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

☐ 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: **001-38912**

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

Delaware	**82-2758923**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

Radnor Corporate Center, Building One, Suite 200
100 Matsonford Road
Radnor, Pennsylvania 19087
(Address of principal executive offices) (zip code)

(610) 386-1700
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Exchange on which registered
Common stock, $0.01 par value	**AVTR**	**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

On July 22, 2024, 679,840,443 shares of common stock, $0.01 par value per share, were outstanding.

Avantor, Inc. and subsidiaries
Form 10-Q for the quarterly period ended June 30, 2024
Table of contents

Glossary

	Description
the Company, we, us, our	Avantor, Inc. and its subsidiaries
Adjusted EBITDA	our earnings or loss before interest, taxes, depreciation, amortization and certain other adjustments
Adjusted Operating Income	our earnings or loss before interest, taxes, amortization and certain other adjustments
Annual Report	our annual report on Form 10-K for the year ended December 31, 2023
AOCI	accumulated other comprehensive income or loss
EURIBOR	the basic rate of interest used in lending between banks on the European Union interbank market
FASB	the Financial Accounting Standards Board of the United States
GAAP	United States generally accepted accounting principles
long-term	period other than short-term
OCI	other comprehensive income or loss
Ritter	Ritter GmbH and affiliates, a company we acquired in June 2021
RSU	restricted stock units represent awards that will vest annually and awards that contain performance and market conditions
SEC	the United States Securities and Exchange Commission
SG&A expenses	selling, general and administrative expenses
SOFR	secured overnight financing rate
VWR	VWR Corporation and its subsidiaries, a company we acquired in November 2017

Cautionary factors regarding forward-looking statements

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, and are subject to the safe harbor created thereby under the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact included in this report are forward-looking statements. Forward-looking statements discuss our current expectations and projections relating to our financial condition, results of operations, plans, including our cost transformation initiative, objectives, future performance and business. These statements may be preceded by, followed by or include the words "aim," "anticipate," "believe," "estimate," "expect," "forecast," "intend," "likely," "outlook," "plan," "potential," "projection," "prospects," "continue," "goal," "objective," "opportunity," "near-term," "long-term," "assumption," "project," "guidance," "target," "trend," "seek," "can," "could," "may," "should," "would," "will," the negatives thereof and other words and terms of similar meaning.

Forward-looking statements are inherently subject to risks, uncertainties and assumptions; they are not guarantees of performance. You should not place undue reliance on these statements. We have based these forward-looking statements on our current expectations and projections about future events. Although we believe that our assumptions made in connection with the forward-looking statements are reasonable, we cannot assure you that the assumptions and expectations will prove to be correct.

You should understand that the following important factors, in addition to those discussed under Part I, Item 1A "Risk Factors" in our Annual Report, as such risk factors may be updated from time to time in our periodic filings with the SEC and in this report, could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in our forward-looking statements:

- disruptions to our operations;
- competition from other industry providers;
- our ability to implement our strategies for improving growth and optimizing costs;
- our ability to anticipate and respond to changing industry trends;
- adverse trends in consumer, business, and government spending;
- our dependence on sole or limited sources for some essential materials and components;
- our ability to successfully value and integrate acquired businesses;
- our products' satisfaction of applicable quality criteria, specifications and performance standards;
- our ability to maintain our relationships with key customers;
- our ability to maintain our relationships with distributors;
- our ability to maintain our customer base and our expected volume of customer orders;
- our ability to maintain and develop relationships with drug manufacturers and contract manufacturing organizations;

- the impact of new laws, regulations, or other industry standards;
- changes in the interest rate environment that increase interest on our borrowings;
- adverse impacts from currency exchange rates or currency controls imposed by any government in major areas where we operate or otherwise;
- our ability to implement and improve processing systems and prevent a compromise of our information systems or personal data;
- our ability to protect our intellectual property and avoid third-party infringement claims;
- exposure to product liability and other claims in the ordinary course of business;
- our ability to develop new products responsive to the markets we serve;
- supply chain constraints and the availability of raw materials;
- our ability to source certain of our products from certain suppliers;
- our ability to contain costs in an inflationary environment;
- our ability to avoid negative outcomes related to the use of chemicals;
- our ability to maintain highly skilled employees;
- our ability to maintain a competitive workforce;
- adverse impact of impairment charges on our goodwill and other intangible assets;
- currency fluctuations and uncertainties related to doing business outside the United States;
- our ability to obtain and maintain required regulatory clearances or approvals, which may constrain the commercialization of submitted products;
- our ability to comply with environmental, health and safety laws and regulations, or the impact of any liability or obligation imposed under such laws or regulations;
- our indebtedness, which could adversely affect our financial condition or prevent us from fulfilling our debt or contractual obligations;
- our ability to generate sufficient cash flows or access sufficient additional capital to meet our debt obligations or to fund our other liquidity needs; and
- our ability to maintain an effective system of internal control over financial reporting.

All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the foregoing cautionary statements. In addition, all forward-looking statements speak only as of the date of this report. We undertake no obligations to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise other than as required under the federal securities laws.

PART I — FINANCIAL INFORMATION

Item 1. Financial statements

Avantor, Inc. and subsidiaries
Index to unaudited condensed consolidated financial statements

Avantor, Inc. and subsidiaries
Unaudited condensed consolidated balance sheets

(in millions)	June 30, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents	$ 272.6	$ 262.9
Accounts receivable, net of allowances of $34.6 and $35.0	1,129.0	1,150.2
Inventory	795.6	828.1
Other current assets	132.0	143.7
Total current assets	2,329.2	2,384.9
Property, plant and equipment, net of accumulated depreciation and impairment charges of $656.7 and $616.9	753.8	737.5
Other intangible assets, net (see note 7)	3,582.8	3,775.3
Goodwill, net of accumulated impairment losses of $38.8 and $38.8	5,659.6	5,716.7
Other assets	368.1	358.3
Total assets	$ 12,693.5	$ 12,972.7
Liabilities and stockholders' equity		
Current liabilities:		
Current portion of debt	$ 258.4	$ 259.9
Accounts payable	657.4	625.9
Employee-related liabilities	146.1	133.1
Accrued interest	49.9	50.2
Other current liabilities	352.8	411.2
Total current liabilities	1,464.6	1,480.3
Debt, net of current portion	4,856.6	5,276.7
Deferred income tax liabilities	575.4	612.8
Other liabilities	361.9	350.3
Total liabilities	7,258.5	7,720.1
Commitments and contingencies (see note 8)		
Stockholders' equity:		
Common stock including paid-in capital, 679.6 and 676.6 shares issued and outstanding	3,897.5	3,830.1
Accumulated earnings	1,644.8	1,491.5
Accumulated other comprehensive loss	(107.3)	(69.0)
Total stockholders' equity	5,435.0	5,252.6
Total liabilities and stockholders' equity	$ 12,693.5	$ 12,972.7

See accompanying notes to the unaudited condensed consolidated financial statements.

Avantor, Inc. and subsidiaries
Unaudited condensed consolidated statements of operations

(in millions, except per share data)	Three months ended June 30, 2024	Three months ended June 30, 2023	Six months ended June 30, 2024	Six months ended June 30, 2023
Net sales	$ 1,702.8	$ 1,743.9	$ 3,382.6	$ 3,524.2
Cost of sales	1,121.3	1,153.9	2,230.6	2,309.4
Gross profit	581.5	590.0	1,152.0	1,214.8
Selling, general and administrative expenses	405.7	357.5	829.9	751.1
Impairment charges	—	160.8	—	160.8
Operating income	175.8	71.7	322.1	302.9
Interest expense, net	(60.9)	(73.4)	(125.2)	(147.1)
Loss on extinguishment of debt	(1.9)	(1.6)	(4.4)	(3.9)
Other income, net	1.6	2.0	2.7	2.6
Income (loss) before income taxes	114.6	(1.3)	195.2	154.5
Income tax expense	(21.7)	(6.0)	(41.9)	(40.3)
Net income (loss)	$ 92.9	$ (7.3)	$ 153.3	$ 114.2
Earnings (Loss) per share:				
Basic	$ 0.14	$ (0.01)	$ 0.23	$ 0.17
Diluted	$ 0.14	$ (0.01)	$ 0.22	$ 0.17
Weighted average shares outstanding:				
Basic	679.4	675.3	678.7	675.0
Diluted	682.6	675.3	681.9	677.9

See accompanying notes to the unaudited condensed consolidated financial statements.

Avantor, Inc. and subsidiaries
Unaudited condensed consolidated statements of comprehensive income or loss

(in millions)	Three months ended June 30, 2024	Three months ended June 30, 2023	Six months ended June 30, 2024	Six months ended June 30, 2023
Net income (loss)	$ 92.9	$ (7.3)	$ 153.3	$ 114.2
Other comprehensive (loss) income:				
Foreign currency translation — unrealized (loss) gain	(6.1)	8.7	(28.1)	25.6
Derivative instruments:				
Unrealized gain	5.4	16.8	15.2	16.7
Reclassification of gain into earnings	(8.4)	(7.6)	(16.9)	(14.1)
Activity related to defined benefit plans	(0.2)	(0.8)	(0.4)	(5.7)
Other comprehensive (loss) income before income taxes	(9.3)	17.1	(30.2)	22.5
Income tax effect	(1.0)	0.7	(8.1)	5.9
Other comprehensive (loss) income	(10.3)	17.8	(38.3)	28.4
Comprehensive income	$ 82.6	$ 10.5	$ 115.0	$ 142.6

See accompanying notes to the unaudited condensed consolidated financial statements.

Avantor, Inc. and subsidiaries
Unaudited condensed consolidated statements of stockholders’ equity

	Stockholders’ equity				
	Common stock including paid-in capital				
(in millions)	Shares	Amount	Accumulated earnings	AOCI	Total
Balance at March 31, 2024	679.2	$ 3,881.4	$ 1,551.9	$ (97.0)	$ 5,336.3
Comprehensive income (loss)	—	—	92.9	(10.3)	82.6
Stock-based compensation expense	—	11.6	—	—	11.6
Stock option exercises and other common stock transactions	0.4	4.5	—	—	4.5
Balance at June 30, 2024	679.6	$ 3,897.5	$ 1,644.8	$ (107.3)	$ 5,435.0
Balance at March 31, 2023	675.1	$ 3,792.4	$ 1,291.9	$ (89.7)	$ 4,994.6
Comprehensive (loss) income	—	—	(7.3)	17.8	10.5
Stock-based compensation expense	—	9.3	—	—	9.3
Stock option exercises and other common stock transactions	0.6	(3.1)	—	—	(3.1)
Balance at June 30, 2023	675.7	$ 3,798.6	$ 1,284.6	$ (71.9)	$ 5,011.3

See accompanying notes to the unaudited condensed consolidated financial statements.

