

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of
The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): February 29, 2024

Chimerix, Inc.
(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation)

001-35867

(Commission File Number)

33-0903395

(IRS Employer Identification No.)

**2505 Meridian Parkway, Suite 100
Durham, NC**

(Address of principal executive offices)

27713

(Zip Code)

(919) 806-1074

(Registrant's telephone number, including area code)

N/A

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	CMRX	The Nasdaq Global Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 2.02 Results of Operations and Financial Condition.

On February 29, 2024, Chimerix, Inc. (the “Company”) announced our financial results for the fourth quarter and full year ended December 31, 2023 in the press release attached hereto as Exhibit 99.1 and incorporated herein by reference.

The information in this Item 2.02 and the attached Exhibit 99.1 is being furnished and shall not be deemed “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section. The information in this Item 2.02 and the attached Exhibit 99.1 shall not be incorporated by reference into any registration statement or other document pursuant to the Securities Act of 1933, as amended.

Item 7.01 Regulation FD Disclosure.

On February 29, 2024, the Company made available an updated corporate presentation (the “Presentation”) that the Company intends to use, in whole or in part, in meetings with investors, analysts and others. The Presentation can be accessed through the “Investors” section of the Company’s website. A copy of the Presentation is furnished as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated by reference herein.

The information in this Item 7.01 and the attached Exhibit 99.2 is being furnished and shall not be deemed “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that Section. The information in this Item 7.01 and the attached Exhibit 99.2 shall not be incorporated by reference into any registration statement or other document pursuant to the Securities Act of 1933, as amended.

Item 9.01 Financial Statements and Exhibits.

d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	Press Release of Chimerix, Inc. dated February 29, 2024.
99.2	Chimerix, Inc. Corporate Presentation, dated February 29, 2024.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: February 29, 2024

Chimerix, Inc.

By: /s/ Michelle LaSpalato
Name: Michelle LaSpalato
Title: Chief Financial Officer



Chimerix Reports Fourth Quarter and Year End 2023 Financial Results and Provides Operational Update

– *ONC201 ACTION Study Progressing; Reiterate Interim OS Data Expected in 2025, Final OS Data Expected in 2026* –

– *Phase 2 ONC201 Data Published in Peer-Reviewed Journal of Clinical Oncology* –

– *\$204 Million in Cash and Equivalents at December 31, 2023* –

– *Conference Call at 8:30 a.m. ET Today* –

DURHAM, N.C., February 29, 2024 (GLOBE NEWSWIRE) -- Chimerix (NASDAQ:CMRX), a biopharmaceutical company whose mission it is to develop medicines that meaningfully improve and extend the lives of patients facing deadly diseases, today reported financial results for the fourth quarter and full-year ended December 31, 2023 and provided an operational update.

"Following strong clinical development in 2023, we remain very focused on advancing the ONC201 ACTION study, completing ONC206 dose escalation this year and strengthening our executive team as we prepare for potential commercialization of ONC201" said Mike Andriole, Chief Executive Officer of Chimerix. "We are making good progress enrolling our global Phase 3 ACTION study and are excited about the prospect of having interim overall survival data next year. In addition, we are pleased to share that the ONC201 Phase 2 data was recently published in the Journal of Clinical Oncology which further elucidates key characteristics of response and detailed patient-level data."

"During the fourth quarter, we were delighted to strengthen our Board of Directors with the addition of Lisa Decker, Ph.D., as well as strengthen the management team with the promotion of Michelle LaSpaluto to Chief Financial Officer and the additions of Tom Riga as Chief Operating and Commercial Officer and Pablo Lee, MD, as Vice President of Medical Affairs. We are confident their collective expertise will be invaluable assets to Chimerix as we seek to maximize our future growth potential for patients and shareholders," added Mr. Andriole.

ONC201

Journal of Clinical Oncology Publication

In February 2024, "ONC201 (dordaviprone) in Recurrent H3 K27M-mutant Diffuse Midline Glioma," was published in the Journal of Clinical Oncology (JCO), a peer reviewed journal of the American Society of Clinical Oncology (ASCO). The manuscript reports in detail the results of 50 patients with recurrent H3 K27M-DMG treated with monotherapy ONC201 who were evaluable for objective response by Response Assessment in Neuro-Oncology (RANO) high grade glioma (HGG) criteria. ONC201 demonstrated a median overall survival (mOS) of 13.7 months (95% CI: 8.0 - 20.3), with an overall two-year rate of survival of 35% (95% CI: 21-49) from the start of ONC201 treatment post-recurrence. Chimerix previously conducted a natural disease history study (n=43) in the recurrent setting evaluating patients who did not receive ONC201 which showed a mOS of 5.1 months (95% CI: 3.9 - 7.7) with an overall two-year survival rate of 11% (95% CI 3.3-24.2). The top-line data from this JCO publication were previously disclosed by Chimerix. The journal can be accessed at <https://ascopubs.org/doi/10.1200/jco.23.01134>.

