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

FORM 10-Q

(Mark One)

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

For the quarterly period ended October 2, 2021

OR

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

For the transition period from ____________ to ____________

Commission File Number: 001-37844

BIOVENTUS INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**81-0980861**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
4721 Emperor Boulevard, Suite 100 **Durham, North Carolina**	**27703**
(Address of Principal Executive Offices)	**(Zip Code)**

(919) 474-6700
Registrant's Telephone Number, Including Area Code

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

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

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

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

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☐
		Emerging Growth Company	☒

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

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

As of November 9, 2021, there were 59,438,082 shares of Class A common stock outstanding and 15,786,737 shares of Class B common stock outstanding.

BIOVENTUS INC.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

As used in this Quarterly Report on Form 10-Q, unless expressly indicated or the context otherwise requires, references to "Bioventus," "we," "us," "our," "the Company," and similar references refer to Bioventus Inc. and its consolidated subsidiaries, including Bioventus LLC (BV LLC).

This Form 10-Q contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (Exchange Act), and Section 27A of the Securities Act of 1933, as amended (Securities Act), concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business operations and financial performance and condition. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements including, without limitation, statements regarding our business strategy, including, without limitation, expectations relating to our acquisitions of Misonix and Bioness, potential acquisitions and expected expansion of our pipeline and research and development investment, new therapy launches, our operations and expected financial performance and condition, and impacts of the COVID-19 pandemic. In some cases, you can identify forward-looking statements by terminology such as “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “predict,” “potential,” “positioned,” “seek,” “should,” “target,” “will,” “would” and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words.

Forward-looking statements are based on management's current expectations, estimates, forecasts and projections about our business and the industry in which we operate, and management's beliefs and assumptions are not guarantees of future performance or development and involve known and unknown risks, uncertainties and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this Quarterly Report may turn out to be inaccurate. Furthermore, if the forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all. Important factors that may cause actual results to differ materially from current expectations include, among other things, our business may continue to experience adverse impacts as a result of the COVID-19 pandemic; we are highly dependent on a limited number of products; our long-term growth depends on our ability to develop, acquire and commercialize new products, line extensions or expanded indications; we may be unable to successfully commercialize newly developed or acquired products or therapies in the United States; demand for our existing portfolio of products and any new products, line extensions or expanded indications depends on the continued and future acceptance of our products by physicians, patients, third-party payers and others in the medical community; our commercial success depends on our ability to differentiate the hyaluronic acid (HA) viscosupplementation therapies that we own or distribute from alternative therapies for the treatment of osteoarthritis; the proposed down classification of non-invasive bone growth stimulators, including our Exogen system, by the U.S. Food and Drug Association (FDA) could increase future competition for bone growth stimulators and otherwise adversely affect the Company's sales of Exogen; if we are unable to achieve and maintain adequate levels of coverage and/or reimbursement for our products, the procedures using our products, or any future products we may seek to commercialize, including any potential changes by Centers for Medicare and Medicaid Services in the manner in which our HA viscosupplementation products are reimbursed, the commercial success of these products may be severely hindered; if we choose to acquire or invest in new businesses, products or technologies, we may be unable to complete these acquisitions or to successfully integrate them in a cost-effective and non-disruptive manner; we compete and may compete in the future against other companies, some of which have longer operating histories, more established products or greater resources than we do, which may prevent us from achieving increased market penetration or improved operating results; the reclassification of our HA products from medical devices to drugs in the United States by the FDA could negatively impact our ability to market these products and may require that we conduct costly additional clinical studies to support current or future indications for use of those products; our ability to maintain our competitive position depends on our ability to attract, retain and motivate our senior management team and highly qualified personnel, and our failure to do so could adversely affect our business, results of operations and financial condition; if our facilities are damaged or become inoperable, we will be unable to continue to research, develop and manufacture our products and, as a result, our business, results of operations and financial condition may be adversely affected until we are able to secure a new facility; our products and operations are subject to extensive governmental regulation, and our failure to comply with applicable requirements could cause our business to suffer; we may be subject to enforcement action if we engage in improper claims submission practices and resulting audits or denials of our claims by government agencies could reduce our net sales or profits; the FDA regulatory process is expensive, time-consuming and uncertain, and the failure to obtain and maintain required regulatory clearances and approvals could prevent us from commercializing our products; our HCT/P products are subject to extensive government regulation and our failure to comply with these requirements could cause our business to suffer; if clinical studies of our future products do not produce results necessary to support regulatory clearance or approval in the United States or elsewhere, we will be unable to expand the indications for or commercialize these products; we may be subject to enforcement action if we engage in improper marketing or promotion of our products, that could lead to costly investigations, fines or sanctions by regulatory bodies, any of which could be costly to our business; and other important factors described in *Part I, Item 1A. Risk Factors* in our 2020 Annual Report on Form 10-K as updated by this Form 10-Q. You are urged to consider these factors carefully in evaluating these forward-looking statements. These forward-looking statements speak only as of the date hereof. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future.

Part I. Financial Information

Item 1. Financial Statements

Bioventus Inc.
Consolidated condensed statements of operations and comprehensive (loss) income
Three and nine months ended October 2, 2021 and September 26, 2020
(Amounts in thousands, except share amounts)
(Unaudited)

	Three Months Ended		Nine Months Ended	
	October 2, 2021	September 26, 2020	October 2, 2021	September 26, 2020
Net sales	$ 108,890	$ 85,908	$ 300,484	$ 222,570
Cost of sales (including depreciation and amortization of $6,637, $5,477, $17,491 and $16,076 respectively)	29,821	23,444	85,546	62,521
Gross profit	79,069	62,464	214,938	160,049
Selling, general and administrative expense	69,636	50,295	173,372	131,104
Research and development expense	6,153	3,569	11,936	8,311
Restructuring costs	1,798	—	1,798	—
Change in fair value of contingent consideration	651	—	1,292	—
Depreciation and amortization	1,878	1,667	5,655	5,305
Impairment of variable interest entity assets	—	—	5,674	—
Operating (loss) income	(1,047)	6,933	15,211	15,329
Interest expense	1,347	1,880	152	7,095
Other expense (income)	757	(3,285)	2,821	(4,539)
Other expense (income)	2,104	(1,405)	2,973	2,556
(Loss) income before income taxes	(3,151)	8,338	12,238	12,773
Income tax (benefit) expense	(882)	373	759	302
Net (loss) income	(2,269)	7,965	11,479	12,471
Loss attributable to noncontrolling interest	1,198	492	8,260	1,164
Net (loss) income attributable to Bioventus Inc.	$ (1,071)	$ 8,457	$ 19,739	$ 13,635
Net (loss) income	$ (2,269)	$ 7,965	$ 11,479	$ 12,471
Other comprehensive (loss) income, net of tax				
Change in foreign currency translation adjustments	(366)	943	(1,225)	687
Comprehensive (loss) income	(2,635)	8,908	10,254	13,158
Comprehensive loss attributable to noncontrolling interest	1,300	492	8,182	1,164
Comprehensive (loss) income attributable to Bioventus Inc.	$ (1,335)	$ 9,400	$ 18,436	$ 14,322
Loss per share of Class A common stock, basic and diluted[1]:	$ (0.03)		$ (0.15)	
Weighted-average shares of Class A common stock outstanding, basic and diluted[1]:	41,837,581		41,816,706	

[1] Per share information for the nine months ended October 2, 2021 represents loss per share of Class A common stock and weighted-average shares of Class A common stock outstanding from February 16, 2021 through October 2, 2021, the period following Bioventus Inc.'s initial public offering and related transactions described in *Note 1. Organization* and *Note 7. Earnings per share* within the *Notes to the unaudited condensed consolidated financial statements.*

The accompanying notes are an integral part of these consolidated financial statements.

Bioventus Inc.
Consolidated condensed balance sheets as of October 2, 2021 (Unaudited) and December 31, 2020
(Amounts in thousands, except share amounts)

	October 2, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 80,917	$ 86,839
Accounts receivable, net	105,442	88,283
Inventory	36,565	29,120
Prepaid and other current assets	23,154	7,552
Total current assets	246,078	211,794
Restricted cash	50,000	—
Property and equipment, net	10,297	6,879
Goodwill	52,885	49,800
Intangible assets, net	248,794	191,650
Operating lease assets	16,938	14,961
Deferred tax assets	481	—
Investment and other assets	29,317	19,382
Total assets	$ 654,790	$ 494,466
Liabilities and Stockholders' and Members' Equity		
Current liabilities:		
Accounts payable	$ 10,897	$ 4,422
Accrued liabilities	107,554	88,187
Accrued equity-based compensation	10,875	11,054
Current portion of long-term debt	15,000	15,000
Current portion of contingent consideration	13,386	—
Other current liabilities	2,993	3,926
Total current liabilities	160,705	122,589
Long-term debt, less current portion	162,437	173,378
Accrued equity-based compensation, less current portion	—	29,249
Deferred income taxes	47,687	3,362
Contingent consideration, less current portion	30,906	—
Other long-term liabilities	22,558	21,728
Total liabilities	424,293	350,306
Commitments and contingencies (Note 10)		
Stockholders' and Members' Equity:		
Members' equity	—	144,160
Preferred stock, $0.001 par value, 10,000,000 shares authorized, 0 shares issued		
Class A common stock, $0.001 par value 250,000,000 shares authorized, 41,097,292 shares issued and outstanding	41	—
Class B common stock, $0.001 par value, 50,000,000 shares authorized, 15,786,737 shares issued and outstanding	16	—
Additional paid-in capital	158,480	—
Accumulated deficit	(6,238)	—
Accumulated other comprehensive income	204	—
Total stockholders' equity attributable to Bioventus Inc. and members' equity	152,503	144,160
Noncontrolling interest	77,994	—
Total stockholders' and members' equity	230,497	144,160
Total liabilities and stockholders' and members' equity	$ 654,790	$ 494,466

The accompanying notes are an integral part of these consolidated financial statements.

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Bioventus Inc.
Consolidated condensed statements of changes in stockholders’ and members’ equity
Three and nine months ended October 2, 2021 and September 26, 2020
(Amounts in thousands, except share amounts)
(Unaudited)

Three Months Ended October 2, 2021

	Class A Common Stock		Class B Common Stock						
	Shares	Amount	Shares	Amount	Additional Paid-In -Capital	Accumulated other comprehensive income	Accumulated Deficit	Non-controlling interest	Total Stockholders' and members’ equity
Balance at July 2, 2021	41,062,652	$ 41	15,786,737	$ 16	$ 146,199	$ 468	$ (5,167)	$ 77,807	$ 219,364
Effect of Organizational Transactions[1]	—	—	—	—	7,437	—	—	—	7,437
Issuance of Class A common stock	34,640	—	—	—	417	—	—	—	417
Distribution of Continuing LLC Owner	—	—	—	—	—	—	—	(24)	(24)
Net loss	—	—	—	—	—	—	(1,071)	(1,198)	(2,269)
Equity based compensation	—	—	—	—	4,427	—	—	1,511	5,938
Translation adjustment	—	—	—	—	—	(264)	—	(102)	(366)
Balance at October 2, 2021	41,097,292	$ 41	15,786,737	$ 16	$ 158,480	$ 204	$ (6,238)	$ 77,994	$ 230,497

[1] Refer to *Note 9. Income taxes* within the *Notes to the unaudited consolidated condensed financial statements* for further details

Three Months Ended September 26, 2020

	Members’ equity
Balance at June 27, 2020	$ 141,791
Profits interest forfeiture	39
Distribution to members	(5,399)
Net income	7,965
Translation adjustment	943
Balance at September 26, 2020	$ 145,339

Nine Months Ended October 2, 2021

	Members' equity	Class A Common Stock Shares	Class A Common Stock Amount	Class B Common Stock Shares	Class B Common Stock Amount	Additional Paid-In - Capital	Accumulated other comprehensive income	Accumulated Deficit	Non-controlling interest	Total Stockholders' and members' equity
Balance at December 31, 2020	$ 144,160	—	$ —	—	$ —	$ —	$ —	$ —	$ —	$ 144,160
Refund from members prior to Organizational Transactions	123	—	—	—	—	—	—	—	—	123
Other equity forfeiture	(39)	—	—	—	—	—	—	—	—	(39)
Net income prior to Organizational Transactions	25,977	—	—	—	—	—	—	—	—	25,977
Translation adjustment prior to Organizational Transactions	(1,507)	—	—	—	—	—	—	—	—	(1,507)
Effect of Organizational Transactions	(168,714)	31,838,589	32	15,786,737	16	41,060	—	—	79,119	(48,487)
Initial public offering, net of offering costs	—	9,200,000	9	—	—	106,441	—	—	—	106,450
Issuance of Class A common stock	—	58,703	—	—	—	731	—	—	—	731
Distribution to Continuing LLC Owner	—	—	—	—	—	—	—	—	(215)	(215)
Net loss subsequent to Organizational Transactions	—	—	—	—	—	—	—	(6,238)	(8,260)	(14,498)
Deconsolidation of variable interest entity	—	—	—	—	—	—	—	—	3,746	3,746
Equity based compensation subsequent to Organizational Transactions	—	—	—	—	—	10,248	—	—	3,526	13,774
Translation adjustment subsequent to Organizational Transactions	—	—	—	—	—	—	204	—	78	282
Balance at October 2, 2021	$ —	41,097,292	$ 41	15,786,737	$ 16	$ 158,480	$ 204	$ (6,238)	$ 77,994	$ 230,497

Nine Months Ended September 26, 2020

	Members' equity
Balance at December 31, 2019	$ 145,617
Profits interest forfeiture	26
Distribution to members	(14,111)
Debt conversion	649
Net income	12,471
Translation adjustment	687
Balance at September 26, 2020	$ 145,339

The accompanying notes are an integral part of these consolidated financial statements.

Bioventus Inc.
Consolidated condensed statements of cash flows
Nine months ended October 2, 2021 and September 26, 2020
(Amounts in thousands)
(Unaudited)

	Nine Months Ended	
	October 2, 2021	September 26, 2020
Operating activities:		
Net income	$ 11,479	$ 12,471
Adjustments to reconcile net income to net cash provided by operating activities from continuing operations:		
Depreciation and amortization	23,185	21,789
(Recovery) provision for expected credit losses	(138)	1,089
Equity-based compensation from 2021 Stock Incentive Plan	13,735	—
Profits interest plan, liability-classified and other equity awards compensation	(24,356)	619
Change in fair value of contingent consideration	1,292	—
Change in fair value of interest rate swap	(1,391)	1,980
Change in fair value of Equity Participation Rights	(2,774)	(788)
Impairments related to variable interest entity	7,043	—
Other, net	(72)	(266)
Changes in operating assets and liabilities:		
Accounts receivable	(13,149)	3,361
Inventories	1,496	(7,004)
Accounts payable and accrued expenses	7,247	11,568
Other current assets and liabilities	(13,723)	1,933
Net cash from operating activities - continuing operations	9,874	46,752
Net cash from operating activities - discontinued operations	—	(400)
Net cash from operating activities	9,874	46,352
Investing activities:		
Purchase of Bioness, Inc., net of cash acquired	(46,790)	—
Investments	(11,124)	(16,630)
Purchase of property and equipment	(4,568)	(2,331)
Net cash from investing activities - continuing operations	(62,482)	(18,961)
Net cash from investing activities - discontinued operations	—	172
Net cash from investing activities	(62,482)	(18,789)
Financing activities:		
Proceeds from issuance of Class A common stock sold in initial public offering, net of underwriting discounts and offering costs	107,777	—
Proceeds from issuance of Class A and B common stock	747	—
Borrowing on revolver	—	49,000
Payment on revolver	—	(49,000)
Payments on long-term debt	(11,250)	(5,000)
Distributions to members	(183)	(14,691)
Other, net	(28)	—
Net cash from financing activities	97,063	(19,691)
Effect of exchange rate changes on cash	(377)	86
Net change in cash, cash equivalents and restricted cash	44,078	7,958
Cash, cash equivalents and restricted cash at the beginning of the period	86,839	64,520
Cash, cash equivalents and restricted cash at the end of the period	$ 130,917	$ 72,478
Supplemental disclosure of noncash investing and financing activities		
Accrued member distributions	$ 123	$ 607
Accounts payable for purchase of property, plant and equipment	$ 612	$ 580

The accompanying notes are an integral part of these consolidated financial statements.

Bioventus Inc.
Notes to the unaudited consolidated condensed financial statements
(Amounts in thousands, except unit and share amounts)

1. Organization

The Company

Bioventus Inc. (the Company, we, us or our) was formed as a Delaware corporation for the purpose of facilitating an initial public offering (IPO) and other related transactions in order to carry on the business of Bioventus LLC and its subsidiaries (BV LLC). The Company is headquartered in Durham, North Carolina. BV LLC, is a limited liability company formed under the laws of the state of Delaware on November 23, 2011 and operates as a partnership. BV LLC commenced operations in May 2012. BV LLC is a global medical device company, conducting business in various countries, primarily in North America and Europe, with approximately 900 employees. The Company is focused on developing and commercializing clinically differentiated, cost efficient and minimally invasive treatments that engage and enhance the body’s natural healing processes.

Initial Public Offering

On February 16, 2021, the Company closed an IPO of 9,200,000 shares of Class A common stock at a public offering price of $13.00 per share, which includes 1,200,000 shares issued pursuant to the underwriters' over-allotment option. The Company received $111,228 in proceeds, net of underwriting discounts and commissions of $8,372, which was used to purchase newly-issued membership interests from BV LLC at a price per interest equal to the IPO price of $13.00. The Company also incurred offering expenses totaling $4,778 in addition to the underwriting discounts and commissions. Offering expenses of $1,327 were paid in 2020 and $3,451 were paid in 2021. Subsequent to the IPO and related transactions that occurred in connection with the IPO (the Transactions), the Company is the sole managing member of BV LLC and owns 72.3% of BV LLC. The Company has a majority economic interest, the sole voting interest in, and controls the management of BV LLC. As a result, the Company consolidates the financial results of BV LLC and reports a non-controlling interest representing the 27.7% interest not held by the Company.

