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

# FORM 10-Q

(Mark One)		
OUARTERLY REPORT PURSUAN     ■ OUARTERLY PURSUAN     ■ OUARTERLY PURSUAN     ■ OUARTERLY PURSUAN     ■ OUARTERLY PU	NT TO SECTION 13 OR 15(d) OF THE SECU	RITIES EXCHANGE ACT OF 1934
For the quarterly period ended September 3		
For the quarterly period chaca september 5	0, 2021 OR	
☐ TRANSITION REPORT PURSUAL		DITIES EVOLUNICE ACT OF 1024
	NT TO SECTION 13 OR 15(d) OF THE SECU	RITIES EXCHANGE ACT OF 1954
For the transition period from	·	
	001-33357 (Commission file number)	
PR <i>C</i>	TALIX BIOTHERAPEUTIC	'S INC
TRO	(Exact name of registrant as specified in its charter)	
	(2. nace name of registrant as specified in its charter)	
Delaware		65-0643773
(State or other jurisdi		(I.R.S. Employer
of incorporation or organ	nzauon)	Identification No.)
2 University Plaza Suite 100	a .	
<u>Hackensack, NJ</u> (Address of principal execu	tive offices)	<u>07601</u> (Zip Code)
(Address of principal execu	(201)-696-9345	(Zip Code)
	(Registrant's telephone number, including area code)	)
(T)	<u>N/A</u>	
(Former	name, former address and former fiscal year, if changed si	• ,
	Securities registered pursuant to Section 12(b) of the A	-
Title of each class Common stock, \$0.001 par value	Trading Symbol(s) PLX	Name of each exchange on which registered NYSE American
Indicate by check mark whether the registrant (1) has	s filed all reports required to be filed by Section 13 or 15(d) of ant was required to file such reports), and (2) has been subject (	
	bmitted electronically every Interactive Data File required to boths (or for such shorter period that the registrant was required	
Indicate by check mark whether the registrant is a lar company. See the definitions of "large accelerated fil Act:	ge accelerated filer, an accelerated filer, a non-accelerated filer er," "accelerated filer," "smaller reporting company," and "em	r, a smaller reporting company, or an emerging growth erging growth company" in Rule 12b-2 of the Exchange
Large accelerated filer $\ \square$		elerated filer
Non-accelerated filer		ller reporting company ⊠ rging growth company □
If an amonging growth company indicate by cheely		
accounting standards provided pursuant to Section 1:	nark if the registrant has elected not to use the extended transition $3(a)$ of the Exchange Act. $\square$	ion period for complying with any new or revised financia
Indicate by check mark whether the registrant is a sh	ell company (as defined in Rule 12b-2 of the Exchange Act). Y	∕es □ No ⊠
On November 1, 2021, approximately 45,556,647 sh	ares of the Registrant's common stock, \$0.001 par value, were	outstanding.
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### PART I – FINANCIAL INFORMATION

### **Item 1. Financial Statements**

# PROTALIX BIOTHERAPEUTICS, INC. CONDENSED CONSOLIDATED BALANCE SHEETS

(U.S. dollars in thousands) (Unaudited)

September 30, 2021		Dece	December 31, 2020		
ASSETS					
CURRENT ASSETS:					
Cash and cash equivalents	\$	10,642	\$	18,265	
Short-term bank deposits		38,017		20,280	
Accounts receivable – Trade		5,561		2,000	
Other assets		2,274		2,096	
Inventories		14,730		13,082	
Total current assets	\$	71,224	\$	55,723	
NON-CURRENT ASSETS:					
Funds in respect of employee rights upon retirement		1,948	\$	1,799	
Property and equipment, net		5,065	Ψ	4,845	
Operating lease right of use assets		5,245		5,567	
Total assets	\$	83,482	\$	67,934	
Total assets	D.	03,402	<b>D</b>	07,934	
LIABILITIES AND STOCKHOLDERS' EQUITY (NET OF CAPITAL DEFICIENCY)					
CURRENT LIABILITIES:					
Accounts payable and accruals:	Φ.	0.400	Φ.	<b>=</b> 004	
Trade	\$	8,436	\$	7,221	
Other		14,694		13,926	
Operating lease liabilities		1,235		1,420	
Contracts liability		15,160		5,394	
Convertible notes		3,239		54,427	
Promissory note			_	4,086	
Total current liabilities	\$	42,764	\$	86,474	
LONG TERM LIABILITIES:					
Convertible notes	\$	27,816	\$		
Contracts liability		5,895		1,716	
Liability for employee rights upon retirement		2,353		2,263	
Operating lease liabilities		4,441		4,467	
Other long term liabilities				51	
Total long term liabilities	\$	40,505	\$	8,497	
Total liabilities	\$	83,269	\$	94,971	
STOCKHOLDEDS, EOUITA (CADITAL DEFICIENCA)		212		(27 027)	
STOCKHOLDERS' EQUITY (CAPITAL DEFICIENCY)	¢	213	¢	(27,037)	
Total liabilities and stockholders' equity (net of capital deficiency)	\$	83,482	\$	67,934	

# PROTALIX BIOTHERAPEUTICS, INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS

(U.S. dollars in thousands, except share and per share data) (Unaudited)

	Nine Months Ended			Three Months Ended				
	September 30, 2021		Sej	otember 30, 2020	September 30, 2021		Sep	tember 30, 2020
REVENUES FROM SELLING GOODS	\$	12,260	\$	11,975	\$	4,506	\$	3,296
REVENUES FROM LICENSE AND R&D SERVICES		17,541		31,428		7,548		7,494
TOTAL REVENUE		29,801		43,403		12,054		10,790
COST OF GOODS SOLD (1)		(13,201)		(8,121)		(3,703)		(2,868)
RESEARCH AND DEVELOPMENT EXPENSES (2)		(22,093)		(27,214)		(7,282)		(7,688)
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES (3)		(9,263)		(8,197)	-	(2,954)		(2,816)
OPERATING LOSS		(14,756)		(129)		(1,885)		(2,582)
FINANCIAL EXPENSES		(6,613)		(7,150)		(2,410)		(1,973)
FINANCIAL INCOME		403		359		96		118
FINANCIAL EXPENSES – NET		(6,210)		(6,791)		(2,314)		(1,855)
OTHER INCOME		51						
NET LOSS FOR THE PERIOD	\$	(20,915)	\$	(6,920)	\$	(4,199)	\$	(4,437)
LOSS PER SHARE OF COMMON STOCK – BASIC AND DILUTED	\$	(0.48)	\$	(0.25)	\$	(0.09)	\$	(0.14)
WEIGHTED AVERAGE NUMBER OF SHARES OF COMMON STOCK								·
USED IN COMPUTING LOSS PER SHARE - BASIC AND DILUTED		43,761,769		27,758,104		45,556,647		32,863,788
(1) Includes share-based compensation	\$	217	\$	•	\$	65	\$	
(2) Includes share-based compensation	\$	524	\$	635		154		562
(3) Includes share-based compensation	\$	1,216	\$	1,477	\$	344	\$	852

# PROTALIX BIOTHERAPEUTICS, INC. CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (CAPITAL DEFICIENCY)

(U.S. dollars in thousands, except share data) (Unaudited)

	Common	c	Common		dditional Paid-In	Ac	cumulated		
	Stock (1)		Stock		Capital		Deficit		Total
	Number of								
	Shares					ount			
Balance at January 1, 2020	14,838,213	\$	15	\$	270,492	\$	(340,829)	\$	(70,322)
Changes during the nine-month period ended September 30, 2020:									
Issuance of common stock and warrants, net of issuance cost	17,604,423		18		41,325				41,343
Share-based compensation related to stock options					1,607				1,607
Share-based compensation related to restricted stock awards	694,073		*		505				505
Exercise of warrants	200,000		*		472		(6.000)		472
Net loss for the period		_		_		_	(6,920)	_	(6,920)
Balance at September 30, 2020	33,336,709	\$	33	\$	314,401	\$	(347,749)	\$	(33,315)
Balance at January 1, 2021	34,765,280	\$	35	\$	320,280	\$	(347,352)	\$	(27,037)
Changes during the nine-month period ended September 30, 2021:									
Issuance of common stock, net of issuance cost	8,749,999		9		37,616				37,625
Issuance of common stock under the Sales Agreement, net	1,867,552		2		8,573				8,575
Share-based compensation related to stock options					1,176				1,176
Share-based compensation related to restricted stock awards					781				781
Exercise of warrants	173,816		*		-		-		-
Reacquisition of equity component of convertible notes					(12,019)				(12,019)
Equity component of convertible notes, net of transaction costs					12,027				12,027
Net loss for the period							(20,915)		(20,915)
Balance at September 30, 2021	45,556,647	\$	46	<u>\$</u>	368,434	\$	(368,267)	\$	213
Balance at June 30, 2020	32,442,636	\$	33	\$	308,515	\$	(343,312)	\$	(34,764)
Changes during the three-month period ended September 30, 2020:									
Note receivable payment					4,000				4,000
Share-based compensation related to stock options					909				909
Share-based compensation related to restricted stock awards	694,073				505				505
Exercise of warrants	200,000		*		472				472
Net loss for the period							(4,437)		(4,437)
Balance at September 30, 2020	33,336,709	\$	33	\$	314,401	\$	(347,749)	\$	(33,315)
Balance at June 30, 2021	45,556,647	\$	46	\$	367,863	\$	(364,068)	\$	3,841
Changes during the three-month period ended September 30, 2021:							, , ,		
Reacquisition of equity component of convertible notes					(12,019)				(12,019)
Equity component of convertible notes, net of transaction costs					12,027				12,027
Share-based compensation related to stock options					344				344
Share-based compensation related to restricted stock awards					219				219
Net loss for the period							(4,199)		(4,199)
Balance at September 30, 2021	45,556,647	\$	46	\$	368,434	\$	(368,267)	\$	213

<sup>\*</sup> Represents an amount equal to less than \$1.

(1) Common stock, \$0.001 par value; Authorized – as of September 30, 2021 and 2020 - 120,000,000 shares.

# PROTALIX BIOTHERAPEUTICS, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(U.S. dollars in thousands) (Unaudited)

	Nine Months Ended			ed.	
	September 30, 2021 September 30, 2020				
CASH FLOWS FROM OPERATING ACTIVITIES:					
Net loss	\$	(20,915)	\$	(6,920)	
Adjustments required to reconcile net loss to net cash used in operating activities:					
Share-based compensation		1,957		2,112	
Depreciation		859		1,011	
Financial income, net (mainly exchange differences)		118		(284)	
Changes in accrued liability for employee rights upon retirement		100		(488)	
Gain on amounts funded in respect of employee rights upon retirement		(75)		(11)	
Gain on sale of fixed assets		(51)			
Loss on extinguishment of convertible notes		831			
Amortization of debt issuance costs and debt discount		2,569		2,548	
Changes in operating assets and liabilities:					
Increase (decrease) in contracts liability (including non-current portion)		13,945		(15,062)	
Decrease (increase) in accounts receivable and other assets		(4,075)		783	
Changes in right of use assets		168		53	
Increase in inventories		(1,648)		(5,126)	
Increase in accounts payable and accruals		1,070		3,291	
Decrease in other long term liabilities		(51)		(463)	
Net cash used in operating activities	\$	(5,198)	\$	(18,556)	
CASH FLOWS FROM INVESTING ACTIVITIES:					
Purchase of bank deposits	\$	(37,835)	\$	(27,500)	
Proceeds from sale of short-term deposits		20,000			
Purchase of property and equipment		(1,011)		(380)	
Proceeds from sale of property and equipment		53		· í	
Decrease (increase) in restricted deposit		359		(4)	
Amounts funded in respect of employee rights upon retirement, net		(81)		340	
Net cash used in investing activities	\$	(18,515)	\$	(27,544)	
	<u> </u>	( - ) - )	<u> </u>	( )- )	
CASH FLOWS FROM FINANCING ACTIVITIES:					
Payment for convertible notes redemption and transactions costs	\$	(25,990)			
Net payment for promissory note	•	(4,086)			
Proceeds from issuance of common stock and warrants, net		37,625	\$	41,343	
Proceeds from issuance of common stock under the Sales Agreement, net		8,575	Ψ	.1,5 .5	
Exercise of warrants		0,070		472	
Net cash provided by financing activities	\$	16,124	\$	41,815	
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH	Ψ	10,124	Ψ	71,013	
EQUIVALENTS	\$	(34)	\$	26	
NET DECREASE IN CASH AND CASH EQUIVALENTS	Ψ	(7,623)	Ψ	(4,259)	
BALANCE OF CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		18,265		17,792	
-	¢		¢		
BALANCE OF CASH AND CASH EQUIVALENTS AT END OF PERIOD	\$	10,642	\$	13,533	

# PROTALIX BIOTHERAPEUTICS, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(U.S. dollars in thousands) (Unaudited)

(Continued) - 2

	Nine Months Ended			ed
	Septem	ber 30, 2021	Septen	nber 30, 2020
SUPPLEMENTARY INFORMATION ON INVESTING AND FINANCING ACTIVITIES				
NOT INVOLVING CASH FLOWS:				
Purchase of property and equipment	\$	387	\$	95
Right of use assets obtained in exchange for new operating lease liabilities	\$	309	\$	564
Transactions costs in connection with the exchange of convertible notes	\$	774		
	<u> </u>			
SUPPLEMENTARY DISCLOSURE ON CASH FLOWS				
Interest paid	\$	3,288	\$	2,172
Interest received	\$	445	\$	68

As to extinguishment of convertible notes see Note 5.

