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

FORM 10-Q

(Mark One)

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

FOR THE QUARTERLY PERIOD ENDED MARCH 31, 2019

OR

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

FOR THE TRANSITION PERIOD FROM TO

Commission File Number 0-29889

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

Delaware	**94-3248524**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1180 Veterans Blvd. South San Francisco, CA (Address of principal executive offices)	**94080** (Zip Code)

(650) 624-1100
(Registrant's telephone number, including area code)

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

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

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

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

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

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

As of May 1, 2019, there were 167,193,410 shares of the registrant's Common Stock outstanding.

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

Title of each class:	**Trading Symbol**	**Name of each exchange on which registered:**
Common Stock, par value $0.001 per share	RIGL	The Nasdaq Global Market

RIGEL PHARMACEUTICALS, IN C.
QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED MARCH 31, 2019

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PART I. FINANCIAL INFORMATIO N

Item 1. Financial Statements

RIGEL PHARMACEUTICALS, INC.
CONDENSED BALANCE SHEET S
(In thousands)

	March 31, 2019 (unaudited)	December 31, 2018(1)
Assets		
Current assets:		
Cash and cash equivalents	$ 74,696	$ 76,322
Short-term investments	53,227	52,215
Accounts receivable, net	5,614	4,077
Inventories	1,130	894
Prepaid and other current assets	4,652	3,479
Total current assets	139,319	136,987
Property and equipment, net	1,600	1,387
Operating lease right-of-use asset	31,136	—
Other assets	729	735
	$ 172,784	$ 139,109
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 1,179	$ 6,391
Accrued compensation	4,432	9,952
Accrued research and development	6,999	6,763
Other accrued liabilities	5,241	3,598
Lease liabilities, current portion	6,755	—
Deferred revenue, current portion	1,532	1,030
Total current liabilities	26,138	27,734
Long-term portion of deferred revenue	26,381	1,408
Long-term portion of deferred rent	—	90
Long-term portion of lease liabilities	24,950	—
Commitments		
Stockholders' equity:		
Preferred stock	—	—
Common stock	167	167
Additional paid-in capital	1,322,070	1,319,068
Accumulated other comprehensive income (loss)	10	(24)
Accumulated deficit	(1,226,932)	(1,209,334)
Total stockholders' equity	95,315	109,877
	$ 172,784	$ 139,109

(1) The balance sheet at December 31, 2018 has been derived from the audited financial statements included in Rigel's Annual Report on Form 10-K for the year ended December 31, 2018.

See Accompanying Notes.

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF OPERATION S
(In thousands, except per share amounts)
(unaudited)

	Three Months Ended March 31,	
	2019	2018
Revenues:		
Product sales, net	$ 8,054	$ —
Contract revenues from collaborations	4,570	—
Total revenues	12,624	—
Costs and expenses:		
Cost of product sales	107	—
Research and development	10,949	11,242
Selling, general and administrative	19,946	13,492
Total costs and expenses	31,002	24,734
Loss from operations	(18,378)	(24,734)
Interest income	780	349
Net loss	$ (17,598)	$ (24,385)
Net loss per share, basic and diluted	$ (0.11)	$ (0.17)
Weighted average shares used in computing net loss per share, basic and diluted	167,173	147,114

See Accompanying Notes.

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF COMPREHENSIVE LOS S
(In thousands)
(unaudited)

	Three Months Ended March 31,	
	2019	2018
Net loss	$ (17,598)	$ (24,385)
Other comprehensive income (loss):		
Net unrealized gain (loss) on short-term investments	34	(5)
Comprehensive loss	$ (17,564)	$ (24,390)

See Accompanying Notes.

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF STOCKHOLDERS' EQUITY
(In thousands, except share amounts)
(unaudited)

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at January 1, 2019	167,171,505	$ 167	$1,319,068	$ (24)	$(1,209,334)	$ 109,877
Net loss	—	—	—	—	(17,598)	(17,598)
Net change in unrealized gain on short-term investments	—	—	—	34	—	34
Issuance of common stock upon exercise of options and participation in Purchase Plan	7,583	—	16	—	—	16
Stock compensation expense	—	—	2,986	—	—	2,986
Balance at March 31, 2019	167,179,088	$ 167	$1,322,070	$ 10	$(1,226,932)	$ 95,315

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance at January 1, 2018	146,814,906	$ 147	$1,239,435	$ (82)	$(1,138,854)	$ 100,646
Net loss	—	—	—	—	(24,385)	(24,385)
Net change in unrealized loss on short-term investments	—	—	—	(5)	—	(5)
Issuance of common stock upon exercise of options and participation in Purchase Plan	652,891	1	2,010	—	—	2,011
Stock compensation expense	—	—	1,540	—	—	1,540
Balance at March 31, 2018	147,467,797	$ 148	$1,242,985	$ (87)	$(1,163,239)	$ 79,807

RIGEL PHARMACEUTICALS, INC.
CONDENSED STATEMENTS OF CASH FLOW S
(In thousands)
(unaudited)

	Three Months Ended March 31,	
	2019	2018
Operating activities		
Net loss	$ (17,598)	$ (24,385)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	2,953	1,540
Depreciation and amortization	164	113
Non-cash operating lease expense	1,691	—
Net amortization of discount on short-term investment	(282)	(134)
Changes in assets and liabilities:		
Accounts receivable, net	(1,537)	—
Inventories	(203)	—
Prepaid and other current assets	(863)	(638)
Other assets	6	533
Accounts payable	(5,212)	(493)
Accrued compensation	(5,520)	(2,313)
Accrued research and development	236	844
Other accrued liabilities	1,642	2,184
Lease liability	(1,522)	—
Deferred revenue	25,476	—
Deferred rent and other long term liabilities	—	(645)
Net cash used in operating activities	(569)	(23,394)
Investing activities		
Purchases of short-term investments	(19,871)	(5,235)
Maturities of short-term investments	19,175	28,650
Capital expenditures	(377)	(197)
Net cash (used in) provided by investing activities	(1,073)	23,218
Financing activities		
Net proceeds from issuances of common stock upon exercise of options and participation in employee stock purchase plan	16	2,011
Net cash provided by financing activities	16	2,011
Net (decrease) increase in cash and cash equivalents	(1,626)	1,835
Cash and cash equivalents at beginning of period	76,322	38,290
Cash and cash equivalents at end of period	$ 74,696	$ 40,125

See Accompanying Notes.

Rigel Pharmaceuticals, In c.
Notes to Condensed Financial Statements
(unaudited)

In this report, "Rigel," "we," "us" and "our" refer to Rigel Pharmaceuticals, Inc.

1. Nature of Operations

We were incorporated in the state of Delaware on June 14, 1996. We are a biotechnology company dedicated to discovering, developing and providing novel small molecule drugs that significantly improve the lives of patients with immune and hematologic disorders, cancer and rare diseases. Our pioneering research focuses on signaling pathways that are critical to disease mechanisms.

Our first U.S. Food and Drug Administration (FDA) approved product, TAVALISSE® (fostamatinib disodium hexahydrate), an oral spleen tyrosine kinase (SYK) inhibitor, for the treatment of adult patients with chronic immune thrombocytopenia (ITP) who have had an insufficient response to a previous treatment, was approved by the FDA in April 2018, which we launched in May 2018.

Our current clinical programs include an upcoming Phase 3 study of fostamatinib in autoimmune hemolytic anemia (AIHA) and an ongoing Phase 1 study for our interleukin receptor associated kinase (IRAK) program. In addition, we have product candidates in development with partners BerGenBio ASA (BerGenBio), Daiichi Sankyo (Daiichi), Aclaris Therapeutics (Aclaris), and AstraZeneca AB (AZ).

2. Basis of Presentation

Our accompanying unaudited condensed financial statements have been prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP), for interim financial information and pursuant to the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities Act of 1933, as amended (Securities Act). Accordingly, they do not include all of the information and notes required by U.S. GAAP for complete financial statements. These unaudited condensed financial statements include only normal and recurring adjustments that we believe are necessary to fairly state our financial position and the results of our operations and cash flows. Interim-period results are not necessarily indicative of results of operations or cash flows for a full-year or any subsequent interim period. The balance sheet at December 31, 2018 has been derived from audited financial statements at that date, but does not include all disclosures required by U.S. GAAP for complete financial statements. Because certain disclosures required by U.S. GAAP for complete financial statements are not included herein, these interim unaudited condensed financial statements and the notes accompanying them should be read in conjunction with our audited financial statements and the notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2018.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results could differ from these estimates.

3. Summary of Significant Accounting Policies

Recent Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02—*Leases*, (Topic 842) (ASU 2016-02), as amended, which generally requires lessees to recognize operating and financing lease liabilities and corresponding right-of-use assets on the balance sheet and to provide enhanced disclosures surrounding the amount, timing and uncertainty of cash flows arising from leasing arrangements. In July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic 842)*: Targeted Improvements, or ASU No. 2018-11. In issuing ASU No. 2018-11, the FASB is permitting another transition method for ASU 2016-02, which allows the transition to the new lease standard by recognizing a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption.

We adopted this new standard on January 1, 2019 using a modified retrospective approach and elected the transition method and the package of practical expedients permitted under the transition guidance, which allowed us to carryforward our historical lease classification and our assessment on whether a contract is or contains a lease. We also elected to combine lease and non-lease components, such as common area maintenance charges, as single lease, and elected to use the short-term lease exception permitted by the standard.

As a result of the adoption of Topic 842 on January 1, 2019, we recognized $32.8 million in operating right-of-use asset and $33.2 million in lease liability, and derecognized $399,000 of deferred rent in the balance sheet at adoption date. These were calculated using the present value of our remaining lease payments using an estimated incremental borrowing rate of 9%. There was no cumulative-effect adjustment on our accumulated deficit as of January 1, 2019.

For our sublease agreement wherein we are the lessor, the same practical expedients apply to both lessor and lessee. Therefore, the sublease is classified as an operating lease under Topic 842. Further, the adoption of Topic 842 did not have an impact on our sublease on the date of adoption as all the expected sublease income is equal to the expected lease costs for the head leases over the remaining period of the lease term, and therefore, no impairment of the operating right-of-use asset is needed upon the adoption of Topic 842.

In June 2018, the FASB issued ASU 2018-07—*Compensation-Stock Compensation Improvements to Nonemployee Share-Based Payment Accounting (Topic 718)*. This standard substantially aligns accounting for share-based payments to employees and non-employees. This standard is effective for annual periods beginning after December 15, 2018, including interim periods within that period, and early adoption is permitted. We adopted this new standard on January 1, 2019 and our adoption did not have a material effect on our financial statements.

In August 2018, the FASB issued ASU 2018-13—*Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement (ASU 2018-13)*, which modifies the disclosure requirements on fair value measurements. This guidance is effective for fiscal years beginning after December 15, 2019, and interim periods therein. Early adoption is permitted. We are currently evaluating the impact of adoption of this new standard on our related disclosures.

In November 2018, the FASB issued ASU 2018-18—*Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*. This standard provides guidance on the interaction between Revenue Recognition (Topic 606) and Collaborative Arrangements (Topic 808) by aligning the unit of account guidance between the two topics and clarifying whether certain transactions between collaborative participants should be accounted for as revenue under Topic 606. ASU 2018-18 is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted. We plan to adopt this new standard on January 1, 2020. We are currently evaluating the impact ASU 2018-18 will have on our financial statements and related disclosures, but do not expect it to have a material impact on our financial statements.