IPO Transactions

The Company and BV LLC completed the following Transactions in connection with the IPO. BV LLC amended and restated the Bioventus LLC Agreement, to, among other things, (i) provide for a new single class of common membership interests in BV LLC (LLC Interests), (ii) exchange all of the existing membership interests in BV LLC for new LLC Interests and (iii) appoint Bioventus Inc. as the sole managing member of BV LLC. The Company amended and restated its certificate of incorporation to, among other things, provide for the (i) authorization of 250,000,000 shares of Class A common stock with a par value of $0.001 per share; (ii) authorization of 50,000,000 shares of Class B common stock with a par value of $0.001 per share; (iii) authorization of 10,000,000 shares of undesignated preferred stock that may be issued from time to time by the Company's Board of Directors (BOD) in one or more series; and (iv) establishment of a classified BOD, divided into three classes, each of whose members will serve for staggered three-year terms. Holders of Class A / Class B common stock are entitled to one vote per share and, except as otherwise required, will vote together as a single class on all matters on which stockholders generally are entitled to vote. Holders of Class B common stock are not entitled to receive dividends and will not be entitled to receive any distributions upon the liquidation, dissolution or winding up of the Company. Shares of Class B common stock may only be issued to the extent necessary to maintain the one-to-one ratio between the number of LLC Interests held by the only member of BV LLC that remained a member following the Transactions (Continuing LLC Owner) and the number of shares of Class B common stock held by the Continuing LLC Owner. Shares of Class B common stock are transferable only together with an equal number of LLC Interests. Shares of Class B common stock will be canceled on a one-for-one basis if the Company, at the election of a Continuing LLC Owner, redeem or exchange LLC Interests.

The Company’s amended and restated certificate of incorporation and the Bioventus LLC Agreement requires that the Company and BV LLC at all times maintain a one-to-one ratio between the number of shares of Class A common stock issued by the Company and the number of LLC Interests owned by the Company, as well as a one-to-one ratio between the number of shares of Class B common stock owned by the Continuing LLC Owner and the number of LLC Interests owned by the Continuing LLC Owner. The Company acquired, by merger, ten entities that were members of BV LLC (Former LLC Owners), for which the Company issued 31,838,589 shares of Class A common stock as merger consideration (Merger). The only assets held by the Former LLC Owners were 31,838,589 LLC Interests and a corresponding number of shares of Class B common stock. Upon consummation of the Merger, the Company canceled the 31,838,589 shares of Class B common stock and recognized the 31,838,589 LLC Interests at carrying value, as the Merger is considered to be a recapitalization transaction. As of October 2, 2021, the Company held 41,097,292 LLC Interests, which represented a 72.3% ownership interest in BV LLC.

The financial statements for periods prior to the IPO and Transactions have been adjusted to combine the previously separate entities for presentation purposes. Prior to the Transactions, Bioventus Inc. had no operations.

Interim periods

The Company reports quarterly interim periods on a 13-week basis within a standard calendar year. Each annual reporting period begins on January 1 and ends on December 31. Each quarter ends on the Saturday closest to calendar quarter-end, with the exception of the fourth quarter, which ends on December 31. The 13-week quarterly periods for fiscal year 2021 end on April 3, July 3 and October 2. Comparable periods for 2020 ended on March 28, June 27 and September 26. The fourth and first quarters may vary in length depending on the calendar year.

Unaudited interim financial information

The accompanying unaudited consolidated financial statements of the Company have been prepared in accordance with generally accepted accounting principles in the United States of America (U.S. GAAP) for interim financial information and with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Pursuant to these rules and regulations they do not include all information and notes required by U.S. GAAP for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair statement of the Company's financial condition and results of operations have been included. Operating results for the periods presented are not necessarily indicative of the results that may be expected for the full year. As such, the information included in this report should be read in conjunction with the Company's 2020 Annual Report on Form 10-K. The balance sheet at December 31, 2020 has been derived from the audited consolidated financial statements of the Company but does not include all the disclosures required by U.S. GAAP.

COVID-19 pandemic impact

In 2020, the COVID-19 pandemic spread around the world including the United States. New variants of the virus have emerged, some of which have shown to be more contagious. The COVID-19 pandemic has had widespread, rapidly evolving and unpredictable impacts on global society, economies, financial markets and business practices. Federal and state governments implemented measures in an effort to prevent or minimize the spread of the virus, and ongoing effects of the pandemic, including social distancing, travel restrictions, border closures, limitations on public gatherings, mandatory closure or reduced capacity of businesses, work from home, supply chain logistical changes and other measures, which caused global business disruptions and significant volatility in U.S. and international debt and equity markets. Our business, results of operations and financial condition have been and may continue to be, materially impacted by fluctuations in patient visits and elective procedures and any future temporary cessations of elective procedures and could be further impacted by delays in payments from customers, supply chain interruptions, extended “shelter-in-place” orders or advisories, facility closures or other reasons related to the pandemic. Furthermore, the long-term impact of COVID-19 on our business will depend on many factors, including, but not limited to, the duration and severity of the pandemic, new and ongoing measures taken in response to the pandemic, the availability, adoption and effectiveness of vaccines and treatments, the impact on economic activity from the pandemic and actions taken in response and the resulting impact it has on our partners, patients and communities in which we operate, all of which continue to be uncertain. As of the date of issuance of these consolidated financial statements, the extent to which COVID-19 could materially impact the Company's financial conditions, liquidity or results of operations is uncertain.

To the extent COVID-19 disruptions continue to adversely impact our business, results of operations and financial condition, it may also have the effect of heightening risks relating to our ability to successfully commercialize newly developed or acquired products or therapies, consolidation in the healthcare industry, intensified pricing pressure as a result of changes in the purchasing behavior of hospitals and maintenance of our numerous contractual relationships.

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act (CARES Act) was signed into law, which was aimed at providing emergency assistance and health care for individuals, families, and businesses affected by the COVID-19 pandemic and generally supporting the U.S. economy. The CARES Act, among other things, includes provisions relating to refundable payroll tax credits, deferment of employer social security payments, net operating loss carryback periods, alternative minimum tax credit refunds, and modifications to the net interest deduction limitations.

As a result of the CARES Act and at the direction of the U.S. Department of Health and Human Services (HHS), the Company received $1,247 and $2,854 in Provider Relief Fund Payments in April and July 2020, respectively. The Company determined it complied with the conditions to be able to keep and use the funds to reimburse for health care related expenses and lost revenue attributable to the public health emergency resulting from COVID-19. The payments were recorded as other income on the consolidated statement of operations and comprehensive (loss) income for the three and nine months ended September 26, 2020.

Recent accounting pronouncements

The Company has elected to comply with non-accelerated public company filer effective dates of adoption. Therefore, the required effective dates for adopting new or revised accounting standards as described below are generally earlier than when emerging growth companies are required to adopt.

Accounting Pronouncements Recently Adopted

In December 2019, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update 2019-12, *Income Taxes* (ASU 2019-12), which amended the accounting for income taxes. ASU 2019-12 eliminates certain exceptions to the guidance for income taxes related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences as well as simplifying aspects of the accounting for franchise taxes and enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. The Company adopted ASU 2019-12 on January 1, 2021 and it did not have a material impact on its consolidated financial statements.

2. Balance sheet information

Cash, cash equivalents and restricted cash

A summary of cash and cash equivalents and restricted cash is as follows:

	October 2, 2021	December 31, 2020
Cash and cash equivalents	$ 80,917	$ 86,839
Restricted cash	50,000	—
	$ 130,917	$ 86,839

Restricted cash consists of a $50,000 escrow deposit with a financial institution for a potential future acquisition, refer to *Note 3. Business combinations and investments* for further information.

Accounts receivable, net

Accounts receivable, net are amounts billed and currently due from customers. The Company records the amounts due net of allowance for credit losses. Collection of the consideration that the Company expects to receive typically occurs within 30 to 90 days of billing. The Company applies the practical expedient for contracts with payment terms of one year or less which does not consider the effects of the time value of money. Occasionally, the Company enters into payment agreements with patients that allow payment terms beyond one year. In those cases, the financing component is not deemed significant to the contract.

Accounts receivable, net of allowances, consisted of the following as of:

	October 2, 2021	December 31, 2020
Accounts receivable	$ 108,504	$ 92,273
Less: Allowance for credit losses	(3,062)	(3,990)
	$ 105,442	$ 88,283

The Company maintains an allowance for credit losses for estimated losses resulting from the inability of its customers to make required payments. The allowance for credit losses is calculated by region and by customer type, where appropriate considering several factors including age of accounts, collection history, historical account write-offs, current economic conditions, and supportable forecasted economic expectations. Due to the short-term nature of its receivables, the estimate of expected credit losses is based on aging of the account receivable balances. The allowance is adjusted on a specific identification basis for certain accounts as well as pooling of accounts with similar characteristics. An increase in the provision for credit losses may be required when the financial condition of the Company's customers or its collection experience deteriorates. The Company has a diverse customer base with no single customer representing ten percent of sales or accounts receivable. Historically, the Company's reserves have been adequate to cover credit losses. The Company's exposure to credit losses may increase if its customers are adversely affected by changes in health care laws, coverage and reimbursement, economic pressures or uncertainty associated with local or global economic recessions, disruption associated with the COVID-19 pandemic, or other customer-specific factors. The Company considered the current and expected future economic and market conditions surrounding the COVID-19 pandemic and determined that the estimate of credit losses was not significantly impacted. Estimates are used to determine the allowance, which are based on an assessment of anticipated payment and all other historical, current and future information that is reasonably available.

Changes in credit losses were as follows:

	Three Months Ended		Nine Months Ended	
	October 2, 2021	September 26, 2020	October 2, 2021	September 26, 2020
Beginning balance	$ (3,019)	$ (5,249)	$ (3,990)	$ (4,146)
Recovery (provision)	(221)	73	138	(1,089)
Write-offs	243	376	927	628
Recoveries	(65)	(84)	(137)	(277)
Ending balance	$ (3,062)	$ (4,884)	$ (3,062)	$ (4,884)

Inventory

Inventory consisted of the following as of:

	October 2, 2021	December 31, 2020
Raw materials and supplies	$ 3,381	$ 3,665
Finished goods	34,710	26,323
Gross	38,091	29,988
Excess and obsolete reserves	(1,526)	(868)
	$ 36,565	$ 29,120

Accrued liabilities

Accrued liabilities consisted of the following as of:

	October 2, 2021	December 31, 2020
Gross-to-net deductions	$ 63,195	$ 43,656
Bonus and commission	16,483	15,188
Compensation and benefits	6,987	5,875
Income and other taxes	21	2,434
Other liabilities	20,868	21,034
	$ 107,554	$ 88,187

3. Business combinations and investments

Acquisitions

Misonix, Inc.

On July 29, 2021, the Company entered into an Agreement and Plan of Merger (the Misonix Merger Agreement) to acquire Misonix, Inc. (Misonix) in a cash-and-stock transaction (the Misonix Merger). On October 29, 2021, the Company completed the Misonix Merger. Misonix manufactures minimally invasive surgical ultrasonic medical devices used for precise bone sculpting, removal of soft and hard tumors and tissue debridement, primarily in the areas of neurosurgery, orthopedic surgery, plastic surgery, wound care and maxillo-facial surgery. Misonix also exclusively distributes skin allografts and wound care products used to support healing of wounds. Please refer to *Note 13. Subsequent events* for further details regarding the transaction.

Bioness, Inc.

On March 30, 2021, in order to broaden its portfolio and increase its global footprint, the Company acquired 100% of the capital stock of Bioness, Inc. (Bioness Acquisition). Bioness, Inc. (Bioness) is a global leader in neuromodulation and advanced rehabilitation medical devices through its innovative peripheral nerve stimulation therapy and premium advanced rehabilitation solutions. The Company had previously made a $1,500 convertible debt investment in Bioness on January 4, 2021 as part of an exclusive negotiation to purchase Bioness, which was subsequently repaid in conjunction with the acquisition. The consideration paid for Bioness is comprised of the following:

	Consideration
Cash consideration at closing	$ 48,933
Contingent consideration at fair value	43,000
Total Bioness consideration	$ 91,933

Contingent consideration is comprised of future earn-out payments contingent upon the achievement of certain research and development projects as well as sales milestones related to Bioness products. Contingent earn-out payments could total up to $65,000 for the achievement of the following:

- $15,000 for obtaining FDA approval for U.S. commercial distribution of a certain product for certain indications on or before June 30, 2022;
- $20,000 for meeting net sales targets for certain implantable products over a three year period ending on June 30, 2025 at the latest;
- Up to $10,000 for meeting net sales milestones for certain implantable products over a three year period ending on June 30, 2025 at the latest; and
- $20,000 for maintaining Centers for Medicare & Medicaid Services coverage and reimbursement for certain products at specified levels as of December 31, 2024.

The allocation of the purchase price is preliminary and subject to change. The primary areas of the purchase price that are not yet finalized are related to contingent consideration (specifically related to timeline of milestones), intangible assets and the residual goodwill. Accordingly, adjustments may be made to the values of assets and liabilities assumed as additional information is obtained about the facts and circumstances that existed at the acquisition date. The following table summarizes the preliminary fair values of the assets acquired and liabilities assumed at the acquisition date and the resulting goodwill, which is expected to be deductible for tax purposes:

Fair value of consideration	$ 91,933
Assets acquired and liabilities assumed:	
Cash and cash equivalents	2,143
Accounts receivable	4,124
Inventory	7,318
Prepaid and other current assets	1,947
Property and equipment	673
Intangible assets	86,250
Operating lease assets	3,616
Other assets	132
Accounts payable and accrued liabilities	(11,405)
Other current liabilities	(1,020)
Other liabilities	(4,930)
Net assets acquired	88,848
Resulting goodwill[(a)]	$ 3,085

(a) The U.S. segment was allocated the resulting goodwill from the Bioness acquisition.

The following table summarizes the preliminary fair values of identifiable intangible assets and their useful lives:

	Useful Life (in years)	Fair Value
Intellectual property	10 years	$ 44,750
IPR&D	N/A	41,250
Customer relationships	2 years	250
		$ 86,250

The aggregate amortization expense related to acquired intangible assets for the following five periods is as follows: $1,150 - remainder of 2021, $4,600 - 2022, $4,506 - 2023, $4,475 - 2024 and $4,475 - 2025.

The Company incurred $1,575 and $6,604 in acquisition and integration costs during the three and nine months ended October 2, 2021, respectively, which are included in selling general and administrative expense within the consolidated condensed statement of operations and comprehensive (loss) income.

Bioness' advanced rehabilitation revenue is comprised of Exoskeletal Systems, Vector Units and Bioness Integrated Therapy Systems (BITS), which is included within the Company's Restorative Therapies vertical. The Company's Pain Treatment and Joint Preservation vertical will encompass Bioness' peripheral nerve stimulation therapy products, which includes the StimRouter, an implantable neuromodulation device used to treat chronic peripheral nerve pain.

Revenue from Bioness' products is primarily recognized at a point in time upon transfer of control of its products to customers such as medical facilities and individual patients. Revenue is recognized net of discounts, which can be offered through a variety of factors.

Consolidated Pro Forma Results

The Company's consolidated condensed statements of operations reflect net sales of $10,798 and $22,668 and net loss attributable to Bioness of $5,396 and $8,925 for the three and nine months ended October 2, 2021, respectively. Consolidated unaudited pro forma results of operations for the Company are presented below assuming the Bioness Acquisition had occurred January 1, 2020. Pro forma operating results for the three and nine months ended September 26, 2020 include operating expenses of $1,575 and $8,710, respectively, for acquisition integration costs and inventory related adjustments.

	Three Months Ended		Nine Months Ended	
	October 2, 2021	September 26, 2020	October 2, 2021	September 26, 2020
Net sales	$ 108,890	$ 94,907	$ 309,431	$ 252,477
Net (loss) income	$ (694)	$ 2,816	$ 15,608	$ (8,591)
Weighted-average shares of Class A common stock outstanding, basic and diluted(1):	$ —		$ (0.08)	

(1) Per share information for the nine months ended October 2, 2021 represents loss per share of Class A common stock and weighted-average shares of Class A common stock outstanding from February 16, 2021 through October 2, 2021, the period following Bioventus Inc.'s initial public offering and related transactions described in *Note 1. Organization* and *Note 7. Earnings per share.*

Investments

VIE

The Company had a fully diluted 8.8% ownership of Harbor Medtech Inc.'s (Harbor) Series C Preferred Stock. The Company and Harbor entered into an exclusive Collaboration Agreement in 2019 for purposes of developing a product for orthopedic uses to be commercialized by the Company and supplied by Harbor. The Company's partial ownership and exclusive Collaboration Agreement created a variable interest in Harbor. The Company terminated the Collaboration Agreement on June 8, 2021. As a result, Harbor had been consolidated in the Company's consolidated financial statements from the third quarter of 2019 through June 8, 2021 when the Company ceased being the primary beneficiary because it no longer had the power to direct Harbor's significant activities.

The Company determined that the termination was a triggering event requiring an impairment assessment of Harbor's long lived assets. The assessment resulted in an impairment of $5,674, representing Harbor's long-lived asset balance, which was recorded within impairment of variable entity assets for the nine months ended October 2, 2021 in the consolidated condensed statements of operations and comprehensive (loss) income, of which $5,176 is attributable to the non-controlling interest. The Company also assessed its Harbor investment post deconsolidation, which resulted in a $1,369 impairment, representing the remaining investment balance in Harbor and was recorded within other expense for the nine months ended October 2, 2021 in the consolidated condensed statements of operations and comprehensive (loss) income. The Company continues to have license rights to certain technology obtained from Harbor and is continuing product development initiated under the Collaboration Agreement.

Harbor assets that could only be used to settle Harbor obligations and Harbor liabilities for which creditors did not have recourse to the general credit of the Company were as follows at December 31, 2020:

	December 31, 2020
Cash and cash equivalents	$ 803
Property and equipment, net	173
Intangible assets, net	5,635
Operating lease assets	178
Other assets	74
	$ 6,863
Accounts payable and accrued liabilities	$ 366
Other current liabilities	2,004
Other long-term liabilities	659
	$ 3,029

Equity Method

The Company has an equity investment in CartiHeal Ltd. (CartiHeal), a privately held entity that does not have a readily determinable fair value, which the Company began recording as an equity investment during the third quarter of 2020. The CartiHeal investment carrying value totaled $17,318 as of October 2, 2021, yielding a 10.03% fully diluted equity ownership. Net losses from CartiHeal for the three and nine months ended October 2, 2021 totaled $419 and $1,320, respectively, which are included in other expense within the consolidated condensed statement of operations and other comprehensive (loss) income. Net losses from CartiHeal for the three and nine months ended September 26, 2020 were nominal.