Avantor, Inc. and subsidiaries

Unaudited condensed consolidated statements of stockholders' equity (continued)

	Stockholders' equity				
	Common stock including paid-in capital				
(in millions)	Shares	Amount	Accumulated earnings	AOCI	Total
Balance at December 31, 2023	676.6	$ 3,830.1	$ 1,491.5	$ (69.0)	$ 5,252.6
Comprehensive income (loss)	—	—	153.3	(38.3)	115.0
Stock-based compensation expense	—	24.0	—	—	24.0
Stock option exercises and other common stock transactions	3.0	43.4	—	—	43.4
Balance at June 30, 2024	679.6	$ 3,897.5	$ 1,644.8	$ (107.3)	$ 5,435.0
Balance at December 31, 2022	674.3	$ 3,785.3	$ 1,170.4	$ (100.3)	$ 4,855.4
Comprehensive income	—	—	114.2	28.4	142.6
Stock-based compensation expense	—	21.9	—	—	21.9
Stock option exercises and other common stock transactions	1.4	(8.6)	—	—	(8.6)
Balance at June 30, 2023	675.7	$ 3,798.6	$ 1,284.6	$ (71.9)	$ 5,011.3

See accompanying notes to the unaudited condensed consolidated financial statements.

Avantor, Inc. and subsidiaries
Unaudited condensed consolidated statements of cash flows

	Six months ended June 30,	
(in millions)	**2024**	**2023**
Cash flows from operating activities:		
Net income	$ 153.3	$ 114.2
Reconciling adjustments:		
Depreciation and amortization	202.2	203.7
Impairment charges	—	160.8
Stock-based compensation expense	23.8	21.9
Provision for accounts receivable and inventory	39.5	43.1
Deferred income tax benefit	(52.7)	(64.7)
Amortization of deferred financing costs	5.8	6.7
Loss on extinguishment of debt	4.4	3.9
Foreign currency remeasurement loss (gain)	3.1	(0.1)
Changes in assets and liabilities:		
Accounts receivable	—	7.9
Inventory	(14.2)	(1.7)
Accounts payable	45.9	(74.4)
Accrued interest	(0.3)	(0.6)
Other assets and liabilities	6.4	(34.3)
Other	5.5	1.3
Net cash provided by operating activities	422.7	387.7
Cash flows from investing activities:		
Capital expenditures	(80.5)	(58.1)
Other	1.4	1.4
Net cash used in investing activities	(79.1)	(56.7)
Cash flows from financing activities:		
Debt borrowings	12.3	—
Debt repayments	(383.0)	(460.3)
Payments of debt refinancing fees and premiums	—	(2.3)
Proceeds received from exercise of stock options	50.8	4.7
Shares repurchased to satisfy employee tax obligations for vested stock-based awards	(7.4)	(13.3)
Net cash used in financing activities	(327.3)	(471.2)
Effect of currency rate changes on cash and cash equivalents	(7.3)	4.1
Net change in cash, cash equivalents and restricted cash	9.0	(136.1)
Cash, cash equivalents and restricted cash, beginning of period	287.7	396.9
Cash, cash equivalents and restricted cash, end of period	$ 296.7	$ 260.8

See accompanying notes to the unaudited condensed consolidated financial statements.

Avantor, Inc. and subsidiaries
Notes to unaudited condensed consolidated financial statements

1. Nature of operations and presentation of financial statements

We are a global manufacturer and distributor that provides products and services to customers in the biopharmaceutical, healthcare, education & government and advanced technologies & applied materials industries.

Basis of presentation

The accompanying condensed consolidated financial statements have been prepared pursuant to SEC regulations whereby certain information normally included in GAAP financial statements has been condensed or omitted. The financial information presented herein reflects all adjustments (consisting only of normal, recurring adjustments) that are, in the opinion of management, necessary for a fair presentation of the results for the interim periods presented. The results for interim periods are not necessarily indicative of the results to be expected for the full year.

We believe that the disclosures included herein are adequate to make the information presented not misleading in any material respect when read in conjunction with the audited consolidated financial statements and notes thereto included in our Annual Report. Those audited consolidated financial statements include a summary of our significant accounting policies.

Principles of consolidation

All intercompany balances and transactions have been eliminated from the financial statements.

Use of estimates

The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported throughout the financial statements. Actual results could differ from those estimates.

Segment Reporting

Effective January 1, 2024, we changed our operating model and reporting segment structure from three reportable segments to two reportable segments: Laboratory Solutions and Bioscience Production. This structure aligns with how our Chief Executive Officer, who is our chief operating decision maker, measures segment operating performance and allocates resources across our operating segments.

Asset impairment - Ritter

The Company's long-lived assets include property, plant and equipment, finite-lived intangible assets and certain other assets. For impairment testing purposes, long-lived assets may be grouped with working capital and other types of assets or liabilities if they generate cash flows on a combined basis. We evaluate long-lived assets or asset groups for impairment whenever events or changes in circumstances indicate a potential inability to recover their carrying amounts. The test to determine if long-lived assets or asset groups are impaired first compares their carrying values to their estimated undiscounted future cash flows. If the carrying values exceed the estimated undiscounted cash flows, an impairment charge is calculated as the amount that the carrying values exceed their fair values.

In the second quarter of 2023, persistently high customer inventory in the end markets served by Ritter and an overall slowdown in research activity caused Ritter's revenue to decline compared to prior expectations. Due to these circumstances, we performed an impairment test of the Ritter asset group, which resulted in a fair value that was lower than its carrying value. As a result, we recorded impairment charges of $106.4 million on Ritter's finite-lived intangible assets and $54.4 million on Ritter's property, plant & equipment in the second quarter of 2023. These charges impacted our Laboratory Solutions reportable segment.

Our impairment test was performed as of June 30, 2023 and utilized our then latest estimates of Ritter's projected cash flows, including revenues, gross margin, SG&A expenses, capital expenditures to maintain the acquired assets, and investments in debt free net working capital, as well as current market assumptions for the discount rate.

We have not identified any further events or changes in circumstances that would indicate a potential inability to recover the remaining carrying amounts of the Ritter asset group following the recognition of the impairment charges in the second quarter of 2023.

2. New accounting standards and climate change related update by SEC

Segment Reporting

In November 2023, the FASB issued Accounting Standards Update 2023-07, *Improvements to Reportable Segment Disclosures*, which amends the existing segment reporting guidance (ASC Topic 280) to improve reportable segment disclosure requirements, primarily through enhanced disclosures about significant segment expenses that are regularly provided to the chief operating decision maker and included within each reported measure of segment profit or loss, an amount for other segment items by reportable segment and a description of its composition, the title and position of the chief operating decision maker and an explanation of how the chief operating decision maker uses the reported measure(s) of segment profit or loss in assessing segment performance and deciding how to allocate resources.

The amendments in this update are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. Early adoption is permitted. We are currently evaluating the impact of our pending adoption of this standard on our financial statement disclosures.

Income Taxes

In December 2023, the FASB issued Accounting Standards Update 2023-09, *Improvements to Income Tax Disclosures*, which amends the existing income taxes guidance (ASC Topic 740) to require additional disclosures surrounding annual rate reconciliation, income taxes paid and other income tax related disclosures.

The amendments in this update are effective for annual periods beginning after December 15, 2024. Early adoption is permitted. We are currently evaluating the impact of our pending adoption of this standard on our financial statement disclosures.

Other

There were no new accounting standards that we expect to have a material impact on our financial position or results of operations upon adoption.

Adoption of rules to enhance and standardize climate-related disclosures for Investors

On March 6, 2024, the SEC adopted final rules to require registrants to disclose certain climate-related information in registration statements and annual reports.

On April 4, 2024, the SEC issued an order staying the final rules pending completion of judicial review of the petitions challenging the final rules. The order does not amend the compliance dates contemplated by the final rules, which are applicable to the Company for fiscal years beginning with the Company's annual report on Form 10-K for the fiscal year ended December 31, 2025. We are currently evaluating the impact of our pending adoption of these requirements on our financial statement disclosures.

3. Earnings per share

The following table presents the reconciliation of basic and diluted earnings per share for the three and six months ended June 30, 2024:

	Three months ended June 30, 2024			Six months ended June 30, 2024		
(in millions, except per share data)	**Earnings (numerator)**	**Weighted average shares outstanding (denominator)**	**Earnings per share**	**Earnings (numerator)**	**Weighted average shares outstanding (denominator)**	**Earnings per share**
Basic	$ 92.9	679.4	$ 0.14	$ 153.3	678.7	$ 0.23
Dilutive effect of stock-based awards	—	3.2		—	3.2	
Diluted	$ 92.9	682.6	$ 0.14	$ 153.3	681.9	$ 0.22

The following table presents the reconciliation of basic and diluted earnings (loss) per share for the three and six months ended June 30, 2023:

	Three months ended June 30, 2023			Six months ended June 30, 2023		
(in millions, except per share data)	**Loss (numerator)**	**Weighted average shares outstanding (denominator)**	**Loss per share**	**Earnings (numerator)**	**Weighted average shares outstanding (denominator)**	**Earnings per share**
Basic	$ (7.3)	675.3	$ (0.01)	$ 114.2	675.0	$ 0.17
Dilutive effect of stock-based awards	—	—		—	2.9	
Diluted	$ (7.3)	$ 675.3	$ (0.01)	$ 114.2	677.9	$ 0.17

For the three months ended June 30, 2023, basic and diluted loss per share calculations were the same because there was a net loss. As a result, 1.6 million of stock options and 0.8 million of restricted stock units were excluded from the calculation of diluted loss per share as their effect would be anti-dilutive.

4. Segment financial information

As described in note 1, effective January 1, 2024, we changed our operating model and reporting segment structure into two reportable business segments: Laboratory Solutions and Bioscience Production. Corporate costs are managed on a standalone basis, certain of which are allocated to our reportable segments.

In connection with this change, our chief operating decision maker changed the measure used to evaluate segment profitability from Adjusted EBITDA to Adjusted Operating Income. All disclosures relating to segment profitability, including those for comparative periods, have been revised as a result of this change.