(Unaudited)

#### **NOTE 1 - SIGNIFICANT ACCOUNTING POLICIES**

#### a. General

Protalix BioTherapeutics, Inc. (collectively with its subsidiaries, the "Company") and its wholly-owned subsidiaries, Protalix Ltd. and Protalix B.V. (collectively, the "Subsidiaries"), are biopharmaceutical companies focused on the development and commercialization of recombinant therapeutic proteins based on the Company's proprietary ProCellEx® protein expression system ("ProCellEx"). To date, the Company has successfully developed taliglucerase alfa (marketed under the name BioManguinhos alfataliglicerase in Brazil and certain other Latin American countries and Elelyso® in the rest of the territories) for the treatment of Gaucher disease that has been approved for marketing in the United States, Brazil, Israel and other markets. The Company has a number of product candidates in varying stages of the clinical development process. The Company's strategy is to develop proprietary recombinant proteins that are therapeutically superior to existing recombinant proteins currently marketed for the same indications.

On August 25, 2021, the Company completed exchanges (the "Exchanges") of the Company's outstanding 7.50% Senior Secured Convertible Notes due 2021 (the "2021 Notes") with institutional note holders of a substantial majority of the 2021 Notes. The Exchanges involved the exchange of an aggregate of \$54.65 million principal amount of the Company's outstanding 2021 Notes for an aggregate of \$28.75 million principal amount of newly issued 7.50% Senior Secured Convertible Notes due 2024 (the "2024 Notes"), \$25.90 million in cash, and approximately \$1.1 million in cash representing accrued and unpaid interest through the closing date. The initial conversion rate for the 2024 Notes is 563.2216 shares of Common Stock for each \$1,000 principal amount of 2024 Notes (equivalent to an initial conversion price of approximately \$1.7755 per share of the Common Stock), subject to adjustment in certain circumstances. This initial conversion price represents a premium of approximately 32.5% relative to the closing price of the Common Stock on the NYSE American on August 13, 2021.

The most advanced investigational drug in the Company's product pipeline is pegunigalsidase alfa, or PRX-102, a therapeutic protein candidate for the treatment of Fabry disease, a rare, genetic lysosomal disorder, which is the subject of a phase III clinical program. The PRX-102 phase III clinical program includes three separate studies which are referred to as the *BALANCE* study, the *BRIDGE* study and the *BRIGHT* study. The studies are designed to evaluate the potential superiority of PRX-102 over current therapies in a head-to-head study and a switch-over study, evaluate the potential for improved efficacy and better quality of life for patients with Fabry disease and evaluate the safety of our drug/therapy. The *BRIDGE* and *BRIGHT* studies have been completed, and, in October 2021, the final dosing of the last patient in the *BALANCE* study was completed. See Part 1, Item 2, Management's Discussion and Analysis of Financial Condition and Results of Operations—Pegunigalsidase Alfa (PRX-102) for the Treatment of Fabry Disease for details regarding the current status of these studies and of available clinical trial results.

On April 28, 2021, the Company, together with its development and commercialization partner for PRX-102, Chiesi Farmaceutici S.p.A. ("Chiesi"), announced that they received a Complete Response Letter (CRL) from the U.S. Food and Drug Administration (the "FDA") regarding the biologics license application ("BLA") for PRX-102 for the treatment of adult patients with Fabry disease. The PRX-102 was submitted to the FDA on May 27, 2020 under the FDA's Accelerated Approval pathway, and was subsequently accepted by the FDA and granted Priority Review designation. The CRL did not report any concerns relating to the potential safety or efficacy of PRX-102 in the submitted data package. In the CRL, the FDA noted that an inspection of the Company's manufacturing facility in Carmiel, Israel, including the FDA's subsequent assessment of any related FDA findings, is required before the FDA can approve a resubmitted BLA. Due to travel restrictions, the FDA was unable to conduct the required inspection during the review cycle. The FDA explained in the letter that it will continue to monitor the public health situation as well as travel restrictions, and is actively working to define an approach for scheduling outstanding inspections. With respect to the third-party facility in Europe at which fill and finish processes are performed for PRX-102, due to the novel coronavirus disease ("COVID-19"), the FDA reviewed records under Section 704(a)(4) of the Federal Food, Drug, and Cosmetic Act (the "FFDCA") in lieu of a pre-licensing inspection. In the CRL, the FDA stated that it will communicate remaining issues to the facility in order to seek prompt resolution of any pending items. In addition to the foregoing, in the CRL, the FDA noted that agalsidase beta (Fabrazyme®), a therapy used to treat Fabry patients, was recently converted to full approval and is now an "available therapy," which must be addressed in the context of any potential resubmission of a BLA for PRX-102.

(Unaudited)

The Company and Chiesi participated in a Type A (End of Review) meeting with the FDA on September 9, 2021. As part of the meeting minutes provided by the FDA, which included the preliminary comments and meeting discussion, the FDA, in principle, agreed that the data package proposed to the FDA for a BLA resubmission has the potential to support a traditional approval of PRX-102 for the treatment of Fabry disease. The planned data package for the BLA resubmission, given the changed regulatory landscape in the United States, will include the final two-year analyses of the *BALANCE* study. The Company intends to continue to work collaboratively with the FDA to resolve the issues noted in the CRL and provide a new, alternative drug to Fabry patients.

Protalix and Chiesi also announced that a meeting was held with the Rapporteur and Co-Rapporteur of the European Medicines Agency ("EMA") on October 8, 2021 regarding PRX-102. At the meeting, Chiesi and Protalix discussed the scope of the anticipated Marketing Authorization Application ("MAA") submission for the European Union, and the Rapporteur and Co-Rapporteur were generally supportive of a planned MAA submission for PRX-102. This is an important step in the necessary pre-submission activities leading up to a MAA submission. Based on the interim analysis of the 12-month data generated from the *BALANCE* study that the Company announced in June 2021, and in combination with previously reported positive data from the *BRIGHT* and *BRIDGE* studies, the Company and Chiesi expect to submit an MAA to the EMA for PRX-102 during the first quarter of 2022.

In addition to PRX-102, the Company's product pipeline currently includes, among other candidates:

- (1) alidornase alfa, or PRX-110, a proprietary plant cell recombinant human Deoxyribonuclease 1, or DNase, which has successfully completed a phase II efficacy and safety study; the Company's exclusive worldwide license agreement with SarcoMed USA Inc. ("SarcoMed") with respect to PRX-110 for use in the treatment of any human respiratory disease or condition including, but not limited to, sarcoidosis, pulmonary fibrosis, and other related diseases via inhaled delivery expired during the three months ended September 30, 2021; we are continuing to evaluate potential strategic marketing partnerships and collaboration programs with biotechnology and pharmaceutical companies for this product candidate for various respiratory indications;
- (2) PRX-115, the Company's plant cell-expressed recombinant PEGylated uricase (urate oxidase) a chemically modified enzyme to treat refractory gout; and
- (3) PRX-119, the Company's plant cell-expressed PEGylated recombinant human DNase I product candidate being designed to elongate half-life in the circulation for NETs-related diseases.

Obtaining marketing approval with respect to any product candidate in any country is dependent on the Company's ability to implement the necessary regulatory steps required to obtain such approvals. The Company cannot reasonably predict the outcome of these activities.

On July 2, 2021, the Company entered into an At The Market Offering Agreement (the "Sales Agreement") with H.C. Wainwright & Co., LLC, as the Company's sales agent (the "Agent"). Pursuant to the terms of the Sales Agreement, the Company may sell from time to time through the Agent shares of its common stock, par value \$0.001 per share (the "Common Stock"), having an aggregate offering price of up to \$20.0 million (the "ATM Shares"). Upon execution of the Sales Agreement, the Company terminated the ATM Equity Offering SM Sales Agreement it had entered into on October 1, 2020 with BofA Securities, Inc. ("BofA Securities"). During the term of the sales agreement with BofA Securities, the Company sold a total of 3,296,123 shares of common stock for total gross proceeds of approximately \$13.8 million.

On February 17, 2021, the Company issued and sold 8,749,999 shares of its Common Stock in an underwritten public offering raising gross proceeds of approximately \$40.2 million at a price equal to \$4.60 per share, before deducting the underwriting discount and estimated expenses of the offering. BofA Securities acted as book-running manager for the offering with Oppenheimer & Co. acting as co-manager.

On October 19, 2017, Protalix Ltd. and Chiesi entered into an Exclusive License and Supply Agreement (the "Chiesi Ex-US Agreement") pursuant to which Protalix Ltd. granted to Chiesi an exclusive license for all markets outside of the United States to commercialize pegunigalsidase alfa. On July 23, 2018, Protalix Ltd. entered into an Exclusive License

(Unaudited)

and Supply Agreement with Chiesi (the "Chiesi US Agreement") with respect to the commercialization of pegunigalsidase alfa in the United States.

Under each of the Chiesi Ex-US Agreement and the Chiesi US Agreement (collectively, the "Chiesi Agreements"), Chiesi made an upfront payment to Protalix Ltd. of \$25.0 million in connection with the execution of each agreement. In addition, under the Chiesi Ex-US Agreement, Protalix Ltd. is entitled to additional payments of up to \$25.0 million in pegunigalsidase alfa development costs, capped at \$10.0 million per year, and to receive additional payments of up to \$320.0 million, in the aggregate, in regulatory and commercial milestone payments. Under the Chiesi US Agreement, Protalix Ltd. is entitled to payments of up to a maximum of \$20.0 million to cover development costs for pegunigalsidase alfa, subject to a maximum of \$7.5 million per year, and to receive additional payments of up to a maximum of \$760.0 million, in the aggregate, in regulatory and commercial milestone payments. To date, Protalix Ltd. has received the full amount of development costs to which it is entitled under the Chiesi Agreements.

Under the terms of both of the Chiesi Agreements, Protalix Ltd. will manufacture all of the pegunigalsidase alfa needed under the agreements, subject to certain exceptions, and Chiesi will purchase pegunigalsidase alfa from Protalix, subject to certain terms and conditions. Under the Chiesi Ex-US Agreement, Chiesi is required to make tiered payments of 15% to 35% of its net sales, depending on the amount of annual sales outside of the United States, as consideration for product supply. Under the Chiesi US Agreement, Chiesi is required to make tiered payments of 15% to 40% of its net sales, depending on the amount of annual sales in the United States, as consideration for product supply.

On May 13, 2021, the Company signed a binding term sheet with Chiesi pursuant to which the Company and Chiesi amended the Chiesi Agreements in order to provide the Company with near-term capital. Chiesi agreed to make a \$10.0 million payment to the Company before the end of the second quarter in exchange for a \$25.0 million reduction in a longer term regulatory milestone payment in the Chiesi EX-US Agreement. All other regulatory and commercial milestone payments remain unchanged. The Company received the payment in June 2021. The Company also agreed to negotiate certain manufacturing related matters.

Since its approval by the FDA, taliglucerase alfa has been marketed by Pfizer in accordance with the Pfizer Agreement. In October 2015, Protalix Ltd. and Pfizer entered into an amended exclusive license and supply agreement (the "Amended Pfizer Agreement") pursuant to which the Company sold to Pfizer its share in the collaboration created under the Pfizer Agreement for the commercialization of Elelyso. As part of the sale, the Company agreed to transfer its rights to Elelyso in Israel to Pfizer while gaining full rights to it in Brazil. Under the Amended Pfizer Agreement, Pfizer is entitled to all of the revenues, and is responsible for 100% of expenses globally for Elelyso, excluding Brazil where the Company is responsible for all expenses and retains all revenues.

On June 18, 2013, the Company entered into a Supply and Technology Transfer Agreement (the "Brazil Agreement") with Fundação Oswaldo Cruz ("Fiocruz"), an arm of the Brazilian Ministry of Health (the "Brazilian MoH"), for taliglucerase alfa. Fiocruz's purchases of BioManguinhos alfataliglicerase to date have been significantly below certain agreed-upon purchase milestones and, accordingly, the Company has the right to terminate the Brazil Agreement. Notwithstanding the termination right, the Company is, at this time, continuing to supply BioManguinhos alfataliglicerase to Fiocruz under the Brazil Agreement, and patients continue to be treated with BioManguinhos alfataliglicerase in Brazil.

