UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2024

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to

Commission file number: **001-33137**

EMERGENT

EMERGENT BIOSOLUTIONS INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**14-1902018**
(State or Other Jurisdiction of Incorporation or Organization)	*(I.R.S. Employer Identification No.)*

300 Professional Drive

Gaithersburg, MD 20879

(Address and zip code of Principal Executive Offices)

(240) 631-3200
(Registrant's Telephone Number, Including Area Code)

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

Title of each class	*Trading Symbol*	*Name of each exchange on which registered*
Common Stock, $0.001 par value per share	**EBS**	**New York Stock Exchange**

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐	Smaller reporting company	☐
		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. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of July 30, 2024, the registrant had 52,906,624 shares of common stock outstanding.

Emergent BioSolutions Inc. and Subsidiaries
Form 10-Q
TABLE OF CONTENTS

PART I. FINANCIAL INFORMATION

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, including statements regarding the future performance of Emergent BioSolutions Inc. or any of our businesses, our business strategy, future operations, future financial position, future revenues and earnings, our ability to achieve the objectives of our restructuring initiatives, including our future results, projected costs, prospects, plans and objectives of management, are forward-looking statements. We generally identify forward-looking statements by using words like "anticipate," "believe," "continue," "could," "estimate," "expect," "forecast," "future," "goal," "intend," "may," "plan," "position," "possible," "potential," "predict," "project," "should," "target," "will," "would," and similar expressions or variations thereof, or the negative thereof, but these terms are not the exclusive means of identifying such statements. These forward-looking statements are based on our current intentions, beliefs, assumptions and expectations regarding future events based on information that is currently available. You should realize that if underlying assumptions prove inaccurate or unknown risks or uncertainties materialize, actual results could differ materially from our expectations. You are, therefore, cautioned not to place undue reliance on any forward-looking statement contained herein. Any such forward-looking statement speaks only as of the date on which such statement is made and, except as required by law, we do not undertake any obligation to update any forward-looking statement to reflect new information, events or circumstances.

There are a number of important factors that could cause our actual results to differ materially from those indicated by such forward-looking statements, including, among others:

- the availability of U.S. government ("USG") funding for contracts related to procurement of our medical countermeasures ("MCM"), including CYFENDUS® (Anthrax Vaccine Adsorbed (AVA), Adjuvanted), previously known as AV7909, BioThrax® (Anthrax Vaccine Adsorbed) and ACAM2000® (Smallpox (Vaccinia) Vaccine, Live) among others, as well as contracts related to development of medical countermeasures;
- the availability of government funding for our other commercialized products, including Ebanga™ (ansuvimab-zykl) and BAT® (Botulism Antitoxin Heptavalent (A,B,C,D,E,F,G)-(Equine));
- our ability to meet our commitments to quality and compliance in all of our manufacturing operations;
- our ability to negotiate additional USG procurement or follow-on contracts for our MCM products that have expired or will be expiring;
- the commercial availability and acceptance of over-the-counter NARCAN® (naloxone HCl) Nasal Spray;
- the impact of a generic and competitive marketplace on NARCAN® Nasal Spray and future NARCAN® Nasal Spray sales;
- our ability to perform under our contracts with the USG, including the timing of and specifications relating to deliveries;
- our ability to provide Bioservices (as defined below) for the development and/or manufacture of product and/or product candidates of our customers at required levels and on required timelines;
- the ability of our contractors and suppliers to maintain compliance with current good manufacturing practices and other regulatory obligations;
- our ability to negotiate further commitments related to the collaboration and deployment of capacity toward future commercial manufacturing under our existing Bioservices contracts;
- our ability to collect reimbursement for raw materials and payment of service fees from our Bioservices customers;
- the results of pending stockholder litigation and government investigations and their potential impact on our business;
- our ability to comply with the operating and financial covenants and the capital raise requirements by the stated deadline required by our revolving credit facility (the "Revolving Credit Facility") and our term loan facility (the "Term Loan Facility" and, together with the Revolving Credit Facility, the "Senior Secured Credit Facilities") under a senior secured credit agreement, dated October 15, 2018, between the Company and multiple lending institutions, as amended, as well as our 3.875% Senior Unsecured Notes due 2028 (the "Senior Unsecured Notes");
- our ability to maintain adequate internal control over financial reporting and to prepare accurate financial statements in a timely manner;
- our ability to resolve the going concern qualification in our consolidated financial statements and otherwise successfully manage our liquidity in order to continue as a going concern;

- the procurement of our product candidates by USG entities under regulatory authorities that permit government procurement of certain medical products prior to United States Food and Drug Administration ("FDA") marketing authorization, and corresponding procurement by government entities outside the United States;
- our ability to realize the expected benefits of the sale of our travel health business to Bavarian Nordic, the pending sale of our Drug Product facility in Baltimore-Camden to Bora Pharmaceuticals Injectibles Inc., a subsidiary of Bora Pharmaceuticals Co., Ltd. ("Bora") and the sale of RSDL® (Reactive Skin Decontamination Lotion) to BTG International Inc., a subsidiary of SERB Pharmaceuticals (collectively, "SERB");
- the impact of the organizational changes we announced in January 2023, August 2023 and May 2024;
- the success of our commercialization, marketing and manufacturing capabilities and strategy;
- our ability to identify and acquire companies, businesses, products or product candidates that satisfy our selection criteria;
- the impact of cyber security incidents, including the risks from the unauthorized access, interruption, failure or compromise of our information systems or those of our business partners, collaborators or other third parties; and
- the accuracy of our estimates regarding future revenues, expenses, capital requirements and need for additional financing.

The foregoing sets forth many, but not all, of the factors that could cause actual results to differ from our expectations in any forward-looking statement. When evaluating our forward-looking statements, you should consider this cautionary statement along with the sections entitled "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Quantitative and Qualitative Disclosures about Market Risk" in this Quarterly Report on Form 10-Q, as well as the risks identified in our other reports filed with the SEC. New factors may emerge from time to time, and it is not possible for management to predict all such factors, nor can it assess the impact of any such factor on the business or the extent to which any factor, or combination of factors, may cause results to differ materially from those contained in any forward-looking statement.

NOTE REGARDING COMPANY REFERENCES

References in this report to "Emergent," the "Company," "we," "us," and "our" refer to Emergent BioSolutions Inc. and its consolidated subsidiaries.

NOTE REGARDING TRADE NAMES

Emergent®, BioThrax®, BaciThrax®, BAT®, Trobigard®, Anthrasil®, CNJ-016®, ACAM2000®, NARCAN®, CYFENDUS®, TEMBEXA® and any and all Emergent BioSolutions Inc. brands, products, services and feature names, logos and slogans are trademarks or registered trademarks of Emergent BioSolutions Inc. or its subsidiaries in the United States or other countries. All other brands, products, services and feature names or trademarks are the property of their respective owners, including RSDL® (Reactive Skin Decontamination Lotion), which was acquired by SERB on July 31, 2024.

ITEM 1. FINANCIAL STATEMENTS

Emergent BioSolutions Inc. and Subsidiaries
Condensed Consolidated Balance Sheets
(in millions, except per share amounts)

	June 30, 2024 (unaudited)	December 31, 2023
ASSETS		
Current assets:		
Cash and cash equivalents	$ 69.7	$ 111.7
Restricted cash	1.3	—
Accounts receivable, net	196.3	191.0
Inventories, net	317.5	328.9
Prepaid expenses and other current assets	36.0	47.9
Assets held for sale	33.7	—
Total current assets	654.5	679.5
Property, plant and equipment, net	306.2	382.8
Intangible assets, net	534.1	566.6
Other assets	18.7	194.3
Total assets	$ 1,513.5	$ 1,823.2
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 95.9	$ 112.2
Accrued expenses	17.2	18.6
Accrued compensation	66.7	74.1
Debt, current portion	415.2	413.7
Other current liabilities	14.6	32.7
Liabilities held for sale	10.1	—
Total current liabilities	619.7	651.3
Debt, net of current portion	447.0	446.5
Deferred tax liability	34.8	47.2
Other liabilities	25.7	28.9
Total liabilities	1,127.2	1,173.9
Stockholders' equity:		
Preferred stock, $0.001 par value per share; 15.0 shares authorized, no shares issued or outstanding	—	—
Common stock, $0.001 par value per share; 200.0 shares authorized, 58.5 and 57.8 shares issued; 52.9 and 52.2 shares outstanding, respectively	0.1	0.1
Treasury stock, at cost, 5.6 and 5.6 common shares, respectively	(227.7)	(227.7)
Additional paid-in capital	915.3	904.4
Accumulated other comprehensive loss, net	(5.5)	(5.7)
Accumulated deficit	(295.9)	(21.8)
Total stockholders’ equity	386.3	649.3
Total liabilities and stockholders’ equity	$ 1,513.5	$ 1,823.2

See accompanying notes to condensed consolidated financial statements.

Emergent BioSolutions Inc. and Subsidiaries
Condensed Consolidated Statements of Operations
(unaudited, in millions, except per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Revenues:				
Commercial Product sales	$ 120.0	$ 137.9	$ 238.5	$ 244.1
MCM Product sales	63.4	164.3	218.8	201.5
Total Product sales, net	183.4	302.2	457.3	445.6
Bioservices:				
Services	64.5	26.4	82.8	39.0
Leases	0.2	2.7	0.4	4.5
Total Bioservices revenues	64.7	29.1	83.2	43.5
Contracts and grants	6.6	6.6	14.6	13.1
Total revenues	254.7	337.9	555.1	502.2
Operating expenses:				
Cost of Commercial Product sales	53.4	54.4	105.5	100.2
Cost of MCM Product sales	31.1	80.5	93.3	135.9
Cost of Bioservices	211.6	55.7	241.9	107.4
Impairment of long-lived assets	27.2	306.7	27.2	306.7
Research and development	32.7	26.0	47.8	66.7
Selling, general and administrative	85.9	91.4	170.6	192.7
Amortization of intangible assets	16.3	16.1	32.5	33.1
Total operating expenses	458.2	630.8	718.8	942.7
Loss from operations	(203.5)	(292.9)	(163.7)	(440.5)
Other income (expense):				
Interest expense	(23.6)	(28.6)	(47.9)	(46.5)
Gain (loss) on sale of business and assets held for sale	(40.0)	74.9	(40.0)	74.9
Other, net	(2.7)	(3.6)	(6.1)	1.3
Total other income (expense), net	(66.3)	42.7	(94.0)	29.7
Loss before income taxes	(269.8)	(250.2)	(257.7)	(410.8)
Income tax provision	13.3	11.2	16.4	36.8
Net loss	$ (283.1)	$ (261.4)	$ (274.1)	$ (447.6)
Net loss per common share				
Basic	$ (5.38)	$ (5.16)	$ (5.23)	$ (8.86)
Diluted	$ (5.38)	$ (5.16)	$ (5.23)	$ (8.86)
Weighted average shares outstanding				
Basic	52.6	50.7	52.4	50.5
Diluted	52.6	50.7	52.4	50.5

See accompanying notes to condensed consolidated financial statements.

Emergent BioSolutions Inc. and Subsidiaries
Condensed Consolidated Statements of Comprehensive Loss
(unaudited, in millions)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Net loss	$ (283.1)	$ (261.4)	$ (274.1)	$ (447.6)
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments, net	—	2.6	0.2	2.5
Unrealized losses on hedging activities	—	1.2	—	(3.2)
Reclassification adjustment for gains on hedging activities	—	(2.9)	—	(0.5)
Reclassification adjustment for gains on pension benefit obligation	—	(3.5)	—	(3.5)
Total other comprehensive income (loss), net of tax	—	(2.6)	0.2	(4.7)
Comprehensive loss, net of tax	$ (283.1)	$ (264.0)	$ (273.9)	$ (452.3)

See accompanying notes to condensed consolidated financial statements.

Emergent BioSolutions Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows
(unaudited, in millions)

	Six Months Ended June 30,	
	2024	2023
Operating Activities		
Net loss	$ (274.1)	$ (447.6)
Adjustments to reconcile net loss to net cash used in operating activities:		
Share-based compensation expense	11.4	15.1
Depreciation and amortization	56.4	67.5
Change in fair value of contingent obligations, net	0.6	0.7
Amortization of deferred financing costs	11.9	9.9
Deferred income taxes	(12.4)	(6.4)
Loss (gain) on sale of business and assets held for sale	40.0	(74.9)
Impairment of long-lived assets	27.2	306.7
Other	15.5	9.5
Changes in operating assets and liabilities:		
Accounts receivable	(29.6)	(129.8)
Inventories	(17.5)	(24.9)
Prepaid expenses and other assets	160.0	(17.8)
Accounts payable	0.2	10.9
Accrued expenses and other liabilities	3.8	(13.8)
Long-term incentive plan accrual	1.9	2.4
Accrued compensation	(7.0)	(12.4)
Income taxes receivable and payable, net	16.1	14.2
Contract liabilities	(19.5)	(7.7)
Net cash used in operating activities	(15.1)	(298.4)
Investing Activities		
Purchases of property, plant and equipment	(15.4)	(27.6)
Proceeds from sale of business, net	—	270.2
Net cash provided by (used in) investing activities	(15.4)	242.6
Financing Activities		
Proceeds from revolving credit facility	65.0	—
Principal payments on revolving credit facility	(61.5)	(347.8)
Principal payments on term loan facility	(7.9)	(156.8)
Proceeds from share-based compensation activity	0.7	1.3
Taxes paid for share-based compensation activity	(0.6)	(2.3)
Debt issuance costs	(5.9)	—
Proceeds from at-the-market sale of stock, net of commissions and expenses	—	8.2
Net cash used in financing activities:	(10.2)	(497.4)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	—	(0.8)
Net change in cash, cash equivalents and restricted cash	(40.7)	(554.0)
Cash, cash equivalents and restricted cash, beginning of period	111.7	642.6
Cash, cash equivalents and restricted cash, end of period	$ 71.0	$ 88.6
Supplemental cash flow disclosures:		
Cash paid for interest	$ 36.0	$ 38.8
Cash paid for income taxes	$ 25.9	$ 26.9
Non-cash investing and financing activities:		
Purchases of property, plant and equipment unpaid at period end	$ 2.9	$ 7.7
Gain on extinguishment of debt	$ 0.3	$ —
Reconciliation of cash and cash equivalents and restricted cash:		
Cash and cash equivalents	$ 69.7	$ 88.6
Restricted cash	1.3	—
Total	$ 71.0	$ 88.6

See accompanying notes to condensed consolidated financial statements.

Emergent BioSolutions Inc. and Subsidiaries
Condensed Consolidated Statements of Changes in Stockholders' Equity
(unaudited, in millions)

	$0.001 Par Value Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2023	57.8	$ 0.1	(5.6)	$ (227.7)	$ 904.4	$ (5.7)	$ (21.8)	$ 649.3
Net income	—	$ —	—	$ —	$ —	$ —	$ 9.0	$ 9.0
Share-based compensation activity	0.2	—	—	—	5.4	—	—	5.4
Other comprehensive income, net of tax	—	—	—	—	—	0.2	—	0.2
Balance at March 31, 2024	58.0	$ 0.1	(5.6)	$ (227.7)	$ 909.8	$ (5.5)	$ (12.8)	$ 663.9
Net loss	—	$ —	—	$ —	$ —	$ —	$ (283.1)	$ (283.1)
Share-based compensation activity	0.5	—	—	—	5.5	—	—	5.5
Balance at June 30, 2024	58.5	$ 0.1	(5.6)	$ (227.7)	$ 915.3	$ (5.5)	$ (295.9)	$ 386.3

	$0.001 Par Value Common Stock		Treasury Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2022	55.7	$ 0.1	(5.6)	$ (227.7)	$ 873.5	$ 3.1	$ 738.7	$ 1,387.7
Net loss	—	$ —	—	$ —	$ —	$ —	$ (186.2)	$ (186.2)
Share-based compensation activity	0.3	—	—	—	4.7	—	—	4.7
Other comprehensive loss, net of tax	—	—	—	—	—	(2.1)	—	(2.1)
Balance at March 31, 2023	56.0	$ 0.1	(5.6)	$ (227.7)	$ 878.2	$ 1.0	$ 552.5	$ 1,204.1
Net loss	—	$ —	—	$ —	$ —	$ —	$ (261.4)	$ (261.4)
Share-based compensation activity	0.3	—	—	—	9.4	—	—	9.4
At-the-market sale of stock, net of commissions and expenses	1.1	—	—	—	8.2	—	—	8.2
Other comprehensive loss, net of tax	—	—	—	—	—	(2.6)	—	(2.6)
Balance at June 30, 2023	57.4	$ 0.1	(5.6)	$ (227.7)	$ 895.8	$ (1.6)	$ 291.1	$ 957.7

See accompanying notes to condensed consolidated financial statements.

1. Nature of the business and organization

Organization and business

Emergent BioSolutions Inc. (“Emergent,” the “Company,” “we,” “us,” and “our”) is a global life sciences company focused on providing innovative preparedness and response solutions addressing accidental, deliberate, and naturally occurring Public Health Threats ("PHTs"). The Company's solutions include a product portfolio, a product development portfolio, and a contract development and manufacturing ("CDMO") services portfolio.

The Company is focused on the following four PHT categories: chemical, biological, radiological, nuclear and explosives ("CBRNE"); emerging infectious diseases ("EID"); emerging health crises; and acute, emergency and community care. As of June 30, 2024, the Company has a product portfolio of 11 products (vaccines, therapeutics, and drug-device combination products). The revenues generated by the products comprise a substantial portion of the Company's revenue. The Company structures its business with a focus on markets and customers. As such, the key components of the business structure include the following four product and service categories: NARCAN® commercial product, Anthrax - Medical Countermeasures (“MCM") Products, Smallpox - MCM products and Emergent Bioservices (CDMO) ("Bioservices").

The Company’s business is organized in three reportable operating segments: (1) a Commercial Products segment consisting of NARCAN® Nasal Spray and other commercial products, which were sold as part of our travel health business in the second quarter of 2023 (see Note 4, "Divestiture" for more information on the sale of the travel health business); (2) a MCM Products segment consisting of our Anthrax - MCM, Smallpox - MCM and Other Products, described below and (3) a Services segment consisting of our Bioservices offerings (see Note 17, "Segment information" for more information on our reportable segments).

The Company's products and services include:

Commercial Products Segment:

NARCAN®

- NARCAN® (naloxone HCl) Nasal Spray is an intranasal formulation of naloxone approved by the United States Food and Drug Administration (“FDA”) (including in over-the-counter form) and Health Canada for the emergency treatment of known or suspected opioid overdose as manifested by respiratory and/or central nervous system depression.

Sale of Travel Health Business

On May 15, 2023, the Company completed the sale of its Commercial Products segment's travel health business, including rights to Vivotif®, the licensed typhoid vaccine; Vaxchora®, the licensed cholera vaccine; the development-stage chikungunya vaccine candidate CHIKV VLP; the Company’s manufacturing site in Bern, Switzerland; and certain of its development facilities in San Diego, California. For additional information, refer to Note 4, "Divestiture".

MCM Products Segment:

Anthrax - MCM Products

- Anthrasil® (Anthrax Immune Globulin Intravenous (human)), the only polyclonal antibody therapeutic licensed by the FDA and Health Canada for the treatment of inhalational anthrax in combination with appropriate antibacterial drugs;
- BioThrax® (Anthrax Vaccine Adsorbed), the only vaccine licensed by the FDA for the general use prophylaxis and post-exposure prophylaxis of anthrax disease;
- CYFENDUS® (Anthrax vaccine adsorbed (AVA), adjuvanted), previously known as AV7909, which was recently approved by the FDA for post-exposure prophylaxis of disease following suspected or confirmed exposure to *Bacillus anthracis* in persons 18 through 65 years of age when administered in conjunction with recommended antibacterial drugs. CYFENDUS® is procured by certain authorized government buyers for their use; and
- Raxibacumab injection, the first fully human monoclonal antibody therapeutic licensed by the FDA for the treatment and prophylaxis of inhalational anthrax;

Smallpox - MCM Products

- ACAM2000®, (Smallpox (Vaccinia) Vaccine, Live), the only single-dose smallpox vaccine licensed by the FDA for active immunization against smallpox disease for persons determined to be at high risk for smallpox infection;
- CNJ-016® (Vaccinia Immune Globulin Intravenous (Human) (VIGIV)), the only polyclonal antibody therapeutic licensed by the FDA and Health Canada to address certain complications from smallpox vaccination; and
- TEMBEXA®, an oral antiviral formulated as 100 mg tablets and 10 mg/mL oral suspension dosed once weekly for two weeks which has been approved by the FDA for the treatment of smallpox disease caused by variola virus in adult and pediatric patients, including neonates.

Other Products

- BAT® (Botulism Antitoxin Heptavalent (A,B,C,D,E,F,G)-(Equine)), the only heptavalent antitoxin licensed by the FDA and Health Canada for the treatment of symptomatic botulism;
- Ebanga™ (ansuvimab-zykl), a monoclonal antibody with antiviral activity provided through a single IV infusion for the treatment of Ebola. Under the terms of a collaboration with Ridgeback Biotherapeutics ("Ridgeback"), Emergent will be responsible for the manufacturing, sale, and distribution of Ebanga™ in the U.S. and Canada, and Ridgeback will serve as the global access partner for Ebanga™;
- RSDL® (Reactive Skin Decontamination Lotion) kit, the only medical device cleared by the FDA that is intended to remove or neutralize chemical warfare agents from the skin, including: tabun, sarin, soman, cyclohexyl sarin, VR, VX, mustard gas and T-2 toxin. On July 31, 2024, the Company entered into the Stock and Asset Purchase Agreement (the "RSDL® Agreement") with SERB Pharmaceuticals, through its wholly owned subsidiary BTG International Inc. (collectively, "SERB"), pursuant to which, among other things, the Company sold its worldwide rights to RSDL®, to SERB (the "RSDL® Transaction"). See Note 18, "Subsequent events" for more information about the RSDL Transaction; and
- Trobigard® atropine sulfate, obidoxime chloride auto-injector, a combination drug-device auto-injector procured product candidate that contains atropine sulfate and obidoxime chloride. On April 2, 2024, the Belgium Federal Agency for Medicines and Health Products acknowledged and confirmed Emergent's request to revoke the Market Authorization for the Trobigard Auto-Injector.