On July 15, 2020, the Company entered into an Option and Equity Purchase Agreement with CartiHeal (Option Agreement). In August 2021, CartiHeal achieved pivotal clinical trial success, as defined in the Option Agreement, for a CartiHeal product, which provides the Company with an exclusive option to acquire 100% of CartiHeal's shares (Call Option), and provides CartiHeal with a put option that would require the Company to purchase 100% of CartiHeal's shares under certain conditions (Put Option). In order to preserve the Company's Call Option, in accordance with the Option Agreement and upon approval of the BOD, the Company deposited $50,000 into escrow in August 2021 for the potential acquisition of CartiHeal, which is included in restricted cash on the consolidated balance sheet. Consideration for the acquisition of all of the remaining shares of CartiHeal, excluding those the Company owns, pursuant to the Call Option or Put Option would be $314,895, inclusive of the existing deposit, all of which would be payable at closing, with an additional $150,000 payable upon achievement of certain sales milestones related to Agili-C. Such closing would be subject to customary closing conditions.

The Call Option may be exercised at any time up to and within 45 days following notice of the U.S. Food and Drug Administration (FDA) approval for a CartiHeal product currently in development. In addition, upon the same FDA approval, CartiHeal may exercise the Put Option within 45 days, which requires the Company to complete the acquisition of the remaining equity in CartiHeal.

CartiHeal submitted the final clinical module of a Modular Premarket Approval Application (PMA) seeking FDA approval during the fourth quarter of 2021. In order to support the completion of the PMA, if needed, the Company will purchase an additional 338,089 of CartiHeal Series G Preferred Shares for $5,000.

Other

On August 23, 2021, the Company purchased 413,896,609 shares of Trice Medical, Inc.'s (Trice) Series D Preferred Stock for $10,000, representing an 11.7% ownership interest. Trice is a privately held company that develops and commercializes minimally invasive technologies for sports medicine and orthopedic surgical procedures and it does not have a readily determinable fair value. Under the measurement alternative, the Trice investment is recorded at cost, less any impairment, plus or minus any changes resulting from observable price changes in orderly transactions for an identical or similar investment of the same issuer.

4. Financial instruments

Long-term debt consists of the following:

	October 2, 2021	December 31, 2020
Term Loan due December 2024 (2.33% at October 2, 2021)	$ 178,750	$ 190,000
Less:		
Current portion of long-term debt	(15,000)	(15,000)
Unamortized debt issuance cost	(889)	(1,098)
Unamortized discount	(424)	(524)
	$ 162,437	$ 173,378

The 2019 Credit Agreement requires the Company to comply with financial and other covenants. The Company complied with all covenants as of October 2, 2021. The 2019 Credit Agreement contains a $50,000 revolving credit facility, from which there were no outstanding borrowings as of October 2, 2021 and December 31, 2020.

The estimated fair value of the Term Loan as of October 2, 2021 was $180,421. The fair value of these obligations was determined by using a discounted cash flow model based on current market interest rates available to the Company. These inputs are corroborated by observable market data for similar obligations and are classified as Level 2 instruments within the fair value hierarchy.

On August 29, 2021, the Company amended the 2019 Credit Agreement (the First Amendment). The First Amendment provided additional flexibility allowing for future establishment and incurrence of a senior secured term loan facility (Term Loan Facility) in the aggregate principal amount of up to $262,000 plus, at the Company's election, an amount sufficient to fund any original issue discount or upfront fees. The Term Loan Facility, if any, will be established pursuant to, and become effective upon the execution of a subsequent amendment, which will set forth the amount, terms and conditions of the Term Loan Facility. The proceeds of the Term Loan Facility, if any, would be available through a single draw on the closing date of the Misonix Merger and the Company would be required to use the proceeds to finance the cash consideration related to the Misonix Merger, to repay debt and related fees, premiums and expenses. After these uses, the remaining proceeds, if any, can be used for working capital needs and general corporate purposes. Concurrently with the Misonix Merger and the incurrence of the Term Loan Facility, if at all, the First Amendment requires a prepayment of $80,000 on the existing Term Loan under the 2019 Credit Agreement. Wells is providing committed financing through a Backstop Term Facility in the amount of $102,500 if additional capital is needed to fund the Misonix Merger. Please refer to *Note 13. Subsequent events* for further details concerning changes to the Company's financial instruments.

The Company enters into interest rate swap agreements to limit its exposure to changes in the variable interest rate on its long-term debt. The Company has one non-designated interest rate swap agreement and has no other active derivatives. The swap is carried at fair value on the balance sheet (Refer to *Note 5. Fair value measurements*) with changes in fair value recorded as interest income or expense within the consolidated statements of operations and comprehensive (loss) income. Nominal net interest was recorded during the three months ended October 2, 2021 and September 26, 2020 related to the change in fair value of the interest rate swap. Net interest income of $1,391 and expense of $1,980 was recorded related to the change in fair value of the interest rate swap for the nine months ended October 2, 2021 and September 26, 2020, respectively.

The notional amount of the swap totaled $100,000, or 55.9% of the Term Loan outstanding principal at October 2, 2021. The swap locked in the variable portion of the interest rate on the $100,000 notional at 0.64%.

5. Fair value measurements

Our process for determining fair value has not changed from that described in the Company's 2020 Annual Report on Form 10-K.

There were no assets measured at fair value on a recurring basis and there were no liabilities valued at fair value using Level 1 inputs. The following table provides information for liabilities measured at fair value on a recurring basis using Level 2 and Level 3 inputs:

	October 2, 2021			December 31, 2020		
	Total	Level 2	Level 3	Total	Level 2	Level 3
Interest rate swap	$ 211	$ 211	$ —	$ 1,602	$ 1,602	$ —
Contingent consideration	44,292	—	44,292	—	—	—
Management incentive plan and liability-classified awards	—	—	—	40,303	—	40,303
Equity Participation Right	—	—	—	6,101	—	6,101
Total liabilities	$ 44,503	$ 211	$ 44,292	$ 48,006	$ 1,602	$ 46,404

Interest rate swap

The Company values interest rate swaps using discounted cash flows. Forward curves and volatility levels are used to estimate future cash flows that are not certain. These are determined using observable market inputs when available and based on estimates when not available. The fair value of the swap was recorded in the Company's consolidated balance sheets within accrued liabilities. Changes in fair value are recognized as interest expense within the consolidated statements of operations and comprehensive (loss) income.

Contingent consideration

The Company initially values contingent consideration related to business combinations using a probability-weighted calculation of potential payment scenarios discounted at rates reflective of the risks associated with the expected future cash flows. Key assumptions used to estimate the fair value of contingent consideration include revenue and the probability of achieving the specific targets as discussed in *Note 3. Business combinations and investments*. After the initial valuation, the Company will use its best estimate to measure contingent consideration related to the Bioness Acquisition at each subsequent reporting period using the following unobservable Level 3 inputs:

	Valuation Technique	Unobservable inputs	Range
Bioness contingent consideration	Discounted cash flow	Payment discount rate	5.0% - 6.8%
		Payment period	2021 - 2025

The contingent consideration reported in the above table resulted from the March 30, 2021 Bioness acquisition, which is adjusted on a monthly basis based upon the passage of time or success or failure of achieving certain milestones. Refer to *Note 3. Business combinations and investments* for further details. Changes in contingent consideration related to the Bioness acquisition totaled $651 and $1,292 for the three and nine months ended October 2, 2021, respectively, which were recorded as the change in fair value of contingent consideration within the consolidated statements of operations and comprehensive (loss) income.

Management incentive plan (MIP) and liability-classified awards

BV LLC had operated two equity-based compensation plans, the management incentive plan (MIP) and the BV LLC Phantom Profits Interest Plan (Phantom Plan and, together with the MIP, the Plans), which were terminated on February 11, 2021 in connection with the Company's IPO. Awards granted under the MIP Plan and the 2015 Phantom Units were liability-classified and the 2012 Phantom Units were equity-classified. Prior to the IPO and during the nine months ended October 2, 2021, the Company settled the remaining 183,078 units with the sole MIP awardee for $10,802. No awards under the Plans were granted post-IPO and the Phantom Plan awards will be settled 12 months following the termination. Vested awardees whose BV LLC employment terminated prior to the IPO will have their awards settled for $10,875, which is included in accrued equity-based compensation on the consolidated condensed balance sheets. Awardees that were active BV LLC employees at the IPO will receive an aggregate of 798,422 shares of Class A common stock.

The following table provides a reconciliation of the beginning and ending balances for the MIP and liability-classified awards at fair value using significant unobservable inputs or Level 3:

Balance at December 31, 2020	$	40,303
Change in fair value		(25,185)
Initial estimate (vesting)		829
Payments		(11,281)
Phantom plan conversion to Class A common stock		(4,666)
Balance at October 2, 2021	$	—

Equity Participation Right (EPR) Unit

Prior to the IPO, the Continuing LLC owner owned the only EPR Unit and its only entitlement was 0.55% of available distributions arising from a distribution event such as the IPO. The EPR Unit was redeemed in exchange for $3,327 in connection with the IPO in February 2021, at which time the EPR ceased to exist and all entitlements ended. The revaluation for the EPR liability is recognized in interest (income) expense on the consolidated statements of operations and comprehensive (loss) income.

The following table provides a reconciliation of the beginning and ending balances for the EPR Unit at fair value using significant unobservable inputs Level 3:

Balance at December 31, 2020	$	6,101
Change in fair value		(2,774)
Payment		(3,327)
Balance at October 2, 2021	$	—

6. Equity-based compensation

Terminated plans

Prior to the IPO, BV LLC operated two equity-based compensation plans, the MIP and the Phantom Plan, which were terminated on February 11, 2021 in conjunction with the IPO. Prior to the Plans termination, during the nine months ended October 2, 2021, (i) the Company granted 90,000 Phantom Plan units; (ii) there were no MIP awards granted; (iii) 900 Phantom Plan units were forfeited and (iv) other Phantom Units were redeemed for $479. Compensation expense related to the Phantom Plan of $829 for the nine months ended October 2, 2021. This amount excludes the $25,185 decrease in fair market value of accrued equity-based compensation due to adjustments to reflect the difference between the expected pricing from the pending IPO and the actual offering price, of which $1,777 was recorded in research and development expense within the consolidated statement of operations and comprehensive (loss) income for the nine months ended October 2, 2021. Compensation expense of $1,390 and $2,468 was recorded for the three and nine months ended September 26, 2020, excluding a $6,000 fair market value increase and a $1,849 fair market value decrease, respectively, within accrued equity-based compensation due to the impact of COVID-19 on the market and economy.

2021 Plan

The Company operates an equity-based compensation plan (2021 Plan). The 2021 Plan is designed to grant incentive awards to eligible employees and other service providers in order to attract, motivate and retain the talent for which the Company competes. The 2021 Plan allows for the issuance of stock options (incentive and nonqualified), restricted stock, dividend equivalents, restricted stock units (RSUs), other stock-based awards, and cash awards. (collectively, Awards). Generally, non-cash Awards granted under the 2021 Plan are equity-classified. As of October 2, 2021, 7,592,476 shares of Class A common stock were authorized to be awarded and 1,919,555 shares were available for award. The number of shares available for issuance will be increased annually on January 1 of each calendar year beginning in 2022 through 2031, equal to the lesser of (i) 4.5% of the shares of our Class A common stock outstanding on the final day of the immediately preceding calendar year and (ii) a smaller number of shares as determined by the Company's BOD.

Equity-based compensation expense of $5,799 and $13,521 was recognized for the three and nine months ended October 2, 2021, respectively, for Awards granted under the 2021 Plan. The expense is primarily included in selling, general and administrative expense with a nominal amount in research and development expense on the consolidated statement of operations and comprehensive (loss) income based upon the classification of the employee. There was no income tax benefit related to this expense for the three and nine months ended October 2, 2021.

Restricted Stock Units

During the three and nine months ended October 2, 2021, the Company granted employees and non-employee directors time-based RSUs which vest at various dates through September 7, 2025. The compensation expense, which represents the fair value of the stock measured at the market price on the date of grant, is recognized over the vesting period, which is typically between 1 and 4 years.

No RSUs were vested or settled during the three and nine months ended October 2, 2021. Unamortized compensation expense related to the RSUs amounted to $10,500 at October 2, 2021, and is expected to be recognized over a weighted average period of approximately 0.72 years. A summary of the RSU award activity for the nine months ended October 2, 2021 is as follows (number of units in thousands):

	Number of units	Weighted-average grant-date fair value per unit
Outstanding at December 31, 2020	—	$ —
Granted	945	14.38
Outstanding at April 3, 2021	945	14.38
Granted	2	14.90
Forfeited/canceled	(4)	13.53
Outstanding at July 3, 2021	943	14.38
Granted	38	15.08
Forfeited/canceled	(4)	14.19
Outstanding at October 2, 2021	977	$ 14.41

Stock Options

During the three and nine months ended October 2, 2021, the Company granted employees time-based stock options which vest over 2 to 4 years following the date of grant and expire within 10 years. The fair value of time-based stock options is determined using the Black-Scholes valuation model, with such value recognized as expense over the service period, which is typically 2 to 4 years, net of actual forfeitures. A summary of the Company’s assumptions used in determining the fair value of the stock options granted during the nine months ended October 2, 2021 is shown in the following table.

Risk-free interest rate	0.59% - 1.19%
Expected dividend yield	— %
Expected stock price volatility	32.9% - 33.5%
Expected life of stock options	5.75- 6.25
Weighted-average fair value of stock options granted	$4.21 - 5.29

The expected term of the options granted is estimated using the simplified method. Expected volatility is based on the historical volatility of the Company’s peers common stock. The risk-free interest rate is determined based upon a constant U.S. Treasury security rate with a contractual life that approximates the expected term of the option.

No options vested or were exercisable during the nine months ended October 2, 2021. Unamortized compensation expense related to the options amounted to $16,161 at October 2, 2021, and is expected to be recognized over a weighted average period of approximately 1.20 years. A summary of stock option activity is as follows for the nine months ended October 2, 2021 (number of options in thousands):

	Number of options	Weighted-average exercise price	Weighted average remaining contractual term
Outstanding at December 31, 2020	—	$ —	
Granted	4,621	13.03	
Outstanding at April 3, 2021	4,621	13.03	
Granted	4	14.90	
Outstanding at July 3, 2021	4,625	13.03	
Granted	75	14.90	
Forfeited/canceled	(4)	13.00	
Outstanding at October 2, 2021	4,696	$ 13.06	3.1 years

The aggregate intrinsic value of options outstanding as of October 2, 2021 was $6,061 and is calculated as the difference between the exercise price of the underlying options and the market price of the Company’s common stock for options that had exercise prices lower than $14.33, the closing price of the Company’s stock on October 1, 2021.

Employee Stock Purchase Plan

In February 2021, in connection with the IPO, the Company began operating the 2021 Employee Stock Purchase Plan (ESPP). The ESPP provides for the issuance of shares of the Company’s common stock to eligible employees of the Company and its subsidiaries that elect to participate in the plan and purchase shares of common stock through payroll deductions (including executive officers).

During each enrollment period, eligible employees may designate between 1% and 15% of their compensation to be deducted for the purchase of common stock under the plan (or such other percentage in order to comply with regulations applicable to employees domiciled in or resident of a member state of the European Union). The purchase price of the shares under the ESPP is equal to 85% of the fair market value on the first day of the offering period or, if lower, on the last day of the offering period.

As of October 2, 2021, the aggregate number of shares reserved for issuance under the ESPP was 483,617. A total of 34,640 and 58,703 shares were issued and $139 and $214 of expense was recognized during the three and nine months ended October 2, 2021, respectively.

7. Earnings per share

The following table sets forth the computation of basic and diluted loss per share of Class A common stock for the period following the Transactions (amounts in thousands, except share and per share data):

	Three Months Ended October 2, 2021	February 16, 2021 through October 2, 2021
Numerator:		
Net loss	$ (2,269)	$ (14,498)
Net loss attributable to noncontrolling interests	1,198	8,260
Net loss attributable to Bioventus Inc. Class A common stockholders	$ (1,071)	$ (6,238)
Denominator:		
Weighted-average shares of Class A common stock outstanding - basic and diluted	41,837,581	41,816,706
Net loss per share of Class A common stock, basic and diluted	$ (0.03)	$ (0.15)

Shares of Class B common stock do not share in the losses of the Company and are therefore not participating securities. As such, separate presentation of basic and diluted losses per share of Class B common stock under the two-class method has not been presented.

The following number of weighted-average potentially dilutive shares as of October 2, 2021 were excluded from the calculation of diluted loss per share because the effect of including such potentially dilutive shares would have been antidilutive upon conversion:

	Three Months Ended October 2, 2021	Nine Months Ended October 2, 2021
LLC Interests held by Continuing LLC Owner[(a)]	15,786,737	15,786,737
Stock options	4,657,637	4,624,655
RSUs	961,429	838,818
Unvested shares of Class A common stock	26,946	30,530
Total	21,432,749	21,280,740

(a) Class A Shares reserved for future issuance upon redemption or exchange of LLC Interests by Continuing LLC Owner.

8. Restructuring costs

The Company completed a restructuring plan during the fourth quarter of 2020 and the remaining $247 accrued liabilities were paid during the nine months ended October 2, 2021.

In the third quarter of 2021, the Company adopted a restructuring plan for a business recently acquired to reduce headcount, reorganize management structure and consolidate certain facilities. The Company expects total charges related to this restructuring plan to be $2,900 and expects the plan will be completed in the first quarter of 2022. Total pre-tax charges of $1,798, for severance and other labor expenses were recorded in restructuring costs within the consolidated condensed statements of operations and comprehensive (loss) income for the three and nine months ended October 2, 2021. The Company's restructuring charges and payments for all plans comprised of the following:

	Employee severance and temporary labor costs	Other charges	Total
Balance at December 31, 2020	$ 166	$ 81	$ 247
Expenses incurred	1,798	—	1,798
Payments made	(852)	(81)	(933)
Balance at October 2, 2021	$ 1,112	$ —	$ 1,112

9. Income taxes

As a result of the Transactions, Bioventus Inc. became the sole managing member of BV LLC, which is treated as a partnership for U.S. federal and most applicable state and local income tax purposes. As a partnership, BV LLC is not subject to U.S. federal and certain state and local income taxes. Any taxable income or loss generated by BV LLC is passed through to and included in the taxable income or loss of its members, including the Company following the Transactions, on a pro rata basis. Bioventus Inc. is subject to U.S. federal income taxes, in addition to state and local income taxes with respect to its allocable share of any taxable income of BV LLC following the Transactions. The Company is also subject to taxes in foreign jurisdictions.