COVID-19, which was declared by the World Health Organization to be a global pandemic on March 11, 2020, has had numerous adverse effects on the global economy. To date, the Company's clinical trials have not been adversely affected by COVID-19, although certain practices the Company has adopted in its offices and facilities in an effort to promote social distancing have resulted in minor delays in the performance of administrative activities outside of the clinical programs. We continue to face uncertainty as to the degree and duration of that impact going forward. The Company does not know the length of time that the pandemic and related disruptions will continue, the impact of governmental regulations or easement of regulations in response to the strengthening or weakening of the pandemic, or the degree of overall potentially permanent changes in consumer behavior that may be caused by the pandemic.

The Company believes that its cash and cash equivalents and bank deposits as of September 30, 2021 are sufficient to satisfy the Company's capital needs for at least 12 months from the date that these financial statements are issued.

(Unaudited)

#### b. Basis of presentation

The accompanying unaudited condensed consolidated financial statements of the Company have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") for interim financial information. Accordingly, they do not include all of the information and notes required by GAAP for annual financial statements. In the opinion of management, all adjustments (of a normal recurring nature) considered necessary for a fair statement of the results for the interim periods presented have been included. Operating results for the interim period are not necessarily indicative of the results that may be expected for the full year.

These unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements in the Annual Report on Form 10-K for the year ended December 31, 2020, filed by the Company with the U.S. Securities and Exchange Commission (the "Commission"). The comparative balance sheet at December 31, 2020 has been derived from the audited financial statements at that date. There have been no material changes in our significant accounting policies as described in our consolidated financial statements for the year ended December 31, 2020.

#### c. Loss per share

Basic and diluted loss per share ("LPS") are computed by dividing net loss by the weighted average number of shares of the Company's Common Stock attributable to common stockholders outstanding for each period. The calculation of diluted LPS does not include 26,905,842 and 21,405,733 shares of Common Stock underlying outstanding options and shares of Common Stock issuable upon conversion of outstanding 2021 Notes and outstanding warrants for the three and nine months ended September 30, 2020, respectively, and 27,962,842 and 26,847,081 shares of Common Stock underlying outstanding options and shares of Common Stock issuable upon conversion of outstanding 2021 Notes, 2024 Notes and outstanding warrants for the three and nine months ended September 30, 2021, respectively, because their effect would be anti-dilutive.

#### d. Revenue recognition

The Company accounts for revenue pursuant to Accounting Standards Codification, Topic 606, Revenue from Contracts with Customers ("ASC 606"). Under ASC 606, a contract with a customer exists only when: the parties to the contract have approved it and are committed to perform their respective obligations, the Company can identify each party's rights regarding the distinct goods or services to be transferred ("performance obligations"), the Company can determine the transaction price for the goods or services to be transferred, the contract has commercial substance and it is probable that the Company will collect the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer.

Revenues are recorded in the amount of consideration to which the Company expects to be entitled in exchange for performance obligations upon transfer of control to the customer.

#### 1. Revenues from selling products

The Company recognizes revenues from selling goods at a point in time when control over the product is transferred to customers (upon delivery).

#### 2. Revenue from Chiesi Agreements

The Company has identified two performance obligations in Chiesi agreements as follows: (1) the license and research and development services and (2) the contingent performance obligation regarding future manufacturing.

The Company determined that the license together with the research and development services should be combined into single performance obligation since Chiesi cannot benefit from the license without the research and development services. The research and development services are highly specialized and are dependent on the supply of the drug.

(Unaudited)

The future manufacturing is contingent on regulatory approvals of the drug and the Company deems these services to be separately identifiable from other performance obligations in the contract. Manufacturing services post-regulatory approval are not interdependent or interrelated with the license and research and development services.

The transaction price was comprised of fixed consideration and variable consideration (capped research and development reimbursements). Under ASC 606, the consideration to which the Company would be entitled upon the achievement of contractual milestones, which are contingent upon the occurrence of future events, are a form of variable consideration. The Company estimates variable consideration using the most likely method. Amounts included in the transaction price are recognized only when it is probable that a significant reversal of cumulative revenues will not occur. Prior to recognizing revenue from variable consideration, the Company uses significant judgment to determine the probability of significant reversal of such revenue.

Since the customer benefits from the research and development services as the entity performs the service, revenue from granting the license and the research and development services is recognized over time using the cost-to-cost method. The Company used significant judgment when it determined the costs expected to be incurred upon satisfying the identified performance obligation.

Revenue from additional research and development services ordered by Chiesi is recognized over time using the cost-to-cost method.

#### 3. Revenue from R&D services

Revenue from the research and development services is recognized over time using the cost-to-cost method since the customer benefits from the research and development services as the entity performs the service.

#### **NOTE 2 - INVENTORIES**

Inventories at September 30, 2021 and December 31, 2020 consisted of the following:

	Sep	tember 30,	Dec	ember 31,
(U.S. dollars in thousands)		2021		2020
Raw materials	\$	3,170	\$	3,347
Work in progress		3,507		2,887
Finished goods		8,053		6,848
Total inventory	\$	14,730	\$	13,082

#### **NOTE 3 – FAIR VALUE MEASUREMENT**

The Company measures fair value and discloses fair value measurements for financial assets and liabilities. Fair value is based on the price that would be received from the sale of an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date.

The accounting standard establishes a fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three broad levels, which are described below:

Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities. The fair value hierarchy gives the highest priority to Level 1 inputs.

Level 2: Observable prices that are based on inputs not quoted on active markets, but corroborated by market data.

Level 3: Unobservable inputs are used when little or no market data is available. The fair value hierarchy gives the lowest priority to Level 3 inputs.

(Unaudited)

In determining fair value, the Company utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible and considers counterparty credit risk in its assessment of fair value.

The fair value of the financial instruments included in the working capital of the Company is usually identical or close to their carrying value.

As of September 30, 2021, the carrying amounts of short-term deposits approximate their fair values due to the stated interest rates, which approximate market rates.

Based on a Level 3 measurement, as of September 30, 2021, the fair value of the \$3.27 million aggregate principal amount of the Company's outstanding 2021 Notes is approximately \$3.4 million and the fair value of the \$28.75 million aggregate principal amount of the Company's outstanding 2024 Notes is approximately \$39.8 million.

The Company prepared a valuation of the fair value of the Company's outstanding 2021 Notes and 2024 Notes (a Level 3 valuation) as of September 30, 2021. The value of these notes was estimated by implementing the binomial model. The liability component was valued based on the Income Approach. The following parameters were used:

	<b>2021 Notes</b>	2024 Notes
Stock price (USD)	1.33	1.33
Expected term	0.13	2.92
Risk free rate	0.04 %	0.50 %
Volatility	81.16 %	91.77 %
Yield	6.74 %	8.99 %

#### **NOTE 4 – REVENUES**

The following table summarizes the Company's disaggregation of revenues:

	Three Months Ended September 30, Nine Months E							nded September 30,			
(U.S. dollars in thousands)		2021		2020		2021		2020			
Pfizer	\$	1,135	\$	3,165	\$	7,883	\$	5,844			
Brazil	\$	3,200	\$	_	\$	4,188	\$	6,000			
Chiesi	\$	171	\$	131	\$	189	\$	131			
Total revenues from selling goods	\$	4,506	\$	3,296	\$	12,260	\$	11,975			
Revenues from license and R&D services	\$	7,548	\$	7,494	\$	17,541	\$	31,428			

During the nine months ended September 30, 2021 and 2020, the Company recognized revenues of approximately \$16.5 million and \$31.4 million, respectively, from license and R&D services mainly in respect of the Chiesi Agreements, after taking into consideration change in estimate as detailed below. During the three months ended September 30, 2021 and 2020, the Company recognized revenues of approximately \$6.5 million and \$7.5 million, respectively, from license and R&D services mainly in respect of the Chiesi Agreements.

During the nine months ended September 30, 2021, and following the CRL received from the FDA, the Company changed its estimate for total costs expected to be incurred until satisfying the performance obligation under the Chiesi Agreements. This resulted in a reduction to accumulated revenues recognized in respect of this performance obligation in the amount of \$4.1 million.

During the three months ended September 30, 2021, the Company completed its obligations under a feasibility study it entered into with Kirin Holdings Company, Limited ("Kirin") on March 16, 2020, and the agreement expired, including the

(Unaudited)

option to provide additional services. Following the expiration of the option, the Company recognized as revenue during the three-month period ended September 30, 2021 the \$1.0 million payment received in March 2020.

#### **NOTE 5 – CONVERTIBLE NOTES**

On August 25, 2021, the Company completed the Exchanges of a substantial majority of the Company's outstanding 2021 Notes with certain institutional note holders. The Exchanges involved the exchange of an aggregate of \$54.65 million principal amount of the Company's outstanding 2021 Notes for an aggregate of \$28.75 million principal amount of newly issued 2024 Notes, \$25.90 million in cash, and approximately \$1.1 million in cash representing accrued and unpaid interest through the issue date. The initial conversion rate for the 2024 Notes is 563.2216 shares of Common Stock for each \$1,000 principal amount of 2024 Notes (equivalent to an initial conversion price of approximately \$1.7755 per share of the Common Stock), subject to adjustment in certain circumstances, which is based on a 32.5% premium to the closing price of the Common Stock on the NYSE American at the close of trading on August 13, 2021, the exchange date.

The 2024 Notes were issued pursuant to an indenture entered into between the Company, the guarantors party thereto, The Bank of New York Mellon Trust Company, N.A., as trustee and Wilmington Savings Fund Society, FSB, as collateral agent. Interest on the Notes will be paid semi-annually at a rate of 7.50% per annum. The Notes will mature three years after the issuance thereof, unless earlier purchased, converted, exchanged or redeemed and are guaranteed by the Company's subsidiaries. The 2024 Notes are secured by perfected liens on all of the assets of the Company and its subsidiaries.

Under the terms of the indentures governing each of the 2021 Notes and 2024 Notes, The Company is required to maintain a minimum cash balance of at least \$7.5 million. In addition, under the exchange agreements the Company entered into with each of the institutional note holders that participated in the Exchanges (the "Exchange Agreements"), the Company agreed to maintain unrestricted cash of not less than \$3.27 million, which is the amount necessary to redeem or repay at maturity all of the 2021 Notes that remain outstanding following the closing of the Exchanges.

For accounting purposes, as the terms of the 2021 Notes and the 2024 Notes are substantially different, the Exchanges are considered an extinguishment of debt. The Company allocated the fair value of the consideration transferred to the participating note holders between the 2021 Notes and their equity component based on the fair value of the liability component before the extinguishment, and the remainder was allocated to the equity component. As a result, the Company recognized a loss from extinguishment in the statement of operations equal to \$0.8 million due to derecognition of the liability component of \$54.8 million and the repurchase of the original equity component for \$12.0 million.

All of the Company's outstanding convertible notes are accounted for using the guidance set forth in the Financial Accounting Standards Board Accounting Standards Codification (ASC) 815 requiring that the Company determine whether the embedded conversion option must be separated and accounted for separately. ASC 470-20 regarding debt with conversion and other options requires the issuer of a convertible debt instrument that may be settled in cash upon conversion to separately account for the liability (debt) and equity (conversion option) components of the instrument in a manner that reflects the issuer's nonconvertible debt borrowing rate.

The Company accounted for the 2024 Notes as a liability (debt) and equity component (conversion option) as the convertible notes may be settled wholly or partly in cash, at the option of the Company, when converted. The equity component with respect to the cash conversion feature of approximately \$12.0 million was recognized in the Company's additional paid in capital.

Transaction costs in the amount of approximately \$869,000 were allocated to the liability and equity component. The debt discount and debt issuance costs regarding the issuance of the 2024 Notes are deferred and amortized over the convertible notes period using the effective interest rate.

(Unaudited)

The Company prepared a valuation of the fair value of the 2024 Notes and 2021 Notes (a Level 3 valuation) as of August 25, 2021. The value was estimated by implementing the binomial model. The liability component was valued based on the Income Approach. The following parameters were used:

	2021 Notes	2024 Notes
Stock price (USD)	1.34	1.34
Expected term	0.23	3.03
Risk free rate	0.05 %	0.44 %
Volatility	78.95 %	91.35 %
Yield	7.87 %	7.66 %

#### NOTE 6 - STOCK TRANSACTIONS

On July 25, 2021, the Company granted to a new employee, with the approval of the Company's compensation committee, 10-year options to purchase 50,000 shares of Common Stock under the Company's Amended and Restated 2006 Employee Stock Incentive Plan, as amended. The options have an exercise price equal to \$1.57 per share and vest over a four-year period in 16 equal quarterly increments. The Company estimated the fair value of the options on the date of grant using the Black-Scholes option-pricing model to be approximately \$55,000 based on the following weighted average assumptions: share price equal to \$1.57; dividend yield of 0% for all years; expected volatility of 84.3%; risk-free interest rate of 0.88%; and expected life of six years.

#### **NOTE 7 – SUBSEQUENT EVENTS**

On October 13, 2021, the Company collected approximately \$1.2 million from expense reimbursements in connection with its collaboration with Chiesi. On October 14, 2021, the Company collected approximately \$1.1 million from sales to Pfizer and on October 15, 2021, the Company collected approximately \$3.2 million from sales of alfataliglicerase to Fiocruz.