The Phase 3 ACTION trial is currently enrolling patients at over 130 sites in 13 countries. The trial enrolls patients shortly after completion of front-line radiation therapy that is the standard of care. The study is designed to enroll 450 patients randomized 1:1:1 to receive ONC201 at one of two dosing frequencies or

placebo. Participants are randomized to receive 625mg of ONC201 once per week (the Phase 2 dosing regimen), 625mg twice per week on two consecutive days or placebo. The dose will be scaled by body weight for patients <52.5kg. For more information, please visit clinicaltrials.gov.

ONC206

ONC206 is a second generation ClpP agonist and DRD2 antagonist that has demonstrated monotherapy anti-cancer activity in pre-clinical models in primary CNS tumors and solid tumors outside of the CNS. Phase I dose escalation trials continue at the National Institutes of Health (NIH) and the Pacific Pediatric Neuro-Oncology Consortium (PNOC) in adult and pediatric CNS tumor patients, respectively. To date, ONC206 has been generally well tolerated with no dose limiting toxicities. The dose escalation trials are currently dosing at more frequent dose schedules, which are expected to increase the duration of therapeutic exposure. Chimerix expects to report preliminary safety and pharmacokinetic data from these trials beginning in mid-2024.

Fourth Quarter 2023 Financial Results

Chimerix's balance sheet at December 31, 2023 included \$204.5 million of capital available to fund operations, no debt, and approximately 88.9 million outstanding shares of common stock.

Chimerix reported a net loss of \$18.2 million, or \$0.20 per basic and diluted share, for the fourth quarter of 2023, compared to a net loss of \$21.0 million, or \$0.24 per basic and diluted share for the fourth quarter of 2022.

Research and development expenses decreased to \$15.6 million for the three-month period ended December 31, 2023, compared to \$19.3 million for the same period in 2022. This decrease was primarily driven by one-time costs associated with a reduction in force related to the TEMBEXA divestiture in the comparable 2022 period.

General and administrative expenses decreased to \$5.2 million for the fourth quarter of 2023, compared to \$5.3 million for the same period in 2022.

Full Year 2023 Financial Results

Chimerix reported a net loss of \$82.1 million, or \$0.93 per basic and diluted share, for the year ended December 31, 2023. For the year ended December 31, 2022, Chimerix recorded net income of \$172.2 million, or \$1.97 per basic and \$1.94 per diluted share. The decrease was primarily driven by the gain on sale of TEMBEXA to Emergent BioSolutions in 2022.

Revenues for 2023 decreased to \$0.3 million, compared to \$33.8 million in 2022. The decrease was primarily related to deliveries under international TEMBEXA procurement agreements in the comparable 2022 period.

Research and development expenses decreased to \$68.8 million for the year ended December 31, 2023, compared to \$71.6 million for the year ended December 31, 2022.

General and administrative expenses increased to \$24.6 million for the year ended December 31, 2023, compared to \$22.1 million for the year ended December 31, 2022.

Conference Call and Webcast

Chimerix will host a conference call and live audio webcast to discuss fourth quarter and full-year 2023 financial results and provide a business update today at 8:30 a.m. ET. To access the live conference call, please dial 646-307-1963 (domestic) or 800-715-9871 (international) at least five minutes prior to the start time and refer to conference ID 6933453. A live audio webcast of the call will also be available on the

Investors section of Chimerix's website, www.chimerix.com. An archived webcast will be available on the Chimerix website approximately two hours after the event.

About Chimerix

Chimerix is a biopharmaceutical company with a mission to develop medicines that meaningfully improve and extend the lives of patients facing deadly diseases. The Company's most advanced clinical-stage development program, ONC201, is in development for H3 K27M-mutant glioma.

Forward Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks and uncertainties that could cause actual results to differ materially from those projected. Forward-looking statements include those relating to, among other things, enrollment and timing of data for the Phase 3 ACTION study, the results of dose escalation trials of ONC206, and the impact of recent changes to the Board of Directors and management team. Among the factors and risks that could cause actual results to differ materially from those indicated in the forward-looking statements are risks related to the timing, completion and outcome of the Phase 3 ACTION study of ONC201; risks associated with repeating positive results obtained in prior preclinical or clinical studies in future studies; risks related to the clinical development of ONC206; and additional risks set forth in the Company's filings with the Securities and Exchange Commission. These forward-looking statements represent the Company's judgment as of the date of this release. The Company disclaims, however, any intent or obligation to update these forward-looking statements.

