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 April 30, 2020
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 001-09974

ENZO BIOCHEM, INC.

(Exact name of registrant as specified in its charter)

New York	13-2866202
(State or Other Jurisdiction of Incorporation or Organization)	(IRS. Employer Identification No.)
527 Madison Ave, New York, New York	10022
(Address of Principal Executive office)	(Zip Code)

212-583-0100
(Registrant's telephone number, including area code)

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 has 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 45 of Regulation S-T (§232.405 of that chapter) during the preceding 12 months (or such shorter period that the registrant was required to submit and post such files).

Yes ☒ No ☐

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common stock $0.01 par	ENZ	New York Stock Exchange

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 (as defined in Rule 12b-2 of the Exchange Act).

Large accelerated filer ☐
Non-accelerated filer ☐
Emerging growth company ☐

Accelerated filer ☒
Smaller reporting 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.

Yes ☐ No ☐

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 June 1, 2020, the Registrant had 47,890,883 shares of common stock outstanding.

ENZO BIOCHEM, INC.
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Part 1 Financial Information

Item 1 Financial Statements

ENZO BIOCHEM, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	April 30, 2020 (unaudited)	July 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 54,407	$ 60,146
Accounts receivable, net	6,817	10,738
Inventories	8,018	7,842
Prepaid expenses and other	3,058	2,727
Total current assets	72,300	81,453
Property, plant and equipment, net	13,295	14,254
Right-of-use assets	20,812	—
Goodwill	7,452	7,452
Intangible assets, net	588	1,032
Other assets, including restricted cash of $750	1,901	2,449
Total assets	$ 116,348	$ 106,640
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable – trade	$ 8,523	$ 7,256
Accrued liabilities	11,714	8,362
Other current liabilities	7,151	391
Finance leases short term	225	—
Current portion of operating lease liabilities	4,257	—
Total current liabilities	31,870	16,009
Long term debt – net	4,509	4,179
Operating lease liabilities, non-current	17,416	—
Other liabilities and finance leases long term	223	424
Total liabilities	54,018	20,612
Commitments and contingencies		
Stockholders' equity:		
Preferred Stock, $.01 par value; authorized 25,000,000 shares; no shares issued or outstanding	—	—
Common Stock, $.01 par value; authorized 75,000,000 shares; shares issued and outstanding: 47,890,883 at April 30, 2020 and 47,556,807 at July 31, 2019	479	476
Additional paid-in capital	334,268	332,704
Accumulated deficit	(274,927)	(249,732)
Accumulated other comprehensive income	2,510	2,580
Total stockholders' equity	62,330	86,028
Total liabilities and stockholders' equity	$ 116,348	$ 106,640

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

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)
(in thousands, except per share data)

	Three Months Ended April 30,		Nine Months Ended April 30,	
	2020	**2019**	**2020**	**2019**
Revenues	$ 16,903	$ 19,662	$ 56,494	$ 60,249
Operating costs and expenses:				
Cost of revenues	12,478	14,360	40,574	43,347
Research and development	1,163	781	3,282	2,342
Selling, general and administrative	11,061	10,920	32,893	33,387
Legal and related expense	1,925	257	5,681	2,700
Legal settlements, net.	—	(28,925)	—	(28,925)
Total operating costs, expenses and legal settlements, net	26,627	(2,607)	82,430	52,851
Operating (loss) income	(9,724)	22,269	(25,936)	7,398
Other income (expense):				
Interest, net	87	258	495	759
Other	135	70	334	249
Foreign exchange loss	(358)	(332)	(88)	(530)
(Loss) income before income taxes	(9,860)	22,265	(25,195)	7,876
Net (loss) income	$ (9,860)	$ 22,265	$ (25,195)	$ 7,876
Net loss (income) per common share:				
Basic	$ (0.21)	$ 0.47	$ (0.53)	$ 0.17
Diluted	$ (0.21)	$ 0.47	$ (0.53)	0.17
Weighted average common shares outstanding:				
Basic	47,780	47,452	47,668	47,259
Diluted	47,780	47,555	47,668	47,364

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

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(UNAUDITED)
(in thousands)

	Three Months Ended April 30,		Nine Months Ended April 30,	
	2020	**2019**	**2020**	**2019**
Net (loss) income	$ (9,860)	$ 22,265	$ (25,195)	$ 7,876
Other comprehensive gain (loss):				
Foreign currency translation adjustments	284	206	(70)	278
Comprehensive (loss) income	$ (9,576)	$ 22,471	$ (25,265)	$ 8,154

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

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Three Months Ended April 30, 2020 and 2019
(UNAUDITED)
(in thousands, except share data)

	Common Stock Shares Issued	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
Balance at January 31, 2020	47,557,618	$ 476	$ 333,225	$ (265,067)	$ 2,226	$ 70,860
Net loss for the period ended April 30, 2020	—	—	—	(9,860)	—	(9,860)
Share-based compensation charges	—	—	209	—	—	209
Issuance of common stock for employee 401(k) plan match	*333,265*	3	834			837
Foreign currency translation adjustments	—	—	—	—	284	284
Balance at April 30, 2020	*47,890,883*	$ 479	$ 334,268	$ (274,927)	$ 2,510	$ 62,330

	Common Stock Shares Issued	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
Balance at January 31, 2019	47,241,335	$ 472	$ 331,463	$ (266,610)	$ 2,172	$ 67,497
Net income for the period ended April 30, 2019	—	—	—	22,265	—	22,265
Exercise of stock options	—	1	72	—	—	73
Net issuance of common stock for options exercise by Directors	—	—	(73)	—	—	(73)
Share-based compensation charges	—	—	199	—	—	199
Issuance of common stock for employee 401(k) plan match	*315,472*	3	829			832
Foreign currency translation adjustments	—	—	—	—	206	206
Balance at April 30, 2019	*47,556,807*	$ 476	$ 332,490	$ (244,345)	$ 2,378	$ 90,999

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

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Nine Months Ended April 30, 2020 and 2019
(UNAUDITED)
(in thousands, except share data)

	Common Stock Shares Issued	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
Balance at July 31, 2019	*47,556,807*	$ 476	$ 332,704	$ (249,732)	$ 2,580	$ 86,028
Net loss for the period ended April 30, 2020	—	—	—	(25,195)	—	(25,195)
Share-based compensation charges	—	—	728	—	—	728
Vesting of restricted stock	*811*	—	—	—	—	—
Issuance of common stock for employee 401(k) plan match	*333,265*	3	836	—	—	839
Foreign currency translation adjustments	—	—	—	—	(70)	(70)
Balance at April 30, 2020	*47,890,883*	$ 479	$ 334,268	$ (274,927)	$ 2,510	$ 62,330

	Common Stock Shares Issued	Common Stock Amount	Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income	Total Stockholders' Equity
Balance at July 31, 2018	*47,182,254*	$ 472	$ 330,770	$ (252,221)	$ 2,100	$ 81,121
Net income for the period ended April 30, 2019	—	—	—	7,876	—	7,876
Vesting of restricted stock	*986*	—	—	—	—	—
Exercise of stock options	*34,719*	1	166	—	—	167
Share-based compensation charges	—	—	725	—	—	725
Issuance of common stock for options exercised by Directors	*23,376*	—	—	—	—	—
Issuance of common stock for employee 401(k) match	*315,472*	3	829	—	—	832
Foreign currency translation adjustments	—	—	—	—	278	278
Balance at April 30, 2019	*47,556,807*	$ 476	$ 332,490	$ (244,345)	$ 2,378	$ 90,999

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

ENZO BIOCHEM, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(UNAUDITED)
(in thousands)

	Nine Months Ended April 30,	
	2020	**2019**
Cash flows from operating activities:		
Net (loss) income	$ (25,195)	$ 7,876
Adjustments to reconcile net (loss) income to net cash provided by (used in) operating activities:		
Depreciation and amortization of property, plant and equipment	1,700	1,631
Amortization of intangible assets	451	741
Share-based compensation charges	728	725
Accrual for share-based 401(k) employer match expense	631	461
Foreign exchange loss	8	650
Changes in operating assets and liabilities:		
Accounts receivable	3,942	1,605
Inventories	(147)	(456)
Prepaid expenses and other assets	223	(36)
Accounts payable – trade	1,211	(3,363)
Accrued liabilities, other current liabilities and other liabilities	4,330	(1,853)
Total adjustments	13,077	105
Net cash (used in) provided by operating activities	(12,118)	7,981
Cash flows from investing activities:		
Capital expenditures	(719)	(7,554)
Net cash used in investing activities	(719)	(7,554)
Cash flows from financing activities:		
Proceeds from borrowing under government programs and mortgage agreement	7,412	4,500
Repayments under mortgage agreement and finance leases	(321)	(244)
Cost to obtain loan	—	(72)
Proceeds from exercise of stock options	—	166
Net cash provided by financing activities	7,091	4,350
Effect of exchange rate changes on cash and cash equivalents	7	(16)
(Decrease) increase in cash and cash equivalents and restricted cash	(5,739)	4,761
Cash and cash equivalents and restricted cash - beginning of period	60,896	60,041
Total cash and cash equivalents and restricted cash - end of period	$ 55,157	$ 64,802
The composition of total cash and cash equivalents and restricted cash is as follows:		
Cash and cash equivalents	54,407	64,052
Restricted cash included in other assets	750	750
Total cash and cash equivalents and restricted cash	$ 55,157	$ 64,802

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

ENZO BIOCHEM, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
As of April 30, 2020
(Unaudited)
(Dollars in thousands, except share data)

Note 1 – Basis of Presentation

The accompanying consolidated financial statements include the accounts of Enzo Biochem, Inc. and its wholly-owned subsidiaries, Enzo Life Sciences, Enzo Clinical Labs, Enzo Therapeutics, Enzo Realty LLC and Enzo Realty II LLC, collectively or with one or more of its subsidiaries referred to as the "Company" or "Companies". The consolidated balance sheet as of April 30, 2020, the consolidated statements of operations, comprehensive income (loss) and stockholders' equity for the three and nine months ended April 30, 2020 and 2019, and the consolidated statements of cash flows for the nine months ended April 30, 2020 and 2019 (the "interim statements") are unaudited. In the opinion of management, all adjustments (which include normal recurring adjustments) necessary to present fairly the financial position and operating results for the interim periods have been made. Certain information and footnote disclosure, normally included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States, have been condensed or omitted. The interim statements should be read in conjunction with the consolidated financial statements for the year ended July 31, 2019 and notes thereto contained in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission. The consolidated balance sheet at July 31, 2019 has been derived from the audited financial statements at that date. The results of operations for the three and nine months ended April 30, 2020 are not necessarily indicative of the results that may be expected for the fiscal year ending July 31, 2020.

A novel strain of coronavirus ("COVID-19") continues to spread and severely impact the economy of the United States and other countries around the world. Through the six month period ended January 31, 2020, we had experienced growth in our laboratory testing services accessions and our products volume compared to the prior year period. This growth continued into February 2020. However, beginning in March 2020, the Company experienced a material decline in its laboratory testing volumes due to the COVID-19 pandemic as patients have reduced physician office visits. Additionally, customers of our products have reduced or suspended purchases because they have temporarily reduced or closed their operations on a global basis.

The COVID-19 impact on the Company's operations is consistent with the overall industry and publicly issued statements from competitors, partners, and vendors. The decline in our laboratory accessions and customer orders for products continued during most of the remainder of the third fiscal quarter (ended April 30, 2020) and only began to show some improvement in the month of April. Federal, state and local governmental policies and initiatives designed to reduce the transmission of COVID-19 have resulted in, among other things, the aforementioned significant reduction in physician office visits, the cancellation of elective medical procedures, customers of our products closing or severely curtailing their operations (voluntarily or in response to government orders), and the adoption of work-from-home or shelter-in-place policies.

The Company believes the COVID-19 pandemic may continue to have a negative impact on the Company's operating results, cash flows and financial condition for an undetermined amount of time. Global supply chain issues due to the pandemic may hamper both production of products within the life science division as well as testing capabilities in the clinical laboratory. It is possible that the Company may experience an adverse impact on cash collections from customers, clients and payers as a result of the impact of the COVID-19 pandemic. The extent to which our businesses may be affected by the COVID-19 pandemic will largely depend on both current and future developments, including its duration, spread and treatment, and related work and travel advisories and restrictions, all of which are highly uncertain and cannot be reasonably predicted at this time.

The Company expects its COVID-19 related products and services to partially offset revenue declines. Enzo has publicly announced that it has applied its technical expertise in molecular diagnostics and serological testing to develop next generation COVID-19 and related antibody testing options. Enzo's innovations include virus-inactivating specimen collection media to lessen transmission risks for healthcare providers and clinical laboratory personnel, the development of more relevant positive controls for the tests, and improved sensitivity. However, it is too early to determine the significance of any positive impact from increased testing and the Company's proprietary product offerings on revenue, profitability and cash flow.

The Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") was passed in March 2020 and addresses the various economic impacts of, and otherwise responds to, the COVID-19 (coronavirus) outbreak. Under the CARES Act, we received a loan, an advance payment, and an income grant during the period ended April 30, 2020 which are further described in this report.