On November 9, 2021, the Company delivered the necessary funds under the indenture governing the 2021 Notes to effectively discharge the remaining outstanding 2021 Notes.

In accordance with ASC 855 "Subsequent Events" the Company evaluated subsequent events through the date the condensed consolidated financial statements were issued. The Company concluded that no other subsequent events have occurred that would require recognition or disclosure in the condensed consolidated financial statements.

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

# CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS AND RISK FACTORS SUMMARY

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and the consolidated financial statements and the related notes included elsewhere in this Form 10-Q and in our Annual Report on Form 10-K for the year ended December 31, 2020. Some of the information contained in this discussion and analysis, particularly with respect to our plans and strategy for our business and related financing, includes forward-looking statements within the meanings of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, including statements regarding expectations, beliefs, intentions or strategies for the future. When used in this report, the terms "anticipate," "believe," "estimate," "expect," "can," "continue," "could," "intend," "may," "plan," "potential," "predict," "project," "should," "will," "would" and words or phrases of similar import, as they relate to our company or our management, are intended to identify forward-looking statements. We intend that all forward-looking statements be subject to the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are only predictions and reflect our views as of the date they are made with respect to future events and financial performance, and we undertake no obligation to update or revise, nor do we have a policy of updating or revising, any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events, except as may be required under applicable law. Forward-looking statements are subject to many risks and uncertainties that could cause our actual results to differ materially from any future results expressed or implied by the forward-looking statements as a result of several factors including those set forth under "Risk Factors" in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2021.

Examples of the risks and uncertainties include, but are not limited to, the following:

- risks related to the timing and progress of the preparation of an updated BLA addressing the CRL for PRX-102;
- risks related to the timing, progress and likelihood of final approval by the FDA of a resubmitted BLA for PRX-102 and, if approved, whether PRX-102 will be commercially successful;
- the risk that the FDA, the EMA or other foreign regulatory authorities may not accept or approve a marketing application filed for PRX-102 or any of our other product candidates;
- failure or delay in the commencement or completion of our preclinical studies and clinical trials, which may be caused by several factors, including: slower than expected rates of patient recruitment; unforeseen safety issues; determination of dosing issues; lack of effectiveness during clinical trials; inability or unwillingness of medical investigators and institutional review boards to follow our clinical protocols; inability to monitor patients adequately during or after treatment; and or lack of sufficient funding to finance our clinical trials;
- the risk that the results of our clinical trials will not support the applicable claims of safety or efficacy and that our product candidates will not have the desired effects or will have undesirable side effects or other unexpected characteristics;
- risks relating to our ability to make required payments under our outstanding 2024 Notes or any other indebtedness as they come due and our ability to obtain additional financing and raise capital as necessary should the regulatory approval process become more extended;
- risks associated with the COVID-19 outbreak and variants, which may adversely impact our business, preclinical studies and clinical trials;
  - risks relating to our evaluation and pursuit of strategic alternatives;
  - risks relating to our ability to manage our relationship with our collaborators, distributors or partners;
  - risks relating to changes to interim, topline or preliminary data from clinical trials that we announce or publish;
- risks related to any transactions we may effect in the public or private equity markets to raise capital to finance future research and development activities, general and administrative expenses and working capital;
  - risk of significant lawsuits, including stockholder litigation, which is common in the life sciences sector;

- our dependence on performance by third-party providers of services and supplies;
- the impact of development of competing therapies and/or technologies by other companies;
- risks related to our supply of drug product to Pfizer;
- risks related to our expectations with respect to the potential commercial value of our product and product candidates;
- risks relating to the compliance by Fiocruz, an arm of the Brazilian MoH, with its purchase obligations under our supply and technology transfer agreement, which may have a material adverse effect on us and may also result in the termination of such agreement;
  - potential product liability risks, and risks of securing adequate levels of related insurance coverage;
- the possibility of infringing a third-party's patents or other intellectual property rights and the uncertainty of obtaining patents covering our products and processes and successfully enforcing our intellectual property rights against third-parties;
  - risks relating to changes in healthcare laws, rules and regulations in the United States or elsewhere; and
- the possible disruption of our operations due to terrorist activities and armed conflict, including as a result of the disruption of the operations of regulatory authorities, our subsidiaries, our manufacturing facilities and our customers, suppliers, distributors, collaborative partners, licensees and clinical trial sites.

### **Recent Company Developments**

- On October 15, 2021, we, together with Chiesi, announced the final dosing of the last patient in the *BALANCE* study for the proposed treatment of Fabry disease.
- On October 11, 2021, we, together with Chiesi, provided a regulatory update regarding PRX-102 which included an announcement of the receipt of the official Type A (End-of-Review) meeting minutes from FDA regarding the CRL confirming a potential pathway for resubmission of a BLA for PRX-102.
- On August 25, 2021, we completed the Exchanges of a substantial majority of our outstanding 2021 Notes with institutional note holders of a substantial majority of the 2021 Notes. In the Exchanges an aggregate of \$54.65 million principal amount of our outstanding 2021 Notes were exchanged for an aggregate of \$28.75 million principal amount of newly issued 2024 Notes, \$25.90 million in cash and approximately \$1.1 million in cash representing accrued and unpaid interest through the closing date.
  - On August 13, 2021, we entered into the Exchange Agreements in connection with the Exchanges.

We continue to actively advance all our clinical programs. We are in close contact with our principal investigators and clinical sites and our clinical research organizations, which are primarily located in the United States and Europe, and to date, our clinical trials have not been materially adversely affected by COVID-19. In light of recent developments relating to the COVID-19 pandemic, the focus of healthcare providers and hospitals on fighting the virus, and consistent with the FDA's updated industry guidance for conducting clinical trials issued on March 18, 2020, we and our contract research organizations have made certain adjustments to the operation of our clinical trials in an effort to ensure the monitoring and safety of patients and minimize risk to trial integrity during the pandemic and generally, and we may need to make further adjustments in the future.

In response to the local spread of COVID-19 at the end of March 2020, and with local directives issued in response thereof, we restructured the work day within our facilities to consist of two shifts thereby reducing the number of employees present in the facilities at any time and facilitating their ability to practice social distancing. Employees that were able to work from home were instructed to do so. Such efforts resulted in minor delays in the performance of administrative activities outside of the clinical programs.

In June 2020, after local directives allowed more flexibility with respect to social interactions, we returned to a regular work day. Since then, as the pandemic's effect locally continued to change, and local Israeli directives continued to evolve to address the changing effects, we returned temporarily to the two-shift work day schedule and to again encourage employees that are able to work from home to do so for parts of September 2020. Our facility currently operates on a regular schedule with adherence to local guidelines.

We will continue to evaluate the impact of the COVID-19 pandemic and its variants on our business as we learn more and the impact of COVID-19 on our industry becomes more clear. We intend to continuously assess the impact of COVID-19 on our trials, expected timelines and costs.

#### **ProCellEx: Our Proprietary Protein Expression System**

- ProCellEx is our proprietary platform used to produce and manufacture recombinant proteins through plant cell-based expressions in suspension. ProCellEx consists of a comprehensive set of proprietary technologies and capabilities, including the use of advanced genetic engineering and plant cell culture technology, enabling us to produce complex, proprietary, and biologically equivalent proteins for a variety of human diseases. Our protein expression system facilitates the creation and selection of high-expressing, genetically-stable cell lines capable of expressing recombinant proteins.
- Our ProCellEx technology allows for many unique advantages, including: biologic optimization; an ability to handle complex protein expressions; flexible manufacturing with improvements through efficiencies, enhancements and/or rapid horizontal scale-ups; a simplified production process; elimination of the risk of viral contaminations from mammalian components; and intellectual property advantages.
- We are the first and only company to gain FDA approval of a protein produced through plant cell-based expression. Our ProCellEx platform uses flexible polyethylene disposable bioreactors and is optimized for plant cell cultures. As opposed to the large stainless-steel bioreactors commonly used for recombinant protein production, our ProCellEx bioreactors are easy to use and maintain and allow for the major advantage of rapid horizontal scale-up.

### **Plant Cell Production Advantages**

### **Plant Cell Production**



- · Rapid product roll-out and development
- No risk of viral contamination from mammalian components
- · Manufacturing maintained at room temp
- Plant cells are not sensitive to small changes in production conditions such as, Ph., temp, etc.
- · Reactors do not need complicated monitors
- maintain production parameter constant → high reproducibility
- Independent, separately controlled, disposable bioreactors - no "cross talking"
- Flexible horizontal scale-up in accordance with changing production needs
- Flexible infrastructure design allows for keeping equivalent volume in each added bioreactor during horizontal scale-up



Chinese Hamster Ovary (CHO) cell lines

#### Mammalian Cell Expression

- · High set-up costs involving large bioreactors
- Cell cultures require a complex medium; small changes in composition may affect product characteristics
- Require highly controlled growth conditions in the bioreactor (e.g., temperature, pH and CO<sub>2</sub>)
- · Susceptibility to viral contaminations



Bacteria or yeast cell lines

#### Bacteria and Yeast Cell Expression

- · Limited to non-glycosylated simple proteins
- Cannot produce antibodies, enzymes and other complex proteins

#### Plant Cell in Suspension Expression System for Therapeutic Proteins Development and Industrial Production: Executive Summary

Cell lines and Genetic Engineering	Unique genetic engineering tools used for producing improved tobacco plant cell lines and plant viral based constructs achieving optimized therapeutic proteins profiles and reducing safety risks
Biologic Optimization	Experienced internal interdisciplinary capabilities (e.g., genetic engineering and chemical modification) to improve biologic attributes: consistent glycosylation, elongated half-life, reduced immunogenicity, enhanced protein stability/activity
Intellectual Property	IP advantages due to proprietary manufacturing processes and development of 2nd generation improved products, related to Composition of Matter protection on the one hand and FTO on the other hand
Simplified and consistent Production Process	Production at room temperature, simplified maintenance with no risk of viral contamination from mammalian components; high batch to batch reproducibility
Can Handle Complexity	Ability to express certain proteins that are difficult to express in other systems
GMP compliance	Implementation of applicable regulatory requirements known to the Biotech industry
Flexible Scale-Up	Flexible infrastructure design allows for rapid horizontal scale-up (or scale-down)

#### **Product Pipeline**

	Discovery and Preclinical	Phase 1	Phase 2	Phase 3	Marketing Application
pegunigalsidase alfa (PRX-102)	Fabry Disease				
alidornase alfa (PRX-110)	Various Respiratory Indicatio	ns			
uricase (PRX-115)	Refractory Gout				
Long Acting (LA) DNase I (PRX-119)	NETs Related Diseases				

### Pegunigalsidase Alfa (PRX-102) for the Treatment of Fabry Disease

PRX-102 is our lead product candidate and we expect it to be the primary subject of our development efforts in the short-term. It is our proprietary, investigational, plant cell culture expressed enzyme, and a chemically modified stabilized version of, the recombinant  $\alpha$ -Galactosidase-A protein, a lysosomal enzyme, under development for the treatment of Fabry disease. Fabry disease is a serious life-threatening rare genetic disorder. Fabry patients lack  $\alpha$ -galactosidase-A resulting in the progressive accumulation of abnormal deposits of a fatty substance called globotriaosylceramide, or Gb<sub>3</sub>, in blood vessel walls throughout their body. The abnormal storage of Gb<sub>3</sub> increases with time and, as a result, Gb<sub>3</sub> accumulates, primarily in the blood and in the blood vessel walls. The accumulation leads to a narrowing of the blood vessels, which in turn leads to decreased blood flow and tissue nourishment. The ultimate consequences of Gb<sub>3</sub> deposition range from episodes of pain and impaired peripheral sensation to end-organ failure, particularly of the kidneys, but also of the heart and the cerebrovascular system. Fabry disease occurs in one person per 40,000 to 60,000 males. The global market for Fabry disease is forecasted to be approximately \$1.9 billion in 2021 (Global Data) and to continue to grow at a CAGR of approximately 9.5% (Global Data).

A BLA for PRX-102 for the treatment of adult patients with Fabry disease was submitted to the FDA on May 27, 2020 under the FDA's Accelerated Approval pathway, which was subsequently accepted by the FDA and granted Priority Review designation. The initial BLA submission included a comprehensive set of preclinical, clinical and manufacturing data compiled from our completed phase I/II clinical trial of PRX-102, including the related extension study succeeding our phase I/II clinical trial, interim clinical data

from our phase III *BRIDGE* switch-over study and safety data from our on-going clinical studies of PRX-102 in patients receiving 1 mg/kg every other week.