Inventories

Inventories are stated at the lower of cost or estimated net realizable value. We determine the cost of inventories using the standard cost method, which approximates actual cost based on a FIFO basis. Inventories consist primarily of third-party manufacturing costs and allocated internal overhead costs. We began capitalizing inventory costs associated with our product upon regulatory approval when, based on management's judgment, future commercialization was considered probable and the future economic benefit was expected to be realized.

Prior to FDA approval of TAVALISSE, all manufacturing costs were charged to research and development expense in the period incurred. At March 31, 2019 and December 31, 2018, our physical inventory included active pharmaceutical product of which costs have been previously charged to research and development expense. However, manufacturing of drug product, finished bottling and other labeling activities that occurred post FDA approval are included in the inventory value at each balance sheet date.

We provide reserves for potential excess, dated or obsolete inventories based on an analysis of forecasted demand compared to quantities on hand and any firm purchase orders, as well as product shelf life.

Cost of Product Sales

Cost of product sales consists of third-party manufacturing costs, transportation and freight, and indirect overhead costs associated with the manufacture and distribution of TAVALISSE. A portion of the cost of producing the product sold to date was expensed as research and development prior to the Company's New Drug Application (NDA) approval for TAVALISSE and therefore is not included in the cost of product sales during this period.

Accounts Receivable

Accounts receivable are recorded net of customer allowances for prompt payment discounts and any allowance for doubtful accounts. We estimate the allowance for doubtful accounts based on existing contractual payment terms, actual payment patterns of our customers and individual customer circumstances. To date, we have determined that an allowance for doubtful accounts is not required.

Revenue Recognition

We recognize revenue in accordance with ASC Topic 606,*Revenue From Contracts with Customers (ASC 606)*, when our customer obtains control of promised goods or services, in an amount that reflects the consideration which we expect to receive in exchange for those goods or services. To determine whether arrangements are within the scope of ASC 606, we perform the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies its performance obligation. We apply the five-step model to contracts when it is probable that the we will collect the consideration we are entitled to in exchange for the goods or services we transfer to the customer. At contract inception, once the contract is determined to be within the scope of this new guidance, we assess the goods or services promised within each contract and identify, as a performance obligation, and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

Product Sales

Revenues from product sales are recognized when the specialty distributors (SDs), who are our customers, obtain control of our product, which occurs at a point in time, upon delivery to such SDs. These SDs subsequently resell our products to specialty pharmacy providers, health care providers, hospitals and clinics. In addition to distribution agreements with these SDs, we also enter into arrangements with specialty pharmacy providers, in-office dispensing providers, group purchasing organizations, and government entities that provide for government-mandated and/or privately-negotiated rebates, chargebacks and discounts with respect to the purchase of our products.

Under ASC 606, we are required to estimate the transaction price, including variable consideration that is subject to a constraint, in our contracts with our customers. Variable considerations are included in the transaction price to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur. Revenue from product sales are recorded net of certain variable considerations which includes estimated government-mandated rebates and chargebacks, distribution fees, estimated product returns and other deductions.

Provisions for returns and other adjustments are provided for in the period the related revenue is recorded. Actual amounts of consideration ultimately received may differ from our estimates. If actual results in the future vary from our estimates, we will adjust these estimates, which would affect net product revenue and earnings in the period such variances become known.

The following are our significant categories of sales discounts and allowances:

Sales Discounts. We provide our customers prompt payment discounts that are explicitly stated in our contracts and are recorded as a reduction of revenue in the period the related product revenue is recognized.

Product Returns. We offer our SDs a right to return product purchased directly from us, which is principally based upon the product's expiration date. Product return allowances are estimated and recorded at the time of sale.

Government Rebates: We are subject to discount obligations under the state Medicaid programs and Medicare prescription drug coverage gap program. We estimate our Medicaid and Medicare prescription drug coverage gap rebates based upon a range of possible outcomes that are probability-weighted for the estimated payor mix. These reserves are recorded in the same period the related revenue is recognized, resulting in a reduction of product revenue and the establishment of a current liability that is included as part of Other Accrued Liabilities account in the Balance Sheet. Our liability for these rebates consists primarily of estimates of claims for the current quarter, and estimated future claims that will be made for product that has been recognized as revenue, but remains in the distribution channel inventories at the end of each reporting period.

Chargebacks and Discounts: Chargebacks for fees and discounts represent the estimated obligations resulting from contractual commitments to sell products to certain specialty pharmacy providers, in-office dispensing providers, group purchasing organizations, and government entities at prices lower than the list prices charged to our SDs who directly purchase the product from us. These SDs charge us for the difference between what they pay for the product and our contracted selling price to these specialty pharmacy providers, in-office dispensing providers, group purchasing organizations, and government entities. These reserves are established in the same period that the related revenue is recognized, resulting in a reduction of product revenue. Actual chargeback amounts are generally determined at the time of resale to the specialty pharmacy providers, in-office dispensing providers, group purchasing organizations, and government entitiesby our SDs. The estimated obligations arising from these chargebacks and discounts are included as part of Other Accrued Liabilities in the balance sheet.

Co-Payment Assistance: We offer co-payment assistance to commercially insured patients meeting certain eligibility requirements. The calculation of the accrual for co-pay assistance is based on an estimate of claims and the cost per claim that we expect to receive associated with product that has been recognized as revenue.

Contract Revenues from Collaborations

In the normal course of business, we conduct research and development programs independently and in connection with our corporate collaborators, pursuant to which we license certain rights to our intellectual property to third parties. The terms of these arrangements typically include payment to us for a combination of one or more of the following: upfront license fees; development, regulatory and commercial milestone payments; product supply services; and royalties on net sales of licensed products.

Upfront License Fees: If the license to our intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, we recognize revenues from upfront license fees allocated to the license when the license is transferred to the licensee and the licensee is able to use and benefit from the license. For licenses that are bundled with other promises, we determine whether the combined performance obligation is satisfied over time or at a point in time. If the combined performance obligation is satisfied over time, we use judgment in determining the appropriate method of measuring progress for purposes of recognizing revenue from the up-front license fees. We evaluate the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition.

Development, Regulatory or Commercial Milestone Payments: At the inception of each arrangement that includes payments based the achievement of certain development, regulatory and commercial or launch events, we evaluate whether the milestones are considered probable of being achieved and estimate the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our or

the licensee's control, such as regulatory approvals, are not considered probable of being achieved until uncertainty associated with the approvals has been resolved. The transaction price is then allocated to each performance obligation, on a relative standalone selling price basis, for which we recognize revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, we re-evaluate the probability of achieving such development and regulatory milestones and any related constraint, and if necessary, adjust our estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, and recorded as part of contract revenues from collaborations during the period of adjustment.

Product Supply Services: Arrangements that include a promise for future supply of drug product for either clinical development or commercial supply at the licensee's discretion are generally considered as options. We assess if these options provide a material right to the licensee and if so, they are accounted for as separate performance obligations.

Sales-based Milestone Payments and Royalties: For arrangements that include sales-based royalties, including milestone payments based on the volume of sales, we determine whether the license is deemed to be the predominant item to which the royalties or sales-based milestones relate to and if such is the case, we recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied).

Leases

We currently lease our research and office space under a noncancelable lease agreement with our landlord through January 2023. In December 2014, we entered into a sublease agreement with an unrelated third party to occupy a portion of our research and office space through January 2023.

As described above, we adopted the Topic 842 as of January 1, 2019. Pursuant to Topic 842, all of our leases outstanding on January 1, 2019 continued to be classified as operating leases. With the adoption of Topic 842, we recorded an operating lease right-of-use asset and an operating lease liability on our balance sheet. Right-of-use lease assets represent our right to use the underlying asset for the lease term and the lease obligation represents our commitment to make the lease payments arising from the lease. Right-of-use lease assets and obligations are recognized at the commencement date based on the present value of remaining lease payments over the lease term. As our lease does not provide an implicit rate, we have used an estimated incremental borrowing rate based on the information available at the commencement date in determining the present value of lease payments. The operating lease right-of-use asset includes any lease payments made prior to commencement. The lease term may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Operating lease expense is recognized on a straight-line basis over the lease term, subject to any changes in the lease or expectations regarding the terms. Variable lease costs such as common area costs and property taxes are expensed as incurred. Leases with an initial term of 12 months or less are not recorded on the balance sheet.

For our sublease agreement wherein we are the lessor, sublease income will be recognized on a straight-line basis over the term of the sublease. The difference between the cash received, and the straight-line lease income recognized, if any, will be recorded as part of prepaid and other current assets in the balance sheet.

Prior to our adoption of Topic 842, we recorded a deferred rent asset or liability equal to the difference between the rent expense and the future minimum lease payments due. We recorded lease expense on a straight-line basis for our lease, net of sublease income, wherein such arrangements contain scheduled rent increases over the term of the lease and sublease, respectively.

Research and Development Accruals

We have various contracts with third parties related to our research and development activities. Costs that are incurred but not billed to us as of the end of the period are accrued. We make estimates of the amounts incurred in each period based on the information available to us and our knowledge of the nature of the contractual activities generating such costs. Clinical trial contract expenses are accrued based on units of activity. Expenses related to other research and

development contracts, such as research contracts, toxicology study contracts and manufacturing contracts are estimated to be incurred generally on a straight-line basis over the duration of the contracts. Raw materials and study materials not related to our approved drug, purchased for us by third parties are expensed at the time of purchase.

4. Stock Award Plans

On May 16, 2018, our stockholders approved the adoption of the Company's 2018 Equity Incentive Plan (2018 Plan). The 2018 Plan is the successor plan to the 2011 Equity Incentive Plan, the 2000 Equity Incentive Plan, and the 2000 Non-Employee Directors' Stock Option Plan.

To date, we have two stock option plans, our 2018 Plan and the Inducement Plan (collectively, the Equity Incentive Plans), that provide for granting to our officers, directors and all other employees and consultants options to purchase shares of our common stock. We also have our Employee Stock Purchase Plan (Purchase Plan), wherein eligible employees can purchase shares of our common stock at a price per share equal to the lesser of 85% of the fair market value on the first day of the offering period or 85% of the fair market value on the purchase date. The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model which considered our stock price, as well as assumptions regarding a number of complex and subjective variables. These variables include, but are not limited to, volatility, expected term, risk-free interest rate and dividends. We estimate volatility over the expected term of the option using historical share price performance. For expected term, we take into consideration our historical data of options exercised, cancelled and expired. The risk-free rate is based on the U.S. Treasury constant maturity rate. We have not paid and do not expect to pay dividends in the foreseeable future. We use the straight-line attribution method over the requisite employee service period for the entire award in recognizing stock-based compensation expense. We account for forfeitures as they occur.

We granted performance-based stock options to purchase shares of our common stock which will vest upon the achievement of certain corporate performance-based milestones. We determined the fair values of these performance-based stock options using the Black-Scholes option pricing model at the date of grant. For the portion of the performance-based stock options of which the performance condition is considered probable of achievement, we recognize stock-based compensation expense on the related estimated grant date fair values of such options on a straight-line basis from the date of grant up to the date when we expect the performance condition will be achieved. For the performance conditions that are not considered probable of achievement at the grant date or upon quarterly re-evaluation, prior to the event actually occurring, we recognize the related stock-based compensation expense when the event occurs or when we can determine that the performance condition is probable of achievement. In those cases, we recognize the change in estimate at the time we determine the condition is probable of achievement (by recognizing stock-based compensation expense as cumulative catch-up adjustment as if we had estimated at the grant date that the performance condition would have been achieved) and recognize the remaining compensation cost up to the date when we expect the performance condition will be achieved, if any.