The following table presents information by reportable segment:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	**2024**	**2023**	**2024**	**2023**
Net sales:				
Laboratory Solutions	$ 1,155.7	$ 1,193.8	$ 2,312.8	$ 2,396.8
Bioscience Production	547.1	550.1	1,069.8	1,127.4
Total	$ 1,702.8	$ 1,743.9	$ 3,382.6	$ 3,524.2
Adjusted Operating Income:				
Laboratory Solutions	$ 150.9	$ 179.7	$ 299.1	$ 351.9
Bioscience Production	144.0	154.2	270.9	321.7
Corporate	(17.7)	(15.0)	(34.4)	(31.6)
Total	$ 277.2	$ 318.9	$ 535.6	$ 642.0

The amounts above exclude inter-segment activity because it is not material. All of the net sales for each segment are from external customers.

The following table presents the reconciliation of net income (loss), the nearest measurement under GAAP, to Adjusted Operating Income:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	2024	2023	2024	2023
Net income (loss)	$ 92.9	$ (7.3)	$ 153.3	$ 114.2
Interest expense, net	60.9	73.4	125.2	147.1
Income tax expense	21.7	6.0	41.9	40.3
Loss on extinguishment of debt	1.9	1.6	4.4	3.9
Other income, net	(1.6)	(2.0)	(2.7)	(2.6)
Operating income	175.8	71.7	322.1	302.9
Amortization	74.9	78.9	150.2	157.3
Integration-related expenses[1]	—	(0.6)	—	8.1
Restructuring and severance charges[2]	9.7	7.2	32.9	11.9
Transformation expenses[3]	16.2	—	29.5	—
Other[4]	0.6	0.9	0.9	1.0
Impairment charges[5]	—	160.8	—	160.8
Adjusted Operating Income	$ 277.2	$ 318.9	$ 535.6	$ 642.0

1. Represents direct costs incurred with third parties and the accrual of a long-term retention incentive to integrate acquired companies. These expenses represent incremental costs and are unrelated to normal operations of our business. Integration expenses are incurred over a pre-defined integration period specific to each acquisition.
2. Reflects the incremental expenses incurred in the period related to restructuring initiatives to increase profitability and productivity. Costs included in this caption are specific to employee severance, site-related exit costs, and contract termination costs. The expenses recognized in 2024 represent costs incurred to achieve the Company's publicly-announced cost transformation initiative.
3. Represents incremental expenses directly associated with the Company's publicly-announced cost transformation initiative, primarily related to the cost of external advisors.
4. Represents other stock-based compensation expense (benefit) and charges and legal costs in connection with certain litigation and other contingencies that are unrelated to our core operations and not reflective of on-going business and operating results.
5. As described in note 1.

The following table presents net sales by product category:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	2024	2023	2024	2023
Proprietary	$ 914.0	$ 923.9	$ 1,797.5	$ 1,876.1
Third-party	788.8	820.0	1,585.1	1,648.1
Total	$ 1,702.8	$ 1,743.9	$ 3,382.6	$ 3,524.2

5. Supplemental disclosures of cash flow information

The following table presents supplemental disclosures of cash flow information:

(in millions)	June 30, 2024	December 31, 2023
Cash and cash equivalents	$ 272.6	$ 262.9
Restricted cash classified as other assets	24.1	24.8
Total	$ 296.7	$ 287.7

At June 30, 2024 and December 31, 2023, amounts included in restricted cash primarily represent funds held in escrow to satisfy a long-term retention incentive related to the acquisition of Ritter.

	Six months ended June 30,	
(in millions)	2024	2023
Cash flows from operating activities:		
Cash paid for income taxes, net	$ 86.5	$ 126.7
Cash paid for interest, net, excluding financing leases	116.1	138.2
Cash paid for interest on finance leases	2.5	2.5
Cash paid under operating leases	22.0	21.1
Cash flows from financing activities:		
Cash paid under finance leases	$ 2.8	$ 2.5

6. Inventory

The following table presents the components of inventory:

(in millions)	June 30, 2024	December 31, 2023
Merchandise inventory	$ 443.5	$ 503.5
Finished goods	119.6	91.0
Raw materials	162.3	167.2
Work in process	70.2	66.4
Total	$ 795.6	$ 828.1

7. Goodwill and other intangible assets

Goodwill

As described in note 1, we reorganized our segment reporting structure effective January 1, 2024. The segment reporting reorganization also resulted in a change to our reporting units for the purpose of goodwill impairment testing. Our new reporting units are Buy Sell Lab, Proprietary Lab, Services, Manufactured Products, Buy Sell Production, and NuSil. As a result of the reorganization, our goodwill was reassigned to the new reporting units making up our Laboratory Solutions and Bioscience Production reporting segments.

We have reassigned goodwill as of January 1, 2024 to align to our new segment structure by using a relative fair value approach. We tested goodwill for impairment immediately before and after the realignment; no impairment was identified.

The following table presents goodwill by our reportable segments, on the effective date of the change:

	Laboratory Solutions	Bioscience Production	Total
Goodwill, gross	$ 3,842.0	$ 1,913.5	$ 5,755.5
Accumulated impairment losses	(18.4)	(20.4)	(38.8)
Goodwill, net	$ 3,823.6	$ 1,893.1	$ 5,716.7

Other intangible assets

The following table presents the components of other intangible assets:

	June 30, 2024			December 31, 2023		
(in millions)	Gross value	Accumulated amortization and impairment[1]	Carrying value	Gross value	Accumulated amortization and impairment[1]	Carrying value
Customer relationships	$ 4,822.3	$ 1,772.0	$ 3,050.3	$ 4,883.2	$ 1,670.3	$ 3,212.9
Trade names	355.5	234.3	121.2	359.7	228.3	131.4
Other	631.3	312.3	319.0	635.5	296.8	338.7
Total finite-lived	$ 5,809.1	$ 2,318.6	3,490.5	$ 5,878.4	$ 2,195.4	3,683.0
Indefinite-lived			92.3			92.3
Total			$ 3,582.8			$ 3,775.3

1. As of June 30, 2024 and December 31, 2023, accumulated impairment losses on Customer relationships were $65.9 million and on Other were $40.5 million totaling $106.4 million.

8. Commitments and contingencies

Our business involves commitments and contingencies related to compliance with environmental laws and regulations, the manufacture and sale of products and litigation. The ultimate resolution of contingencies is subject to significant uncertainty, and it is reasonably possible that contingencies could be decided unfavorably against us.

Environmental laws and regulations

Our environmental liabilities are subject to changing governmental policy and regulations, discovery of unknown conditions, judicial proceedings, method and extent of remediation, existence of other potentially responsible parties and future changes in technology. We believe that known and unknown environmental matters, if not resolved favorably, could have a material effect on our financial position, liquidity and profitability. Matters to be disclosed are as follows:

The New Jersey Department of Environmental Protection has ordered us to remediate groundwater conditions near our plant in Phillipsburg, New Jersey. At June 30, 2024, our accrued obligation under this order is $2.4 million, which is calculated based on expected cash payments discounted at rates ranging from 4.3% to 5.1% between 2024 and 2046. The undiscounted amount of that obligation is $3.7 million.

We are indemnified against any losses incurred in this matter as stipulated through the agreement and guaranty referenced in our Annual Report.

In 2016, we assessed the environmental condition of our chemical manufacturing site in Gliwice, Poland. Our assessment revealed specific types of soil and groundwater contamination throughout the site. We are also monitoring the condition of a closed landfill on that site. These matters are not covered by our indemnification arrangement because they relate to an operation we subsequently acquired. At June 30, 2024, our balance sheet includes a liability of $1.1 million for remediation and monitoring costs. That liability is estimated primarily on discounted expected remediation payments and is not materially different from its undiscounted amount.

Manufacture and sale of products

Our business involves risk of product liability, patent infringement and other claims in the ordinary course of business arising from the products that we produce ourselves or obtain from our suppliers, as well as from the services we provide. Our exposure to such claims may increase to the extent that we expand our manufacturing operations or service offerings.

We maintain insurance policies to protect us against these risks, including product liability insurance. In many cases the suppliers of products we distribute have indemnified us against such claims. Our insurance coverage or indemnification agreements with suppliers may not be adequate in all pending or any future cases brought against us. Furthermore, our ability to recover under any insurance or indemnification arrangements is subject to the financial viability of our insurers, our suppliers and our suppliers' insurers, as well as legal enforcement under the local laws governing the arrangements.

We have entered into indemnification agreements with customers of our self-manufactured products to protect them from liabilities and losses arising from our negligence, willful misconduct or sale of defective products. To date, we have not incurred material costs to defend lawsuits or settle claims related to these indemnification provisions.

Litigation

At June 30, 2024, there was no outstanding litigation that we believe would result in material losses if decided against us, and we do not believe that there are any unasserted matters that are reasonably possible to result in a material loss.

Table of contents

9. Debt

The following table presents information about our debt:

	June 30, 2024			
(dollars in millions)	Interest terms	Rate	Amount	December 31, 2023
Receivables facility	SOFR[1] plus 0.80%	6.24%	$ 233.3	$ 221.0
Senior secured credit facilities:				
Euro term loans B-4	EURIBOR plus 2.50%	6.15%	264.5	630.1
Euro term loans B-5	EURIBOR plus 2.00%	5.65%	337.8	350.4
U.S. dollar term loans B-5	SOFR[1] plus —%	—%	—	787.6
U.S. dollar term loans B-6	SOFR[1] plus 2.00%	7.44%	760.5	—
2.625% secured notes	fixed rate	2.625%	696.5	718.7
3.875% unsecured notes	fixed rate	3.875%	800.0	800.0
3.875% unsecured notes	fixed rate	3.875%	428.6	442.3
4.625% unsecured notes	fixed rate	4.625%	1,550.0	1,550.0
Finance lease liabilities			67.0	68.3
Other			10.1	11.6
Total debt, gross			5,148.3	5,580.0
Less: unamortized deferred financing costs			(33.3)	(43.4)
Total debt			$ 5,115.0	$ 5,536.6
Classification on balance sheets:				
Current portion of debt			$ 258.4	$ 259.9
Debt, net of current portion			4,856.6	5,276.7

1. SOFR includes credit spread adjustment.

Interest expense, net includes interest income of $17.9 million and $15.5 million for the three months ended June 30, 2024 and June 30, 2023, respectively, and $35.8 million and $30.0 million for the six months ended June 30, 2024 and June 30, 2023, respectively. The interest income primarily relates to income on our interest rate swaps and cross currency swaps. Refer to note 14 to the unaudited consolidated financial statements for more information.