Services Segment:

Bioservices - CDMO

The Company's services revenue consists of distinct but interrelated bioservices: drug substance manufacturing; drug product manufacturing (also referred to as "fill/finish" services) and packaging; development services including technology transfer, process and analytical development services; and, when necessary, suite reservation obligations. These services, which the Company refers to as "molecule-to-market" offerings, employ diverse technology platforms (mammalian, microbial, viral and plasma) across a network of seven geographically distinct development and manufacturing sites operated by the Company for its internal products and pipeline candidates and third-party bioservices. The Company services both clinical-stage and commercial-stage projects for a variety of third-party customers, including government agencies, innovative pharmaceutical companies, and non-government organizations. In August 2023, the Company initiated an organizational restructuring plan (the "August 2023 Plan") which included actions to reduce investment in and de-emphasize focus on its Bioservices business. In May 2024, the Company initiated a further organizational restructuring plan (the "May 2024 Plan") announcing the closure of the Company's Baltimore-Bayview Drug Substance manufacturing facility and Rockville, Maryland Drug Product facility. Additionally, on June 20, 2024 the Company announced entry into an Asset Purchase Agreement (the "Asset Purchase Agreement") with Bora Pharmaceuticals Injectibles Inc., a subsidiary of Bora Pharmaceuticals Co., Ltd. ("Bora"), under which the Company will sell its Drug Product facility in Baltimore-Camden (the "Camden Transaction"). See Note 3, "Assets and liabilities held for sale" and Note 5, "Impairment and restructuring charges" for more information related to these announcements.

2. Summary of significant accounting policies

Basis of presentation and consolidation

The accompanying unaudited condensed consolidated financial statements include the accounts of Emergent and its wholly owned subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation. The unaudited condensed consolidated financial statements included herein have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and in accordance with the instructions to Form 10-Q and Article 10 of Regulation S-X issued by the Securities and Exchange Commission ("SEC"). Certain information and footnote disclosures normally included in consolidated financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. These condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes thereto contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2023, as filed with the SEC on March 8, 2024.

All adjustments contained in the accompanying unaudited condensed consolidated financial statements are of a normal recurring nature and are necessary to present fairly the financial position of the Company as of June 30, 2024. Interim results are not necessarily indicative of results that may be expected for any other interim period or for an entire year.

Going concern

As of June 30, 2024, there was $222.7 million outstanding on the Company's senior revolving credit facility ("Revolving Credit Facility") and $190.3 million on the senior term loan facility ("Term Loan Facility" and together with the Revolving Credit Facility, the "Senior Secured Credit Facilities") that mature in May 2025 and the Senior Credit Facilities are subject to a forbearance agreement as described below, with respect to the Company's noncompliance with certain operational and financial covenants. As of June 30, 2024, the Company had $69.7 million in cash and cash equivalents. As a result of these factors, the Company determined that there is substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued. The evaluation considered the potential mitigating effects of management's plans that have not been fully implemented. Management has evaluated the mitigating effects of its plans to determine if it is probable that (1) the plans will be effectively implemented within one year after the date the financial statements are issued, and (2) when implemented, the plans will mitigate the relevant conditions or events that raise substantial doubt about the entity's ability to continue as a going concern. Management's plans include (A) further amending the Senior Secured Credit Facilities, and (B) improving operating performance, reducing working capital and the potential of the sale of assets to pay down the Senior Secured Credit Facilities before they become due. As neither plan is in the complete control of management, neither is probable of occurring. In this regard, management may not be able to further amend the Senior Secured Credit Facilities or find a buyer for the assets it is willing to divest and may not be able to close on any asset sale for which management is able to reach an agreement with a buyer. As a result, the Company may be unable to meet its obligations as they become due. In addition, any asset sales that are completed could have potential negative impacts on the Company's future operating cash flows and profitability.

Debt Covenants

The Senior Secured Credit Facilities mature in May 2025, and provide for (1) revolving credit commitments, (2) a term loan, and (3) the issuance of commercial letters of credit. As of March 31, 2024, the Company was not in compliance with the minimum consolidated EBITDA covenant under the Senior Secured Credit Facilities and did not satisfy a covenant requiring it to raise not less than $75.0 million through issuance of equity and/or unsecured indebtedness by April 30, 2024. In addition, the Company was required to deliver audited annual financial statements without a "going concern" explanatory paragraph with respect to its financial statements for the year ended December 31, 2023, which was not achieved. However, on February 29, 2024, the requisite lenders agreed to enter into a Forbearance Agreement and Sixth Amendment to Amended and Restated Credit Agreement (the "Forbearance Agreement and Amendment") with the Company, which included a limited waiver of certain events of default, including those that resulted from (a) any violation of the financial covenants set forth in the Senior Secured Credit Facilities with respect to the fiscal quarter ending December 31, 2023 and the fiscal quarter ending March 31, 2024 and (b) the going concern explanatory paragraph contained in the audited financial statements for the year ended December 31, 2023. This forbearance period (the "Forbearance Period") expired on April 30, 2024.

On April 29, 2024, the requisite lenders agreed to enter into a Consent, Waiver and Seventh Amendment to the Amended and Restated Credit Agreement (the "Seventh Amendment") with the Company. The Seventh Amendment, among other things: (a) reduces available commitments under the Revolving Credit Facility to $240.0 million through July 30, 2024, to $210.0 million from July 31, 2024 through September 29, 2024, to $205.0 million from September 30, 2024 through October 30, 2024, to $180.0 million from October 31, 2024 through November 29, 2024, and to $170.0 million from November 30, 2024 and thereafter (in each case subject to potential limited additional borrowings from a specified reserve with the consent of the lenders); (b) amends the interest rate benchmark in the definition of Applicable Margin from (i) 5.00% per annum to 7.00% per annum with respect to Base Rate Loans and (ii) 6.50% per annum to 8.50% per annum with respect to SOFR Loans, RFR Loans and Eurocurrency Rate Loans; and (c) requires the Company to raise equity or unsecured indebtedness of at least $85.0 million by July 31, 2024 (or such later date on or before September 29, 2024 as agreed to by the Administrative Agent), provided that such requirement will be reduced by the aggregate net cash proceeds received from certain dispositions that are applied to reduce amounts outstanding under the Revolving Credit Facility. The Company expects to apply the proceeds from the Camden Transaction and the RSDL® Transaction to reduce borrowings under the Revolving Credit Facility in order to satisfy the capital raise requirement, the deadline for which was recently extended to September 29, 2024. There is no guarantee the Company will be able to meet the capital raise requirement by this deadline.

In addition, pursuant to the Seventh Amendment, the Company is obligated to apply 100% of the aggregate net cash proceeds received from certain dispositions to the prepayment of amounts outstanding under the Revolving Credit Facility, except where such proceeds exceed $85,000,000, in which case such mandatory prepayment of the Revolving Credit Facility will no longer be required. Mandatory prepayment of the Term Loan Facility will not be required unless and until the aggregate net proceeds from such dispositions exceed $85,000,000, at which point 100% of such proceeds must be used toward repayment of amounts outstanding under the Term Loan Facility.

Under the Seventh Amendment, the Company is also subject to (a) a monthly minimum consolidated EBITDA covenant through May 15, 2025 and a monthly maximum capital expenditures covenant through March 31, 2025, (b) a minimum liquidity requirement and (c) additional financial statement reporting and business plan forecast obligations. In connection with the entry into the Seventh Amendment, the Company paid an amendment fee of an aggregate amount equal to 0.5% of the total credit exposure as of the Seventh Amendment effective date and will be required to pay an additional amendment fee of 1.0% of total credit exposure at December 1, 2024 and each month thereafter. The Senior Secured Credit Facilities and the Company's other debt facilities are described in more detail below in Note 10, "Debt". As of the date of these financial statements, the Company is in compliance with the terms of the Senior Secured Credit Facilities.

If the Company defaults under the Senior Secured Credit Facilities, the lenders would have the right to accelerate the repayment of borrowings under the Senior Secured Credit Facilities, which would result in a cross-default of the Company's obligations under the 3.875% Senior Unsecured Notes due 2028 (the "Senior Unsecured Notes"). If the Company were unable to obtain additional waivers or forbearance of such covenants or defaults, to successfully renegotiate the terms of the Senior Secured Credit Facilities, or to cure the potential covenant breach or default, and the lenders enforced one or more of their rights upon default and/or the default resulted in a cross-default under the Senior Unsecured Notes, the Company would be unable to meet its obligations under those agreements and would likely be forced into insolvency proceedings.

Based on the facts and circumstances described above, there can be no assurance that the Company would be able to comply with its debt covenants in the future. As a result, the Company continues to evaluate a number of factors related to its ability to continue as a going concern, including its ability to comply with the terms and operating and financial covenants required by the Senior Secured Credit Facilities, its ability to satisfy the capital raise requirement required by the Senior Secured Credit Facilities, other market conditions, economic conditions, particularly in the pharmaceutical and biotechnology industry, and disruptions or volatility caused by factors such as regional conflicts, inflation, and supply chain disruptions. The Company has engaged legal and financial advisors to assist with a comprehensive review of alternatives to enhance its capital structure, which may include taking steps to cure any potential defaults or seeking forbearance, waivers, further cost reductions, asset sales, restructurings or other alternatives to avoid an event of default.

Significant accounting policies

During the six months ended June 30, 2024, there have been no significant changes to the Company's summary of significant accounting policies contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2023, as filed with the SEC that have materially impacted the presentation of the Company's financial statements.

Fair value measurements

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability, an exit price, in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value, includes:

Level 1 —	Observable inputs for identical assets or liabilities such as quoted prices in active markets;
Level 2 —	Inputs other than quoted prices in active markets that are either directly or indirectly observable; and
Level 3 —	Unobservable inputs in which little or no market data exists, which are therefore developed by the Company using estimates and assumptions that reflect those that a market participant would use.

On a recurring basis, the Company measures and records money market funds (Level 1), interest-rate swap arrangements and time deposits (Level 2) and contingent purchase consideration (Level 3) using fair value measurements in the accompanying financial statements. The carrying amounts of the Company's short-term financial instruments, which include cash and cash equivalents, accounts receivable and accounts payable approximate their fair values due to their short maturities. The carrying amounts of the Company’s long-term variable interest rate debt arrangements (Level 2) approximate their fair values.

New accounting standards

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board that the Company adopts as of the pronouncement's specified effective date.

Accounting Standards Not Yet Adopted

In November 2023, the Financial Accounting Standards board ("FASB") issued Accounting Standards Update ("ASU") 2023-07 ("ASU 2023-07"), *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures,* which improves reportable segment disclosure requirements, on an annual and interim basis, primarily through enhanced disclosures about significant segment expenses. Additionally, it requires a public entity to disclose the title and position of the Chief Operating Decision Maker ("CODM"). The ASU does not change how a public entity identifies its operating segments, aggregates them, or applies the quantitative thresholds to determine its reportable segments. The amendments in the ASU are effective for annual periods beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024, although early adoption is permitted. The Company is in the process of evaluating the impact of this new guidance on its consolidated financial statements.

In December 2023, the FASB issued ASU 2023-09, Income Taxes (Topic 740): *Improvements to Income Tax Disclosures*, which requires a public business entity to disclose, on an annual basis, a tabular rate reconciliation using both percentages and currency amounts, broken out into specified categories with certain reconciling items further broken out by nature and jurisdiction to the extent those items exceed a specified threshold. In addition, all entities are required to disclose income taxes paid, net of refunds received disaggregated by federal, state/local, and foreign and by jurisdiction if the amount is at least 5% of total income tax payments, net of refunds received. The amendments in the ASU are effective for public business entities for annual periods beginning after December 15, 2024, although early adoption is permitted. The Company is in the process of evaluating the impact of this new guidance on it consolidated financial statements.

3. Assets and liabilities held for sale

On June 20, 2024, the Company announced that it had entered into the Asset Purchase Agreement to sell its Drug Product facility in Baltimore-Camden to an affiliate of Bora, a leading international pharmaceutical services company, for a total value of approximately $30.0 million. The Camden site, which is part of the Company's Bioservices segment, has clinical and commercial non-viral aseptic fill/finish services on four fill lines, including lyophilization, formulation development, and support services. Alongside the facility, approximately 350 current Emergent employees are expected to join Bora as part of the transaction.

The Camden Transaction is expected to close in the third quarter of 2024, subject to the satisfaction or waiver of customary closing conditions.

In the accompanying Condensed Consolidated Balance Sheet as of June 30, 2024, the assets and liabilities that are expected to be conveyed in the Camden Transaction are classified as held for sale and are measured at the lower of (i) the carrying value of the disposal group and (ii) the fair value of the disposal group, less costs to sell. Effective with the designation of the Camden Transaction as held for sale on June 20, 2024, the Company suspended recording depreciation of property, plant and equipment and right-of-use assets while these assets are classified as held for sale. Any loss resulting from the measurement is recognized in the period the held for sale criteria are met. Conversely, gains are not recognized until the date of sale. The Company recognized a loss on assets held for sale of $40.0 million, including transaction costs of $3.9 million, during the three months ended June 30, 2024 in "Gain (loss) on sale of business and assets held for sale" within non-operating activities.

Assets and liabilities classified as held for sale in the Condensed Consolidated Balance Sheets as of June 30, 2024 consist of the following:

	June 30, 2024
Assets held for sale:	
Accounts receivable, net	$ 21.5
Inventories, net	28.9
Prepaid expenses and other current assets	0.5
Property, plant and equipment, net	22.1
Other assets	0.7
Valuation allowance	(40.0)
Total assets held for sale	$ 33.7
Liabilities held for sale:	
Accounts payable	$ 6.5
Accrued compensation	2.5
Other current liabilities	0.3
Other liabilities	0.8
Total liabilities held for sale	$ 10.1

4. Divestiture

On May 15, 2023, pursuant to the Purchase and Sale Agreement (the "Purchase and Sale Agreement"), by and between the Company, through its wholly owned subsidiaries Emergent International Inc. and Emergent Travel Health Inc., and Bavarian Nordic, the Company completed the sale of the Company's travel health business, including rights to Vivotif®, the licensed typhoid vaccine; Vaxchora®, the licensed cholera vaccine; the development-stage chikungunya vaccine candidate CHIKV VLP; the Company's manufacturing site in Bern, Switzerland; and certain of its development facilities in San Diego, California.

At the closing, Bavarian Nordic paid a cash purchase price of $270.2 million, exclusive of customary closing adjustments for cash, indebtedness, working capital and transaction expenses of the business at closing. Bavarian Nordic may also be required to pay milestone payments of up to $80.0 million related to the development of CHIKV VLP and receipt of marketing approval and authorization in the U.S. and Europe, and earn-out payments of up to $30.0 million based on aggregate net sales of Vaxchora® and Vivotif® in calendar year 2026. On July 18, 2024, Bavarian Nordic announced that the European Medicines Agency had validated the marketing authorization application, which triggered a development milestone payment under the Purchase and Sale Agreement to the Company in the amount of $10.0 million. See Note 18, "Subsequent events" for more information on the development milestone trigger.

As a result of the divestiture, the Company recognized a pre-tax gain of $74.2 million, net of transaction costs of $4.0 million recorded within "Gain (loss) on sale of business and assets held for sale" on the Condensed Consolidated Statements of Operations during 2023.

In connection with the divestiture, the Company entered into a Transition Services Agreement ("TSA") with Bavarian Nordic to help support its ongoing operations. Under the TSA, the Company provides certain transition services to Bavarian Nordic, including information technology, finance and enterprise resource planning, research and development, human resources, employee benefits and other limited services. Income from performing services under the TSA is recorded within "Other, net" on the Condensed Consolidated Statements of Operations and was $0.1 million and $0.5 million for three and six months ended June 30, 2024, respectively and $1.0 million for the three and six months ended June 30, 2023.

5. Impairment and restructuring charges

Impairments of long-lived assets

The Company tests its long-lived assets that are held and used for recoverability whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be recoverable.

2024 Impairment of long-lived assets

During the preparation of the Company's financial statements for the three months ended June 30, 2024, due to the decision to close the Company's Baltimore-Bayview Drug Substance manufacturing facility and the Rockville, Maryland Drug Product facility the Company determined there were sufficient indicators of impairment for the Bayview and Rockville asset groups within the Bioservices reporting unit. As a result, the Company performed recoverability tests on those asset groups and concluded that the Bayview and Rockville asset groups were not recoverable as the undiscounted expected cash flows did not exceed their carrying values.

Asset groups are written down only to the extent that their carrying value is higher than their respective fair value. The Company, with the assistance of a third-party valuation firm, applied valuation methods to estimate the fair values for each of the assets within the different asset classes. An orderly liquidation value was applied to estimate the fair value of the personal property assets and market and cost based approaches were applied to estimate the fair value of the real property assets, each representing Level 3 non-recurring fair value measurements. Based on these analyses, the Company allocated and recognized a non-cash impairment charge of $27.2 million during the three months ended June 30, 2024.

2023 Impairment of long-lived assets

During the preparation of the Company's financial statements for the three months ended June 30, 2023, due to deterioration in performance and resulting downward revisions to the Company's internal Bioservices forecast made during the second quarter, including future expected cash flows, the Company determined there were sufficient indicators of impairment on the Camden, Bayview and Rockville asset groups within the Bioservices reporting unit to require an impairment analysis. As a result, the Company performed recoverability tests on certain asset groups within the Bioservices reporting unit and concluded that the impacted asset groups were not recoverable as the undiscounted expected cash flows did not exceed their carrying values.

Asset groups are written down only to the extent that their carrying value is higher than their respective fair value. The Company, with the assistance of a third-party valuation firm, applied valuation methods to estimate the fair values for each of the assets within the different asset classes. An orderly liquidation value was applied to estimate the fair value of the personal property assets and market and cost based approaches were applied to estimate the fair value of the real property assets, each representing Level 3 non-recurring fair value measurements. Based on these analyses, the Company allocated and recognized a non-cash impairment charge of $306.7 million during the three months ended June 30, 2023.

The table below presents the total impairment charge by asset class for the three months ended June 30, 2024 and 2023:

	Three Months Ended June 30, 2024	Three Months Ended June 30, 2023
Buildings, building improvements and leasehold improvements	7.8	81.5
Furniture and equipment	14.1	117.5
Software	0.2	0.3
Construction-in-progress	5.1	107.4
Total impairment of long-lived assets	$ 27.2	$ 306.7

Restructuring Charges

January 2023 Organizational Restructuring Plan

In January 2023, the Company initiated an organizational restructuring plan (the "January 2023 Plan") intended to reduce operating costs, improve operating margins, and continue advancing the Company's ongoing commitment to profitable growth. As part of the January 2023 Plan, the Company reduced its workforce by approximately 125 employees. The charges related to the January 2023 plan consist primarily of employee transition, severance payment and employee benefit charges. The cumulative amount of restructuring charge related to the January 2023 Plan since inception is $9.3 million. All activities related to the January 2023 Plan were substantially completed during the first quarter of 2023. Restructuring costs are recognized as an operating expense within the Condensed Consolidated Statement of Operations and are classified based on the Company's classification policy for each category of operating expense.

August 2023 Organizational Restructuring Plan

In August 2023, the Company initiated the August 2023 Plan which was intended to strengthen its core business and financial position by reducing investment in and de-emphasizing focus on its CDMO services business for future growth. As part of the August 2023 Plan, the Company reduced its workforce by approximately 400 employees. The charges related to the August 2023 Plan consist primarily of employee transition, severance payment and employee benefit charges. The cumulative amount of restructuring charge related to the August 2023 Plan since inception is $19.4 million. All activities related to the August 2023 Plan were substantially completed during the third quarter of 2023. Restructuring costs are recognized as an operating expense within the Condensed Consolidated Statement of Operations and are classified based on the Company's classification policy for each category of operating expense.

May 2024 Organizational Restructuring Plan

In May 2024, the Company initiated the May 2024 Plan. These strategic actions will lead to a reduction of the Company's current workforce by approximately 300 employees across all areas of the Company and the elimination of approximately 85 positions that are currently vacant, as well as the closure of the Company's Baltimore-Bayview Drug Substance manufacturing facility and Rockville, Maryland Drug Product facility. Decisions regarding the elimination of positions and the closure of manufacturing facilities are subject to local law and consultation requirements in certain countries, as well as the Company's business needs. The cumulative amount of restructuring charge related to the May 2024 Plan since inception is $17.2 million. All activities related to the May 2024 Plan are expected to be substantially completed during in the third quarter of 2024. Restructuring costs are recognized as an operating expense within the Condensed Consolidated Statement of Operations and are classified based on the Company's classification policy for each category of operating expense.