5. Net Loss Per Share

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the period and the number of additional shares of common stock that would have been outstanding if potentially dilutive securities had been issued. Potentially dilutive securities include stock options and shares issuable under our stock award plans. The dilutive effect of these potentially dilutive securities is reflected in diluted earnings per share by application of the treasury stock method. Under the treasury stock method, an increase in the fair market value of our common stock can result in a greater dilutive effect from potentially dilutive securities.

We had securities which could potentially dilute basic loss per share, but were excluded from the computation of diluted net loss per share, as their effect would have been antidilutive. These securities consist of the following (in thousands):

	Three Months Ended March 31,	
	2019	2018
Outstanding stock options	25,126	20,985
Purchase Plan	130	94
Total	25,256	21,079

6. Stock-Based Compensation

Total stock-based compensation related to all of our share-based payments that we recognized for the three months ended March 31, 2019 and 2018 were as follows (in thousands):

	Three Months Ended March 31,	
	2019	2018
Selling, general and administrative	$ 2,166	$ 940
Research and development	787	600
Total stock-based compensation expense	$ 2,953	$ 1,540

The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model. We have segregated option awards into the following three homogenous groups for the purposes of determining fair values of options: officers and directors, all other employees, and consultants. We account for forfeitures as they occur.

We determined weighted-average valuation assumptions separately for each of these groups as follows:

- Volatility—We estimated volatility using our historical share price performance over the expected life of the option. We also considered other factors, such as implied volatility, our current clinical trials and other company activities that may affect the volatility of our stock in the future. We determined that at this time historical volatility is more indicative of our expected future stock performance than implied volatility.

- Expected term—For options granted to consultants, we use the contractual term of the option, which is generally ten years, for the initial valuation of the option and the remaining contractual term of the option for the succeeding periods. We analyzed various historical data to determine the applicable expected term for each of the other option groups. This data included: (1) for exercised options, the term of the options from option grant date to exercise date; (2) for cancelled options, the term of the options from option grant date to cancellation date, excluding non-vested option forfeitures; and (3) for options that remained outstanding at the balance sheet date, the term of the options from option grant date to the end of the reporting period and the estimated remaining term of the options. The consideration and calculation of the above data gave us reasonable estimates of the expected term for each employee group. We also considered the vesting schedules of the options granted and factors surrounding exercise behavior of the option groups, our current market price and company activity that may affect our market price. In addition, we considered the optionee type (i.e., officers and directors or all other employees) and other factors that may affect the expected term of the options.

- Risk-free interest rate—The risk-free interest rate is based on U.S. Treasury constant maturity rates with similar terms to the expected term of the options for each option group.

- Dividend yield—The expected dividend yield is 0% as we have not paid and do not expect to pay dividends in the future.

The following table summarizes the weighted-average assumptions relating to options granted pursuant to our equity incentive plans for the three months ended March 31, 2019 and 2018:

	Three Months Ended March 31,	
	2019	2018
Risk-free interest rate	2.6 %	2.7 %
Expected term (in years)	6.6	6.7
Dividend yield	0.0 %	0.0 %
Expected volatility	65.9 %	64.6 %

The exercise price of stock options granted under our stock plans is equal to the fair market value of the underlying shares on the date of grant. Options become exercisable at varying dates and generally expire 10 years from the date of grant.

We granted options to purchase 5,675,525 shares of common stock during the three months ended March 31, 2019 with a grant-date weighted-average fair value of $1.27 per share. As of March 31, 2019, we had 1,012,500 shares of outstanding performance-based stock option wherein the achievement of the corresponding corporate-based milestones were not considered as probable. Accordingly, none of the stock-based compensation expense of $1.4 million has been recognized as expense as of March 31, 2019.

As of March 31, 2019, there were approximately $14.2 million of unrecognized stock-based compensation cost related to time-based stock options and performance-based stock options, wherein achievement of the corresponding corporate-based milestones was considered as probable.

At March 31, 2019, there were 10,641,901 shares of common stock available for future grant under our equity incentive plan and 7,583 options to purchase shares were exercised during the three months ended March 31, 2019.

Employee Stock Purchase Plan

Our Purchase Plan permits eligible employees to purchase common stock at a discount through payroll deductions during defined offering periods. The price at which the stock is purchased is equal to the lesser of 85% of the fair market value of our common stock on the first day of the offering or 85% of the fair market value of our common stock on the purchase date. The initial offering period commenced on the effective date of our initial public offering.

The fair value of awards granted under our Purchase Plan is estimated on the date of grant using the Black-Scholes option pricing model, which uses weighted-average assumptions. Our Purchase Plan provides for a twenty-four month offering period comprised of four six-month purchase periods with a look-back option. A look-back option is a provision in our Purchase Plan under which eligible employees can purchase shares of our common stock at a price per share equal to the lesser of 85% of the fair market value on the first day of the offering period or 85% of the fair market value on the purchase date. Our Purchase Plan also includes a feature that provides for a new offering period to begin when the fair market value of our common stock on any purchase date during an offering period falls below the fair market value of our common stock on the first day of such offering period. This feature is called a “reset.” Participants are automatically enrolled in the new offering period. We had “reset” on January 2, 2019 because the fair market value of our stock on December 31, 2018 was lower than the fair market value of our stock on July 1, 2018, the first day of the offering period. We applied modification accounting in accordance with the relevant accounting guidance. The total incremental fair value associated with this Purchase Plan “reset” was approximately $879,000 and is being recognized as expense from the period from January 1, 2019 to December 31, 2020.

As of March 31, 2019, there were 1,331,584 shares reserved for future issuance under the Purchase Plan and there was $1.5 million of unrecognized stock-based compensation cost related to our Purchase Plan. The following table

summarizes the weighted-average assumptions related to our Purchase Plan for the three months ended March 31, 2019 and 2018. Expected volatilities for our Purchase Plan are based on the historical volatility of our stock. Expected term represents the weighted-average of the purchase periods within the offering period. The risk-free interest rate for periods within the expected term is based on U.S. Treasury constant maturity rates.

	Three Months Ended March 31,	
	2019	2018
Risk-free interest rate	2.7 %	0.6 %
Expected term (in years)	1.5	2.0
Dividend yield	0.0 %	0.0 %
Expected volatility	62.6 %	63.8 %

7. Revenues

Revenues disaggregated by category were as follows (in thousands):

	Three Months Ended March 31,	
	2019	2018
Product sales:		
Gross product sales	$ 9,916	$ —
Discounts and allowances	(1,862)	—
Product sales, net	$ 8,054	$ —
Revenues from collaborations:		
License revenues	4,499	—
Research and development services	71	—
Total revenues from collaborations	4,570	—
Total revenues	$ 12,624	$ —

The following table summarizes revenues from each of our customers who individually accounted for 10% or more of our total revenues (as a percentage of total revenues):

	Three Months Ended March 31,	
	2019	2018
Grifols	36%	—
ASD Healthcare and Oncology Supply	33%	—
McKesson Specialty Care Distribution Corporation	24%	—

Our first and only FDA approved product, TAVALISSE®, was approved by the U.S. FDA in April 2018. We commenced commercial sale of TAVALISSE in the U.S. in May 2018.

In addition to the distribution agreements with our customers, the SDs, we also enter into arrangements with specialty pharmacy providers, in-office dispensing providers, group purchasing organizations, and government entities that provide for government-mandated and/or privately-negotiated rebates, chargebacks and discounts with respect to the purchase of our products which reduced our gross product sales. Also refer to Revenue Recognition policy discussion in Note 3.

The following tables summarize activity in each of the product revenue allowance and reserve categories for the three months ended March 31, 2019 (in thousands):

	Chargebacks, Discounts and Fees	Government and Other Rebates	Returns	Total
Balance at January 1, 2019	$ 622	$ 843	$ 170	$ 1,635
Provision related to current period sales	855	706	99	1,660
Credit or payments made during the period	(735)	(323)	—	(1,058)
Balance at March 31, 2019	$ 742	$ 1,226	$ 269	$ 2,237

The above provisions, which included the provision for current period sales of $1.7 million, are included as part of Other Accrued Liabilities in the balance sheet. The remaining $202,000 in provision related to current period sales is recorded as reduction of accounts receivable and prepaid and other current assets in the balance sheet.

8. Sponsored Research and License Agreements

We conduct research and development programs independently and in connection with our corporate collaborators. As of March 31, 2019, we are a party to collaboration agreements with ongoing performance obligations, with Kissei Pharmaceutical Co., Ltd. (Kissei) for the development and commercialization of fostamatinib in Japan, China, Taiwan and the Republic of Korea and with Grifols, S.A. (Grifols) to commercialize fostamatinib in all indications, including chronic ITP, AIHA, and IgAN, in Europe and Turkey. As of March 31, 2019, we are also a party to collaboration agreements, but do not have ongoing performance obligations with Aclaris for the development and commercialization of JAK inhibitors for the treatment of alopecia areata and other dermatological conditions, AZ for the development and commercialization of R256, an inhaled JAK inhibitor, BerGenBio for the development and commercialization of AXL inhibitors in oncology, and Daiichi to pursue research related to MDM2 inhibitors, a novel class of drug targets called ligases.

Grifols License Agreement

In January 2019, we entered into an exclusive license agreement with Grifols to commercialize fostamatinib in all indications, including chronic ITP, AIHA, and IgAN, in Europe and Turkey. Under the agreement, we received an upfront payment of $30.0 million, with the potential for $297.5 million in total regulatory and commercial milestones, which included a $20 million payment upon approval from the European Medicines Agency (EMA) for fostamatinib in chronic ITP. We will also receive stepped double-digit royalty payments based on tiered net sales which may reach 30% of net sales. In return, Grifols will receive exclusive rights to fostamatinib in human diseases, including chronic ITP, AIHA, and IgAN, in Europe and Turkey. In the event that, in 2021, after the second anniversary of the agreement, fostamatinib has not been approved by the EMA for the treatment of ITP in Europe, Grifols will have the option during a six-month time-frame to terminate the entire agreement which would terminate all their rights to ITP, AIHA, and all other indications . In this limited circumstance, we will pay Grifols $25.0 million and regain all rights to fostamatinib in Europe and other territories. The agreement also requires us to continue to conduct our long term open-label extension study on patients with ITP through EMA approval of ITP in Europe as well as conduct the Phase 3 trial in AIHA in the U.S.

We accounted for this agreement under ASC 606 and identified the following distinct performance obligations at inception of the agreement namely: (a) granting of the license, (b) performance of research and regulatory services related to our ongoing long-term open-label extension study on patients with ITP, and (c) performance of research services related to our Phase 3 study in AIHA. In addition, we will enter into a commercial supply agreement for the licensed territories. We concluded each of these performance obligations is distinct. We based our assessment on the following: (i) our assessment that Grifols can benefit from the license on its own by developing and commercializing the underlying product using its own resources, and (ii) the fact that the manufacturing services are not highly specialized in nature and can be performed by other vendors. Moreover, we determined that the upfront fee of $5.0 million represented the transaction price, which represent the non-refundable portion of the $30.0 million upfront fee, and was allocated to the performance obligations based on our best estimate of the relative standalone selling price as follows: (a) for the

license, we estimated the standalone selling price using the adjusted market assessment approach to estimate its standalone selling price in the licensed territories; (b) for the research and regulatory services, we estimated the standalone selling price using the cost plus expected margin approach.