Use of Estimates

The extent to which the COVID-19 pandemic impacts the Company's business and financial results will depend on numerous evolving factors including, but not limited to: the magnitude and duration of the COVID-19 pandemic, the extent to which it will impact worldwide macroeconomic conditions including, but not limited to, employment rates and health insurance coverage, the speed of the anticipated recovery, and governmental and business reactions to the pandemic. The Company assessed certain accounting matters that generally require consideration of forecasted financial information in context with the information reasonably available to the Company and the unknown future impacts of COVID-19 as of April 30, 2020 and through the date of this report. The accounting matters assessed included, but were not limited to, the Company's implicit price concessions and credit losses, accounts receivable and the carrying value of goodwill and other long-lived assets. The Company's future assessment of the magnitude and duration of COVID-19, as well as other factors, could result in additional material impacts to the Company's consolidated financial statements in future reporting periods.

Effect of New Accounting Pronouncements

Adoption of New Accounting Standards

On August 1, 2019, the Company adopted a new accounting standard issued by the Financial Accounting Standards Board ("FASB") on accounting for leases using the modified retrospective method. This new accounting standard requires a lessee to recognize an asset and liability for most leases on its balance sheet. The Company elected the optional transition method that allowed for a cumulative-effect adjustment to the opening balance of retained earnings recorded on August 1, 2019 and did not restate previously reported results in the comparative periods. The Company also elected the package of practical expedients, which among other things, allowed it to carry forward its historical lease classification.

As a result of adoption of the new standard, the Company recorded right-of-use assets and lease liabilities of approximately $24.4 million and $25.1 million, respectively as of August 1, 2019. The operating lease liability was determined based on the present value of the remaining minimum rental payments and the right-of-use asset was determined based on the value of the lease liability, adjusted for deferred rent balances of approximately $0.7 million, which were previously included in accrued expenses. There was no cumulative effect adjustment to the opening balance of accumulated deficit. Accounting for the Company's finance leases remains substantially unchanged. The adoption of the new standard did not materially impact the Company's consolidated results of operations or cash flows. The adoption of this new accounting standard resulted in increased qualitative and quantitative disclosures regarding the amount, timing, and uncertainty of cash flows arising from leases.

The Company elected the package of three practical expedients. As such, the Company did not reassess whether expired or existing contracts are or contain a lease and did not need to reassess the lease classifications or reassess the initial direct costs associated with expired or existing leases. The Company did not elect the hindsight practical expedient. Further, the land easement practical expedient was not elected as the practical expedient is not applicable to the Company. The Company elected to take the practical expedient to not separate lease and non-lease components of all asset classes entered into or modified after the effective date. For further details, see Note 8.

Pronouncements Issued but Not Yet Adopted

In June 2016, FASB issued ASU No. 2016-13 Financial Instruments – Credit Losses (Topic 326). This standard changes the impairment model for most financial instruments, including trade receivables, from an incurred loss method to a new forward-looking approach, based on expected losses. The estimate of expected credit losses will require entities to incorporate considerations of historical information, current information and reasonable and supportable forecasts. Adoption of this standard is required for our annual and interim periods beginning August 1, 2023, the effective date for smaller reporting companies and must be adopted using a modified retrospective transition approach. We are currently assessing the impact of the adoption of this standard on our results of operations, financial position and cash flows.

We reviewed all other recently issued accounting pronouncements and have concluded they are not applicable or not expected to be significant to the accounting for our operations.

Concentration Risk

Other than the Medicare program, one provider whose programs are included in the "Third-party payers" and "Health Maintenance Organizations" ("HMO's") categories represents approximately 22% of Clinical Services net revenue for the three month period and 26% for the nine month period ended April 30, 2020 and 42% of Clinical Services net revenue for each of the three and nine month periods ended April 30, 2019. As of April 30, 2020, other than the Medicare program, one provider whose programs are included in either "Third-party payers" and/or "Health Maintenance Organizations" ("HMO's") categories represents approximately 12% of Clinical Services net receivables.

Income Taxes

The benefit for income taxes and the effective tax rates for the three and nine months ended April 30, 2020 and 2019 is $0 and 0%, respectively. The primary difference between the Company's effective tax rates and the statutory rates for the three and nine months ended April 30, 2020 and 2019 is due to the change in net operating losses for which a full valuation allowance is maintained. The Company believes that the valuation allowance is necessary as it is not more likely than not that the deferred tax assets will be realized in the foreseeable future based on positive and negative evidence available at this time. This conclusion was reached because of uncertainties relating to future taxable income, in terms of both its timing and its sufficiency, which would enable the Company to realize its deferred tax assets.

Note 2 – Net income (loss) per share

Basic net income (loss) per share represents net income (loss) divided by the weighted average number of common shares outstanding during the period. As a result of the net loss for the three months ended April 30, 2020 and nine months ended April 30, 2020 diluted weighted average shares outstanding are the same as basic weighted average shares outstanding, and do not include the potential common shares from stock options and unvested restricted stock because to do so would be antidilutive. For the three and nine months ended April 30, 2020, approximately 40,000 and 56,000, respectively of potential common shares ("in the money options") and unvested restricted stock were excluded from the calculation of diluted earnings per share. For the three and nine months ended April 30, 2020, the effect of approximately 2,201,000 and 1,805,000 of outstanding "out of the money" options to purchase common shares were excluded from the calculation of diluted earnings per share because their effect would be antidilutive.

For the three and nine months ended April 30, 2019, the effect of approximately 1,640,000 and 1,541,000 of outstanding "out of the money" options to purchase common shares were excluded from the calculation of diluted net income per share because their effect would be anti-dilutive.

Note 3 – Revenue Recognition

Clinical Services Revenue

Net services revenues in the Company's clinical services business accounted for 58% and 63% of the Company's total net revenues for the nine months ended April 30, 2020 and 2019, respectively and are primarily comprised of a high volume of relatively low-dollar transactions. The services business, which provides clinical testing services, satisfies its performance obligation and recognizes revenues upon completion of the testing process for a specific patient and reporting to the ordering physician. The Company may also perform clinical testing services for other laboratories and will recognize revenue from those services when reported to the ordering laboratory. The Company estimates the amount of consideration it expects to receive from customer groups using the portfolio approach. These estimates of the expected consideration include the impact of contractual allowances and price concessions on our customer group portfolios consisting of healthcare insurers, government payers, client payers and patients as described below. Contracts with customers in our laboratory services business do not contain a financing component, based on the typically limited period of time between performance of services and collection of consideration. The transaction price includes variable consideration in the form of the contractual allowance and price concessions as well as the collectability of the transaction based on the patient intent and ability to pay. The Company uses the expected value method in estimating the amount of the variability included in the transaction price. The following are descriptions of our laboratory services business portfolios:

Third party payers and Health Maintenance Organizations (HMO's)

Reimbursements from third party payers, primarily healthcare insurers, and HMO's are based on negotiated fee-for-service schedules. Revenues consist of amounts billed net of contractual allowances for differences between amounts billed and the estimated consideration the Company expects to receive from such payers, which considers historical collection and denial experience and the terms of the Company's contractual arrangements. Adjustments to the allowances, based on actual receipts from the third-party payers, are recorded upon settlement.

Collection of the consideration the Company expects to receive is normally a function of providing complete and correct billing information to these third party payers within the various filing deadlines, and typically occurs within 60 to 90 days of billing. Provided the Company has billed healthcare insurers accurately with complete information prior to the established filing deadline, there has historically been little to no collection risk. If there has been a delay in billing, the Company determines if the amounts in question will likely go past the filing deadline, and if so, will reserve accordingly for the billing.

Third-party payers, including government programs, may decide to deny payment or recoup payments for testing that they contend was improperly billed or not medically necessary, against their coverage determinations, or for which they believe they have otherwise overpaid (including as a result of their own error), and we may be required to refund payments already received. Our revenues may be subject to adjustment as a result of these factors among others, including without limitation, differing interpretations of billing and coding guidance and changes by government agencies and payers in interpretations, requirements, and "conditions of participation" in various programs.

Government Payer - Medicare

Reimbursements from Medicare are based on fee-for-service schedules set by Medicare, which is funded by the government. Revenues consist of amounts billed net of contractual allowances for differences between amounts billed and the estimated consideration the Company expects to receive from Medicare, which considers historical collection and denial experience and other factors. Adjustments to the allowances, based on actual receipts from the government payers, are recorded upon settlement.

Collection of consideration the Company expects to receive is normally a function of providing the complete and correct billing information within the various filing deadlines and typically occurs within 60 days of billing. Provided the Company has billed the government payer accurately with complete information prior to the established filing deadline, there has historically been little to no collection risk. If there has been a delay in billing, the Company determines if the amounts in question will likely go past the filing deadline, and, if so, it will reserve accordingly for the billing.

Patient self-pay

Uninsured patients are billed based on established patient fee schedules or fees negotiated with physicians on behalf of their patients. Coinsurance and deductible responsibilities based on fees negotiated with healthcare insurers are also billed to insured patients and included in this portfolio. Collection of billings from patients is subject to credit risk and ability of the patients to pay. Revenues consist of amounts billed net of discounts provided to uninsured patients in accordance with the Company's policies and implicit price concessions. Implicit price concessions represent differences between amounts billed and the estimated consideration the Company expects to receive from patients, which considers historical collection experience and other factors including current market conditions. Adjustments to the estimated allowances, based on actual receipts from the patients, are recorded upon settlement. Patient responsibility is invoiced and if it reaches 91 days outstanding, the account is sent to a collection agency for further processing. After the account has been with the collection agency for at least 105 days, and is determined to be uncollectable it is written off.

The following table represents clinical services net revenues and percentages by type of customer:

	Three months ended April 30, 2020		Three months ended April 30, 2019	
Revenue category				
Third-party payer	$ 5,082	52%	$ 5,799	50%
Medicare	1,870	19	2,634	22
Patient self-pay	1,655	17	1,881	16
HMO's	1,132	12	1,437	12
Total	$ 9,739	100%	$ 12,000	100%

	Nine months ended April 30, 2020		Nine months ended April 30, 2019	
Revenue category				
Third-party payer	$ 17,878	51%	$ 20,213	53%
Medicare	8,048	23	7,724	20
Patient self-pay	4,621	13	5,652	15
HMO's	4,485	13	4,459	12
Total	$ 35,032	100%	$ 38,048	100%

For the nine months ended April 30, 2020 and 2019, all of the Company's clinical services were provided within the United States.

Grant income

Under the CARES Act, we were eligible for and received a $747 income grant under the Department of Health and Human Services (HHS) Public Health and Social Services Emergency Fund for provider relief. The purpose of the payment is to reimburse the Company for health care related expenses or lost revenues attributable to COVID-19. We have certified that the grant funds were accepted per the regulations and have recognized it as Grant income for the three and nine month periods ended April 30, 2020 in the Clinical Services segment.

In April 2020, the HHS began an additional general distribution to Medicare facilities and providers impacted by COVID-19, augmenting the first amount that was established in March. In May 2020, we applied for a second grant from the Emergency Fund, which has not yet been received.

Products Revenue

Products revenue consists of the sale of single-use products used in the identification of genomic information and are recognized at a point in time following the transfer of control of such products to the customer, which generally occurs upon shipment. Payment terms for shipments to end-user and distributor customers may range from 30 to 90 days. Any claims for credit or return of goods may be made generally within 30 days of receipt. Revenues are reduced to reflect estimated credits and returns, although historically these adjustments have not been material. Taxes collected from customers relating to product sales and remitted to governmental authorities are excluded from revenue. Amounts billed to customers for shipping and handling are included in revenue, while the related shipping and handling costs are reflected in cost of products.

Products revenue by geography is as follows:

	Three Months Ended April 30		Nine Months Ended April 30	
	2020	**2019**	**2020**	**2019**
United States	$ 3,458	$ 4,585	$ 11,652	$ 12,571
Europe	1,793	2,297	5,740	6,347
Rest of the world	1,166	1,029	3,323	3,283
Products revenue	$ 6,417	$ 7,911	$ 20,715	$ 22,201

Note 4 - Supplemental disclosure for statement of cash flows

For the nine months ended April 30, 2020 and 2019, interest paid by the Company was $204 and $138, respectively.

For the nine months ended April 30, 2020, reductions in the measurement of right of use assets and liabilities included in cash flows from operating activities was approximately $4,300 for each, with the net amount of such changes included in changes in accrued liabilities, other current liabilities, and other liabilities in the statement of cash flows.

For the nine months ended April 30, 2020 and 2019, tax on capital paid by the Company was $79 and $94, respectively.

During the nine months ended April 30, 2020 and 2019, the Company issued common stock in connection with its share based 401(k) employer match in the amount of $836 and $832, respectively.

For the nine months ended April 30, 2020, non-cash activities related to the adoption of the new accounting standard for leases are detailed in Note 1.

Note 5 – Inventories

Inventories consist of the following:

	April 30, 2020	July 31, 2019
Raw materials	$ 907	$ 876
Work in process	2,652	2,566
Finished products	4,459	4,400
	$ 8,018	$ 7,842

Note 6 – Goodwill and intangible assets

At April 30, 2020 and July 31, 2019, the Company has goodwill of $7,452 allocated to the Clinical Services reporting unit.

