



2seventy bio Reports Fourth Quarter and Full Year 2023 Financial Results and Recent Operational Progress

March 5, 2024 12:00 PM EST

New strategic path forward as Abecma-focused company announced in January 2024; on track to close Asset Sale of R&D pipeline to Regeneron in the first half of 2024

U.S. Food and Drug Administration Oncologic Drugs Advisory Committee scheduled for March 15, 2024, to review data supporting the supplemental Biologics License Application for Abecma® (idecabtagene vicleucel) for triple-class exposed relapsed or refractory multiple myeloma

Abecma generated \$56 million U.S. commercial revenue in the fourth quarter of 2023 and \$358 million for the full year, shared equally with Bristol Myers Squibb

Ended quarter with \$221.8 million cash, cash equivalents, and marketable securities; cash runway extended beyond 2027

Conference call today at 8:00 AM ET

CAMBRIDGE, Mass.--(BUSINESS WIRE)--Mar. 5, 2024-- [2seventy bio, Inc.](https://www.2seventybio.com) (Nasdaq: TSVT), a leading immuno-oncology cell therapy company, today reported financial results and recent highlights for the fourth quarter and full year ended December 31, 2023.

"In the past weeks and months, 2seventy has made significant changes to our business and cost structure designed to optimize our ability to unlock value for *Abecma*," said Chip Baird, incoming CEO. "While *Abecma* experienced continued competitive headwinds in the fourth quarter, we and our partners at Bristol Myers Squibb are approaching critical milestones that we believe will shift *Abecma* back to growth, including the upcoming ODAC meeting next week to review our sBLA for *Abecma* in earlier lines. Given the strength of the KarMMA-3 data, which was presented at the American Society of Hematology Annual Meeting and Exposition last year, and the positive response from regulators in other geographies, we have confidence in the outcome of the ODAC meeting and potential for approval in the third line setting. With the potential for this expanded label and continuing commercial execution, in addition to the ongoing KarMMA-9 study in newly-diagnosed patients with inadequate response to transplant, we have confidence in *Abecma's* role as an important treatment option for patients living with multiple myeloma."

ABECMA COMMERCIAL AND REGULATORY HIGHLIGHTS

- Fourth quarter *Abecma* U.S. revenues, as reported by Bristol Myers Squibb (BMS), were \$56 million. The decline in fourth quarter sales was due to ongoing competition from other BCMA-targeted therapies. We anticipate that commercial performance for the first part of 2024 will continue to be impacted by competitive dynamics until the potential expansion of the label to the third-line (3L) setting.
- In order to restore growth in *Abecma*, we and BMS are focused on progressing into earlier lines of therapy, rapidly expanding the site footprint and competitively differentiating *Abecma's* safety and efficacy profile with real-world data.
- The supplemental biologic license application (sBLA) for *Abecma* based on the KarMMA-3 clinical study will be reviewed at a meeting of the U.S. FDA's Oncologic Drugs Advisory Committee (ODAC) on March 15, 2024. If approved, this would expand the *Abecma* label into the larger 3L setting.
- We and BMS are prepared to meet the anticipated increased demand based on the larger eligible patient population and anticipate continuing to deliver *Abecma* consistently, on-time and in-spec.
- We and BMS share equally in all profits and losses related to development, manufacturing, and commercialization of *Abecma* in the U.S. We reported collaborative arrangement revenue of \$2.0 million related to our collaboration with BMS for the three months ended December 31, 2023, and collaborative arrangement revenue of \$50.0 million related to our collaboration with BMS for the twelve months ended December 31, 2023.