CONTACTS:

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Stern Investor Relations
212-362-1200
Will@sternir.com

CHIMERIX, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	December 31,	
	2023	2022
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 27,661	\$ 25,842
Short-term investments, available-for-sale	155,174	191,492
Accounts receivable	4	1,040
Prepaid expenses and other current assets	6,271	9,764
Total current assets	<u>189,110</u>	<u>228,138</u>
Long-term investments	21,657	48,626
Property and equipment, net of accumulated depreciation	224	227
Operating lease right-of-use assets	1,482	1,964
Other long-term assets	301	386
Total assets	<u>\$ 212,774</u>	<u>\$ 279,341</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 2,851	\$ 3,034
Accrued liabilities	15,592	17,381
Total current liabilities	<u>18,443</u>	<u>20,415</u>
Line of credit commitment fee	125	250
Lease-related obligations	1,177	1,819
Total liabilities	<u>19,745</u>	<u>22,484</u>
Stockholders' equity:		
Preferred stock, \$0.001 par value, 10,000,000 shares authorized at December 31, 2023 and 2022; no shares issued and outstanding as of December 31, 2023 and 2022	—	—
Common stock, \$0.001 par value; 200,000,000 shares authorized at December 31, 2023 and 2022; 88,929,300 and 88,054,127 shares issued and outstanding at December 31, 2023 and 2022, respectively	89	88
Additional paid-in capital	988,457	970,535
Accumulated other comprehensive gain (loss), net	7	(337)
Accumulated deficit	(795,524)	(713,429)
Total stockholders' equity	<u>193,029</u>	<u>256,857</u>
Total liabilities and stockholders' equity	<u>\$ 212,774</u>	<u>\$ 279,341</u>

CHIMERIX, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE (LOSS) INCOME
(in thousands, except share and per share data)

	Three Months Ended December 31,		Years Ended December 31,	
	2023	2022	2023	2022
Revenues:				
Procurement revenue	\$ —	\$ —	\$ —	\$ 31,971
Contract and grant revenue	4	439	275	942
Licensing revenue	—	—	49	536
Royalty revenue	—	375	—	375
Total revenues	4	814	324	33,824
Cost of goods sold	—	—	—	447
Gross Profit	4	814	324	33,377
Operating expenses:				
Research and development	15,642	19,281	68,788	71,631
General and administrative	5,172	5,347	24,601	22,132
Total operating expenses	20,814	24,628	93,389	93,763
Loss from operations	(20,810)	(23,814)	(93,065)	(60,386)
Other income:				
Interest income and other, net	2,649	2,737	10,970	2,919
Gain on sale of business, net	—	—	—	229,670
(Loss) income before income taxes	(18,161)	(21,077)	(82,095)	172,203
Income tax expense	—	(117)	—	36
Net (loss) income	(18,161)	(20,960)	(82,095)	172,167
Other comprehensive income (loss):				
Unrealized gain (loss) on investments, net	632	(300)	344	(316)
Comprehensive (loss) income	\$ (17,529)	\$ (21,260)	\$ (81,751)	\$ 171,851
Per share information:				
Net (loss) income, basic	\$ (0.20)	\$ (0.24)	\$ (0.93)	\$ 1.97
Net (loss) income, diluted	(0.20)	(0.24)	(0.93)	1.94
Weighted-average shares outstanding, basic	88,910,300	88,049,138	88,604,026	87,555,110
Weighted-average shares outstanding, diluted	88,910,300	88,049,138	88,604,026	88,776,147

Chimerix Corporate Presentation

February 29, 2024



Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to risks and uncertainties that could cause actual results to differ materially from those projected. Forward-looking statements include those relating to, among other things, the enrollment and timing of data for the Phase 3 ACTION study, the expected results of Phase 3 ACTION study of ONC201 and dose escalation trials of ONC206, our ability to successfully commercialize our current and future product candidates, the potential for royalty and milestone revenue from strategic collaborations, and projections regarding funding and timing of future data readouts. Among the factors and risks that could cause actual results to differ materially from those indicated in the forward-looking statements are risks related to the timing, completion and outcome of the Phase 3 ACTION study of ONC201; risks associated with repeating positive results obtained in prior preclinical or clinical studies in future studies; risks related to the clinical development of ONC206; and additional risks set forth in the Company's filings with the Securities and Exchange Commission. These forward-looking statements represent the Company's judgment as of the date of this release. The Company disclaims, however, any intent or obligation to update these forward-looking statements.

Investment highlights and key catalysts



Ph 3 ACTION study
actively enrolling



Significant
commercial potential



Corporate capability
and financial flexibility

ONC201 Ph 3 trial enrolling - interim OS data expected in 2025, final OS expected in 2026

First-Line H3 K27M-mutant diffuse glioma – The ACTION Study

- ✓ No approved therapies targeting H3 K27M diffuse glioma, an area of high unmet medical need
- ✓ First in class mechanism of action with clinical validation
- ✓ Patent protection thru 2037 (potential additional US patent term extension)

ONC206 in dose escalation

- ✓ Investigator reported response in non-H3 K27M mutated recurrent glioblastoma patient
- ✓ Dose escalation on track for completion beginning in mid 2024