The Company's change in the carrying amount of intangible assets, all in the Products segment is as follows:

	Gross	Accumulated Amortization	Net
July 31, 2019	$ 27,238	$ (26,206)	$ 1,032
Amortization expense	—	(451)	(451)
Foreign currency translation	47	(40)	7
April 30, 2020	$ 27,285	$ (26,697)	$ 588

Intangible assets, all finite lived, consist of the following:

	April 30, 2020			July 31, 2019		
	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Patents	$ 11,027	$ (11,010)	$ 17	$ 11,027	$ (10,996)	$ 31
Customer relationships	11,791	(11,220)	571	11,746	(10,745)	1,001
Website and acquired content	1,009	(1,009)	—	1,008	(1,008)	—
Licensed technology and other	475	(475)	—	483	(483)	—
Trademarks	2,983	(2,983)	—	2,974	(2,974)	—
Total	$ 27,285	$ (26,697)	$ 588	$ 27,238	$ (26,206)	$ 1,032

At April 30, 2020, information with respect to intangibles assets acquired is as follows:

	Useful life assigned	Weighted average remaining useful life
Customer relationships	8 -15 years	Less than 1 year
Other intangibles	10 years	Less than 2 years

At April 30, 2020, the weighted average remaining useful life of intangible assets is approximately one year.

Note 7 - Loans Payable

In connection with the purchase of our new facility, on November 27, 2018, a wholly-owned subsidiary (the ""mortgagor subsidiary") of the Company entered into a Fee Mortgage and Security Agreement (the "mortgage agreement") with Citibank, N.A. (the "mortgagee"). The mortgage agreement provides for a loan of $4.5 million for a term of 10 years, bears a fixed interest rate of 5.09% per annum and requires monthly mortgage payments of principal and interest of $30. Debt issuance costs of $72 are being amortized over the life of the mortgage agreement. The balance of unamortized debt issuance cost was $62 at April 30, 2020. At April 30, 2020, the balance owed by the subsidiary under the mortgage agreement was $4.3 million. The Company's obligations under the mortgage agreement are secured by the new facility and by a $750 cash collateral deposit with the mortgagee as additional security. This restricted cash is included in other assets as of April 30, 2020.

The mortgage agreement includes affirmative and negative covenants and events of default, as defined. Events of default include non-payment of principal and interest on debt outstanding, non-performance of covenants, material changes in business, breach of representations, bankruptcy or insolvency, and changes in control. The mortgage includes certain financial covenants. As of April 30, 2020, required financial covenants have been met.

We assumed from the seller an operating lease for a current tenant at the facility which was extended to June 30, 2020. Rental income from the assumed lease is included in other income.

Minimum future annual principal payments under the mortgage agreement as of April 30, 2020, are as follows:

July 31,	
2020	$ 35
2021	144
2022	152
2023	160
2024	167
Thereafter	3,653
	$ 4,311
Less: Current portion	(142)
Unamortized mortgage cost	(62)
	$ 4,107

In April 2020, our subsidiary in Switzerland received a loan of CHF 0.4 million ($ 0.4 million, based on the foreign exchange rate as of April 30, 2020) from the Swiss government under the “Corona Krise” emergency loan program in response to the pandemic. This loan is uncollateralized, bears 0% interest, is due in 5 years, and may be repaid at any time. This loan is included in long term debt – net as of April 30, 2020.

The CARES Act expanded the U.S. Small Business Administration’s (SBA) business loan program to create the Paycheck Protection Program (PPP), which provides employers with uncollateralized loans whose primary purpose is to retain or maintain workforce and salaries for a twenty four week period (“covered period”) following receipt of the loan. Currently, PPP loans have a 1% fixed interest rate and are due from two to five years. The primary features of the PPP loan program are to provide funding to companies to cover eligible expenses, and the potential for forgiveness of that portion of the loan spent on payroll and other permitted operating expenses during the covered period, subject to reductions if the borrower fails to maintain or restore employee and salary levels. We applied for a PPP loan based on the eligibility and need requirements established when the program was announced and in April 2020, the Company received $7,000 through Citibank N.A., the Company’s existing lender, pursuant to the PPP (the “PPP Loan”). The PPP Loan matures on April 17, 2022 (the “Maturity Date”), accrues interest at 1% per annum and may be prepaid in whole or in part without penalty. No interest payments are due within the initial six months of the PPP Loan. The interest accrued during the initial six-month period is due and payable, together with the principal, on the Maturity Date. The Company intends to use all proceeds from the PPP Loan to retain employees, maintain payroll and make lease and utility payments to support business continuity throughout the COVID-19 pandemic. All or a portion of the PPP Loan may be forgiven by the SBA upon application by the Company and upon documentation of expenditures in accordance with the SBA requirements. Under the CARES Act, loan forgiveness is available for the sum of documented payroll costs, covered rent payments, covered mortgage interest and covered utilities during the twenty four week period beginning on the date of receipt of the PPP loan with certain stipulated restrictions. Due to uncertainties with respect to loan forgiveness calculations and government pronouncements with respect to eligibility, we did not recognize any loan forgiveness as of April 30, 2020 and have classified the loan in other current liabilities as we expect to earn loan forgiveness by the end of the covered period. The SBA has announced its intention to audit loans in excess of $2.0 million. No assurance can be given that we will obtain forgiveness of the PPP loan in whole or in part.

Note 8 - Leases

During the first quarter of fiscal 2020, the Company adopted ASU No. 2016-02 “Leases (Topic 842)”, which requires leases with durations greater than twelve months to be recognized on the balance sheet. The Company adopted the standard using the modified retrospective approach with an effective date of August 1, 2019. The Company did not apply the new standard to comparative periods and therefore those amounts are not presented below.

The Company determines if an arrangement is or contains a lease at contract inception. The Company leases buildings, office space, patient service centers, and equipment primarily through operating leases, and equipment through a limited number of finance leases. Generally, a right-of-use asset, representing the right to use the underlying asset during the lease term, and a lease liability, representing the payment obligation arising from the lease, are recognized on the balance sheet at lease commencement based on the present value of the payment obligation. For operating leases, expense is recognized on a straight-line basis over the lease term. For finance leases, interest expense on the lease liability is recognized using the effective interest method and amortization of the right-of-use asset is recognized on a straight-line basis over the shorter of the estimated useful life of the asset or the lease term. Short-term leases with an initial term of 12 months or less are not recorded on the balance sheet; the Company recognizes lease expense for these leases on a straight-line basis over the lease term.

The Company primarily uses its incremental borrowing rate in determining the present value of lease payments as the Company’s leases generally do not provide an implicit rate.

The Company has lease agreements with (i) right-of-use asset payments and (ii) non-lease components (i.e. payments related to maintenance fees, utilities, etc.,) which have generally been combined and accounted for as a single lease component.

The Company's leases have remaining terms of less than 1 year to 9 years, some of which include options to extend the leases for up to 5 years. The Company's lease terms may include renewal options that are reasonably certain to be exercised and termination options that are reasonably certain not to be exercised.

Certain of the Company's lease agreements include rental payments adjusted periodically for inflation or a market rate which are included in the lease liabilities.

Leases	Balance Sheet Classification	April 30, 2020
Assets		
Operating	Right-of-use assets	$ 20,812
Finance	Property, plant and equipment, net (a)	459
Total lease assets		$ 21,271
Liabilities		
Current:		
Operating	Current portion of operating lease liabilities	$ 4,257
Finance	Finance leases short term	225
Non-current:		
Operating	Operating lease liabilities, non-current	17,416
Finance	Other liabilities and finance leases long term	223
Total lease liabilities		$ 22,121

(a) Accumulated amortization of finance lease assets was approximately $0.9 million as of April 30, 2020.

Components of lease cost for the three and nine months ended April 30, 2020 were as follows:

Lease cost	Three Months Ended April 30, 2020	Nine Months Ended April 30, 2020
Operating lease cost	$ 1,466	$ 4,414
Finance lease cost:		
Amortization of leased assets	61	177
Interest on lease liabilities	7	29
Total lease cost	$ 1,534	$ 4,620

The maturity of the Company's lease liabilities as of April 30, 2020 is as follows:

Maturity of lease liabilities	Operating leases	Finance leases	Total
Remainder of fiscal 2020	$ 1,473	$ 84	$ 1,557
2021	4,997	188	5,185
2022	3,786	88	3,874
2023	3,284	88	3,372
2024	3,273	37	3,310
Thereafter	9,606	—	9,606
Total lease payments	26,419	485	26,904
Less: Interest (a)	(4,746)	(37)	(4,783)
Present value of lease liabilities	$ 21,673	$ 448	$ 22,121

(a) Primarily calculated using the Company's incremental borrowing rate.

Lease term and discount rate for the nine months ended April 30, 2020 were as follows:

Lease term and discount rate	
Weighted-average remaining lease term (years):	
Operating leases	6.4 years
Finance leases	2.7 years
Weighted-average discount rate:	
Operating leases	4.9%
Finance leases	8.1%

See Note 4 for cash flow information on cash paid for amounts included in the measurement of lease liabilities for the nine months ended April 30, 2020.

Note 9 – Accrued Liabilities

Accrued liabilities consist of the following:

	April 30, 2020	July 31, 2019
Payroll, benefits, and commissions	$ 4,866	$ 5,123
Professional fees	806	774
Legal	2,333	164
Deferred revenue – CARES Act Advance Payment	2,526	—
Other	1,183	2,301
	$ 11,714	$ 8,362

In order to increase cash flow to providers of services and suppliers impacted by the pandemic, the Centers for Medicare and Medicaid Services (CMS) expanded its Accelerated and Advance Payment Program to a broader group of Medicare providers. We applied for and received a $2,526 payment advance from this program in April 2020. The recoupment by CMS of our advance payment begins 120 days after the date of receipt, at which time every claim we submit from that point will be automatically offset to repay the advance payment. Any unrecouped advance balance remaining after 90 days of the recoupment process must then be repaid such that 210 days after receiving the advance it will be entirely repaid.

Note 10 – Stockholders' Equity

Controlled Equity Offering

The Company has a Controlled Equity Offering^{SM} Sales Agreement (the "Sales Agreement") with Cantor Fitzgerald & Co., as sales agent ("Cantor"). Under the Sales Agreement, the Company may offer and sell, from time to time, through Cantor, shares of the Company's common stock, par value $0.01 per share (the "Common Stock"). The Company pays Cantor a commission of 3.0% of the aggregate gross proceeds received under the Sale Agreement. The Company is not obligated to make any sales of the shares under the Sales Agreement. The offering of shares pursuant to the Sales Agreement will terminate upon the earlier of (a) the sale of all of the shares subject to the Sales Agreement or (b) the termination of the Sales Agreement by Cantor or the Company, as permitted therein. The initial agreement contemplated the sale of shares of the Company's common stock having an aggregate offering price of up to $20.0 million. In December 2014, the Sales Agreement was amended in order for the Company to offer and sell additional shares of Common Stock having an aggregate offering price of $20.0 million.

On September 1, 2017, the Company filed with the SEC a "shelf" registration and sales agreement prospectus covering the offering, issuance and sale of our Common Stock that may be issued and sold under the existing Sales Agreement in an aggregate amount of up to $19.15 million. A total of $150 million of securities may be sold under this shelf registration, which was declared effective September 15, 2017.

During the nine months ended April 30, 2020 and 2019, the Company did not sell any shares of Common Stock under the Sales Agreement.

Share-based compensation

In January 2011, the Company's stockholders approved the adoption of the 2011 Incentive Plan (the "2011 Plan") which provides for the issuance of equity awards, including among others, options, restricted stock and restricted stock units for up to 3,000,000 Common Shares. The exercise price of options granted under the 2011 Plan, and consistent with other Plans, is equal to or greater than fair market value of the Common Stock on the date of grant. Unless terminated earlier by the Board of Directors, the 2011 Plan will terminate at the earliest of; (a) such time as no shares of Common Stock remain available for issuance under the 2011 Plan or (b) tenth anniversary of the effective date of the 2011 Plan. On January 5, 2018, the Company's stockholders approved the amendment and restatement of the 2011 Plan to increase the number of shares available for issuance by 2,000,000 bringing the total number of shares available for award under the 2011 Plan to 5,000,000. Awards outstanding upon expiration of the 2011 Plan shall remain in effect until they have been exercised, terminated, or have expired.

The total number of shares available for grant as equity awards from the 2011 Incentive Plan is approximately 935,000 shares as of April 30, 2020.

The amounts of share-based compensation expense recognized in the periods presented are as follows:

	Three months ended April 30,		Nine months ended April 30,	
	2020	2019	2020	2019
Stock options	$ 206	$ 289	$ 724	$ 521
Restricted stock	1	2	4	5
	$ 207	$ 291	$ 728	$ 526

The following table sets forth the amount of expense related to share-based payment arrangements included in specific line items in the accompanying statements of operations:

	Three months ended April 30,		Nine months ended April 30,	
	2020	2019	2020	2019
Selling, general and administrative	$ 207	$ 291	$ 728	$ 526
	$ 207	$ 291	$ 728	$ 526

No excess tax benefits were recognized during the nine month periods ended April 30, 2020 and 2019.

