3107, with the final decision from the European Commission expected in late May.

INO-4201 – Ebola Booster for ERVEBO

- During the quarter, INOVIO **announced** positive results from a Phase 1b trial with INO-4201 as a potential Ebola booster for ERVEBO **(NCT04906629)** showing INO-4201 was well-tolerated and boosted humoral responses in 36 of 36 (100%) of treated participants.
- Following quarter end, lead investigator Dr. Angela Huttner presented new safety and immunology data from the trial at the 33rd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID) in April. The new data showed that a single-dose of INO-4201 followed by electroporation was well-tolerated and immunogenic compared to placebo in a cohort of healthy volunteers primed with ERVEBO up to 5 to 7 years previously. Binding antibody titers rose significantly after boost for each time point measured, peaking at week 2 in all treated participants. Mean neutralizing antibody titers also rose and remained high and constant until the end of the 24-week trial period. There was also a noteworthy engagement of T cells, including increased production of IFNγ, IL2, and/or TNFα from EBOV-specific CD4+ and CD8+ T cells. The additional data indicated that a booster dose of INO-4201 has the potential to restore the levels of antibodies needed to extend protection against Ebola and thus could be an important tool in future Ebola outbreaks.

VGX-3100 – High-Grade Squamous Intraepithelial Lesions (HSIL)

- During the quarter, INOVIO **shared** topline results from REVEAL2, the second Phase 3 trial for VGX-3100 as a treatment for cervical HSIL indicating that the trial results did not meet the primary endpoint in the

biomarker-selected population, but the trial did achieve statistical significance in the all-participants population.

- INOVIO has continued to analyze the clinical characteristics of the biomarker positive population that may have had an impact on response to treatment, such as stage of disease, infection with other HPV types, clinical site location, age, and smoking status. Additionally, INOVIO is working to better understand why some patients who exhibited a clinical response were not positive for the biomarker. INOVIO expects to share findings from its ongoing biomarker analysis in the third quarter.
- In the all-participants population of REVEAL2, VGX-3100 showed an ability to clear HPV infection, with viral clearance of 37.3% in the treated group versus 8.7% in the placebo group. INOVIO continues to evaluate how this data further informs its extensive body of evidence regarding the potential of DNA medicines to treat HPV-related diseases, including anal HSIL, which can be a precursor to anal cancer. INOVIO continues to discuss next steps for developing VGX-3100 for anal HSIL with key opinion leaders and regulators.
- Discussions with partner ApolloBio to support continued development of VGX-3100 in China are underway.

Strengthened Product Development Team

- Dr. Cheryl Elder joined INOVIO as Senior Vice President of Regulatory Affairs, adding additional leadership and expertise to an already strong product development team. With over 30 years of experience leading cross-functional teams in drug development in multiple therapeutic areas, Dr. Elder has a successful track record of driving regulatory strategies within both small and multinational biotechnology companies, including Hoffman La Roche and, most recently, Novartis Pharmaceuticals. She will be responsible for developing INOVIO's regulatory strategy and will lead company interaction with regulatory authorities globally.

Data Presentations & Publications

During and following the quarter, INOVIO presented, published, or submitted data from several of its clinical programs:

- Glioblastoma Drug Development Summit (March): Dr. Jeffrey Skolnik, INOVIO's Senior Vice President, Clinical Development, presented data on INO-5401 (glioblastoma therapeutic candidate).
- World Vaccines Congress (April): Dr. Michael Sumner, INOVIO's Chief Medical Officer, presented data on INO-3107 (RRP product candidate) and INO-4201 (Ebola vaccine booster candidate).
- 33rd European Congress of Clinical Microbiology and Infectious Diseases (April): Dr. Angela Huttner, Infectious Disease Consultant, Geneva University Hospitals, and lead investigator for the trial, presented data on INO-4201 (Ebola vaccine booster candidate).
- The Laryngoscope (April): Paper entitled "Interim Results of a Phase 1/2 Open-Label Study of INO-3107 for HPV-6 and/or HPV-11–Associated RRP" accepted for publication in this peer-reviewed journal focused on

advances in the diagnosis and treatment of head and neck disorders.

- American Broncho-Esophagological Association Meeting (May): Dr. Ted Mau, lead investigator and laryngologist at University of Texas Southwestern Medical Center, presented data on INO-3107 (RRP therapeutic candidate).