Credit facilities

The following table presents availability under our credit facilities:

	June 30, 2024		
(in millions)	**Receivables facility**	**Revolving credit facility**	**Total**
Capacity	$ 333.5	$ 975.0	$ 1,308.5
Undrawn letters of credit outstanding	(14.5)	—	(14.5)
Outstanding borrowings	(233.3)	—	(233.3)
Unused availability	$ 85.7	$ 975.0	$ 1,060.7

Capacity under the receivables facility is calculated as the lower of eligible borrowing base or facility limit of $400.0 million. Eligible borrowing base is determined as total available accounts receivable less ineligible accounts receivable and other adjustments. At June 30, 2024, total available accounts receivable under the receivables facility were $547.2 million.

In June 2023, we amended the revolving credit facility to increase its funding limit up to $975.0 million and extended the term to June 29, 2028. We capitalized $2.3 million of fees in connection with this transaction.

Senior secured credit facilities

On April 2, 2024, we amended the credit agreement to reprice the U.S. Dollar term loan under our senior secured credit facilities. Pursuant to the agreement, the interest rate applicable to the U.S. Dollar term loan reduced from SOFR plus a spread of 2.25% per annum to SOFR plus a spread of 2.00% per annum. The principal amount of U.S. Dollar term loan outstanding immediately prior to the amendment and the outstanding principal amount of U.S. Dollar term loan immediately following the amendment each totaled $772.4 million. The final stated maturity of the U.S. Dollar term loan remains November 6, 2027. The costs to complete the amendment were not material.

During the quarter ended June 30, 2024, we made prepayments of $10.0 million on our U.S. dollar term loan B-6 that matures on November 6, 2027 and prepayments of $156.2 million on our Euro term loan B-4 that matures on June 10, 2028. In connection with these prepayments, we expensed $1.9 million of previously unamortized deferred financing costs as a loss on extinguishment of debt.

Debt covenants

Our debt agreements include representations and covenants that we consider usual and customary, and our receivables facility and senior secured credit facilities include a financial covenant that becomes applicable for periods in which we have drawn more than 35% of our revolving credit facility under the senior secured credit facilities. In this circumstance, we are not permitted to have combined borrowings on our senior secured credit facilities and secured notes in excess of a pro forma net leverage ratio, as defined in our credit agreements. As we had not drawn more than 35% of our revolving credit facility in this period, this covenant was not applicable at June 30, 2024.

10. Accumulated other comprehensive income or loss

The following table presents changes in the components of AOCI:

(in millions)	Foreign currency translation	Derivative instruments	Defined benefit plans	Total
Balance at March 31, 2024	$ (111.7)	$ 13.6	$ 1.1	$ (97.0)
Unrealized (loss) gain	(6.1)	5.4	(0.2)	(0.9)
Reclassification of gain into earnings	—	(8.4)	—	(8.4)
Change due to income taxes	(1.7)	0.7	—	(1.0)
Balance at June 30, 2024	$ (119.5)	$ 11.3	$ 0.9	$ (107.3)
Balance at March 31, 2023	$ (111.7)	$ 14.9	$ 7.1	$ (89.7)
Unrealized gain (loss)	8.7	16.8	(0.8)	24.7
Reclassification of gain into earnings	—	(7.6)	—	(7.6)
Change due to income taxes	2.6	(2.2)	0.3	0.7
Balance at June 30, 2023	$ (100.4)	$ 21.9	$ 6.6	$ (71.9)
Balance at December 31, 2023	$ (82.8)	$ 12.6	$ 1.2	$ (69.0)
Unrealized (loss) gain	(28.1)	15.2	(0.4)	(13.3)
Reclassification of gain into earnings	—	(16.9)	—	(16.9)
Change due to income taxes	(8.6)	0.4	0.1	(8.1)
Balance at June 30, 2024	$ (119.5)	$ 11.3	$ 0.9	$ (107.3)
Balance at December 31, 2022	$ (131.3)	$ 19.9	$ 11.1	$ (100.3)
Unrealized gain (loss)	25.6	16.7	(5.7)	36.6
Reclassification of gain into earnings	—	(14.1)	—	(14.1)
Change due to income taxes	5.3	(0.6)	1.2	5.9
Balance at June 30, 2023	$ (100.4)	$ 21.9	$ 6.6	$ (71.9)

The reclassifications effects shown above were immaterial to the financial statements and were made to either cost of sales, SG&A expense or interest expense depending upon the nature of the underlying transaction. The income tax effects in the three and six months ended June 30, 2024 on foreign currency translation were due to our net investment hedge and cross-currency swap discussed in note 14.

11. Stock-based compensation

The following table presents the components of stock-based compensation expense:

(in millions)	Award Classification	Three months ended June 30, 2024	Three months ended June 30, 2023	Six months ended June 30, 2024	Six months ended June 30, 2023
Stock options	Equity	$ 2.6	$ 3.6	$ 5.7	$ 7.2
RSUs	Equity	8.8	5.5	17.6	14.2
Other	Both	(0.3)	0.1	0.5	0.5
Total		$ 11.1	$ 9.2	$ 23.8	$ 21.9
Award classification:					
Equity		$ 11.6	$ 9.3	$ 24.0	$ 21.9
Liability		(0.5)	(0.1)	(0.2)	—

At June 30, 2024, unvested awards under our plans have remaining stock-based compensation expense of $103.8 million to be recognized over a weighted average period of 1.8 years.

Stock options

The following table presents information about outstanding stock options:

(options and intrinsic value in millions)	Number of options	Weighted average exercise price per option	Aggregate intrinsic value	Weighted average remaining term
Balance at December 31, 2023	16.4	$ 21.37		
Granted	0.7	24.14		
Exercised	(2.3)	21.34		
Forfeited	(0.7)	25.94		
Balance at June 30, 2024	14.1	$ 21.25	$ 31.4	5.3 years
Expected to vest	3.0	25.12	0.3	8.7 years
Vested	11.1	20.24	31.1	4.4 years

During the six months ended June 30, 2024, we granted stock options that have a contractual life of ten years and will vest annually over three years, subject to the recipient continuously providing service to us through such date.

RSUs

The following table presents information about unvested RSUs:

(awards in millions)	Number of awards	Weighted average grant date fair value per award
Balance at December 31, 2023	4.0	$ 26.35
Granted	2.2	25.65
Vested	(0.9)	25.93
Forfeited	(0.2)	29.62
Balance at June 30, 2024	5.1	$ 26.60

During the six months ended June 30, 2024, we granted RSUs that will vest annually over three years, subject to the recipient continuously providing service to us throughout the vesting period. Certain of those awards contain performance and market conditions that impact the number of shares that will ultimately vest. We recorded expense on such awards of $2.7 million and $(0.5) million for the three months ended June 30, 2024 and June 30, 2023, respectively, and $4.8 million and $1.8 million for the six months ended June 30, 2024 and June 30, 2023, respectively.

12. Other income or expense, net

The following table presents the components of other income or expense, net:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	2024	2023	2024	2023
Net foreign currency gain from financing activities	$ 1.0	$ 1.6	$ 1.8	$ 1.8
Income related to defined benefit plans	0.6	0.3	0.9	0.7
Other	—	0.1	—	0.1
Other income, net	$ 1.6	$ 2.0	$ 2.7	$ 2.6

13. Income taxes

The following table presents the relationship between income tax expense and income (loss) before income taxes:

	Three months ended June 30,		Six months ended June 30,	
(in millions)	2024	2023	2024	2023
Income (loss) before income taxes	$ 114.6	$ (1.3)	$ 195.2	$ 154.5
Income tax expense	(21.7)	(6.0)	(41.9)	(40.3)
Effective income tax rate	18.9 %	(461.5)%	21.5 %	26.1 %

Income tax expense in the quarter is based upon the estimated income for the full year. The composition of the income in different countries and adjustments, if any, in the applicable quarterly periods influences our expense.

The relationship between pre-tax income and income tax expense is affected by the impact of losses for which we cannot claim a tax benefit, non-deductible expenses, and other items that increase tax expense without a relationship to income, such as withholding taxes and changes with respect to uncertain tax positions.

The change in the effective tax rate for the three and six months ended June 30, 2024 when compared to the three and six months ended June 30, 2023, is primarily due to an impairment loss against the Company's investment in its Ritter business that was recorded in the second quarter of 2023, as well as valuation allowances against deferred tax assets not expected to be realized as a result of the impairment.

14. Derivative and hedging activities

Hedging instruments:

We engage in hedging activities to reduce our exposure to foreign currency exchange rates and interest rates. Our hedging activities are designed to manage specific risks according to our strategies, as summarized below, which may change from time to time. Our hedging activities consist of the following:

- *Economic hedges* — We are exposed to changes in foreign currency exchange rates on certain of our euro-denominated term loans and notes that move inversely from our portfolio of euro-denominated intercompany loans. The currency effects for these non-derivative instruments are recorded through earnings in the period of change and substantially offset one another;

- *Other hedging activities* — Certain of our subsidiaries hedge short-term foreign currency denominated business transactions, external debt and intercompany financing transactions using foreign currency forward contracts. These activities were not material to our consolidated financial statements.

Cash flow hedges of interest rate risk

Our objectives in using interest rate derivatives are to add stability to interest expense and to manage its exposure to interest rate movements. To accomplish this objective, the Company primarily uses interest rate swaps as part of its interest rate risk management strategy. Interest rate swaps designated as cash flow hedges involve the receipt of variable amounts from a counterparty in exchange for the Company making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount.

For derivatives designated and that qualify as cash flow hedges of interest rate risk, the gain or loss on the derivative is recorded in AOCI and subsequently reclassified into interest expense in the same period(s) during which the hedged transaction affects earnings. Amounts reported in AOCI related to derivatives will be reclassified to interest expense as interest payments are made on the Company's variable-rate debt. During the next twelve months, the Company estimates that an additional $14.8 million will be reclassified as a reduction to interest expense.

As of June 30, 2024, the Company had the following outstanding interest rate derivatives that were designated as cash flow hedges of interest rate risk:

(dollars in millions)

Interest rate derivative	Number of instruments	Notional
Interest rate swaps	2	$ 850.0

Effect of cash flow hedge accounting on AOCI

The table below presents the effect of cash flow hedge accounting on AOCI for the three and six months ended June 30, 2024 and June 30, 2023.