Stock Option Plans

The following table summarizes stock option activity during the nine month period ended April 30, 2020:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value (000s)
Outstanding at July 31, 2019	2,351,040	$ 4.53		
Awarded	773,032	$ 2.40		
Exercised	—	—		$ —
Cancelled or expired	(485,076)	$ 3.71		
Outstanding at end of period	2,638,996	$ 4.05	3.2 years	$ 637
Exercisable at end of period	1,457,162	$ 5.10	1.7 years	$ 78

As of April 30, 2020, the total future compensation cost related to non-vested options, not yet recognized in the statements of operations, was $1.2 million and the weighted average period over which the remaining expense of these awards is expected to be recognized is approximately fifteen months.

The intrinsic value of in the money stock option awards at the end of the period represents the Company's closing stock price on the last trading day of the period in excess of the exercise price multiplied by the number of options.

Performance Stock Units

To better align the long-term interest of executives with growing U.S. practices, beginning in fiscal 2018, the Company granted long-term incentive awards in the form of time based stock options and performance-based restricted stock units ("Performance Stock Units" or "PSUs"). The PSUs earned will be determined over a three-year performance period. The primary performance metrics will be revenue and Adjusted EBITDA growth. Payouts based on revenue and adjusted EBITDA goals will be modified based on Total Shareholder Return ("TSR") performance relative to Enzo's peer group.

During the nine months ended April 30, 2020 and fiscal years ended 2019 and 2018, the Company awarded PSUs to its executive officers, this award provides for the grant of shares of our common stock at the end of a three–year period based on the achievement of average revenue growth and adjusted EBITDA growth over that period. During the nine months ended April 30, 2020, one former executive forfeited a total of 14,500 PSUs. As of April 30, 2020, the Company did not accrue any compensation expense for these PSU's as the achievement of the growth goals is currently not probable.

The following table summarizes PSU's granted and outstanding as of April 30, 2020:

Grant Date	Total Grant	Forfeitures	Outstanding	Fair Market Value At Grant Date (000s)
7/31/2018	32,000	(4,000)	28,000	$ 124
1/3/2019	80,500	(10,500)	70,000	$ 196
2/25/2020	98,600	—	98,600	$ 217

Restricted Stock Awards

The fair value of a restricted stock award is determined based on the closing stock price on the award date. As of April 30, 2020, there were 817 shares of unvested restricted stock which have a weighted average award price of $3.34 per share. As of April 30, 2020, there was approximately $4 of unrecognized compensation cost related to these unvested shares of restricted stock to be recognized over a weighted average remaining period of approximately nine months. There were no awards made during the nine months ended April 30, 2020. During the nine months ended April 30, 2020, a total of 811 restricted stock awards vested whose fair value was approximately $2.

Note 11 – Segment reporting

The Company has three reportable segments: Products, Clinical Services and Therapeutics. The Company's Products segment develops, manufactures, and markets products to research and pharmaceutical customers. The Clinical Services segment provides diagnostic services to the health care community. The Company's Therapeutics segment conducts research and development activities for therapeutic drug candidates. The Company evaluates segment performance based on segment income (loss) before taxes. Costs excluded from segment income (loss) before taxes and reported as "Other" consist of corporate general and administrative costs which are not allocable to the three reportable segments.

Legal and related expenses incurred to defend the Company's intellectual property, which may result in settlements recognized in another segment and other general corporate matters are considered a component of the Other segment. Legal and related expense specific to other segments' activities have been allocated to those segments.

Legal settlements, net, represent activities for which royalties would have been received in the Company's Products segment. Management of the Company assesses assets on a consolidated basis only and therefore, assets by reportable segment have not been included in the reportable segments below. The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies.

The following financial information represents the operating results of the reportable segments of the Company:

Three months ended April 30, 2020

	Clinical Services	Products	Therapeutics	Other	Consolidated
Revenues – Services and Products	$ 9,739	$ 6,417	—	—	$ 16,156
Grant income	747	—	—	—	747
Total	10,486	6,417	—	—	16,903
Operating costs and expenses:					
Cost of revenues	9,133	3,345	—	—	12,478
Research and development	395	580	$ 188	—	1,163
Selling, general and administrative	5,902	2,667	—	$ 2,492	11,061
Legal and related expenses	52	—	—	1,873	1,925
Total operating costs and expenses	15,482	6,592	188	4,365	26,627
Operating loss	(4,996)	(175)	(188)	(4,365)	(9,724)
Other income (expense):					
Interest	(7)	11	—	83	87
Other	1	4	—	130	135
Foreign exchange loss	—	(358)	—	—	(358)
Loss before income taxes	$ (5,002)	$ (518)	$ (188)	$ (4,152)	$ (9,860)
Depreciation and amortization included above	$ 373	$ 278	$ —	$ 66	$ 717
Share-based compensation included in above:					
Selling, general and administrative	21	14	—	172	207
Total	$ 21	$ 14	$ —	$ 172	$ 207
Capital expenditures	$ 225	$ 60	$ —	$ —	$ 285

Three months ended April 30, 2019

	Clinical Services	Products	Therapeutics	Other	Consolidated
Revenues	$ 11,751	$ 7,911	—	—	$ 19,662
Operating costs, expenses and legal settlements, net:					
Cost of revenues	10,963	3,397	—	—	14,360
Research and development	31	527	$ 223	—	781
Selling, general and administrative	5,960	2,923	—	$ 2,037	10,920
Legal fee expense	35	16	—	206	257
Legal settlements, net	—	(28,925)	—	—	(28,925)
Total operating costs, expenses, and legal settlements, net	16,989	(22,062)	223	2,243	(2,607)
Operating income (loss)	(5,238)	29,973	(223)	(2,243)	22,269
Other income (expense):					
Interest	(18)	19	—	257	258
Other	6	—	—	64	70
Foreign exchange loss	—	(332)	—	—	(332)
(Loss) income before income taxes	$ (5,250)	$ 29,660	$ (223)	$ (1,922)	$ 22,265
Depreciation and amortization included above	$ 440	$ 340	$ —	$ 58	$ 838
Share-based compensation included in above:					
Selling, general and administrative	40	24	—	135	199
Total	$ 40	$ 24	$ —	$ 135	$ 199
Capital expenditures	$ 120	$ 446	$ —	$ —	$ 566

Nine months ended April 30, 2020

	Clinical Services	Products	Therapeutics	Other	Consolidated
Revenues – Services and Products	$ 35,032	$ 20,715	—	—	$ 55,747
Grant income	747	—	—	—	747
Total	35,779	20,715	—	—	56,494
Operating costs and expenses:					
Cost of revenues	30,351	10,223	—	—	40,574
Research and development	1,118	1,599	$ 565	—	3,282
Selling, general and administrative	18,012	7,954	—	$ 6,927	32,893
Legal and related expenses	140	1	—	5,540	5,681
Total operating costs and expenses	49,621	19,777	565	12,467	82,430
Operating income (loss)	(13,842)	938	(565)	(12,467)	(25,936)
Other income (expense):					
Interest	(29)	45	—	479	495
Other	20	(1)	—	315	334
Foreign exchange loss	—	(88)	—	—	(88)
Income (loss) before income taxes	$ (13,851)	$ 894	$ (565)	$ (11,673)	$ (25,195)
Depreciation and amortization included above	$ 1,174	$ 781	$ —	$ 196	$ 2,151
Share-based compensation included in above:					
Selling, general and administrative	88	58	—	582	728
Total	$ 88	$ 58	$ —	$ 582	$ 728
Capital expenditures	$ 514	$ 205	$ —	$ —	$ 719

Nine months ended April 30, 2019

	Clinical Services	Products	Therapeutics	Other	Consolidated
Revenues	$ 38,048	$ 22,201	—	—	$ 60,249
Operating costs, expenses and legal settlements, net:					
Cost of revenues	32,956	10,391	—	—	43,347
Research and development	31	1,645	$ 668	—	2,344
Selling, general and administrative	18,220	8,828	—	$ 6,339	33,387
Legal fee expense	109	24	—	2,567	2,700
Legal settlements, net	—	(28,925)	—	—	(28,925)
Total operating costs, expenses and legal settlements, net	51,316	(8,037)	668	8,906	52,853
Operating income (loss)	(13,268)	30,238	(668)	(8,906)	7,396
Other income (expense):					
Interest	(51)	49	—	761	759
Other	17	—	—	232	249
Foreign exchange loss (gain)	—	(530)	—	—	(530)
(Loss) income before income taxes	$ (13,302)	$ 29,757	$ (668)	$ (7,913)	$ 7,874
Depreciation and amortization included above.	$ 1,217	$ 1,025	$ —	$ 130	$ 2,372
Share-based compensation included in above:					
Selling, general and administrative	118	74	—	553	725
Total	$ 118	$ 74	$ —	$ 553	$ 725
Capital expenditures	$ 883	$ 524	$ —	$ 6,147	$ 7,554

Note 12 – Contingencies

The Company has brought cases in the United States District Court for the District of Delaware ("the Court"), alleging patent infringement against various companies. In 2017, the Court ruled that the asserted claims of the '180 and '405 Patents are invalid for nonenablement in cases involving Abbott, Becton Dickinson, Gen-Probe, Hologic, and Roche. That ruling was affirmed by the United States Court of Appeals for the Federal Circuit ("Federal Circuit") in June 2019. Enzo subsequently filed a petition for certiorari regarding the invalidity ruling for the '180 and '405 Patents in February 2020; the Supreme Court denied Enzo's petition on March 30, 2020. There are currently two cases that were originally brought by the Company in the Court. In those two cases, Enzo alleges patent infringement against Becton Dickinson Defendants and Roche Defendants, respectively. The claims in those cases involve the '197 Patent. Both cases are stayed.

In separate inter partes review proceedings before the U.S. Patent and Trademark Office involving, among others, Becton Dickinson, certain claims of the '197 Patent were found unpatentable as anticipated or obvious and cancelled by the Patent Trial and Appeals Board ("Board"). Enzo appealed that decision to the Federal Circuit. On August 16, 2019, the Federal Circuit affirmed the Board's decision, finding that each of the challenged claims is unpatentable. The Company filed a petition for rehearing and rehearing en banc on October 30, 2019, which the Federal Circuit denied on December 4, 2019. The Company filed a petition for certiorari with the Supreme Court on March 3, 2020, which is pending.

In April 2019, the Company entered into an agreement with Hologic and Grifols, resolving litigation resulting from four cases originally brought by the Company in the Court. As a result, Enzo dismissed (1) a stayed patent litigation regarding the '180 and '197 Patent against Hologic in the Court; (2) the Consolidated Appeals against Gen-Probe and Hologic resulting from two cases filed in the Court, and (3) the Company's appeal in the litigation involving the '581 Patent that involved both Hologic and Grifols. As a result of the agreement with Hologic, Hologic withdrew from Enzo's Federal Circuit appeal of the Board's adverse rulings in the *inter partes* review proceedings regarding the '197 Patent filed by Hologic and joined by Becton Dickinson mentioned above.

On February 5, 2020, plaintiffs Harbert Discovery Fund, LP and Harbert Discovery Co-Investment Fund I, LP ("Plaintiffs") filed a complaint in the United States District Court for the Southern District of New York in connection with the Company's 2020 annual meeting (the "Annual Meeting"). The Complaint names the Company, Dr. Elazar Rabbani, Barry W. Weiner, Dr. Bruce A. Hanna, Dov Perlysky and Rebecca Fischer as defendants ("Defendants"). On March 26, 2020, Plaintiffs filed an amended verified complaint against the Defendants. Plaintiffs assert claims (i) against the Company for alleged violation of Section 14(a) of the Securities and Exchange Act (the "Exchange Act") and Rule 14a-9 thereunder in connection with two public statements by the Company concerning the Annual Meeting; (ii) against the individual defendants for alleged violation of Section 20 of the Exchange Act based on the Company's purported violation of Section 14(a) and Rule 14a-9; (iii) against the individual defendants for breach of fiduciary duty in connection with the Annual Meeting; and (iv) derivatively on behalf of the Company against the individual defendants for a declaration that any amendment of Article II, Section 2 of the Company's By-Laws requires the approval of the holders of at least 80% of the voting power of the then outstanding shares of the Company's stock entitled to vote generally in the election of directors, voting together as a single class, and a majority of such shares owned by persons not affiliated with an interested shareholder. Defendants' response to the amended complaint is now due on June 30, 2020. Discovery has not commenced.

There can be no assurance that the Company will be successful in these litigations. Even if the Company is not successful, management does not believe that there will be a significant adverse monetary impact on the Company. The Company is party to other claims, legal actions, complaints, and contractual disputes that arise in the ordinary course of business. The Company believes that any liability that may ultimately result from the resolution of these matters will not, individually or in the aggregate, have a material adverse effect on its financial position or results of operations.

As described in Note 3, third-party payers, including government programs, may decide to deny payment or recoup payments for testing that they contend was improperly billed or not medically necessary, against their coverage determinations, or for which they believe they have otherwise overpaid (including as a result of their own error), and we may be required to refund payments already received. During the third fiscal quarter of 2019, a significant third-party payer informed us outside of their typical business practice that they believe it overpaid the Company during certain periods of fiscal 2018. The Company disputed these claims and formally sent legal appeal letters to the payer. During the nine month 2020 period, we recorded $0.8 million in legal and related expenses as a result of reduced reimbursements this payer made to us. In April 2020, we and the payer entered into a settlement agreement and release whereby the parties agreed that the $0.8 million previously withheld by the payer shall fully and completely satisfy the dispute.