INOVIO plans to continue to submit papers and abstracts related to its research for publication and presentation as data becomes available to various journals and medical conferences. Further details will be shared upon acceptance for publication.

First Quarter 2023 Financial Results

- INOVIO reported total revenue of $115,000 for the three months ended March 31, 2023, compared to $199,000 for the same period in 2022. Total operating expenses were $44.1 million compared to $71.9 million for the same period in 2022.
- INOVIO's net loss for the quarter ended March 31, 2023 was $40.6 million, or $0.16 per basic and diluted share, compared to net loss of $79.1 million, or $0.36 per basic and diluted share, for the quarter ended March 31, 2022.

Operating Expenses

- Research and development (R&D) expenses for the three months ended March 31, 2023, were $30.2 million compared to $56.0 million for the same period in 2022. The decrease in R&D expenses was primarily the result of lower drug manufacturing, clinical trial expenses and outside services related to INO-4800, and lower expensed inventory and outside services related to our CELLECTRA® 3PSP device and array automation project, among other variances.
- General and administrative (G&A) expenses were $13.9 million for the three months ended March 31, 2023, compared to $16.0 million for the same period in 2022. The decrease in G&A expenses was primarily related to a decrease in non-cash stock-based compensation, insurance and other outside services expenses, offset by higher legal expenses, among other variances.

Capital Resources

- As of March 31, 2023, cash and cash equivalents and short-term investments were $223.8 million compared to $253.0 million as of December 31, 2022. As of March 31, 2023, the Company had 262.7 million common shares outstanding and 283.2 million common shares outstanding on a fully diluted basis, after giving effect to the exercise, vesting and conversion, as applicable, of its outstanding options, restricted stock units, convertible preferred stock, and convertible debt.
- INOVIO's balance sheet and statement of operations are provided below. Additional information is included in

INOVIO's quarterly report on Form 10-Q for the quarter ended March 31, 2023, which can be accessed at: **http://ir.inovio.com/financials/default.aspx**.

Cash Guidance

- INOVIO continues to expect its cash runway to extend into the first quarter of 2025. This projection includes a cash burn estimate of approximately $33 million for the second quarter 2023 and its ongoing expectation that cash burn will decrease incrementally from there into the first quarter of 2025. These projections do not include any funds that may be raised through the Company's existing at-the-market program or other capital-raising activities.

Conference Call / Webcast Information

INOVIO's management will host its quarterly conference call and webcast at 4:30 p.m. ET today. A replay of the conference call will be available following the conclusion of the call. The live webcast and replay may be accessed by visiting INOVIO's website at **http://ir.inovio.com/events-and-presentations/default.aspx**.

About INOVIO

INOVIO is a biotechnology company focused on developing and commercializing DNA medicines to help treat and protect people from HPV-related diseases, cancer, and infectious diseases. INOVIO's DNA medicines in development are delivered using its investigational proprietary smart device, CELLECTRA®, to produce immune responses against targeted pathogens and cancers. For more information, visit **www.inovio.com**.

Contacts

Media: Jennie Willson (267) 429-8567 **jennie.willson@inovio.com**
Investors: Thomas Hong (267) 440-4298 **thomas.hong@inovio.com**

Forward-Looking Statements

This press release contains certain forward-looking statements relating to our business, including our plans to develop and commercialize DNA medicines and our expectations regarding our research and development programs, including the planned initiation and conduct of pre-clinical studies and clinical trials and the availability and timing of data from those studies and trials, and expectations with respect to our cash resources and expected operating expenses into the first quarter of 2025. Actual events or results may differ from the expectations set forth herein as a result of a number of factors, including uncertainties inherent in pre-clinical studies, clinical trials, product development programs and commercialization activities and outcomes, the availability of funding to