Early-stage pipeline leverages external capital

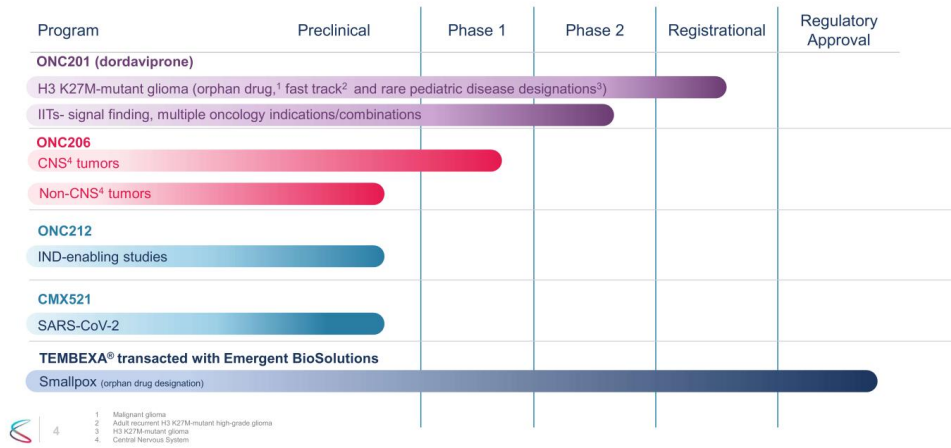
- ✓ Pre-clinical programs potential to advance to clinic or partner (ONC212, CMX521)
- ✓ Robust business development search and evaluation process

\$204 million in capital to fund operations as of December 31, 2023, no debt



3

Deep pipeline across all development stages



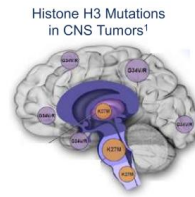
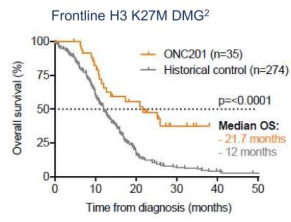

 1. Malignant glioma
 2. Adult recurrent H3 K27M-mutant high-grade glioma
 3. H3 K27M-mutant glioma
 4. Central Nervous System

**ONC201 (dordaviprone)
Phase 2 Data Analysis**



ONC201 data suggests potential to address high unmet need

- H3 K27M mutation is predominantly found among diffuse midline gliomas (DMGs) in young adults and children
- Frontline radiotherapy remains standard of care with transient benefit; resection often not feasible
- DMGs harboring the H3 K27M mutation are WHO Grade IV; historically invariably lethal
- Consistently longer OS of ONC201-treated H3 K27M DMG patients across:
 - Diverse external controls (historical, trials)
 - Sensitivity analysis (early event censoring)
 - Isolated tumor locations (thalamus, brainstem)



Recurrent H3 K27M DMG³

	Natural Disease History ⁴ (n=43)	ONC201 Phase 2 (n=50)
Median OS, mo (95% CI)	5.1 (3.9-7.7)	13.7 (8-20.3)
OS @ 12mo (95% CI)	23.6% (11.7-37.9)	57% (41-70)
OS @ 24mo (95% CI)	11.1% (3.3-24.2)	35% (21-49)



¹ Lulla RR et al. Sci Adv. 2016;2(3):e1501354

² Kochmann, Carl et al. "Clinical efficacy of ONC201 in H3 K27M-mutant diffuse midline glioma is driven by disruption of integrated metabolic and epigenetic pathways", Cancer Discovery, Aug 16, 2023

³ In company sponsored studies

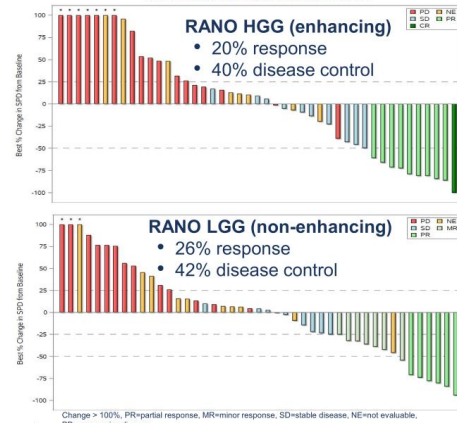
⁴ The median OS was 5.1 months for the subset of patients with H3 K27M-mutant diffuse glioma excluding DIPG, CSF dissemination, spinal or leptomeningeal disease (N=12), OS at 12 mos was 25.0%, OS at 24 mos was 16.7%

Phase 2 efficacy for ONC201 in recurrent H3 K27M DMG

- ONC201 monotherapy exhibited durable, clinically meaningful efficacy in recurrent H3 K27M-mutant DMG
 - Overall Response Rate (ORR) of 30% (95% CI: 18 - 45%) by RANO HGG and/or LGG dual reader BICR
 - RANO-HGG criteria assessed by dual reader BICR
 - ORR 20% (95% CI: 10 – 34%)
 - Median Duration of Response (DOR) 11.2 months (95% CI: 3.8 – not reached)
 - Median time to response 8.3 months (range 1.9 – 15.9)
 - Disease control rate 40% (95% CI: 26 – 55%)
 - PFS at 6 months 35% (95% CI: 21 – 49%); PFS at 12 months 30% (95% CI: 17 – 44%)
 - RANO-LGG criteria assessed by dual reader BICR
 - ORR 26% (95% CI: 15 – 40%)
 - Overall survival
 - 12 months: 57% (95% CI: 41 – 70%)
 - 24 months: 35% (95% CI: 21 – 49%)
- Improvements observed in performance status and reduction in corticosteroid use
- All Serious Adverse Events considered not related to ONC201 by sponsor