(in millions)

Hedging relationships	Amount of gain or (loss) recognized in OCI on Derivative				Location of gain or (loss) reclassified from AOCI into income	Amount of gain or (loss) reclassified from AOCI into income			
	Three months ended June 30,		Six months ended June 30,			Three months ended June 30,		Six months ended June 30,	
	2024	2023	2024	2023		2024	2023	2024	2023
Interest rate products	$ 2.2	$ 13.6	$ 8.8	$ 10.1	Interest expense, net	$ 5.3	$ 4.4	$ 10.5	$ 7.5
Total	$ 2.2	$ 13.6	$ 8.8	$ 10.1		$ 5.3	$ 4.4	$ 10.5	$ 7.5

Effect of cash flow hedge accounting on the income statement

The table below presents the effect of our derivative financial instruments on the statement of operations for the three and six months ended June 30, 2024 and June 30, 2023.

	Three months ended June 30,		Six months ended June 30,	
	2024	2023	2024	2023
(in millions)	Interest expense, net	Interest expense, net	Interest expense, net	Interest expense, net
Total amounts of line items presented in the statements of operations where the effects of cash flow hedges are recorded	$ (60.9)	$ (73.4)	$ (125.2)	$ (147.1)
Amount of gain reclassified from AOCI into income	$ 5.3	$ 4.4	$ 10.5	$ 7.5

Net investment hedges

We are exposed to fluctuations in foreign exchange rates on investments we hold in foreign entities, specifically our net investment in Avantor Holdings B.V., a EUR-functional-currency consolidated subsidiary, against the risk of changes in the EUR-USD exchange rate.

For derivatives designated as net investment hedges, the gain or loss on the derivative is reported in AOCI as part of the cumulative translation adjustment. Amounts are reclassified out of AOCI into earnings when the hedged net investment is either sold or substantially liquidated.

As of June 30, 2024, we had the following outstanding foreign currency derivatives that were used to hedge net investments in foreign operations:

(value in millions)

Foreign currency derivative	Number of instruments	Notional sold		Notional purchased	
Cross-currency swaps	1	€	732.1	$	750.0

Effect of net investment hedges on AOCI and the income statement

The table below presents the effect of our net investment hedges on AOCI and the statement of operations for the three and six months ended June 30, 2024 and June 30, 2023.

Effect of Net Investment Hedges on AOCI and the Income Statement

(in millions)

Hedging relationships	Amount of gain or (loss) recognized in OCI on Derivative				Location of gain or (loss) recognized in income on Derivative (amount excluded from effectiveness testing)	Amount of gain or (loss) recognized in income on Derivative (amount excluded from effectiveness testing)			
	Three months ended June 30,					Three months ended June 30,			
	2024		2023			2024		2023	
Three months ended:									
Cross currency swaps	$	7.4	$	(6.0)	Interest expense, net	$	3.2	$	3.2
Total	$	7.4	$	(6.0)		$	3.2	$	3.2
Six months ended:									
Cross currency swaps	$	28.3	$	(13.2)	Interest expense, net	$	6.3	$	6.4
Total	$	28.3	$	(13.2)		$	6.3	$	6.4

The Company did not reclassify any other deferred gains or losses related to cash flow hedges from accumulated other comprehensive income (loss) to earnings for the three and six months ended June 30, 2024 and June 30, 2023.

The table below presents the fair value of our derivative financial instruments as well as their classification on the Balance Sheet as of June 30, 2024 and December 31, 2023:

(in millions)	Derivative assets				Derivative liabilities			
	June 30, 2024		December 31, 2023		June 30, 2024		December 31, 2023	
	Balance sheet location	Fair value	Balance sheet location	Fair value	Balance sheet location	Fair value	Balance sheet location	Fair value
Derivatives designated as hedging instruments:								
Interest rate products	Other current assets	$ 14.9	Other current assets	$ 16.6	Other current liabilities	$ —	Other current liabilities	$ —
Foreign exchange products	Other current assets	—	Other current assets	—	Other current liabilities	(33.3)	Other current liabilities	(55.2)
Total		$ 14.9		$ 16.6		$ (33.3)		$ (55.2)

Non-derivative financial instruments which are designated as hedging instruments:

We designated all of our outstanding €400.0 million 3.875% senior unsecured notes, issued on July 17, 2020, and maturing on July 15, 2028, as a hedge of our net investment in certain of our European operations. For instruments that are designated and qualify as net investment hedges, the foreign currency transactional gains or losses are reported as a component of AOCI. The gains or losses would be reclassified into earnings upon a liquidation event or deconsolidation of a hedged foreign subsidiary.

Net investment hedge effectiveness is assessed based upon the change in the spot rate of the foreign currency denominated debt. The critical terms of the foreign currency notes match the portion of the net investments designated as being hedged. At June 30, 2024, the net investment hedge was equal to the designated portion of the European operations and was considered to be perfectly effective.

The accumulated gain related to the foreign currency denominated debt designated as net investment hedges classified in the foreign currency translation adjustment component of AOCI was $23.0 million and $9.3 million as of June 30, 2024 and December 31, 2023, respectively.

The amount of (gain) loss related to the foreign currency denominated debt designated as net investment hedges classified in the foreign currency translation adjustment component of other comprehensive income or loss for the three and six months ended June 30, 2024 and June 30, 2023 are presented below:

(in millions)	Three months ended June 30,		Six months ended June 30,	
	2024	2023	2024	2023
Net investment hedges	$ (3.0)	$ 1.8	$ (13.7)	$ 9.3

15. Financial instruments and fair value measurements

Our financial instruments include cash and cash equivalents, accounts receivable, accounts payable and debt.

Certain financial and nonfinancial assets and liabilities are measured at fair value on a nonrecurring basis and are subject to fair value adjustments in certain circumstances, such as when there is evidence of impairment. As discussed in note 1, during the second quarter of 2023, property, plant and equipment, customer relationships and developed technology related to the Ritter asset group were deemed to be impaired and their carrying values were reduced to estimated fair values of $25.9 million, $31.4 million and $19.3 million, respectively. This was the result of an impairment charge of $160.8 million. The Company estimates the fair value of the Ritter asset group using Level 3 inputs, which included a discounted cash flow analysis.

Assets and liabilities for which fair value is only disclosed

The carrying amount of cash and cash equivalents was the same as its fair value and is a Level 1 measurement. The carrying amounts for trade accounts receivable and accounts payable approximated fair value due to their short-term nature and are Level 2 measurements.

The following table presents the gross amounts, which exclude unamortized deferred financing costs, and the fair values of debt instruments:

	June 30, 2024		December 31, 2023	
(in millions)	**Gross amount**	**Fair value**	**Gross amount**	**Fair value**
Receivables facility	$ 233.3	$ 233.3	$ 221.0	$ 221.0
Senior secured credit facilities:				
Euro term loans B-4	264.5	265.8	630.1	630.9
Euro term loans B-5	337.8	339.5	350.4	351.1
U.S. dollar term loans B-5	—	—	787.6	791.0
U.S. dollar term loans B-6	760.5	765.7	—	—
2.625% secured notes	696.5	682.4	718.7	705.3
3.875% unsecured notes	800.0	724.0	800.0	727.3
3.875% unsecured notes	428.6	418.6	442.3	434.3
4.625 % unsecured notes	1,550.0	1,474.7	1,550.0	1,489.1
Finance lease liabilities	67.0	67.0	68.3	68.3
Other	10.1	10.1	11.6	11.6
Total	$ 5,148.3	$ 4,981.1	$ 5,580.0	$ 5,429.9

The fair values of debt instruments are based on standard pricing models that take into account the present value of future cash flows, and in some cases private trading data, which are level 2 measurements.

16. **Subsequent events**

On July 24, 2024, we committed to certain significant restructuring activities in connection with the Company's publicly-announced multi-year cost transformation initiative. These activities are designed to right-size the Company's cost base and optimize its footprint and organizational structure with a focus on driving significant cost improvement and productivity.

While the Company is continuing to define the specific actions that may be required to deliver the targeted benefits, it expects to incur incremental restructuring charges in the range of $50.0 million to $65.0 million, including severance costs and other employment related expenses in the range of $40.0

million to $50.0 million. The Company expects to recognize the majority of these severance and related costs during the third and fourth quarters of 2024.

Item 2. Management’s discussion and analysis of financial condition and results of operations

This discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results may differ materially from those contained in or implied by any forward-looking statements. See “Cautionary factors regarding forward-looking statements.”

Basis of presentation

This discussion should be read in conjunction with the accompanying condensed consolidated financial statements and notes. Pursuant to SEC rules for reports covering interim periods, we have prepared this discussion and analysis to enable you to assess material changes in our financial condition and results of operations since December 31, 2023, the date of our Annual Report. Therefore, we encourage you to read this discussion and analysis in conjunction with the Annual Report.

Overview

During the three months ended June 30, 2024, we recorded net sales of $1,702.8 million, net income of $92.9 million, Adjusted EBITDA of $305.6 million and Adjusted Operating Income of $277.2 million. Net sales decreased by 2.4%, which included a 2.0% decline in organic sales compared to the same period in 2023. See “Reconciliations of non-GAAP measures” for reconciliations of net income (loss) to Adjusted EBITDA and Adjusted Operating Income, and net income (loss) margin to Adjusted EBITDA margin and Adjusted Operating Income margin. See “Results of operations” for a reconciliation of net sales growth (decline) to organic net sales growth (decline).

Segment Change

Effective January 1, 2024, we changed our operating model and reporting segment structure from three reportable segments to two reportable segments, Laboratory Solutions and Bioscience Production. This structure aligns with how our Chief Executive Officer, who is our chief operating decision maker, measures segment operating performance and allocate resources across our operating segments. This reportable segment change has no impact on our consolidated operating results.

In connection with the operating model and reporting structure change, our chief operating decision maker changed the measure used to evaluate segment profitability from Adjusted EBITDA to Adjusted Operating Income. All disclosures relating to segment profitability, including those for comparative periods, have been revised as a result of this change.

Factors and current trends affecting our business and results of operations

The following updates the factors and current trends disclosed in the Annual Report. These updates may affect our performance and financial condition in future periods.

Our business continues to be impacted by the transition from the global coronavirus pandemic

Customer demand and required inventory levels continue to normalize in the transition from the COVID-19 pandemic. For a discussion of this trend and associated economic disruptions, and the actual operational and financial impacts that we experienced through December 31, 2023, see “Part II—Item 7

—Management's discussion and analysis of financial condition and results of operations" in the Annual Report.