The remaining $25 million of the upfront payment which is potentially refundable and the future variable considerations of $297.5 million related to future regulatory and commercial milestones were fully constrained due to the fact that it was probable that a significant reversal of cumulative revenue would occur, given the inherent uncertainty of success with these future milestones. We will recognize revenues related the research and regulatory services throughout the term of the respective clinincal programs using the input method. For sales-based milestones and royalties, we determined that the license is the predominant item to which the royalties or sales-based milestones relate to. Accordingly, we will recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). We will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

As of March 31, 2019, we had granted Grifols the license rights over fostamatinib. Accordingly, we recognized $4.4 million of the $30.0 million upfront fee as allocated revenue for the delivered license during the three months ended March 31, 2019. Additionally, during the three months ended March 31, 2019, we recognized $71,000 in revenues related to the research and regulatory services performed. Deferred revenues as of March 31, 2019 was $25.5 million.

Kissei License Agreement

In October 2018, we entered into an exclusive license and supply agreement with Kissei to develop and commercialize fostamatinib in all current and potential indications in Japan, China, Taiwan and the Republic of Korea. Kissei is responsible for performing and funding all development activities for fostamatinib in the above-mentioned territories. We received an upfront cash payment of $33.0 million with the potential for up to an additional $147.0 million in development, regulatory and commercial milestone payments, and will receive mid to upper twenty percent, tiered, escalated net sales-based payments for the supply of fostamatinib. Under the agreement, we granted Kissei the license rights on fostamatinib on the territories above and are obligated to supply Kissei with drug product for use in clinical trials and pre-commercialization activities. We are also responsible for the manufacture and supply of fostamatinib for all future development and commercialization activities under the agreement.

We accounted for this agreement under ASC 606 and identified the following distinct performance obligations at inception of the agreement namely: (a) granting of the license, (b) supply of fostamatinib for clinical use and (c) material right associated with discounted fostamatinib that are supplied for use other than clinical or commercial. In addition, we will provide commercial product supply if the product is approved in the licensed territory. We concluded that each of these performance obligations is distinct. We based our assessment on the following: (i) our assessment that Kissei can benefit from the license on its own by developing and commercializing the underlying product using its own resources and (ii) the fact that the manufacturing services are not highly specialized in nature and can be performed by other vendors. Moreover, we determined that the upfront fee of $33.0 million represented the transaction price and was allocated to the performance obligations based on our best estimate of the relative standalone selling price as follows: (a) for the license, we estimated the standalone selling price using the adjusted market assessment approach to estimate its standalone selling price in the licensed territories; (b) for the supply of fostamatinib and the material right associated with discounted fostamatinib, we estimated the standalone selling price using the cost plus expected margin approach. Variable considerations of $147.0 million related to future development and regulatory milestones was fully constrained due to the fact that it was probable that a significant reversal of cumulative revenue would occur, given the inherent uncertainty of success with these future milestones. We will recognize revenues related to the supply of fostamatinib and material right upon delivery of fostamatinib to Kissei. For sales-based milestones and royalties, we determined that the license is the predominant item to which the royalties or sales-based milestones relate to. Accordingly, we will recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). We will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

As of December 31, 2018, we had granted Kissei the license rights over fostamatinib. Accordingly, we recognized $30.6 million of the $33.0 million upfront fee as allocated revenue for the delivered license during the fourth quarter of 2018. During the three months ended March 31, 2019, we recognized $27,000 as revenue related to the material right associated with discounted fostamatinib. At March 31, 2019, deferred revenues related to the unsatisfied performance obligations relate to related to the supply of fostamatinib and material right associated with discounted fostamatinib supply was $2.4 million.

9. Inventories

The following table summarizes inventories as of March 31, 2019 and December 31, 2018 (in thousands):

	March 31, 2019	December 31, 2018
Finished goods	$ 300	$ 364
Work in process	830	530
Total	$ 1,130	$ 894

10. Cash, Cash Equivalents and Short-Term Investments

Cash, cash equivalents and short-term investments consisted of the following (in thousands):

	March 31, 2019	December 31, 2018
Cash	$ 1,296	$ 2,626
Money market funds	10,334	9,106
U.S. treasury bills	2,293	—
Government-sponsored enterprise securities	2,486	7,872
Corporate bonds and commercial paper	111,514	108,933
	$ 127,923	$ 128,537
Reported as:		
Cash and cash equivalents	$ 74,696	$ 76,322
Short-term investments	53,227	52,215
	$ 127,923	$ 128,537

Cash equivalents and short-term investments include the following securities with gross unrealized gains and losses (in thousands):

March 31, 2019	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. treasury bills	$ 2,293	$ —	$ —	$ 2,293
Government-sponsored enterprise securities	2,484	2	—	2,486
Corporate bonds and commercial paper	111,506	20	(12)	111,514
Total	$ 116,283	$ 22	$ (12)	$ 116,293

December 31, 2018	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Government-sponsored enterprise securities	$ 7,873	$ —	$ (1)	7,872
Corporate bonds and commercial paper	108,957	2	(26)	108,933
Total	$ 116,830	$ 2	$ (27)	$ 116,805

As of March 31, 2019, our cash equivalents and short-term investments, which have contractual maturities within one year, had a weighted-average time to maturity of approximately 61 days. We view our short-term investments

portfolio as available for use in current operations. We have the ability to hold all investments as of March 31, 2019 through their respective maturity dates. At March 31, 2019, we had no investments that had been in a continuous unrealized loss position for more than 12 months. As of March 31, 2019, a total of 32 individual securities had been in an unrealized loss position for 12 months or less, and the losses were determined to be temporary. The gross unrealized losses above were caused by interest rate increases. No significant facts or circumstances have arisen to indicate that there has been any significant deterioration in the creditworthiness of the issuers of the securities held by us. Based on our review of these securities, including the assessment of the duration and severity of the unrealized losses and our ability and intent to hold the investments until maturity, there were no other-than-temporary impairments for these securities at March 31, 2019.

The following table shows the fair value and gross unrealized losses of our investments in individual securities that are in an unrealized loss position, aggregated by investment category (in thousands):

March 31, 2019	Fair Value	Unrealized Losses
Corporate bonds and commercial paper	$ 69,359	$ (12)

11. Fair Value

Under FASB ASC 820, *Fair Value Measurements and Disclosures*, fair value is defined as the price at which an asset could be exchanged or a liability transferred in a transaction between knowledgeable, willing parties in the principal or most advantageous market for the asset or liability. Where available, fair value is based on observable market prices or parameters or derived from such prices or parameters. Where observable prices or parameters are not available, valuation models are applied.

Assets and liabilities recorded at fair value in our financial statements are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Hierarchical levels directly related to the amount of subjectivity associated with the inputs to fair valuation of these assets and liabilities, are as follows:

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets at the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

The fair valued assets we hold that are generally included under this Level 1 are money market securities where fair value is based on publicly quoted prices.

Level 2—Inputs, other than quoted prices included in Level 1, that are either directly or indirectly observable for the asset or liability through correlation with market data at the reporting date and for the duration of the instrument's anticipated life.

The fair valued assets we hold that are generally assessed under Level 2 included government-sponsored enterprise securities, U.S. treasury bills and corporate bonds and commercial paper. We utilize third party pricing services in developing fair value measurements where fair value is based on valuation methodologies such as models using observable market inputs, including benchmark yields, reported trades, broker/dealer quotes, bids, offers and other reference data. We use quotes from external pricing service providers and other on-line quotation systems to verify the fair value of investments provided by our third party pricing service providers. We review independent auditor's reports from our third party pricing service providers particularly regarding the controls over pricing and valuation of financial instruments and ensure that our internal controls address certain control deficiencies, if any, and complementary user entity controls are in place.

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities and which reflect management's best estimate of what market participants would use in pricing the asset or liability at the reporting date. Consideration is given to the risk inherent in the valuation technique and the risk inherent in the inputs to the model.

We do not have fair valued assets and liabilities classified under Level 3.

Fair Value on a Recurring Basis

Financial assets measured at fair value on a recurring basis are categorized in the tables below based upon the lowest level of significant input to the valuations (in thousands):

	Assets at Fair Value as of March 31, 2019			
	Level 1	Level 2	Level 3	Total
Money market funds	$ 10,334	$ —	$ —	$ 10,334
U.S. treasury bills	—	2,293	—	2,293
Government-sponsored enterprise securities	—	2,486	—	2,486
Corporate bonds and commercial paper	—	111,514	—	111,514
Total	$ 10,334	$ 116,293	$ —	$ 126,627

	Assets at Fair Value as of December 31, 2018			
	Level 1	Level 2	Level 3	Total
Money market funds	$ 9,106	$ —	$ —	$ 9,106
Government-sponsored enterprise securities	—	7,872	—	7,872
Corporate bonds and commercial paper	—	108,933	—	108,933
Total	$ 9,106	$ 116,805	$ —	$ 125,911

12. Lease Agreements

We currently lease our research and office space under a noncancelable lease agreement with our landlord, HCP BTC, LLC (formerly known as Slough BTC, LLC) which was originally set to expire in 2018. The lease term provides for renewal option for up to two additional periods of five years each. In July 2017, we exercised our option to extend the term of our lease for another five years through January 2023 and modified the amount of monthly base rent during such renewal period.

In December 2014, we entered into a sublease agreement, which was amended in 2017, with an unrelated third party to occupy approximately 57,000 square feet of our research and office space. In February 2017, we entered into an amendment to the sublease agreement to increase the subleased research and office space for an additional 9,328 square feet under the same term of the sublease. Effective July 2017, the sublease agreement was amended primarily to extend the term of the sublease through January 2023 and modified the monthly base rent to equal the amount we will pay our landlord. Because the future sublease income under the extended sublease agreement is the same as the amount we will pay our landlord, we did not recognize any loss on sublease relative to this amendment. We expect to receive approximately $17.2 million in future sublease income (excluding our subtenant's share of facilities operating expenses) through January 2023.

We adopted Topic 842 on January 1, 2019 using a modified retrospective approach and elected the transition method and the package of practical expedients permitted under the transition guidance, which allowed us to carryforward our historical lease classification and our assessment on whether a contract is or contains a lease. We also elected to combine lease and non-lease components, such as common area maintenance charges, as single lease, and elected to use the short-term lease exception permitted by the standard.

As a result of the adoption of Topic 842 on January 1, 2019, we recognized $32.8 million in operating right-of-use asset and $33.2 million in lease liability, and derecognized $399,000 of deferred rent in the balance sheet at adoption date. These were calculated using the present value of our remaining lease payments using an estimated incremental borrowing rate of 9%, which represents the weighted average discount rate for our lease. There was no cumulative-effect adjustment on our accumulated deficit as of January 1, 2019. As of March 31, 2019, we had operating lease right-of-use asset of $31.1 million and lease liability of $31.7 million in the balance sheet. The weighted average remaining term of our lease as of March 31, 2019 was 3.83 years.

For the three months ended March 31, 2019, the components of our operating lease expense were as follows (in thousands):

Fixed operating lease expense	$	1,256
Variable operating lease expense		249
Total operating lease expense	$	1,505

Supplemental information related to the Company's operating lease for the three months ended March 31, 2019 was as follows (in thousands):

Cash payments included in the measurement of operating lease liabilities	$	2,308
Right-of-use asset obtained in exchange for operating lease obligations		—

The following table presents the maturity of our operating lease liabilities as of March 31, 2019 (in thousands):

Remainder of 2019	$	7,014
2020		9,694
2021		10,082
2022		10,485
2023		877
Total operating lease payments		38,152
Less: imputed interest		(6,447)
Total operating lease liabilities	$	31,705

As of March 31, 2019, we do not have any additional significant lease that had not yet commenced.