The tax provision for interim periods is determined using an estimate of the Company's annual effective tax rate, adjusted for discrete items, if any, that arise during the period. Each quarter, the Company updates its estimate of its annual effective tax rate, and if the estimated annual effective tax rate changes, the Company makes a cumulative adjustment in such period. The quarterly tax provision, and estimate of the Company's annual effective tax rate, are subject to variation due to several factors, including variability in pre-tax income (or loss), the mix of jurisdictions to which such income relates, changes in how the Company conducts business, and tax law developments.

For the three months ended October 2, 2021 and September 26, 2020 the Company's estimated effective tax rate was 28.0% and 4.5%, respectively. For the nine months ended October 2, 2021 and September 26, 2020 the Company's estimated effective tax rate was 6.2% and 2.4%, respectively. The increase was primarily driven by the change in structure resulting from the IPO and associated Up C structure as well as the impact of non-deductible stock option expense during 2021.

Upon finalizing the 2020 tax returns of the entities involved in the Merger, the Company recorded an increase in the estimated tax receivable of $7,437 with an offset to additional paid-in capital. The refunds were the result of certain distributions paid in accordance with the LLC agreement. The Company recorded deferred taxes with the offset to additional paid-in capital in connection with the Transaction. The deferred tax asset of $481 was due to tax credits and the deferred tax liability of $45,998 was for the difference between the book value and the tax basis of the Company's investment in BV LLC. The Company maintains a valuation allowance on certain deferred tax assets that has determined are not more-likely-than-not to be realizable. The Company assesses the need for an adjustment to this valuation allowance on a quarterly basis. The assessment is based on estimates of future sources of taxable income for the jurisdictions in which the Company operates and the periods over which deferred tax assets will be realizable. In the event the Company determines that it will be able to realize all or part of its net deferred tax assets in the future, all or part of the valuation allowance will be reversed in the period in which the Company makes such determination. The release of all or part of the valuation allowance against deferred tax assets may cause greater volatility in the effective tax rate in the periods in which it is reversed.

Tax Receivable Agreement

The Company expects to obtain an increase in the share of the tax basis of the assets of BV LLC when LLC Interests are redeemed or exchanged by the Continuing LLC Owner and other qualifying transactions. This increase in tax basis may have the effect of reducing the amounts that the Company would otherwise pay in the future to various tax authorities. The increase in tax basis may also decrease gains (or increase losses) on future dispositions of certain capital assets to the extent tax basis is allocated to those capital assets.

On February 16, 2021, the Company entered into a tax receivable agreement (TRA) with the Continuing LLC Owner that provides for the payment by the Company to the Continuing LLC Owner of 85% of the amount of tax benefits, if any, that the Company actually realizes as a result of (i) increases in the tax basis of assets of BV LLC resulting from any redemptions or exchanges of LLC Interests or any prior sales of interests in BV LLC and (ii) certain other tax benefits related to our making payments under the TRA.

The Company will maintain a full valuation allowance against deferred tax assets related to the tax attributes generated as a result of redemptions of LLC Interests or exchanges described above until it is determined that the benefits are more-likely-than-not to be realized. As of October 2, 2021, Continuing LLC Owner had not exchanged LLC Interests for shares of Class A common stock and therefore the Company had not recorded any liabilities under the TRA.

10. Commitments and contingencies

Leases

The Company leases its office facilities as well as other property, vehicles and equipment under operating leases. The Company also leases certain office equipment under nominal finance leases. The remaining lease terms range from 1 month to 7 years.

The components of lease cost were as follows:

	Three Months Ended		Nine Months Ended	
	October 2, 2021	**September 26, 2020**	**October 2, 2021**	**September 26, 2020**
Operating lease cost	$ 885	$ 651	$ 2,499	$ 1,943
Short-term lease cost[a]	153	81	482	285
Total lease cost	$ 1,038	$ 732	$ 2,981	$ 2,228

[a] Includes variable lease cost and sublease income, which are immaterial.

Supplemental cash flow information and non-cash activity related to operating leases were as follows:

	Nine Months Ended	
	October 2, 2021	**September 26, 2020**
Operating cash flows from operating leases	$ 2,598	$ 1,920

Supplemental balance sheet and other information related to operating leases were as follows:

	October 2, 2021	December 31, 2020
Operating lease assets	$ 16,938	$ 14,961
Operating lease liabilities- current	$ 2,956	$ 1,960
Operating lease liabilities- noncurrent	15,223	14,108
Total operating lease liabilities	$ 18,179	$ 16,068
Weighted average remaining lease term (years)	6.0	7.2
Weighted average discount rate	4.4 %	5.0 %

Product Recall

In December 2020, the Company voluntarily recalled our ultrasound gel, an accessory to one of the Restorative Therapies product. The Company has incurred $2,061 in total costs associated with this recall. Reserves of $126 and $1,684 were recorded within accrued liabilities on the consolidated balance sheets at October 2, 2021 and December 31, 2020, respectively.

Legal Contingencies

In the normal course of business, the Company periodically becomes involved in various claims and lawsuits, and governmental proceedings and investigations that are incidental to the business. The Company accrues a liability when a loss is considered probable and the amount can be reasonably estimated. When a material loss contingency is reasonably possible but not probable, the Company does not record a liability, but instead discloses the nature and the amount of the claim, and an estimate of the loss or range of loss, if such an estimate can be made. Legal fees are expensed as incurred. In the opinion of management, the outcome of any existing claims and legal or regulatory proceedings, other than the specific matters described below, if decided adversely, is not expected to have a material adverse effect on the Company's business, financial condition, results of operations, or cash flows.

With respect to governmental proceedings and investigations, like other companies in our industry, the Company is subject to extensive regulation by national, state and local governmental agencies in the U.S. and in other jurisdictions in which the Company operates. As a result, interaction with governmental agencies is ongoing. The Company’s standard practice is to cooperate with regulators and investigators in responding to inquiries.

On September 15, 2021, a purported stockholder of Misonix filed an action in the United States District Court for the Eastern District of New York, captioned Stein v. Misonix, Inc., et al., Case No. 2:21-cv-05127 (E.D.N.Y.) (the Stein Complaint). The Stein Complaint names Misonix and members of its board of directors as defendants. On September 16, 2021, a purported stockholder of Misonix filed an action in the United States District Court for the Southern District of New York, captioned Ciccotelli v. Misonix, Inc. et al., Case No. 1:21-cv-07773 (S.D.N.Y.) against Misonix, members of its board of directors, the Company, and its subsidiaries, Merger Sub I and Merger Sub II, as defendants. On October 12, 2021, another purported stockholder of Misonix filed an action in the United States District Court for the Eastern District of New York, captioned Rubin v. Misonix, Inc. et al., Case No. 1:21-cv-05672 (S.D.N.Y.) (the Rubin Complaint) and on October 15, 2021, another purported stockholder of Misonix filed an action in the United States District Court for the Southern District of New York, captioned Taylor v. Misonix, Inc. et al., Case No. 1:21-cv-08513 (S.D.N.Y.) (the Taylor Complaint). The Rubin Complaint and the Taylor Complaint name Misonix and members of its board of directors as defendants.

Each of the complaints asserts claims under Section 14(a) and Section 20(a) of the Exchange Act and SEC Rule 14a-9, challenging the adequacy of disclosures in the proxy statement/prospectus filed with the SEC on September 8, 2021 or the Definitive Proxy Statement filed with the SEC on September 24, 2021, regarding Misonix and/or Bioventus’ projections and J.P. Morgan’s financial analysis. The complaints seek, among other relief, (i) injunctive relief preventing the parties from proceeding with the merger, (ii) rescission in the event that the merger is consummated, and (iii) an award of costs, including attorneys’ and experts’ fees.

The Company and/or Misonix stockholders may file additional lawsuits challenging the merger, which may name the Company, Misonix, members of the Board of Directors for the Company or Misonix and/or others as defendants. No assurance can be made as to the outcome of such lawsuits or the complaint, including the amount of costs associated with defending, or any other liabilities that may be incurred in connection with the litigation of, such claims.

Prior to the closing of our acquisition of Bioness, Bioness had been named as a defendant in a lawsuit, for which we are indemnified under the indemnification provisions contained in the Bioness Merger Agreement. The case relates to an action brought in February 2021 in the Delaware State Court of Chancery by a former minority shareholder and director of Bioness, seeking a temporary restraining order contesting our acquisition of Bioness. While the complaint to block the Bioness acquisition was dismissed by the court, a separate action was brought against the Company under the indemnification provisions of the Bioness Certificate of Incorporation to recover attorney fees and other expenses totaling approximately $2,000 incurred by the director and shareholder in connection with the dismissed case.

On August 19, 2021, the court issued a ruling granting, in part, plaintiff's motion for summary judgment, awarding plaintiff attorney's fees and related expenses incurred in connection with performance of the plaintiff's directorial duties, and denying fees and expenses incurred in a non-director capacity. In its ruling, the Court's order also directed the parties to agree upon a process that will govern the payment of and challenges to plaintiff's payment requests and required Bioness to pay 50% of the demanded amount into escrow if more than 50% of the total invoiced amount was in dispute. Pursuant to the court's order, to date, Bioness has paid approximately $1,000 into escrow and continues to meet and confer with the plaintiff to resolve all matters relating to this proceeding.

The Company is presently unable to predict the duration, scope, or result of the foregoing proceedings. As such, the Company is presently unable to develop a reasonable estimate of a possible loss or range of losses, if any, related to these matters. While the Company intends to defend these matters vigorously, the outcome of such litigation or any other litigation is necessarily uncertain.

Other matters

On August 23, 2019, the Company was assigned a third-party license on a product currently in development and the Company is subject to a 3% royalty on certain commercial sales, or a nominal minimum amount per quarter, beginning in 2023.

On May 29, 2019, the Company and the Musculoskeletal Transplant Foundation, Inc. d/b/a MTF Biologics (MTF), entered into a collaboration and development agreement to develop one or more products for orthopedic application to be commercialized by the Company and supplied by MTF (the Development Agreement). The first phase has been completed. Additional fees for the subsequent phases will be determined as the development work progresses. The Development Agreement continues until the date when the parties execute a supply agreement for the commercial products.

On December 9, 2016, the Company entered into an amended and restated license agreement for the exclusive U.S. distribution and commercialization rights of a single injection osteoarthritis (OA) product with the supplier of the Company's single injection OA product for the non-U.S. market. The agreement requires the Company to meet annual minimum purchase requirements and pay royalties on net sales. Royalties related to this agreement totaled $3,677 and $3,069 during the three months ended October 2, 2021 and September 26, 2020, respectively, and $9,602 and $7,038 during the nine months ended October 2, 2021 and September 26, 2020, respectively. These royalties are included in cost of sales on the consolidated statement of operations and comprehensive (loss) income.

As part of a supply agreement entered on February 9, 2016 for the Company's three injection OA product, the Company is subject to annual minimum purchase requirements for 10 years. After the initial 10 years, the agreement will automatically renew for an additional 5 years unless terminated by the Company or the seller in accordance with the agreement.

As part of a supply agreement for the Company's five injection OA product, that was amended and restated on December 22, 2020, the Company is subject to annual minimum purchase requirements for 8 years.

The Company has an exclusive license agreement for bioactive bone graft putty. The Company is required to pay a royalty on all commercial sales revenue from the licensed products with a minimum annual royalty payment through 2023, the date the agreement will expire, upon the expiration of the patent held by the licensor. These royalties are included in cost of sales on the consolidated statement of operations and comprehensive (loss) income.

From time to time, the Company causes letters of credit (LOCs) to be issued to provide credit support for guarantees, contractual commitments and insurance policies. The fair values of the LOCs reflect the amount of the underlying obligation and are subject to fees payable to the issuers, competitively determined in the marketplace. As of October 2, 2021 and December 31, 2020, the Company had one LOC outstanding for a nominal amount.

The Company currently maintains insurance for risks associated with the operation of its business, provision of professional services and ownership of property. These policies provide coverage for a variety of potential losses, including loss or damage to property, bodily injury, general commercial liability, professional errors and omissions and medical malpractice. The Company is self-insured for health insurance covering most of its employees located in the United States. The Company maintains stop-loss insurance on a "claims made" basis for expenses in excess of $200 per member per year.

11. Revenue recognition

Our policies for recognizing sales have not changed from those described in the Company's 2020 Annual Report on Form 10-K. The Company attributes net sales to external customers to the U.S. and to all foreign countries based on the legal entity from which the sale originated. The following table presents our net sales by segment disaggregated by geographic markets and major products (Vertical) as follows:

	Three Months Ended		Nine Months Ended	
	October 2, 2021	September 26, 2020	October 2, 2021	September 26, 2020
Primary geographic markets:				
U.S.	$ 99,162	$ 78,886	$ 272,382	$ 204,022
International	9,728	7,022	28,102	18,548
Total net sales	$ 108,890	$ 85,908	$ 300,484	$ 222,570
Vertical:				
Pain Treatments and Joint Preservation	$ 60,635	$ 48,781	$ 158,869	$ 118,932
Restorative Therapies	30,475	20,000	84,807	61,433
Bone Graft Substitutes	17,780	17,127	56,808	42,205
Total net sales	$ 108,890	$ 85,908	$ 300,484	$ 222,570

12. Segments

The Company's two reportable segments are U.S. and International. The Company's products are primarily sold to orthopedists, musculoskeletal and sports medicine physicians, podiatrists, neurosurgeons and orthopedic spine surgeons, as well as to their patients. The Company does not disclose segment information by asset as the Chief Operating Decision Maker does not review or use it to allocate resources or to assess the operating results and financial performance. Segment adjusted EBITDA is the segment profitability metric reported to the Company's Chief Operating Decision Maker for purposes of decisions about allocation of resources to, and assessing performance of, each reportable segment.

The following table presents segment adjusted EBITDA reconciled to (loss) income before income taxes:

	Three Months Ended		Nine Months Ended	
	October 2, 2021	September 26, 2020	October 2, 2021	September 26, 2020
Segment adjusted EBITDA				
U.S.	$ 19,782	$ 21,649	$ 46,929	$ 42,800
International	1,533	1,452	5,343	1,489
Depreciation and amortization	(8,522)	(7,276)	(23,185)	(21,789)
Interest expense	(1,347)	(1,880)	(152)	(7,095)
Equity compensation	(5,938)	(7,390)	10,621	(619)
Restructuring costs	(1,798)	—	(1,798)	—
COVID-19 benefits, net	—	3,057	—	4,158
Succession and transition charges	—	(771)	(344)	(5,345)
Foreign currency impact	(17)	98	47	58
Acquisition and integration costs	(1,575)	—	(6,604)	—
Inventory step-up costs	—	—	(2,106)	—
Equity loss in unconsolidated investments	(419)	—	(1,320)	—
Change in fair value of contingent consideration	(651)	—	(1,292)	—
Impairments related to variable interest entity	—	—	(7,043)	—
Other non-recurring costs	(4,199)	(601)	(6,858)	(884)
(Loss) income before income taxes	$ (3,151)	$ 8,338	$ 12,238	$ 12,773

13. Subsequent events

Financial Instruments

On October 25, 2021, the Company borrowed $20,000 on the Revolver.

On October 29, 2021, the Company amended the 2019 Credit Agreement (the Second Amendment) and prepaid $80,000 on the existing Term Loan under the 2019 Credit Agreement. Upon executing the Second Amendment and making the prepayment, the amended 2019 Credit Agreement is comprised of a $360,750 term loan (Amended Term Loan) and the $50,000 revolving facility. All obligations under the Second Amendment remain guaranteed by the Company and certain of the Company's wholly owned subsidiaries. Substantially all the assets of the Company collateralize the obligations under the Second Amendment.

During October 2021, the Company paid financing costs totaling $2,867 as a result of the Second Amendment of which $1,003 was capitalized on the consolidated condensed balance sheet as deferred financing costs. The remaining $1,864 and an additional $277 in deferred costs were recorded in selling, general and administrative expense and interest expense, respectively, comprising a total loss on debt retirement and modification of $2,141.

The Amended Term Loan and Revolver mature on October 29, 2026. As of October 29, 2021, $357,562 was outstanding on the Amended Term Loan, net of an original issue discount of $1,438 and deferred financing costs of $1,750. Scheduled quarterly principal payments are as follows with the final payment of $225,469 at Maturity:

	Quarterly payment
2022	$ 4,509
2023 and 2024	$ 6,764
2025 and 2026	$ 9,019

As of October 29, 2021, following the Second Amendment, the interest rate on the 1-month Eurodollar loan including the initial margin of 2.00% was 2.09%. Loan margin is adjusted after the quarterly financial statements are delivered to the lenders in accordance with the amended pricing grid below:

Leverage ratio	Eurodollar	BR
> 2.50 to 1.00	2.00 %	1.00 %
>1.50 to 1.00 and < 2.50 to 1.00	1.75 %	0.75 %
> 0.75 to 1.00 and < 1.50 to 1.00	1.50 %	0.50 %
< 0.75 to 1.00	1.25 %	0.25 %

The commitment fee rate increased to 0.30% through December 31, 2021 and is adjusted after the quarterly financial statements are delivered to lenders based on the amended pricing grid below:

Leverage ratio	Commitment fee rate
> 2.50 to 1.00	0.30 %
>1.50 to 1.00 and < 2.50 to 1.00	0.25 %
> 0.75 to 1.00 and < 1.50 to 1.00	0.20 %
< 0.75 to 1.00	0.15 %

Contractual maturities of long-term debt as of October 29, 2021, were as follows:

2022	$ 18,038
2023	27,056
2024	27,056
2025	36,075
2026 and thereafter	252,525
Deferred financing costs	(1,750)
Original issue discount	(1,438)
Total long-term debt	357,562
Less current portion	(13,528)
Total	$ 344,034

Misonix Merger

On October 29, 2021, the Misonix Merger closed after regulatory, Bioventus stockholder and Misonix stockholder approvals were obtained and customary closing conditions were met. The consideration for Misonix is comprised of the following:

	Common Shares	Price per Share	Amount
Cash			$ 182,988
Bioventus Class A shares	18,340,790	$ 14.97	274,562
Value of Misonix options settled in Bioventus options			22,624
Merger consideration			480,174
Other cash consideration			33,004
Total Misonix consideration			$ 513,178

The Company funded the cash portion of the acquisition, partial prepayment of the Company's existing debt obligations and extinguishment of Misonix's existing debt obligations through the issuance of new debt described above and cash on hand. The Company incurred $2,970 and $3,162 in acquisition costs during the three and nine months ended October 2, 2021, respectively, which are included in selling general and administrative expense within the consolidated condensed statement of operations and other comprehensive (loss) income. The disclosures required by ASC 805 have not been included for the acquisition as the transaction was recently consummated and the initial purchase accounting is incomplete.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of Bioventus Inc.'s (sometimes referred to as "we," "us," "our" or "Bioventus") financial condition and results of operations should be read in conjunction with the "Special Note Regarding Forward-Looking Statements" and our unaudited consolidated condensed financial statements and related notes thereto appearing elsewhere in this Form 10-Q, as well as our audited consolidated financial statements and related notes as disclosed in our Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on March 26, 2021 (2020 10-K).