We have been impacted by supply chain constraints and inflationary pressures

We have experienced inventory fluctuations and build up at customers as a result of global supply chain disruptions and have experienced inflationary pressures across all of our cost categories. While we have implemented pricing and productivity measures to combat these pressures, they may continue to adversely impact our results.

Fluctuations in foreign currency rates impact our results

Our consolidated results of operations are comprised of many different functional currencies that translate into our U.S. Dollar reporting currency. The movement of the U.S. Dollar against those functional currencies, particularly the Euro, has caused significant variability in our results and may continue to do so in the future.

Key indicators of performance and financial condition

To evaluate our performance, we monitor a number of key indicators. As appropriate, we supplement our results of operations determined in accordance with U.S. generally accepted accounting principles ("GAAP") with certain non-GAAP financial measurements that we believe are useful to investors, creditors and others in assessing our performance. These measures should not be considered in isolation or as a substitute for reported GAAP results because they may include or exclude certain items as compared to similar GAAP-based measures, and such measures may not be comparable to similarly titled measures reported by other companies. Rather, these measures should be considered as an additional way of viewing aspects of our operations that provide a more complete understanding of our business.

The key indicators that we monitor are as follows:

- ***Net sales, gross margin, operating income, operating income margin, net income or loss and net income or loss margin***. These measures are discussed in the section entitled "Results of operations";

- ***Organic net sales growth***, which is a non-GAAP measure discussed in the section entitled "Results of operations." Organic net sales growth (decline) eliminates from our reported net sales change the impacts of revenues from any acquired businesses that have been owned for less than one year and changes in foreign currency exchange rates. We believe that this measurement is useful to investors as a way to measure and evaluate our underlying commercial operating performance consistently across our segments and the periods presented. This measurement is used by our management for the same reason. Reconciliations to the change in reported net sales, the most directly comparable GAAP financial measure, are included in the section entitled "Results of operations";

- ***Adjusted EBITDA and Adjusted EBITDA margin***, which are non-GAAP measures discussed in the section entitled "Results of operations." Adjusted EBITDA is our net income or loss adjusted for the following items: (i) interest expense, (ii) income tax expense, (iii) amortization of acquired intangible assets, (iv) depreciation expense, (v) losses on extinguishment of debt, (vi) charges associated with the impairment of certain assets, (vii) and certain other adjustments. Adjusted EBITDA margin is Adjusted EBITDA divided by net sales as determined under GAAP. We believe that these measurements are useful as a way to analyze the underlying trends in our business consistently across the periods presented. These measurements are used by our management for the same reason. A reconciliation of net income or loss and net income or loss margin, the most directly comparable GAAP financial measures, to Adjusted EBITDA and Adjusted EBITDA margin, respectively, are included in the section entitled “Reconciliations of non-GAAP measures”;

- ***Adjusted Operating Income and Adjusted Operating Income margin***, which are non-GAAP measures discussed in the section entitled “Results of operations.” Adjusted Operating Income is our net income or loss adjusted for the following items: (i) interest expense, (ii) income tax expense, (iii) amortization of acquired intangible assets, (iv) losses on extinguishment of debt, (v) charges associated with the impairment of certain assets, (vi) and certain other adjustments. This measurement is our segment reporting profitability measure under generally accepted accounting principles. Adjusted Operating Income margin is Adjusted Operating Income divided by net sales as determined under GAAP. We believe that these measurements are useful to investors as a way to analyze the underlying trends in our business consistently across the periods presented. These measurements are used by our management for the same reason. A reconciliation of net income or loss and net income or loss margin, the most directly comparable GAAP financial measures, to Adjusted Operating Income and Adjusted Operating Income margin, respectively, are included in the section entitled “Reconciliations of non-GAAP measures”;

- ***Cash flows from operating activities***, which we discuss in the section entitled “Liquidity and capital resources—Historical cash flows”;

- ***Free cash flow***, which is a non-GAAP measure, is equal to our cash flows from operating activities, plus acquisition-related costs paid in the period, less capital expenditures. We believe that this measurement is useful to investors as it provides a view on the Company’s ability to generate cash for use in financing or investing activities. This measurement is used by management for the same reason. A reconciliation of cash flows from operating activities, the most directly comparable GAAP financial measure, to free cash flow, is included in the section entitled “Liquidity and capital resources—Historical cash flows.”

Results of operations

We present results of operations in the same way that we manage our business, evaluate our performance and allocate our resources. We also provide discussion of net sales and Adjusted Operating Income by segment: Laboratory Solutions and Bioscience Production. Corporate costs are managed on a standalone basis, certain of which are allocated to our reportable segments.

Executive summary

(dollars in millions)	Three months ended June 30, 2024		Three months ended June 30, 2023		Change	
Net sales	$	1,702.8	$	1,743.9	$	(41.1)
Gross margin		34.1 %		33.8 %		30 bps
Operating income	$	175.8	$	71.7	$	104.1
Operating income margin		10.3 %		4.1 %		620 bps
Net income (loss)	$	92.9	$	(7.3)	$	100.2
Net income (loss) margin		5.5 %		(0.4)%		590 bps
Adjusted EBITDA	$	305.6	$	343.0	$	(37.4)
Adjusted EBITDA margin		17.9 %		19.7 %		(180) bps
Adjusted Operating Income	$	277.2	$	318.9	$	(41.7)
Adjusted Operating Income margin		16.3 %		18.3 %		(200) bps

The second quarter net sales decline was driven by decreases in the Laboratory Solutions segment primarily due to reduced customer demand. Volume declines contributed to contraction in gross profit while gross margin increased due to improved product mix, lower inventory reserves and manufacturing productivity, partially offset by inflationary pressures. Volume softness and the reset of annual incentive compensation drove Adjusted EBITDA margin and Adjusted Operating Income margin contraction.

Net Sales

Three months ended

	Three months ended June 30,				Reconciliation of net sales growth (decline) to organic net sales growth (decline)					
(in millions)	2024		2023		Net sales growth (decline)		Foreign currency impact		Organic net sales growth (decline)	
Laboratory Solutions	$	1,155.7	$	1,193.8	$	(38.1)	$	(5.4)	$	(32.7)
Bioscience Production		547.1		550.1		(3.0)		(1.3)		(1.7)
Total	$	1,702.8	$	1,743.9	$	(41.1)	$	(6.7)	$	(34.4)

Net sales decreased $41.1 million or 2.4%, which included $6.7 million or 0.4% of unfavorable foreign currency impact. Organic net sales decreased by $34.4 million or 2.0%.

In the Laboratory Solutions segment, net sales decreased $38.1 million or 3.2%, which included $5.4 million or 0.5% of unfavorable foreign currency impact. Organic net sales decreased $32.7 million or 2.7%. Sales decline was primarily driven by decreased demand in biopharma and healthcare end markets.

In the Bioscience Production segment, net sales decreased $3.0 million or 0.5%, which included $1.3 million or 0.2% of unfavorable foreign currency impact. Organic net sales decreased by $1.7 million or 0.3%.

Six months ended

	Six months ended June 30,		Reconciliation of net sales growth (decline) to organic net sales growth (decline)		
(in millions)	2024	2023	Net sales growth (decline)	Foreign currency impact	Organic net sales growth (decline)
Laboratory Solutions	$ 2,312.8	$ 2,396.8	$ (84.0)	$ 3.6	$ (87.6)
Bioscience Production	1,069.8	1,127.4	(57.6)	1.7	(59.3)
Total	$ 3,382.6	$ 3,524.2	$ (141.6)	$ 5.3	$ (146.9)

Net sales decreased $141.6 million or 4.0%, which included $5.3 million or 0.2% of favorable foreign currency impact. Organic decline in net sales was $146.9 million or 4.2%.

In the Laboratory Solutions segment, net sales decreased $84.0 million or 3.5%, which included $3.6 million or 0.2% of favorable foreign currency impact. Organic net sales decreased $87.6 million or 3.7%. Sales decline was primarily driven by decreased demand in biopharma and healthcare end markets.

In the Bioscience Production segment, net sales decreased $57.6 million or 5.1%, which included $1.7 million or 0.2% of favorable foreign currency impact. Organic net sales decreased by $59.3 million or 5.3%. Sales decline was primarily driven by decreased demand in biopharma and healthcare end markets.

Gross margin

	Three months ended June 30,			Six months ended June 30,		
	2024	2023	Change	2024	2023	Change
Gross margin	34.1 %	33.8 %	30 bps	34.1 %	34.5 %	(40) bps

Three and six months ended

Gross margin for the three months ended June 30, 2024, expanded by 30 basis points due to improved product mix, lower inventory reserves and manufacturing productivity, partially offset by inflationary pressures. For the six months ended June 30, 2024, margin contracted 40 basis points driven by inflationary pressures and unfavorable product mix.

Operating income

(in millions)	Three months ended June 30, 2024	Three months ended June 30, 2023	Change	Six months ended June 30, 2024	Six months ended June 30, 2023	Change
Gross profit	$ 581.5	$ 590.0	$ (8.5)	$ 1,152.0	$ 1,214.8	$ (62.8)
Operating expenses (excluding impairment charges)	405.7	357.5	48.2	829.9	751.1	78.8
Impairment charges	—	160.8	(160.8)	—	160.8	(160.8)
Operating income	$ 175.8	$ 71.7	$ 104.1	$ 322.1	$ 302.9	$ 19.2

Three and six months ended

Operating income for the three months ended June 30, 2024, increased primarily from the absence of impairment charges, partially offset by higher operating expenses driven by transformation expenses, higher accruals related to incentive compensation and inflationary pressures on salary expenses. Operating income for the six months ended June 30, 2024, increased primarily from the absence of impairment charges, partially offset by lower gross profit, as previously discussed, and higher operating expenses driven by restructuring and severance charges, transformation expenses, higher accruals related to incentive compensation and inflationary pressures on salary expenses.