The following table presents the total restructuring costs related to the January 2023 Plan, August 2023 Plan and May 2024 Plan by reportable segment as well as amounts included within unallocated corporate selling general and administrative ("SG&A") expense and research and development ("R&D") expense:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Commercial Products	$ —	$ —	$ —	$ —
MCM Products	2.7	—	2.6	2.0
Services	0.4	—	0.2	—
Total restructuring costs by segment	3.1	—	2.8	2.0
SG&A	8.6	0.1	8.5	5.1
R&D	5.4	(0.2)	5.3	2.5
Total restructuring costs	$ 17.1	$ (0.1)	$ 16.6	$ 9.6

The following table presents the total restructuring costs related to the January 2023 Plan, August 2023 Plan and May 2024 Plan by function:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Employee transition	$ 0.2	$ —	$ 0.2	$ 0.3
Severance payments	14.8	0.1	14.3	8.8
Employee benefits	2.1	(0.2)	2.1	0.5
Total restructuring costs	$ 17.1	$ (0.1)	$ 16.6	$ 9.6

The following tables provide the components of and changes in the Company's restructuring accrual for the January 2023 Plan during the three and six months ended June 30, 2024 and 2023:

	Employee Transition	Severance Payments	Employee Benefits	Total
Balance at December 31, 2023	$ —	$ 1.4	$ —	$ 1.4
Cash payments	—	(1.3)	—	(1.3)
Balance at March 31, 2024	$ —	$ 0.1	$ —	$ 0.1
Cash payments	—	(0.1)	—	(0.1)
Balance at June 30, 2024	$ —	$ —	$ —	$ —

	Employee Transition	Severance Payments	Employee Benefits	Total
Balance at December 31, 2022	$ —	$ —	$ —	$ —
Accruals	0.3	8.7	0.7	9.7
Cash payments	(0.2)	(2.0)	(0.1)	(2.3)
Balance at March 31, 2023	$ 0.1	$ 6.7	$ 0.6	$ 7.4
Accruals	—	0.1	(0.2)	(0.1)
Cash payments	—	(3.6)	(0.1)	(3.7)
Balance at June 30, 2023	$ 0.1	$ 3.2	$ 0.3	$ 3.6

The following table provides the components of and changes in the Company's restructuring accrual for the August 2023 Plan during the three and six months ended June 30, 2024:

	Employee Transition	Severance Payments	Employee Benefits	Total
Balance at December 31, 2023	$ —	$ 5.3	$ 0.1	$ 5.4
Accruals	—	(0.5)	—	(0.5)
Cash payments	—	(3.6)	—	(3.6)
Balance at March 31, 2024	$ —	$ 1.2	$ 0.1	$ 1.3
Accruals	—	(0.1)	—	(0.1)
Cash payments	—	(0.5)	(0.1)	(0.6)
Balance at June 30, 2024	$ —	$ 0.6	$ —	$ 0.6

The following table provides the components of and changes in the Company's restructuring accrual for the May 2024 Plan during the three months ended June 30, 2024:

	Employee Transition	Severance Payments	Employee Benefits	Total
Balance at March 31, 2024	$ —	$ —	$ —	$ —
Accruals	0.2	14.8	2.2	17.2
Cash payments	(0.2)	—	—	(0.2)
Balance at June 30, 2024	$ —	$ 14.8	$ 2.2	$ 17.0

6. Inventories, net

Inventories, net consisted of the following:

	June 30, 2024	December 31, 2023
Raw materials and supplies	$ 97.2	$ 128.7
Work-in-process	136.5	113.3
Finished goods	83.8	86.9
Total inventories, net	$ 317.5	$ 328.9

Inventories, net is stated at the lower of cost or net realizable value.

7. Property, plant and equipment, net

Property, plant and equipment, net consisted of the following:

	June 30, 2024	December 31, 2023
Land and improvements	$ 28.8	$ 30.0
Buildings, building improvements and leasehold improvements	209.0	229.9
Furniture and equipment	389.5	433.6
Software	68.6	64.0
Construction-in-progress	11.0	36.7
Property, plant and equipment, gross	$ 706.9	$ 794.2
Less: Accumulated depreciation and amortization	(400.7)	(411.4)
Total property, plant and equipment, net	$ 306.2	$ 382.8

As of June 30, 2024 and December 31, 2023, construction-in-progress primarily included costs incurred to advance the Company's MCM Product capabilities. Property, plant and equipment, net is stated at cost, less accumulated depreciation and amortization.

8. Intangible assets and goodwill

The Company's finite-lived intangible assets consist of products acquired via business combinations or asset acquisitions. The following table summarizes the Company's finite-lived intangible assets:

	Weighted Average Useful Life in Years	June 30, 2024			December 31, 2023		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Products	13.5	$ 855.4	$ 321.3	$ 534.1	$ 855.4	$ 288.8	$ 566.6
Customer relationships	0.0	28.6	28.6	—	28.6	28.6	—
CDMO	0.0	5.5	5.5	—	5.5	5.5	—
Total intangible assets		$ 889.5	$ 355.4	$ 534.1	$ 889.5	$ 322.9	$ 566.6

Amortization expense associated with the Company's finite-lived intangible assets was recorded as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Amortization of intangible assets	$ 16.3	$ 16.1	$ 32.5	$ 33.1

The Company had no remaining goodwill balance on the Condensed Consolidated Balance Sheets as of June 30, 2024 and December 31, 2023 due to impairment charges recorded during the third quarter of 2023.

9. Fair value measurements

The table below presents information about the Company's assets and liabilities that are regularly measured and carried at fair value and indicates the level within the fair value hierarchy of the valuation techniques the Company utilized to determine fair value:

	June 30, 2024				December 31, 2023			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Assets:								
Money market accounts	$ 10.9	$ 10.9	$ —	$ —	$ 40.5	$ 40.5	$ —	$ —
Total	$ 10.9	$ 10.9	$ —	$ —	$ 40.5	$ 40.5	$ —	$ —
Liabilities:								
Contingent consideration	$ 4.3	$ —	$ —	$ 4.3	$ 5.6	$ —	$ —	$ 5.6
Total	$ 4.3	$ —	$ —	$ 4.3	$ 5.6	$ —	$ —	$ 5.6

Contingent consideration

Contingent consideration payments in an asset acquisition not required to be accounted for as derivatives are recognized when the contingency is resolved, and the consideration is paid or becomes payable. Contingent consideration liabilities associated with business combinations are measured at fair value. The liabilities represent an obligation of the Company to transfer additional assets to the selling shareholders and owners if future events occur or conditions are met. These liabilities associated with business combinations are measured at fair value at inception and at each subsequent reporting date. The changes in the fair value are primarily due to the expected amount and timing of future net sales, which are inputs that have no observable market. Any change in fair value for the contingent consideration liabilities related to the Company’s products is classified on the Company's Condensed Consolidated Statements of Operations as "Cost of MCM Product sales."

The table below is a reconciliation of the beginning and ending balance of the Company's Level 3 contingent consideration liability:

	Contingent Consideration
Balance at December 31, 2023	$ 5.6
Change in fair value	0.5
Settlements	(0.6)
Balance at March 31, 2024	$ 5.5
Change in fair value	0.1
Settlements	(1.3)
Balance at June 30, 2024	$ 4.3

	Contingent Consideration
Balance at December 31, 2022	$ 8.0
Change in fair value	0.3
Settlements	(0.7)
Balance at March 31, 2023	$ 7.6
Change in fair value	0.4
Settlements	(0.6)
Balance at June 30, 2023	$ 7.4

As of June 30, 2024 and December 31, 2023, the current portion of the contingent consideration liability was $1.7 million and $2.7 million, respectively, and was included in "Other current liabilities" on the Condensed Consolidated Balance Sheets. The non-current portion of the contingent consideration liability is included in "Other liabilities" on the Condensed Consolidated Balance Sheets.

The recurring Level 3 fair value measurement for the Company's contingent consideration liability used the following significant unobservable inputs:

Contingent Consideration Liability	Fair Value as of June 30, 2024	Valuation Technique	Unobservable Input	Range
Royalty based	$4.3 million	Discounted cash flow	Discount rate	9.9%
			Probability of payment	0% - 50%
			Projected year of payment	2024 - 2028

Non-variable rate debt

As of June 30, 2024 and December 31, 2023, the fair value of the Company's Senior Unsecured Notes was $292.5 million and $184.3 million, respectively. The fair value was determined through market sources, which are Level 2 inputs and directly observable. The carrying amounts of the Company’s other long-term variable interest rate debt arrangements approximate their fair values (see Note 10, "Debt").

10. Debt

The table below presents the components of the Company's debt:

	June 30, 2024	December 31, 2023
Senior secured credit agreement - Term loan due 2025	$ 190.3	$ 198.2
Senior secured credit agreement - Revolver loan due 2025	222.7	219.2
3.875% Senior Unsecured Notes due 2028	450.0	450.0
Other	0.8	1.0
Total debt	$ 863.8	$ 868.4
Current portion of long-term debt, net of debt issuance costs	(415.2)	(413.7)
Unamortized debt issuance costs	(1.6)	(8.2)
Non-current portion of debt, net of debt issuance costs	$ 447.0	$ 446.5

During the year ended December 31, 2023, the Company reclassified the debt issuance costs associated with the revolver loan to a contra account to directly offset the loan balance in "Debt, current portion" on the Company's Condensed Consolidated Balance Sheets. As of June 30, 2024 and December 31, 2023, the Company had $1.1 million and $5.3 million, respectively, of debt issuance costs associated with the revolver loan.

During the six months ended June 30, 2024, the Company entered into a bilateral agreement with a bank in the amount of $0.5 million that is fully collateralized by cash, which is classified within "Restricted cash" in the Company's Condensed Consolidated Balance Sheet as of June 30, 2024.

3.875% Senior Unsecured Notes due 2028

On August 7, 2020, the Company completed its offering of $450.0 million aggregate principal amount of its Senior Unsecured Notes. Interest on the Senior Unsecured Notes is payable on February 15th and August 15th of each year until maturity, beginning on February 15, 2021. The Senior Unsecured Notes will mature on August 15, 2028.

As of August 15, 2023, the Company may redeem all or a portion of the Senior Unsecured Notes at a redemption price equal to 100% of the principal amount of the Senior Unsecured Notes plus a "make-whole" premium and accrued and unpaid interest as set forth in the related indenture. Upon the occurrence of a change of control, the Company must offer to repurchase the Senior Unsecured Notes at a purchase price of 101% of the principal amount of such notes plus accrued and unpaid interest.

Negative covenants in the indenture governing the Senior Unsecured Notes, among other things, limit the ability of the Company to incur indebtedness and liens, dispose of assets, make investments, enter into certain merger or consolidation transactions and make restricted payments.

Senior Secured Credit Facilities

On February 29, 2024, the Company entered into the Forbearance Agreement and Amendment to, among other things, (a) provide that the Administrative Agent and the lenders forbear from exercising all rights and remedies under the Senior Secured Credit Facilities and the other related loan documents arising from the occurrence and continuation of certain specified events of default during the Forbearance Period and (b) provide consent by the required revolving credit lenders to make further loans to the Company or other extensions of credit to the credit parties during the Forbearance Period, notwithstanding the occurrence of the specified events of default, subject to certain conditions set forth in the Forbearance Agreement and Amendment, including a limit on Revolving Credit Facility indebtedness of $270 million. The Forbearance Agreement and Amendment also amended, among other things, (x) the interest rate benchmark to provide that borrowings will bear interest at a rate per annum equal to (A) 5.00% with respect to Base Rate Loans, (B) 6.50% per annum with respect to SOFR Loans, Daily Simple SONIA Loans and Eurocurrency Rate Loans, and (C) 0.40% with respect to Commitment Fees, (y) the mandatory prepayment threshold amount for unrestricted cash and cash equivalents from $125,000,000 to $100,000,000, and (z) the mandatory principal prepayment amount from 75% of all milestone payments received by the Company and its subsidiaries from certain project milestone payments to 100%. Under the Forbearance Agreement and Amendment, the Company and the other guarantors agreed to cause Emergent BioSolutions Canada Inc. to (i) become a guarantor under the Senior Secured Credit Facilities and (ii) grant a security lien in all collateral owned by Emergent BioSolutions Canada Inc. (subject to the exclusions and exceptions specified in the Collateral Agreement) to the Administrative Agent. In addition, in connection with the entry into the Forbearance Agreement and Amendment, the Company paid a forbearance fee of approximately $1.2 million. The Forbearance Period expired on April 30, 2024. See Note 2, "Summary of significant accounting policies" for further discussion of the Forbearance Agreement and Amendment.

On April 29, 2024, the Company entered into the Seventh Amendment. The Seventh Amendment, among other things: (a) reduces available commitments under the Revolving Credit Facility to $240.0 million through July 30, 2024, to $210.0 million from July 31, 2024 through September 29, 2024, to $205.0 million from September 30, 2024 through October 30, 2024, to $180.0 million from October 31, 2024 through November 29, 2024, and to $170.0 million from November 30, 2024 and thereafter (in each case subject to potential limited additional borrowings from a specified reserve with the consent of the lenders); (b) amends the interest rate benchmark in the definition of Applicable Margin from (i) 5.00% per annum to 7.00% per annum with respect to Base Rate Loans and (ii) 6.50% per annum to 8.50% per annum with respect to SOFR Loans, RFR Loans and Eurocurrency Rate Loans; and (c) requires the requirement that the Company to raise equity or unsecured indebtedness of at least $85.0 million by July 31, 2024 (or such later date on or before September 29, 2024 as agreed to by the Administrative Agent), provided that such requirement will be reduced by the aggregate net cash proceeds received from certain dispositions that are applied to reduce amounts outstanding under the Revolving Credit Facility. On July 18, 2024, the Administrative Agent agreed to extend the deadline of the capital raise requirement to September 29, 2024.

In addition, pursuant to the Seventh Amendment, the Company is obligated to apply 100% of the aggregate net cash proceeds received from certain dispositions to the prepayment of amounts outstanding under the Revolving Credit Facility, except where such proceeds exceed $85,000,000, in which case such mandatory prepayment of the Revolving Credit Facility will no longer be required. Mandatory prepayment of the Term Loan Facility will not be required unless and until the aggregate net proceeds from such dispositions exceed $85,000,000, at which point 100% of such proceeds must be used toward repayment of amounts outstanding under the Term Loan Facility.

Under the Seventh Amendment, the Company is also subject to (a) a monthly minimum consolidated EBITDA covenant through May 15, 2025 and a monthly maximum capital expenditures covenant through March 31, 2025, (b) a minimum liquidity requirement, and (c) additional financial statement reporting and business plan forecast obligations. In connection with the entry into the Seventh Amendment, the Company paid an amendment fee of an aggregate amount equal to 0.5% of the total credit exposure as of the Seventh Amendment effective date and will be required to pay an additional amendment fee of 1.0% of total credit exposure at December 1, 2024 and each month thereafter. See Note 2, "Summary of significant accounting policies" for additional information related to the Company’s compliance with the debt covenants described above. As a result of the Seventh Amendment, the Company capitalized $3.2 million of costs associated with the Revolving Credit Facility as a contra account to directly offset the loan balance in “Debt, current portion” on the Company's Condensed Consolidated Balance Sheets, expensed $1.4 million of debt issuance costs related to the Term Loan Facility, and capitalized $1.0 million of costs related to the Term Loan Facility as a contra account to directly offset the loan balance in "Debt, current portion" on the Company's Condensed Consolidated Balance Sheets.

11. Share-based compensation and stockholders' equity

Share-based compensation

The Company's share-based compensation expense relates to stock options, performance stock options, restricted stock units, performance stock units and liability classified long-term incentive awards. During the six months ended June 30, 2024, the Company granted stock options to purchase 4.0 million shares of common stock; performance stock options subject to market conditions, to purchase 0.8 million shares of common stock; and 0.2 million restricted stock units. The grants were made under the Emergent BioSolutions Inc. Amended and Restated Stock Incentive Plan and the Emergent BioSolutions Inc. Inducement Plan. Additionally, during the six months ended June 30, 2024, the Company granted an $8.0 million long-term incentive award, subject to market conditions, with the option to settle in any combination of cash or shares, which is accounted for as a liability classified award. The performance stock options and the long-term incentive award were valued using Monte Carlo valuation models, and both have a performance period of five years to vest based on the Company's stock price performance. The long-term incentive award will be revalued at each reporting period until the award is earned or expires. The Company's other equity awards typically vest over three equal annual installments beginning on the day prior to the anniversary of the grant date. The performance stock units settle in stock at the end of the three-year performance period based on the Company's results compared to the performance criteria. During the six months ended June 30, 2024, 0.2 million stock options and 0.1 million restricted stock units were forfeited prior to the completion of the applicable vesting requirements or expiration. An immaterial number of performance stock units were forfeited during the six months ended June 30, 2024.

Share-based compensation expense, net of forfeitures was recorded in the following financial statement line items:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Cost of Commercial Product sales	$ —	$ —	$ —	$ 0.1
Cost of MCM Product sales	0.6	1.2	1.3	2.5
Cost of Bioservices	0.2	0.3	0.3	0.6
R&D	0.5	0.4	1.0	1.1
Selling, general and administrative	4.2	6.4	8.8	10.8
Total share-based compensation expense	$ 5.5	$ 8.3	$ 11.4	$ 15.1

Stockholders' equity

At-the-Market Equity Offering Facility

The Company may, from time to time, sell up to $150.0 million aggregate gross sales price of shares of its common stock through Evercore Group L.L.C. and RBC Capital Markets, LLC, as sales agents, under an "at-the-market" equity offering program (the "ATM Program") that was entered into on May 17, 2023. There were no sales of the Company's common stock under the ATM Program during the three months ended June 30, 2024. The Company's Registration Statement on Form S-3 expires on August 9, 2024 and the Company is not eligible to file a new Registration Statement on Form S-3 until 2025 due to the delayed filing of the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2023. The Company will not be eligible to sell any shares under the ATM Program until a new Registration Statement is filed and becomes effective. During the second quarter of 2023, the Company sold 1.1 million shares of the Company's common stock under the ATM Program for gross proceeds of $9.1 million, representing an average share price of $8.22 per share. As of June 30, 2024, $140.9 million aggregate gross sales price of shares of the Company's common stock remains available for issuance under the ATM Program. The Company intends to use proceeds obtained from the sale of shares under the ATM Program for general corporate purposes.

Accumulated other comprehensive income (loss), net of tax

The following table includes changes in accumulated other comprehensive income (loss), net of tax by component:

	Defined Benefit Pension Plan	Derivative Instruments	Foreign Currency Translation Adjustments	Total
Balance at December 31, 2023	$ —	$ —	$ (5.7)	$ (5.7)
Other comprehensive income before reclassifications	—	—	0.2	0.2
Net current period other comprehensive income	—	—	0.2	0.2
Balance at March 31, 2024	$ —	$ —	$ (5.5)	$ (5.5)
Other comprehensive income (loss) before reclassifications	—	—	—	—
Net current period other comprehensive loss	—	—	—	—
Balance at June 30, 2024	$ —	$ —	$ (5.5)	$ (5.5)
Balance at December 31, 2022	$ 3.5	$ 6.2	$ (6.6)	$ 3.1
Other comprehensive loss before reclassifications	—	(4.4)	(0.1)	(4.5)
Amounts reclassified from accumulated other comprehensive income	—	2.4	—	2.4
Net current period other comprehensive loss	—	(2.0)	(0.1)	(2.1)
Balance at March 31, 2023	$ 3.5	$ 4.2	$ (6.7)	$ 1.0
Other comprehensive income before reclassifications	—	1.2	2.6	3.8
Amounts reclassified from accumulated other comprehensive loss	(3.5)	(2.9)	—	(6.4)
Net current period other comprehensive income (loss)	(3.5)	(1.7)	2.6	(2.6)
Balance at June 30, 2023	$ —	$ 2.5	$ (4.1)	$ (1.6)

The tables below present the tax effects related to each component of other comprehensive income (loss):

	Three Months Ended June 30,					
	2024			2023		
	Pretax	Tax Expense	Net of tax	Pretax	Tax Expense	Net of tax
Defined benefit pension plan	$ —	$ —	$ —	$ (4.1)	$ 0.6	$ (3.5)
Derivative instruments	—	—	—	(2.4)	0.7	(1.7)
Foreign currency translation adjustments	—	—	—	2.1	0.5	2.6
Total adjustments	$ —	$ —	$ —	$ (4.4)	$ 1.8	$ (2.6)

	Six Months Ended June 30,					
	2024			2023		
	Pretax	Tax Expense	Net of tax	Pretax	Tax Expense	Net of tax
Defined benefit pension plan	$ —	$ —	$ —	$ (4.1)	$ 0.6	$ (3.5)
Derivative instruments	—	—	—	(5.0)	1.3	(3.7)
Foreign currency translation adjustments	0.2	—	0.2	2.0	0.5	2.5
Total adjustments	$ 0.2	$ —	$ 0.2	$ (7.1)	$ 2.4	$ (4.7)

12. Loss per common share

Basic loss per common share is calculated using the treasury method by dividing net loss by the weighted average number of shares of common stock outstanding during the period. Diluted loss per common share adjusts basic loss per common share for the effects of potentially dilutive common shares and is calculated using the treasury stock method. Potentially dilutive common shares include the dilutive effect of shares issuable under our equity compensation plans, including stock options, restricted stock units and performance stock units. Diluted loss per share excludes anti-dilutive securities, which represent the number of potential common shares related to shares issuable under our equity compensation plan that were excluded from diluted loss per common share because their effect would have been antidilutive.

The following table presents the calculation of basic and diluted loss per common share:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Numerator:				
Net loss	$ (283.1)	$ (261.4)	$ (274.1)	$ (447.6)
Denominator:				
Weighted-average number of shares outstanding-basic	52.6	50.7	52.4	50.5
Weighted-average number of shares outstanding-diluted	52.6	50.7	52.4	50.5
Net loss per common share - basic	$ (5.38)	$ (5.16)	$ (5.23)	$ (8.86)
Net loss per common share - diluted	$ (5.38)	$ (5.16)	$ (5.23)	$ (8.86)
Anti-dilutive securities	2.3	3.6	3.4	3.4

13. Revenue recognition

The Company generates the majority of its revenues through product sales to customers. The Company also generates revenues through its Bioservices offerings and suite reservations for and to third parties and contracts and grants revenue. The Company recognizes revenue when its customers obtain control of promised goods or services, in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services by analyzing the following five steps: (1) identify the contract with (a) customer(s); (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to the performance obligations in the contract; and (5) recognize revenue when (or as) the entity satisfies a performance obligation.