Executive Summary

We are a global medical device company focused on developing and commercializing clinically differentiated, cost efficient and minimally invasive treatments that engage and enhance the body's natural healing process. We operate our business through two reportable segments, U.S. and International, and our portfolio of products is grouped into three verticals:

- Pain Treatments and Joint Preservation includes the legacy osteoarthritis (OA) joint pain treatment and joint preservation products, plus Peripheral Nerve Stimulation (PNS) products.
- Bone Graft Substitutes (BGS) is comprised of human tissue allograft and synthetic products used primarily in spine surgery; and
- Restorative Therapies includes the legacy minimally invasive fracture treatments, plus rehabilitation products.

The following table sets forth total net sales, net income and Adjusted EBITDA:

	Three Months Ended		Nine Months Ended	
	October 2, 2021	September 26, 2020	October 2, 2021	September 26, 2020
Net sales	$ 108,890	$ 85,908	$ 300,484	$ 222,570
Net (loss) income	$ (2,269)	$ 7,965	$ 11,479	$ 12,471
Adjusted EBITDA[(1)]	$ 21,315	$ 23,101	$ 52,272	$ 44,289

(1) See below under results of operations-Adjusted EBITDA for a reconciliation of net income to Adjusted EBITDA.

Recent Developments

Misonix Acquisition

On July 29, 2021, we entered into an Agreement and Plan of Merger (the Misonix Merger Agreement) with Misonix, Inc. (Misonix). On October 29, 2021, we merged with Misonix. in a cash-and-stock transaction (the Misonix Merger). Misonix manufactures minimally invasive surgical ultrasonic medical devices used for precise bone sculpting, removal of soft and hard tumors, and tissue debridement, primarily in the areas of neurosurgery, orthopedic surgery, plastic surgery, wound care and maxillo-facial surgery. Misonix also exclusively distributes skin allografts and wound care products used to support healing of wounds.

Pursuant to the Misonix Merger Agreement, at the closing of the Misonix Merger, we provided merger consideration totaling $513.2 million, including cash of $183.0 million and the issuance of 18,340,790 shares of our Class A common stock and the assumption or settlement of Misonix stock options having a value of $22.6 million. The remaining consideration is the net of Misonix cash and debt which we repaid in full. The acquisition includes the entire portfolio of Misonix products as well as its research and development pipeline. The cash consideration was funded through taking on additional debt, as described below, as well as the use of cash on hand.

Bioness Acquisition

On March 30, 2021, we completed the acquisition of Bioness, a global leader in neuromodulation and advanced rehabilitation medical devices through its innovative PNS therapy and premium advanced rehabilitation solutions.

The Bioness acquisition gives us access into two large and growing markets: PNS and the advanced rehabilitation market, and we estimate their medical devices address total global market opportunities approaching $8 billion per year. We believe both of these markets offer attractive growth opportunities driven by demographic trends and the need for safe, effective, treatment options for the many patients suffering from post-surgical pain, stroke, multiple sclerosis, traumatic brain injury, spinal cord injury and cerebral palsy.

Bioness advanced rehabilitation solutions have a broad portfolio of offerings, including proprietary electrical stimulation exoskeletal devices for both the upper and lower extremities, robotic gait and fall safety systems, and high-tech, interactive software learning and recovery assessment platforms.

These products play an essential role in helping patients regain mobility due to stroke, traumatic brain injury, multiple sclerosis and osteoarthritis, and are used by physical or occupational therapists in a clinical setting or by the patient at home, with the guidance of a clinician through telemedicine.

Bioness PNS Systems help patients suffering from pain after surgery on an extremity, which affects over 16 million patients each year globally, and addresses the growing need to reduce opioid usage.

Under the Merger Agreement pursuant to which we acquired Bioness (the Bioness Merger Agreement), we paid $48.9 million at the closing of the transaction and agreed to pay up to an additional $43.0 million of discounted contingent consideration related to the achievement of certain key milestones. The acquisition includes the entire portfolio of Bioness products as well as its research and development pipeline. The up-front consideration was funded exclusively through the use of cash on hand.

CartiHeal

On July 15, 2020, we entered into an Option and Equity Purchase Agreement (Option Agreement) with CartiHeal (2009) Ltd., a privately-held company headquartered in Israel and the developer of the proprietary Agili-C™ implant for the treatment of joint surface lesions in traumatic and osteoarthritic joint, and its shareholders. The agreement provides us with an exclusive option to acquire 100% of CartiHeal's shares under certain conditions, or the Call Option, and provides CartiHeal with a put option that would require us to purchase 100% of CartiHeal's shares under certain conditions, or the Put Option. The Put Option is only exercisable by CartiHeal upon pivotal clinical trial success, including achievement of certain secondary endpoints and FDA approval of the Agili-C device with a label consistent in all respects with pivotal clinical trial success. The pivotal clinical trial's objective is to demonstrate the superiority of the Agili-C implant over the surgical standard of care, including microfracture and debridement, for the treatment of cartilage or osteochondral defects, in both osteoarthritic knees and knees without degenerative changes.

On August 2, 2021, CartiHeal provided us a statistical report containing the results of the pivotal clinical trial. We have determined that the report is consistent with the terms of the agreement and all required endpoints have been achieved. As a result, in August 2021, upon approval of the Board of Directors, we deposited $50.0 million into escrow as a deposit towards the potential purchase price of CartiHeal. Consideration for the acquisition of all of the remaining shares of CartiHeal, excluding those we own, pursuant to the Call Option or Put Option would be $314.9 million, inclusive of the existing deposit, all of which would be payable at closing, with an additional $150.0 million payable upon achievement of certain sales milestones related to Agili-C. Such closing would be subject to customary closing conditions.

CartiHeal submitted the final clinical module of a Modular Premarket Approval Application (PMA) seeking FDA approval during the fourth quarter of 2021. In order to support the completion of the PMA, if needed, we will purchase an additional 338,089 of CartiHeal Series G Preferred Shares for $5.0 million.

BONES Trial

We submitted a supplemental PMA to the FDA in December 2020 seeking approval of an expanded indication for EXOGEN, specifically, for the adjunctive treatment of acute and delayed metatarsal fractures to reduce the risk of non-union. This PMA supplement was based on and supported by clinical data in metatarsal fractures from the ongoing B.O.N.E.S. study. In April 2021, we received a letter from the FDA identifying certain deficiencies in the PMA supplement that must be addressed before the FDA can complete its review of the PMA supplement. The deficiencies include concerns about the data and endpoints from the B.O.N.E.S. study, and requests for re-analyses of certain data and provision of other information to support the findings. We continue to evaluate the FDA's comments and are initiating discussions with them to address their concerns. We can give no assurance that we will be able to resolve the deficiencies identified by the FDA in a timely manner, or at all. Consequently, the FDA's decision on the PMA supplement may be delayed beyond the time originally anticipated. Moreover, if our responses do not satisfy the FDA's concerns, the FDA may not approve our PMA supplement seeking to expand the indications for use of EXOGEN as proposed.

Other

On August 23, 2021, we invested $10.0 million in Trice Medical, Inc. (Trice). Trice is a privately held company that develops and commercializes minimally invasive technologies for sports medicine and orthopedic surgical procedures. Trice combines their handheld arthroscope and portable ultrasound visualization technologies with its surgical devices to treat a range of sports medicine and orthopedic conditions, including tendinopathy, planter fasciitis and carpel tunnel, in order to improve patient recovery time, reduce pain, minimize scarring and move surgical procedures out of higher cost points of care. Trice's established and growing presence in sports medicine and orthopedics is directly aligned with our strategy of expanding our offerings.

Our investment resulted in exclusive sales and distribution rights to Trice's products outside of the U.S. and a seat on the Trice board of directors. It will also fund the ongoing growth of Trice and is expected to allow us both to further assess the merits of a potential combination. We also entered into a co-development arrangement to explore the integration of Trice technologies with our current and future PNS products in order to accelerate the adoption of both of our products.

COVID-19 pandemic impact

In 2020, the COVID-19 pandemic spread around the world, including the United States. New variants of the virus have emerged, some of which have shown to be more contagious. The COVID-19 pandemic has had widespread, rapidly evolving and unpredictable impacts on global society, economies, financial markets and business practices. Federal and state governments have implemented measures in an effort to prevent or minimize the spread of the virus, and ongoing effects of the pandemic, including social distancing, travel restrictions, border closures, limitations on public gatherings, mandatory closure or reduced capacity of businesses, work from home, supply chain logistical changes and other measures, which caused global business disruptions and significant volatility in U.S. and international debt and equity markets. Our business, results of operations and financial condition have been and may continue to be, materially impacted by fluctuations in patient visits and elective procedures and any future temporary cessations of elective procedures and could be further impacted by delays in payments from customers, supply chain interruptions, extended "shelter-in-place" orders or advisories, facility closures or other reasons related to the pandemic. Furthermore, the long-term impact of COVID-19 on our business will depend on many factors, including, but not limited to, the duration and severity of the pandemic, the spread of new variants of the virus, new and ongoing measures taken in response to the pandemic, the availability, adoption and effectiveness of vaccines and treatments, the impact on economic activity from the pandemic and actions taken in response and the resulting impact it has on our partners, patients and communities in which we operate, all of which continue to be uncertain. As of the date of this Quarterly Report on Form 10-Q, the extent to which COVID-19 could materially impact the Company's financial conditions, liquidity or results of operations is uncertain.

To the extent COVID-19 disruptions continue to adversely impact our business, results of operations and financial condition, it may also have the effect of heightening risks relating to our ability to successfully commercialize newly developed or acquired products or therapies, consolidation in the healthcare industry, intensified pricing pressure as a result of changes in the purchasing behavior of hospitals and maintenance of our numerous contractual relationships. For additional information on the risks we may face as a result of COVID-19, refer to *Part I, Item 1A. Risk Factors – Our business may continue to experience adverse impacts as a result of the COVID-19 pandemic* in our 2020 10-K.

Results of Operations

For a description of the components of our results of operations, refer to *Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations* in our 2020 10-K.

The following table sets forth components of our condensed consolidated statements of operations as a percentage of net sales for the periods presented:

	Three Months Ended		Nine Months Ended	
	October 2, 2021	September 26, 2020	October 2, 2021	September 26, 2020
Net sales	100.0 %	100.0 %	100.0 %	100.0 %
Cost of sales (including depreciation and amortization)	27.4 %	27.3 %	28.5 %	28.1 %
Gross profit	72.6 %	72.7 %	71.5 %	71.9 %
Selling, general and administrative expense	64.0 %	58.5 %	57.7 %	58.9 %
Research and development expense	5.7 %	4.2 %	4.0 %	3.7 %
Restructuring costs	1.7 %	— %	0.6 %	— %
Change in fair value of contingent consideration	0.6 %	— %	0.4 %	— %
Depreciation and amortization	1.7 %	1.9 %	1.9 %	2.4 %
Impairment of variable interest entity assets	— %	— %	1.9 %	— %
Operating (loss) income	(1.1)%	8.1 %	5.0 %	6.9 %

The following table presents a reconciliation of net (loss) income to Adjusted EBITDA for the periods presented:

	Three Months Ended		Nine Months Ended	
(in thousands)	**October 2, 2021**	**September 26, 2020**	**October 2, 2021**	**September 26, 2020**
Net (loss) income	**$ (2,269)**	**$ 7,965**	**$ 11,479**	**$ 12,471**
Depreciation and amortization[(a)]	8,522	7,276	23,185	21,789
Income tax expense	(882)	373	759	302
Interest expense	1,347	1,880	152	7,095
Equity compensation[(b)]	5,938	7,390	(10,621)	619
Restructuring costs[(c)]	1,798	—	1,798	—
COVID-19 benefits, net[(d)]	—	(3,057)	—	(4,158)
Succession and transition charges[(e)]	—	771	344	5,345
Foreign currency impact[(f)]	17	(98)	(47)	(58)
Acquisition and integration costs[(g)]	1,575	—	6,604	—
Inventory step-up costs[(h)]	—	—	2,106	—
Equity loss in unconsolidated investments[(i)]	419	—	1,320	—
Change in fair value of contingent consideration[(j)]	651	—	1,292	—
Impairments related to variable interest entity[(k)]	—	—	7,043	—
Other non-recurring costs[(l)]	4,199	601	6,858	884
Adjusted EBITDA	**$ 21,315**	**$ 23,101**	**$ 52,272**	**$ 44,289**

(a) Includes for the three months ended October 2, 2021 and September 26, 2020 and the nine months ended October 2, 2021 and September 26, 2020, respectively, depreciation and amortization of $6,637, $5,477, $17,491 and $16,076 in cost of sales and $1,878, $1,667, $5,655 and $5,305 presented in the consolidated statements of operations and comprehensive (loss) income with the balance in research and development.

(b) The three and nine months ended October 2, 2021 primarily includes equity-based compensation expense (income) resulting from awards granted under the Company's current equity based compensation plan (2021 Plan) and compensation costs. The nine months ended October 2, 2021 also includes the change in fair market value of accrued equity-based compensation related to the BV LLC Phantom Profits Interest Plan (Phantom Plan) due to expected pricing with our IPO. Equity compensation expenses for the three and nine months ended September 26, 2020 represents compensation from the Company's management incentive plan and Phantom Plan as well as the change in fair market value of accrued equity-based compensation related to the plans due to the impact of the COVID-19 pandemic on our business.

(c) Costs incurred as a result of adopting a restructuring plan for Bioness to reduce headcount, reorganize management structure and consolidate certain facilities.

(d) Represents income resulting from the CARES Act offset by additional cleaning and disinfecting expenses and contract termination fees for canceled events.

(e) Primarily represents costs related to the CEO transition.

(f) Foreign currency impact represents realized and unrealized gains and losses from fluctuations in foreign currency and is included within other expense (income) in the consolidated statements of operations and comprehensive (loss) income.

(g) Represents costs incurred to acquire and integrate Bioness.

(h) Amortization of the inventory step-up associated with the Bioness acquisition.

(i) Represents CartiHeal equity investment losses.

(j) Represents change in fair value of contingent consideration resulting from the Bioness Acquisition.

(k) Represents loss on impairment of Harbor's long-lived assets and the Company's investment in Harbor.

(l) Other non-recurring costs primarily includes charges associated with strategic transactions, such as potential acquisitions and public company preparation costs, primarily accounting and legal fees.

We present Adjusted EBITDA, a non-GAAP financial measure, because we believe it is a useful indicator of our operating performance. Our management uses Adjusted EBITDA principally as a measure of our operating performance and believes that Adjusted EBITDA is useful to our investors because it is frequently used by securities analysts, investors and other interested parties frequently use it in their evaluation of the operating performance of companies in industries similar to ours. Our management also uses Adjusted EBITDA for planning purposes, including the preparation of our annual operating budget and financial projections. We define Adjusted EBITDA as net (loss) income before depreciation and amortization, provision of income taxes and interest expense, adjusted for the impact of certain cash, non-cash and other items that we do not consider in our evaluation of ongoing operating performance. These items include equity compensation, change in fair value of contingent consideration, Bioness acquisition costs, succession and transition charges, loss on impairment of intangible assets, losses associated with debt refinancing, foreign currency impact and other non-recurring costs. Adjusted EBITDA by segment is comprised of net sales and costs directly attributable to a segment, as well as an allocation of corporate overhead costs. The allocation of corporate overhead costs is determined based on various methods but is primarily based on a ratio of net sales by segment to total consolidated net sales.

Net sales

	Three Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
U.S.	$ 99,162	$ 78,886	$ 20,276	25.7 %
International	9,728	7,022	2,706	38.5 %
Net Sales	$ 108,890	$ 85,908	$ 22,982	26.8 %

	Nine Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
U.S.	$ 272,382	$ 204,022	$ 68,360	33.5 %
International	28,102	18,548	9,554	51.5 %
Net Sales	$ 300,484	$ 222,570	$ 77,914	35.0 %

Three months ended October 2, 2021 compared to September 26, 2020

U.S.

Net sales increased $20.3 million, or 25.7%. The changes in net sales by vertical are as follows:

- Pain Treatments and Joint Preservation $ 11.2 million
- Restorative Therapies $ 8.4 million
- Bone Graft Substitutes $ 0.7 million

Revenue increased primarily due to volume growth as revenue in 2020 was negatively affected by the economic impact of the COVID-19 pandemic. The Bioness acquisition contributed $8.8 million in additional sales primarily within the Restorative Therapies vertical.

International

Net sales increased $2.7 million, or 38.5%, due to the Bioness acquisition contributing $2.0 million in additional sales and the negative impacts to revenue during 2020 as a result of the COVID-19 pandemic.

Nine months ended October 2, 2021 compared to September 26, 2020

U.S.

Net sales increased $68.4 million, or 33.5%. The changes in net sales by vertical are as follows:

- Pain Treatments and Joint Preservation $ 35.5 million
- Restorative Therapies $ 18.5 million
- Bone Graft Substitutes $ 14.4 million

Revenue increased primarily due to volume growth as revenue in 2020 was negatively affected by the economic impact of the COVID-19 pandemic. The Bioness acquisition contributed a total of $18.2 million in additional sales comprising of $15.6 million within the Restorative Therapies vertical and the remainder in Pain Treatments and Joint Preservation. These increases were partially offset with more treatments being sold under contracts with major insurers at lower prices.