On April 28, 2021, we, together with Chiesi, announced the receipt of a CRL from the FDA regarding the BLA. The CRL did not report any concerns relating to the potential safety or efficacy of PRX-102 in the submitted data package. In the CRL, the FDA noted that an inspection of Protalix's manufacturing facility in Carmiel, Israel, including a subsequent assessment of any related FDA findings, is required before the FDA can approve a resubmitted BLA. Due to travel restrictions, the FDA was unable to conduct the required inspection during the review cycle. The FDA explained in the letter that it will continue to monitor the public health situation as well as travel restrictions, and is actively working to define an approach for scheduling outstanding inspections. With respect to the third-party facility in Europe at which fill and finish processes are performed for PRX-102, due to COVID-19, the FDA reviewed records under Section 704(a) (4) of the FFDCA in lieu of a pre-licensing inspection. In the CRL, the FDA stated that it will communicate remaining issues to the facility in order to seek prompt resolution of any pending items. In addition to the foregoing, in the CRL, the FDA noted that Fabrazyme, a therapy used to treat Fabry patients, was recently converted to full approval and is now an "available therapy," which must be addressed in the context of any potential resubmission of a BLA for PRX-102.

We and Chiesi participated in a Type A (End of Review) meeting with the FDA on September 9, 2021 to discuss the FDA's requirements for a BLA resubmission. As part of the meeting minutes provided by the FDA, which included the preliminary comments and meeting discussion, the FDA, in principle, agreed that the clinical data package proposed to the FDA for a BLA resubmission has the potential to support a traditional approval of PRX-102 for the treatment of Fabry disease. The planned data package for the BLA resubmission, given the changed regulatory landscape in the United States, will include the final two-year analyses of the *BALANCE* study. We intend to continue to work collaboratively with the FDA resolve the issues noted in the CRL and provide a new, alternative drug to Fabry patients.

In addition, we and Chiesi also held a meeting with the Rapporteur and Co-Rapporteur of the EMA on October 8, 2021 regarding the submission plans for an MAA with the EMA. At the meeting, we and Chiesi discussed the scope of the anticipated MAA for the European Union, and the Rapporteur and Co-Rapporteur were generally supportive of a planned MAA submission for PRX-102. This is an important step in the necessary pre-submission activities leading up to a planned MAA submission. Based on the interim analysis of the 12-month data generated from the *BALANCE* study that we announced in June 2021, and in combination with previously reported positive data from the *BRIGHT* and *BRIDGE* studies, we and Chiesi expect to submit an MAA to the EMA for PRX-102 during the first quarter of 2022.

In December 2017, the European Commission granted Orphan Drug Designation for PRX-102 for the treatment of Fabry disease. Orphan Drug Designation for PRX-102 qualifies Chiesi for access to a centralized marketing authorization procedure, including applications for inspections and for protocol assistance. If the orphan drug designation is maintained at the time PRX-102 is approved for marketing in the European Union, if at all, we expect that PRX-102 will benefit from 10 years of market exclusivity within the European Union. The market exclusivity will not have any effect on Fabry disease treatments already approved at that time.

In January 2018, the FDA granted Fast Track designation to PRX-102. Fast Track designation is a process designed to facilitate the development and expedite the review of drugs and vaccines for serious conditions that fill an unmet medical need.

#### Key Trials and Design

Our phase III clinical program of PRX-102 for the treatment of Fabry disease includes three individual studies; the *BALANCE* study, the *BRIDGE* study and the *BRIGHT* study. Enrollment has been completed in all three studies, and the final dosing of the last patient in the *BALANCE* study took place in October 2021. In 2015, we completed a phase I/II clinical trial of PRX-102. In the phase III clinical program, we are studying two alternative doses and regimens for PRX-102; 1 mg/kg every two weeks, with the potential for improved efficacy and safety offering a potential alternative to existing enzyme replacement therapies, and 2 mg/kg every four weeks, which has the potential to lower treatment burden versus existing treatments and potentially provide a better quality of life for a subset of Fabry patients. Final results from the *BRIDGE* study were released in December 2020 and topline results from the *BRIGHT* study were released in February 2021. Interim one-year data from the *BALANCE* study was released in June 2021.

Patients that completed the phase I/II clinical trial were offered, and patients that complete the *BALANCE*, *BRIDGE* and *BRIGHT* studies are offered, the opportunity to continue PRX-102 treatment as part of a long-term open-label extension study. Currently, 106 subjects that participated in the our PRX-102 clinical program have opted, with the advice of the treating physician, to continue PRX-102 treatment in one of our long-term extension studies; 10 subjects that completed an extension study from the phase I/II clinical trial, 18 subjects that completed the *BRIDGE* study; 69 subjects that completed the *BALANCE* study; and 29 subjects that

completed the *BRIGHT* study. Of the 29 subjects that completed the *BRIGHT* study that are enrolled in a long-term extension study, 27 of them are being treated with 2 mg/kg of PRX-102 every 4 weeks and two are being treated with 1 mg/kg every two weeks.

In February 2020, we, together with Chiesi, announced an agreement with the FDA for the Initial Pediatric Study Plan (iPSP) for PRX-102. The joint announcement was made after completion of discussions with the FDA and receipt of confirmation from the FDA in an official "Agreement Letter" which outlines an agreed-upon approach to evaluate the safety and efficacy of PRX-102 in pediatric Fabry patients in a clinical trial to be performed by Chiesi with our collaborative efforts.

#### Phase III BALANCE Study

The *BALANCE* study is a 24-month, randomized, double blind, active control study of PRX-102 in Fabry patients with impaired renal function. We have completed enrollment of 78 patients in the trial, which is designed to evaluate the safety and efficacy of PRX-102 compared to agalsidase beta (Fabrazyme) on renal function in Fabry patients with progressing kidney disease previously treated with Fabrazyme infused once every two weeks. On October 15, 2021, we announced the last dosing of the last patient in the *BALANCE* study. Patients previously treated with Fabrazyme for approximately one year and on a stable dose for at least six months were screened and then randomized on a 2:1 ratio to 1 mg/kg of PRX-102 or 1 mg/kg of Fabrazyme. Randomization is being stratified by urinary protein to creatinine ratio (UPCR) of < or  $\ge$  1 g/g by spot urine sample. The study was designed such that no more than 50% of the patients enrolled in the study would be female. Approximately 40% of the enrolled patients were female.

The primary endpoint of the *BALANCE* study is the comparison in the annualized rate of decline of eGFR slope between Fabrazyme and PRX-102. eGFR is considered a reliable and accepted test to measure the level of kidney function and stage of kidney disease. Additional parameters being evaluated include: cardiac assessment, Lyso-Gb<sub>3</sub> (a biomarker for monitoring Fabry patients during therapy), pain, quality of life, immunogenicity, Fabry clinical events and pharmacokinetic and other parameters.

In June 2021, we, together with Chiesi, announced topline results from an interim analysis of the *BALANCE* study. The primary endpoint of the interim analysis is the comparison of mean annualized changes (slope) of the eGFR<sub>(CKD-EPI)</sub> after completion of at least 12 months of treatment between the two treatment arms (Fabrazyme and PRX-102). The interim efficacy analysis was conducted on two pre-defined analysis sets: Intention to Treat (ITT), consisting of all randomized patients who received at least one dose (77 patients), considered as the primary analysis for this interim review; and the Per Protocol (PP), consisting of all patients who completed at least 12 months of treatment with no major protocol violations (74 patients). The patient population (ITT analysis set) of the study is comprised of 47 males (61%) and 30 females (39%) with a mean age of 44.3 years.

The initial top-line results show that the lower boundary of the confidence interval for the mean difference between the two treatments was below the non-inferiority margin pre-specified for this interim analysis in the ITT analysis set and above such limit in the PP analysis set. At the time of this analysis, two patients discontinued participation due to treatment emergent adverse events (TEAEs). Of these two patients, one discontinued participation due to a related adverse event. No deaths were registered. Overall, safety data appears favorable and consistent with what was observed in previous clinical studies with PRX-102. Unblinded final data is anticipated to be released in the second quarter of 2022 after all remaining patients have completed the 24-month treatment period.

The planned data package for the BLA resubmission, given the changed regulatory landscape in the United States, will include the final two-year analyses of the *BALANCE* study.

#### Phase III BRIDGE Study

The *BRIDGE* study was a 12-month open-label, single arm switch-over study evaluating the safety and efficacy of pegunigalsidase alfa, 1 mg/kg infused every two weeks, in up to 22 Fabry patients. The trial, which is was completed in December 2019, enrolled patients then being treated with agalsidase alfa, marketed by Takeda Pharmaceutical Company Limited (acquired Shire Plc) as Replagal®, for at least two years and on a stable dose for at least six months. Patients were screened and evaluated over three months while continuing Replagal treatment. Following the screening period, each patient was enrolled and switched from Replagal treatment to receive intravenous (IV) infusions of PRX-102 1 mg/kg every two weeks for 12 months.

Final results of the data generated in the *BRIDGE* study showed substantial improvement in renal function as measured by mean annualized estimated Glomerular Filtration Rate, or eGFR, slope in both male and female patients who were switched from agalsidase alfa to PRX-102. Twenty of 22 patients completed the 12-month treatment duration. Eighteen of the patients who completed the study opted to roll over to a long-term extension study and continue to be treated with PRX-102. In the study, the mean annualized eGFR slope of the study participants improved from -5.90 mL/min/1.73m²/year while on agalsidase alfa to -1.19 mL/min/1.73m²/year on PRX-102 in all patients. Male patients improved from -6.36 mL/min/1.73m²/year to -1.73 mL/min/1.73m²/year and female patients improved from -5.03 mL/min/1.73m²/year. Following

the switch to PRX-102, there was a decrease in patients with progressing or fast progressing kidney disease, and most patients achieved a stable status post-switch.

PRX-102 was well-tolerated in the *BRIDGE* study, with all adverse events being transient in nature without sequelae. Of the 22 patients enrolled in the *BRIDGE* study, the majority of treatment emergent adverse events were mild or moderate in severity, with two patients (9.1%) withdrawing from the therapy due to hypersensitivity reaction that was resolved. The most common moderate treatment emergent adverse events were nasopharyngitis, headache and dyspnea.

An immunogenicity assessment indicated that four out of 20 patients (20%) developed persistent antidrug antibodies over the course of the study, of which two had neutralizing activity.

Baseline characteristics of the 20 patients that completed the study, ranging from ages 28 to 60 years, were as follows: mean eGFR  $75.87 \text{ mL/min/1.73m}^2$  in males, and  $86.14 \text{ mL/min/1.73m}^2$  in females and plasma lyso-Gb<sub>3</sub> were 51.81 nM and 13.81 nM in males and females, respectively. While lyso-Gb<sub>3</sub> levels remain slightly high, particularly within the male cohort, continuous reduction in lyso-Gb<sub>3</sub> levels was observed of 19.55 nM (32.35%) in males and 4.57 nM (29.81%) in females.

Data from the interim analysis of the *BRIDGE* study, which were first announced in February 2020, were used to support the PRX-102 BLA filing with the FDA, and we anticipate that the final analysis will be used to support the planned MAA submission to the EMA and the BLA resubmission.

#### Phase III BRIGHT Study

The *BRIGHT* study was a 12-month, open-label, switch-over study designed to evaluate the safety, efficacy and pharmacokinetics of PRX-102 via IV infusions of 2 mg/kg administered every 4 weeks. The trial, which was completed in June 2020, enrolled up to 30 patients with Fabry disease previously treated with a commercially available ERT (Fabrazyme or Replagal), for at least three years and on a stable dose administered every two weeks. To determine eligibility for participation in the study, candidates were screened to identify and select Fabry patients with stable kidney disease. Patients who matched the criteria were enrolled in the study and switched from their current treatment of IV infusions every 2 weeks to 2 mg/kg of PRX-102 every 4 weeks for 12 months. Patients participating in the study were evaluated, among other disease parameters, to determine if their kidney disease had not further deteriorated while being treated with the 4-week dosing regimen as measured by eGFR and Lyso-Gb<sub>3</sub>, as well as other parameters. In addition, participating patients were evaluated to assess the safety and tolerability of PRX-102.

We announced topline results from the *BRIGHT* study in February 2021. The topline results indicate that 2 mg/kg of PRX-102 administered by intravenous infusion every four weeks was found to be well tolerated among treated patients, and stable clinical presentation was maintained in adult Fabry patients. No new patients developed treatment-induced anti-drug antibodies, or ADA, following the switch to PRX-102 treatment.

The *BRIGHT* study enrolled 24 adult males and 6 adult females. The most common Fabry disease symptoms were acroparesthesia, heat intolerance, angiokeratomas and hypohydrosis. All 30 patients received at least one dose of PRX-102, and 29 patients (mean [SD] age was 40.5 [11.3] years, ranging from 19 to 58 years) completed the 12-month study. Of these 29 patients, 28 received the intended regimen of 2 mg/kg every four weeks throughout the study, while one patient was switched to PRX-102 1 mg/kg every two weeks per protocol. One patient withdrew from the study after the first infusion due to a traffic accident.

Following screening, patients were enrolled and switched from their then current ERT to IV infusions of 2 mg/kg of PRX-102 every four weeks for 52 weeks (a total of 14 infusions). First infusions of PRX-102 were administered under controlled conditions at the investigation site. Based on the protocol-specified criteria, patients were able to receive their PRX-102 infusions at a home care setup once the Investigator and Sponsor Medical Monitor agreed that it was safe to do so. Safety and efficacy exploratory endpoints were assessed throughout the 52-week study.