In the third quarter of 2023, the Company launched over-the-counter (“OTC”) NARCAN®, which was approved by the FDA as an over-the-counter emergency treatment of opioid overdose, broadening the Company’s customer base and sales channels to retail pharmacies and digital commerce websites. The Company's Nasal Naloxone Products are now sold commercially over-the-counter at retail pharmacies and digital commerce websites as well as through physician-directed or standing order prescriptions at retail pharmacies, health departments, local law enforcement agencies, community-based organizations, substance abuse centers and other federal agencies.

The Company's OTC NARCAN® customer contracts are fixed price contracts. The Company invoices and records revenue when the pharmacies and wholesalers receive product from the third-party logistics warehouse used by the Company, which is the point at which control is transferred to the customer. Revenues for OTC NARCAN® are recorded at the net sales price (transaction price), which includes estimates of variable consideration for which reserves are established. Estimates of variable consideration include allowance for returns, specialty distributor fees, wholesaler fees and prompt payment discounts. OTC NARCAN® may also be sold on consignment through third-party online retailers where revenues are recognized at the point in time when sold to the end customer. The Company pays these third-party online retailers selling commissions and fulfillment fees which are recorded as SG&A expenses and Cost of Commercial Product sales, respectively, in the Condensed Consolidated Statement of Operations. Revenues from OTC NARCAN® are recognized to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with such variable consideration is subsequently resolved. The Company considers several factors in the estimation process for the allowance for returns of OTC NARCAN®, including inventory levels within the distribution channel, product shelf life and historical return activity, including activity for product sold for which the return period has passed, as well as other relevant factors. Because returned product cannot be resold, there is no corresponding asset for product returns.

The Company's revenues disaggregated by operating segment and major sources for the three and six months ended June 30, 2024 and 2023 were as follows:

	Three Months Ended June 30, 2024			Three Months Ended June 30, 2023		
	USG	Non-USG	Total	USG	Non-USG	Total
Commercial Product sales	$ 0.1	$ 119.9	$ 120.0	$ 0.3	$ 137.6	$ 137.9
MCM Product sales	30.6	32.8	63.4	150.2	14.1	164.3
Bioservices:						
Services [1]	—	64.5	64.5	—	26.4	26.4
Leases	—	0.2	0.2	—	2.7	2.7
Total Bioservices	$ —	$ 64.7	$ 64.7	$ —	$ 29.1	$ 29.1
Contracts and grants	6.6	—	6.6	4.6	2.0	6.6
Total revenues	$ 37.3	$ 217.4	$ 254.7	$ 155.1	$ 182.8	$ 337.9

[1] Bioservices Services revenues for the three months ended June 30, 2024 include $50.0 million attributable to the confidential arbitration settlement (the "Settlement Agreement") with Janssen Pharmaceuticals, Inc. ("Janssen"), one of the Janssen Pharmaceutical Companies of Johnson & Johnson, related to the 2022 termination of manufacturing services agreement with Janssen (the "Janssen Agreement"). The revenue is related to raw materials purchased for the Janssen Agreement which Janssen had not reimbursed. See Note 16, "Litigation" for additional information related to the accounting treatment and settlement of the arbitration with Janssen.

	Six Months Ended June 30, 2024			Six Months Ended June 30, 2023		
	USG	Non-USG	Total	USG	Non-USG	Total
Commercial Product sales	$ 0.4	$ 238.1	$ 238.5	$ 0.3	$ 243.8	$ 244.1
MCM Product sales	144.7	74.1	218.8	176.3	25.2	201.5
Bioservices:						
Services [1]	—	82.8	82.8	—	39.0	39.0
Leases	—	0.4	0.4	—	4.5	4.5
Total Bioservices	$ —	$ 83.2	$ 83.2	$ —	$ 43.5	$ 43.5
Contracts and grants	14.0	0.6	14.6	9.5	3.6	13.1
Total revenues	$ 159.1	$ 396.0	$ 555.1	$ 186.1	$ 316.1	$ 502.2

[1] Bioservices Services revenues for the six months ended June 30, 2024 include $50.0 million attributable to the Settlement Agreement. The revenue is related to raw materials purchased for the Janssen Agreement which Janssen had not reimbursed. See Note 16, "Litigation" for additional information related to the Settlement Agreement and its accounting treatment.

Bioservices operating leases

Certain multi-year Bioservices arrangements with non-USG customers include operating leases whereby the customer has the right to direct the use of and obtain substantially all of the economic benefits of specific manufacturing suites operated by the Company. The associated revenue is recognized on a straight-line basis over the term of the lease. The remaining term on the Company's operating lease components approximates 4.5 years. The Company utilizes a cost-plus model to determine the stand-alone selling price of the lease component to allocate contract consideration between the lease and non-lease components. During the three and six months ended June 30, 2024, the Company's non-USG lease revenues were $0.2 million and $0.4 million, respectively, which is included within Bioservices "Leases" on the Condensed Consolidated Statement of Operations. The Company estimates future operating lease revenues to be $0.4 million in the remainder of 2024, $0.8 million in 2025, $0.9 million in 2026, $0.9 million in 2027, $0.9 million in 2028 and no lease revenue in 2029 and thereafter.

Transaction price allocated to remaining performance obligations

As of June 30, 2024, the Company has future contract value on unsatisfied performance obligations of approximately $383.7 million associated with all arrangements entered into by the Company. The Company expects to recognize $361.3 million of unsatisfied performance obligations within the next 24 months. The amount and timing of revenue recognition for unsatisfied performance obligations can change. The future revenues associated with unsatisfied performance obligations exclude the value of unexercised option periods in the Company's revenue arrangements. Often the timing of manufacturing activities changes based on customer needs and resource availability. Government funding appropriations can impact the timing of product deliveries. The success of the Company's development activities that receive development funding support from the USG under development contracts can also impact the timing of revenue recognition.

Contract assets

The Company considers accounts receivable and deferred costs associated with revenue generating contracts, which are not included in inventory or property, plant and equipment and that the Company does not currently have a contractual right to bill, to be contract assets. As of June 30, 2024 and December 31, 2023, the Company had $8.0 million and $21.9 million, respectively, of contract assets recorded within "Accounts receivable, net" on the Condensed Consolidated Balance Sheets.

Contract liabilities

When performance obligations are not transferred to a customer at the end of a reporting period, cash received associated with amounts allocated to those performance obligations is reflected as contract liabilities on the Condensed Consolidated Balance Sheets and is deferred until control of these performance obligations is transferred to the customer. The following table presents the roll forward of the contract liability balances:

		Contract Liabilities
Balance at December 31, 2023	$	29.9
Balance at June 30, 2024	$	9.7
Revenue recognized in the period from amounts included in contract liability at the beginning of the period:	$	25.0

As of June 30, 2024 and December 31, 2023, the current portion of contract liabilities was $6.2 million and $27.2 million, respectively, and was included in "Other current liabilities" on the Condensed Consolidated Balance Sheets.

Accounts receivable and allowance for expected credit losses

Accounts receivable, including unbilled accounts receivable contract assets, consist of the following:

	June 30, 2024	December 31, 2023
Accounts receivable:		
Billed	$ 120.7	$ 141.8
Unbilled	82.5	51.4
Allowance for expected credit losses	(6.9)	(2.2)
Accounts receivable, net	$ 196.3	$ 191.0

We maintain an allowance for expected credit losses, which represents the estimated aggregate amount of credit risk arising from the inability or unwillingness of specific customers to pay our fees or disputes that may affect our ability to fully collect our billed accounts receivable. We estimate the current-period provision for expected credit losses on a specific identification basis and we consider factors such as the age of the receivables balance, knowledge of the specific customers' circumstances and historical collection experience for similar customers. Accounts receivable, net of the allowance for expected credit losses, represents the amount we expect to collect. Our actual experience may vary from our estimates. At each reporting date, we adjust the allowance for expected credit losses to reflect our current estimate.

14. Leases

The Company is the lessee for operating leases for offices, R&D facilities and manufacturing facilities. The Company determines if an arrangement is a lease at inception. Operating leases are included in right-of-use assets and liabilities. For a discussion of lessor activities, see Note 13, "Revenue recognition."

The components of lease expense were as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Operating lease cost:				
Amortization of right-of-use assets	$ 0.9	$ 0.9	$ 1.8	$ 2.0
Interest on lease liabilities	0.2	0.2	0.4	0.4
Total operating lease cost	$ 1.1	$ 1.1	$ 2.2	$ 2.4

Operating lease costs are reflected as components of "Cost of Commercial Product sales", "Cost of MCM Product sales", "Cost of Bioservices", "R&D" expense and "SG&A" expense on the Company's Condensed Consolidated Statements of Operations.

Supplemental balance sheet information related to lessee activities is as follows:

Leases	Classification	June 30, 2024	December 31, 2023
Operating lease right-of-use assets	Other assets	$ 13.7	$ 16.2
Operating lease liabilities, current portion	Other current liabilities	$ 3.1	$ 3.5
Operating lease liabilities	Other liabilities	11.5	13.8
Total operating lease liabilities		$ 14.6	$ 17.3
Operating leases:			
Weighted average remaining lease term (years)		6.1	6.2
Weighted average discount rate		5.3 %	5.3 %

15. Income taxes

The estimated effective annual tax rate as of June 30, 2024 and 2023 for the years ended December 31, 2024 and 2023, excluding the impact of discrete adjustments, was 19% and (8)%, respectively. The effective tax rate for the six months ended June 30, 2024 and 2023 was (6)% and (9)%, respectively. The increase in the estimated effective annual tax rate is primarily due to a change in jurisdictional mix of income and losses. The Company did not record a discrete tax expense (benefit) for the three and six months ended June 30, 2024 and 2023.

The Company establishes valuation allowances for deferred income tax assets in accordance with U.S. GAAP, which provides that such valuation allowances shall be established unless realization of the income tax benefits is more likely than not. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. At each reporting period, the Company considers the scheduled reversal of deferred tax liabilities and assets, available taxes in carryback periods, tax planning strategies and projected future taxable income in making this assessment.

In 2022, the Company determined that it was more likely than not that certain deferred tax assets would not be realized due to reductions in estimates of future profitability and disclosure related to substantial doubt about the Company's ability to continue as a going concern.

16. Litigation

Securities and shareholder litigation

With respect to the specific legal proceedings and claims described below, unless otherwise noted, the amount or range of possible losses is not reasonably estimable. There can be no assurance that the settlement, resolution, or other outcome of one or more matters, including the matters set forth below, during any subsequent reporting period will not have a material adverse effect on the Company's results of operations or cash flows for that period or on the Company's financial condition.

On April 20, 2021, May 14, 2021, and June 2, 2021, putative class action lawsuits were filed against the Company and certain of its current and former senior officers in the United States District Court for the District of Maryland on behalf of purchasers of the Company's common stock, seeking to pursue remedies under the Exchange Act. These complaints were filed by Palm Tran, Inc. – Amalgamated Transit Union Local 1577 Pension Plan; Alan I. Roth; and Stephen M. Weiss, respectively. The complaints allege, among other things, that the defendants made false and misleading statements about the Company's manufacturing capabilities with respect to COVID-19 vaccine bulk drug substance (referred to herein as "CDMO Manufacturing Capabilities"). These cases were consolidated on December 23, 2021, under the caption In re Emergent BioSolutions Inc. Securities Litigation, No. 8:21-cv-00955-PWG (the "Federal Securities Class Action"). The lead plaintiffs in the consolidated matter (the "Lead Plaintiffs") are Nova Scotia Health Employees' Pension Plan and The City of Fort Lauderdale Police & Firefighters' Retirement System. An order granting Lead Plaintiff's motion for class certification and appointment of class representatives was entered on June 18, 2024. The defendants believe that the allegations in the complaints are without merit and intend to defend the matters vigorously. Given the uncertainty of litigation, the preliminary stage of the cases, and the legal standards that must be met for, among other things, class certification and success on the merits, the Company cannot reasonably estimate the possible loss or range of loss, if any, that may result from the consolidated action.

On June 29, 2021, Lincolnshire Police Pension Fund ("Lincolnshire"), and on August 16, 2021, Pooja Sayal, filed putative shareholder derivative lawsuits in the United States District Court for the District of Maryland on behalf of the Company against certain of the Company's current and former officers and directors for breach of fiduciary duties, waste of corporate assets, and unjust enrichment, each allegation related to the CDMO Manufacturing Capabilities. In addition to monetary damages, the complaints seek the implementation of multiple corporate governance and internal policy changes. On November 16, 2021, the cases were consolidated under the caption In re Emergent BioSolutions Inc. Stockholder Derivative Litigation, Master Case No. 8:21-cv-01595-PWG. On January 3, 2022, the Lincolnshire complaint was designated as the operative complaint in the consolidated action. On April 13, 2022, the Court approved the parties' joint stipulation to and stay of the proceedings and discovery until the close of fact discovery in the Federal Securities Class Action. The defendants believe that the allegations in the complaints are without merit and intend to defend the matter vigorously.

On September 15, 2021, September 16, 2021 and November 12, 2021, putative shareholder derivative lawsuits were filed by Chang Kyum Kim, Mark Nevins and Employees Retirement System of the State of Rhode Island, North Collier Fire Control and Rescue District Firefighters Pension Plan, and Pembroke Pines Firefighters & Police Officers Pension Fund, respectively, in the Court of Chancery of the State of Delaware on behalf of the Company against certain of its current and former officers and directors for breach of fiduciary duties, unjust enrichment and insider trading, each allegation related to the CDMO Manufacturing Capabilities. In addition to monetary damages, the complaints seek the implementation of multiple corporate governance and internal policy changes. On February 2, 2022, the cases were consolidated under the caption In re Emergent BioSolutions, Inc. Derivative Litigation, C.A. No. 2021-0974-MTZ with the institutional investors as co-lead plaintiffs. On March 4, 2022, the defendants' filed a motion to dismiss the complaint. Ruling on this motion is stayed pursuant to a March 29, 2022 order staying all proceedings pending a final, non-appealable judgment in the Federal Securities Class Action.

On December 3, 2021, December 22, 2021 and January 18, 2022, putative shareholder derivative lawsuits were filed by Zachary Elton, Eric White and Jeffrey Reynolds in the Circuit Court for Montgomery County, Maryland on behalf of the Company against certain of its current and former officers and directors for breach of fiduciary duty, unjust enrichment, waste of corporate assets, failing to maintain internal controls, making or causing to be made false and/or misleading statements and material omissions, insider trading and otherwise violating the federal securities laws, each allegation related to the CDMO Manufacturing Capabilities. The complaints seek monetary and punitive damages. On February 22, 2022, the Court entered an order consolidating these actions under case number C-15-21-CV-000496. On March 9, 2022, the parties filed a Joint Stipulation of Stay of Proceedings and Discovery, pursuant to which the parties agreed to stay all proceedings until 30 calendar days after a ruling on the defendants' motion to dismiss, and on November 2, 2023, the Court approved the parties' joint stipulation to extend the stay of the proceedings and discovery until the close of fact discovery in the Federal Securities Class Action.

In addition to the above actions, the Company received inquiries and subpoenas to produce documents related to these matters from the Department of Justice, the SEC, the Maryland Attorney General's Office, and the New York Attorney General's Office. The Company produced documents as required in response and will continue to cooperate with these government inquiries should further requests be made. The Company also received inquiries and subpoenas from Representative Carolyn Maloney and Representative Jim Clyburn, members of the House Committee on Oversight and Reform and the Select Subcommittee on the Coronavirus Crisis and Senator Murray of the Committee on Health, Education, Labor and Pensions. The Company produced documents and provided testimony and briefings as requested in response to these inquiries and the Select Subcommittee released its final report related to the coronavirus crisis on December 9, 2022.

2022 Termination of manufacturing services agreement with Janssen Pharmaceuticals, Inc.

On July 2, 2020, the Company, through its wholly owned subsidiary, Emergent Manufacturing Operations Baltimore, LLC, entered into the Janssen Agreement with Janssen, for large-scale drug substance manufacturing of Johnson & Johnson's investigational SARS-CoV-2 vaccine, Ad26.COV2-S, recombinant based on the AdVac technology (the "Product").

On June 6, 2022, the Company provided to Janssen a notice (the "Notice") of material breach of the Janssen Agreement for, among other things, failure by Janssen (i) to provide the Company the requisite forecasts of the required quantity of Product to be purchased by Janssen under the Janssen Agreement and (ii) to confirm Janssen's intent to not purchase the requisite minimum quantity of the Product pursuant to the Janssen Agreement and instead, wind-down the Janssen Agreement ahead of fulfilling these minimum requirements. On June 6, 2022, the Company received from Janssen a purported written notice of termination (the "Janssen Notice") of the Janssen Agreement for asserted material breaches of the Janssen Agreement by the Company, including alleged failure by the Company to perform its obligations in compliance with current good manufacturing practices or other applicable laws and regulations and alleged failure by the Company to supply Janssen with the Product. Janssen alleged that the Company's breaches were not curable and that, therefore, termination of the Janssen Agreement would be effective as of July 6, 2022. On June 14, 2022, Janssen filed a Demand for Arbitration and on July 29, 2022 the Company filed its Answering Statement and counterclaims. On July 3, 2024, the Company and Janssen entered into the Settlement Agreement to resolve all claims among the parties arising from the Janssen Agreement and the activities referenced above. Pursuant to the terms of the Settlement Agreement, Janssen paid the Company $50.0 million on July 31, 2024. See Note 18, "Subsequent events" for more information on the Settlement Agreement.

During the three months ended June 30, 2024, there were no impacts on previously recognized revenue or depreciation related to the conclusion of the Janssen Agreement. As of June 30, 2024, the Company has no billed or unbilled net accounts receivable related to the Janssen Agreement.

Beginning in the fourth quarter of 2022, because the arbitration process with Janssen was expected to extend longer than one year, the Company reclassified amounts related to the Janssen Agreement from "Inventories, net" and from "Prepaid expenses and other current assets" to "Other assets", resulting in $152.7 million in long-term assets related to the Janssen Agreement on the Condensed Consolidated Balance Sheet as of December 31, 2022. The long-term asset balance within "Other Assets" prior to announcing the Settlement Agreement was $158.7 million. The Company concluded the Settlement Agreement is a recognized subsequent event and recorded $50.0 million in "Services revenue" and "Cost of Services" on the Condensed Consolidated Statement of Operations for the three months ended June 30, 2024 to reflect the settlement receivable as a change in the transaction price for the Janssen Agreement. Additionally, the Company recorded $110.2 million for the three months ended June 30, 2024 within "Cost of Services" on the Condensed Consolidated Statement of Operations to write down the remaining inventory to its net realizable value and for estimated disposal costs. The receivable for the settlement amount was recorded within "Accounts receivable, net" and there was no long-term asset balance remaining within "Other Assets" related to the Janssen Agreement as of June 30, 2024.

17. Segment information

In the fourth quarter of 2023, the Company realigned its reportable operating segments to reflect recent changes in the Company's internal operating and reporting process. The revised reporting structure reflects the internal reporting and review process used by the Company's CODM for making decisions and assessing performance and is consistent with how the Company currently manages the business. The Company now manages its business with a focus on three reportable segments. The Commercial Products segment, which includes NARCAN® products and other commercial products that were sold as part of the travel health business in the second quarter of 2023 (see Note 4, "Divestiture" for more information on the sale of the travel health business); the MCM Products segment, which includes the Anthrax - MCM products, Smallpox - MCM products and Other Products; and the Services segment, consisting of the Company's Bioservices offerings.

The Company evaluates the performance of these reportable segments based on revenue and segment adjusted gross margin, which is a non-GAAP financial measure. Segment revenue includes external customer sales, but it does not include inter-segment services. The Company defines segment adjusted gross margin, as segment gross margin excluding the impact of restructuring costs and non-cash items related to changes in fair value of contingent consideration and inventory step-up provision. We define total segment adjusted gross margin, which is a non-GAAP financial measure, as total segment gross margin, excluding the impact of restructuring costs and the fair value of contingent consideration. The Company does not allocate research and development, selling, general and administrative costs, amortization of intangibles assets, interest and other income (expense) or taxes to operating segments in the management reporting reviewed by the CODM. The accounting policies for segment reporting are the same as for the Company as a whole.

The Company manages its assets on a total company basis, not by operating segment, as the Company's operating assets are shared or commingled. Therefore, the Company's CODM does not regularly review any asset information by operating segment and, accordingly, the Company does not report asset information by operating segment.

For all tables presented below, the prior period disclosures have been recast to conform to the current period segment presentation.

The following table presents segment revenues, segment cost of sales or services, segment gross margin, segment gross margin percentage and segment adjusted gross margin for each of the Company's reportable segments for the three and six months ended June 30, 2024 and 2023:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Revenues:				
Commercial Products	$ 120.0	$ 137.9	$ 238.5	$ 244.1
MCM Products	63.4	164.3	218.8	201.5
Services	64.7	29.1	83.2	43.5
Segment revenues	248.1	331.3	540.5	489.1
Contracts and grants revenue	6.6	6.6	14.6	13.1
Total revenues	$ 254.7	$ 337.9	$ 555.1	$ 502.2
Cost of sales or services:				
Cost of Commercial Products	$ 53.4	$ 54.4	$ 105.5	100.2
Cost of MCM Products	31.1	80.5	93.3	135.9
Cost of Services	211.6	55.7	241.9	107.4
Total cost of sales or services	$ 296.1	$ 190.6	$ 440.7	$ 343.5
Gross margin				
Commercial Products	$ 66.6	$ 83.5	$ 133.0	$ 143.9
MCM Products	32.3	83.8	125.5	65.6
Services	(146.9)	(26.6)	(158.7)	(63.9)
Total segment gross margin [(1)]	$ (48.0)	$ 140.7	$ 99.8	$ 145.6
Gross margin %				
Commercial Products	56 %	61 %	56 %	59 %
MCM Products	51 %	51 %	57 %	33 %
Services	(227)%	(91)%	(191)%	(147)%
Total Segment	(19)%	42 %	18 %	30 %
Segment adjusted gross margin				
Commercial Products	$ 66.6	$ 83.5	$ 133.0	$ 143.9
MCM Products	35.1	86.1	128.7	70.2
Services	(36.3)	(26.6)	(48.3)	(63.9)
Total segment adjusted gross margin	$ 65.4	$ 143.0	$ 213.4	$ 150.2

[(1)] Segment revenues less total cost of sales or services.