International

Net sales increased $9.6 million, or 51.5%, primarily due to sales volume growth as revenue in 2020 was negatively affected by the economic impact of the COVID-19 pandemic. The Bioness acquisition contributed $4.5 million in additional sales, a majority of which was reported within our Restorative Therapies vertical.

Gross profit and gross margin

	Three Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
U.S.	$ 72,571	$ 57,640	$ 14,931	25.9 %
International	6,498	4,824	1,674	34.7 %
	$ 79,069	$ 62,464	$ 16,605	

	Nine Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
U.S.	$ 196,000	$ 147,654	$ 48,346	32.7 %
International	18,938	12,395	6,543	52.8 %
	$ 214,938	$ 160,049	$ 54,889	

Gross margin	Three Months Ended			Nine Months Ended		
	October 2, 2021	September 26, 2020	Change	October 2, 2021	September 26, 2020	Change
U.S.	73.2 %	73.1 %	0.1 %	72.0 %	72.4 %	(0.4 %)
International	66.8 %	68.7 %	(1.9 %)	67.4 %	66.8 %	0.6 %
Total	72.6 %	72.7 %	(0.1 %)	71.5 %	71.9 %	(0.4 %)

Three months ended October 2, 2021 compared to September 26, 2020

U.S.

Gross profit increased $14.9 million, or 25.9%, primarily due to the increase in net sales. Gross margin remained consistent with the prior year comparable period.

International

Gross profit increased $1.7 million, or 34.7%, primarily due to the increase in net sales. Gross margin decreased due to product mix.

Nine months ended October 2, 2021 compared to September 26, 2020

U.S.

Gross profit increased $48.3 million, or 32.7%, primarily due to the increase in net sales. Gross margin slightly decreased due to product mix.

International

Gross profit increased $6.5 million, or 52.8%, primarily due to the increase in net sales. Gross margin increased slightly due to product and geographical mix.

Selling, general and administrative expense

	Three Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Selling, general and administrative expense	$ 69,636	$ 50,295	$ 19,341	38.5 %

	Nine Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Selling, general and administrative expense	$ 173,372	$ 131,104	$ 42,268	32.2 %

Three months ended October 2, 2021 compared to September 26, 2020

Selling, general and administrative expenses increased $19.3 million, or 38.5%, primarily due: i) to the impact of the COVID-19 pandemic on our business in 2020 compared to normalized spending in 2021; ii) costs incurred as a result of being a public company in 2021 and iii) the Bioness Acquisition. The increases were primarily in the following areas:

• Compensation related expenses	$	9.5 million
• Equity compensation excluding change in fair value discussed below	$	4.2 million
• Legal and accounting expenses	$	3.7 million
• Travel related expenses	$	1.9 million
• Consulting expense	$	1.8 million
• Corporate and employee health insurance	$	1.6 million

These increases were partially offset by a change in fair value of our accrued equity-based compensation, resulting in less expense compared to the prior year of $5.7 million.

Nine months ended October 2, 2021 compared to September 26, 2020

Selling, general and administrative expenses increased $42.3 million, or 32.2%, primarily due: i) to the impact of the COVID-19 pandemic on our business in 2020 compared to normalized spending in 2021; ii) costs incurred as a result of being public company in 2021 and iii) the Bioness Acquisition. The increases were primarily in the following areas:

• Compensation related expenses	$	28.4 million
• Equity compensation excluding change in the fair value discussed below	$	10.8 million
• Consulting expense	$	7.2 million
• Legal and accounting expenses	$	7.0 million
• Corporate and employee health insurance	$	5.3 million
• Travel related expenses	$	2.4 million

These increases were partially offset by a higher change in fair value of our accrued equity-based compensation resulting in an increased net recovery of expense compared to the prior year of $21.3 million. The change in fair value for 2021 was due to adjustments to reflect the difference between the expected pricing from the pending IPO and the actual offering price. The change in fair value for 2020 was due to the impact of the COVID-19 pandemic on our business.

Research and development expenses

	Three Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Research and development expense	$ 6,153	$ 3,569	$ 2,584	72.4 %

	Nine Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Research and development expense	$ 11,936	$ 8,311	$ 3,625	43.6 %

Three months ended October 2, 2021 compared to September 26, 2020

Research and development expense increased by $2.6 million, or 72.4%, partially due to the Bioness acquisition and as well as our cost reduction efforts implemented during 2020 as a result of the COVID-19 pandemic. In addition, compensation related expenses increased $1.0 million.

Nine months ended October 2, 2021 compared to September 26, 2020

Research and development expense increased by $3.6 million, or 43.6%, partially due to the Bioness acquisition and as well as our cost reduction efforts implemented during 2020 as a result of the COVID-19 pandemic. In addition, compensation related expenses increased $2.0 million and equity compensation, excluding the change in fair value discussed below, increased $1.3 million. These increases were partially offset by a higher change in fair value of our accrued equity-based compensation resulting in an increased net recovery of expense totaling $2.0 million. The change in fair value during 2021 was due to adjustments to reflect the difference between the expected pricing from the pending IPO and the actual offering price. The change in fair value during 2020 was due to the impact of the COVID-19 pandemic on our business.

Restructuring costs

Restructuring costs of $1.8 million for the three and nine months ended October 2, 2021 were incurred as a result of initiating a restructuring plan for a recently acquired business to reduce headcount and to reorganize management structure.

Change in fair value of contingent consideration

The change in fair value of the Bioness contingent consideration of $0.7 million and $1.3 million during the three and nine months ended October 2, 2021, respectively, resulted from the change in present value of discounted cash flows due to the passage of time.

Depreciation and amortization

	Three Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Depreciation and amortization	$ 1,878	$ 1,667	$ 211	12.7 %

	Nine Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Depreciation and amortization	$ 5,655	$ 5,305	$ 350	6.6 %

Depreciation and amortization increased during three and nine months ended October 2, 2021 compared with the prior year comparable periods primarily due to the Bioness acquisition.

Impairment of variable interest entity assets

The Company terminated the Harbor Collaboration Agreement on June 8, 2021 which resulted in a $5.7 million impairment on Harbor's long-lived asset balances, of which $5.2 million was recorded in loss attributable to noncontrolling interest. Refer to *Note 3. Business combinations and investments* within the *Notes to the Unaudited Condensed Consolidated Financial statements of Part 1, Item 1. Financial Statements* of this Form 10-Q for further details concerning the impairment and deconsolidation of Harbor.

Other (income) expense

	Three Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Interest expense	$ 1,347	$ 1,880	$ (533)	(28.4 %)
Other expense (income)	$ 757	$ (3,285)	$ 4,042	(123.0 %)

	Nine Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Interest expense	$ 152	$ 7,095	$ (6,943)	(97.9)%
Other expense (income)	$ 2,821	$ (4,539)	$ 7,360	(162.2)%

NM = Not meaningful

Three months ended October 2, 2021 compared to September 26, 2020

Interest expense decreased $0.5 million primarily due to incurring $0.3 million of interest on our outstanding revolving credit facility balance in 2020 and $0.2 million less interest on our Term Loan due to lower outstanding principal during 2021.

Other expense (income) increased $4.0 million primarily due to receiving a $2.9 million Provider Relief Fund payment in 2020 under the Coronavirus Aid, Relief and Economic Security Act (CARES Act) and incurring $0.4 million in net losses related to our equity investment in CartiHeal during 2021.

Nine months ended October 2, 2021 compared to September 26, 2020

Interest expense decreased $6.9 million due to the following: i) the change in the fair value of our interest rate swap resulted in interest income of $1.4 million during 2021 compared to interest expense of $2.0 million in 2020; ii) the settlement of our equity participation right (EPR) liability during 2021 resulted in interest income of $2.8 million compared to EPR interest income of $0.8 million in 2020; iii) lower interest of $1.1 million on our Term Loan in 2021 as we have lower outstanding principal; and iv) we incurred $0.7 million in interest relating to our outstanding revolving credit facility balance in 2020.

Other expense (income) increased $7.4 million primarily due to i) a $4.1 million Provider Relief Fund payment under the CARES Act received in 2020; ii) an impairment of our Harbor investment of $1.4 million during 2021 and iii) $1.3 million in net losses related to our equity investment in CartiHeal during 2021.

Income tax expense

	Three Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Income tax expense (benefit)	$ (882)	$ 373	$ (1,255)	NM
Effective tax rate	28.0 %	4.5 %		23.5 %

	Nine Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Income tax expense (benefit)	$ 759	$ 302	$ 457	151.3 %
Effective tax rate	6.2 %	2.4 %		3.8 %

Income tax expense increased for the three and nine months ended October 2, 2021 and September 26, 2020 primarily due to the increase in our effective tax rate related to the change in structure resulting from our IPO and associated Up C partnership structure as well as the impact of non-deductible stock option expense during 2021.

Noncontrolling interest

	Three Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Continuing LLC Owner	$ 1,198	$ —	$ 1,198	NM
Harbor	—	492	(492)	(100.0 %)
Total	$ 1,198	$ 492	$ 706	

	Nine Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Continuing LLC Owner	$ 2,595	$ —	$ 2,595	NM
Harbor	5,665	1,164	4,501	NM
Total	$ 8,260	$ 1,164	$ 7,096	

Subsequent to the IPO and Transactions, we are the sole managing member of BV LLC in which we own 72.3%. We have a majority economic interest, the sole voting interest in, and control the management of BV LLC. As a result, we consolidate the financial results of BV LLC and report a non-controlling interest representing the 27.7% which is owned by the Continuing LLC Owner.

We stopped consolidating Harbor upon the termination of the Collaboration Agreement, as we ceased being the primary beneficiary because we no longer had the power to direct Harbor’s significant activities. Prior to the deconsolidation, our partial ownership and exclusive Collaboration Agreement with Harbor resulted in loss attributable to noncontrolling interest through June 8, 2021. The $4.5 million increase for the nine months ended October 2, 2021 and September 26, 2020 is primarily due to the $5.7 million impairment on Harbor’s long-lived asset balances.

Segment Adjusted EBITDA

Adjusted EBITDA for each of our reportable segments is as follows:

	Three Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
U.S.	$ 19,782	$ 21,649	$ (1,867)	(8.6 %)
International	$ 1,533	$ 1,452	$ 81	5.6 %

	Nine Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
U.S.	$ 46,929	$ 42,800	$ 4,129	9.6 %
International	$ 5,343	$ 1,489	$ 3,854	NM

Three months ended October 2, 2021 compared to September 26, 2020

U.S.

Adjusted EBITDA decreased $1.9 million or 8.6%, primarily due to an increase in expenses such as compensation related charges of $8.0 million as previously discussed, additional costs of being a public company and an increase in travel related expenses. The decrease was partially offset with a $14.9 million increase in gross profit resulting from higher sales.

International

Adjusted EBITDA increased $0.1 million primarily due to a $1.7 million increase in gross profit resulting from higher sales. This increase was partially offset by the increase in compensation related charges of $1.0 million previously discussed.

Nine months ended October 2, 2021 compared to September 26, 2020

U.S.

Adjusted EBITDA increased $4.1 million or 9.6% primarily due a $48.3 million increase in gross profit resulting from the increase in sales. This increase was partially offset by the increase in compensation related charges of $29.3 million previously discussed as well as higher public company costs.

International

Adjusted EBITDA increased $3.9 million primarily due to a $6.5 million increase in gross profit resulting from the increase in sales. This increase was partially offset by the increase in compensation related charges of $2.0 million previously discussed.

Liquidity and Capital Resources

Our principal liquidity needs have historically been for acquisitions, working capital, research and development, clinical trials, and capital expenditures. We expect these needs to continue as we develop and commercialize new products and further our expansion into international markets. We believe that our existing cash and cash equivalents, borrowing capacity under our revolving credit facility, cash flow from operations, and net proceeds from our IPO will be enough to meet our anticipated cash requirements for at least the next twelve months. We may require additional liquidity as we continue to execute our business strategy. Negative impacts to our liquidity would include a decline in sales of our products, including declines due to changes in our customers' ability to obtain third-party coverage and reimbursement for procedures that utilize our products, increased pricing pressures resulting from intensifying competition and cost increases, as well as general economic and industry factors. We anticipate that to the extent that we require additional liquidity, we will obtain funding through the incurrence of other indebtedness, additional equity financings or a combination of these potential sources of liquidity. In addition, we may raise additional funds to finance future cash needs through receivables or royalty financings or corporate collaboration and licensing arrangements. If we raise additional funds by issuing equity securities or convertible debt, our stockholders will experience dilution. Debt financing, if available, would result in increased fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, or making capital expenditures. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish valuable rights to our products, future revenue streams or product candidates, or to grant licenses on terms that may not be favorable to us. The covenants under our credit agreement limit our ability to obtain additional debt financing. We cannot be certain that additional funding will be available on acceptable terms, or at all. Any failure to raise capital in the future could have a negative impact on our financial condition and our ability to pursue our business strategies.

Misonix Acquisition

For information regarding our recently announced acquisition of Misonix, see above under *Recent Developments.*

Initial Public Offering

On February 16, 2021, in connection with our IPO, we issued and sold 9,200,000 shares of our Class A common stock at a price to the public of $13.00 per share, resulting in gross proceeds to us of approximately $119.6 million, before deducting the underwriting discount, commissions and estimated offering expenses payable by us.

We are a holding company and have no material assets other than our ownership of LLC Interests and no independent means of generating revenue. The limited liability company agreement of BV LLC provides for the payment of certain distributions to the Continuing LLC Owner and us in amounts sufficient to cover the income taxes imposed on such members with respect to the allocation of taxable income from BV LLC as well as to cover our obligations under the Tax Receivable Agreement (the TRA). Additionally, in the event we declare any cash dividend, we intend to cause BV LLC to make distributions to us, in an amount sufficient to cover such cash dividends declared by us. Deterioration in the financial condition, earnings, or cash flow of BV LLC and its subsidiaries for any reason could limit or impair their ability to pay such distributions. In addition, the terms of our financing arrangements, including the 2019 Credit Agreement, contain covenants that may restrict BV LLC and its subsidiaries from paying such distributions, subject to certain exceptions. Further, BV LLC is generally prohibited under Delaware law from making a distribution to a member to the extent that, at the time of the distribution, after giving effect to the distribution, liabilities of BV LLC (with certain exceptions), as applicable, exceed the fair value of its assets. Subsidiaries of BV LLC are generally subject to similar legal limitations on their ability to make distributions to BV LLC. If we do not have sufficient funds to pay taxes or other liabilities or to fund our operations, we may have to borrow funds, which could materially adversely affect our liquidity and financial condition and subject us to various restrictions imposed by any such lenders. To the extent that we are unable to make payments under the TRA for any reason, such payments generally will be deferred and will accrue interest until paid; provided, however, that nonpayment for a specified period may constitute a material breach of a material obligation under the TRA and therefore accelerate payments due under the TRA.

In addition, under the TRA, we are required to make cash payments to the Continuing LLC Owner equal to 85% of the tax benefits, if any, that we actually realize (or in certain circumstances are deemed to realize), as a result of (1) increases in the tax basis of assets of BV LLC resulting from (a) any future redemptions or exchanges of LLC Interests, and (b) certain distributions (or deemed distributions) by BV LLC and (2) certain other tax benefits arising from payments under the TRA. We expect the amount of the cash payments required to be made under the TRA will be significant. The actual amount and timing of any payments under the TRA will vary depending upon a number of factors, including the timing of redemptions or exchanges by the Continuing LLC Owner, the amount of gain recognized by the Continuing LLC Owner, the amount and timing of the taxable income we generate in the future, and the federal tax rates then applicable. Any payments made by us to the Continuing LLC Owner under the TRA will generally reduce the amount of overall cash flow that might have otherwise been available to us.

Cash, cash equivalents and restricted cash as of October 2, 2021 totaled $130.9 million, compared to $86.8 million as of December 31, 2020. The increase in cash was primarily due to the following:

	Nine Months Ended		Change	
(in thousands, except for percentage)	October 2, 2021	September 26, 2020	$	%
Net cash from operating activities - continuing operations	$ 9,874	$ 46,752	$ (36,878)	(78.9 %)
Net cash from investing activities - continuing operations	(62,482)	(18,961)	(43,521)	NM
Net cash from financing activities	97,063	(19,691)	116,754	NM
Net cash from discontinued operations	—	(228)	228	(100.0 %)
Effect of exchange rate changes on cash	(377)	86	(463)	NM
Net change in cash, cash equivalents and restricted cash	$ 44,078	$ 7,958	$ 36,120	NM

NM = Not Meaningful

Operating Activities

Net cash from operating activities from continuing operations decreased $36.9 million, primarily due to the following:

- Compensation and annual incentive plan payments increased $19.9 million during 2021;
- Completed and potential acquisition expenses increased in 2021 as well as other nonrecurring costs of $13.6 million;
- Tax payments increased $7.2 million during 2021;
- Higher inventory purchases during 2021 of $4.9 million;

- Larger directors and officers annual insurance premiums in 2021 for $4.6 million;
- Larger net settlements in 2021 with the sole MIP awardee of $4.3 million;
- Receipt of $4.1 million from the CARES Act during 2020;
- Settlement of our EPR liability for $3.3 million occurred in 2021;
- Increase in travel expenditures of $0.7 million; and
- Fluctuations in working capital.

The above uses of cash were partially offset by:

- An increase of $35.2 million in net collections during 2021, primarily due to the economic impact of COVID-19 during 2020.

Investing Activities

Cash flows used in investing activities from continuing operations increased $43.5 million, primarily due to the $46.8 million acquisition of Bioness as well as $2.2 million in capital expenditures. These increases were partially offset by a $5.5 million decrease in investments.

Financing Activities

Cash flows provided by financing activities increased $116.8 million, primarily due to the $107.8 million in net proceeds from the issuance of Class A common stock sold during our IPO and a $14.5 million decrease in net partner distributions. These increases were partially offset by a $6.3 million increase in debt payments due to the timing of our quarter ends and the scheduled escalation in quarterly principal payments.