ABECMA CLINICAL HIGHLIGHTS

- At the 65th American Society of Hematology (ASH) Annual Meeting and Exposition in December 2023, we and BMS presented data from the KarMMa-3 and KarMMa-2, cohort 2c studies of *Abecma*.
- In **KarMMa-3**, with a median follow-up of more than 30 months, *Abecma* maintained a 51% reduction in risk of disease progression or death with median PFS of 13.8 months compared with 4.4 months for standard regimens in triple class exposed and refractory patients exposed to 2-4 prior lines of therapy.
 - Responses were significantly improved with *Abecma* and continued to deepen over time with a complete response rate of 44% vs. 5% for standard regimens with consistent benefit observed across subgroups.
 - In the KarMMa-3 study, the well-established safety profile of *Abecma* remained consistent with generally predictable and mostly low-grade occurrences of cytokine release syndrome and neurotoxicity. There were no new CRS or iINT events with ide-cel since the interim analysis and no parkinsonism or Guillain-Barré syndrome were reported.
 - No secondary primary malignancies of T-cell origin were reported in the ide-cel arm.
 - No new safety signals.
 - The Patient Related Outcomes in KarMMa-3 demonstrated clinically meaningful Health Related Quality of Life benefits, including key multiple myeloma symptoms and functioning domains, with a single infusion of *Abecma* treatment compared with standard regimens treatment in patients with triple class exposed relapsed and refractory multiple myeloma.
- In **KarMMa-2, cohort 2c** in newly diagnosed multiple myeloma, *Abecma* demonstrated deep and durable responses with a 77% complete response rate and median PFS not reached with no new safety signals with extended follow-up from the KarMMa-2 study.
 - The KarMMa-2, cohort 2c study has a similar patient population and study design to the registration-enabling KarMMa-9 study which is currently enrolling patients.

CORPORATE RESTRUCTURING

- In January 2024, we announced a strategic realignment of our business to focus solely on *Abecma*. In connection with our strategic re-alignment, we entered into an asset purchase agreement with Regeneron Pharmaceuticals, Inc. (Regeneron) to sell our oncology and autoimmune research and development programs, clinical manufacturing capabilities, and related platform technologies (the Asset Sale). The Asset Sale continues to be on track for closing in the first half of 2024.
- These changes are expected to yield annual savings of approximately \$150 million in 2024 and approximately \$200 million in 2025, inclusive of one-time cash restructuring costs of approximately \$8 - 10 million.
- We expect to have extended cash runway beyond 2027.

UPCOMING ANTICIPATED MILESTONES

- FDA decision on the sBLA for *Abecma* in 3L multiple myeloma is anticipated following the ODAC meeting on March 15, 2024
- Close of the Asset Sale to Regeneron expected in the first half of 2024

SELECT FOURTH QUARTER AND FULL YEAR FINANCIAL RESULTS

- Total revenues were \$10.7 million for the three months ended December 31, 2023, compared to \$56.2 million for the three months ended December 31, 2022. Total revenues were \$100.4

million for the twelve months ended December 31, 2023, compared to \$91.5 million for the twelve months ended December 31, 2022.

- Research and development expenses were \$51.2 million for the three months ended December 31, 2023, compared to \$60.1 million for the three months ended December 31, 2022. Research and development expenses were \$230.8 million for the twelve months ended December 31, 2023, compared to \$248.7 million for the twelve months ended December 31, 2022.
- Selling, general and administrative expenses were \$16.2 million for the three months ended December 31, 2023, compared to \$18.7 million for the three months ended December 31, 2022. Selling, general and administrative expenses were \$69.4 million for the twelve months ended December 31, 2023, compared to \$79.5 million for the twelve months ended December 31, 2022.
- Net loss was \$56.8 million for the three months ended December 31, 2023, compared to \$23.1 million for the three months ended December 31, 2022. Net loss was \$217.6 million for the twelve months ended December 31, 2023, compared to \$254.2 million for the twelve months ended December 31, 2022.

Conference Call Information

2seventy bio will host a conference call and live webcast today, March 5, at 8:00 a.m. ET to discuss fourth quarter and full year 2023 financial results and recent business highlights. To join the live conference call, please register at: <https://register.vevent.com/register/B11f96356c45184868a0cde91b2864ffd8>. Upon registering, each participant will be provided with call details and access codes. The live webcast may be accessed by visiting the event link at: <https://edge.media-server.com/mmc/p/3ob85kez/>.

A replay of the webcast may be accessed from the "News and Events" page in the Investors and Media section of our website at <https://ir.2seventybio.com/> and will be available for 30 days following the event.