support continuing research and studies in an effort to prove safety and efficacy of electroporation technology as a delivery mechanism or develop viable DNA medicines, our ability to support our pipeline of DNA medicine products, the ability of our collaborators to attain development and commercial milestones for products we license and product sales that will enable us to receive future payments and royalties, the adequacy of our capital resources, the availability or potential availability of alternative therapies or treatments for the conditions targeted by us or collaborators, including alternatives that may be more efficacious or cost effective than any therapy or treatment that we and our collaborators hope to develop, issues involving product liability, issues involving patents and whether they or licenses to them will provide us with meaningful protection from others using the covered technologies, whether such proprietary rights are enforceable or defensible or infringe or allegedly infringe on rights of others or can withstand claims of invalidity and whether we can finance or devote other significant resources that may be necessary to prosecute, protect or defend them, the level of corporate expenditures, assessments of our technology by potential corporate or other partners or collaborators, capital market conditions, the impact of government healthcare proposals and other factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2022, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2023, and other filings we make from time to time with the Securities and Exchange Commission. There can be no assurance that any product candidate in our pipeline will be successfully developed, manufactured, or commercialized, that the results of clinical trials will be supportive of regulatory approvals required to market products, or that any of the forward-looking information provided herein will be proven accurate. Forward-looking statements speak only as of the date of this release, and we undertake no obligation to update or revise these statements, except as may be required by law.

INOVIO Pharmaceuticals, Inc.
CONSOLIDATED BALANCE SHEETS

	March 31, 2023	December 31, 2022
	(Unaudited)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 28,238,152	$ 46,329,359
Short-term investments	195,513,005	206,669,397
Accounts receivable	73,304	1,701,726
Accounts receivable from affiliated entities	4,961,802	10,036,490
Prepaid expenses and other current assets	4,914,313	50,130,481
Prepaid expenses and other current assets from affiliated entities	195,853	375,227
Total current assets	233,896,429	315,242,680
Fixed assets, net	6,983,305	7,727,997
Investment in affiliated entity	2,623,781	2,007,142
Intangible assets, net	2,047,778	2,129,861
Goodwill	10,513,371	10,513,371
Operating lease right-of-use assets	9,865,543	10,228,207
Other assets	652,517	684,044
Total assets	$ 266,582,724	$ 348,533,302
LIABILITIES AND STOCKHOLDERS' EQUITY		

Current liabilities:		
Accounts payable and accrued expenses	$ 24,752,171	$ 79,686,885
Accounts payable and accrued expenses due to affiliated entities	1,417,274	1,220,439
Accrued clinical trial expenses	5,795,846	10,594,073
Operating lease liability	2,579,949	2,803,973
Grant funding liability	4,121,989	2,475,031
Grant funding liability from affiliated entity	89,007	87,673
Convertible senior notes	16,394,841	—
Total current liabilities	55,151,077	96,868,074
Convertible senior notes	—	16,614,840
Operating lease liability, net of current portion	12,185,919	12,655,586
Deferred tax liabilities	32,046	32,046
Total liabilities	67,369,042	126,170,546
Stockholders' equity:		
Preferred stock	—	—
Common stock	262,738	253,090
Additional paid-in capital	1,728,030,842	1,710,656,191
Accumulated deficit	(1,528,497,101)	(1,487,847,784)
Accumulated other comprehensive loss	(582,797)	(698,741)
Total Inovio Pharmaceuticals, Inc. stockholders' equity	199,213,682	222,362,756
Total liabilities and stockholders' equity	$ 266,582,724	$ 348,533,302

INOVIO Pharmaceuticals, Inc.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended March 31,	
	2023	2022
Revenue from collaborative arrangements and other contracts	$114,943	$199,074
Operating expenses:		
Research and development	30,176,511	55,978,611
General and administrative	13,890,610	15,953,458
Total operating expenses	44,067,121	71,932,069
Loss from operations	(43,952,178)	(71,732,995)
Other income (expense):		
Interest income	2,207,171	669,814
Interest expense	(313,488)	(313,488)
Gain (loss) on investment in affiliated entity	616,639	(537,728)
Net unrealized gain (loss) on available-for-sale equity securities	3,218,215	(4,840,641)
Other expense, net	(2,425,676)	(153,468)
Net loss before share in net loss of Geneos	(40,649,317)	(76,908,506)
Share in net loss of Geneos	—	(2,165,213)
Net loss	$(40,649,317)	$(79,073,719)
Net loss per share		
Basic and diluted	$(0.16)	$(0.36)
Weighted average number of common shares outstanding		
Basic and diluted	258,437,714	218,940,693

View original content:**https://www.prnewswire.com/news-releases/inovio-reports-first-quarter-2023-financial-results-and-operational-highlights-301821342.html**

SOURCE INOVIO Pharmaceuticals, Inc.