Credit Facilities

As of October 2, 2021, there were no material changes to our outstanding indebtedness or the terms of and available borrowing capacity under our credit facilities as disclosed in our 2020 10-K and we were in compliance with all required financial covenants. Material changes after October 2, 2021 are described below.

On August 29, 2021, we amended the 2019 Credit Agreement (the First Amendment). The First Amendment provided additional flexibility allowing for the future establishment and incurrence of a senior secured term loan facility (Term Loan Facility) in the aggregate principal amount of up to $262.0 million plus, at the Company’s election, an amount sufficient to fund any original issue discount or upfront fees.

On October 29, 2021, we amended the 2019 Credit Agreement (the Second Amendment) and prepaid $80.0 million on the existing term loan under the 2019 Credit Agreement. Upon executing the Second Amendment and making the prepayment, the amended 2019 Credit Agreement (2021 Credit Agreement) is comprised of a $360.8 million term loan (2021 Term Loan) and the $50.0 million revolving facility. All obligations under the 2021 Credit Agreement remain guaranteed by us and some of our wholly owned subsidiaries. Substantially all of our assets collateralize the obligations under the 2021 Credit Agreement. As required, we used the proceeds to finance the cash consideration related to the Misonix Merger and to repay debt and related fees, premiums and expenses. On October 25, 2021, as a precautionary measure and in order to increase our cash position and preserve financial flexibility we borrowed $20.0 million on our revolving credit facility to use for working capital needs and general corporate purposes as needed.

As of October 29, 2021 there was $360.8 million of outstanding borrowings under the 2021 Term Loan. The amended term loan and revolving credit facility mature on October 29, 2026 and there were no material changes to the various restrictive covenants. For additional information regarding the terms of the 2021 Credit Agreement, including amended interest rates, refer to *Note 4. Financial instruments* and *Note 13. Subsequent events* to the *Notes to the Unaudited condensed consolidated financial statements* of *Part 1, Item 1. Financial Statements* of this Form 10-Q.

Other

For information regarding Commitments and Contingencies, refer to *Note 10. Commitments and contingencies* and *Note 3. Business combinations and investments* to the *Notes to the Unaudited condensed consolidated financial statements of Part 1, Item 1. Financial Statements* of this Form 10-Q.

Off-balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Contractual Obligations

Contractual lease commitments increased $0.2 million, $0.8 million, $0.8 million, $0.8 million and $0.6 million for the years ended December 31, 2021, 2022, 2023, 2024 and 2025, respectively, compared to our lease commitments disclosed in our 2020 10-K due to a newly contracted lease and the acquisition of Bioness. As of October 2, 2021, the Misonix acquisition was still pending as described above under “Recent Developments - Misonix Acquisition” and “Credit Facilities.” Other than the foregoing, as of October 2, 2021, there have been no material changes to our contractual obligations as disclosed in our 2020 10-K.

Critical Accounting Estimates

Our discussion of operating results is based upon the unaudited condensed consolidated financial statements and accompanying notes. The preparation of these statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the reporting period. Our critical accounting estimates are detailed in Item 7 of our 2020 10-K, except for the following:

Contingent Consideration

The Company initially values contingent consideration related to business combinations using a probability-weighted calculation of potential payment scenarios discounted at rates reflective of the risks associated with the expected future cash flows. Key assumptions used to estimate the fair value of contingent consideration include revenue and the probability of achieving the specific targets. After the initial valuation, the Company will use its best estimate to measure contingent consideration at each subsequent reporting period. Gains and losses are recorded with selling, general and administrative expenses within the consolidated statements of operations and comprehensive (loss) income.

Recently Issued Accounting Pronouncements

Refer to *Note 1. Organization*, in the *Notes to the Unaudited condensed consolidated financial statements of Part 1, Item 1. Financial Statements* of this Form 10-Q for detailed information regarding the status of recently issued accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

There have been no material changes to our market risks as disclosed in our 2020 10-K.

Item 4. Controls and Procedures

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of October 2, 2021.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarterly period covered by this report 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

Prior to the closing of our acquisition of Bioness, Bioness had been named as a defendant in a lawsuit, for which we are indemnified under the indemnification provisions contained in the Bioness Merger Agreement. The case relates to an action brought in February 2021 in the Delaware State Court of Chancery by a former minority shareholder and director of Bioness, seeking a temporary restraining order contesting our acquisition of Bioness. While the complaint to block the Bioness acquisition was dismissed by the court, a separate action was brought against the Company under the indemnification provisions of the Bioness Certificate of Incorporation to recover $2.0 million in attorney fees and other expenses incurred by the director and shareholder in connection with the dismissed case.

On August 19, 2021, the court issued a ruling granting, in part, plaintiff's motion for summary judgment, awarding plaintiff attorney's fees and related expenses incurred in connection with performance of the plaintiff's directorial duties, and denying fees and expenses incurred in a non-director capacity. In its ruling, the Court's order also directed the parties to agree upon a process that will govern the payment of and challenges to plaintiff's payment requests and required Bioness to pay 50% of the demanded amount into escrow if more than 50% of the total invoiced amount was in dispute. Pursuant to the court's order, to date, Bioness has paid approximately $1.0 million into escrow and continues to meet and confer with the plaintiff to resolve all matters relating to this proceeding.

On September 15, 2021, a purported stockholder of Misonix filed an action in the United States District Court for the Eastern District of New York, captioned Stein v. Misonix, Inc., et al., Case No. 2:21-cv-05127 (E.D.N.Y.) (the Stein Complaint). The Stein Complaint names Misonix and members of its board of directors as defendants. On September 16, 2021, a purported stockholder of Misonix filed an action in the United States District Court for the Southern District of New York, captioned Ciccotelli v. Misonix, Inc. et al., Case No. 1:21-cv-07773 (S.D.N.Y.) against Misonix, members of its board of directors, the Company, and its subsidiaries, Merger Sub I and Merger Sub II, as defendants. On October 12, 2021, another purported stockholder of Misonix filed an action in the United States District Court for the Eastern District of New York, captioned Rubin v. Misonix, Inc. et al., Case No. 1:21-cv-05672 (S.D.N.Y.) (the Rubin Complaint) and on October 15, 2021, another purported stockholder of Misonix filed an action in the United States District Court for the Southern District of New York, captioned Taylor v. Misonix, Inc. et al., Case No. 1:21-cv-08513 (S.D.N.Y.) (the Taylor Complaint). The Rubin Complaint and the Taylor Complaint name Misonix and members of its board of directors as defendants.

Each of the complaints asserts claims under Section 14(a) and Section 20(a) of the Exchange Act and SEC Rule 14a-9, challenging the adequacy of disclosures in the proxy statement/prospectus filed with the SEC on September 8, 2021 or the Definitive Proxy Statement filed with the SEC on September 24, 2021, regarding Misonix and/or Bioventus' projections and J.P. Morgan's financial analysis. The complaints seek, among other relief, (i) injunctive relief preventing the parties from proceeding with the merger, (ii) rescission in the event that the merger is consummated, and (iii) an award of costs, including attorneys' and experts' fees.

The Company and/or Misonix stockholders may file additional lawsuits challenging the merger, which may name the Company, Misonix, members of the Board of Directors for the Company or Misonix and/or others as defendants. No assurance can be made as to the outcome of such lawsuits or the complaint, including the amount of costs associated with defending, or any other liabilities that may be incurred in connection with the litigation of, such claims.

The Company could be forced to expend significant resources in the defense of these lawsuits or future ones, and it may not prevail. As such, these matters could have a material adverse effect on the Company's business, annual, or interim results of operations, cash flows, or its financial condition.

Item 1A. Risk Factors

In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the risk factors and other cautionary statements described under the heading *Risk Factors* included in our 2020 10-K, which could materially affect our businesses, financial condition, or future results. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition, or future results. The below update to our Risk Factors as those presented in our 2020 10-K results from the potential acquisition of Misonix.

Risks Related to the Acquisition of Misonix

We are subject to various risks related to the acquisition of Misonix.

On October 29, 2021, we completed our acquisition of Misonix. The risks, contingencies and other uncertainties that could have a material adverse effect on our business, financial condition or results of operations as a result of the acquisition, and the anticipated benefits of the acquisition include:

- the effect of the announcement of the acquisition on our ability to retain and hire key personnel, maintain business relationships, and on operating results and the businesses generally;
- the diversion of our management's attention from our core business as we work to take all steps necessary to integrate Misonix's business into ours; and
- the inability to achieve the anticipated synergies and our incurrence of significant transaction related costs in connection with the acquisition.

Our future results will suffer if we do not effectively manage the expanded operations or successfully integrate the businesses of Misonix.

Our future success will depend, in part, upon our ability to manage the expanded business, including challenges related to the management and monitoring of new operations and associated increased costs and complexity associated with the acquisition of Misonix and other acquisitions. If we are not able to successfully complete integrations in an efficient and effective manner, the anticipated benefits of these acquisitions may not be realized fully, or at all, or may take longer to realize than expected, and the value of our common stock may be affected adversely. An inability to realize the full extent of the anticipated benefits of the proposed acquisitions, as well as any delays encountered in the integration processes, could have an adverse effect upon on our business, financial condition or results of operations. In addition, the actual integrations may result in additional and unforeseen expenses, including increased legal, accounting and compliance costs.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Recent Sales of Unregistered Securities

There were no sales of unregistered securities during the three months ended October 2, 2021.

Use of Proceeds

On February 10, 2021, our Registration Statement on Form S-1 (File No. 333-252238) was declared effective by the SEC for our IPO pursuant to which we registered and sold an aggregate of 9,200,000 shares of our Class A common stock (including 1,200,000 shares sold pursuant to the underwriters' over-allotment option) at a price of $13.00 per share. Morgan Stanley & Co. LLC, J.P. Morgan Securities LLC and Goldman Sachs & Co. LLC acted as joint book-running managers in the offering. Canaccord Genuity Securities LLC acted as lead manager in the offering. The offering commenced on February 11, 2021 and did not terminate before all of the securities registered in the registration statement were sold. The offering closed on February 16, 2021, resulting in net proceeds of $111.2 million after deducting underwriters' discounts and commissions of $8.4 million. No payments were made by us to directors, officers, general partners or persons owning 10% or more of our common stock or to their associates, or to our affiliates.

We used the net proceeds to us from the IPO to purchase 9,200,000 newly-issued LLC Interests from BV LLC at a purchase price per interest equal to the IPO price per share of Class A common stock. As sole managing member of BV LLC, we caused BV LLC to use the proceeds it received as follows: (i) to pay fees and expenses of approximately $3.8 million in connection with the IPO and the Transactions (ii) to satisfy the $3.3 million cash entitlement of the Continuing LLC Owner in respect of the EPR Unit held by the Continuing LLC Owner, (iii) to pursue future potential acquisition opportunities and (iv) for general corporate purposes. The remaining proceeds have been applied to fund recent acquisitions and investments, consistent with the use of proceeds as described in our final prospectus filed on February 12, 2021.

Item 3. Defaults Upon Senior Securities

Not Applicable

Item 4. Mine Safety Disclosures

Not Applicable

Item 5. Other Information

Not Applicable

Item 6. Exhibits

Exhibit No.	Description	Form	File No.	Exhibit	Filing Date	Filed / Furnished Herewithin
2.1	Agreement and Plan of Merger by and among: Bioventus Inc., a Delaware corporation; Oyster Merger Sub I, Inc., A Delaware corporation; Oyster Merger Sub II LLC, a Delaware limited liability company; and Misonix, Inc. a Delaware corporation, dated as of July 29, 2021	8-K	001-37844	2.1	7/29/2021	
3.1	Amended and Restated Certificate of Incorporation of Bioventus Inc.	8-K	001-37844	3.1	2/17/2021	
3.2	Amended and Restated Bylaws of Bioventus Inc.	8-K	001-37844	3.2	2/17/2021	
4.1	Specimen Stock Certificate evidencing the shares of Class A common stock	S-1	333-252238	4.1	1/20/2021	
10.1	Amendment No. 1 to Credit and Guaranty Agreement, dated as of August 29, 2021, by and among Bioventus LLC, certain Guarantor Subsidiaries party thereto, Wells Fargo Bank, National Association, as administrative agent and the lenders and other financial institutions party thereto.					*
10.2	Amendment No. 2 to Credit and Guaranty Agreement, dated as of October 29, 2021, by and among Bioventus LLC, Oyster Merger Sub II, LLC, Misonix, Inc., certain Guarantor Subsidiaries party thereto, Wells Fargo Bank, National Association, as administrative agent and the lenders and other financial institutions party thereto.	8-K	001-37844	10.1	2/17/2021	
31.1	Certification of Chief Executive Officer pursuant to Rules 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended.					*
31.2	Certification of Chief Financial Officer pursuant to Rules 13a-14(a)/15d-14(a) under the Securities Exchange Act of 1934, as amended.					*
32	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					**
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document					***
101.SCH	Inline XBRL Taxonomy Extension Schema Document					***
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					***
101.DEF	Inline XBRL Extension Definition Linkbase Document					***

Exhibit No.	Description	Form	File No.	Exhibit	Filing Date	Filed / Furnished Herewithin
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					***
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					***
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					***

* Filed herewith
** Furnished herewith
*** Submitted electronically herewith

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 duly authorized.

BIOVENTUS INC.

November 10, 2021	/s/ Gregory O. Anglum
Date	Gregory O. Anglum Senior Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

AMENDMENT NO. 1 TO CREDIT AND GUARANTY AGREEMENT

THIS AMENDMENT NO. 1 TO CREDIT AND GUARANTY AGREEMENT, dated as of August 29, 2021 (this "Amendment"), made by and among BIOVENTUS LLC, a Delaware limited liability company ("Borrower"), the Guarantor Subsidiaries party hereto, the LENDERS party hereto (the "Consenting Lenders") and WELLS FARGO BANK, NATIONAL ASSOCIATION**,** as Administrative Agent (the "Administrative Agent"), amends that certain Credit and Guaranty Agreement, dated as of December 6, 2019 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and among the Borrower, the Guarantor Subsidiaries party thereto from time to time, each Lender party thereto from time to time, the Administrative Agent and the Collateral Agent.

WHEREAS, the Borrower, the Administrative Agent and the Consenting Lenders (which collectively constitute the Required Lenders) have agreed to amend the Credit Agreement in certain respects subject to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the premises and mutual agreements contained herein, the parties hereto agree as follows:

Section 1. Defined Terms. Capitalized terms used herein and not otherwise defined shall have the meanings ascribed thereto in the Credit Agreement.

Section 2. Amendments. Effective as of the Amendment No. 1 Effective Date (as defined below), the Credit Agreement is hereby amended as the follows (provided that, for the avoidance of doubt, the schedules and exhibits to the Credit Agreement shall remain in effect without any amendment or other modification thereto):

(a) Section 1.1 of the Credit Agreement is hereby amended by adding the following defined terms in the appropriate alphabetical order:

"**First Oyster Merger**" as defined in the definition of "Oyster Merger Agreement".

1 "**Oyster Borrower**" means (x) prior to the consummation of the First Oyster Merger, Oyster Merger Sub I, (y) from and after the consummation of the First Oyster Merger but prior to the consummation of the Second Oyster Merger, the Oyster Target and (z) from and after the consummation of the Second Oyster Merger, Oyster Merger Sub II.

2 "**Oyster Merger Agreement**" means that certain Agreement and Plan of Merger, dated as of July 29, 2021 (together with any exhibits and schedules thereto, as amended, supplemented, waived or otherwise modified from time to time), by and among Bioventus, Inc., a Delaware corporation, Oyster Merger Sub I, Oyster Merger Sub II, and Oyster Target, pursuant to which, first, Merger Sub I will merge with and into Oyster Target, with Oyster Target as the surviving corporation (the "**First Oyster Merger**"), and, second, Oyster Target, as the surviving corporation in the First Oyster Merger, will merge with and into Oyster Merger Sub II, with Oyster Merger Sub II as the surviving limited liability company (the "**Second Oyster Merger**" and, together with the First Oyster Merger, the "**Oyster Mergers**").

3 "**Oyster Merger Sub I**" means Oyster Merger Sub I, Inc., a Delaware corporation.

4 "**Oyster Merger Sub II**" means Oyster Merger Sub II, LLC, a Delaware limited liability company.

5 "**Oyster Mergers**" as defined in the definition of "Oyster Merger Agreement".

6 “**Oyster Reorganization**” means, following the consummation of the Oyster Mergers, the contribution by Bioventus, Inc. of all of the Capital Stock of Oyster Merger Sub II to the Borrower.

7 “**Oyster Target**” means Misonix, Inc., a Delaware corporation.

8 “**Oyster Term Facility**” as defined in Section 2.25(a).

9 “**Oyster Term Facility Amendment**” as defined in Section 2.25(e).

10 “**Oyster Term Facility Debt Assumption**” as defined in Section 2.25(a).

11 “**Oyster Term Loans**” as defined in Section 2.25(a).

“**Oyster Transactions**” means, collectively, the Oyster Mergers, the Oyster Reorganization, the Oyster Term Facility Debt Assumption and the funding of the Oyster Term Loans.

“**Second Oyster Merger**” as defined in the definition of “Oyster Merger Agreement”.

(b) The definition of “**Additional Lender**” in Section 1.1 of the Credit Agreement is hereby amended by (i) deleting the “or” immediately following the end of clause (a) thereof and substituting a “,” in lieu thereof, (ii) immediately following the end of clause (a) thereof adding a new clause (b) reading in its entirety as “(b) Oyster Term Loan in accordance with Section 2.25 or” and (iii) updating the existing clause (b) to be clause (c).

(c) The definition of “**Consolidated Adjusted EBITDA**” in Section 1.1 of the Credit Agreement is hereby amended by amending and restating clause (2) of the proviso therein to read as follows:

“(2) to the extent the Borrower decides to add back such non-cash charge or expense, the cash payment in respect thereof in such future period will be subtracted from Consolidated Adjusted EBITDA to such extent (in the case of this clause (2), other than in respect of payments in an aggregate amount not in excess of $12,300,000 made by the Borrower or any of its Restricted Subsidiaries to Anthony Bihl pursuant to any management equity plan or other management or employee benefit plan or arrangement)”

(d) The definition of “**Consolidated Adjusted EBITDA**” in Section 1.1 of the Credit Agreement is hereby amended by amending and restating the proviso immediately following the end of clause (c) thereof to read as follows:

“*provided* that the amounts included in Consolidated Adjusted EBITDA for any Test Period pursuant to subclauses (vii), (ix) (other than any payment in connection with the OIG Matter), (xvi), (xxi) (other than adjustments thereunder, in an aggregate amount not to exceed $20,000,000, pertaining to the Oyster Mergers or the Oyster Reorganization), (xxii) and (viii) (solely with respect to cash expenses incurred by discontinued operations at the time of close and on an ongoing basis) of clause (b) above will not in the aggregate exceed 25% of Consolidated Adjusted EBITDA for such Test Period (prior to giving effect to amounts added-back pursuant to such subclauses); provided further that any determination of whether any item is extraordinary, unusual or non-recurring shall be made by the Borrower in its reasonable judgment in consultation with the Administrative Agent.”