ONC201 waterfall plot – 30% RANO HGG / LGG response

ONC201 Ph 2 Efficacy Analysis by BICR in Recurrent H3 K27M-mutant Diffuse Midline Glioma



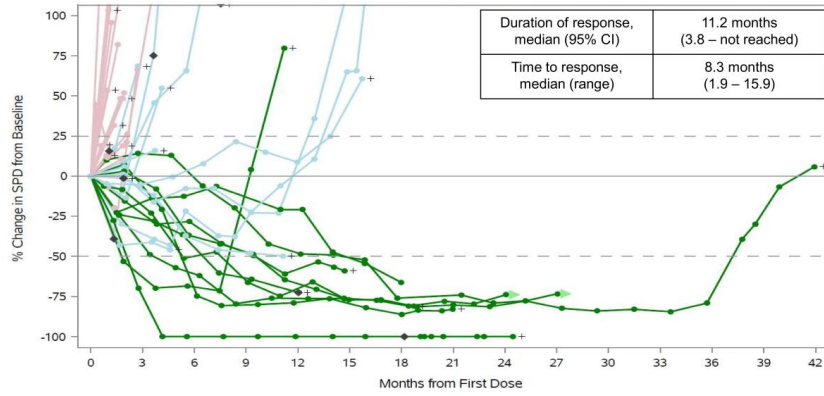
Arrillaga-Romany, et al, Journal of Clinical Oncology, Feb 2024

- Strict selection criteria to ensure responses attributable to single agent treatment
- Responses require both imaging and clinical criteria
- Dual reader blinded independent central review (BICR)
- Growing consensus that assessment of enhancing and non-enhancing disease (RANO-HGG and RANO-LGG criteria) is needed for diffuse midline glioma



Clinically meaningful and durable RANO-HGG responses

ONC201 Phase 2 Efficacy Analysis by BICR in Recurrent H3 K27M-mutant Diffuse Midline Glioma



SPD= sum of products of perpendicular diameters (target enhancing lesions per BICR)
Only patients with measurable target enhancing lesions by BICR at baseline and with post-baseline evaluations are included.
Three patients did not have on-treatment monotherapy MRIs available for BICR; one patient censored prior to first on-treatment MRI; one patient did not have measurable target lesion.

ONC201 safety

Healthy Adult Dose Escalation Study¹ Incidence of ONC201-Related Adverse Events (AE)

	125 mg N=33	375 mg N=15	625 mg N=45
Any treatment-related AE	36.0%	20.0%	51.0%
Grade 1	36.0%	20.0%	51.0%
Grade 2	0	0	0
Grade 3-5	0	0	0

- Treatment-related AEs were generally Grade 1 and transient across the clinical pharmacology program.

Treatment-related Adverse Events in > 5% Glioma Patients

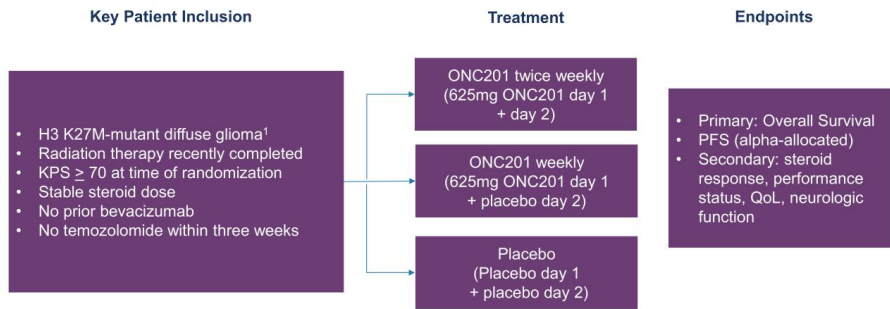
Treatment-related Adverse Events, Integrated Safety Data Set, (N=422 glioma patients) ¹	Related TEAEs	
	All grades	Grade ≥ 3
Any Treatment-related AE	56.2%	11.6%
Fatigue	20.1%	2.1%
Nausea	15.4%	0
Vomiting	11.1%	0.9%
Lymphocyte count decreased	9.2%	1.9%
ALT increased	8.5%	1.4%
Headache	7.3%	0
White blood cell count decreased	7.1%	0.2%
Decreased appetite	5.7%	0
Hypophosphataemia	5.2%	0

ONC201 Phase 3 ACTION Study Summary



Pivotal Phase 3 ACTION trial design

Now enrolling, a randomized, double-blind, placebo-controlled, multicenter international study in 450 newly diagnosed diffuse glioma patients whose tumor harbors an H3 K27M-mutation.



Design provides multiple paths for success

Interim data expected in 2025 and final data in 2026

Independent comparisons for each ONC201 arm versus control will be made at each timepoint.