ABECMA U.S. INDICATION

ABECMA (idecabtagene vicleucel) is a B-cell maturation antigen (BCMA)-directed genetically modified autologous T cell immunotherapy indicated for the treatment of adult patients with relapsed or refractory multiple myeloma after four or more prior lines of therapy, including an immunomodulatory agent, a proteasome inhibitor, and an anti-CD38 monoclonal antibody.

IMPORTANT SAFETY INFORMATION

BOXED WARNING: CYTOKINE RELEASE SYNDROME, NEUROLOGIC TOXICITIES, HLH/MAS, AND PROLONGED CYTOPENIA

- Cytokine Release Syndrome (CRS), including fatal or life-threatening reactions, occurred in patients following treatment with *ABECMA*. Do not administer *ABECMA* to patients with active infection or inflammatory disorders. Treat severe or life-threatening CRS with tocilizumab or tocilizumab and corticosteroids.
- Neurologic Toxicities, which may be severe or life-threatening, occurred following treatment with *ABECMA*, including concurrently with CRS, after CRS resolution, or in the absence of CRS. Monitor for neurologic events after treatment with *ABECMA*. Provide supportive care and/or corticosteroids as needed.
- Hemophagocytic Lymphohistiocytosis/Macrophage Activation Syndrome (HLH/MAS) including fatal and life-threatening reactions, occurred in patients following treatment with *ABECMA*. HLH/MAS can occur with CRS or neurologic toxicities.
- Prolonged Cytopenia with bleeding and infection, including fatal outcomes following stem cell transplantation for hematopoietic recovery, occurred following treatment with *ABECMA*.
- *ABECMA* is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the *ABECMA* REMS.

Warnings and Precautions:

Cytokine Release Syndrome (CRS): CRS, including fatal or life-threatening reactions, occurred following treatment with *ABECMA* in 85% (108/127) of patients. Grade 3 or higher CRS occurred in 9% (12/127) of patients, with Grade 5 CRS reported in one (0.8%) patient. The median time to onset of CRS, any grade, was 1 day (range: 1 - 23 days) and the median duration of CRS was 7 days (range: 1 - 63 days). The most common manifestations included pyrexia, hypotension, tachycardia, chills, hypoxia, fatigue, and headache. Grade 3 or higher events that may be associated with CRS include hypotension, hypoxia, hyperbilirubinemia, hypofibrinogenemia, acute respiratory distress syndrome (ARDS), atrial fibrillation, hepatocellular injury, metabolic acidosis, pulmonary edema, multiple organ dysfunction syndrome, and HLH/MAS.

Identify CRS based on clinical presentation. Evaluate for and treat other causes of fever, hypoxia, and hypotension. CRS has been reported to be associated with findings of HLH/MAS, and the physiology of the syndromes may overlap. In patients with progressive symptoms of CRS or refractory CRS despite treatment, evaluate for evidence of HLH/MAS.

Fifty four percent (68/127) of patients received tocilizumab (single dose: 35%; more than 1 dose: 18%). Overall, 15% (19/127) of patients received at least 1 dose of corticosteroids for treatment of CRS. All patients that received corticosteroids for CRS received tocilizumab. Ensure that a minimum of 2 doses of tocilizumab are available prior to infusion of *ABECMA*.

Monitor patients at least daily for 7 days following *ABECMA* infusion at the REMS-certified healthcare facility for signs or symptoms of CRS and monitor patients for signs or symptoms of CRS for at least 4 weeks after *ABECMA* infusion. At the first sign of CRS, institute treatment with supportive care, tocilizumab and/or corticosteroids as indicated.

Counsel patients to seek immediate medical attention should signs or symptoms of CRS occur at any time.