The following table provides a reconciliation of the Company's total segment adjusted gross margin to the Condensed Consolidated Statement of Operations:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Total segment adjusted gross margin	$ 65.4	$ 143.0	$ 213.4	$ 150.2
Reconciling items:				
Contracts and grants revenue	$ 6.6	$ 6.6	$ 14.6	$ 13.1
Segment restructuring costs	(3.1)	—	(2.8)	(2.0)
Segment inventory step-up provision	—	(1.9)	—	(1.9)
Changes in fair value of contingent consideration	(0.1)	(0.4)	(0.6)	(0.7)
Settlement charge, net	(110.2)	—	(110.2)	—
Impairment of long-lived assets	(27.2)	(306.7)	(27.2)	(306.7)
Research and development	(32.7)	(26.0)	(47.8)	(66.7)
Selling, general and administrative	(85.9)	(91.4)	(170.6)	(192.7)
Amortization of intangible assets	(16.3)	(16.1)	(32.5)	(33.1)
Interest expense	(23.6)	(28.6)	(47.9)	(46.5)
Gain (loss) on sale of business and assets held for sale	(40.0)	74.9	(40.0)	74.9
Other, net	(2.7)	(3.6)	(6.1)	1.3
Loss before income taxes	$ (269.8)	$ (250.2)	$ (257.7)	$ (410.8)

The following table includes depreciation expense for each segment:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Depreciation:				
Commercial Products	$ —	$ —	$ —	$ 0.3
MCM Products	5.6	7.5	$ 11.2	$ 15.2
Services	2.6	8.4	5.2	16.3
Other	4.0	0.9	7.5	2.6
Total	$ 12.2	$ 16.8	$ 23.9	$ 34.4

18. Subsequent events

Confidential arbitration settlement with Janssen

On July 3, 2024, the Company, its wholly owned subsidiary, Emergent Manufacturing Operations Baltimore, LLC (“EMOB”), and Janssen executed the Settlement Agreement to resolve all claims among the Parties arising from the Janssen Agreement. The Settlement Agreement also resolves the Parties’ related and previously disclosed arbitration.

Pursuant to the terms of the Settlement Agreement, Janssen paid the Company $50.0 million on July 31, 2024. In addition, the Settlement Agreement contains broad releases of the parties, their affiliates and subsidiaries, representatives, officers, directors and shareholders, including releases of all claims related to the manufacture of the Product by EMOB, the Janssen Agreement, or any agreement or understanding between the parties concerning the Product, and the matters at issue in the arbitration. The Company concluded this is a recognized subsequent event. See Note 16, “Litigation" for more information on the Settlement Agreement and its accounting treatment.

Development milestone payments for CHIKV VLP

On July 18, 2024, Bavarian Nordic announced that the European Medicines Agency has validated the marketing authorization application for CHIKV VLP, which was submitted in June 2024. This approval triggered a milestone payment under the Purchase and Sale Agreement to the Company in the amount of $10.0 million, which is expected to be received in the third quarter of 2024.

2024 Sale of RSDL® to SERB Pharmaceuticals

On July 31, 2024, the Company entered into the RSDL® Agreement with SERB, pursuant to which, among other things, the Company sold its worldwide rights to RSDL® to SERB. The RSDL® Transaction also included the sale of all the outstanding capital stock of Emergent Protective Products USA Inc. ("EPPU"), a wholly owned subsidiary of the Company, which leases a manufacturing facility in Hattiesburg, Mississippi, as well as certain assets related to RSDL®, including intellectual property rights, contract rights, inventory and marketing authorizations. In addition, the employees of EPPU are expected to join SERB in connection with the RSDL® Transaction.

Pursuant to the RSDL® Transaction, SERB will assume certain government contracts related to RSDL® decontamination lotion, including the Company's existing contract to supply RSDL® to the U.S. Department of Defense, through a new contract award to the Canadian Commercial Corporation.

The RSDL® Agreement provided for a cash purchase price of $75.0 million at the closing of the RSDL® Transaction, which is subject to customary adjustments based on inventory value at closing. In addition, SERB will pay the Company a $5.0 million payment upon achievement of a milestone relating to sourcing of a certain component of RSDL® decontamination lotion. The Company and SERB made customary representations, warranties, and covenants in the RSDL® Agreement. In addition, the Company agreed, for a period of three years following the closing of the RSDL® Transaction, not to make, import, export, use, sell or otherwise dispose of, any product that is intended to remove or neutralize chemical warfare agents from the skin, including any product that contains the same chemical components as RSDL®, or to engage in a similar competing business.

At the closing of the RSDL® Transaction, the Company and SERB also entered into a transition services agreement to ensure the orderly transition of RSDL® decontamination lotion and the related assets to SERB, and a supply agreement pursuant to which the Company's Winnipeg facility will continue to manufacture and supply bulk lotion to SERB under a long-term supply agreement. The Company and SERB will also enter into a reverse supply agreement shortly after the closing of the RSDL® Transaction pursuant to which SERB will supply to the Company finished RSDL® for the purposes of the Company performing certain transitional distribution services.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our unaudited condensed consolidated financial statements and accompanying notes and other financial information included elsewhere in this quarterly report on Form 10-Q and our audited consolidated financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2023 (the "2023 Form 10-K"). Some of the information contained in this discussion and analysis or set forth elsewhere in this quarterly report on Form 10-Q includes information with respect to our plans and strategy for our business and financing, as well as forward-looking statements that involve risks and uncertainties. You should carefully review the sections entitled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements" in this Quarterly Report on Form 10-Q for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

BUSINESS OVERVIEW

Emergent BioSolutions Inc. ("Emergent," the "Company," "we," "us," and "our") is a global life sciences company focused on providing innovative preparedness and response solutions addressing accidental, deliberate, and naturally occurring Public Health Threats ("PHTs"). The Company's solutions include a product portfolio, a product development portfolio, and a contract development and manufacturing services ("CDMO") portfolio.

We are currently focused on the following four PHT categories: chemical, biological, radiological, nuclear and explosives ("CBRNE"); emerging infectious diseases ("EID"); public health crises; and acute, emergency and community care. As of June 30, 2024, we have a product portfolio of 11 products that contribute a substantial portion of our revenue and are sold to government and commercial customers. Additionally, we have a development pipeline consisting of a diversified mix of both pre-clinical and clinical stage product candidates. Finally, we have a fully integrated portfolio of CDMO services which cover development services, drug substance manufacturing and drug product manufacturing and packaging.

The Company structures the business with a focus on markets and customers. As such, the key components of the business structure include the following four product and service categories: Anthrax - Medical Countermeasures ("MCM") Products, NARCAN®, Smallpox - MCM products, and Emergent Bioservices (CDMO) services ("Bioservices"). In the fourth quarter of 2023, we realigned our reportable operating segments to reflect recent changes in our internal operating and reporting process. The revised reporting structure reflects the internal reporting and review process used by our Chief Operating Decision Maker, for making decisions and assessing performance, and is consistent with how we currently manage the business. We now manage our business with a focus on three reportable segments: (1) a Commercial Products segment consisting of our NARCAN® and Other Commercial Products; (2) a MCM Products segment consisting of the Anthrax - MCM, Smallpox - MCM and Other Products; and (3) a Services segment consisting of our Bioservices offerings.

Commercial Products Segment:

The majority of our Commercial product revenue comes from the following products:

NARCAN®

- NARCAN® (naloxone HCl) Nasal Spray, an intranasal formulation of naloxone approved by the FDA (including in over-the-counter form) and Health Canada for the emergency treatment of known or suspected opioid overdose as manifested by respiratory and/or central nervous system depression.

Sale of Travel Health Business

On May 15, 2023, the Company completed the sale of its Commercial Products segment's travel health business, including rights to Vivotif®, the licensed typhoid vaccine; Vaxchora®, the licensed cholera vaccine; the development-stage chikungunya vaccine candidate CHIKV VLP; the Company's manufacturing site in Bern, Switzerland; and certain of its development facilities in San Diego, California.

MCM Products Segment:

The majority of our MCM product revenue comes from the following products and procured product candidates:

Anthrax - MCM Products

- Anthrasil® (Anthrax Immune Globulin Intravenous (human)), the only polyclonal antibody therapeutic licensed by the FDA and Health Canada for the treatment of inhalational anthrax in combination with appropriate antibacterial drugs;
- BioThrax® (Anthrax Vaccine Adsorbed), the only vaccine licensed by the United States Food and Drug Administration ("FDA") for the general use prophylaxis and post-exposure prophylaxis of anthrax disease;
- CYFENDUS® (Anthrax vaccine adsorbed (AVA), adjuvanted), previously known as AV7909, which was recently approved by the FDA for post-exposure prophylaxis of disease following suspected or confirmed exposure to Bacillus anthracis in persons 18 through 65 years of age when administered in conjunction with recommended antibacterial drugs. CYFENDUS® is procured by certain authorized government buyers for their use; and
- Raxibacumab injection, the first fully human monoclonal antibody therapeutic licensed by the FDA for the treatment and prophylaxis of inhalational anthrax.

Smallpox - MCM Products

- ACAM2000®, (Smallpox (Vaccinia) Vaccine, Live), the only single-dose smallpox vaccine licensed by the FDA for active immunization against smallpox disease for persons determined to be at high risk for smallpox infection;
- CNJ-016® (Vaccinia Immune Globulin Intravenous (Human) (VIGIV)), the only polyclonal antibody therapeutic licensed by the FDA and Health Canada to address certain complications from smallpox vaccination; and
- TEMBEXA®, an oral antiviral formulated as 100 mg tablets and 10 mg/mL oral suspension dosed once weekly for two weeks which has been approved by the FDA for the treatment of smallpox disease caused by variola virus in adult and pediatric patients, including neonates.

Other Products

- BAT® (Botulism Antitoxin Heptavalent (A,B,C,D,E,F,G)-(Equine)), the only heptavalent antitoxin licensed by the FDA and Health Canada for the treatment of symptomatic botulism;
- Ebanga™ (ansuvimab-zykl), a monoclonal antibody with antiviral activity provided through a single IV infusion for the treatment of Ebola. Under the terms of a collaboration with Ridgeback Biotherapeutics ("Ridgeback"), Emergent will be responsible for the manufacturing, sale, and distribution of Ebanga™ in the U.S. and Canada, and Ridgeback will serve as the global access partner for Ebanga™;
- RSDL® (Reactive Skin Decontamination Lotion Kit), the only medical device cleared by the FDA that is intended to remove or neutralize chemical warfare agents from the skin, including: tabun, sarin, soman, cyclohexyl sarin, VR, VX, mustard gas and T-2 toxin. On July 31, 2024, the Company entered into the Stock and Asset Purchase Agreement ("RSDL® Agreement") with SERB Pharmaceuticals, through its wholly owned subsidiary BTG International Inc. (collectively, "SERB"), pursuant to which, among other things, the Company sold its worldwide rights to RSDL®, to SERB (the "RSDL® Transaction"). See Note 18, Subsequent events for more information about the RSDL® Transaction; and
- Trobigard® atropine sulfate, obidoxime chloride auto-injector, a combination drug-device auto-injector procured product candidate that contains atropine sulfate and obidoxime chloride. On April 2, 2024, the Belgium Federal Agency for Medicines and Health Products ("FAMHP") acknowledged and confirmed Emergent's request to revoke the Market Authorization for the Trobigard Auto-Injector.

Services Segment:

Bioservices - contract development and manufacturing

Our services revenue consists of distinct but interrelated Bioservices: drug substance manufacturing; drug product manufacturing (also referred to as "fill/finish" services) and packaging; development services including technology transfer, process and analytical development services; and, when necessary, suite reservation obligations. These services, which we refer to as "molecule-to-market" offerings, employ diverse technology platforms (mammalian, microbial, viral and plasma) across a network of seven geographically distinct development and manufacturing sites operated by us for our internal products and pipeline candidates and third-party Bioservices. We service both clinical-stage and commercial-stage projects for a variety of third-party customers, including government agencies, innovative pharmaceutical companies, and non-government organizations. In August 2023, we initiated an organizational restructuring plan (the "August 2023 Plan") which included actions to reduce investment in and de-emphasize focus on our Bioservices business. In May 2024, the Company initiated an organizational restructuring plan (the "May 2024 Plan") announcing the closure of the Company's Baltimore-Bayview Drug Substance manufacturing facility and Rockville, Maryland Drug Product facility. Additionally, on June 20, 2024 the Company announced entry into an Asset Purchase Agreement (the "Asset Purchase Agreement") with Bora Pharmaceuticals Injectibles Inc., a subsidiary of Bora Pharmaceuticals Co., Ltd. ("Bora"), under which the Company will sell its drug product facility in Baltimore-Camden (the "Camden Transaction").

Other Strategic Activities

January 2023 Organizational Restructuring Plan

In January 2023, the Company initiated an organizational restructuring plan (the "January 2023 Plan") intended to reduce operating costs, improve operating margins, and continue advancing the Company's ongoing commitment to profitable growth. As part of the January 2023 Plan, the Company reduced its workforce by approximately 125 employees. The charges related to the January 2023 plan consist primarily of employee transition, severance payment and employee benefit charges. The cumulative amount of restructuring charge related to the January 2023 Plan since inception is $9.3 million. All activities related to the January 2023 Plan were substantially completed during the first quarter of 2023. Restructuring costs are recognized as an operating expense within the Condensed Consolidated Statement of Operations and are classified based on the Company's classification policy for each category of operating expense.

August 2023 Organizational Restructuring Plan

In August 2023, the Company initiated the August 2023 Plan intended to strengthen its core business and financial position by reducing investment in and de-emphasizing focus on its CDMO services business for future growth. As part of the August 2023 Plan, the Company reduced its workforce by approximately 400 employees. The charges related to the August 2023 Plan consist primarily of employee transition, severance payment and employee benefit charges. The cumulative amount of restructuring charge related to the August 2023 Plan since inception is $19.4 million. All activities related to the August 2023 Plan were substantially completed during the third quarter of 2023. Restructuring costs are recognized as an operating expense within the Condensed Consolidated Statement of Operations and are classified based on the Company's classification policy for each category of operating expense.

Trobigard Revocation

On April 2, 2024, Emergent submitted its revocation of the Market Authorization for the Trobigard Auto-Injector to the Belgium FAMHP. The FAMHP subsequently acknowledged and confirmed the revocation date as being April 2, 2024.

May 2024 Organizational Restructuring Plan

In May 2024, the Company initiated the May 2024 Plan. These strategic actions will lead to a reduction of the Company's current workforce by approximately 300 employees across all areas of the Company and the elimination of approximately 85 positions that are currently vacant, as well as the closure of the Company's Baltimore-Bayview Drug Substance manufacturing facility and Rockville, Maryland Drug Product facility. Decisions regarding the elimination of positions and the closure of manufacturing facilities are subject to local law and consultation requirements in certain countries, as well as the Company's business needs. The cumulative amount of restructuring charge related to the May 2024 Plan since inception is $17.2 million. All activities related to the May 2024 Plan were substantially completed during the second quarter of 2024. Restructuring costs are recognized as an operating expense within the Condensed Consolidated Statement of Operations and are classified based on the Company's classification policy for each category of operating expense.

Sale of Baltimore-Camden Facility

On June 20, 2024, Cangene bioPharma LLC, a subsidiary of the Company, entered into the Asset Purchase Agreement with Bora, under which the Company will sell its drug product facility in Baltimore-Camden for a total value of approximately $30.0 million. Approximately 350 of the Company's employees are expected to join Bora as part of the transaction.

The transaction is expected to close in the third quarter of 2024, subject to the satisfaction or waiver of customary closing conditions.

As a result of the Asset Purchase Agreement, the assets and liabilities of our Baltimore-Camden facility are classified as held for sale. The Company has recognized a pre-tax loss of $40.0 million during the quarter, including transaction costs of $3.9 million, in "Gain (loss) on sale of business and assets held for sale" within non-operating activities.

Confidential arbitration settlement with Janssen

On July 3, 2024, the Company, its wholly owned subsidiary, Emergent Manufacturing Operations Baltimore, LLC ("EMOB"), and Janssen executed the Settlement Agreement to resolve all claims among the Parties arising from the Janssen Agreement. The Settlement Agreement also resolves the Parties' related and previously disclosed arbitration.

Pursuant to the terms of the Settlement Agreement, Janssen paid the Company $50.0 million on July 31, 2024. In addition, the Settlement Agreement contains broad releases of the parties, their affiliates and subsidiaries, representatives, officers, directors and shareholders, including releases of all claims related to the manufacture of the Product by EMOB, the Janssen Agreement, or any agreement or understanding between the parties concerning the Product, and the matters at issue in the arbitration. The Company concluded this is a recognized subsequent event.

Development milestone payments for CHIKV VLP

On July 18, 2024, Bavarian Nordic announced that the European Medicines Agency has validated the marketing authorization application for CHIKV VLP, which was submitted in June 2024. This approval triggered a milestone payment under the Purchase and Sale Agreement to the Company in the amount of $10.0 million, which is expected to be received in the third quarter of 2024.

2024 Sale of RSDL® to SERB Pharmaceuticals

On July 31, 2024, the Company entered into the RSDL® Agreement with SERB, pursuant to which, among other things, the Company sold its worldwide rights to RSDL® to SERB. The RSDL® Transaction also included the sale of all the outstanding capital stock of Emergent Protective Products USA Inc. ("EPPU"), a wholly owned subsidiary of the Company, which leases a manufacturing facility in Hattiesburg, Mississippi, as well as certain assets related to RSDL®, including intellectual property rights, contract rights, inventory and marketing authorizations. In addition, the employees of EPPU are expected to join SERB in connection with the RSDL® Transaction.

Pursuant to the RSDL® Transaction, SERB will assume certain government contracts related to RSDL® decontamination lotion, including the Company's existing contract to supply RSDL® to the U.S. Department of Defense, through a new contract award to the Canadian Commercial Corporation.

The RSDL® Agreement provided for a cash purchase price of $75.0 million at the closing of the RSDL® Transaction, which is subject to customary adjustments based on inventory value at closing. In addition, SERB will pay the Company a $5.0 million payment upon achievement of a milestone relating to sourcing of a certain component of RSDL® decontamination lotion. The RSDL® Transaction closed on July 31, 2024. The Company and SERB made customary representations, warranties, and covenants in the RSDL® Agreement. In addition, the Company agreed, for a period of three years following the closing of the RSDL® Transaction, not to make, import, export, use, sell or otherwise dispose of, any product that is intended to remove or neutralize chemical warfare agents from the skin, including any product that contains the same chemical components as RSDL®, or to engage in a similar competing business.

At the closing of the RSDL® Transaction, the Company and SERB also entered into a transition services agreement to ensure the orderly transition of RSDL® decontamination lotion and the related assets to SERB, and a supply agreement pursuant to which the Company's Winnipeg facility will continue to manufacture and supply bulk lotion to SERB under a long-term supply agreement. The Company and SERB will also enter into a reverse supply agreement shortly after the closing of the RSDL® Transaction pursuant to which SERB will supply to the Company finished RSDL® for the purposes of the Company performing certain transitional distribution services.

2024 Triggering Events

2024 Impairment of long-lived assets

During the preparation of our financial statements for the three months ended June 30, 2024, due to the decision to close the Company's Baltimore-Bayview Drug Substance manufacturing facility and Rockville, Maryland Drug Product facility, the Company determined there were sufficient indicators of impairment for the Bayview and Rockville asset groups within the Bioservices reporting unit. As a result, the Company performed recoverability tests on those asset groups and concluded that the Bayview and Rockville asset groups were not recoverable as the undiscounted expected cash flows did not exceed their carrying values.

Asset groups are written down only to the extent that their carrying value is higher than their respective fair value. The Company, with the assistance of a third-party valuation firm, applied valuation methods to estimate the fair values for each of the assets within the different asset classes. An orderly liquidation value was applied to estimate the fair value of the personal property assets and market and cost based approaches were applied to estimate the fair value of the real property assets, each representing Level 3 non-recurring fair value measurements. Based on these analyses, the Company allocated and recognized a non-cash impairment charge of $27.2 million during the three months ended June 30, 2024.

FINANCIAL OPERATIONS OVERVIEW

Revenues

We generate Commercial Product revenues through sale of NARCAN® Nasal Spray, which is sold commercially over-the-counter at retail pharmacies and digital commerce websites as well as through physician-directed or standing order prescriptions at retail pharmacies, health departments, local law enforcement agencies, community-based organizations, substance abuse centers and other federal agencies. In addition, we previously generated Commercial product revenues through sale of the Company's travel health products, which we sold to Bavarian Nordic in May 2023.We generate MCM Product revenues from the sale of our marketed products and procured product candidates. The U.S. government ("USG") is the largest purchaser of our Government - MCM products and primarily purchases our products for the Strategic National Stockpile, a national repository of medical countermeasures including critical antibiotics, vaccines, chemical antidotes, antitoxins, and other critical medical supplies. The USG primarily purchases our products under long-term, firm fixed-price procurement contracts, generally with annual options.