The following legal settlements are included in the statement of operations under Legal settlements, net within the Life Science segment for the 2019 periods:

The Company, along with its subsidiaries Enzo Life Sciences, Inc. entered into a Settlement Agreement as of February 5, 2019 (the "Agreement) with Roche Diagnostics GmbH and Roche Molecular Systems, Inc. (together, "Roche") with respect to an action between the Company and Roche before the U.S. District Court, Southern District of New York, Case No 04-CV4046. Roche agreed to pay the Company $21 million in settlement pursuant to the Agreement. The Company received $19.4 million net of attorney contingency payments. This settlement does not affect the Company's civil action for patent infringement against Roche in the U.S. District Court for the State of Delaware, Enzo Life Sciences Inc. v. Roche Molecular Systems Inc., et al., civil action No. 12 cv-00106, which remains pending on appeal.

The Company, along with its subsidiaries Enzo Life Sciences, Inc. entered into a settlement and license agreement as of April 16, 2019 (the "Agreement") with Hologic, Inc. ("Hologic"), Grifols, S.A., and Grifols Diagnostic Solutions Inc. (together, "Grifols") to settle all outstanding patent disputes among the parties. The terms of the agreement include one-time payments totaling $14 million to the Company in exchange for fully paid-up, worldwide licenses to Hologic and Grifols. The Company received $9.5 million net of attorney contingency payments.

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

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes and other information included elsewhere in this Quarterly Report on Form 10-Q.

Forward-Looking Statements

Our disclosure and analysis in this report, including but not limited to the information discussed in this Item 2, contain forward-looking information about our Company's financial results and estimates, business prospects and products in research and development that involve substantial risks and uncertainties. From time to time, we also may provide oral or written forward-looking statements in other materials we release to the public. Forward-looking statements give our current expectations or forecasts of future events. You can identify these statements by the fact that they do not relate strictly to historic or current facts. They use words such as "anticipate", "estimate", "expect", "project", "intend", "plan", "believe", "will", and other words and terms of similar meaning in connection with any discussion of future operations or financial performance.

In particular, these include statements relating to future actions, prospective products or product approvals, future performance or results of current and anticipated products, sales efforts, expenses, interest rates, foreign currency rates, intellectual property matters, the outcome of contingencies, such as legal proceedings, impacts of the COVID-19 pandemic and measures we have taken in response, and financial results. We cannot guarantee that any forward-looking statement will be realized, although we believe we have been prudent in our plans and assumptions. Achievement of future results is subject to risks, uncertainties and inaccurate assumptions. Should known or unknown risks or uncertainties materialize, or should underlying assumptions prove inaccurate, actual results could vary materially from past results and those anticipated, estimated or projected. As a result, investors are cautioned not to place undue reliance on any of our forward-looking statements. Investors should bear this in mind as they consider forward-looking statements. We do not assume any obligation to update or revise any forward-looking statement that we make, even if new information becomes available or other events occur in the future. We are also affected by other factors that may be identified from time to time in our filings with the Securities and Exchange Commission, some of which are set forth in Item 1A - Risk Factors in our Form 10-K filing for the July 31, 2019 fiscal year and updated in Item 1A. "Risk Factors in this Form 10-Q, You are advised to consult any further disclosures we make on related subjects in our Forms 10-Q, 8-K and 10-K reports to the Securities and Exchange Commission. Although we have attempted to provide a list of important factors which may affect our business, investors are cautioned that other factors may prove to be important in the future and could affect our operating results.

You should understand that it is not possible to predict or identify all such factors or to assess the impact of each factor or combination of factors on our business. Consequently, you should not consider any such list to be a complete set of all potential risks or uncertainties.

Impact of COVID-19 pandemic

As a novel strain of coronavirus ("COVID-19") continues to spread and severely impact the economy of the United States and other countries around the world, we are committed to being a part of the coordinated public and private sector response to this unprecedented challenge. We have made and will continue to make substantial investments to expand the amount of COVID-19 diagnostic and antibody testing available offering both products and services in the marketplace. We have been managing challenges in the global supply chain; and, at this point, believe we have sufficient supplies to conduct our business. We have put preparedness plans in place at our facilities to maintain continuity of operations, while also taking steps to keep colleagues and customers healthy and safe. In line with recommendations to reduce large gatherings and increase social distancing, we have transitioned many office-based colleagues to a remote work environment.

Through the six month period ended January 31, 2020, we had experienced growth in our laboratory testing services accessions and our products volume compared to the same period of the prior year. This growth continued into February 2020. However, beginning in March 2020, the Company experienced a material decline in its laboratory testing volumes due to the COVID-19 pandemic as patients have reduced physician office visits. Additionally, customers of our products have reduced or suspended purchases because they have temporarily reduced or closed their operations on a global basis.

The COVID-19 impact on the Company's operations is consistent with the overall industry and publicly issued statements from competitors, partners, and vendors. The decline in our laboratory accessions and customer orders for products continued during most the remainder of the third fiscal quarter (ended April 30, 2020) and only began to show some improved in the latter part of the month of April. Federal, state and local governmental policies and initiatives designed to reduce the transmission of COVID-19 have resulted in, among other things, the aforementioned significant reduction in physician office visits, the cancelation of elective medical procedures, customers closing or severely curtailing their operations (voluntarily or in response to government orders), and the adoption of work-from-home or shelter-in-place policies.

The Company believes the COVID-19 pandemic may continue to have a negative impact on the Company's operating results, cash flows and financial condition. Global supply chain issues due to the pandemic may hamper both production of products within the life science division as well as testing capabilities in the clinical laboratory. It is possible that the Company may experience an adverse impact on cash collections from customers, clients and payers as a result of the impact of the COVID-19 pandemic. The extent to which our businesses may be affected by the COVID-19 pandemic will largely depend on both current and future developments, including its duration, spread and treatment, and related work and travel advisories and restrictions, all of which are highly uncertain and cannot be reasonably predicted at this time.

The Company expects COVID-19 related products and services to partially offset revenue declines. Enzo has publicly announced that it has applied its technical expertise in molecular diagnostics and serological testing to develop next generation COVID-19 and related antibody testing options. Enzo's innovations include virus-inactivating specimen collection media to lessen transmission risks for healthcare providers and clinical laboratory personnel, the development of more relevant positive controls for the tests, and improved sensitivity. However, it is too early to determine the positive impact from increased testing and the Company's proprietary product offerings on revenue, profitability and cash flow.

The Coronavirus Aid, Relief, and Economic Security Act (CARES Act)

In March 2020, in response to the COVID-19 pandemic, the CARES Act was signed into law. The CARES Act provides numerous tax provisions and other stimulus measures. The CARES Act also includes a number of benefits that are applicable to us and other healthcare providers including, but not limited to

- Providing clinical laboratories a one-year reprieve from the reporting requirements under the Protecting Access to Medicare Act ("PAMA") as well as a one-year delay of reimbursement rate reductions for clinical laboratory services provided under Medicare that were scheduled to take place in 2021. Further revisions of the Medicare Clinical Laboratory Fee Schedule for years after 2021 will be based on future surveys of market rates. Reimbursement reduction from 2022-2024 is capped by PAMA at 15% annually;

- Appropriating $100 billion to health care providers for related expenses or lost revenues that are attributable to the COVID-19 pandemic. In April 2020, we received from Medicare a CARES Act Relief Payment grant of approximately $0.75 million from the initial tranche of $30 billion distributed to health care providers;

- Allocated $349 billion to small businesses as Payment Protection Program (PPP) loans through the Small Business Administration (SBA). In April 2020, we received approximately $7.0 million from the initial tranche of this program.

- Providing an advance on testing services payments which can be either paid back or earned back starting 120 days from receipt. In April 2020 we applied for and received a Medicare advance payment of $2.5 million;

- Suspending Medicare sequestration from May 2020 to December 2020. We estimate that the suspension of Medicare sequestration will result in a small benefit to us in the form of higher reimbursement rates for diagnostic testing services performed on behalf of Medicare beneficiaries.

Overview

Enzo Biochem, Inc. (the "Company" "we", "our" or "Enzo") is an integrated diagnostics, clinical lab, and life sciences company focused on delivering and applying advanced technology capabilities to produce affordable reliable products and services that enable our customers to meet their clinical needs. Through a connection with the market, we provide advanced biotechnology solutions to the global community as affordable and flexible quality products and services. We develop, manufacture and sell our proprietary technology solutions and platforms to clinical laboratories, specialty clinics, researchers and physicians globally. Enzo's structure and business strategy represent the culmination of years of extensive planning and work. The Company has the unique ability to offer low cost, high performance products and services for diagnostic testing, which ideally positions us to capitalize on the reimbursement pressures facing diagnostic labs. Our pioneering work in genomic analysis coupled with our extensive patent estate and enabling platforms have positioned the Company to continue to play an important role in the rapidly growing molecular medicine marketplaces.

Enzo develops low cost diagnostic platform products and related services. Our platform development includes automation-compatible reagent systems and associated products for sample collection and processing through analysis. We develop affordable products and services to improve healthcare, one of the greatest challenges today. Enzo combines over 40 years of expertise in technology development with assay development capabilities and diagnostic testing services to create high performance, cost-effective, and open assay solutions. The ability to combine these assets in one company is unique. With our strong intellectual property portfolio integrated with assay development know-how, production, distribution, validation and services capabilities, we have enabled sustainable products and services for a market that is facing increasing pressure in costs and reimbursement

Enzo technology solutions and platforms and unique operational structure are designed to reduce overall healthcare costs for both government and private insurers. Our proprietary technology platforms reduces our customers' need for multiple, specialized instruments, and offer a variety of high throughput capabilities together with a demonstrated high level of accuracy and reproducibility. Our genetic test panels are focused on large and growing markets primarily in the areas of personalized medicine, women's health, infectious diseases and genetic disorders.

For example, our NY State Department of Health approved GenFlex platform addresses the $450 million annualized global CT/NG/TV diagnostic market as well as the $1.3 billion women's health market. According to the Centers for Disease Control and Prevention (CDC), there are more than 1.7 million cases of Chlamydia (CT), 500,000 cases of Neisseria Gonorrhea (NG) and 3.7 million cases of Trichomonas Vaginalis (TV) in the United States per annum. We are currently developing extensions of the GenFlex platform which could eventually address the entire $7 billion molecular diagnostic market. GenFlex is a commercially available sample-to-result molecular diagnostic platform that includes sample collection, sample processing, amplification and detection. The GenFlex open system delivers high-throughput, high capacity, workflow efficiency and flexibility at a much greater level of affordability than existing systems Furthermore, reduced patient to physician office visits translates into lower healthcare processing costs and greater patient services.

In the course of our research and development activities, we have built a substantial portfolio of intellectual property assets, comprised of 478 issued patents worldwide and 63 pending patent applications, along with extensive enabling technologies and platforms.

Below are brief descriptions of each of our operating segments (See Note 11 in the Notes to Consolidated Financial Statements):

Enzo Clinical Services is a clinical reference laboratory providing a wide range of clinical services to physicians, medical centers, other clinical labs and pharmaceutical companies. The Company believes having a Clinical Laboratory Improvement Amendments of 1988 ("CLIA") certified and College of American Pathologists ("CAP") accredited medical laboratory located in New York provides us the opportunity to more rapidly introduce cutting edge products and services to the clinical marketplace. Enzo Clinical Labs offers an extensive menu of molecular and other clinical laboratory tests and procedures used in patient care by physicians to establish or support a diagnosis, monitor treatment or medication, and search for an otherwise undiagnosed condition. Our laboratory is equipped with state-of-the-art communication and connectivity solutions enabling the rapid transmission, analysis and interpretation of generated data. We operate a full service clinical laboratory in Farmingdale, New York, a network of over 30 patient service centers throughout New York, New Jersey and Connecticut, two free standing "STAT" or rapid response laboratories in New York City and Connecticut, an in-house logistics department, and an information technology department. Under our license in New York State, we are able to offer testing services to clinical laboratories and physicians nationwide.

The Clinical Laboratory Services reporting unit is impacted by various risk factors, including among others, reduced reimbursements from third party payers for testing performed and from recent health care legislation. Despite the growth we have experienced in previous years, there can be no assurance future growth can be achieved. The introduction of new molecular and esoteric tests is expected to increase our revenue per test and could offset impacts from the above factors. The Company anticipates improved profitability with increased service volume.

Enzo Products manufactures, develops and markets products and tools for clinical research, drug development and bioscience research customers worldwide. Underpinned by broad technological capabilities, Enzo Life Sciences has developed proprietary products used in the identification of genomic information by laboratories around the world. Information regarding our technologies can be found in the "Core Technologies" section. We are internationally recognized and acknowledged as a leader in the development, manufacturing validation and commercialization of numerous products serving not only the clinical research market, but also the life sciences markets in the fields of cellular analysis and drug discovery, among others. Our operations are supported by global operations allowing for the efficient marketing and delivery of our products around the world.