Neurologic Toxicities: Neurologic toxicities, which may be severe or life-threatening, occurred following treatment with *ABECMA* in 28% (36/127) of patients receiving *ABECMA*, including Grade 3 in 4% (5/127) of patients. One patient had ongoing Grade 2 neurotoxicity at the time of death. Two patients had ongoing Grade 1 tremor at the time of data cutoff. The median time to onset of neurotoxicity was 2 days (range: 1 - 42 days). CAR T cell-associated neurotoxicity resolved in 92% (33/36) of patients with a median time to resolution of 5 days (range: 1 - 61 days). The median duration of neurotoxicity was 6 days (range: 1 - 578) in all patients including 3 patients with ongoing neurotoxicity. Thirty-four patients with neurotoxicity had CRS with onset in 3 patients before, 29 patients during, and 2 patients after CRS. The most frequently reported manifestations of CAR T cell-associated neurotoxicity include encephalopathy, tremor, aphasia, and delirium. Grade 4 neurotoxicity and cerebral edema in 1 patient, Grade 3 myelitis, and Grade 3 parkinsonism have been reported with *ABECMA* in another study in multiple myeloma.

Monitor patients at least daily for 7 days following *ABECMA* infusion at the REMS-certified healthcare facility for signs or symptoms of neurologic toxicities and monitor patients for signs or symptoms of neurologic toxicities for at least 4 weeks after *ABECMA* infusion and treat promptly. Rule out other causes of neurologic symptoms. Neurologic toxicity should be managed with supportive care and/or corticosteroids as needed.

Counsel patients to seek immediate medical attention should signs or symptoms occur at any time.

Hemophagocytic Lymphohistiocytosis (HLH)/Macrophage Activation Syndrome (MAS): HLH/MAS occurred in 4% (5/127) of patients receiving *ABECMA*. One patient developed fatal multi-organ HLH/MAS with CRS and another patient developed fatal bronchopulmonary aspergillosis with contributory HLH/MAS. Three cases of Grade 2 HLH/MAS resolved. All events of HLH/MAS had onset within 10 days of receiving *ABECMA* with a median onset of 7 days (range: 4 - 9 days) and occurred in the setting of ongoing or worsening CRS. Two patients with HLH/MAS had overlapping neurotoxicity. The manifestations of HLH/MAS include hypotension, hypoxia, multiple organ dysfunction, renal dysfunction, and cytopenia. HLH/MAS is a potentially life-threatening condition with a high mortality rate if not recognized early and treated. Treatment of HLH/MAS should be administered per institutional guidelines.

***ABECMA* REMS:** Due to the risk of CRS and neurologic toxicities, *ABECMA* is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the *ABECMA* REMS. Further information is available at www.AbecmaREMS.com or 1-888-423-5436.

Hypersensitivity Reactions: Allergic reactions may occur with the infusion of *ABECMA*. Serious hypersensitivity reactions, including anaphylaxis, may be due to dimethyl sulfoxide (DMSO) in *ABECMA*.

Infections: *ABECMA* should not be administered to patients with active infections or inflammatory disorders. Severe, life-threatening, or fatal infections occurred in patients after *ABECMA* infusion. Infections (all grades) occurred in 70% of patients. Grade 3 or 4 infections occurred in 23% of patients. Overall, 4 patients had Grade 5 infections (3%); 2 patients (1.6%) had Grade 5 events of pneumonia, 1 patient (0.8%) had Grade 5 bronchopulmonary aspergillosis, and 1 patient (0.8%) had cytomegalovirus (CMV) pneumonia associated with *Pneumocystis jirovecii*. Monitor patients for signs and symptoms of infection before and after *ABECMA* infusion and treat appropriately. Administer prophylactic, pre-emptive, and/or therapeutic antimicrobials according to standard institutional guidelines.

Febrile neutropenia was observed in 16% (20/127) of patients after *ABECMA* infusion and may be concurrent with CRS. In the event of febrile neutropenia, evaluate for infection and manage with broad-spectrum antibiotics, fluids, and other supportive care.

Viral Reactivation: CMV infection resulting in pneumonia and death has occurred following *ABECMA* administration. Monitor and treat for CMV reactivation in accordance with clinical guidelines. Hepatitis B virus (HBV) reactivation, in some cases resulting in fulminant hepatitis, hepatic failure, and death, can occur in patients treated with drugs directed against plasma cells. Perform screening for CMV, HBV, hepatitis C virus (HCV), and human immunodeficiency virus (HIV) in accordance with clinical guidelines before collection of cells for manufacturing.