We also generate revenue from our Services segment through our Bioservices portfolio, which is based on our established development and manufacturing infrastructure, technology platforms and expertise. Our services include a fully integrated molecule-to-market Bioservices business offering across development services, drug substance and drug product for small to large pharmaceutical and biotechnology industry and government agencies/non-governmental organizations. From time to time, clients require suite reservations at our various manufacturing sites, which may be considered leases depending on the facts and circumstances.

We have received contracts and grant funding from the USG and other non-governmental organizations to perform R&D activities, particularly related to programs addressing certain CBRNE threats and EIDs.

Our revenue, operating results and profitability vary quarterly based on the timing of production and deliveries, the timing of manufacturing services performed and the nature of our business, which involves providing large scale bundles of products and services as needs arise. We expect continued variability in our quarterly financial results.

Cost of Product Sales and Services

Commercial and MCM Products - The primary expenses that we incur to deliver our NARCAN® and MCM and other commercial products consist of fixed and variable costs. We determine the cost of product sales for products sold during a reporting period based on the average manufacturing cost per unit in the period those units were manufactured. Fixed manufacturing costs include facilities, utilities and amortization of intangible assets. Variable manufacturing costs primarily consist of costs for materials and personnel-related expenses for direct and indirect manufacturing support staff, contract manufacturing operations, sales-based royalties, shipping and logistics. In addition to the fixed and variable manufacturing costs described above, the cost of product sales depends on utilization of available manufacturing capacity. For our commercial sales, other associated expenses include sales-based royalties, shipping, and logistics.

Services - The primary expenses that we incur to deliver our Bioservices offerings consist of fixed and variable costs, including personnel, equipment, and facilities costs. Our manufacturing process includes the production of bulk material and performing drug product work for containment and distribution of biological products. For drug product customers, we receive work in process inventory to be prepared for distribution.

Research and Development ("R&D") Expenses

We expense R&D costs as incurred. Our R&D expenses consist primarily of:

- personnel-related expenses;
- fees to professional service providers for, among other things, analytical testing, independent monitoring or other administration of our clinical trials and obtaining and evaluating data from our clinical trials and non-clinical studies;
- costs of Bioservices for our clinical trial material; and
- costs of materials intended for use and used in clinical trials and R&D.

In many cases, we seek funding for development activities from external sources and third parties, such as governments and non-governmental organizations, or through collaborative partnerships. We expect our R&D spending will be dependent upon such factors as the results from our clinical trials, the availability of reimbursement of R&D spending, the number of product candidates under development, the size, structure and duration of any clinical programs that we may initiate, the costs associated with manufacturing and development of our product candidates on a large-scale basis for later stage clinical trials, and our ability to use or rely on data generated by government agencies.

Selling, General and Administrative Expenses

Selling, general and administrative ("SG&A") expenses consist primarily of personnel-related costs and professional fees in support of our executives, sales and marketing, business development, government affairs, finance, accounting, information technology, legal, human resource functions and other corporate functions. Other costs include facility costs not otherwise included in cost of product sales and Bioservices or R&D expense.

Income taxes

Uncertainty in income taxes is accounted for using a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. We recognize in our financial statements the impact of a tax position if that position is more likely than not of being sustained on audit, based on the technical merits of the position.

Changes in tax laws, rulings, policies, or related legal and regulatory interpretations occur frequently and may have significant favorable or adverse impacts on our effective tax rate. In 2021, the Organization for Economic Cooperation and Development ("OECD") released model rules for a 15% global minimum tax applied to cross-border profits of certain large multinational corporations, known as Pillar Two. Pillar Two has now been enacted by approximately 30 countries, including Ireland. This minimum tax is treated as a period cost beginning in 2024 and its impact is included on the Company's financial results of operations for the current period. The Company is monitoring legislative developments, as well as additional guidance from countries that have enacted legislation. We anticipate further legislative activity and administrative guidance in 2024.

Management believes that the assumptions and estimates related to the provision for income taxes are critical to the Company's results of operations.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of our condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the U.S., requires us to make estimates, judgments and assumptions that may affect the reported amounts of assets, liabilities, equity, revenues and expenses and related disclosure of contingent assets and liabilities. On an ongoing basis we evaluate our estimates, judgments and methodologies. We base our estimates on historical experience and on various other assumptions that we believe are reasonable, the results of which form the basis for making judgments about the carrying values of assets, liabilities and equity and the amount of revenues and expenses. Actual results may differ from these estimates. There have been no significant changes to our critical accounting policies and estimates contained in "Critical Accounting Policies and Estimates" in the Management's Discussion and Analysis, in Part II, Item 7, of the 2023 Form 10-K, as filed with the SEC.

New accounting standards

For a discussion of new accounting standards please see Note 2, "Summary of significant accounting policies", in Part I, Item 1, of this Quarterly Report on Form 10-Q.

RESULTS OF OPERATIONS

Consolidated and Segment Operating Results:

	Three Months Ended June 30,				Six Months Ended June 30,			
(in millions, except %)	2024	2023	$ Change	% Change	2024	2023	$ Change	% Change
Revenues								
Commercial Product sales, net:								
NARCAN®	$ 120.0	$ 133.9	$ (13.9)	(10)%	$ 238.5	$ 234.3	$ 4.2	2 %
Other Commercial Products	—	4.0	(4.0)	(100)%	—	9.8	(9.8)	(100)%
Total Commercial Product sales, net	120.0	137.9	(17.9)	(13)%	238.5	244.1	(5.6)	(2)%
MCM Product sales, net:								
Anthrax MCM	38.7	21.1	17.6	83 %	94.6	43.0	51.6	120 %
Smallpox MCM	17.9	123.8	(105.9)	(86)%	68.1	131.0	(62.9)	(48)%
Other Products sales	6.8	19.4	(12.6)	(65)%	56.1	27.5	28.6	104 %
Total MCM Product sales, net	63.4	164.3	(100.9)	(61)%	218.8	201.5	17.3	9 %
Services:								
Bioservices - Services	64.5	26.4	38.1	144 %	82.8	39.0	43.8	112 %
Bioservices - Leases	0.2	2.7	(2.5)	(93)%	0.4	4.5	(4.1)	(91)%
Total Services revenues	64.7	29.1	35.6	122 %	83.2	43.5	39.7	91 %
Contracts and grants	6.6	6.6	—	— %	14.6	13.1	1.5	11 %
Total revenues	254.7	337.9	(83.2)	(25)%	555.1	502.2	52.9	11 %
Operating expenses:								
Cost of Commercial Product sales	53.4	54.4	(1.0)	(2)%	105.5	100.2	5.3	5 %
Cost of MCM Product sales	31.1	80.5	(49.4)	(61)%	93.3	135.9	(42.6)	(31)%
Cost of Bioservices	211.6	55.7	155.9	NM	241.9	107.4	134.5	125 %
Impairment of long-lived assets	27.2	306.7	(279.5)	(91)%	27.2	306.7	(279.5)	(91)%
Research and development	32.7	26.0	6.7	26 %	47.8	66.7	(18.9)	(28)%
Selling, general and administrative	85.9	91.4	(5.5)	(6)%	170.6	192.7	(22.1)	(11)%
Amortization of intangible assets	16.3	16.1	0.2	1 %	32.5	33.1	(0.6)	(2)%
Total operating expenses	458.2	630.8	(172.6)	(27)%	718.8	942.7	(223.9)	(24)%
Loss from operations	(203.5)	(292.9)	89.4	31 %	(163.7)	(440.5)	276.8	63 %
Other income (expense):								
Interest expense	(23.6)	(28.6)	5.0	17 %	(47.9)	(46.5)	(1.4)	(3)%
Gain (loss) on sale of business and assets held for sale	(40.0)	74.9	(114.9)	(153)%	(40.0)	74.9	(114.9)	(153)%
Other, net	(2.7)	(3.6)	0.9	25 %	(6.1)	1.3	(7.4)	NM
Total other income (expense), net	(66.3)	42.7	(109.0)	NM	(94.0)	29.7	(123.7)	NM
Loss before income taxes	(269.8)	(250.2)	(19.6)	(8)%	(257.7)	(410.8)	153.1	37 %
Income tax provision	13.3	11.2	2.1	19 %	16.4	36.8	(20.4)	(55)%
Net loss	$ (283.1)	$ (261.4)	$ (21.7)	(8)%	$ (274.1)	$ (447.6)	$ 173.5	39 %

NM - Not meaningful

Three Months Ended June 30, 2024 Compared with Three Months Ended June 30, 2023

Revenues and gross margin

(dollars in millions)	Three Months Ended June 30, 2024	2023	% Change
Total revenues	$ 254.7	$ 337.9	(25)%
Contracts and grants	6.6	6.6	— %
Total segment revenues [1]	$ 248.1	$ 331.3	(25)%
Cost of Commercial Product sales	53.4	54.4	(2)%
Cost of MCM Product sales	31.1	80.5	(61)%
Cost of Bioservices	211.6	55.7	NM
Total cost of sales or services	296.1	190.6	55 %
Total segment gross margin [1]	$ (48.0)	$ 140.7	(134)%
Total segment gross margin % [1]	(19)%	42 %	

[1] We define total segment revenues, which is a non-GAAP financial measure, as our total revenues, less contracts and grants revenue, which is also equal to the sum of the revenues of our reportable operating segments. We define total segment gross margin, which is a non-GAAP financial measure, as total segment revenues less our aggregate cost of sales or services. We define total segment gross margin percentage, which is a non-GAAP financial measure, as total segment gross margin as a percentage of total segment revenues. We believe that this non-GAAP operating measure, when reviewed collectively with our GAAP financial information, provides useful supplemental information to investors in assessing our operating performance.

NM - Not meaningful

Total revenues decreased $83.2 million, or 25%, to $254.7 million for the three months ended June 30, 2024. The decrease was due to decreases in MCM Products revenue of $100.9 million and Commercial Products revenue of $17.9 million, partially offset by an increase in Services revenue of $35.6 million.

Total segment gross margin decreased $188.7 million, or 134%, to $(48.0) million for the three months ended June 30, 2024. Total segment gross margin percentage decreased 61 percentage points to (19)% for the three months ended June 30, 2024. The decrease in total segment gross margin was due to decreases in Services gross margin of $120.3 million, MCM Products gross margin of $51.5 million and Commercial Products gross margin of $16.9 million. Total segment gross margin and total segment gross margin percentage exclude Contracts and grants revenues because the related costs are R&D expenses.

See "Segment Results" for an expanded discussion of revenues and gross margin.

Unallocated corporate operating expenses

R&D Expenses

R&D expenses increased $6.7 million, or 26%, to $32.7 million for the three months ended June 30, 2024. The increase was primarily due to write-offs related to program terminations during the period and an increase in R&D overhead and severance costs. The increase was partially offset by the sale of our development program for CHIKV VLP to Bavarian Nordic and reduction in related overhead costs driven by the headcount reductions and an overall decrease in spend for funded projects.

SG&A Expenses

SG&A expenses decreased $5.5 million, or 6%, to $85.9 million for the three months ended June 30, 2024. The decrease was primarily due to lower employee related expenses and compensation as a result of restructuring initiatives during 2023, coupled with a decrease in marketing expense. The decrease was partially offset by higher legal services fees for disputes and other corporate initiatives, as well as higher restructuring costs. SG&A expenses as a percentage of total revenue increased 7 percentage points to 34% for the three months ended June 30, 2024.

Amortization of Intangible Assets

Amortization of intangible assets increased $0.2 million, or 1%, to $16.3 million for the three months ended June 30, 2024. The increase was primarily due to an increase in amortization expense for the intangible asset related to Ebanga™, which was the result of the contingent consideration payment made to Ridgeback in the third quarter of 2023.

Impairment of Long-Lived Assets

Impairment of long-lived assets decreased $279.5 million, or 91%, to $27.2 million for the three months ended June 30, 2024. The decrease was due to a $27.2 million non-cash impairment charge in the second quarter of 2024 related to our Bayview and Rockville asset groups within the Bioservices reporting unit, compared to a $306.7 million non-cash impairment charge recorded in the second quarter of 2023 related to our Camden, Bayview and Rockville asset groups within the Bioservices reporting unit.

Interest expense

Interest expense decreased $5.0 million, or 17%, to $23.6 million for the three months ended June 30, 2024. The decrease was primarily due to lower interest costs related to our syndicated borrowings and debt service costs attributable to the negotiation of the Fourth Amendment to Amended and Restated Credit Agreement, Waiver and First Amendment to Amended and Restated Collateral Agreement (the “Credit Agreement Amendment") in the second quarter of 2023, partially offset by higher interest expense related to the termination of our interest rate swap hedging agreements.

Gain (loss) on sale of business and assets held for sale

Gain (loss) on sale of business and assets held for sale was a loss of $40.0 million for the three months ended June 30, 2024 compared to a gain of $74.9 million for the three months ended June 30, 2023. The loss on sale of business and assets held for sale is related to the held for sale treatment of the Company’s drug product facility in Baltimore-Camden, which the Company agreed to sell to Bora. The gain on sale of business and assets held for sale in the prior year is attributable to the sale of our travel health business to Bavarian Nordic during the second quarter of 2023.

Other, net

Other, net went from $3.6 million in expense to $2.7 million in expense for the three months ended June 30, 2024. The change of $0.9 million was primarily attributable to lower interest income, due to lower balances in our money market accounts.

Income tax provision (benefit)

Income tax provision increased $2.1 million, or 19%, to $13.3 million for the three months ended June 30, 2024. The increase was primarily due to an increase in taxable income in the Company’s profitable jurisdictions.

Six Months Ended June 30, 2024 Compared with Six Months Ended June 30, 2023

Revenues and gross margin

(dollars in millions)	Six Months Ended June 30, 2024	Six Months Ended June 30, 2023	% Change
Total revenues	$ 555.1	$ 502.2	11 %
Contracts and grants	14.6	13.1	11 %
Total segment revenues [(1)]	$ 540.5	$ 489.1	11 %
Cost of Commercial Product sales	105.5	100.2	5 %
Cost of MCM Product sales	93.3	135.9	(31)%
Cost of Bioservices	241.9	107.4	125 %
Total cost of sales or services	440.7	343.5	28 %
Total segment gross margin [(1)]	$ 99.8	$ 145.6	(31)%
Total segment gross margin % [(1)]	18 %	30 %	

[(1)] We define total segment revenues, which is a non-GAAP financial measure, as our total revenues, less contracts and grants revenue, which is also equal to the sum of the revenues of our reportable operating segments. We define total segment gross margin, which is a non-GAAP financial measure, as total segment revenues less our aggregate cost of sales or services. We define total segment gross margin percentage, which is a non-GAAP financial measure, as total segment gross margin as a percentage of total segment revenues. We believe that this non-GAAP operating measure, when reviewed collectively with our GAAP financial information, provides useful supplemental information to investors in assessing our operating performance.

NM - Not meaningful

Total revenues increased $52.9 million, or 11%, to $555.1 million for the six months ended June 30, 2024. The increase was due to increases in Services revenue of $39.7 million, MCM Products revenue of $17.3 million and Contracts and grants revenue of $1.5 million, partially offset by a decrease in Commercial Products revenue of $5.6 million.

Total segment gross margin decreased $45.8 million, or 31%, to $99.8 million for the six months ended June 30, 2024. Total segment gross margin percentage decreased 11 percentage points to 18% for the six months ended June 30, 2024. The decrease in total segment gross margin was due to decreases in Services gross margin of $94.8 million and Commercial Products gross margin of $10.9 million, partially offset by an increase in MCM Products gross margin of $59.9 million. Total segment gross margin and Total segment gross margin percentage exclude Contracts and grants revenues because the related costs are R&D expenses.

See "Segment Results" for an expanded discussion of revenues and gross margin.

Unallocated corporate operating expenses

R&D Expenses

R&D expenses decreased $18.9 million, or 28%, to $47.8 million for the six months ended June 30, 2024. The decrease was primarily due to the sale of our development program for CHIKV VLP to Bavarian Nordic in the second quarter of 2023 and reduction in related overhead costs driven by the headcount reductions. The decrease was also driven by a reduction in spend for certain funded projects, excluding Ebanga™. The decrease was partially offset by write-offs related to program terminations during the period, an increase in the allocation of R&D overhead costs, an increase in severance costs and an increase in funded R&D related to Ebanga™.

SG&A Expenses

SG&A expenses decreased $22.1 million, or 11%, to $170.6 million for the six months ended June 30, 2024. The decrease was primarily due to lower employee related expenses and compensation as a result of restructuring initiatives during 2023 and lower professional services fees related to corporate initiatives, including organizational transformation consulting fees. These decreases were partially offset by higher legal services fees for disputes and strategic corporate initiatives, as well as higher restructuring costs. SG&A expenses as a percentage of total revenue decreased 7 percentage points to 31% for the six months ended June 30, 2024.

Amortization of Intangible Assets

Amortization of intangible assets decreased $0.6 million, or 2%, to $32.5 million for the six months ended June 30, 2024. The decrease was primarily due to a decrease in amortization expense resulting from the intangibles sold with our travel health business to Bavarian Nordic, partially offset by an increase in amortization expense for the intangible asset related to Ebanga™, which was the result of the contingent consideration payment made to Ridgeback in the third quarter of 2023.

Impairment of Long-Lived Assets

Impairment of long-lived assets decreased $279.5 million, or 91%, to $27.2 million for the six months ended June 30, 2024. The decrease was due to a $27.2 million non-cash impairment charge in the second quarter of 2024 related to our Bayview and Rockville asset groups within the Bioservices reporting unit, compared to a $306.7 million non-cash impairment charge recorded in the second quarter of 2023 related to our Camden, Bayview and Rockville asset groups within the Bioservices reporting unit.

Interest expense

Interest expense increased $1.4 million, or 3%, to $47.9 million for the six months ended June 30, 2024. The increase was primarily due to interest expense related to the termination of our interest rate swap hedging agreements and one-time debt service costs attributable to the negotiation of the Forbearance Agreement and Sixth Amendment (the "Forbearance Agreement and Amendment") and the Seventh Amendment to the Amended and Restated Credit Agreement, partially offset by lower interest costs related to our syndicated borrowings.

Gain (loss) on sale of business and assets held for sale

Gain (loss) on sale of business and assets held for sale was a loss of $40.0 million for the six months ended June 30, 2024 compared to a gain of $74.9 million for the six months ended June 30, 2023. The loss on sale of business and assets held for sale is related to the held for sale treatment of the Company's drug product facility in Baltimore-Camden, which the Company agreed to sell to Bora. The gain on sale of business and assets held for sale in the prior year is attributable to the sale of our travel health business to Bavarian Nordic during the second quarter of 2023.

Other, net

Other, net went from $1.3 million in income to $6.1 million in expense for the six months ended June 30, 2024. The change of $7.4 million was primarily attributable to lower interest income, due to lower balances in our money market accounts and a write-off of an equity method investment.

Income tax provision (benefit)

Income tax provision decreased $20.4 million, or 55%, to $16.4 million for the six months ended June 30, 2024. The decrease was largely due to the jurisdictional mix of income and losses. The effective tax rate was (6)% for the six months ended June 30, 2024 as compared with (9)% in 2023. The effective annual tax rate increased largely due the jurisdictional mix of income and losses.

SEGMENT RESULTS

COMMERCIAL PRODUCTS SEGMENT

	Commercial Products Segment					
	Three Months Ended June 30,			Six Months Ended June 30,		
(dollars in millions)	2024	2023	% Change	2024	2023	% Change
Revenues	$ 120.0	$ 137.9	(13 %)	$ 238.5	$ 244.1	(2 %)
Cost of sales	$ 53.4	$ 54.4	(2 %)	$ 105.5	$ 100.2	5 %
Gross margin [1]	$ 66.6	$ 83.5	(20 %)	$ 133.0	$ 143.9	(8 %)
Gross margin % [1]	56 %	61 %		56 %	59 %	
Segment adjusted gross margin [2]	$ 66.6	$ 83.5	(20 %)	$ 133.0	$ 143.9	(8 %)
Segment adjusted gross margin %[2]	56 %	61 %		56 %	59 %	

[1] Gross margin is calculated as revenues less cost of sales. Gross margin percentage is calculated as gross margin divided by revenues.

[2] Segment adjusted gross margin, which is a non-GAAP financial measure, is calculated as gross margin plus restructuring costs and non-cash items related to changes in fair value of contingent consideration, inventory step-up provision and settlement charge, net. Segment adjusted gross margin percentage, which is a non-GAAP financial measure, is calculated as segment adjusted gross margin divided by revenues. The Company's management utilizes segment adjusted gross margin and segment adjusted gross margin percentage for purposes of evaluating our ongoing operations and for internal planning and forecasting purposes. We believe that these non-GAAP operating measures, when reviewed collectively with our GAAP financial information, provide useful supplemental information to investors in assessing our operating performance.

NM - Not meaningful

Three Months Ended June 30, 2024 Compared with Three Months Ended June 30, 2023

NARCAN®

NARCAN® sales decreased $13.9 million, or 10%, to $120.0 million for the three months ended June 30, 2024. The decrease was primarily driven by an unfavorable price and volume mix in 2024 to U.S. public interest channels and lower Canadian market sales, partially offset by higher sales of over-the-counter ("OTC") NARCAN® through wholesaler channels, which launched in the third quarter of 2023.

Other Commercial Products

Other Commercial Products sales decreased $4.0 million, or 100%, to no sales for the three months ended June 30, 2024. During the second quarter of 2023, the Company sold Vivotif® and Vaxchora® to Bavarian Nordic as part of our travel health business.