Enzo Therapeutics is a biopharmaceutical venture that has developed multiple novel approaches in the areas of gastrointestinal, infectious, ophthalmic and metabolic diseases, many of which are derived from the pioneering work of Enzo Life Sciences. Enzo Therapeutics has focused its efforts on developing treatment regimens for diseases and conditions for which current treatment options are ineffective, costly, and/or cause unwanted side effects. This focus has generated a clinical and preclinical pipeline, as well as more than 100 patents and patent applications. In December 2019, Enzo announced it will consider various avenues to unlock value in Enzo Therapeutics. Alternatives under consideration include a possible spin-off, sale, joint venture or licensing of its intellectual property.

Results of Operations
Three months ended April 30, 2020 compared to April 30, 2019
(in 000s)

Comparative Financial Data for the Three Months Ended April 30,

	2020	2019	Favorable (Unfavorable)	% Change
Revenues	$ 16,903	$ 19,662	$ (2,759)	(14)
Operating costs and expenses:				
Cost of revenues	12,478	14,360	1,882	13
Research and development	1,163	781	(382)	(49)
Selling, general and administrative	11,061	10,920	(141)	(1)
Legal and related expenses	1,925	257	(1,668)	**
Legal settlements, net	—	(28,925)	(28,925)	(100)
Total operating costs, expenses, and legal settlements, net	26,627	(2,607)	(29,234)	**
Operating (loss) income	(9,724)	22,269	(31,993)	**
Other income (expense):				
Interest	87	258	(171)	(66)
Other	135	70	65	93
Foreign currency loss	(358)	(332)	(26)	(8)
(Loss) income before income taxes	$ (9,860)	$ 22,265	$ (32,125)	**

**** not meaningful**

Consolidated Results:

The "2020 period" and the "2019 period" refer to the three months ended April 30, 2020 and 2019, respectively.

Clinical services revenues for the 2020 period were $10.5 million compared to $11.8 million in the 2019 period, a decrease of $1.3 million or 11%. Revenues for the 2020 period include a CARES Act Relief Payment grant of $0.7 million. Due to COVID-19, total diagnostic testing volume measured by the number of accessions for both our core, or non-genetic, and our genetic services decreased 28% period over period, resulting in the 2020 period's revenue decrease. COVID-19 testing services provided in the last month of the 2020 period partially offset the impact of that decline in volume. The impact from the Protecting Access to Medicare Act ("PAMA") continues to negatively impact reimbursements from Medicare and third party payers.

Product revenues for the 2020 and 2019 periods were $6.4 million and $7.9 million, respectively. The decrease of $1.5 million or 19% is the result of the policies and initiatives ordered by national and local governments designed to reduce the transmission of COVID-19. The negative effect of these government policies on our products revenues was greater in the U.S. market than markets in the rest of the world, and began in the latter half of the 2020 period.

The cost of clinical services was $9.1 million in the 2020 period and $11.0 million in the 2019 period, a decrease of $1.9 million, attributable to the overall decline in testing volume, resulting in reduction in reagent usage and outside reference testing expense. However, due to fixed overhead costs, the gross profit margin on Clinical Services revenues, excluding the grant, was 6.2% in the 2020 period and 6.7% in the 2019 period.

The cost of product revenues was $3.3 million in the 2020 period and $3.4 million in the 2019 period, a decrease of $0.1 million or 3% due to the decrease in revenues. The gross profit margin on products was 48% in the 2020 period and 56% in the 2019 period, negatively impacted by period fixed labor and overhead costs.

Research and development expenses were approximately $1.2 million in the 2020 period and $0.8 million in the 2019 period, an increase of $0.4 million or 49%. The increase is mostly attributed to the Clinical Services division for lab developed tests (LDT's) including those based on our proprietary GenFlex platform. During the 2020 period, our research was focused on lab developed tests for detection of COVID-19 antibodies under the FDA's Emergency Use Authorization (EUA).

Selling, general and administrative expenses were $11.1 million during the 2020 period versus $10.9 million during the 2019 period, an increase of $0.2 million or 1%. The Clinical Services expense decreased $0.1 million due to cost savings initiatives. The Life Sciences Products expense decreased $0.2 million primarily due to reductions in sales and marketing salaries and related costs. The other segment increased $0.5 million for higher self-insured healthcare benefit costs and professional fees.

Legal and related expenses were $1.9 million during the 2020 period compared to $0.2 million in the 2019 period, an increase of $1.7 million. During the 2020 period, we incurred $1.5 million for contested proxy costs relating to our February 2020 annual shareholders meeting. Legal expense associated with legal activity and related costs associated with on-going litigation and contract disputes increased $0.1 million due to the timing of activities.

Legal settlements, net were $28.9 million in the 2019 period versus none in the 2020 period. During the 2019 period the Company as plaintiff finalized and executed settlement agreements with Roche ($19.4 million, net), and Hologic Inc. ($9.5 million, net).

Interest income, net was approximately $0.1 million in the 2020 period and $0.2 million in the 2019 period and represents interest on cash and cash equivalents. During the 2020 period, the amount of investable cash was lower as were interest rates earned on deposits. Due to recent emergency actions by the Federal Reserve to cut its target interest rate near zero in response to COVID-19, we expect there will be substantially no interest earned on our cash and cash equivalents for the foreseeable future.

The foreign currency revaluation loss recognized by the Life Sciences Products segment during both the 2020 and 2019 periods was $0.3 million due to the depreciation of the British pound and Euro versus the U.S. dollar.

Results of Operations
Nine months ended April 30, 2020 compared to April 30, 2019
(in 000s)

Comparative Financial Data for the Nine Months Ended April 30,

	2020	2019	Favorable (Unfavorable)	% Change
Revenues	$ 56,494	$ 60,249	$ (3,755)	(6)
Operating costs and expenses:				
Cost of revenues	40,574	43,347	2,773	6
Research and development	3,282	2,342	(940)	(40)
Selling, general and administrative	32,893	33,387	494	1
Legal and related expenses	5,681	2,700	(2,981)	(110)
Legal settlements, net	—	(28,925)	(28,925)	(100)
Total operating costs, expenses and legal settlements, net	82,430	52,851	(29,579)	(1)
Operating (loss) income	(25,936)	7,398	(33,334)	**
Other income (expense):				
Interest	495	759	(264)	(35)
Other	334	249	85	34
Foreign currency loss	(88)	(530)	442	(83)
(Loss) income before income taxes	$ (25,195)	$ 7,876	$ (33,071)	**

**** not meaningful**

Consolidated Results:

The "2020 period" and the "2019 period" refer to the nine months ended April 30, 2020 and 2019, respectively.

Clinical services revenues for the 2020 period were $35.8 million compared to $38.0 million in the 2019 period, a decrease of $2.3 million or 6%. Revenues for the 2020 period include a CARES Act Relief Payment grant of $0.7 million. Due to COVID-19, total diagnostic testing volume measured by the number of accessions for both our core, or non-genetic, and our genetic services decreased 6% period over period, resulting in the 2020 period's revenue decrease. COVID-19 testing services provided in the last month of the 2020 period partially offset the impact of that decline in volume. Liquidation rate improvements also partially offset the impact of the decline in volume. In the normal course of business, estimated collection amounts are subject to the complexities and ambiguities of third party payer billing, reimbursement regulations and claims processing, as well as issues unique to Medicare and Medicaid programs, and require us to consider the potential for adjustments when estimating variable consideration in the recognition of revenue in the period that the related services are rendered. The impact from the Protecting Access to Medicare Act ("PAMA") continues to negatively impact reimbursements from Medicare and third party payers.

Product revenues for the 2020 and 2019 periods were $20.7 million and $22.2 million, respectively. The decrease of $1.5 million or 7% is the result of the policies and initiatives ordered by national and local governments designed to reduce the transmission of COVID-19. The negative effect of these government policies on our products revenues was greater in the U.S. market than markets in the rest of the world, and began in the latter half of the third quarter of the 2020 period.

The cost of Clinical Services was $30.4 million in the 2020 period and $33.0 million in the 2019 period, a decrease of $2.6 million, attributable to the overall decline in testing volume, resulting in reduction in reagent usage and outside reference testing expense. The gross profit margin on Clinical Services revenues, excluding the grant in the 2020 period, was 13.4% in both periods. In the 2020 period, liquidation rate improvements and the higher margin on COVID-19 testing helped to offset the effect of reduced genetics reimbursements and lower margin core, or non-genetic testing services.

The cost of product revenues was $10.2 million in the 2020 period and $10.4 million in the 2019 period, a decrease of $0.2 million or 2% due to the decrease in revenues. The gross profit margin on products was 51% in the 2020 period and 53% in the 2019 period, negatively impacted by third quarter fixed labor and overhead costs and higher material costs.

Research and development expenses were $3.3 million in the 2020 period and $2.3 million in the 2019 period, an increase of $0.9 million or 40%. The increase is entirely attributed to the Clinical Services division for lab developed tests (LDTs) including those based on our proprietary GenFlex platform. During the 2020 period, our research was focused on lab developed tests for detection of COVID-19 antibodies under the FDA's Emergency Use Authorization (EUA) and certain other tests based GenFlex, which were approved by The New York State Department of Health.

Selling, general and administrative expenses were $32.9 million during the 2020 period versus $33.4 million during the 2019 period, a decrease of $0.5 million or 1%. The Clinical Services expense decreased $0.2 million due to cost savings initiatives. The Life Sciences Products expense decreased $0.9 million primarily due to reductions in sales, marketing and administrative salaries and related costs. The other segment increased $0.6 million for higher self-insured healthcare benefit costs.

Legal and related expenses were $5.7 million during the 2020 period compared to $2.7 million in the 2019 period, an increase of $3.0 million. During the 2020 period, we incurred $4.0 million for contested proxy costs relating to our February 2020 annual shareholders meeting. As described in Note 3, third-party payers, including government programs, may decide to deny payment or recoup payments for testing that they contend was improperly billed or not medically necessary, against their coverage determinations, or for which they believe they have otherwise overpaid (including as a result of their own error), and we may be required to refund payments already received. During the third fiscal quarter of 2019, a significant third-party payer informed us outside of their typical business practice that they believe it overpaid the Company during certain periods of fiscal 2018. The Company disputes these claims and has formally sent legal appeal letters to the payer. In the 2020 period, we recorded $0.8 million in legal and related expenses as a result of reduced reimbursements this payer made to us. At this time, we are unable to determine the probability of the outcome of these appeals or reasonably estimate a range of potential losses associated with this claim. Legal expense associated with legal activity and related costs associated with on-going litigation and contract disputes decreased $1.8 million due to the timing of activities.

Legal settlements, net were $28.9 million in the 2019 period versus none in the 2020 period. During the 2019 period the Company as plaintiff finalized and executed settlement agreements with Roche ($19.4 million, net), and Hologic Inc. ($9.5 million, net).

Interest income, net was $0.5 million in the 2020 period and $0.8 million in the 2019 period and represents interest on cash and cash equivalents. During the 2020 period, the amount of investable cash was lower as were interest rates earned on deposits. Due to recent emergency actions by the Federal Reserve to cut its target interest rates near zero in response to COVID-19, we expect there will be substantially no interest earned on our cash and cash equivalents for the foreseeable future.

The foreign currency revaluation loss recognized by the Life Sciences Products segment during the 2020 period was $0.1 million compared to a loss of $0.5 million in the 2019 period, a favorable variance of $0.4 million. The lower loss was primarily due to appreciation of the British pound and Swiss franc versus the U.S. dollar during the 2020 period, compared to their depreciation during the 2019 period.

Liquidity and Capital Resources

At April 30, 2020, the Company had cash and cash equivalents and restricted cash of $55.2 million of which $0.9 million was in foreign accounts, as compared to cash and cash equivalents and restricted stock of $60.9 million, of which $0.7 million was in foreign accounts at July 31, 2019. It is the Company's current intent to permanently reinvest these funds outside of the United States, and its current plans do not demonstrate a need to repatriate them to fund its United States operations. The Company had working capital of $40.4 million at April 30, 2020 compared to $65.4 million at July 31, 2019. The decrease in working capital of $25.0 million was due to the period loss and the adoption of the new accounting standard for leases, which resulted in the recognition of $4.3 million of current operating lease liabilities at April 30, 2020. These effects were partially offset by the 2020 period's financing and an advance payment from the government due to COVID-19 explained below and a positive net change in current operating assets and liabilities.

Net cash used in operating activities during the 2020 period was approximately $12.1 million as compared to cash provided by operating activities of $8.0 million during the 2019 period, a negative variance of approximately $20.1 million. The variance is mainly due to the 2019 period's net income, generated by legal settlements, partially offset by the proceeds from the PPP loan of $7.0 million, the CMS advance payment of $2.5 million, and the positive variance in the changes in operating assets and liabilities in the 2020 period compared to the 2019 period. In April 2020 we received a $2.5 million advance on testing services payments from CMS under the CARES Act which can be either paid back or earned back starting 120 days from receipt and fully repaid by 210 days from receipt. This advance is classified as deferred revenue and is included in accrued liabilities.

Net cash used in investing activities in fiscal 2020 and 2019 was approximately $0.7 million and $7.0 million, respectively. The 2020 period use consists of capital expenditures and the 2019 period use is mainly due to the purchase of our new facility.

Net cash provided by financing activities in fiscal 2020 was $7.1 million as compared to $4.4 million in fiscal 2019.