For the three months ended March 31, 2019, we have the following operating sublease information (in thousands):

Fixed sublease expense	$	1,095
Variable sublease expense		215
Sublease income		(1,310)
Net	$	—

The following table presents the future lease payments expected to be received under our sublease as of March 31, 2019 (in thousands):

Remainder of 2019	$	3,154
2020		4,360
2021		4,534
2022		4,716
2023		394
Total operating lease liabilities	$	17,158

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

This discussion and analysis should be read in conjunction with our financial statements and the accompanying notes included in this report and the audited financial statements and accompanying notes included in our Annual Report on Form 10-K for the year ended December 31, 2018. Operating results for the three months ended March 31, 2019 are not necessarily indicative of results that may occur in future interim periods or for the full fiscal year.

This Quarterly Report on Form 10-Q contains statements indicating expectations about future performance and other forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, that involve risks and uncertainties. We usually use words such as "may," "will," "should," "could," "expect," "plan," "anticipate," "believe," "estimate," "predict," "intend," or the negative of these terms or similar expressions to identify these forward-looking statements. These statements appear throughout this Quarterly Report on Form 10-Q and are statements regarding our current expectation, belief or intent, primarily with respect to our operations and related industry developments. Examples of these statements include, but are not limited to, statements regarding the following: our business and scientific strategies; the progress of our and our collaborators' product development programs, including clinical testing, and the timing of results thereof; our corporate collaborations and revenues that may be received from our collaborations and the timing of those potential payments; our expectations with respect to regulatory submissions and approvals; our drug discovery technologies; our research and development expenses; protection of our intellectual property; sufficiency of our cash and capital resources and the need for additional capital; and our operations and legal risks. You should not place undue reliance on these forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements for many reasons, including as a result of the risks and uncertainties discussed under the heading "Risk Factors" in Item 1A of Part II of this Quarterly Report on Form 10-Q. Any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update 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. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

Overview

We are a biotechnology company dedicated to discovering, developing and providing novel small molecule drugs that significantly improve the lives of patients with immune and hematologic disorders, cancer and rare diseases. Our pioneering research focuses on signaling pathways that are critical to disease mechanisms. Our first FDA approved product is TAVALISSE® (fostamatinib disodium hexahydrate), an oral SYK inhibitor, for the treatment of adult patients with chronic ITP who have had an insufficient response to a previous treatment. Our current clinical programs include an upcoming Phase 3 study of fostamatinib in AIHA and an ongoing Phase 1 study of R835, a proprietary molecule from our IRAK program. In addition, we have product candidates in development with partners BerGenBio, Daiichi, Aclaris, and AZ.

Business Update

In April 2018, we received FDA approval of our first product TAVALISSE®, an oral SYK inhibitor, for the treatment of adult patients with chronic immune thrombocytopenia who have had an insufficient response to a previous treatment. TAVALISSE was launched in the U.S. on May 29, 2018. For the three months ended March 31, 2019, we reported $8.1 million in net product sales of TAVALISSE. Sales grew approximately $759,000 or 10% in the first quarter of 2019 compared to the fourth quarter of 2018, which was driven, in part, by continued use of the product as an early treatment option in steroid refractory patients and strong continuation of therapy among patients. With our fully integrated commercial team consisting of sales, marketing, market access, and commercial operations functions, we continue to execute on our commercial strategy to access the U.S. ITP market which is estimated to be over $1.0 billion annually.

Execution of our global strategy for commercialization of fostamatinib outside of the U.S. has made significant progress since the fourth quarter of 2018. Our recent commercial collaborations with Kissei and Grifols, lay the

groundwork for us to advance fostamatinib globally and to access the worldwide ITP market which is estimated to be over $1.8 billion annually. Kissei is a leading Japanese pharmaceutical company with significant development experience and a track record of commercial success in Asian markets. Grifols is one of the largest intravenous immunoglobulin (IVIG) providers globally and has established relationships with European hematologists and hematologist/oncologists, as well as a distribution infrastructure across the E.U. Fostamatinib is on track for potential E.U. approval by the end of 2019, which could enable a product launch in initial European markets as early as 2020.

In October 2018, we entered into an exclusive license and supply agreement with Kissei to develop and commercialize fostamatinib in all current and potential indications in Japan, China, Taiwan and the Republic of Korea. Under the agreement, we received an upfront payment of $33.0 million with the potential for up to $147 million in development, regulatory and commercial milestone payments. We will also receive product transfer price payments in the mid to upper twenty percent range based on tiered net sales for the exclusive supply of fostamatinib to Kissei.

In January 2019, we entered into an exclusive license agreement with Grifols to commercialize fostamatinib in all indications, including chronic ITP, AIHA, and IgAN, in Europe and Turkey. Under the agreement, we received an upfront payment of $30.0 million, with the potential for $297.5 million in total regulatory and commercial milestones, which includes a $20 million payment upon approval from the EMA for fostamatinib in chronic ITP. We will also receive stepped double-digit royalty payments based on tiered net sales which may reach 30% of net sales. In the event that, in 2021, after the second anniversary of the agreement, fostamatinib has not been approved by the EMA for the treatment of ITP in Europe, Grifols will have the option during a six-month time-frame to terminate the entire agreement which would terminate all their rights to ITP, AIHA, and all other indications. In this limited circumstance, we will pay Grifols $25.0 million and regain all rights to fostamatinib in Europe and other territories. We retain the global rights to fostamatinib outside of the Kissei and Grifols territories.

In November 2018, our pivotal Phase 3 trial design for fostamatinib in warm AIHA was submitted to the FDA. Results from our recent Phase 2 suggest that fostamatinib could potentially be an effective treatment option. Clinical trial sites for our pivotal study have opened to begin screening patients for enrollment and we are on track for study initiation in the first half of 2019. For the site selection process, we are leveraging the locations and relationships from our Phase 3 trial in chronic ITP. Additionally, in January 2018, the FDA awarded Orphan Drug Designation to fostamatinib for the treatment of warm AIHA.

Liquidity and Capital Resources

Since inception, we have financed our operations primarily through the sale of equity securities, product sales from TAVALISSE and contract payments under our collaboration agreements. Our commercialization of TAVALISSE, research and development activities, including preclinical studies and clinical trials, consume substantial amounts of capital. As of March 31, 2019, we had approximately $127.9 million in cash, cash equivalents and short term investments. We believe that our existing capital resources will be sufficient to support our current and projected funding requirements, including our ongoing commercialization of TAVALISSE in the U.S., through at least the next 12 months from the Form 10-Q filing date.

Our revenues have consisted of product sales from TAVALISSE and revenues from sponsored research and license agreements with our corporate collaborators. Our potential future revenues may include product sales from TAVALISSE, and payments from our current partners and from new partners with whom we enter into agreements in the future, if any, the timing and amount of which is unknown at this time.

Change in Board of Directors

In March 2019, Jane Wasman was appointed to the Company's board of directors. In addition, we announced that Peter S. Ringrose, Ph.D., will retire from the Company's board of directors effective at the end of his term in May 2019, and therefore, will not stand for re-election.

Our Product Portfolio

The following table summarizes our portfolio:

Product in Commercial Launch

TAVALISSE in ITP

Disease background. Chronic ITP affects an estimated 68,300 adult patients in the U.S. In patients with ITP, the immune system attacks and destroys the body's own blood platelets, which play an active role in blood clotting and healing. ITP patients can suffer extraordinary bruising, bleeding and fatigue as a result of low platelet counts. Current therapies for ITP include steroids, blood platelet production boosters that imitate thrombopoietin (TPOs) and splenectomy.

Orally-available fostamatinib program. Taken in tablet form, fostamatinib blocks the activation of SYK inside immune cells. ITP is typically characterized by the body producing antibodies that attach to healthy platelets in the blood stream. Immune cells recognize these antibodies and affix to them, which activates the SYK enzyme inside the immune cell, and triggers the destruction of the antibody and the attached platelet. When SYK is inhibited by fostamatinib, it interrupts this immune cell function and allows the platelets to escape destruction. The results of our Phase 2 clinical trial, in which fostamatinib was orally administered to sixteen adults with chronic ITP, published in *Blood*, showed that fostamatinib significantly increased the platelet counts of certain ITP patients, including those who had failed other currently available agents.

We designed a Phase 3 clinical program, called fostamatinib in thrombocytopenia (FIT), in which a total of 150 ITP patients were randomized into two identical multi-center, double-blind, placebo-controlled clinical trials. The patients were diagnosed with persistent or chronic ITP, and had blood platelet counts consistently below 30,000 per microliter of blood. Two-thirds of the subjects received fostamatinib orally at 100 mg bid (twice daily) and the other third received placebo on the same schedule. Subjects were expected to remain on treatment for up to 24 weeks. At week four of treatment, subjects who failed to meet certain platelet count and met certain tolerability thresholds could have their dosage of fostamatinib (or corresponding placebo) increased to 150 mg bid. The primary efficacy endpoint of this program was a stable platelet response by week 24 with platelet counts at or above 50,000 per microliter of blood for at least four of the final six qualifying blood draws. In August 2015, the FDA granted our request for Orphan Drug designation for fostamatinib for the treatment of ITP.

On August 30, 2016, we announced the results of the first study, reporting that fostamatinib met the study's primary efficacy endpoint. The study showed that 18% of patients receiving fostamatinib achieved a stable platelet response compared to none receiving a placebo control (p=0.0261). On October 20, 2016, we announced the results of the second study, reporting that the response rate was 18%, consistent with the first study. However, one patient in the placebo group (4%) achieved a stable platelet response, therefore the difference between those on treatment and those on placebo did not reach statistical significance (p=0.152) and the study did not meet its primary endpoint. Using the most

conservative sensitivity analysis, rather than the protocol's prespecified analysis, one more patient in the second study is considered a non-responder, resulting in 8 of 50 (16%) responders on fostamatinib (p = 0.256 vs. placebo). When the data from both studies are combined, however, this difference is statistically significant (p=0.007).

Patients from the FIT studies were given the option to enroll in a long-term open-label extension study and receive treatment with fostamatinib, also a Phase 3 trial. A total of 123 patients enrolled in this study. All the patients who responded to fostamatinib in the FIT studies and enrolled in the long-term open-label extension study maintained a median platelet count of 106,500/uL at a median of 16 months. In addition, there were 44 placebo non-responders that enrolled in the long-term open-label extension study. 41 of these patients had at least 12 weeks of follow-up. Of those, 9 patients (22%) have achieved a prospectively defined stable platelet response, which is statistically significant (p=0.0078) and similar to the response rate fostamatinib achieved in the parent studies.

A stable response was defined as a patient achieving platelet counts of greater than 50,000/uL on more than 4 of the 6 visits between weeks 14 and 24, without rescue medication. In the post-study analysis we performed, a clinically-relevant platelet response was defined to include patients achieving one platelet count over 50,000/uL during the first 12 weeks of treatment, in absence of rescue medication, but who did not otherwise meet the stable response criteria. Once the platelet count of greater than 50,000/uL is achieved, a loss of response was defined as two consecutive platelet counts of less than 30,000/uL in any subsequent visits. In the combined dataset of both stable and clinically-relevant platelet responders for the FIT studies, the response rate was 43% (43/101), compared to 14% (7/49) for placebo (p=0.0006).