(e) The definition of “**Permitted Acquisition**” in Section 1.1 of the Credit Agreement is hereby amended by adding a new sentence at the end of such definition reading in its entirety as follows:

"Notwithstanding anything in this definition to the contrary, the Oyster Mergers shall be deemed to be a Permitted Acquisition."

(f) The definition of "**Term Loan**" in Section 1.1 of the Credit Agreement is hereby amended by adding the phrase "the Oyster Term Loans, if any," immediately prior to the phrase "the Incremental Term Loans".

(g) The definition of "**Term Loan Commitment**" in Section 1.1 of the Credit Agreement is hereby amended by adding the phrase "Oyster Term Loans, if any," immediately prior to the phrase "Refinancing Term Loans".

(h) Section 2.14 of the Credit Agreement is hereby amended by adding a new clause (e) thereof reading in its entirety as follows:

"(e) Oyster Closing Date Prepayment. On the date of, and subject to the occurrence of, the Oyster Mergers and the incurrence of the Oyster Term Facility, the Borrower will prepay, or cause to be prepaid, in accordance with Section 2.15(b), the Term Loans outstanding under this Agreement immediately prior to the incurrence of the Oyster Term Facility in an aggregate amount equal to $80,000,000."

(i) Section 2.15(b) of the Credit Agreement is hereby amended by deleting the phrase "pursuant to Sections 2.14(a) through 2.14(c)" and substituting in lieu thereof the phrase "pursuant to Sections 2.14(a), 2.14(b), 2.14(c) or 2.14(e)".

(i) Section 2.25 of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

"**2.25 Oyster Term Facility**.

(i) Notice; Borrower. At any time, on one occasion, the Oyster Borrower may, by notice to the Administrative Agent, incur a new tranche of term loans under this Agreement and the other Credit Documents (the "**Oyster Term Facility**" and the term loans made thereunder, the "**Oyster Term Loans**"). At any time on or after the date of incurrence of the Oyster Term Facility, the Borrower may (pursuant to documentation reasonably satisfactory to the Borrower, the Oyster Borrower and the Administrative Agent) assume all of the rights and obligations of the Oyster Borrower as the borrower in respect of the Oyster Term Loans, upon which the Oyster Borrower shall cease to constitute (and shall automatically and without further action by any other Person be released from all of its obligations as) the borrower in respect of the Oyster Term Loans (the foregoing, the "**Oyster Term Facility Debt Assumption**").

(ii) Ranking; Security; Guarantees. At any time prior to the Oyster Term Facility Debt Assumption, the Oyster Term Facility shall be permitted to be (i) guaranteed by any Subsidiary of the Oyster Borrower (which, for the avoidance of doubt, (x) may include Persons that are not guarantors in respect of the Initial Term Loans or the Initial Revolving Commitments and (y) may exclude Persons that are Excluded Subsidiaries (with such defined term being interpreted as referring to Subsidiaries of the Oyster Borrower rather than Subsidiaries of the Borrower)) and (ii) secured by a Lien on any assets of the Oyster Borrower and its Subsidiaries (which, for the avoidance of doubt, (x) may include assets that do not constitute Collateral in respect of the Initial Term Loans or the Initial Revolving Commitments and (y) may exclude Excluded Assets (with such defined term being interpreted as referring to such assets of the Oyster Borrower and its Subsidiaries rather than such assets of the Borrower and its Subsidiaries)). It is understood and agreed that prior to the Oyster Term Facility Debt Assumption, (w) the Credit Parties that are not the Oyster Borrower and its Subsidiaries shall not be required to provide guarantees in respect of the Oyster Term Facility, (x) the Oyster Borrower and its Subsidiaries shall not be required to provide guarantees in respect any Obligations other than those Obligations in respect of the Oyster Term Facility, (y) the assets of the Credit Parties that are not the Oyster Borrower and its Subsidiaries shall not be required to secure the Obligations in respect of the Oyster Term Facility and (z) the assets of the Oyster Borrower and its Subsidiaries shall not be required to secure any Obligations other than those Obligations in respect of the Oyster Term Facility. From and after the Oyster Term Facility Debt Assumption, the Oyster Term Facility will (i) rank *pari passu* in right of payment and security with the Initial Term Loans and the Initial Revolving Commitments (subject to Section 8.2) and (ii) be secured by the same Liens (with the same ranking in priority) that secure the Initial Revolving Commitments and the Initial Term Loans.

(iii) Size. The aggregate principal amount of the Oyster Term Facility on the date of incurrence thereof will not exceed an amount equal to the sum of $262,000,000 plus additional amounts necessary to fund certain fees (if any) in connection with the incurrence of the Oyster Term Facility.

(iv) Oyster Term Lenders. The Oyster Term Facility may be provided by any existing Lender (it being understood that no existing Lender will have an obligation to make all or any portion of any Oyster Term Loan except as otherwise set forth in a separate written agreement) or by any Additional Lender on terms permitted by this Section 2.25.

(v) Oyster Term Facility Amendment; Use of Proceeds. The Oyster Term Facility will become effective pursuant to an amendment (an "**Oyster Term Facility Amendment**") to this Agreement and, as appropriate, other Credit Documents, executed by the Borrower, the Oyster Borrower, each Person providing the Oyster Term Facility and the Administrative Agent (and without the consent of any other Lenders). An Oyster Term Facility Amendment may, without the consent of any other Lenders, effect such amendments to this Agreement and the other Credit Documents as may be necessary or appropriate, in the reasonable good faith opinion of the Administrative Agent, the Borrower and the Oyster Borrower, to effect the provisions of this Section 2.25, including, but not limited to, (i) modifications to Section 7, Section 8.2 and the Collateral Documents to implement (or otherwise account for) the guarantee and security arrangements in respect of the Oyster Term Facility during any period prior to the occurrence of the Oyster Term Facility Debt Assumption, (ii) modifications (including to Sections 4, 5, 6 and 8) to effect the terms of the Oyster Term Facility applicable to the Oyster Borrower and its Subsidiaries during any period prior to the occurrence of the Oyster Term Facility Debt Assumption and (iii) such other amendments to this Agreement and other Credit Documents that are necessary to give effect and/or permit the Oyster Transactions, as agreed by the Borrower, the Oyster Borrower, each Person providing the Oyster Term Facility and the Administrative Agent. Upon the effectiveness of an Oyster Term Facility Amendment, this Agreement and the other Credit Documents, as applicable, will be amended to the extent necessary to reflect the existence and terms of the Oyster Term Facility and the Oyster Term Loans evidenced thereby. The Oyster Borrower shall use the proceeds of the Oyster Term Loans, together with certain stock consideration and cash on hand, (i) to finance the Oyster Mergers, to repay certain Indebtedness and to pay related fees, premiums and expenses and (ii) after the usage specified in the foregoing clause (i), for working capital needs and general corporate purposes of the Oyster Borrower and its subsidiaries, including for Permitted Acquisitions.

(vi) Conditions. The availability of the Oyster Term Facility under this Agreement will be subject solely to the satisfaction of those conditions precedent as agreed between the Oyster Borrower and the Persons providing such Oyster Term Loans.

(vii) Terms. The Oyster Term Facility Amendment will set forth the amount and terms of the Oyster Term Facility. The terms of the Oyster Term Loans will be as agreed between the Oyster Borrower and the Persons providing such Oyster Term Loans; provided that the Oyster Term Facility may participate on a *pro rata* basis or a less than *pro rata* basis (but not greater than a *pro rata* basis) in any voluntary or mandatory repayments or prepayments of the Initial Term Loans (other than pursuant to a refinancing or with respect to greater than *pro rata* payments to an earlier maturing tranche).

(viii) Pricing. The interest rate, fees, and original issue discount for any Oyster Term Loans will be as determined by the Oyster Borrower and the Persons providing such Oyster Term Loans; *provided* that, for the avoidance of doubt, the MFN Adjustment will not apply to the Oyster Term Loans."

(j) Section 3.2(a) of the Credit Agreement is hereby amended by adding the phrase "and excluding any Oyster Term Loans," immediately prior to the phrase "the obligations of each Lender to make any Loan".

(k) Section 6.1(a) of the Credit Agreement is hereby amended by adding the phrase "the Oyster Term Facility," immediately prior to the phrase "all obligations arising under any Secured Rate Contract".

(l) Section 6.2(a) of the Credit Agreement is hereby amended by adding the phrase "the Oyster Term Facility" immediately prior to the phrase "and all obligations arising under any Secured Rate Contract".

(m) Section 6.6 of the Credit Agreement is hereby amended by (i) deleting the "and" immediately following clause (z) thereof, (ii) deleting the "." immediately following clause (aa) thereof and substituting in lieu thereof "; and" and (iii) adding a new clause (bb) reading in its entirety as follows:

"(bb) Investments made pursuant to, or in connection with, each of the Oyster Mergers, the Oyster Reorganization and the Oyster Term Facility Debt Assumption."

(n) Section 6.7(a)(i) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

"(i) Total Net Leverage Ratio. Commencing with the Test Period ending March 31, 2020, the Borrower will not permit the Total Net Leverage Ratio at the end of any Test Period (measured on a Pro Forma Basis) to exceed 3.50:1.00; *provided* that the Borrower may, upon written notice to the Administrative Agent, elect to increase such ratio level to 4.00:1.00 in connection with the consummation of any Material Permitted Acquisition and, if the Borrower shall have made the foregoing election, such increase shall continue to be in effect for the quarter-end test date in which such Material Permitted Acquisition occurs as well as for the next three Test Periods; provided that there shall be at least two full Fiscal Quarters following the cessation of each such increase during which no such increase shall then be in effect; provided further that such increase shall be available in connection with the Oyster Mergers, irrespective of whether there have been two full Fiscal Quarters following the cessation of a prior increase."

(o) Section 6.8 of the Credit Agreement is hereby amended by (i) deleting the "and" immediately following clause (i) thereof, (ii) deleting the "." immediately following clause (j) thereof and substituting in lieu thereof "; and" and (iii) adding a new clause (k) reading in its entirety as follows:

"(k) any transaction in connection with each of the Oyster Mergers, the Oyster Reorganization and the Oyster Term Facility Debt Assumption."

(p) Section 6.9 of the Credit Agreement is hereby amended by (i) deleting the "and" immediately following clause (k) thereof, (ii) deleting the "." immediately following clause (l) thereof and substituting in lieu thereof "; and" and (iii) adding a new clause (m) reading in its entirety as follows:

> "(m) any transaction in connection with the Oyster Mergers, the Oyster Reorganization and the Oyster Term Facility Debt Assumption."

Section 3. Representations and Warranties. In order to induce the Consenting Lenders and the Administrative Agent to enter into this Amendment, each Credit Party hereby represents and warrants to each of the Consenting Lenders and the Administrative Agent that, as of the Amendment No. 1 Effective Date, (i) it has the organizational power and authority to execute, deliver and carry out the terms of this Amendment, (ii) it has taken all necessary organizational action to authorize the execution, delivery and performance of the Amendment, (iii) it has duly executed and delivered the Amendment, (iv) no Default or Event of Default has occurred and is continuing before or after giving effect to this Amendment and (v) the representations and warranties contained in Section 4 of the Credit Agreement and in the other Credit Documents are true and correct in all material respects (except for those representations and warranties that are conditioned by materiality, which will be true and correct in all respects) on and as of the Amendment No. 1 Effective Date to the same extent as though made on and as of that date, except to the extent such representations and warranties specifically relate to an earlier date, in which case such representations and warranties will have been true and correct in all material respects (except for those representations and warranties that are conditioned by materiality, which will have been true and correct in all respects) on and as of such earlier date.

Section 4. Conditions to Effectiveness of Amendment. This Amendment shall become effective on the date (such date, if any, the "Amendment No. 1 Effective Date") on which the Administrative Agent shall have received duly executed counterparts of this Amendment from the Borrower, the Guarantor Subsidiaries and the Lenders constituting the Required Lenders.

Section 5. Acknowledgement of the Guarantor Subsidiaries. Each Guarantor Subsidiary hereby consents, acknowledges and agrees to the amendments to the Credit Agreement set forth in Section 2 and hereby confirms and ratifies in all respects the Guaranty and each Collateral Document to which such Guarantor Subsidiary is a party (including without limitation the continuation of such Guarantor Subsidiary's payment and performance obligations thereunder and the Liens granted thereunder upon and after the effectiveness of this Amendment) and the enforceability of such Guaranty and each such Collateral Document against such Guarantor Subsidiary in accordance with their respective terms.

Section 6. Effects on Loan Documents; Acknowledgement. Except as expressly modified hereby, the Credit Agreement shall continue in effect in accordance with its terms. Except as expressly set forth herein, this Amendment (i) shall not by implication or otherwise limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Lenders, the Administrative Agent, the Collateral Agent or the Credit Parties under the Credit Agreement or any other Loan Document, and (ii) shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement or any other provision of the Credit Agreement or any other Loan Document. Each and every term, condition, obligation, covenant and agreement contained in the Credit Agreement or any other Loan Document is hereby ratified and re-affirmed in all respects and shall continue in full force and effect as modified by this Amendment and nothing herein can or may be construed as a novation thereof. It is understood and agreed that (i) each reference in the Credit Agreement to "this Agreement", "hereunder", "hereof" or words of like import referring to the Credit Agreement, shall hereafter be deemed to be a reference to the Credit Agreement as amended and supplemented hereby, (ii) each reference in each Loan Document to the "Credit Agreement", "thereunder", "thereof" or words of like import referring to the Credit Agreement, shall hereafter be deemed to be a reference to the Credit Agreement as amended and supplemented hereby and (iii) this Amendment is a Loan Document.

Section 7. Amendment, Modification and Waiver. This Agreement may not be amended, modified or waived except by an instrument or instruments in writing signed and delivered on behalf of each of the parties hereto.

Section 8. Severability. Any provision of this Amendment held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

Section 9. Counterparts. This Amendment may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page of this Amendment by telecopier or any other electronic transmission (PDF or TIFF format) shall be effective as delivery of a manually executed counterpart of this Amendment. The words “execution,” “signed,” “signature,” and words of like import in this Commitment Letter shall be deemed to include electronic signatures or electronic records, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

Section 10. Governing Law. **THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK**.

Section 11. Headings. The headings of this Amendment are for purposes of reference only and shall not limit or otherwise affect the meaning hereof.

Section 12. Successors and Assigns. This Amendment shall be binding upon and inure to the benefit of the Borrower, the Administrative Agent and each of the Guarantor Subsidiaries and Lenders, and their respective successors, legal representatives, and assignees to the extent such assignees are permitted assignees as provided in Section 10.6 of the Credit Agreement.

[*Remainder of page intentionally left blank.*]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed and delivered by their respective duly authorized officers as of the date first above written.

BIOVENTUS LLC,
as Borrower

By: /s/ Greg Anglum
Name: Greg Anglum
Title: Chief Financial Officer

EXOGEN, INC.,
as Guarantor Subsidiary

By: /s/ Greg Anglum
Name: Greg Anglum
Title: Chief Financial Officer

PERSEUS INTERMEDIATE, INC.,
as Guarantor Subsidiary

By: /s/ Anthony D'Adamio
Name: Anthony D'Adamio
Title: Vice President

BIONESS INC.,
as Guarantor Subsidiary

By: /s/ Greg Anglum
Name: Greg Anglum
Title: Chief Financial Officer

WELLS FARGO BANK, NATIONAL ASSOCIATION,
as Administrative Agent and a Lender

By: /s/ Matthew Beltman
Name: Matthew Beltman
Title: Vice President

JPMorgan Chase Bank, N.A.,
as a Lender

By: /s/ Tyler Dean
Name: Tyler Dean
Title: Authorized Officer

[*Signature Page to Amendment No. 1*]

TRUIST BANK,
as a Lender

By: /s/ James W. Ford
Name: James W. Ford
Title: Managing Director

[*Signature Page to Amendment No. 1*]

TD BANK, NA,
as a Lender

By: /s/ Nate Barrett
Name: Nate Barrett
Title: Vice President

[*Signature Page to Amendment No. 1*]

First National Bank of Pennsylvania,
as a Lender

By: /s/ W. Walter Ricks
Name: W. Walter Ricks
Title: Senior Vice President

[*Signature Page to Amendment No. 1*]

Exhibit 31.1

CERTIFICATIONS

I, Kenneth M. Reali, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Bioventus 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)) 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) [Omitted];

(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.

/s/ Kenneth M. Reali

Name:	Kenneth M. Reali
Title:	Chief Executive Officer and Director (Principal Executive Officer)

Date: November 10, 2021

Exhibit 31.2

CERTIFICATIONS

I, Gregory O. Anglum, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Bioventus 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)) 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) [Omitted];

(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.

	/s/ Gregory O. Anglum
Name:	Gregory O. Anglum
Title:	Senior Vice President and Chief Financial Officer (Principal Financial Officer)

Date: November 10, 2021

Exhibit 32

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

Pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, in connection with the Quarterly Report on Form 10-Q of Bioventus Inc. (the Company) for the quarter ended October 2, 2021, as filed with the Securities and Exchange Commission on the date hereof (the Report), each of Kenneth M. Reali, Chief Executive Officer and Director of the Company and Gregory O. Anglum, Senior Vice President and Chief Financial Officer of the Company, hereby certifies, that, to such officer's 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.

/s/ Kenneth M. Reali

Name: Kenneth M. Reali
Title: Chief Executive Officer and Director (Principal Executive Officer)

/s/ Gregory O. Anglum

Name: Gregory O. Anglum
Title: Senior Vice President and Chief Financial Officer (Principal Financial Officer)

Date: November 10, 2021