Net income (loss)

(in millions)	Three months ended June 30, 2024	Three months ended June 30, 2023	Change	Six months ended June 30, 2024	Six months ended June 30, 2023	Change
Operating income	$ 175.8	$ 71.7	$ 104.1	$ 322.1	$ 302.9	$ 19.2
Interest expense, net	(60.9)	(73.4)	12.5	(125.2)	(147.1)	21.9
Loss on extinguishment of debt	(1.9)	(1.6)	(0.3)	(4.4)	(3.9)	(0.5)
Other income, net	1.6	2.0	(0.4)	2.7	2.6	0.1
Income tax expense	(21.7)	(6.0)	(15.7)	(41.9)	(40.3)	(1.6)
Net income (loss)	$ 92.9	$ (7.3)	$ 100.2	$ 153.3	$ 114.2	$ 39.1

Three and six months ended

Net income increased primarily due to higher operating income, as previously discussed, and lower interest expense due to debt repayments made over the last twelve months, partially offset by higher income tax expense due to higher income before income taxes.

Adjusted EBITDA and Adjusted EBITDA margin

For a reconciliation of Adjusted EBITDA and Adjusted EBITDA margin to net income (loss) and net income (loss) margin, respectively, the most directly comparable measures under GAAP, see “Reconciliations of non-GAAP financial measures.”

	Three months ended June 30,			Six months ended June 30,		
(dollars in millions)	2024	2023	Change	2024	2023	Change
Adjusted EBITDA	$ 305.6	$ 343.0	$ (37.4)	$ 588.6	$ 689.2	$ (100.6)
Adjusted EBITDA margin	17.9 %	19.7 %	(180) bps	17.4 %	19.6 %	(220) bps

Three and six months ended

For the three months ended June 30, 2024, Adjusted EBITDA decreased by $37.4 million or 10.9%, which included a favorable foreign currency translation impact of $2.0 million or 0.6%.The remaining decline was $39.4 million or 11.5% primarily driven by increased operating expenses and lower sales volume.

For the six months ended June 30, 2024, Adjusted EBITDA decreased by $100.6 million or 14.6%, which included a favorable foreign currency translation impact of $3.0 million or 0.4%.The remaining decline was 103.6 million or 15.0% primarily driven by increased operating expenses and lower sales volume.

Adjusted Operating Income and Adjusted Operating Income margin

For a reconciliation of Adjusted Operating Income and Adjusted Operating Income margin to net income (loss) and net income (loss) margin, respectively, the most directly comparable measures under GAAP, see “Reconciliations of non-GAAP financial measures.”

	Three months ended June 30,			Six months ended June 30,		
(dollars in millions)	2024	2023	Change	2024	2023	Change
Adjusted Operating Income:						
Laboratory Solutions	$ 150.9	$ 179.7	$ (28.8)	$ 299.1	$ 351.9	$ (52.8)
Bioscience Production	144.0	154.2	(10.2)	270.9	321.7	(50.8)
Corporate	(17.7)	(15.0)	(2.7)	(34.4)	(31.6)	(2.8)
Total	$ 277.2	$ 318.9	$ (41.7)	$ 535.6	$ 642.0	$ (106.4)
Adjusted Operating Income margin	16.3 %	18.3 %	(200) bps	15.8 %	18.2 %	(240) bps

Three months ended

Adjusted Operating Income decreased $41.7 million or 13.1%, which included an unfavorable foreign currency translation impact of $2.5 million or 0.8%. The remaining decline was $39.2 million or 12.3% which is further discussed below.

In the Laboratory Solutions segment, Adjusted Operating Income declined $28.8 million or 16.0%, or 14.9% when adjusted for unfavorable foreign currency translation impact. The decrease was due to increased operating expenses primarily driven by higher accruals related to incentive compensation.

In the Bioscience Production segment, Adjusted Operating Income declined $10.2 million or 6.6%, or 6.4% when adjusted for unfavorable foreign currency translation impact. The decrease was driven primarily by increased operating expenses primarily driven by higher accruals related to incentive compensation and lower sales volume.

In Corporate, Adjusted Operating Income decreased $2.7 million due to immaterial offsetting factors.

Six months ended

Adjusted Operating Income decreased $106.4 million or 16.6%, which included an unfavorable foreign currency translation impact of $1.6 million or 0.3%. The remaining decline was $104.8 million or 16.3% which is further discussed below.

In the Laboratory Solutions segment, Adjusted Operating Income declined $52.8 million or 15.0%, or 14.3% when adjusted for unfavorable foreign currency translation impact. The decrease was due to increased operating expenses primarily driven by higher accruals related to incentive compensation and lower sales volume.

In the Bioscience Production segment, Adjusted Operating Income declined $50.8 million or 15.8%, or 15.7% when adjusted for unfavorable foreign currency translation impact. The decrease was driven primarily by lower sales volume and unfavorable product mix.

In Corporate, Adjusted Operating Income decreased $2.8 million due to immaterial offsetting factors.

Reconciliations of non-GAAP financial measures

The following table presents the reconciliation of net income (loss) and net income (loss) margin to Adjusted EBITDA and Adjusted EBITDA margin, respectively:

	Three months ended June 30,				Six months ended June 30,			
	2024		2023		2024		2023	
(dollars in millions)	$	%	$	%	$	%	$	%
Net income (loss)	$ 92.9	5.5 %	$ (7.3)	(0.4)%	$ 153.3	4.5 %	$ 114.2	3.2 %
Interest expense, net	60.9	3.6 %	73.4	4.2 %	125.2	3.7 %	147.1	4.2 %
Income tax expense	21.7	1.3 %	6.0	0.3 %	41.9	1.2 %	40.3	1.1 %
Depreciation and amortization	102.6	5.9 %	102.6	5.9 %	202.2	6.0 %	203.7	5.9 %
Loss on extinguishment of debt	1.9	— %	1.6	0.1 %	4.4	0.1 %	3.9	0.1 %
Integration-related expenses[1]	—	— %	(0.6)	— %	—	— %	8.1	0.2 %
Restructuring and severance charges[2]	9.7	0.6 %	7.2	0.4 %	32.9	1.0 %	11.9	0.3 %
Transformation expenses[3]	16.2	1.0 %	—	— %	29.5	0.9 %	—	— %
Other[4]	(0.3)	— %	(0.7)	— %	(0.8)	— %	(0.8)	— %
Impairment charges[5]	—	— %	160.8	9.2 %	—	— %	160.8	4.6 %
Adjusted EBITDA	$ 305.6	17.9 %	$ 343.0	19.7 %	$ 588.6	17.4 %	$ 689.2	19.6 %

1. Represents direct costs incurred with third parties and the accrual of a long-term retention incentive to integrate acquired companies. These expenses represent incremental costs and are unrelated to normal operations of our business. Integration expenses are incurred over a pre-defined integration period specific to each acquisition.
2. Reflects the incremental expenses incurred in the period related to restructuring initiatives to increase profitability and productivity. Costs included in this caption are specific to employee severance, site-related exit costs, and contract termination costs. The expenses recognized in 2024 represent costs incurred to achieve the Company's publicly-announced cost transformation initiative.
3. Represents incremental expenses directly associated with the Company's publicly-announced cost transformation initiative, primarily related to the cost of external advisors.
4. Represents net foreign currency (gain) loss from financing activities, other stock-based compensation expense (benefit) and charges and legal costs in connection with certain litigation and other contingencies that are unrelated to our core operations and not reflective of on-going business and operating results.
5. As described in note 1 to our unaudited condensed consolidated financial statements.

The following table presents the reconciliation of net income (loss) and net income (loss) margin to Adjusted Operating Income and Adjusted Operating Income margin, respectively:

	Three months ended June 30,				Six months ended June 30,			
	2024		2023		2024		2023	
(dollars in millions)	$	%	$	%	$	%	$	%
Net income (loss)	$ 92.9	5.5 %	$ (7.3)	(0.4)%	$ 153.3	4.5 %	$ 114.2	3.2 %
Interest expense, net	60.9	3.6 %	73.4	4.2 %	125.2	3.7 %	147.1	4.2 %
Income tax expense	21.7	1.3 %	6.0	0.3 %	41.9	1.2 %	40.3	1.1 %
Loss on extinguishment of debt	1.9	— %	1.6	0.1 %	4.4	0.1 %	3.9	0.1 %
Other income, net	(1.6)	(0.1)%	(2.0)	(0.1)%	(2.7)	— %	(2.6)	— %
Operating income	175.8	10.3 %	71.7	4.1 %	322.1	9.5 %	302.9	8.6 %
Amortization	74.9	4.4 %	78.9	4.5 %	150.2	4.4 %	157.3	4.5 %
Integration-related expenses[1]	—	— %	(0.6)	— %	—	— %	8.1	0.2 %
Restructuring and severance charges[2]	9.7	0.6 %	7.2	0.4 %	32.9	1.0 %	11.9	0.3 %
Transformation expenses[3]	16.2	1.0 %	—	— %	29.5	0.9 %	—	— %
Other[4]	0.6	— %	0.9	0.1 %	0.9	— %	1.0	— %
Impairment charges[5]	—	— %	160.8	9.2 %	—	— %	160.8	4.6 %
Adjusted Operating Income	$ 277.2	16.3 %	$ 318.9	18.3 %	$ 535.6	15.8 %	$ 642.0	18.2 %

1. Represents direct costs incurred with third parties and the accrual of a long-term retention incentive to integrate acquired companies. These expenses represent incremental costs and are unrelated to normal operations of our business. Integration expenses are incurred over a pre-defined integration period specific to each acquisition.
2. Reflects the incremental expenses incurred in the period related to restructuring initiatives to increase profitability and productivity. Costs included in this caption are specific to employee severance, site-related exit costs, and contract termination costs. The expenses recognized in 2024 represent costs incurred to achieve the Company's publicly-announced cost transformation initiative.
3. Represents incremental expenses directly associated with the Company's publicly-announced cost transformation initiative, primarily related to the cost of external advisors.
4. Represents other stock-based compensation expense (benefit) and charges and legal costs in connection with certain litigation and other contingencies that are unrelated to our core operations and not reflective of on-going business and operating results.
5. As described in note 1 to our unaudited condensed consolidated financial statements.

Liquidity and capital resources

We fund short-term cash requirements primarily from operating cash flows and credit facilities. Most of our long-term financing is from indebtedness. For the three and six months ended June 30, 2024, we generated $281.1 million and $422.7 million of cash from operating activities, respectively, ended the quarter with $272.6 million of cash and cash equivalents and our availability under our credit facilities was $1,060.7 million. We have no debt repayments due in the next twelve months other than required term loan payments of $19.7 million and receivables facility borrowing of $233.3 million.