Prolonged Cytopenias: In the clinical study, 41% of patients (52/127) experienced prolonged Grade 3 or 4 neutropenia and 49% (62/127) experienced prolonged Grade 3 or 4 thrombocytopenia that had not resolved by Month 1 following *ABECMA* infusion. In 83% (43/52) of patients who recovered from Grade 3 or 4 neutropenia after Month 1, the median time to recovery from *ABECMA* infusion was 1.9 months. In 65% (40/62) of patients who recovered from Grade 3 or 4 thrombocytopenia, the median time to recovery was 2.1 months.

Three patients underwent stem cell therapy for hematopoietic reconstitution due to prolonged cytopenia. Two of the three patients died from complications of prolonged cytopenia. Monitor blood counts prior to and after *ABECMA* infusion. Manage cytopenia with myeloid growth factor and blood product transfusion support.

Hypogammaglobulinemia: Hypogammaglobulinemia was reported as an adverse event in 21% (27/127) of patients; laboratory IgG levels fell below 500 mg/dl after infusion in 25% (32/127) of patients treated with *ABECMA*.

Monitor immunoglobulin levels after treatment with *ABECMA* and administer IVIG for IgG <400 mg/dl. Manage appropriately per local institutional guidelines, including infection precautions and antibiotic or antiviral prophylaxis.

The safety of immunization with live viral vaccines during or after *ABECMA* treatment has not been studied. Vaccination with live virus vaccines is not recommended for at least 6 weeks prior to the start of lymphodepleting chemotherapy, during *ABECMA* treatment, and until immune recovery following treatment with *ABECMA*.

Secondary Malignancies: Patients treated with *ABECMA* may develop secondary malignancies. Monitor life-long for secondary malignancies. If a secondary malignancy occurs, contact Bristol-Myers Squibb at 1-888-805-4555 to obtain instructions on patient samples to collect for testing of secondary malignancy of T cell origin.

Effects on Ability to Drive and Operate Machinery: Due to the potential for neurologic events, patients receiving *ABECMA* are at risk for altered or decreased consciousness or coordination in the 8 weeks following *ABECMA* infusion. Advise patients to refrain from driving and engaging in

hazardous occupations or activities, such as operating heavy or potentially dangerous machinery, during this initial period.

Adverse Reactions: The most common nonlaboratory adverse reactions include CRS, infections – pathogen unspecified, fatigue, musculoskeletal pain, hypogammaglobulinemia, diarrhea, upper respiratory tract infection, nausea, viral infections, encephalopathy, edema, pyrexia, cough, headache, and decreased appetite.

Please see full Prescribing Information, including Boxed WARNINGS and Medication Guide.

About Bristol Myers Squibb and 2seventy bio

Abecma is being jointly developed and commercialized in the U.S. as part of a Co-Development, Co-Promotion, and Profit Share Agreement between Bristol Myers Squibb and 2seventy bio. Bristol Myers Squibb assumes sole responsibility for *Abecma* drug product manufacturing and commercialization outside of the U.S. The companies' broad clinical development program for *Abecma* includes ongoing and planned clinical studies (KarMMa-2, KarMMa-3, KarMMa-9) in earlier lines of treatment for patients with multiple myeloma. For more information visit clinicaltrials.gov.

About 2seventy bio

Our name, 2seventy bio, reflects why we do what we do - TIME. Cancer rips time away, and our goal is to work at the maximum speed of translating human thought into action – 270 miles per hour – to give the people we serve more time. With a deep understanding of the human body's immune response to tumor cells and how to translate cell therapies into practice, we're applying this knowledge to deliver the first FDA-approved CAR T cell therapy for multiple myeloma. We are focused on delivering therapies that are designed with the goal to "think" smarter and faster than the disease. Importantly, we remain focused on accomplishing these goals by staying genuine and authentic to our "why" and keeping our people and culture top of mind every day.