The most frequent adverse events were gastrointestinal-related, and the safety profile of the product was consistent with prior clinical experience, with no new or unusual safety issues uncovered.

On April 17, 2018, we announced that the FDA had approved TAVALISSE for the treatment of thrombocytopenia in adult patients with chronic ITP who have had an insufficient response to a previous treatment. On April 30, 2018, we announced that the American Journal of Hematology published positive results from the FIT Phase 3 clinical program. We launched TAVALISSE in the U.S. on our own in May 2018. In October 2018, we announced that the EMA has validated the MAA for fostamatinib in adult chronic immune thrombocytopenia, which initiated the MAA review process. We anticipate a decision from the Committee for Medicinal Products for Human Use (CHMP) of the EMA by the fourth quarter of 2019.

Commercial launch activities, including sales and marketing

A significant portion of our operating expenses in the first quarter of 2019 is related to our commercial launch activities for TAVALISSE. Specifically, our marketing and sales efforts are focused on targeting hematologists and hematologist-oncologists in the United States, who manage chronic adult ITP patients.

We have a fully integrated commercial team consisting of sales, marketing, market access, and commercial operations functions. Our sales team promotes TAVALISSE in the U.S. wherein, in the ordinary course of the business, we use customary pharmaceutical company practices to market our products in the U.S. and concentrate our efforts on hematologists and hematologists-oncologists. TAVALISSE is sold initially through third-party wholesale distribution and specialty pharmacy channels and group purchasing organizations before being ultimately prescribed to patients. To facilitate our commercial activities in the U.S., we also enter into arrangements with various third-parties, including advertising agencies, market research firms and other sales-support-related services as needed. We believe that our commercial team and distribution practices are adequate to ensure that our marketing efforts reach our target customers and deliver our products to patients in a timely and compliant fashion. Also, to help ensure that all eligible patients in the U.S. have appropriate access to TAVALISSE, we have established a comprehensive reimbursement and patient support program called Rigel One Care (ROC). Through ROC, we provide co-pay assistance to qualified, commercially insured patients to help minimize out-of-pocket costs and provide free drug to uninsured or under-insured patients who meet certain clinical and financial criteria. In addition, ROC is designed to provide comprehensive reimbursement support services, such as prior authorization support, benefits investigation and appeals support.

Competitive landscape for TAVALISSE

Our industry is intensely competitive and subject to rapid and significant technological change. TAVALISSE is competing with other existing therapies. In addition, a number of companies are pursuing the development of pharmaceuticals that target the same diseases and conditions that we are targeting. For example, there are existing therapies and drug candidates in development for the treatment of ITP that may be alternative therapies to TAVALISSE.

Currently, corticosteriods remain the most common first line therapy for ITP, occasionally in conjunction with intravenous immuglobulin (IVIg) or anti-Rh(D) to help further augment platelet count recovery, particularly in emergency situations. However, it has been estimated that frontline agents lead to durable remissions in only a small percentage of newly-diagnosed adults with ITP. Moreover, concerns with steroid-related side effects often restrict therapy to approximately four weeks. As such, many patients progress to persistent or chronic ITP, requiring other forms of therapeutic intervention. In long-term treatment of chronic ITP, patients are often cycled through several therapies over time in order to maintain a sufficient response to the disease.

Other approaches to treat ITP are varied in their mechanism of action, and there is no consensus about the sequence of their use, according to the most recent ITP guideline from the American Society of Hematology. Options include splenectomy, thrombopoietin receptor agonists (TPO-RAs) and various immunosuppressants (such as rituximab). The response rate criteria of the above-mentioned options vary, precluding a comparison of response rates for individual therapies.

Even with the above treatment options, a significant number of patients remain severely thrombocytopenic for long durations and are subject to risk of spontaneous or trauma-induced hemorrhage. The addition of fostamatinib to the treatment options could be beneficial since it has a different mechanism of action than any of the therapies that are currently available. Fostamatinib is a potent and relatively selective SYK inhibitor, and its inhibition of Fc receptors and B-cell receptors of signaling pathways make it a potentially broad immunomodulatory agent.

Other products in the U.S. that are approved by the FDA to increase platelet production through binding and TPO receptors on megakaryocyte precursors include PROMACTA® (Novartis) and Nplate® (Amgen, Inc.).

Fostamatinib in Global Markets

Fostamatinib in Europe/Turkey

In January 2019, we entered into an exclusive commercialization license agreement with Grifols to commercialize fostamatinib for the treatment, palliation, or prevention of human diseases, including chronic or persistent ITP, AIHA, and IgAN in Europe and Turkey. Pursuant to the terms of the license agreement, Grifols received exclusive rights to commercialize, and non-exclusive rights to develop, fostamatinib in Europe and Turkey.

We are responsible for performing and funding certain development activities for fostamatinib for ITP and AIHA in Europe and Turkey and Grifols is responsible for all other development activities for fostamatinib in such territory. We will retain the global rights to fostamatinib outside the Grifols territories and those rights previously granted to Kissei. In connection with the agreement, we will enter into a supply agreement with Grifols pursuant to which we will provide commercial inventory products in the future to Grifols for use under the license agreement.

Under the terms of the agreement, we received an upfront cash payment of $30.0 million and will be eligible to receive regulatory and commercial milestones of up to $297.5 million, which includes a $17.5 million payment for EMA approval of fostamatinib for the first indication, currently anticipated to be for the treatment of chronic ITP, and a $2.5 million creditable advance royalty payment due upon EMA approval of fostamatinib in the first indication. We will also receive tiered royalty payments ranging from the mid-teens to 30% of net sales of fostamatinib in Europe and Turkey. In return, Grifols receives exclusive rights to fostamatinib in human diseases, including chronic ITP, AIHA, and IgAN, in Europe and Turkey. In the event that, in 2021, after the second anniversary of the agreement, fostamatinib has not been approved by the EMA for the treatment of ITP in Europe, Grifols will have the option during a six-month time-frame to terminate the entire agreement which would terminate all their rights to ITP, AIHA, and all other

indications. In this limited circumstance, we will pay Grifols $25.0 million and regain all rights to fostamatinib in Europe and other territories. We retain the global rights to fostamatinib outside of the Kissei and Grifols territories.

Fostamatinib in Japan/Asia

In October 2018, we entered into an exclusive license and supply agreement with Kissei to develop and commercialize fostamatinib in all current and potential indications in Japan, China, Taiwan and the Republic of Korea. Kissei is a Japan-based pharmaceutical company addressing patients' unmet medical needs through its research, development and commercialization efforts, as well as through collaborations with partners.

Under the terms of the agreement, we received an upfront cash payment of $33.0 million, with the potential for an additional $147 million in development and commercial milestone payments, and will receive product transfer price payments in the mid to upper twenty percent range based on tiered net sales for the exclusive supply of fostamatinib. We granted Kissei exclusive rights to fostamatinib in ITP and all future indications in Japan, China, Taiwan, and the Republic of Korea, and are obligated to supply Kissei with drug product for use in clinical trials and pre-commercialization activities. We retain the global rights outside of the Kissei and Grifols territories.

Kissei will initially seek local country approval for fostamatinib in ITP and conduct clinical studies as required by the country's Pharmaceuticals and Medical Devices Agency. Japan has the third highest prevalence of chronic ITP in the world behind the U.S. and EU.

Clinical Stage Programs

Fostamatinib—AIHA

Disease background. AIHA is a rare, serious blood disorder where the immune system produces antibodies that result in the destruction of the body's own red blood cells. Symptoms can include fatigue, shortness of breath, rapid heartbeat, jaundice or enlarged spleen. While no medical treatments are currently approved for AIHA, physicians generally treat acute and chronic cases of the disorder with corticosteroids, other immuno-suppressants, or splenectomy. Research has shown that inhibiting SYK with fostamatinib may reduce the destruction of red blood cells. This disorder affects an estimated 40,000 Americans, for whom no approved treatment options currently exist.

Orally available fostamatinib program. We are completing the second stage of our Phase 2 clinical trial, also known as SOAR study, on patients with warm AIHA. The trial is an open-label, multi-center, two-stage study that will evaluate the efficacy and safety of fostamatinib in patients with warm AIHA who have previously received treatment for the disorder, but have relapsed. Stage 1 completed enrollment for 19 patients (17 patients evaluable for efficacy) who received 150 mg of fostamatinib orally twice a day for a period of 12 weeks, with an option of entering into a long-term extension study. The patients returned to the clinic every two weeks for blood draws and medical assessment. The primary efficacy endpoint of this study was to achieve increased hemoglobin levels by week 12 of greater than 10 g/dL, and greater than or equal to 2 g/dL higher than baseline.

In October 2017, we announced that, on a top-line, preliminary basis, Stage 1 of the AIHA study enrolled 17 patients who have had at least one post-baseline hemoglobin measure. In January 2018, we also announced the updated top-line data as of December 2017 for this open-label study of which 47% of these patients (8 patients out of 17) have responded to fostamatinib treatment. Of the 17, six patients, including the last two patients enrolled, responded during the 12-week evaluation period and an additional two patients met the response criteria in the extension study after 12 weeks of dosing. In February 2018, an additional patient in the Stage 1 extension study met the response criteria. As of February 2018, 53% of evaluable patients (9 of 17) have responded to fostamatinib treatment. The safety profile was consistent with the existing fostamatinib safety database. Given that the Stage 1 of the study met its primary efficacy endpoint, we began enrollment of Stage 2 of this study, in which we planned to enroll 20 patients under the same protocol. After we obtained feedback from the FDA, we stopped enrollment of Stage 2 of this study at the end of August 2018 and have initiated the pivotal Phase 3 trial.

We have submitted our pivotal Phase 3 trial design for the treatment of warm AIHA to the FDA. The trial, also known as Fostamatinib Research in Warm Antibody AIHA Disease (FORWARD), is a placebo-controlled study of approximately 80 patients with primary or secondary warm AIHA who have failed at least one prior treatment. The primary endpoint will be a durable hemoglobin response by week 24, defined as Hgb > 10 g/dL and > 2 g/dL greater than baseline and durability response, with the response not being attributed to rescue therapy. Enrollment is expected to begin in the first half of 2019.

In January 2018, the FDA granted our request for Orphan Drug designation for fostamatinib for the treatment of AIHA.

R835, an IRAK1/4 Inhibitor for Autoimmune and Inflammatory Diseases

Orally Available IRAK 1/4 Inhibitor Program. During the second quarter of 2018, we selected R835, a proprietary molecule from our IRAK preclinical development program, for human clinical trials. This investigational candidate, R835, is an orally available, potent and selective inhibitor of IRAK1 and IRAK4 that blocks inflammatory cytokine production in response to toll-like receptor (TLR) and the interleukin-1 (IL-1R) family receptor signaling. TLRs and IL- 1Rs play a critical role in the innate immune response and dysregulation of these pathways can lead to a variety of inflammatory conditions including psoriasis, rheumatoid arthritis, inflammatory bowel disease and gout (among others). R835 prevents cytokine release in response to TLR and IL-1R activation in vitro. R835 is active in multiple rodent models of inflammatory disease including psoriasis, arthritis, lupus, multiple sclerosis and gout. Preclinical studies show that R835 inhibits both the IRAK1 and IRAK4 signaling pathways, which play a key role in inflammation and immune responses to tissue damage. Dual inhibition of IRAK1 and IRAK4 allows for more complete suppression of pro-inflammatory cytokine release.