During the third quarter of fiscal 2020 period, we received a CARES Act Paycheck Protection Program (PPP) loan of $7.0 million. The CARES Act expanded the U.S. Small Business Administration's (SBA) business loan program to create the Paycheck Protection Program (PPP), which provides employers with uncollateralized loans whose primary purpose is to retain or maintain workforce and salaries for a twenty four week period ("covered period") following receipt of the loan. Currently, PPP loans have a 1% fixed interest rate and are due from two to five years. The primary features of the PPP loan program are to provide funding to companies to cover eligible expenses, and the potential for forgiveness of that portion of the loan spent on payroll and other permitted operating expenses during the covered period, subject to reductions if the borrower fails to maintain or restore employee and salary levels. We applied for a PPP loan based on the eligibility and need requirements established when the program was announced and In April 2020, the Company received $7,000 through Citibank N.A., the Company's existing lender, pursuant to the PPP (the "PPP Loan").. The PPP Loan matures on April 17, 2022 (the "Maturity Date"), accrues interest at 1% per annum and may be prepaid in whole or in part without penalty. No interest payments are due within the initial six months of the PPP Loan. The interest accrued during the initial six-month period is due and payable, together with the principal, on the Maturity Date. The Company intends to use all proceeds from the PPP Loan to retain employees, maintain payroll and make lease and utility payments to support business continuity throughout the COVID-19 pandemic. All or a portion of the PPP Loan may be forgiven by the SBA upon application by the Company and upon documentation of expenditures in accordance with the SBA requirements. Under the CARES Act, loan forgiveness is available for the sum of documented payroll costs, covered rent payments, covered mortgage interest and covered utilities during the twenty four week period beginning on the date of receipt of the PPP loan with certain stipulated restrictions. Due to uncertainties with respect to loan forgiveness calculations and government pronouncements with respect to eligibility, we did not recognize any loan forgiveness as of April 30, 2020 and have classified the loan in other current liabilities as we expect to earn loan forgiveness by the end of the covered period. The SBA has announced its intention to audit loans in excess of $2.0. No assurance can be given that we will obtain forgiveness of the PPP loan in whole or in part. This loan is included in other current liabilities as of April 30, 2020.

In April 2020, our subsidiary in Switzerland received a loan of CHF 0.4 million ($ 0.4 million, based on the foreign exchange rate as of April 30, 2020) from the Swiss government under the "Corona Krise" emergency loan program in response to the pandemic. This loan is uncollateralized, bears 0% interest, is due in 5 years, and may be repaid at any time. This loan is included in long term debt – net as of April 30, 2020

During the 2019 period, we entered into a mortgage agreement for the purchase of our new facility. The mortgage agreement, a loan of $4.5 million for a term of 10 years, bears a fixed interest rate of 5.09% per annum and requires monthly mortgage payments of $30. At April 30, 2020, the balance owed under the mortgage agreement was $4.3 million. The Company's obligations under the mortgage agreement are secured by the purchased facility and by a $750 cash collateral deposit with the mortgagee as additional security. This restricted cash is included in other assets as of April 30, 2020.

For additional information regarding these loans, see Note 7 – Loan Payable.

For the remainder of fiscal 2020 and beyond, we will make capital expenditures to support and grow our existing operations including but not limited to the Company's COVID-19 program. These capital expenditures principally relate to investments in information technology, laboratory equipment and facilities, including build out of our new facility at our Farmingdale campus. The extent of such investments is subject to future consideration in light of the impact of the COVID-19 pandemic.

Historically, we have funded working capital requirements, capital expenditures, debt service requirements and other obligations through existing cash and cash equivalents and cash flows from operations, and through loans. We believe that the COVID-19 pandemic has had and will likely continue to have an adverse impact our consolidated results of operations, financial position, and cash flows, including material declines in testing volumes and revenues and therefore, cash collections of accounts receivable, the extent of which will be primarily driven by: the severity and duration of the COVID-19 pandemic; the COVID-19 pandemic's impact on the U.S. healthcare system and the U.S. economy; and the timing, scope and effectiveness of federal, state and local governmental responses to the COVID-19 pandemic, including the continuation of social distancing protocols, shelter-in-place protocols, work-from-home mandates and business shutdowns. We believe that our current cash and cash equivalents level and utilization of the Controlled Equity Offering program if necessary, are sufficient for our foreseeable liquidity and capital resource needs over at least the next twelve (12) months, although there can be no assurance that future events will not alter such view. We expect our cash reserves will be reduced over the next four quarters as we implement our strategy of developing innovative diagnostic platforms and assays for use by independent labs, which includes substantial capital expenditure. Although there can be no assurances, in the event additional capital is required, the Company believes it has the ability to raise additional funds through equity offerings or other sources. Our liquidity plans are subject to a number of risks and uncertainties, including those described in the Item 1A. "Risk Factors" section of this Form 10-Q and in our Form 10-K for the year ended July 31, 2019, some of which are outside our control. Macroeconomic conditions could limit our ability to successfully execute our business plans and therefore adversely affect our liquidity plans.

Contractual Obligations

There have been no material changes to our Contractual Obligations as reported in our Form 10-K for the fiscal year ended July 31, 2019. Management is not aware of any material claims, disputes or settled matters concerning third party reimbursement that would have a material effect on our financial statements, except as disclosed in Note 12 to the Consolidated Financial Statements.

Off-Balance Sheet Arrangements

The Company does not have any "off-balance sheet arrangements" as such term is defined in Item 303(a)(4) of Regulation S-K.

Critical Accounting Policies

The Company's discussion and analysis of its financial condition and results of operations are based upon Enzo Biochem, Inc.'s consolidated financial statements, certain information and footnote disclosure, normally included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States, have been condensed or omitted, as permitted under rules promulgated by the Security and Exchange Commission. The preparation of these financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses. These estimates and judgments also affect related disclosure of contingent assets and liabilities.

On an on-going basis, we evaluate our estimates, including those related to contractual expense, allowance for uncollectible accounts, inventory, operating lease liabilities, goodwill and income taxes. The Company bases its estimates on experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

Revenues – Clinical Services

Contractual Adjustment

The Company's estimate of contractual adjustment is based on significant assumptions and judgments, such as its interpretation of payer reimbursement policies, and bears the risk of change. The estimation process is based on the experience of amounts approved as reimbursable and ultimately settled by payers, versus the corresponding gross amount billed to the respective payers. The contractual adjustment is an estimate that reduces gross revenue, based on gross billing rates, to amounts expected to be approved and reimbursed.

Gross billings are based on a standard fee schedule we set for all third party payers, including Medicare, HMO's and managed care. The Company adjusts the contractual adjustment estimate quarterly, based on its evaluation of current and historical settlement experience with payers, industry reimbursement trends, and other relevant factors. The other relevant factors that affect our contractual adjustment include the monthly and quarterly review of: 1) current gross billings and receivables and reimbursement by payer, 2) current changes in third party arrangements and 3) the growth of in-network provider arrangements and managed care plans specific to our Company.

Our clinical business is primarily dependent upon reimbursement from third-party payers, such as Medicare (which principally serves patients 65 and older) and insurers. We are subject to variances in reimbursement rates among different third-party payers, as well as constant changes of reimbursement rates. Changes that decrease reimbursement rates or coverage would negatively impact our revenues. The number of individuals covered under managed care contracts or other similar arrangements has grown over the past several years and may continue to grow in the future. In addition, Medicare and other government healthcare programs continue to shift to managed care. These trends will continue to reduce our revenues from these programs.

During the three months ended April 30, 2020 and 2019, the contractual adjustment percentages, determined using current and historical reimbursement statistics, were 87.1% and 89.1%, respectively, of gross billings. During the nine months ended April 30, 2020 and 2019, the contractual adjustment percentages, determined using current and historical reimbursements statistics, were 88.2% and 88.4%, respectively. In general, the Company believes a decline in reimbursement rates or a shift to managed care or similar arrangements may be offset by the positive impact of an increase in the number of molecular tests we perform. However, there can be no assurance that we can increase the number of tests we perform or that if we do increase the number of tests we perform, that we can maintain that higher number of tests performed, or that an increase in the number of tests we perform would result in increased revenue.

The Company estimates (by using a sensitivity analysis) that each 1% point change in the contractual adjustment percentage could result in a change in clinical services revenues of approximately $3.0 million and $2.2 million for the nine months periods ended April 30, 2020 and 2019 respectively, and a change in the net accounts receivable of approximately $0.3 million as of April 30, 2020.

Our clinical services financial billing system records gross billings using a standard fee schedule for all payers and does not record contractual adjustment by payer at the time of billing. Therefore, we are unable to quantify the effect contractual adjustments recorded during the current period have on revenue recorded in a previous period. However, we can reasonably estimate our monthly contractual adjustment to revenue on a timely basis based on our quarterly review process, which includes:

- an analysis of industry reimbursement trends;
- an evaluation of third-party reimbursement rates changes and changes in reimbursement arrangements with third-party payers;
- a rolling monthly analysis of current and historical claim settlement and reimbursement experience statistics with payers; and
- an analysis of current gross billings and receivables by payer.

Government assistance grant income

Government assistance grants which are unconditional when received and intended to compensate for expenses incurred or replace lost revenues are recognized when those expenses are incurred or during the period that the lost revenues is experienced, and are included in revenues.

Accounts Receivable

Accounts receivable are reported at realizable value, net of allowances for doubtful accounts, which is estimated and recorded in the period of the related revenue.

The following is a table of the Company's net accounts receivable by services and by products. Net receivables for Clinical Services are detailed by billing category and as a percent to its total net receivables. At April 30, 2020, and July 31, 2019, approximately 57% and 63% respectively of the Company's net accounts receivable relates to its Clinical Laboratory Services business, which operates in the New York, New Jersey and Connecticut medical communities.

The accounts receivable balance for Life Science products includes $0.7 million or 25% and $1.2 million or 32% of foreign receivables as of April 30, 2020 and July 31, 2019, respectively.

Net accounts receivable

Billing category	As of April 30, 2020		As of July 31, 2019	
Clinical Services				
Third party payers	$ 1,311	34%	$ 2,956	44%
Patient self-pay	1,698	44	2,360	35
Medicare	471	12	910	13
HMO's	390	10	574	8
Total Clinical Services	3,870	100%	6,800	100%
Total Products	2,947		3,938	
Total accounts receivable	$ 6,817		$ 10,738	

The Company's ability to collect outstanding receivables from third party payers is critical to its operating performance and cash flows. The primary collection risk lies with uninsured patients or patients for whom primary insurance has paid but a patient portion remains outstanding. The Company also assesses the current state of its billing functions in order to identify any known collection or reimbursement issues in order to assess the impact, if any, on the allowance estimates, which involves judgment.

The Company believes that the collectability of its receivables is directly linked to the quality of its billing processes, most notably, those related to obtaining the accurate patient information in order to bill effectively for the services provided. Should circumstances change (e.g. shift in payer mix, decline in economic conditions or deterioration in aging of receivables), our estimates of net realizable value of receivables could be reduced by a material amount. As of April 30, 2020, approximately 17% of Clinical Labs receivables are from one payer. Furthermore, the Company could experience a negative impact on cash collections as a result of the impact of the COVID-19 pandemic.

Billing for clinical services is complicated because of many factors, especially: the differences between our standard gross fee schedule for all payers and the reimbursement rates of the various payers we deal with, disparity of coverage and information requirements among the various payers, and disputes with payers as to which party is responsible for reimbursement.

The following table indicates the Clinical Services aged gross receivables by payer group which is prior to adjustment to gross receivables for: 1) contractual adjustment, 2) fully reserved balances not yet written off, and 3) other revenue adjustments.

As of April 30, 2020	Total	%	Third Party Payers	%	Medicare	%	Self-Pay	%	HMO's	%
1-30 days	$ 4,242	15	$ 2,809	16	$ 587	12	$ 420	8	$ 426	69
31-60 days	4,813	17	3,121	18	569	11	1,046	19	77	12
61-90 days	5,090	18	3,273	19	687	14	1,103	20	27	4
91-120 days	4,605	16	2,634	15	897	18	1,045	19	29	5
121-150 days	2,683	9	1,543	9	574	12	537	10	29	5
Greater than 150 days	7,168	25	4,154	24	1,641	33	1,344	24	29	5
Totals	$ 28,601	100%	$ 17,534	100%	$ 4,955	100%	$ 5,495	100%	$ 617	100%

As of July 31, 2019	Total	%	Third Party Payers	%	Medicare	%	Self-Pay	%	HMO's	%
1-30 days	$ 22,031	50	$ 14,232	53	$ 4,114	52	$ 1,236	20	$ 2,449	90
31-60 days	6,659	15	4,473	17	952	12	1,109	18	125	5
61-90 days	4,185	10	2,742	10	495	6	903	15	45	2
91-120 days	2,786	6	1,708	6	316	4	736	12	26	1
121-150 days	2,014	5	1,137	4	256	3	610	10	11	—
Greater than 150 days	6,007	14	2,684	10	1,709	22	1,563	25	51	2
Totals	$ 43,682	100%	$ 26,976	100%	$ 7,842	100%	$ 6,157	100%	$ 2,707	100%

Income Taxes

The Company accounts for income taxes under the liability method of accounting for income taxes. Under the liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. The liability method requires that any tax benefits recognized for net operating loss carry forwards and other items be reduced by a valuation allowance where it is not more likely than not the benefits will be realized in the foreseeable future. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under the liability method, the effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

It is the Company's policy to provide for uncertain tax positions and the related interest and penalties based upon management's assessment of whether a tax benefit is more likely than not to be sustained upon examination by tax authorities. To the extent the Company prevails in matters for which a liability for an unrecognized tax benefit is established or is required to pay amounts in excess of the liability, the Company's effective tax rate in a given financial statement period may be affected.