First OS⁽¹⁾ Interim

- ~164 events
- Success at HR⁽³⁾~0.52

PFS by RANO HGG⁽²⁾

- ~286 events
- Success at HR~0.68

Second OS Interim

- ~246 events
- Success at HR~0.64

Final OS

- ~327 events
- Success at HR~0.73

Powering assumptions 0.65 expected HR for OS and 0.60 expected HR for PFS



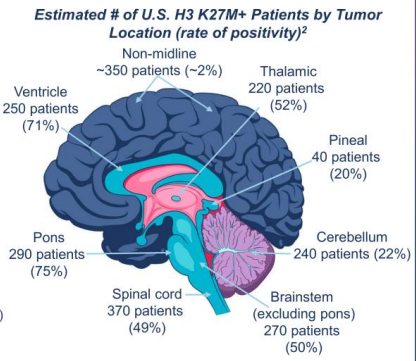
1. Overall Survival (OS)
2. Progression-free survival (PFS). PFS may provide valuable data for regulatory discussions.
3. Hazard Ratio

ONC201 Market Opportunity Assessment



Approximately 21,000 gliomas reported in the U.S. each year, affecting all locations in the brain¹

- **~40%** of 4,000+ **midline gliomas** are expected to harbor the H3 K27M mutation²
- **~2%** of 17,000+ **non-midline gliomas** are expected to harbor the H3 K27M mutation²
- Each year it is estimated that **~2,000** patients are affected by H3 K27M-mutant glioma in the U.S.;
- **~5,000** patients in the top seven global markets (by extrapolation of the estimated US incidence rate to the top seven markets)
- No approved therapies specifically for H3 K27M mutant glioma



[1] Ozonoff CE, et al. *Neuro Oncol*. 2022;24(Suppl 5):v1-v95. [2] Patient numbers and percentages are estimates (weighted avg per sample size) derived from a review of the literature from 2012-2020: [Althera K, et al. *Neuro Oncol*. 2014;16(11):140-6; Peng L, et al. *Hum Pathol*. 2015;46(11):1626-32; Solomon DA, et al. *Brain Pathol*. 2016;26(5):589-600;Pavali S, et al. *Acta Neuropathol Commun*. 2016;4(1):10; Abbas MS, et al. *Acta Neuropathol*. 2017;36(1):795-800; Wang L, et al. *Brain Pathol*. 2018;28:88-96; Castel D, et al. *Acta Neuropathol Commun*. 2018;6(6):117; Kuzmenko M, et al. *Neuro Oncol*. 2018;20(11):21-31; Abbas MS, et al. *ANM J Neurosci*. 2019;40(11):2834-2835; Duffner C, et al. *Acta Neuropathol (Berl)*. 2019;37(1):2025-2035; Sivara P, et al. *Neuro Oncol*. 2021;23(11):34-43; Mackay A, et al. *Cancer Cell*. 2017;32(4):526-537 e5; Huang T, et al. *Oncotarget*. 2018;9(96):3712-3724; Schreck KC, et al. *J Neurosci*. 2019;39(18):3743-3751; Chiba K, et al. *World Neurology*. 2020;11(4):423-425; Nakaya A, et al. *Neuro Oncol*. 2014;16(Suppl 3):409-410; Castel D, et al. *Acta Neuropathol*. 2015;126(2):412-21; Phuong-Duong DA, et al. *Acta Neuropathol*. 2012;124(5):424-47; Roca A, et al. *Neuro Oncol*. 2020;22(11):195-202; Giordano M, et al. *Childs Nerv Syst*. 2020;36(4):697-704; Wu G, et al. *Acta Neuropathol*. 2014;46(3):444-450; Wu G, et al. *Acta Neuropathol*. 2012;44(3):211-8; Taylor RS, et al. *Acta Neuropathol*. 2014;46(3):437-461; Sarrafian AA, et al. *Acta Neuropathol*. 2014;127(6):881-95; Elmer C, et al. *Neuro Oncol*. 2022;24(11):141-152; Buchkovec P, et al. *Acta Neuropathol*. 2014;126(4):574-83; Doreck P, et al. *J Neuropathol Exp Neurol*. 2018;174(1):102-111; Chih HC, et al. *Acta Neuropathol Commun*. 2020;8(1):40; V.S., et al. *Neuroscience*. 2019;465:1072-1081; Green M, et al. *Acta Neuropathol*. 2015;128(1):45-7; Abu Bakr, et al. *Med Pathol*. 2018;10(2):1296-1343; Currey EE, et al. *J Neurooncol*. 2020;148(3):607-611; Doreck A, et al. *J Clin Neurosci*. 2020;82(Pt A1):3-8; Alkandari OD, et al. *J Neurosurg Spine*. 2021;35(8):834-843; Nakata S, et al. *Brain Tumor Pathol*. 2022;34(3):113-119; Namura M, et al. *Acta Neuropathol*. 2017;134(6):941-956; Eschtbacher KL, et al. *Am J Surg Pathol*. 2021;45(8):1042-1050; P'Amico RS, et al. *J Neurooncol*. 2018;140(1):63-78; Karthausen A, et al. *Acta Neuropathol*. 2015;129(3):669-76; Alzobaida A, et al. *Neuro Oncol*. 2017;19(10):1327-1337].