We initiated a Phase 1 study to assess safety, tolerability, pharmacokinetics and pharmacodynamics of R835 in healthy subjects in the second quarter of 2018. This Phase 1 study is a randomized, placebo-controlled, double-blind trial in up to 91 healthy subjects, ages 18 to 55. The study design aims to assess the tolerability and safety of R835 in both single ascending and multiple ascending doses. We expect to complete our Phase 1 study in mid-2019.

Partnered Clinical Programs

R548 (ATI-501 and ATI-502) - Aclaris

Aclaris is developing ATI-501 and ATI-502, an oral and topical JAK 1/3 inhibitor. ATI- 501 is being developed as an oral treatment for patients with alopecia areata (AA), including the more severe forms of AA that result in total scalp hair loss, known as alopecia totalis (AT), and total hair loss on the scalp and body, known as alopecia universalis (AU). Aclaris has an ongoing Phase 2 clinical trial of its investigational JAK inhibitor ATI-501 oral suspension in patients with AA, including AT and AU. In December 2018, Aclaris announced that it has completed enrollment of AUAT-201 Oral, a randomized, double-blinded, parallel-group, placebo-controlled trial to evaluate the safety, efficacy and dose response of three concentrations of ATI-501 oral suspension for the treatment of AA. Topline data from the AUAT-201 Oral trial are expected in the second half of 2019.

In 2017, three Phase 2 studies with the topical treatment ATI-502 in AA and Vitiligo were initiated. AA-202 Topical and AUATB-201 Topical are ongoing Phase 2 clinical trials of ATI-502 for the treatment of AA in the U.S. and Australia, respectively. In November 2018, Aclaris completed enrollment of AA-201 Topical, a randomized, double-blinded, parallel-group, placebo-controlled trial to evaluate the safety, efficacy and dose response of two concentrations of ATI-502 for the treatment of AA. Topline data from the AA-201 Topical trial are expected in the second quarter of 2019.

BGB324 - BerGenBio

BerGenBio is conducting Phase 1/2 studies with BGB324 (bemcentinib), a first-in-class selective AXL kinase inhibitor, as a single agent in relapsed acute myeloid leukemia (AML) and myelodysplastic syndrome (MDS); and in combination with erlotinib (Tarceva®) in advanced (EGFR-positive) non-small-cell lung carcinoma. BerGenBio is also

conducting Phase 2 studies with BGB324 in combination with KEYTRUDA® (pembrolizumab) in non-small cell adenocarcinoma of the lung and triple negative breast cancer in collaboration with another company. In October 2018, BerGenBio announced that the first patient had been dosed in the second stage of the Phase 2 studies in BGB324 in combination with KEYTRUDA®.

DS-3032 - Daiichi

DS-3032 is an investigational oral selective inhibitor of the murine double minute 2 (MDM2) protein currently being investigated by Daiichi in three Phase 1 clinical trials for solid and hematological malignancies including AML and MDS.

Preliminary safety and efficacy data from a Phase 1 study of DS-3032 suggests that DS-3032 may be a promising treatment for hematological malignancies including relapsed/refractory AML and high-risk MDS. Evaluation of additional dosing schedules of DS-3032 is underway and combination studies with fostamatinib are currently being conducted by Daiichi.

AZ-D0449 – AZ

AZ is currently conducting a Phase 1 study in healthy volunteers and patients with mild asthma to investigate the safety, anti-inflammatory effect of inhaled AZ-D0449. The study, which follows the single and multiple ascending doses, is currently recruiting patients.

Research/Preclinical Programs

We are conducting proprietary research in the broad disease areas of inflammation/immunology, immuno-oncology and cancers. Within each disease area, our researchers are investigating mechanisms of action as well as screening compounds against potential novel targets and optimizing those leads that appear to have the greatest potential.

Sponsored Research and License Agreements

We conduct research and development programs independently and in connection with our corporate collaborators. As of March 31, 2019, we are a party to collaboration agreements with ongoing performance obligations, with Kissei for the development and commercialization of fostamatinib in Japan, China, Taiwan and the Republic of Korea and with Grifols to commercialize fostamatinib in all indications, including chronic ITP, AIHA, and IgAN, in Europe and Turkey. As of March 31, 2019, we are also a party to collaboration agreements, but do not have ongoing performance obligations with Aclaris for the development and commercialization of JAK inhibitors for the treatment of alopecia areata and other dermatological conditions, AZ for the development and commercialization of R256, an inhaled JAK inhibitor, BerGenBio for the development and commercialization of AXL inhibitors in oncology, and Daiichi to pursue research related to MDM2 inhibitors, a novel class of drug targets called ligases.

In October 2018, we entered into an exclusive license and supply agreement with Kissei to develop and commercialize fostamatinib in all current and potential indications in Japan, China, Taiwan and the Republic of Korea. Kissei is responsible for performing and funding all development activities for fostamatinib in the above-mentioned territories. We received an upfront cash payment of $33.0 million with the potential for up to an additional $147.0 million in development, regulatory and commercial milestone payments, and will receive mid to upper twenty percent, tiered, escalated net sales-based payments for the supply of fostamatinib. Under the agreement, we granted Kissei the license rights on fostamatinib on the territories above, and are obligated to supply Kissei with drug product for use in clinical trials and pre-commercialization activities. We are also responsible for the manufacture and supply of fostamatinib for all development and commercialization activities under the agreement.

In January 2019, we entered into an exclusive license agreement with Grifols to commercialize fostamatinib in all indications, including chronic ITP, AIHA, and IgAN, in Europe and Turkey. Under the agreement, we received an upfront payment of $30.0 million, with the potential for $297.5 million in total regulatory and commercial milestones, which includes a $20 million payment upon approval from the EMA for fostamatinib in chronic ITP. We will also

receive stepped double-digit royalty payments based on tiered net sales which may reach 30% of net sales. In return, Grifols will receive exclusive rights to fostamatinib in human diseases, including chronic ITP, AIHA, and IgAN, in Europe and Turkey. In the event that, in 2021, after the second anniversary of the agreement, fostamatinib has not been approved by the EMA for the treatment of ITP in Europe, Grifols will have the option during a six-month time-frame to terminate the entire agreement which would terminate all their rights to ITP, AIHA, and all other indications. In this limited circumstance, we will pay Grifols $25.0 million and regain all rights to fostamatinib in Europe and other territories. The agreement also requires us to continue to conduct our long term open-label extension study on patients with ITP through EMA approval of ITP in Europe as well as conduct the Phase 3 trial in AIHA in the U.S. In connection with the agreement, we will enter into a supply agreement with Grifols pursuant to which we will provide commercial inventory products in the future to Grifols for use under the license agreement.

Results of Operations

Three Months Ended March 31, 2019 and 2018

Revenues

	Three Months Ended March 31,		Aggregate Change
	2019	2018	
		(in thousands)	
Product sales, net	$ 8,054	$ —	$ 8,054
Contract revenues from collaborations	4,570	—	4,570
Total revenues	$ 12,624	$ —	$ 12,624

The following table summarizes revenues from each of our customers and collaboration partners who individually accounted for 10% or more of our total revenues (as a percentage of total revenues):

	Three Months Ended March 31,	
	2019	2018
Grifols	36%	—
ASD Healthcare and Oncology Supply	33%	—
McKesson Specialty Care Distribution Corporation	24%	—

Product sales during the three months ended March 31, 2019 relates to sales of TAVALISSE in the U.S. Our product sales for TAVALISSE for the three months ended March 31, 2019 represents increasing sales volume since we launched in May 2018. TAVALISSE has been prescribed across all lines of therapy in steroid refractory patients in ITP. It has been utilized by a broad base of prescribers and community physicians. There were no product sales during the three months ended March 31, 2018.

We recognize product sales net of discounts and allowances that are described in “Note 3” to our “Notes to Condensed Financial Statements” contained in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Contract revenues from collaborations of $4.6 million during the three months ended March 31, 2019 primarily relates to the $4.4 million of the $30.0 million upfront fee recognized as revenue upon delivery of license rights to Grifols, and our performance of certain research and development services. There were no contract revenues from collaborations during the three months ended March 31, 2018.

Our potential future revenues may include product sales from TAVALISSE, payments from our current partners and from new partners with whom we enter into agreements in the future, if any, the timing and amount of which is unknown at this time. As of March 31, 2019, we had deferred revenues of $27.9 million which we will recognize as revenue upon satisfaction of our remaining performance obligations to Grifols and Kissei.

Cost of Product Sales

	Three Months Ended March 31,		Aggregate Change
	2019	2018	
		(in thousands)	
Cost of product sales	$ 107	$ —	$ 107

We recognized $107,000 in cost of product sales during the three months ended March 31, 2019 related to our product, TAVALISSE. Prior to the FDA approval, manufacturing and related costs were charged to research and development expense. Therefore, these costs were not capitalized and as a result, are not fully reflected in the costs of product sales during the three months ended March 31, 2019. We will continue to have a lower cost of product sales that excludes the cost of the active pharmaceutical product that was produced prior to FDA approval until we sell TAVALISSE that includes newly manufactured API. We expect that this will be the case for the near-term and as a result, our cost of product sales will be less than we anticipate it will be in future periods. As we produce TAVALISSE in the future, our inventory cost in the Balance Sheet and Cost of Product Sales will increase reflecting the full cost of manufacturing.

Research and Development Expense

	Three Months Ended March 31,		Aggregate Change
	2019	2018	
		(in thousands)	
Research and development expense	$ 10,949	$ 11,242	$ (293)
Stock-based compensation expense included in research and development expense	$ 787	$ 600	$ 187

The decrease in research and development expense for the three months ended March 31, 2019, compared to the same period in 2018, was primarily due to the decreases in research and development costs of $2.1 million due to the completion of NDA-related filing activities for TAVALISSE, winding down of our Phase 2 studies in AIHA and IgAN, as well as reduction in costs in our Phase 1 study in our IRAK inhibitor program and our long-term extension study in ITP, partially offset by the increases in research and development costs of $1.4 million related to the start of our pivotal Phase 3 study in AIHA and preclinical research costs, third party consultants and vendors of $301,000, stock-based compensation expense of $187,000, research supplies of $93,000 and various other costs of $113,000. We expect our research and development expense in 2019 will increase compared to the amount reported in the first quarter of 2019 as we continue to ramp up our activities in our Phase 3 AIHA study.

Our research and development expenditures include costs related to preclinical and clinical trials, scientific personnel, supplies, equipment, consultants, sponsored research, stock based compensation, and allocated facility costs.

We do not track fully burdened research and development costs separately for each of our drug candidates. We review our research and development expenses by focusing on three categories: research, development, and other. Our research team is focused on creating a portfolio of product candidates that can be developed into small molecule therapeutics in our own proprietary programs or with potential collaborative partners and utilizes our robust discovery engine to rapidly discover and validate new product candidates in our focused range of therapeutic indications. “Research” expenses relate primarily to personnel expenses, lab supplies, fees to third party research consultants and compounds. Our development group leads the implementation of our clinical and regulatory strategies and prioritizes disease indications in which our compounds may be studied in clinical trials. “Development” expenses relate primarily to clinical trials, personnel expenses, costs related to the submission and management of our NDA, lab supplies and fees to third party research consultants. “Other” expenses primarily consist of allocated facilities costs and allocated stock based compensation expense relating to personnel in research and development groups.