Inventory

The Company values inventory at the lower of cost (first-in, first-out) or net realizable value, which approximates market. Work-in-process and finished goods inventories consist of material, labor, and manufacturing overhead. Write downs of inventories to net realizable value are based on a review of inventory quantities on hand and estimated sales forecasts based on sales history and anticipated future demand. Unanticipated changes in demand could have a significant impact on the value of our inventory and require additional write downs of inventory which would impact our results of operations.

Leases - right of use assets and operating lease liabilities

The Company determines if an arrangement is or contains a lease at contract inception. The Company leases buildings, office space, patient service centers, and equipment primarily through operating leases, and equipment through a limited number of finance leases. Generally, a right-of-use asset, representing the right to use the underlying asset during the lease term, and a lease liability, representing the payment obligation arising from the lease, are recognized on the balance sheet at lease commencement based on the present value of the payment obligation. For operating leases, expense is recognized on a straight-line basis over the lease term. For finance leases, interest expense on the lease liability is recognized using the effective interest method and amortization of the right-of-use asset is recognized on a straight-line basis over the shorter of the estimated useful life of the asset or the lease term. Short-term leases with an initial term of 12 months or less are not recorded on the balance sheet; the Company recognizes lease expense for these leases on a straight-line basis over the lease term. The Company primarily uses its incremental borrowing rate in determining the present value of lease payments as the Company's leases generally do not provide an implicit rate. The Company has lease agreements with (i) right-of-use asset payments and (ii) non-lease components (i.e. payments related to maintenance fees, utilities, etc.,) which have generally been combined and accounted for as a single lease component.

On at least an annual basis, we perform a review of our business to determine if events or changes in circumstances have occurred that indicate that it is more likely than not that the carrying amount of an asset group, including long lived assets such as right of use assets, is not recoverable. If such events or changes in circumstances were deemed to have occurred, we would perform an impairment test of such long lived assets and record any noted impairment loss. In conjunction with the preparation of our April 30, 2020 financial statements, we performed such review and concluded that no impairment test for long lived assets was necessary. However, should the impact of the COVID-19 pandemic be significantly worse than currently expected, it is possible that we could incur impairment charges on long lived assets in the future.

Goodwill

Goodwill represents the excess of the cost of an acquisition over the fair value of the net assets acquired. The Company tests goodwill and long-lived assets annually as of the first day of the fourth quarter, or more frequently if indicators of potential impairment exist. In assessing goodwill and long-lived assets for impairment, the Company has the option to perform a qualitative assessment to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the Company determines that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, the Company is not required to perform a quantitative test in assessing goodwill and long-lived assets for impairment. However, if the Company concludes otherwise or elects not to perform the qualitative assessment, then it identifies the reporting units and compares the fair value of each of these reporting units to their respective carrying amount. If the carrying amount of the reporting unit is less than its fair value, no impairment exists. If the carrying amount of the reporting unit is higher than its fair value, the impairment charge is the amount by which the carrying amount exceeds its fair value, not to exceed the total amount of goodwill and intangibles allocated to the reporting unit.

On at least an annual basis, we perform a review of our business to determine if events or changes in circumstances have occurred that indicate that it is more likely than not that the fair value of a reporting unit with goodwill is less than its carrying value. If such events or changes in circumstances were deemed to have occurred, we would perform an impairment test of goodwill and record any noted impairment loss. In conjunction with the preparation of our April 30, 2020 financial statements, we performed such review and concluded that no impairment test for goodwill was necessary. However, should the impact of the COVID-19 pandemic be significantly worse than currently expected, it is possible that we could incur impairment charges in the future.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to market risk from changes in foreign currency exchange rates resulting from acquisitions with foreign locations (See Item 1A. Risk Factors section of the Form 10-K for the fiscal year ended July 31, 2019) that could impact our results of operations and financial position. We do not currently engage in any hedging or market risk management tools.

Foreign Currency Exchange Rate Risk

The financial reporting of our non-U.S. subsidiaries is denominated in currencies other than the U.S. dollar. Since the functional currency of our non-U.S. subsidiaries is the local currency, foreign currency translation adjustments are accumulated as a component of accumulated other comprehensive income in stockholders' equity. Assuming a hypothetical increase of 10% in the value of the U.S. dollar versus foreign currencies at April 30, 2020, our assets and liabilities would decrease by $0.4 million and $0.1 million, respectively, and our net sales and net earnings (loss) would decrease by $0.8 million and $0.2 million, respectively, on an annual basis.

We also maintain intercompany balances and loans with subsidiaries in different local currencies. These amounts are at risk of foreign exchange losses if exchange rates fluctuate. Assuming a hypothetical increase of 10% in the value of the U.S. dollar versus foreign currencies, our pre-tax earnings (loss) would be unfavorably impacted by approximately $1.6 million on an annual basis.

Interest Rate Risk

As of April 30, 2020, we have fixed interest rate financing on a building mortgage, equipment finance leases, and the PPP loan from the SBA.

Item 4. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this report, the Company's management conducted an evaluation (as required under Rules 13a-15(b) and 15d-15(b) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) of the Company's "disclosure controls and procedures" (as such term is defined under the Exchange Act), under the supervision and with the participation of the principal executive officer and the principal financial officer. Based on this evaluation, the principal executive officer and the principal financial officer concluded that the Company's disclosure controls and procedures are effective as of the end of the period covered by this report. Notwithstanding the foregoing, a control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that it will detect or uncover failures within the Company to disclose material information otherwise required to be set forth in the Company's periodic reports.

(b) Changes in Internal Controls over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended April 30, 2020 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

There have been no other material developments with respect to previously reported legal proceedings discussed in the annual report on Form 10-K for the fiscal year ended July 31, 2019 filed with the Securities and Exchange Commission, other than as noted in Note 12 to the Consolidated Financial Statements as of April 30, 2020.

Item 1A. Risk Factors

The COVID-19 pandemic has significantly and adversely affected our consolidated results of operations, financial position and cash flows, and may continue to do so depending on the severity and duration of the COVID-19 pandemic, the pandemic's impact on the U.S. healthcare system and the timing, scope and effectiveness of federal, state and local governmental responses to the COVID-19 pandemic.

[From our 8-K]: A novel strain of coronavirus ("COVID-19") continues to spread and severely impact the economy of the United States and other countries around the world, the Company has made substantial investments to expand the amount of COVID-19 testing available and is currently offering direct testing at its drive-through testing facilities as well as accepting tests for processing at its clinical laboratory. The Company and its employees are committed to being a part of the coordinated public and private sector response to this unprecedented challenge. The Company has also put preparedness plans in place at its facilities to maintain continuity of operations, while also taking steps to keep colleagues and customers healthy and safe.

Beginning in March 2020, the Company experienced, and anticipates it will continue to experience, a material decline in its laboratory testing volumes due to the COVID-19 pandemic as patients have reduced physician office visits. Additionally, our products customers have reduced or suspended purchases or temporarily closed and/or reduced operations on a global basis. This decline continues in the fourth fiscal quarter and may continue through the fiscal year ending July 31, 2020). Federal, state and local governmental policies and initiatives designed to reduce the transmission of COVID-19 have resulted in, among other things, the aforementioned significant reduction in physician office visits, the cancelation of elective medical procedures, customers closing or severely curtailing their operations (voluntarily or in response to government orders), and the adoption of work-from-home or shelter-in-place policies. The Company believes the COVID-19 pandemic may continue to have an impact on the Company's operating results, cash flows and financial condition. Global supply chain issues due to the pandemic may hamper both the manufacturing of products within the life sciences division as well as the testing capabilities in the clinical laboratory services division. It is possible that the Company may experience an adverse impact on cash collections from customers, clients and payers as a result of the impact of the COVID-19 pandemic.

The Company expects COVID-19 related products and services to partially offset revenue declines. Enzo is applying its technical expertise in molecular diagnostics to develop next generation COVID-19 diagnostic and antibody testing options under the FDA Emergency Use Authorization. However, it is too early to determine the positive impact from increased testing and the Company's proprietary product offerings will have on revenue, profitability and cash flow.

The Company believes the COVID-19 pandemic's adverse impact on its consolidated results of operations, financial position and cash flows will be primarily driven by: the severity and duration of the COVID-19 pandemic; the COVID-19 pandemic's impact on the U.S. healthcare system and the U.S. economy; and the timing, scope and effectiveness of federal, state and local governmental responses to the COVID-19 pandemic. These primary drivers are beyond the Company's knowledge and control, and as a result, at this time the Company cannot reasonably estimate the adverse impact the COVID-19 pandemic will have on its businesses, consolidated results of operations, financial position and cash flows, but the adverse impact is likely to be material. Even after the COVID-19 pandemic has moderated and the business and social distancing restrictions have eased, we may continue to experience similar adverse effects to our businesses, consolidated results of operations, financial position and cash flows resulting from a recessionary economic environment that may persist. The impact that the COVID-19 pandemic will have on our businesses, consolidated results of operations, financial position and cash flows could exacerbate the risks identified in "Item 1A. Risk Factors" in our Annual Report on Form 10-K.

Our outstanding debt may impair our financial and operating flexibility and a failure to satisfy the covenants under any of the agreements governing our outstanding debt could limit the availability of borrowings or result in an event of default under such agreements.

The Company had over $55 million in cash, cash equivalents and restricted cash on its balance sheet as of April 30 2020. Also as of that date, we had approximately $11 million of short term debt and $26.5 million in long term debt, primarily related to the $7 million SBA Payroll Protection Program loan of the CARES Act but which includes operating leases and a mortgage obligation of approximately $4.1 million, which contains various restrictive covenants. The SBA Payroll Protection Program loan or a portion of the PPP Loan may be forgiven by the SBA upon application by the Company. These restrictions could limit our ability to use operating cash flow in other areas of our business because we must use a portion of these funds to make principal and interest payments on our debt. Our ability to comply with the restrictive covenants in the debt agreements and other instruments governing our indebtedness, including the leverage ratio covenant will depend upon our future performance and various other factors, including but not limited to the impact on our business, consolidated results of operations, financial condition and cash flows associated with the COVID-19 pandemic, any prolonged recessionary economic environment that may develop and competitive and regulatory factors, many of which are beyond our control. We may not be able to maintain compliance with all of the covenants. In that event, we may not be able to find and access any other borrowing availability and we may need to seek a waiver or amendment to the mortgage agreement or would need to refinance the mortgage. There can be no assurance that we can obtain additional waivers of our mortgage agreement covenants, or be able to refinance it, and, even if we were able to obtain a waiver or amendment in the future, such relief may only last for a limited period. Any noncompliance by us with the covenants under our mortgage agreement could result in an event of default under the agreement, which may allow the lender to accelerate payment of the mortgage. In the event our creditor accelerates the repayment of our mortgage, we cannot assure that we would have sufficient assets to make such repayment.

Item 6. Exhibits

Exhibit No.	Exhibit
31.1	Certification of Elazar Rabbani, Ph.D. pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of David Bench pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Elazar Rabbani, Ph.D. pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of David Bench pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101. INS*	XBRL Instance Document
101. SCH*	XBRL Taxonomy Extension Schema Document
101. CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definitions Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

*XBRL (Extensible Business Reporting Language) information is being furnished and not filed for purposes of Sections 11 and 12 of the Securities Act of 1933 and Section 18 of the Securities Exchange Act of 1934.

SIGNATURES

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

ENZO BIOCHEM, INC.
(Registrant)

Date: June 9, 2020

by: /s/ David Bench
Chief Financial Officer and
Principal Accounting Officer

EXHIBIT 31.1

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

I, Elazar Rabbani, Ph.D., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Enzo Biochem, Inc. (the "registrant").

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

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

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

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

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

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

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

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

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

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

Date: June 9, 2020

By: /s/ Elazar Rabbani, Ph.D.
Elazar Rabbani, Ph.D.
Chairman of the Board,
Chief Executive Officer and Secretary

EXHIBIT 31.2

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

I, David Bench, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Enzo Biochem, Inc. (the "registrant").

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

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

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

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

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

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

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

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

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

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

Date: June 9, 2020

By: /s/ David Bench
David Bench
Chief Financial Officer and
Principal Accounting Officer

EXHIBIT 32.1

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

In connection with the Quarterly Report of Enzo Biochem, Inc., and Subsidiaries ("the Company") on Form 10-Q for the period ended April 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Elazar Rabbani, Ph.D., Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(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.

Dated: June 9, 2020

By: /s/ Elazar Rabbani, Ph.D.
Elazar Rabbani, Ph.D.
Chairman of the Board,
Chief Executive Officer and Director

EXHIBIT 32.2

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

In connection with the Quarterly Report of Enzo Biochem, Inc., and Subsidiaries ("the Company") on Form 10-Q for the period ended April 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Bench, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(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.

Dated: June 9, 2020

By: /s/ David Bench
David Bench
Chief Financial Officer and
Principal Accounting Officer