Liquidity

The following table presents our primary sources of liquidity:

	June 30, 2024		
(in millions)	Receivables facility	Revolving credit facility	Total
Unused availability under credit facilities:			
Capacity	$ 333.5	$ 975.0	$ 1,308.5
Undrawn letters of credit outstanding	(14.5)	—	(14.5)
Outstanding borrowings	(233.3)	—	(233.3)
Unused availability	$ 85.7	$ 975.0	$ 1,060.7
Cash and cash equivalents			272.6
Total liquidity			$ 1,333.3

Some of our credit line availability depends upon maintaining a sufficient borrowing base of eligible accounts receivable. We believe that we have sufficient capital resources to meet our liquidity needs.

Our debt agreements include representations and covenants that we consider usual and customary, and our receivables facility and senior secured credit facilities include a financial covenant that becomes applicable for periods in which we have drawn more than 35% of our revolving credit facility under the senior secured credit facilities. In this circumstance, we are not permitted to have combined borrowings on our senior secured credit facilities and secured notes in excess of a pro forma net leverage ratio, as defined in our credit agreements. As we had not drawn more than 35% of our revolving credit facility in this period, this covenant was not applicable at June 30, 2024.

At June 30, 2024, $258.0 million or 94.6% of our $272.6 million in cash and cash equivalents was held by our non-U.S. subsidiaries and may be subject to certain taxes upon repatriation, primarily where foreign withholding taxes apply.

Historical cash flows

The following table presents a summary of cash provided by (used in) various activities:

(in millions)	Six months ended June 30, 2024	Six months ended June 30, 2023	Change
Operating activities:			
Net income	$ 153.3	$ 114.2	$ 39.1
Non-cash items[1]	226.1	375.3	(149.2)
Working capital changes[2]	35.5	(46.8)	82.3
All other	7.8	(55.0)	62.8
Total	$ 422.7	$ 387.7	$ 35.0
Investing activities	$ (79.1)	$ (56.7)	$ (22.4)
Capital expenditures	(80.5)	(58.1)	(22.4)
Financing activities	(327.3)	(471.2)	143.9

1. Consists of typical non-cash charges including depreciation and amortization, impairments, stock based compensation expense, deferred income tax expense and others.
2. Includes changes to our accounts receivable, inventory, contract assets and accounts payable.

Cash flows from operating activities provided $35.0 million more cash in 2024 primarily due to improved working capital and lower outflow of income taxes, partially offset by lower operating income.

Investing activities used $22.4 million more cash in 2024. The change was primarily attributable to an increase in capital expenditures compared to the prior year.

Financing activities used $143.9 million less cash in 2024 primarily due to the net borrowings made on the receivables facility in 2024 compared to having net repayments in 2023 and higher proceeds received from stock options exercises in 2024 compared to the prior year.

Free cash flow

(in millions)	Six months ended June 30, 2024	Six months ended June 30, 2023	Change
Net cash provided by operating activities	$ 422.7	$ 387.7	$ 35.0
Capital expenditures	(80.5)	(58.1)	(22.4)
Free cash flow	$ 342.2	$ 329.6	$ 12.6

Free cash flow was $12.6 million higher in 2024 primarily due to higher cash flow from operating activities as previously discussed, partially offset by an increase in capital spending across the Company in 2024 as noted above.

Indebtedness

For information about our indebtedness, refer to the section entitled “Liquidity” and note 9 to our unaudited condensed consolidated financial statements included in Part I, Item 1 — “Financial statements.”

Item 3. Quantitative and qualitative disclosures about market risk

Quantitative and qualitative disclosures about market risk appear in Item 7A in the Company’s 2023 Annual Report. There were no material changes during the quarter ended June 30, 2024 to this information as reported in the Company’s 2023 Annual Report.

Item 4. Controls and procedures

Management’s 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 defined in Exchange Act Rules 13a-15(e) and 15d-15(e)), as of the end of the period covered by this report. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2024, the design and operation of our disclosure controls and procedures were effective to accomplish their objectives 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 Securities Exchange Act of 1934) during the fiscal quarter 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

For additional information regarding legal proceedings and matters, see note 8 to our unaudited condensed consolidated financial statements included in Part I, Item 1 — “Financial Statements,” which information is incorporated into this item by reference.

Item 1A. Risk factors

For information regarding factors that could affect the Company's results of operations, financial condition and liquidity, see the risk factors discussed in Part I, Item 1A “Risk Factors” in our Annual Report. There have been no material changes to the risk factors disclosed in Part I—Item 1A of the Annual Report.

Item 2. Unregistered sales of equity securities and use of proceeds

None.

Item 3. Defaults upon senior securities

None.

Item 4. Mine safety disclosures

Not applicable.

Item 5. Other information

Item 2.05 Costs Associated with Exit or Disposal Activities

As previously announced, effective January 1, 2024, the Company transitioned to a new operating model consisting of two complementary business segments, the Laboratory Solutions segment and the Bioscience Production segment. In conjunction with the new operating model, the Company launched a multi-year cost transformation initiative and undertook a period of evaluation to determine the scope and scale of the initiative which included certain immaterial restructuring charges in the first and second quarters of 2024. On July 24, 2024, the Company committed to certain significant restructuring activities in connection with the initiative. These activities are designed to right-size the Company's cost base and optimize its footprint and organizational structure with a focus on driving significant cost improvement and productivity. The Company will involve local stakeholders, including relevant employee representatives, in each impacted country in compliance with local laws and regulations.

The Company's objective for this multi-year cost transformation initiative is to deliver approximately $300.0 million in annual gross run-rate savings by the end of 2026.

While the Company is continuing to define the specific actions that may be required to deliver the targeted benefits, it expects to incur incremental restructuring charges in the range of $50.0 million to $65.0 million, including severance costs and other employment related expenses in the range of $40.0 million to $50.0 million. The Company expects to recognize the majority of these severance and related costs during the third and fourth quarters of 2024. Other charges, primarily related to impairments of long-lived assets and site closures, are expected to be immaterial in 2024. Cash expenses are expected in the range of $40.0 million to $50.0 million.

The Company is currently in the process of defining the specific parameters of its restructuring activities associated with the multi-year cost transformation initiative and, accordingly, future actions by the Company or changes in circumstances from current assumptions may cause actual results and future cash payments to differ.

Securities Trading Plans of Directors and Officers

Our directors and officers (as defined in Exchange Act Rule 16a-1(f)) may from time to time enter into plans or other arrangements for the purchase or sale of our shares that are intended to satisfy the affirmative defense conditions of Rule 10b5–1(c) of the Exchange Act. No directors or officers, as defined in Exchange Act Rule 16a-1(f), of the Company adopted or terminated (i) a Rule 10b5-1 trading arrangement, as defined in Item 408(a) under Regulation S-K of the Securities Act of 1933, or (ii) a non-Rule 10b5-1 trading arrangement, as defined in Item 408(c) under Regulation S-K of the Securities Act of 1933, during the three months ended June 30, 2024.

Item 6. Exhibits

Exhibit no.	Exhibit description	Location of exhibits		
		Form	Exhibit no.	Filing date
10.1	Amendment No. 12 (the "Credit Agreement Amendment") to Credit Agreement, dated as of November 21, 2017 (as amended by Amendment No. 1 to Credit Agreement, dated as of November 27, 2018, Amendment No. 2 to Credit Agreement, dated as of June 18, 2019, Amendment No. 3 to Credit Agreement, dated as of January 24, 2020, Amendment No. 4 to Credit Agreement, dated as of July 14, 2020, Amendment No. 5 to Credit Agreement, dated as of November 6, 2020, Amendment No. 6 to Credit Agreement, dated as of June 10, 2021, Amendment No. 7 to Credit Agreement, dated as of July 7, 2021, Amendment No. 8 to Credit Agreement, dated as of November 1, 2021, Amendment No. 9 to Credit Agreement, dated as of April 7, 2022, Amendment No. 10 to Credit Agreement, dated as of March 17, 2023, and Amendment No. 11 to Credit Agreement, dated as of June 29, 2023, and as further amended, restated, extended, supplemented or otherwise modified in writing from time to time prior to the date of the Credit Agreement Amendment), among Vail Holdco Sub LLC, Avantor Funding, Inc., each of the guarantors, Goldman Sachs Bank USA, as administrative agent and collateral agent, the swing line lender, a letter of credit issuer and the Additional Incremental B-6 Dollar Term Lender (as defined in the Credit Agreement Amendment) and the other lenders party thereto.	8-K	10.1	4/5/2024
10.2^	Consulting Agreement dated April 3, 2024 by and between VWR International, LLC and BrophyBio, LLC	10-Q	10.2	4/26/2024
10.3^	Scientific Advisory Board Consulting Agreement dated April 3, 2024, by and between Avantor, Inc. and Gerard Brophy	10-Q	10.3	4/26/2024
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	*		
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	*		

		Location of exhibits
32.1	Certification of Principal Executive Officer pursuant to 18 U.S.C. 1350 (Section 906 of the Sarbanes-Oxley Act of 2002)	**
32.2	Certification of Principal Financial Officer pursuant to 18 U.S.C. 1350 (Section 906 of the Sarbanes-Oxley Act of 2002)	**
101	XBRL exhibits	*
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	*

* Filled herewith

** Furnished herewith

^ Indicates management contract or compensatory plan, contract or arrangement.

SIGNATURE

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.

Avantor, Inc.

Date: July 26, 2024	By:	/s/ Steven Eck	
		Name:	Steven Eck
		Title:	Senior Vice President, Chief Accounting Officer (Principal Accounting Officer)

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Michael Stubblefield, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Avantor, 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: July 26, 2024	By:	/s/ Michael Stubblefield	
		Name:	Michael Stubblefield
		Title:	President and Chief Executive Officer (Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, R. Brent Jones, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Avantor, 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: July 26, 2024	By:	/s/ R. Brent Jones	
		Name:	R. Brent Jones
		Title:	Executive Vice President and Chief Financial Officer (Principal 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 Avantor, Inc. (the “Company”) for the three months ended June 30, 2024, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Michael Stubblefield, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(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: July 26, 2024	By:	/s/ Michael Stubblefield	
		Name:	Michael Stubblefield
		Title:	President and Chief Executive Officer (Principal 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 Avantor, Inc. (the “Company”) for the three months ended June 30, 2024, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, R. Brent Jones, Executive Vice President, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(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: July 26, 2024	By:	/s/ R. Brent Jones	
		Name:	R. Brent Jones
		Title:	Executive Vice President and Chief Financial Officer (Principal Financial Officer)