Study outcome measures showed plasma lyso-Gb<sub>3</sub> concentrations remained stable during the study with a mean change of 3.01 nM from baseline (19.36 nM) to Week 52 (22.23 nM). Mean absolute change of eGFR values were stable during the 52-week treatment period, with a mean change from baseline of -1.27 mL/min/1.73m<sup>2</sup>.

Following a survey of participants using the Quality of Life EQ-5D-5L questionnaire, responses indicate that patient perception of their own health remained high and stable throughout the 52-week study duration, with overall health mean (SE) scores of 78.3 (3.1) and 82.1 (2.9) at baseline and Week 52, respectively, in a 0 to 100 scale. Using the short-form Brief Pain Inventory, or BPI, questionnaire, approximately 75% of study participants had an improvement or no change in average pain severity at Week 52 (compared to baseline). The short-form BPI interference items also remained stable during the study. Pain-related results indicate that there was no increase and/or relapse in pain. No Fabry clinical events were reported during the study.

#### COVID-19 Impact on PRX-102 Clinical Trials

To date, the COVID-19 pandemic has had a minimal effect on the performance of the phase III clinical trials of PRX-102 as many of the patients were already treated in home care settings. In a minimal amount of cases, patients that completed a trial were not able to be transferred into an extension study due to the pandemic restrictions, and, accordingly, the main trial was prolonged for the patients to permit the continuation of treatment.

### Phase I/II Study

Our phase I/II clinical trial of PRX-102, which we completed in 2015, was a worldwide, multi-center, open-label, dose ranging study designed to evaluate the safety, tolerability, pharmacokinetics, immunogenicity and efficacy parameters of PRX-102 in adult Fabry patients. Sixteen adult, naïve Fabry patients (9 male and 7 female) completed the trial, each in one of three dosing groups, 0.2 mg/kg, 1 mg/kg and 2 mg/kg. Each patient received IV infusions of PRX-102 every two weeks for 12 weeks, with efficacy follow-up after six-month and twelve-month periods. A majority of the patients who completed the trial opted to continue receiving PRX-102 in an open-label, 60-month extension study under which all patients were switched to receive 1 mg/kg of the drug, the selected dose for our *BALANCE* and *BRIDGE* studies of PRX-102.

The adult symptomatic, ERT-naïve Fabry disease patients enrolled in the phase I/II study were evaluated for  $Gb_3$  levels in kidney biopsies and for plasma Lyso- $Gb_3$  concentration by the quantitative BLISS methodology. Biopsies were available from 14 patients. The outcome of  $\geq 50\%$  reduction in the average number of  $Gb_3$  inclusions per kidney PTC from baseline to Month 6 was demonstrated in 11 of 14 (78.6%) of the patients treated with PRX-102. The overall results demonstrate that PRX-102 reaches the affected tissue and reduces kidney  $Gb_3$  inclusions burden and Lyso- $Gb_3$  in the circulation. A high correlation was found between the two Fabry disease biomarkers, reduction of kidney  $Gb_3$  inclusions and the reduction of plasma Lyso- $Gb_3$  over six months of treatment.

Data was recorded at 24 months from 11 patients who completed 12 months of the long-term open-label extension trial that succeeded the phase I/II study. Patients who did not continue in the extension trial included: female patients who became or planned to become pregnant and therefore were unable to continue in accordance with the study protocol; and patients who relocated to a location where treatment was not available under the clinical study.

Results show that Lyso- $Gb_3$  levels decreased approximately 90% from baseline. Renal function remained stable with mean eGRF levels of 108.02 and 107.20 at baseline and 24 months, respectively, with a modest annual eGFR slope of -2.1. An improvement across all the gastrointestinal symptoms evaluated, including severity and frequency of abdominal pain and frequency of diarrhea, was noted. Cardiac parameters, including LVM, LVMI and EF, remained stable with no cardiac fibrosis development detected. In conclusion, an improvement of over 40% in disease severity was shown as measured by the Mainz Severity Score Index, or MSSI, a score compiling the different elements of the disease severity including neurological, renal and cardiovascular parameters. In addition, an improvement was noted in each of the individual parameters of the MSSI.

The majority of adverse events were mild-to-moderate in severity, and transient in nature. During the first 12 months of treatment, only three of 16 patients (less than 19%) formed anti-drug antibodies (ADA), of which two of these patients (less than 13%) had neutralizing antibodies. Importantly, however, the ADAs turned negative for all three of these patients following 12 months of treatment. The ADA positivity effect had no observed impact on the safety, efficacy or continuous biomarker reduction of PRX-102.

#### Commercialization Agreements with Chiesi Farmaceutici

We have entered into two exclusive global licensing and supply agreements for PRX-102 for the treatment of Fabry disease with Chiesi. The agreements have significant revenue potential for Protalix. Under the agreements, Protalix Ltd. has received \$50.0 million in upfront payments and was entitled to development cost reimbursements of up to \$45.0 million, up to more than \$1.0 billion in potential milestone payments and tiered royalties of 15% - 35% (ex-US) and 15% - 40% (US). To date, Protalix Ltd. has received the complete amount of development costs to which it is entitled under the two Agreements.

On October 19, 2017, Protalix Ltd. and Chiesi entered into the Chiesi Ex-US Agreement pursuant to which Chiesi was granted an exclusive license for all markets outside of the United States to commercialize PRX-102. Under the Chiesi Ex-US Agreement, Chiesi made an upfront payment to Protalix Ltd. of \$25.0 million in connection with the execution of the agreement, and Protalix Ltd. was entitled to additional payments of up to \$25.0 million in development costs in the aggregate, capped at \$10.0 million per year. Protalix Ltd. is also eligible to receive additional payments of up to a maximum of \$320.0 million in regulatory and commercial milestone payments. Protalix Ltd. agreed to manufacture all of the PRX-102 needed for all purposes under the agreement, subject to certain exceptions, and Chiesi will purchase PRX-102 from Protalix Ltd., subject to certain terms and conditions. Chiesi is required to make tiered payments of 15% to 35% of its net sales, depending on the amount of annual sales, as consideration for the supply of PRX-102.

On July 23, 2018, Protalix Ltd. entered into the Chiesi US Agreement with respect to the development and commercialization of PRX-102 in the United States. Protalix Ltd. received an upfront, non-refundable, non-creditable payment of \$25.0 million from Chiesi and was entitled to additional payments of up to a maximum of \$20.0 million to cover development costs for PRX-102, subject to a maximum of \$7.5 million per year. Protalix Ltd. is also eligible to receive additional payments of up to a maximum of \$760.0 million, in the aggregate, in regulatory and commercial milestone payments. Chiesi is also required to make tiered payments of 15% to 40% of its net sales under the Chiesi US Agreement to Protalix Ltd., depending on the amount of annual sales, subject to certain terms and conditions, as consideration for product supply.

On May 13, 2021, we signed a binding term sheet with Chiesi pursuant to which we amended the Chiesi Agreements in order to provide us with near-term capital. Chiesi agreed to make a \$10.0 million milestone payment to us before the end of the second quarter in exchange for a \$25.0 million reduction in a longer term regulatory milestone payment in the Chiesi EX-US Agreement. All other regulatory and commercial milestone payments remain unchanged. We also agreed to negotiate certain manufacturing related matters.

#### Elelyso® for the Treatment of Gaucher Disease

Elelyso (taliglucerase alfa), our first commercial product, was approved by the FDA in 2012 for injection as an enzyme replacement therapy (ERT) for the long-term treatment of adult patients with a confirmed diagnosis of type 1 Gaucher disease. In August 2014, the FDA approved Elelyso for injection for pediatric patients. Elelyso is the first plant cell derived recombinant protein to be approved by the FDA for the treatment of Gaucher disease and is now approved in over 20 markets.

Gaucher disease, also known as glucocerebrosidase, or GCD, deficiency, is a rare genetic autosomal recessive disorder and one of the most common Lysosomal Storage Disorders, or LSDs, in the world. It is one of a group of disorders that affect specific enzymes that normally break down fatty substances for reuse in the cells. If the enzymes are missing or do not work properly, the substances can build up and become toxic. Gaucher disease occurs when a lipid called glucosylceramide accumulates in the cells of the bone marrow, lungs, spleen and liver, and sometimes the brain. Gaucher disease symptoms can include fatigue, anemia, easy bruising and bleeding, severe bone pain and easily broken bones, and distended stomach due to an enlarged spleen and thrombocytopenia. Epidemiology of Gaucher disease varies; recent literature provides that prevalence of Gaucher disease ranges from 0.70 to 1.75 per 100,000 in the general population. In people of Ashkenazi Jewish heritage, estimates of occurrence vary from approximately 1 in 400 to 1 in 850 people.

Gaucher disease is a \$1.5 billion global annual therapeutic market that includes Sanofi's Cerezyme<sup>®</sup>, Shire's (acquired by Takeda Pharmaceutical Company Limited) Vpriv<sup>®</sup> and Sanofi's Cerdelga<sup>®</sup>.

#### Commercialization Agreements for Elelyso

We have licensed to Pfizer the global rights to Elelyso in all markets excluding Brazil. Pfizer retains 100% of revenue and reimburses 100% of direct costs. We manufacture drug substance for Pfizer, subject to certain terms and conditions.

For the first 10-year period after the execution of our Amended Pfizer Agreement, we have agreed to sell drug substance to Pfizer for the production of Elelyso, and Pfizer maintains the right to extend the supply period for up to two additional 30-month periods subject to certain terms and conditions. In a subsequent amendment, we agreed that after the completion of the first 10-year supply period, the supply term would automatically extend for a five-year period.

We maintain distribution rights to Elelyso in Brazil (marketed in Brazil as BioManguinhos alfataliglicerase) through a supply and technology transfer agreement with Fiocruz, an arm of the Brazilian MoH. In 2020, we generated \$8.0 million from sales of BioManguinhos alfataliglicerase to the Brazilian MoH.

#### Alidornase Alfa (PRX-110)

Alidornase alfa is our chemically-modified plant cell expressed recombinant human DNase I, administered via inhalation. Recombinant human DNase I enzymatically cleaves DNA but its activity is inhibited by actin, which is present in the blood and other target organs. PRX-110 is designed to be less susceptible to actin inhibition and have higher affinity to DNA, thus enhancing enzymatic activity. In-vitro studies have shown PRX-110 to have a highly improved catalytic efficiency and affinity to DNA, compared to dornase alfa (Pulmozyme<sup>®</sup>, currently the only commercially available DNase therapy), even more so in the presence of actin. In February 2021, we entered into an exclusive worldwide license agreement with SarcoMed with respect to PRX-110 for use in the treatment of any human respiratory disease or condition including, but not limited to, sarcoidosis, pulmonary fibrosis, and other related diseases via inhaled delivery. The license agreement expired during the three months ended September 30, 2021. We are continuing to evaluate potential strategic marketing partnerships and collaboration programs with biotechnology and pharmaceutical companies for this product candidate for various respiratory indications.

#### PRX-115

PRX-115 is our plant cell-expressed recombinant PEGylated uricase (urate oxidase) – a chemically modified enzyme under development for the potential treatment of refractory gout. Gout is the most common inflammatory arthritis in the United States, affecting an estimated 9.2 million adults. Gout is caused by factors that elevate serum uric acid, or sUA, levels, which may include diet or genetic predisposition and environmental factors leading to hyperuricemia and tissue deposition of monosodium urate crystals, tophi, in joints and soft tissues, causing acute and chronic inflammation, and is characterized by recurrent flares. Gout flares lead to substantial morbidity by causing severe pain, reduced quality of life, decreased physical function, increased healthcare costs, and lost economic productivity. Furthermore, gout is strongly associated with metabolic syndrome, and may contribute to myocardial infarction, type 2 diabetes mellitus, chronic kidney disease, or CKD, and premature mortality.

Currently available urate-lowering therapies, or ULTs, can be effective in treating gout. Refractory gout patients are those whom, despite treatment with existing ULTs, have high flare frequency, consistent tophi, and the inability to maintain therapeutic goals of urate levels. An estimated approximately 2% of the gout population is considered to have chronic refractory disease and are in need of other therapeutic options. One option may be a therapeutic use of the uricase enzyme which converts uric acid to allantoin, which is easily eliminated through urine. The uricase enzyme does not exist naturally in humans. To date, two variants of recombinant uricases are approved for marketing: (i) Krystexxa® for treatment of chronic gout refractory to conventional therapy (no longer approved in the European Union) and (ii) Elitek®, indicated for the treatment of tumor lysis syndrome but not gout. Both have a black box warning for anaphylaxis, induce strong immunogenic reactions and have other major side-effects. We use ProCellEx to express an optimized recombinant uricase enzyme under development for the potential treatment of refractory gout which we are designing to have an improved half-life, reduced immunogenicity and potentially longer term efficacy.