Cost of Product Sales and Gross Margin

Cost of Commercial Product sales decreased $1.0 million, or 2%, to $53.4 million for the three months ended June 30, 2024. The decrease was primarily due to no current period costs related to Vivotif® and Vaxchora®, which were sold to Bavarian Nordic as part of our travel health business, partially offset by higher NARCAN® expense as a result of increased unit volume.

Commercial Products gross margin decreased $16.9 million, or 20%, to $66.6 million for the three months ended June 30, 2024. Commercial Products gross margin percentage decreased 5 percentage points to 56% for the three months ended June 30, 2024. The decrease was largely due to an unfavorable price and volume mix in 2024 for NARCAN® products, partially offset by the sale of the products associated with our travel health business to Bavarian Nordic. Commercial Products segment adjusted gross margin is consistent with gross margin.

Six Months Ended June 30, 2024 Compared with Six Months Ended June 30, 2023

NARCAN®

NARCAN® sales increased $4.2 million, or 2%, to $238.5 million for the six months ended June 30, 2024. The increase was primarily driven by higher NARCAN® sales to U.S. public interest channels and higher sales of OTC NARCAN®, partially offset by lower Canadian retail sales.

Other Commercial Products

Other Commercial Products sales decreased $9.8 million, or 100%, to no sales for the six months ended June 30, 2024. During the second quarter of 2023, we sold Vivotif® and Vaxchora® to Bavarian Nordic as part of our travel health business.

Cost of Commercial Product Sales and Gross Margin

Cost of Commercial Product sales increased $5.3 million, or 5%, to $105.5 million for the six months ended June 30, 2024. The increase was primarily due to higher NARCAN® expense as a result of increased unit volume, partially offset by the sale of the products associated with our travel health business to Bavarian Nordic.

Commercial Products gross margin decreased $10.9 million, or 8%, to $133.0 million for the six months ended June 30, 2024. Commercial Products gross margin percentage decreased 3 percentage points to 56% for the six months ended June 30, 2024. The decrease was largely due to an unfavorable price and volume mix in 2024 for NARCAN® products, partially offset by the sale of the products associated with our travel health business to Bavarian Nordic. Commercial Products segment adjusted gross margin is consistent with gross margin.

MCM PRODUCTS SEGMENT

	MCM Products Segment					
	Three Months Ended June 30,			Six Months Ended June 30,		
(dollars in millions)	2024	2023	% Change	2024	2023	% Change
Revenues	$ 63.4	$ 164.3	(61 %)	$ 218.8	$ 201.5	9 %
Cost of sales	$ 31.1	$ 80.5	(61 %)	$ 93.3	$ 135.9	(31 %)
Gross margin [1]	$ 32.3	$ 83.8	(61 %)	$ 125.5	$ 65.6	91 %
Gross margin % [1]	51 %	51 %		57 %	33 %	
Add back:						
Changes in fair value of contingent consideration	0.1	0.4	(75 %)	0.6	0.7	(14 %)
Restructuring costs	2.7	—	NM	2.6	2.0	30 %
Inventory step-up provision	—	1.9	(100 %)	—	1.9	(100 %)
Segment adjusted gross margin [2]	$ 35.1	$ 86.1	(59 %)	$ 128.7	$ 70.2	83 %
Segment adjusted gross margin %[2]	55 %	52 %		59 %	35 %	

[1] Gross margin is calculated as revenues less cost of sales. Gross margin percentage is calculated as gross margin divided by revenues.

[2] Segment adjusted gross margin, which is a non-GAAP financial measure, is calculated as gross margin plus restructuring costs and non-cash items related to changes in fair value of contingent consideration, inventory step-up provision and settlement charge, net. Segment adjusted gross margin percentage, which is a non-GAAP financial measure, is calculated as segment adjusted gross margin divided by revenues. The Company's management utilizes segment adjusted gross margin and segment adjusted gross margin percentage for purposes of evaluating our ongoing operations and for internal planning and forecasting purposes. We believe that these non-GAAP operating measures, when reviewed collectively with our GAAP financial information, provide useful supplemental information to investors in assessing our operating performance.

NM - Not meaningful

Anthrax MCM

Anthrax MCM sales increased $17.6 million, or 83%, to $38.7 million for the three months ended June 30, 2024. The increase reflects the impact of timing of sales related to CYFENDUS® and BioThrax®, partially offset by a decrease in Anthrasil® sales, due to timing. Anthrax vaccine product sales are primarily made under annual purchase options exercised by the USG. Fluctuations in revenues result from the timing of the exercise of annual purchase options, the timing of USG purchases, the availability of governmental funding and the Company's delivery of orders that follow.

Smallpox MCM

Smallpox MCM sales decreased $105.9 million, or 86%, to $17.9 million for the three months ended June 30, 2024. The decrease was primarily due to timing of USG purchases of ACAM2000® and VIGIV. Fluctuations in revenues from Smallpox MCM result from the timing of the exercise of annual purchase options in the existing procurement contracts, the timing of USG purchases, the availability of governmental funding and Company delivery of orders that follow.

Other Products

Other Products sales decreased $12.6 million, or 65%, to $6.8 million for the three months ended June 30, 2024. The decrease was due to lower BAT® and RSDL® product sales, due to timing of deliveries.

Cost of MCM Product Sales and Gross Margin

Cost of MCM Product sales decreased $49.4 million, or 61%, to $31.1 million for the three months ended June 30, 2024. The decrease was primarily due to lower sales of ACAM2000®, BAT®, RSDL® and Anthrasil®, lower allocations to Cost of MCM Product sales at our Bayview facility and a reduction in Trobigard® related costs, due to the Belgium FAMHP's approval of the Company's request to revoke the Market Authorization for Trobigard® (the "Trobigard® revocation"). This decrease was partially offset by higher shutdown costs, Raxibacumab inventory reserves and overhead allocations at our Winnipeg facility.

MCM Product gross margin decreased $51.5 million, or 61%, to $32.3 million for the three months ended June 30, 2024. MCM Product gross margin percentage was consistent at 51% for the three months ended June 30, 2024. MCM Products segment adjusted gross margin excludes the impacts of non-cash items related to restructuring costs of $2.7 million and the changes in the fair value of contingent consideration of $0.1 million.

Six Months Ended June 30, 2024 Compared with Six Months Ended June 30, 2023

Anthrax MCM

Anthrax MCM sales increased $51.6 million, or 120%, to $94.6 million for the six months ended June 30, 2024. The increase was due to the impact of timing of sales related to CYFENDUS® and BioThrax®, partially offset by a decrease in Anthrasil® sales, due to timing. Anthrax vaccine product sales are primarily made under annual purchase options exercised by the USG. Fluctuations in revenues result from the timing of the exercise of annual purchase options, the timing of USG purchases, the availability of governmental funding and the Company's delivery of orders that follow.

Smallpox MCM

Smallpox MCM sales decreased $62.9 million, or 48%, to $68.1 million for the six months ended June 30, 2024. The decrease was due to timing of USG purchases ACAM2000®, partially offset by ACAM2000® sales to non-U.S. customers and higher VIGIV sales, due to timing. Fluctuations in revenues result from the timing of the exercise of annual purchase options in existing procurement contracts, the timing of USG purchases, the availability of governmental funding and Company delivery of orders that follow.

Other Products

Other Products sales increased $28.6 million, or 104%, to $56.1 million for the six months ended June 30, 2024. The increase was primarily due to higher BAT® product sales to USG and non-U.S. customers.

Cost of MCM Product Sales and Gross Margin

Cost of MCM Product sales decreased $42.6 million, or 31%, to $93.3 million for the six months ended June 30, 2024. The decrease was primarily due to lower sales of ACAM2000®, lower allocations to Cost of MCM Product sales at our Bayview facility, lower shut down costs, a reduction in Trobigard® related costs, due to the Trobigard® revocation, partially offset by higher BAT® and BioThrax® sales.

MCM Product gross margin increased $59.9 million, or 91%, to $125.5 million for the six months ended June 30, 2024. MCM Product gross margin percentage increased 24 percentage points to 57% for the six months ended June 30, 2024. The increase was largely due to overall higher sales volumes with a favorable product mix weighted more heavily to higher margin products coupled with lower allocations to Cost of MCM Product sales at our Bayview facility and lower shutdown related costs, a reduction in Trobigard® related costs, due to the Trobigard® revocation, and realization of previously adjusted inventory values. MCM Products segment adjusted gross margin excludes the impacts of restructuring costs of $2.6 million and the changes in the fair value of contingent consideration of $0.6 million.

SERVICES SEGMENT

	Services Segment					
	Three Months Ended June 30,			Six Months Ended June 30,		
(dollars in millions)	2024	2023	% Change	2024	2023	% Change
Revenues	$ 64.7	$ 29.1	122 %	$ 83.2	$ 43.5	91 %
Cost of services	$ 211.6	$ 55.7	NM	$ 241.9	$ 107.4	125 %
Gross margin [1]	$ (146.9)	$ (26.6)	NM	$ (158.7)	$ (63.9)	(148 %)
Gross margin % [1]	(227)%	(91)%		(191)%	(147)%	
Add back:						
Settlement charge, net	110.2	—	NM	110.2	—	NM
Restructuring costs	0.4	—	NM	0.2	—	NM
Segment adjusted gross margin [2]	$ (36.3)	$ (26.6)	36 %	$ (48.3)	$ (63.9)	(24 %)
Segment adjusted gross margin %[2]	(56)%	(91)%		(58)%	(147)%	

[1] Gross margin is calculated as revenues less cost of sales. Gross margin percentage is calculated as gross margin divided by revenues.

[2] Segment adjusted gross margin, which is a non-GAAP financial measure, is calculated as gross margin plus restructuring costs and non-cash items related to changes in fair value of contingent consideration, inventory step-up provision and settlement charge, net. Segment adjusted gross margin percentage, which is a non-GAAP financial measure, is calculated as segment adjusted gross margin divided by revenues. The Company's management utilizes segment adjusted gross margin and segment adjusted gross margin percentage for purposes of evaluating our ongoing operations and for internal planning and forecasting purposes. We believe that these non-GAAP operating measures, when reviewed collectively with our GAAP financial information, provide useful supplemental information to investors in assessing our operating performance.

NM - Not meaningful

Three Months Ended June 30, 2024 Compared with Three Months Ended June 30, 2023

Services Revenues

Bioservices revenues increased $38.1 million, or 144%, to $64.5 million for the three months ended June 30, 2024. The increase was primarily attributable to the $50.0 million arbitration settlement (the "Settlement Agreement") with Janssen Pharmaceuticals, Inc. ("Janssen"), one of the Janssen Pharmaceutical Companies of Johnson & Johnson, related to the 2022 termination of the manufacturing services agreement with Janssen (the "Janssen Agreement"), coupled with an increase in production at the Company's Camden facility. The increase was partially offset by lower production at the Company's Canton and Winnipeg facilities coupled with the prior year quarter recognition of revenue related to the resolution of a customer's outstanding obligation.

Bioservices lease revenues decreased $2.5 million, or 93%, to $0.2 million for the three months ended June 30, 2024. The decrease was related to the completion of a lease for a Bioservices customer at our Canton facility.

Cost of Services and Gross Margin

Cost of services increased $155.9 million to $211.6 million for the three months ended June 30, 2024. The increase was primarily due to the Settlement Agreement with Janssen and resulting write-down of related assets to net realizable value, partially offset by a decrease in production at the Company's Canton facility and a decrease in overhead costs at our Maryland facilities.

Services gross margin decreased $120.3 million to $(146.9) million for the three months ended June 30, 2024. Services gross margin percentage decreased 136 percentage points to (227)% for the three months ended June 30, 2024. The decrease was primarily due to the Settlement Agreement with Janssen and resulting revenue and write-down of related assets mentioned above, coupled with lower production at the Company's Canton and Winnipeg facilities, partially offset by an increase in production at the Company's Camden facility and a decrease in overhead costs at our Maryland facilities. Services segment adjusted gross margin excludes the impacts of the settlement charge, net of $110.2 million and restructuring costs of $0.4 million.

Six Months Ended June 30, 2024 Compared with Six Months Ended June 30, 2023

Services revenues

Bioservices revenues increased $43.8 million, or 112%, to $82.8 million for the six months ended June 30, 2024. The increase was primarily attributable to the $50 million arbitration settlement with Janssen related to the Settlement Agreement, coupled with increased production at our Camden facility. The increase was partially offset by reduced production activities at the Company's Canton and Winnipeg facilities.

Bioservices lease revenues decreased $4.1 million, or 91%, to $0.4 million for the six months ended June 30, 2024. The decrease was related to the completion of a lease for a Bioservices customer at our Canton facility.

Cost of Services and Gross Margin

Cost of Services increased $134.5 million, or 125%, to $241.9 million for the six months ended June 30, 2024. The increase was primarily due to the Settlement Agreement with Janssen and resulting write-down of related assets to net realizable value, coupled with higher production activities at the Company’s Camden facility, partially offset by higher allocations to Cost of MCM Product sales and lower costs associated with production activities at the Company’s Canton facility.

Services gross margin decreased $94.8 million, or 148%, to $(158.7) million for the six months ended June 30, 2024. Services gross margin percentage decreased 44 percentage points to (191)% for the six months ended June 30, 2024. The decrease was primarily due to the Settlement Agreement with Janssen and resulting revenue and write-down of related assets mentioned above, coupled with lower production at the Company's Canton and Winnipeg facilities, partially offset by an increase in production at the Company’s Camden facility and a decrease in overhead costs at our Maryland facilities. Services segment adjusted gross margin excludes the impacts of the settlement charge, net of $110.2 million and restructuring costs of $0.2 million.

OTHER REVENUE

Three Months Ended June 30, 2024 Compared with Three Months Ended June 30, 2023

Contracts and Grants

Contracts and grants revenue was consistent at $6.6 million for the three months ended June 30, 2024.

Six Months Ended June 30, 2024 Compared with Six Months Ended June 30, 2023

Contracts and Grants

Contracts and grants revenue increased $1.5 million, or 11%, to $14.6 million for the six months ended June 30, 2024. The increase was related to work under the Ebanga™ program, partially offset by the wind-down of our other funded development initiatives.

FINANCIAL CONDITION, LIQUIDITY AND CAPITAL RESOURCES

Our financial condition is summarized as follows:

(dollars in millions)	June 30, 2024	December 31, 2023	Change %
Financial assets:			
Cash and cash equivalents	$ 69.7	$ 111.7	(38)%
Borrowings:			
Debt, current portion	$ 415.2	$ 413.7	— %
Debt, net of current portion	447.0	446.5	— %
Total borrowings	$ 862.2	$ 860.2	— %
Working capital:			
Current assets	$ 654.5	$ 679.5	(4)%
Current liabilities	619.7	651.3	(5)%
Total working capital	$ 34.8	$ 28.2	23 %

Principal Sources of Capital Resources

We have historically financed our operating and capital expenditures through existing cash and cash equivalents, cash from operations, development contracts and grant funding and borrowings under our Revolving Credit Facility, our Term Loan Facility, and other lines of credit we have established from time to time. We also obtain financing from the sale of our common stock upon exercise of stock options and participation in an at-the-market equity offering program that we entered into on May 17, 2023 (the "ATM Program"), which we are currently ineligible to use. As of June 30, 2024, we had unrestricted cash and cash equivalents of $69.7 million and remaining capacity under our Revolving Credit Facility of $41.8 million.

Going Concern

The consolidated financial statements have been prepared on the going concern basis of accounting, which assumes the Company will continue to operate as a going concern and which contemplates the realization of assets and the satisfaction of liabilities and commitments in the normal course of business.

As of June 30, 2024, there was $222.7 million outstanding on the Company’s senior revolving credit facility (“Revolving Credit Facility”) and $190.3 million on the senior term loan facility (“Term Loan Facility” and together with the Revolving Credit Facility, the “Senior Secured Credit Facilities”) that mature in May 2025 and the Senior Credit Facilities are subject to the Forbearance Agreement and Amendment as described below, with respect to the Company’s noncompliance with certain operational and financial covenants. As of June 30, 2024, the Company had $69.7 million in cash and cash equivalents. As a result of these factors, the Company determined that there is substantial doubt about the Company’s ability to continue as a going concern within one year after the date that the financial statements are issued. The evaluation considered the potential mitigating effects of management’s plans that have not been fully implemented. Management has evaluated the mitigating effects of its plans to determine if it is probable that (1) the plans will be effectively implemented within one year after the date the financial statements are issued, and (2) when implemented, the plans will mitigate the relevant conditions or events that raise substantial doubt about the entity’s ability to continue as a going concern. Management's plans include (A) further amending the Senior Secured Credit Facilities, and (B) improving operating performance, reducing working capital and the potential of the sale of assets to pay down the Senior Secured Credit Facilities before they become due. As neither plan is in the complete control of management, neither is probable of occurring. In this regard, management may not be able to further amend the Senior Secured Credit Facilities or find a buyer for the assets it is willing to divest and may not be able to close on any asset sale for which management is able to reach an agreement with a buyer. As a result, the Company may be unable to meet its obligations as they become due. In addition, any asset sales that are completed could have potential negative impacts on the Company's future operating cash flows and profitability.

Debt Covenants

The Senior Secured Credit Facilities mature in May 2025, and provide for (1) revolving credit commitments, (2) a term loan, and (3) the issuance of commercial letters of credit. As of March 31, 2024, the Company was not in compliance with the minimum consolidated EBITDA covenant under the Senior Secured Credit Facilities and did not satisfy a covenant requiring it to raise not less

than $75.0 million through issuance of equity and/or unsecured indebtedness by April 30, 2024. In addition, the Company was required to deliver audited annual financial statements without a "going concern" explanatory paragraph with respect to its financial statements for the year ended December 31, 2023, which was not achieved. However, on February 29, 2024, the requisite lenders agreed to enter into the Forbearance Agreement and Amendment with the Company, which included a limited waiver of certain events of default, including those that resulted from (a) any violation of the financial covenants set forth in the Senior Secured Credit Facilities with respect to the fiscal quarter ending December 31, 2023 and the fiscal quarter ending March 31, 2024 and (b) the going concern explanatory paragraph contained in the audited financial statements for the year ended December 31, 2023. This forbearance period (the "Forbearance Period") expired on April 30, 2024.

On April 29, 2024, the requisite lenders agreed to enter into a Consent, Waiver and Seventh Amendment to the Amended and Restated Credit Agreement (the "Seventh Amendment") with the Company. The Seventh Amendment, among other things: (a) reduces available commitments under the Revolving Credit Facility to $240.0 million through July 30, 2024, to $210.0 million from July 31, 2024 through September 29, 2024, to $205.0 million from September 30, 2024 through October 30, 2024, to $180.0 million from October 31, 2024 through November 29, 2024, and to $170.0 million from November 30, 2024 and thereafter (in each case subject to potential limited additional borrowings from a specified reserve with the consent of the lenders); (b) amends the interest rate benchmark in the definition of Applicable Margin from (i) 5.00% per annum to 7.00% per annum with respect to Base Rate Loans and (ii) 6.50% per annum to 8.50% per annum with respect to SOFR Loans, RFR Loans and Eurocurrency Rate Loans; and (c) requires the Company to raise equity or unsecured indebtedness of at least $85.0 million by July 31, 2024 (or such later date on or before September 29, 2024 as agreed to by the Administrative Agent), provided that such requirement will be reduced by the aggregate net cash proceeds received from certain dispositions that are applied to reduce amounts outstanding under the Revolving Credit Facility. The Company expects to apply the proceeds from the Camden Transaction and the RSDL® Transaction to reduce borrowings under the Revolving Credit Facility in order to satisfy the capital raise requirement, the deadline for which was recently extended to September 29, 2024. There is no guarantee the Company will be able to meet the capital raise requirement by this deadline.

In addition, pursuant to the Seventh Amendment, the Company is obligated to apply 100% of the aggregate net cash proceeds received from certain dispositions to the prepayment of amounts outstanding under the Revolving Credit Facility, except where such proceeds exceed $85,000,000, in which case such mandatory prepayment of the Revolving Credit Facility will no longer be required. Mandatory prepayment of the Term Loan Facility will not be required unless and until the aggregate net proceeds from such dispositions exceed $85,000,000, at which point 100% of such proceeds must be used toward repayment of amounts outstanding under the Term Loan Facility.

Under the Seventh Amendment, the Company is also subject to (a) a monthly minimum consolidated EBITDA covenant through May 15, 2025 and a monthly maximum capital expenditures covenant through March 31, 2025, (b) a minimum liquidity requirement, and (c) additional financial statement reporting and business plan forecast obligations. In connection with the entry into the Seventh Amendment, the Company paid an amendment fee of an aggregate amount equal to 0.5% of the total credit exposure as of the Seventh Amendment effective date and will be required to pay an additional amendment fee of 1.0% of total credit exposure at December 1, 2024 and each month thereafter. The Senior Secured Credit Facilities and the Company's other debt facilities are described in more detail below in Note 10, "Debt." As of the date of these financial statements, the Company is in compliance with the terms of the Senior Secured Credit Facilities.

If we default under the Senior Secured Credit Facilities, the lenders would have the right to accelerate the repayment of borrowings under the Senior Secured Credit Facilities, which would result in a cross-default of the Company's obligations under the 3.875% Senior Unsecured Notes due 2028 (the "Senior Unsecured Notes"). If the Company were unable to obtain additional waivers or forbearance of such covenants or defaults, to successfully renegotiate the terms of the Senior Secured Credit Facilities, or to cure the potential covenant breach or default, and the lenders enforced one or more of their rights upon default and/or the default resulted in a cross-default under the Senior Unsecured Notes, the Company would be unable to meet its obligations under those agreements and would likely be forced into insolvency proceedings.