For more information, visit www.2seventybio.com.

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Cautionary Note Regarding Forward-Looking Statements

This release contains "forward-looking statements" within the meaning of applicable laws and regulations. These statements include, but are not limited to: statements about our plans, strategies, timelines and expectations with respect to the regulatory approval of ABECMA (ide-cel) in additional indications and in earlier line settings; statements regarding expected ABECMA U.S. revenue; statements regarding expected benefits from our strategic collaboration with BMS; statements about the efficacy and perceived therapeutic benefits of ABECMA; statements regarding the expected timing and anticipated benefits of the Asset Sale; statements about our strategic realignment and expected cost savings; statements regarding our financial condition, expenses, results of operations, expectations regarding use of capital, cash runway and other future financial results; and statements about our ability to execute our strategic priorities. Any forward-looking statements in this press release are based on management's current expectations and beliefs and are subject to a number of risks, uncertainties and important factors that may cause actual events or results to differ materially from those expressed or implied by any forward-looking statements contained in this press release, including, without limitation, our limited independent operating history and the risk that our accounting and other management systems may not be prepared to meet the financial reporting and other requirements of operating as an independent public company; the risk that our BLAs and INDs will not be accepted for filing by the FDA on the timeline that we expect, or at all; the risk that Abecma will not be as commercially successful as we may anticipate; the risk that our strategic realignment to focus on the development and commercialization of Abecma may not be as successful as anticipated, may fail to achieve the anticipated cost savings, and may cause disruptions in our business that could make it difficult to achieve our strategic objectives; the risk that we may not be able to successfully or timely complete the Asset Sale; and the risk that we are unable to manage our operating expenses or cash use for operations. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in our annual report on Form 10-K for the year ended December 31, 2023, as supplemented and/or modified by any other filings that we will make with the Securities and Exchange Commission in the future. All information in this press release is as of the date of this release, and we undertake no duty to update this information unless required by law.

2seventy bio, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(unaudited)
(in thousands, except per share data)

	For the three months ended December 31,		For the twelve months ended December 31,	
	2023	2022	2023	2022
Revenue:				
Service revenue	3,348	41,126	24,144	55,489
Collaborative arrangement revenue	7,336	13,933	71,601	32,358
Royalty and other revenue	-	1,118	4,642	3,649
Total revenues	10,684	56,177	100,387	91,496
Operating expenses:				
Research and development	51,217	60,144	230,758	248,735
Cost of manufacturing for commercial collaboration	3,147	4,019	14,819	14,851
Selling, general and administrative	16,201	18,701	69,414	79,450
Share of collaboration loss	-	-	-	9,642
Restructuring expenses	-	-	8,614	-
Cost of royalty and other revenue	-	474	2,099	1,726
Change in fair value of contingent consideration	55	51	235	232
Goodwill impairment charge	-	-	12,056	-
Total operating expenses	70,620	83,389	337,995	354,636

Loss from operations	(59,936)	(27,212)	(237,608)	(263,140)
Interest income, net	3,648	1,491	12,413	2,932
Other (expense) income, net	(534)	2,578	7,625	6,055
Loss before income taxes	(56,822)	(23,143)	(217,570)	(254,153)
Income tax (expense) benefit	-	-	-	-
Net loss	(56,822)	(23,143)	(217,570)	(254,153)
Net loss per share - basic and diluted	(1.11)	(0.60)	(4.42)	(7.13)
Weighted-average number of common shares used in computing net loss per share - basic and diluted	51,383	38,679	49,276	35,637

2seventy bio, Inc.
Condensed Consolidated Balance Sheet Data
(unaudited)
(in thousands)

	As of December 31, 2023	As of December 31, 2022
Cash, cash equivalents and marketable securities	\$ 221,805	\$ 267,684
Total assets	565,426	656,665
Total liabilities	310,126	346,199
Total stockholders' equity	255,300	310,466

View source version on [businesswire.com](https://www.businesswire.com/news/home/20240305186843/en/): <https://www.businesswire.com/news/home/20240305186843/en/>

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