#### PRX-119

PRX-119 is our plant cell-expressed PEGylated recombinant human DNase I product candidate being designed to elongate half-life in the circulation for NETs-related diseases. NETs, Neutrophil extracellular traps, are web-like structures, released by activated neutrophils that trap and kill a variety of microorganisms. NETs are composed of DNA, histones, antimicrobial and pro-inflammatory proteins. Excessive formation or ineffective clearance of NETs can cause different pathological effects. NETs formation has been observed in various autoimmune, inflammatory and fibrotic conditions, diverse forms of thrombosis, cancer and metastasis. According to scientific literature, animal studies have demonstrated that DNase treatment reduces NETs toxicity. Our proprietary modified DNase I design for long and customized systemically circulating in the bloodstream, may potentially enable effective treatment of acute and chronic conditions.

#### **Intellectual Property**

A key element of our overall strategy is to establish a broad portfolio of patents to protect our proprietary technology, proprietary product and product candidates and their methods of use. As of September 30, 2021, we hold a broad portfolio of over 90 patents in Europe, the United States, Israel and additional countries worldwide, as well as over 30 pending patent applications.

### Research & Development

We continuously work on the further development of our ProCellEx plant cell expression technology and bioreactor system. In addition, we are working on the development of new products, each in different initial stages of development, for specific products for which there are unmet needs in terms of efficacy and safety. Our development strategy focuses on the utilization of different modification approaches and development improvements, customized for each protein product, in all stages of expression and development.

#### **Critical Accounting Policies**

Our significant accounting policies are more fully described in Note 1 to our consolidated financial statements appearing in this Quarterly Report. There have been no material changes to our critical accounting policies since we filed our Annual Report on Form 10-K for the year ended December 31, 2020.

The discussion and analysis of our financial condition and results of operations is based on our financial statements, which we prepared in accordance with U.S. generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported revenues and expenses during the reporting periods. On an ongoing basis, we evaluate such estimates and judgments, including those described in greater detail below. We base our estimates on historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the

basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

The full extent to which the COVID-19 pandemic will directly or indirectly impact our financial condition, liquidity, or results of operations will depend on future developments that are highly uncertain, including as a result of new information that may emerge concerning COVID-19 and its variants and the actions taken to contain or treat COVID-19 and its variants, as well as the economic impact on local, regional, national and international customers and markets.

#### **Results of Operations**

#### Three months ended September 30, 2021 compared to the three months ended September 30, 2020

Revenues from Selling Goods

We recorded revenues from selling goods of \$4.5 million during the three months ended September 30, 2021, an increase of \$1.2 million, or 36%, compared to revenues of \$3.3 million for the three months ended September 30, 2020. The increase of \$3.2 million in sales to Brazil, resulting from timing differences, was partially offset by a decrease of \$2.0 million in sales to Pfizer.

Revenues from License and R&D Services

We recorded revenues from license and R&D services of \$7.5 million for the three months ended September 30, 2021 and September 30, 2020. Revenues from license and R&D services are comprised primarily of revenues we recognized in connection with the Chiesi Agreements. A revenue increase of \$1.0 million recognized from the Kirin feasibility study was offset by a \$1.0 million decrease in revenue generated under the Chiesi Agreements.

Cost of Goods Sold

Cost of goods sold was \$3.7 million for the three months ended September 30, 2021, an increase of \$0.8 million, or 28%, from cost of goods sold of \$2.9 million for the three months ended September 30, 2020. The increase in cost of goods sold was primarily the result of higher sales.

Research and Development Expenses

Research and development expenses were \$7.3 million for the three months ended September 30, 2021, a decrease of \$0.4 million, or 5%, compared to \$7.7 million of research and development expenses for the three months ended September 30, 2020. The decrease is primarily the result of the completion of two out of the three phase III clinical trials of PRX-102 and reduced costs related to the *BALANCE* study.

We expect research and development expenses to continue to be our primary expense as we enter into a more advanced stage of preclinical and clinical trials for certain of our product candidates.

Selling, General and Administrative Expenses

Selling, general and administrative expenses were \$3.0 million for the three months ended September 30, 2021, an increase of \$0.2 million, or 7%, compared to \$2.8 million for the three months ended September 30, 2020. The increase is primarily the result of an increase of \$0.4 million in corporate costs mainly related to insurance and a \$0.2 million increase in sales and marketing costs, partially offset by a decrease of \$0.5 million in share-based compensation.

Financial Expenses, Net

Financial expenses, net were \$2.3 million for the three months ended September 30, 2021 and \$1.9 million for the three months ended September 30, 2020. The increase resulted primarily from loss on extinguishment related to the Exchanges of our 2021 Notes.

### Nine months ended September 30, 2021 compared to the nine months ended September 30, 2020

Revenues from Selling Goods

We recorded revenues from selling goods of \$12.3 million during the nine months ended September 30, 2021, an increase of \$0.3 million, or 3%, compared to revenues of \$12.0 million for the nine months ended September 30, 2020. The increase of

\$2.0 million in sales to Pfizer was partially offset by a decrease of \$1.8 million in sales to Brazil, both resulting from timing differences.

#### Revenues from License and R&D Services

We recorded revenues from license and R&D services of \$17.5 million for the nine months ended September 30, 2021, a decrease of \$13.9 million, or 44%, compared to revenues of \$31.4 million for the nine months ended September 30, 2020. Revenues from license and R&D services are comprised primarily of revenues we recognized in connection with the Chiesi Agreements. The decrease resulted primarily from revenues recognized in connection with the progress of our clinical trials that have been completed during 2020 and includes a \$4.1 million reduction to accumulated revenues recognized due to updated costs estimation throughout the trials until completion. The decrease was partially offset by an increase of \$1.0 million of revenues recognized in connection with the Kirin feasibility study.

#### Cost of Goods Sold

Cost of goods sold was \$13.2 million for the nine months ended September 30, 2021, an increase of \$5.1 million, or 63%, from cost of goods sold of \$8.1 million for the nine months ended September 30, 2020. The increase in cost of goods sold was primarily the result of certain one-time manufacturing costs incurred while preparing for the then anticipated FDA approval of the PRX-102 BLA and higher manufacturing costs.

#### Research and Development Expenses

Research and development expenses were \$22.1 million for the nine months ended September 30, 2021, a decrease of \$5.1 million, or 19%, compared to \$27.2 million of research and development expenses for the nine months ended September 30, 2020. The decrease is primarily the result of the completion of two out of the three phase III clinical trials of PRX-102 and reduced costs related to the *BALANCE* study.

We expect research and development expenses to continue to be our primary expense as we enter into a more advanced stage of preclinical and clinical trials for certain of our product candidates.

#### Selling, General and Administrative Expenses

Selling, general and administrative expenses were \$9.3 million for the nine months ended September 30, 2021, an increase of \$1.1 million, or 13%, compared to \$8.2 million for the nine months ended September 30, 2020. The increase resulted primarily from an increase in corporate costs of \$1.4 million related mainly to insurance and funding which was partially offset by \$0.3 million decrease in share-based compensation.

#### Financial Expenses, Net

Financial expenses net were \$6.2 million for the nine months ended September 30, 2021, a decrease of \$0.6 million, or 9%, compared to financial expenses net of \$6.8 million for the nine months ended September 30, 2020. The decrease resulted primarily from a decrease in expenses related to our outstanding convertible notes equal to \$1.3 million offset by a \$0.8 million loss on extinguishment related to the Exchanges of our 2021 Notes.

### **Liquidity and Capital Resources**

Our sources of liquidity include our cash balances and bank deposits. At September 30, 2021, we had \$10.6 million in cash and cash equivalents and \$38.0 million in short-term bank deposits. We have primarily financed our operations through equity and debt financings, business collaborations, and grants funding.

During the nine months ended September 30, 2021, we raised gross proceeds equal to approximately \$8.8 million from sales of common stock under our ATM program through the sale of 1,867,552 shares of our common stock. In addition, we raised gross proceeds of approximately \$40.2 million from a public offering of our common stock before deducting the underwriting discount and estimated expenses of the offering. In connection with the offering, we issued 8,749,999 shares of our common stock at a purchase price per share of \$4.60.

On August 25, 2021, we completed the Exchanges of our outstanding 2021 Notes with institutional note holders of a substantial majority of the 2021 Notes. The Exchanges involved the exchange of an aggregate of \$54.65 million principal amount of 2021 Notes for an aggregate of \$28.75 million principal amount of newly issued 2024 Notes, \$25.90 million in cash and approximately

\$1.1 million in cash representing accrued and unpaid interest through the closing date. The initial conversion rate of the 2024 Notes is 563.2216 shares of our common stock per \$1,000 principal amount of 2024 Notes, which is equivalent to an initial conversion price of approximately \$1.7755 per share of common stock, subject to adjustment in certain circumstances. This initial conversion price represents a premium of approximately 32.5% relative to the closing price of the common stock on the NYSE American on August 13, 2021. After giving effect to the Exchanges, \$3.27 million aggregate principal amount of the 2021 Notes are currently outstanding. The maturity date of the 2021 Notes is November 15, 2021, on which date we are required to settle all the then outstanding 2021 Notes and pay all accrued but unpaid interest thereon. On November 9, 2021, we delivered the necessary funds under the indenture governing the 2021 Notes to effectively discharge the remaining outstanding 2021 Notes.

The 2024 Notes were issued pursuant to an indenture entered into between us, the guarantors party thereto, The Bank of New York Mellon Trust Company, N.A., as trustee and Wilmington Savings Fund Society, FSB, as collateral agent. Interest on the Notes are payable semi-annually at a rate of 7.50% per annum. The 2024 Notes will mature three years after the issuance thereof, unless earlier purchased, converted, exchanged or redeemed and will be guaranteed by our subsidiaries. The 2024 Notes are secured by perfected liens on all of our assets, including those of our subsidiaries.

We believe that our cash and cash equivalents and bank deposits as of September 30, 2021 are sufficient to satisfy our capital needs for at least 12 months from the date that these financial statements are issued.

#### Cash Flows

Net cash used in operations was \$5.2 million for the nine months ended September 30, 2021. In response to the COVID-19 pandemic, a higher number of subjects in our ongoing clinical trials opted for home care treatments over in-site treatments which resulted in an immaterial amount of additional expenses. The net loss for the nine months ended September 30, 2021 of \$20.9 million was increased by a \$4.1 million increase in accounts receivable and other assets and \$1.6 million increase in inventories, and was partially offset by a \$13.9 million increase in contracts liability, a \$2.6 million of amortization of debt issuance costs and debt discount, \$2.0 million in share-based compensation and \$1.1 million increase in accounts payable and accruals. Net cash used in investing activities for the nine months ended September 30, 2021 was \$18.5 million and consisted primarily of a net increase in bank deposits. Net cash provided by financing activities was \$16.1 million resulting from the sale of common stock under our former ATM program and from our public offering of common stock, net of the convertible notes and promissory note payments.

Net cash used in operations was \$18.6 million for the nine months ended September 30, 2020. In response to the COVID-19 pandemic, a higher number of subjects in our ongoing clinical trials opted for home care treatments over in-site treatments which resulted in an immaterial amount of additional expenses. The net loss for the nine months ended September 30, 2020 of \$6.9 million was increased by a \$15.1 million decrease in contracts liability and a \$5.1 million increase in inventories, partially offset by an increase of \$3.3 million in accounts payable and accruals, \$2.5 million amortization of debt issuance costs and debt discount and a \$2.1 million in share-based compensation. Net cash used in investing activities for the nine months ended September 30, 2020 was \$27.5 million and consisted primarily of an increase in bank deposits. Net cash provided by financing activities was \$41.8 million resulting from our issuance of common stock and warrants on March 18, 2020.

#### **Future Funding Requirements**

As a result of our significant research and development expenditures and the lack of significant revenue from sales of taliglucerase alfa, we have generated operating losses from our continuing operations since our inception. Our outstanding 2021 Notes and 2024 Notes are secured by a perfected lien on all of our assets. Under the terms of the indentures governing the 2021 Notes and 2024 Notes, we are required to maintain a minimum cash balance of at least \$7.5 million. In addition, under the Exchange Agreements, we agreed to maintain an amount of unrestricted cash that is not less than the amount necessary to redeem or repay at maturity all of the 2021 Notes that remain outstanding following the closing of the Exchanges. After the closing of the Exchanges, an aggregate principal amount of \$3.27 million of the 2021 Notes remained outstanding, which notes are required to be repaid not later than November 15, 2021.

We expect to continue to incur significant expenditures in the near future as we increase our research and developments efforts with respect to our product candidates given the receipt of the CRL from the FDA discussed above, we expect to incur additional expenses in connection with any resubmission. We cannot anticipate the costs or the timing of the occurrence of such costs. In addition, to the extent we need to obtain additional financing in connection with this process or with any additional clinical testing that may be required, it may be more difficult for us to do so given the volatility of the price of our common stock. Our material cash needs for the next 24 months will include, among other expenses, (i) costs of preclinical and clinical trials, (ii) employee salaries, (iii) payments for rent and operation of our manufacturing facilities, (iv) fees to our consultants and legal advisors, patent advisors and fees for service providers in connection with our research and development efforts and (v) payment of interest on our outstanding 2024 Notes. We believe that the funds currently available to us are sufficient to satisfy our capital needs for at least 12 months.