Based on the facts and circumstances described above, there can be no assurance that the Company would be able to comply with its debt covenants in the future. As a result, the Company continues to evaluate a number of factors related to its ability to continue as a going concern, including its ability to comply with the terms and operating and financial covenants required by the Senior Secured Credit Facilities, its ability to satisfy the capital raise requirement required by the Senior Secured Credit Facilities, other market conditions, economic conditions, particularly in the pharmaceutical and biotechnology industry, and disruptions or volatility caused by factors such as regional conflicts, inflation, and supply chain disruptions. The Company has engaged legal and financial advisors to assist with a comprehensive review of alternatives to enhance its capital structure, which may include taking steps to cure any potential defaults or seeking forbearance, waivers, further cost reductions, asset sales, restructurings or other alternatives to avoid an event of default.

At-the-Market Equity Offering Facility

The Company may, from time to time, sell up to $150.0 million aggregate gross sales price of shares of its common stock through Evercore Group L.L.C. and RBC Capital Markets, LLC, as sales agents, under the ATM Program that we entered into on May 17, 2023. There were no sales of the Company's common stock under the ATM Program during the three months ended June 30, 2024. The Company's Registration Statement on Form S-3 expires on August 9, 2024 and the Company is not eligible to file a new Registration Statement on Form S-3 until 2025 due to the delayed filing of the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2023. The Company will not be eligible to sell any shares under the ATM Program until a new Registration Statement is filed and becomes effective. During the second quarter of 2023, we sold 1.1 million shares of our common stock under the ATM Program for gross proceeds of $9.1 million, representing an average price of $8.22 per share. As of June 30, 2024, $140.9 million aggregate gross sales price of shares of the Company's common stock remains available for issuance under the ATM Program. The Company intends to use proceeds obtained from the sale of shares under the ATM Program for general corporate purposes.

Cash Flows

The following table provides information regarding our cash flows for the six months ended June 30, 2024 and 2023:

	Six Months Ended June 30,	
(in millions)	**2024**	**2023**
Net cash provided by (used in):		
Operating activities	$ (15.1)	$ (298.4)
Investing activities	(15.4)	242.6
Financing activities	(10.2)	(497.4)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	—	(0.8)
Net change in cash, cash equivalents and restricted cash	$ (40.7)	$ (554.0)

Operating Activities:

Net cash used in operating activities for the six months ended June 30, 2024 decreased $283.3 million as compared with the six months ended June 30, 2023. The decrease in net cash used in operating activities was primarily due to positive working capital changes of $287.3 million, driven primarily by changes in prepaid and other assets related to the write down to net realizable values of the assets classified within "Other long term assets" related to the Janssen Agreement and Settlement Agreement, and higher cash collections on accounts receivable.

Investing Activities:

Net cash used in investing activities for the six months ended June 30, 2024 increased $258.0 million as compared with the six months ended June 30, 2023. The increase in net cash used in investing activities was attributable to $270.2 million in proceeds from the sale of our travel health business in 2023, partially offset by a reduction in purchases of property, plant and equipment.

Financing Activities:

Net cash used in financing activities for the six months ended June 30, 2024 decreased $487.2 million as compared with the six months ended June 30, 2023. The decrease in net cash used in financing activities was primarily due to a reduction of principal payments of $286.3 million on our Revolving Credit Facility and $148.9 million on our Term Loan Facility, partially offset by an increase in proceeds of $65.0 million under our Revolving Credit Facility in the current period and proceeds of $8.2 million from the sale of stock under the ATM Program in the prior period.

Debt

As of June 30, 2024, the Company has $863.8 million of fixed and variable rate debt with varying maturities. See Note 10, “Debt” in the Notes to Condensed Consolidated Financial Statements in Part I, Item 1, of this Form 10-Q for further discussion.

Uncertainties and Trends Affecting Funding Requirements

We expect to continue to fund our short-term and long-term anticipated operating expenses, capital expenditures and debt service requirements from the following sources:

- existing cash and cash equivalents;
- net proceeds from the sale of our products and Bioservices;
- development contracts and grant funding;
- proceeds from the sale of our common stock through the ATM Program;
- proceeds from potential asset sales; and
- our Senior Secured Credit Facilities and any replacement or other lines of credit we may establish from time to time.

There are numerous risks and uncertainties associated with product sales and with the development and commercialization of our product candidates. We may seek additional external financing to provide additional financial flexibility. Our future capital requirements will depend on many factors, including (but not limited to):

- the level, timing and cost of product sales and Bioservices;
- the extent to which we acquire or invest in and integrate companies, businesses, products or technologies;
- the acquisition of new facilities and capital improvements to new or existing facilities;
- the payment obligations under our indebtedness;
- the scope, progress, results and costs of our development activities;
- our ability to obtain funding from collaborative partners, government entities and non-governmental organizations for our development programs; and
- the costs of commercialization activities, including product marketing, sales and distribution.

If our capital resources are insufficient to meet our future capital requirements, we will need to finance our cash needs through public or private equity or debt offerings, bank loans, collaboration and licensing arrangements, cost reductions, assets sales or a combination of these options.

If we raise funds by issuing equity securities, including through the ATM Program, our stockholders may experience dilution. Public or bank debt financing, if available, may involve agreements that include covenants, like those contained in our Senior Unsecured Notes and the Senior Secured Credit Facilities, which could limit or restrict our ability to take specific actions, such as incurring additional debt, making capital expenditures, pursuing acquisition opportunities, buying back shares or declaring dividends. If we raise funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish valuable rights to our technologies or product candidates or grant licenses on terms that may not be favorable to us.

Economic conditions, including market volatility and adverse impacts on financial markets, may make it more difficult to obtain financing on attractive terms, or at all. Any new debt funding, if available, may be on terms less favorable to us than our Senior Secured Credit Facilities or the Senior Unsecured Notes. If financing is unavailable or lost, our business, operating results, financial condition and cash flows would be adversely affected, and we could be forced to delay, reduce the scope of or eliminate many of our planned activities.

Unused Credit Capacity

Available room under the Revolving Credit Facility as of June 30, 2024 and December 31, 2023 was:

(in millions)	June 30, 2024 [1]	December 31, 2023
Total Capacity	$ 240.0	$ 300.0
Less:		
Outstanding Letters of Credit	5.5	0.5
Outstanding Indebtedness	222.7	219.2
Unused Capacity	$ 11.8	$ 80.3

[1] As of June 30, 2024, excludes $30.0 million subject to consent of the lenders.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

For a discussion of additional risks arising from our operations, see the Company's Annual Report on Form 10-K for the year ended December 31, 2023, under the heading "Item 1A. Risk Factors" in addition to updates contained in "Item 1A-Risk Factors" of this Quarterly Report on Form 10-Q.

Market risk

We have interest rate and foreign currency market risk. Because of the short-term maturities of our cash and cash equivalents, we believe that an increase in market rates would likely not have a significant impact on the realized value of our investments.

Interest rate risk

We have debt with a mix of fixed and variable rates of interest and we are satisfied with the current fix-float mix of the Company's debt portfolio. Floating rate debt carries interest based generally on the eurocurrency rate, as defined in our Amended and Restated Credit Agreement, as amended from time to time, plus an applicable margin. Increases in interest rates could result in an increase in interest payments for our floating rate debt. See Note 10, "Debt" in the Notes to Consolidated Financial Statements in Part I, Item 1. of this Form 10-Q.

From time to time, we may use derivative instruments to manage our interest rate risk and market risk exposure.

We have assessed our exposure to changes in interest rates by analyzing the sensitivity to our operating results assuming various changes in market interest rates. A hypothetical increase of one percentage point in the eurocurrency rate as of June 30, 2024 would increase our interest expense by approximately $4.1 million annually.

Foreign currency exchange rate risk

We have exposure to foreign currency exchange rate fluctuations worldwide and primarily with respect to the Euro, Canadian dollar, Swiss franc and British pound. We manage our foreign currency exchange rate risk primarily by either entering into foreign currency hedging transactions or incurring operating expenses in the local currency in the countries in which we operate, to the extent practical. We currently do not hedge all of our foreign currency exchange exposure and the movement of foreign currency exchange rates could have an adverse or positive impact on our results of operations.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2024. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2024, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in internal control over financial reporting

There have been no changes in our internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act that occurred during the three months ended June 30, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

See Note 16, "Litigation" in Part I, Item 1, of this Quarterly Report on Form 10-Q.

ITEM 1A. RISK FACTORS

The Company's Annual Report on Form 10-K for the year ended December 31, 2023 contains disclosure regarding the risks and uncertainties related to the Company's business under the heading Item 1A. Risk Factors. There have been no material changes to the Company's risk factors as presented in the Company's 2023 Form 10-K, except as described below:

We have incurred significant indebtedness in connection with our acquisitions and servicing our debt requires a significant amount of cash. We may not have sufficient cash flow from our operations to pay our substantial debt.

Our ability to make scheduled payments of the principal of, to pay interest on or to further refinance, our indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. We may also seek additional debt financing to support our ongoing activities or to provide additional financial flexibility. Debt financing can have significant adverse consequences for our business, including:

- requiring us to dedicate a substantial portion of cash flows from operations to payment on our debt, which would reduce available funds for other corporate initiatives;
- increasing the amount of interest that we have to pay on debt with variable interest rates, if market rates of interest increase, to the extent we are unable to offset such risk through our hedging instruments;
- subjecting us, as under our Senior Secured Credit Facilities and the indenture governing the Senior Unsecured Notes, to restrictive covenants that reduce our ability to take certain corporate actions, acquire companies, products or technology, or obtain further debt financing;
- requiring us to pledge our assets as collateral, which could limit our ability to obtain additional debt financing;
- limiting our flexibility in planning for, or reacting to, general adverse economic and industry conditions; and
- placing us at a competitive disadvantage compared to our competitors that have less debt, better debt servicing options or stronger debt servicing capacity.

We may not have sufficient funds or be able to obtain additional financing to pay the amounts due under our indebtedness. In addition, failure to comply with the covenants under our Senior Secured Credit Facilities and other debt agreements, including the maintenance of a specified consolidated net leverage ratio, debt service coverage ratio, consolidated EBITDA level, minimum liquidity level, maximum capital expenditure level and required liquidity raise under our Senior Secured Credit Facilities, the additional terms and conditions imposed by the Seventh Amendment could result in an event of default under those agreements. An event of default could result in the acceleration of amounts due under a particular debt agreement and a cross-default and acceleration under other debt agreements, and we may not have sufficient funds to pay or be able to obtain additional financing to make any accelerated payments.

Our current indebtedness restricts and any additional debt financing may restrict the operation of our business and limit the cash available for investment in our business operations.

The Senior Secured Credit Facilities include the Term Loan Facility, which had an outstanding principal balance of $190.3 million as of June 30, 2024, and the ability to borrow up to $240.0 million under our Revolving Credit Facility, which excludes $30.0 million subject to consent of the lenders, under which we had $222.7 million of outstanding borrowings as of June 30, 2024. The available commitments under our Revolving Credit Facility decreased to $225.0 million on July 31, 2024, and will decrease to $200.0 million on October 31, 2024. In addition, on August 7, 2020, we completed an offering of $450.0 million aggregate principal amount of Senior Unsecured Notes. We may also seek additional debt financing to support our ongoing activities or to provide additional financial flexibility. Debt financing can have significant adverse consequences for our business, including:

- the level, timing and cost of product sales and bioservices;
- the extent to which we acquire or invest in and integrate companies, businesses, products or technologies;
- the acquisition of new facilities and capital improvements to new or existing facilities;
- the payment obligations under our indebtedness;
- the scope, progress, results and costs of our development activities;
- our ability to obtain funding from collaborative partners, government entities and non-governmental organizations for our development programs;
- the extent to which we repurchase common stock under any future share repurchase program; and
- the costs of commercialization activities, including product marketing, sales and distribution.

In addition, our Senior Secured Credit Facilities and our Senior Unsecured Notes each contain cross-default provisions whereby a default under one agreement would likely result in cross defaults under agreements covering other indebtedness. For example, if we default under the Senior Secured Credit Facilities, the lenders would have the right to accelerate the repayment of borrowings under the Senior Secured Credit Facilities, which would result in a cross-default and acceleration of the Company's obligations under the Senior Unsecured Notes. The occurrence of a default under any of these arrangements would permit the holders of the notes or the lenders under our Senior Secured Credit Facilities to declare all amounts outstanding under those borrowing arrangements to be immediately due and payable, and there is no assurance that we would have sufficient funds to satisfy any such accelerated obligations.

We require significant additional funding to be able to continue as a going concern and we may be unable to raise capital when needed or on acceptable terms, which would harm our ability to grow our business, and our results of operations and financial condition. In addition, any capital we raise may result in dilution to our current stockholders.

As of June 30, 2024, we had unrestricted cash and cash equivalents of $69.7 million and remaining capacity under our Revolving Credit Facility of $41.8 million. Also as of June 30, 2024, there was $222.7 million outstanding on our Revolving Credit Facility and $190.3 million on our Term Loan Facility that mature in May 2025. The Senior Credit Facilities are subject to the Forbearance Agreement and Amendment with respect to the Company's noncompliance with certain operational and financial covenants. As a result of these factors, the Company determined that there is substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued.

On April 29, 2024, the requisite lenders agreed to enter into the Seventh Amendment with the Company. The Seventh Amendment, among other things: (a) reduces available commitments under the Revolving Credit Facility to $240.0 million through July 30, 2024, to $210.0 million from July 31, 2024 through September 29, 2024, to $205.0 million from September 30, 2024 through October 30, 2024, to $180.0 million from October 31, 2024 through November 29, 2024, and to $170.0 million from November 30, 2024 and thereafter (in each case subject to potential limited additional borrowings from a specified reserve with the consent of the lenders); (b) amends the interest rate benchmark in the definition of Applicable Margin from (i) 5.00% per annum to 7.00% per annum with respect to Base Rate Loans and (ii) 6.50% per annum to 8.50% per annum with respect to SOFR Loans, RFR Loans and Eurocurrency Rate Loans; and (c) in lieu of the $75.0 million capital raise referenced above, requires the Company to raise equity or unsecured indebtedness of at least $85.0 million by July 31, 2024 (or such later date on or before September 29, 2024 as agreed to by the Administrative Agent), provided that such requirement will be reduced by the aggregate net cash proceeds received from certain dispositions that are applied to reduce amounts outstanding under the Revolving Credit Facility. Under the Seventh Amendment, the Company is also subject to (a) a monthly minimum consolidated EBITDA covenant through May 15, 2025 and a monthly maximum capital expenditures covenant through March 31, 2025, (b) a minimum liquidity requirement and (c) additional financial statement reporting and business plan forecast obligations.

The Company may be unable to comply with debt covenants in future periods without additional sources of liquidity or future amendments to or forbearance arrangements under the Credit Agreement. We will need to obtain substantial additional funding in connection with our continuing operations, which cannot be assured.

If our capital resources are insufficient to meet our future capital requirements, we will need to finance our cash needs through public or private equity or debt offerings, bank loans or collaboration and licensing arrangements. Our Registration Statement on Form S-3 expires on August 9, 2024 and we are ineligible to file a new Registration Statement on Form S-3 until 2025. There can be no assurance that we will become eligible to file a shelf registration statement or to have such a shelf registration statement become effective after such period, which may inhibit our ability to access the capital markets to raise funds.

If we raise funds by issuing equity securities, including through our ATM Program, our stockholders may experience dilution. Debt financing, if available, may involve agreements that include covenants, like those contained in our Senior Secured Credit Facilities and the indenture governing the Senior Unsecured Notes, limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, pursuing acquisition opportunities or declaring dividends. If we raise funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish valuable rights to our technologies or product candidates or grant licenses on terms that may not be favorable to us. Our Senior Secured Credit Facilities as well as the indenture governing the Senior Unsecured Notes restrict our ability to incur additional indebtedness.

Economic conditions may make it difficult to obtain financing on attractive terms, or at all. If financing is unavailable or lost, our business, operating results, financial condition and cash flows would be adversely affected, and we could be forced to delay, reduce the scope of or eliminate many of our planned activities.

We may not realize the expected benefits of the sale of our travel health business to Bavarian Nordic, the sale of RSDL® to SERB, and the pending sale of our drug product facility in Baltimore-Camden to Bora.

On May 15, 2023, pursuant to the Purchase and Sale Agreement, we completed the previously announced sale to Bavarian Nordic of our travel health business, including rights to Vaxchora® and Vivotif®, as well as our development-stage chikungunya vaccine candidate CHIKV VLP, our manufacturing site in Bern, Switzerland and certain of our development facilities in San Diego, California for a cash purchase price of $270.2 million, subject to certain customary adjustments. In addition, we may receive milestone payments of up to $80.0 million related to the development of CHIKV VLP and receipt of marketing approval and authorization in the U.S. and Europe, and sales-based milestone payments of up to $30.0 million based on aggregate net sales of Vaxchora® and Vivotif® in calendar year 2026.

On June 20, 2024, Cangene bioPharma LLC ("Cangene"), a subsidiary of the Company (together with Cangene, the "Seller"), entered into an Asset Purchase Agreement with Bora, under which the Seller will sell its drug product facility in Baltimore-Camden for a total value of approximately $30 million. Approximately 350 of the Seller's employees are expected to join Bora as part of the transaction.

On July 31, 2024, the Company entered into a Stock and Asset Purchase Agreement with SERB Pharmaceuticals, through its wholly owned subsidiary BTG International Inc. (collectively, "SERB"), pursuant to which, among other things, the Company sold its worldwide rights to RSDL®, to SERB (the "RSDL® Transaction") for a cash purchase price of $75 million, which was paid at closing and will be subject to customary adjustments based on inventory value at closing. In addition, SERB will pay the Company a $5 million payment upon achievement of a milestone relating to sourcing of a certain component of RSDL® decontamination lotion. The Transaction also included the sale to SERB of all the outstanding capital stock of Emergent Protective Products USA Inc. ("EPPU"), a wholly owned subsidiary of the Company, which leases a manufacturing facility in Hattiesburg, Mississippi, as well as certain assets related to RSDL®, including intellectual property rights, contract rights, inventory and marketing authorizations. In addition, the employees of EPPU are expected to join SERB in connection with the RSDL® Transaction.

There can be no assurance that we will be able to realize in full the expected benefits of these transactions. If we are unable to or do not realize the expected strategic, economic, or other benefits of these transactions, it could adversely affect our business and financial position.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES, USE OF PROCEEDS, AND ISSUER PURCHASES OF EQUITY SECURITIES

Recent sales of unregistered securities

Not applicable.

Use of proceeds

Not applicable.

Purchases of equity securities

Not applicable.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ITEM 5. OTHER INFORMATION

During the three months ended June 30, 2024, none of the Company's directors or Section 16 reporting officers adopted or terminated any Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K).

ITEM 6. EXHIBITS

The exhibits required to be filed by Item 601 of Regulation S-K are listed in the Exhibit Index immediately preceding the exhibits hereto.

Exhibit Index

Exhibit Number	Description
10.1†	Modification No. 11, effective April 29, 2024, to the ACAM2000 Contract (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on May 1, 2024).
10.2†	Modification No. 12 effective June 28, 2024, to the ACAM2000 Contract (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on July 2, 2024).
10.3†	Modification No. 17 effective June 26, 2024, to the BARDA AV7909 Contract (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on July 2, 2024).
10.4*	Form of Amendment to Letter Agreement, dated April 23, 2024 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on April 26, 2024).
10.5*	Emergent BioSolutions Inc. Amended and Restated Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on May 29, 2024).
31.1 #	Certification of the Chief Executive Officer, pursuant to Exchange Act Rule 13a-14(a).
31.2 #	Certification of the Chief Financial Officer pursuant to Exchange Act Rule 13a-14(a).
32.1 #	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2 #	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101 #	The following financial information related to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2024, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Condensed Consolidated Balance Sheets, (ii) the Condensed Consolidated Statements of Operations, (iii) the Condensed Consolidated Statements of Comprehensive Loss, (iv) the Condensed Consolidated Statements of Cash Flows, (v) the Condensed Consolidated Statement of Changes in Stockholders' Equity; and (vi) the related Notes to the Condensed Consolidated Financial Statements.
104 #	Cover Page Interactive Data File, formatted in iXBRL and contained in Exhibit 101.
#	Filed herewith.
†	Certain confidential portions of this exhibit were omitted by means of marking such portions with asterisks because of the identified confidential portions (i) are not material and (ii) are items the Company customarily and actually treats such information as private or confidential.
*	Management contract or compensatory plan or arrangement.

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, thereunto duly authorized.

EMERGENT BIOSOLUTIONS INC.

By: /s/JOSEPH C. PAPA
Joseph C. Papa
President. Chief Executive Officer and Director
(Principal Executive Officer)

Date: August 6, 2024

By: /s/RICHARD S. LINDAHL
Richard S. Lindahl
Executive Vice President, Chief Financial Officer and Treasurer
(Principal Financial and Accounting Officer)

Date: August 6, 2024

EXHIBIT 31.1

CERTIFICATION

I, Joseph C. Papa, certify that:

(1) I have reviewed this Quarterly Report on Form 10-Q of Emergent BioSolutions Inc.;

(2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

(3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

(4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

(5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information, and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2024

/s/Joseph C. Papa
Joseph C. Papa
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, Richard S. Lindahl, certify that:

(1) I have reviewed this Quarterly Report on Form 10-Q of Emergent BioSolutions Inc.;

(2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

(3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

(4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

(5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information, and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2024

/s/RICHARD S. LINDAHL
Richard S. Lindahl
Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Emergent BioSolutions Inc. (the "Company") for the period ended June 30, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Joseph C. Papa, President and Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 6, 2024

/s/Joseph C. Papa
Joseph C. Papa
President and Chief Executive Officer

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Emergent BioSolutions Inc. (the "Company") for the period ended June 30, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Richard S. Lindahl, Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 6, 2024

/s/RICHARD S. LINDAHL
Richard S. Lindahl
Chief Financial Officer