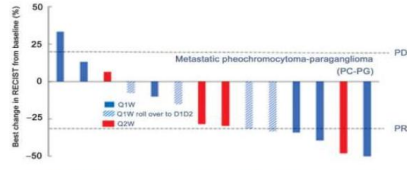
H3 K27M-mutant glioma: rapid ramp to peak revenue expected

- No approved therapies for H3 K27M mutant glioma, ONC201 is the leading program targeting this mutation globally
- Potential market opportunity ~\$750 million
- Approximately 5,000 patients in top seven markets¹
- Ultra-orphan indication drug pricing
- H3 K27M mutations most often in children / young adults
- Low barriers to adoption
 - No effective alternative therapies
 - High unaided awareness among neuro-oncologists
 - Mutation routinely identified by existing diagnostics
 - Longer-term, potentially combinable with other glioma therapies
- Patent protection for lead indication into 2037 - potential U.S. patent term extension (up to five years)

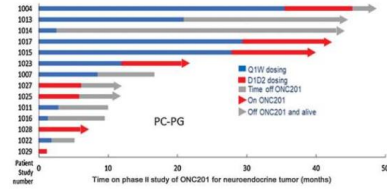


Potential for ONC201 beyond brain tumors

ONC201 efficacy results in dopamine-secreting tumors outside the brain



Ph 2 Study of ONC201 in Neuroendocrine Tumors in investigator-reported data from clinical trial NCT # (NT03034200)



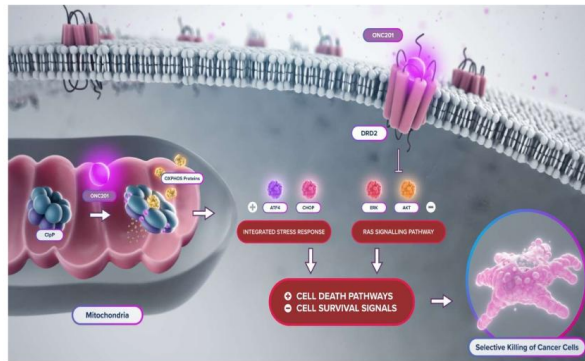
- Single agent responses in Ph 2 neuroendocrine trial of ONC201 observed in subset (PCPG)
- PCPG are adrenal-related tumors with elevated DRD2 expression
- Five patients have been treated > 1 year
- Fewer short-term and potential long-term toxicities than other paraganglioma therapies

ONC201 Mechanism of Action



ONC201 directly engages DRD2 and ClpP

ONC201 upregulates integrated stress response, inactivates Akt/ERK, and selectively induces tumor cell death



- ONC201 can selectively induce apoptosis in cancer cells by altering the activity of two protein targets
- DRD2 antagonism
 - DRD2 is a G protein-coupled neuroreceptor that regulates Ras signaling
 - ONC201 antagonizes DRD2, inhibiting Ras signaling pathways
- ClpP agonism
 - ClpP normally degrades misfolded proteins in mitochondria
 - ONC201 modifies ClpP conformation, promoting excess degradation of specific mitochondrial proteins important for cancer cell viability



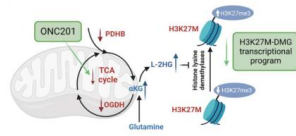
Mechanism and frontline clinical efficacy in H3 K27M DMG

CANCER DISCOVERY

RESEARCH ARTICLE | AUGUST 16 2023

Clinical efficacy of **ONC201** in H3K27M-mutant diffuse midline gliomas is driven by disruption of integrated metabolic and epigenetic pathways

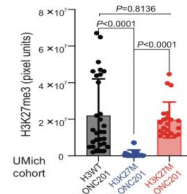
Mitochondrial effects reverse H3 K27me3-loss hallmark of H3 K27M



Provides ClpP connection to H3 K27M
Anchors MOA directly to targeting H3 K27M

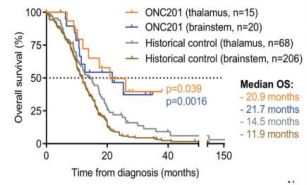


H3 K27me3-loss reversal evident in ONC201-treated H3 K27M patients



Increased confidence in Ph3 dose

Front-line ONC201 following RT survival benefit



Extends documented benefit to front-line, pediatrics, and brainstem

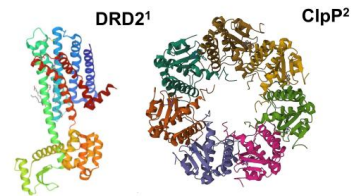
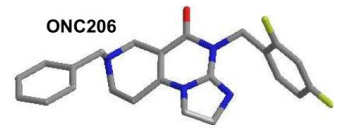
Median OS:
- 23.9 months
- 21.7 months
- 14.5 months
- 11.9 months