As discussed above, we may be required to raise additional capital to develop our product candidates and continue research and development activities. Our ability to raise capital, and the amounts of necessary capital, will depend on many other factors, including:

- our efforts, combined with those of Chiesi, to file for resubmission with the FDA and to commercialize PRX-102;
- our progress in commercializing BioManguinhos alfataliglicerase in Brazil;
- the duration and cost of discovery and preclinical development and laboratory testing and clinical trials for our product candidates:
- the timing and outcome of regulatory review of our product candidates;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims and other intellectual property rights; and
- the costs associated with any litigation claims.

We expect to finance our future cash needs through corporate collaborations, licensing or similar arrangements, public or private equity offerings and/or debt financings. We currently do not have any commitments for future external funding, except with respect to the development-related payments and milestone payments that may become payable under the Chiesi Agreements. On July 2, 2021, we entered into the Sales Agreement in connection with a new ATM program pursuant to which we may sell from time to time through the Agent ATM Shares having an aggregate offering price of up to \$20.0 million. On the same date, we terminated our former ATM program.

#### **Effects of Currency Fluctuations**

Currency fluctuations could affect us through increased or decreased acquisition costs for certain goods and services. We do not believe currency fluctuations have had a material effect on our results of operations during the nine months ended September 30, 2021 and September 30, 2020.

#### **Off-Balance Sheet Arrangements**

We have no off-balance sheet arrangements as of each of September 30, 2021 and September 30, 2020.

#### Item 3. Quantitative and Qualitative Disclosures about Market Risk

#### **Currency Exchange Risk**

The currency of the primary economic environment in which our operations are conducted is the U.S. dollar. Most of our revenues and approximately 52% of our expenses and capital expenditures are incurred in dollars, and a significant source of our financing has been provided in U.S. dollars. Since the dollar is the functional currency, monetary items maintained in currencies other than the dollar are remeasured using the rate of exchange in effect at the balance sheet dates and non-monetary items are remeasured at historical exchange rates. Revenue and expense items are remeasured at the average rate of exchange in effect during the period in which they occur. Foreign currency translation gains or losses are recognized in the statement of operations.

Approximately 43% of our costs, including salaries, expenses and office expenses, are incurred in NIS. Inflation in Israel may have the effect of increasing the U.S. dollar cost of our operations in Israel. If the U.S. dollar declines in value in relation to the NIS, it will become more expensive for us to fund our operations in Israel. A revaluation of 1% of the NIS will affect our loss before tax by less than 1%. The exchange rate of the U.S. dollar to the NIS, based on exchange rates published by the Bank of Israel, was as follows:

	September 30,		December 31,
	2021	2020	2020
Average rate for period	3.255	3.479	3.442
Rate at period-end	3.229	3.441	3.215

To date, we have not engaged in hedging transactions. In the future, we may enter into currency hedging transactions to decrease the risk of financial exposure from fluctuations in the exchange rate of the U.S. dollar against the NIS. These measures, however, may not adequately protect us from material adverse effects due to the impact of inflation in Israel.

#### **Interest Rate Risk**

Our exposure to market risk is confined to our cash and cash equivalents. We consider all short term, highly liquid investments, which include short-term deposits with original maturities of three months or less from the date of purchase, that are not restricted as to withdrawal or use and are readily convertible to known amounts of cash, to be cash equivalents. The primary objective of our investment activities is to preserve principal while maximizing the interest income we receive from our investments, without increasing risk. We invest any cash balances primarily in bank deposits and investment grade interest-bearing instruments. We are exposed to market risks resulting from changes in interest rates. We do not use derivative financial instruments to limit exposure to interest rate risk. Our interest gains may decline in the future as a result of changes in the financial markets.

#### **Item 4. Controls and Procedures**

#### **Evaluation of Disclosure Controls and Procedures**

We conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. The evaluation was conducted under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer. Disclosure controls and procedures are controls and procedures designed to reasonably assure that information required to be disclosed in our reports filed under the Exchange Act, such as this Quarterly Report on Form 10-Q, is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms. Disclosure controls and procedures are also designed to reasonably assure that such information is accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Based on the evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this Quarterly Report on Form 10-Q, our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified by the Commission, and that material information relating to our company and our consolidated subsidiary is made known to management, including the Chief Executive Officer and Chief Financial Officer, particularly during the period when our periodic reports are being prepared.

#### **Inherent Limitations on Effectiveness of Controls**

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within a company have been detected.

#### **Changes in Internal Control over Financial Reporting**

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15f and 15d-15f under the Exchange Act) that occurred during the quarter ended September 30, 2021 that have materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting.

#### PART II - OTHER INFORMATION

#### Item 1. Legal Proceedings

We are not involved in any material legal proceedings.

#### Item 1A. Risk Factors

Except as set forth below, there have been no material changes to the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2020 and in our Quarterly Report for the three-month period ended March 31, 2021.

If any holder of our 2024 Notes converts such notes prior to our receipt of stockholder approval to issue 20% or more of our total outstanding common stock in connection with our compliance with the terms of such notes, we may be obligated to settle a significant portion or all of such converted notes in cash.

Under the terms of the indenture for the 2024 Notes, we agreed to solicit stockholder approval prior to issuing 20% or more of our outstanding shares of common stock, calculated as of the date we entered into the exchange agreements in connection with the issuance of the 2024 Notes, in compliance with certain listing standards of the NYSE American. Unless and until we obtain such stockholder approval, we may be required to settle all conversions of the 2024 Notes substantially or entirely in cash. Absent such approval, we are left with limited financial and corporate flexibility with respect to our ability to satisfy obligations under the indenture with shares of our common stock which may have a material adverse effect on our financial condition.

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

None.

#### Item 3. Defaults Upon Senior Securities

None.

#### Item 4. Mine Safety Disclosure

Not applicable.

#### Item 5. Other Information

None.

#### Item 6. Exhibits

Exhibit	Incorporated by Reference Filed or Furnished						
Number 3.1	Exhibit Description Certificate of Incorporation of the Company	Form 8-K	File Number 001-33357	Exhibit 3.1	<b>Date</b> April 1, 2016	Herewith	
3.2	Amendment to Certificate of Incorporation of the Company	Def 14A	001-33357	Appen. A	July 1, 2016		
3.3	Second Amendment to Certificate of Incorporation of the Company	Def 14A	001-33357	Appen. A	October 17, 2018		
3.4	Third Amendment to Certificate of Incorporation of the Company	8-K	001-33357	3.1	December 19, 2019		
3.5	Bylaws of the Company	8-K	001-33357	3.2	April 1, 2016		
4.1	Form of Restricted Stock Agreement/Notice	8-K	001-33357	4.1	July 18, 2012		
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4.2	Indenture, dated as of December 7, 2016, between Protalix BioTherapeutics, Inc. the guarantors party thereto, The Bank of New York Mellon Trust Company, N.A., as trustee and Wilmington	8-K	001-33357	4.1	December 7, 2016
4.3	Savings Fund Society, FSB, as collateral agent Form of 7.50% Convertible Note due 2021 (Issued in 2016 Financing)	8-K	001-33357	4.2	December 7, 2016
4.4	Form of 7.50% Convertible Note due 2021 (Issued in 2016 Exchange)	8-K	001-33357	4.3	December 7, 2016
4.5	First Supplemental Indenture, dated as of July 24, 2017, by and among Protalix BioTherapeutics, Inc., the guarantors party thereto, The Bank of New York Mellon Trust Company, N.A., as trustee, and Wilmington Savings Fund Society, FSB, as collateral agent	8-K	001-33357	4.2	July 25, 2017
4.6	Second Supplemental Indenture, dated as of November 27, 2017, by and among Protalix BioTherapeutics, Inc., the guarantors party hereto and The Bank of New York Mellon Trust Company, N.A., as trustee, registrar, paying agent and conversion agent	8-K	001-33357	4.1	December 1, 2017
4.7	Description of Capital Stock	10-K	001-33357	4.7	March 12, 2020
4.8	Form of Warrant	8-K	001-33357	4.1	March 12, 2020
4.9†	Form of Stock Option Agreement (Executives)	10-Q	001-33357	4.8	August 10, 2020
4.10	Form of Stock Option Agreement (Standard)	10-Q	001-33357	4.9	August 10, 2020
4.11	Third Supplemental Indenture, dated as of August 24, 2021, by and among Protalix BioTherapeutics, Inc., the guarantors party hereto and The Bank of New York Mellon Trust Company, N.A., as trustee, registrar, paying agent and conversion agent, and Wilmington Savings Fund Society, FSB, as the collateral agent	8-K	001-33357	4.1	August 26, 2021
4.12	Indenture, dated as of August 24, 2021, between Protalix BioTherapeutics, Inc., the guarantors party thereto, The Bank of New York Mellon Trust Company, N.A., as trustee and Wilmington Savings Fund Society, FSB, as collateral agent	8-K	001-33357	4.2	August 26, 2021
4.13	Form of Exchange Note (2024)	8-K	001-33357	4.3	August 26, 2021
10.1	Form of Exchange Agreement, dated as of August 12, 2021 among Protalix BioTherapeutics, Inc. and the holders named therein	8-K	001-33357	10.1	August 12, 2021
10.2	Amended and Restated U.S. Security Agreement dated of August 24, 2021 among Protalix BioTherapeutics, Inc., the guarantors party thereto, Wilmington Savings Fund Society, FSB, as collateral agent and The Bank of New York Mellon Trust Company, N.A., as Notes Trustee	8-K	001-33357	10.1	August 26, 2021
10.3	2021 Security Agreement/Debenture, made on August 24, 2021 between Protalix Ltd. and Altshuler Shaham Trusts Ltd., as security trustee	8-K 31	001-33357	10.2	August 26, 2021
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31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X
32.1	18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, Certification of Chief Executive Officer	X
32.2	18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, Certification of Chief Financial Officer	X
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document	X
101.SCH	Inline XBRL Taxonomy Extension Schema Document	X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	X
101.LAB	Inline XBRL Taxonomy Extension Labels Linkbase Document	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	X
104	COVER PAGE INTERACTIVE DATA FILE (formatted as Inline XBRL and contained in Exhibit 101).	

<sup>†</sup> Management contracts or compensation plans or arrangements in which directors or executive officers are eligible to participate.

#### **SIGNATURES**

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

PROTALIX BIOTHERAPEUTICS, INC. (Registrant)

Date: November 15, 2021 By: /s/ Dror Bashan

Dror Bashan

President and Chief Executive Officer (Principal Executive Officer)

Date: November 15, 2021 By: /s/ Eyal Rubin

Eyal Rubin

Senior Vice President and Chief Financial Officer, Treasurer and

Secretary

(Principal Financial and Accounting Officer)

#### CERTIFICATION

- I, Dror Bashan, certify that:
- 1. I have reviewed this quarterly report on Form 10-Q of Protalix BioTherapeutics, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - 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: November 15, 2021	
/s/ Dror Bashan	
Dror Bashan	
President and Chief Executive Officer	

#### CERTIFICATION

- I. Eval Rubin, certify that:
- 1. I have reviewed this quarterly report on Form 10-Q of Protalix BioTherapeutics, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - 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: November 15, 2021

/s/ Eyal Rubin

Eyal Rubin

Sr. Vice President & Chief Financial Officer,

Treasurer

#### PROTALIX BIOTHERAPEUTICS, INC.

#### CERTIFICATION

In connection with the quarterly report of Protalix BioTherapeutics, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2021 as filed with the Securities and Exchange Commission (the "Report"), I, Dror Bashan, President and Chief Executive Officer of the Company, hereby certify as of the date hereof, solely for purposes of Title 18, Chapter 63, Section 1350 of the United States Code, that to the best of my knowledge:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, 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 at the dates and for the periods indicated.

This Certification has not been, and shall not be deemed, "filed" with the Securities and Exchange Commission.

Date: November 15, 2021	
/s/ Dror Bashan	
Dror Bashan	
President and Chief Executive Officer	

#### PROTALIX BIOTHERAPEUTICS, INC.

#### CERTIFICATION

In connection with the quarterly report of Protalix BioTherapeutics, Inc. (the "Company") on Form 10-Q for the period ended September 30, 2021 as filed with the Securities and Exchange Commission (the "Report"), I, Eyal Rubin, Senior Vice President and Chief Financial Officer of the Company, hereby certify as of the date hereof, solely for the purposes of Title 18, Chapter 63, Section 1350 of the United States Code, that to the best of my knowledge:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, 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 at the dates and for the periods indicated.

This Certification has not been, and shall not be deemed, "filed" with the Securities and Exchange Commission.

Date: November 15, 2021

/s/ Eyal Rubin

Eyal Rubin

Senior Vice President and Chief Financial Officer