ONC206



ONC206: oral brain penetrant DRD2 antagonist + ClpP agonist

- Second generation imipridone
 - Increased potency
 - Indications beyond H3 K27M-mutant glioma
- Monotherapy efficacy across multiple preclinical models of CNS and non-CNS tumors
 - Tumor regression in patient-derived xenografts
- Oral dose escalation trials with intensified dosing are ongoing in CNS cancers
- Monotherapy response in recurrent GBM patient without the H3 K27M mutation
 - Differentiated from ONC201 glioma responses that were exclusive to H3 K27M

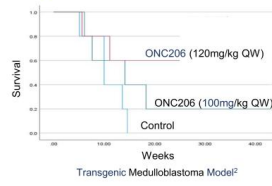


ONC206 monotherapy activity CNS and non-CNS cancer models

CNS Tumors

Glioblastoma¹

Medulloblastoma²



Non-CNS Solid Tumors

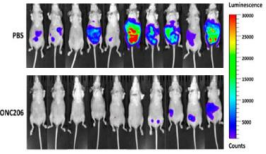
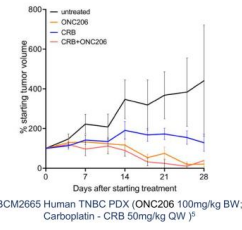
Cholangiocarcinoma¹

Endometrial cancer³

Pheochromocytoma/paraganglioma

Ovarian cancer⁴

Triple-negative breast cancer⁵



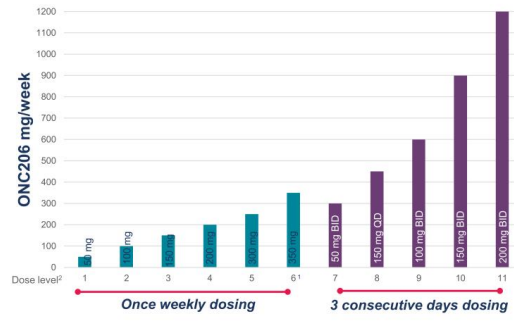
23

1. Theeler et al, SNO 2020
2. Mahboubi et al, ISPNIG 2020
3. Hu et al, Cancer 2022
4. Tucker et al, American Journal of Cancer Research, 2022
5. Baek et al, SABCS 2023

ONC206 dose escalation to more frequent dosing ongoing

Dose escalation on track for completion in mid 2024

- No DLTs observed with weekly dosing³
- Similar safety profile in adults and pediatrics
- Majority of treatment-related AEs are mild to moderate
- Most common treatment-related events are fatigue, lymphocyte count decreased, and vomiting
- No dose related toxicity with dose escalation³ – dose escalation continuing



24

1. Dose level 6 was conducted in adults only
2. Pediatric dose scaled by body weight
3. As of publication date February 29, 2024

Ongoing pipeline development

- ONC212 GPR132 + ClpP agonist
 - GLP-tox studies complete, potential to advance to IND, work performed with support from academic grants
 - Preclinical studies are ongoing to evaluate additional oncology indications and predictive biomarkers for ONC212 for clinical development
- CMX521 anti-SARS-CoV-2 preclinical activity
 - Monotherapy efficacy in mouse-adapted SARS-CoV-2-MA10 model across multiple endpoints
 - \$2m grant to fund research collaboration with University of North Carolina/READDI¹



Corporate Update



TEMBEXA® deal term summary

Emergent BioSolutions is an experienced biodefense company collaborating with government agencies to protect public health

Terms summary:

- \$238 million received upfront at closing in Q3 2022
- Up to an additional \$124 million in potential BARDA procurement milestones
- 20% royalty on future U.S. gross profit with volumes above 1.7 million courses of therapy
- 15% royalty of all international gross profit
- Up to an additional \$12.5 million in development milestones

TEMBEXA[®]
brincidofovir
1.0 mg/mL oral suspension | 100 mg tablets



Financial strength supports development through key catalysts



Ph 3 ACTION study
actively enrolling



Significant
commercial potential



Corporate capability
and financial flexibility

ONC201 Ph 3 trial enrolling - interim OS data expected in 2025, final OS expected in 2026

First-Line H3 K27M-mutant diffuse glioma – The ACTION Study

- ✓ No approved therapies targeting H3 K27M diffuse glioma, an area of high unmet medical need
- ✓ First in class mechanism of action with clinical validation
- ✓ Patent protection thru 2037 (potential additional US patent term extension)

ONC206 in dose escalation

- ✓ Investigator reported response in non-H3 K27M mutated recurrent glioblastoma patient
- ✓ Dose escalation on track for completion beginning in mid 2024

Early-stage pipeline leverages external capital

- ✓ Pre-clinical programs potential to advance to clinic or partner (ONC212, CMX521)
- ✓ Robust business development search and evaluation process

\$204 million in capital to fund operations as of December 31, 2023, no debt

Chimerix Corporate
Presentation