In addition to reviewing the three categories of research and development expenses described in the preceding paragraph, we principally consider qualitative factors in making decisions regarding our research and development

programs, which include enrollment in clinical trials and the results thereof, the clinical and commercial potential for our drug candidates and competitive dynamics. We also make our research and development decisions in the context of our overall business strategy, which includes the evaluation of potential collaborations for the development of our drug candidates.

We do not have reliable estimates regarding the timing of our clinical trials. Preclinical testing and clinical development are long, expensive and uncertain processes. In general, biopharmaceutical development involves a series of steps, beginning with identification of a potential target and including, among others, proof of concept in animals and Phase 1, 2 and 3 clinical trials in humans. Significant delays in clinical testing could materially impact our product development costs and timing of completion of the clinical trials. We do not know whether planned clinical trials will begin on time, will need to be halted or revamped or will be completed on schedule, or at all. Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a trial, delays from scale up, delays in reaching agreement on acceptable clinical trial agreement terms with prospective clinical sites, delays in obtaining institutional review board approval to conduct a clinical trial at a prospective clinical site or delays in recruiting subjects to participate in a clinical trial.

We currently do not have reliable estimates of total costs for a particular drug candidate to reach the market. Our potential products are subject to a lengthy and uncertain regulatory process that may involve unanticipated additional clinical trials and may not result in receipt of the necessary regulatory approvals. Failure to receive the necessary regulatory approvals would prevent us from commercializing the product candidates affected. In addition, clinical trials of our potential products may fail to demonstrate safety and efficacy, which could prevent or significantly delay regulatory approval.

The following table presents our total research and development expense by category (in thousands).

	Three Months Ended March 31,		From January 1, 2007* to March 31, 2019
	2019	2018	
Categories:			
Research	$ 2,659	$ 2,507	$ 239,326
Development	5,907	6,638	376,769
Other	2,383	2,097	240,618
	$ 10,949	$ 11,242	$ 856,713

* We started tracking research and development expense by category on January 1, 2007.

"Other" expenses mainly represent allocated facilities costs of approximately $1.6 million and $1.5 million for the three months ended March 31, 2019 and 2018, respectively, and allocated stock-based compensation expenses of approximately $787,000 and $600,000 for the three months ended March 31, 2019 and 2018, respectively.

For the three months ended March 31, 2019 and 2018, a major portion of our total research and development expense was associated with our ITP, AIHA, IRAK, and IgAN programs, salaries of our research and development personnel and allocated facilities costs.

Selling, General and Administrative Expense

	Three Months Ended March 31,		Aggregate Change
	2019	2018	
		(in thousands)	
Selling, general and administrative expense	$ 19,946	$ 13,492	$ 6,454
Stock-based compensation expense included in selling, general and administrative expense	$ 2,166	$ 940	$ 1,226

The increase in selling, general and administrative expense for the three months ended March 31, 2019, compared to the same period in 2018, was primarily due to the increases in personnel costs related to our customer-facing and medical affairs team of $4.9 million and third party commercial-related costs to support our ongoing commercialization of TAVALISSE of $1.4 million, and various other costs of $200,000.

We expect our selling, general and administrative expense in 2019 to increase as we continue our commercial launch relative to TAVALISSE, including a full year of commercial launch in 2019, compared to seven months in 2018.

Interest Income

	Three Months Ended March 31,		Aggregate Change
	2019	2018	
		(in thousands)	
Interest income	$ 780	$ 349	$ 431

Interest income results from our interest-bearing cash and investment balances. The increase in interest income for the three months ended March 31, 2019, as compared to the same period in 2018 were primarily due to the higher yield on our investments, as well as higher average cash and investment balances.

Critical Accounting Policies and the Use of Estimates

Our discussion and analysis of our financial condition and results of operations is based upon our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP). The preparation of these financial statements requires us to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition on product sales and collaboration agreements, recoverability of our assets, including accounts receivables and inventories, stock-based compensation, the probability of achievement of corporate performance-based milestone for our performance-based stock option awards, impairment issues, the estimated useful life of assets, estimated accruals, particularly research and development accruals, and estimates related our valuation of the operating lease right-of-use asset and lease liability, including the incremental borrowing rate used. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe that there have been no significant changes in our critical accounting policies and estimates disclosed in our Annual Report on Form 10-K for the year ended December 31, 2018, as filed with the SEC.

Recent Accounting Pronouncements

For a discussion of new accounting pronouncements, see “Note 3” to our “Notes to Condensed Financial Statements” contained in Part I, Item 1 of this Quarterly Report on Form 10-Q.

Liquidity and Capital Resources

Cash Requirements

From inception, we have financed our operations primarily through the sale of equity securities, product sales from TAVALISSE and contract payments under our collaboration agreements.. We have consumed substantial amounts of capital to date as we continue our research and development activities, including preclinical studies and clinical trials and our ongoing commercial launch of TAVALISSE.

As of March 31, 2019, we had approximately $127.9 million in cash, cash equivalents and short-term investments, as compared to approximately $128.5 million as of December 31, 2018, a decrease of approximately $614,000. The decrease was primarily attributable to payments associated with funding our operating expenses during

the three months ended March 31, 2019, partially offset by the $30.0 million upfront payment received from Grifols and proceeds from sale of TAVALISSE.

In December 2014, we entered into a sublease agreement with an unrelated third party to occupy a portion of our research and office space. This sublease agreement was amended in February 2017 to sublease additional research and office space. Effective July 2017, the sublease agreement was amended primarily to extend the term of the sublease through January 2023. During the three months ended March 31, 2019, we received approximately $1.3 million of sublease income and reimbursements. We expect to receive approximately $17.2 million in future sublease income (excluding our subtenant's share of facility's operating expenses) through January 2023.

In January 2019, we entered into an exclusive license agreement with Grifols to commercialize fostamatinib in all indications, including chronic ITP, AIHA, and IgAN, in Europe and Turkey. Under the agreement, we received an upfront payment of $30.0 million, with the potential for $297.5 million in total regulatory and commercial milestones, which includes a $20 million payment upon approval from the EMA for fostamatinib in chronic ITP. We will also receive stepped double-digit royalty payments based on tiered net sales which may reach 30% of net sales. In return, Grifols will receive exclusive rights to fostamatinib in human diseases, including chronic ITP, AIHA, and IgAN, in Europe and Turkey. In the event that, in 2021, after the second anniversary of the agreement, fostamatinib has not been approved by the EMA for the treatment of ITP in Europe, Grifols will have the option during a six-month time-frame to terminate the entire agreement which would terminate all their rights to ITP, AIHA, and all other indications. In this limited circumstance, we will pay Grifols $25.0 million and regain all rights to fostamatinib in Europe and other territories. The agreement also requires us to continue to conduct our long term open-label extension study on patients with ITP through EMA approval of ITP in Europe as well as conduct the Phase 3 trial in AIHA in the U.S.

We believe that our existing capital resources will be sufficient to support our current and projected funding requirements, including the ongoing commercialization of TAVALISSE in the U.S., through at least the next 12 months from the Form 10-Q filing date. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with commercial launch, the development of our product candidates and other research and development activities, we are unable to estimate with certainty our future product revenues, our revenues from our current and future collaborative partners, the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials and other research and development activities.

Our operations will require significant additional funding for the foreseeable future. Unless and until we are able to generate a sufficient amount of product, royalty or milestone revenue, we expect to finance future cash needs through public and/or private offerings of equity securities, debt financings and/or collaboration and licensing arrangements, and to a much lesser extent through the proceeds from exercise of stock options and interest income earned on the investment of our excess cash balances and short-term investments. With the exception of contingent and royalty payments that we may receive under our existing collaborations, we do not currently have any committed future funding. To the extent we raise additional capital by issuing equity securities, our stockholders could at that time experience substantial dilution. Any debt financing that we are able to obtain may involve operating covenants that restrict our business. To the extent that we raise additional funds through collaboration and licensing arrangements, we may be required to relinquish some of our rights to our technologies or product candidates or grant licenses on terms that are not favorable to us.

Our future funding requirements will depend upon many factors, including, but not limited to:

- the ongoing costs to commercialize TAVALISSE for the treatment of ITP in the U.S., or any other future product candidates, if any such candidate receives regulatory approval for commercial sale;
- our ability to successfully obtain EMA authorization on our MAA for fostamatinib in ITP in Europe;
- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;

- our ability to sell TAVALISSE in the U.S.;
- our ability to enter into partnering opportunities across our pipeline;
- the costs and timing of regulatory filings and approvals by us and our collaborators;
- the progress of research and development programs carried out by us and our collaborative partners;
- any changes in the breadth of our research and development programs;
- the ability to achieve the events identified in our collaborative agreements that may trigger payments to us from our collaboration partners;
- our ability to acquire or license other technologies or compounds that we may seek to pursue;
- our ability to manage our growth;
- competing technological and market developments;
- the costs and timing of obtaining, enforcing and defending our patent and other intellectual property rights; and
- expenses associated with any unforeseen litigation, including any arbitration and securities class action lawsuits.

Insufficient funds may require us to delay, scale back or eliminate some or all of our commercial efforts and/or research or development programs, to lose rights under existing licenses or to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose or may adversely affect our ability to operate as a going concern.

For the three months ended March 31, 2019 and 2018, we maintained an investment portfolio primarily in money market funds, U. S. treasury bills, government-sponsored enterprise securities, and corporate bonds and commercial paper. Cash in excess of immediate requirements is invested with regard to liquidity and capital preservation. Wherever possible, we seek to minimize the potential effects of concentration and degrees of risk. We will continue to monitor the impact of the changes in the conditions of the credit and financial markets to our investment portfolio and assess if future changes in our investment strategy are necessary.

Cash Flows from Operating, Investing and Financing Activities

	Three Months Ended March 31,	
	2019	2018
	(in thousands)	
Net cash provided by (used in):		
Operating activities	$ (569)	$ (23,394)
Investing activities	(1,073)	23,218
Financing activities	16	2,011
Net (decrease) increase in cash and cash equivalents	$ (1,626)	$ 1,835

Net cash used in operating activities was approximately $569,000 for the three months ended March 31, 2019, compared to approximately $23.4 million for the three months ended March 31, 2018. Net cash used in operating activities for the three months ended March 31, 2019 was related to our research and development programs and our ongoing commercialization of TAVALISSE, partially offset by the $30.0 million upfront fee received from Grifols. Net cash used in operating activities for the three months ended March 31, 2018 was primarily due to the cash payments related to our research and development programs and commercial launch preparation costs. The timing of cash

requirements may vary from period to period depending on our ongoing commercial activities related to TAVALISSE (fostamatinib disodium hexahydrate), our research and development activities, including our planned preclinical and clinical trials, and future requirements to establish commercial capabilities for any products that we may develop.

Net cash used in investing activities was approximately $1.1 million for the three months ended March 31, 2019, compared to net cash provided by investing activities of approximately $23.8 million for the three months ended March 31, 2018. Net cash used in investing activites during the three months ended March 31, 2019 related to net purchases of short-term investments and capital expenditures. Net cash provided by investing activities during the three months ended March 31, 2018 related to net maturities of short-term investments, partially offset by capital expenditures. Capital expenditures were approximately $377,000 for the three months ended March 31, 2019, compared to approximately $197,000 for the same period in 2018.

Net cash provided by financing activities was approximately $16,000 for the three months ended March 31, 2019, compared to approximately $2.0 million for the three months ended March 31, 2018. Net cash provided by financing activities for the three months ended March 31, 2019 and 2018 related to the cash proceeds received from the exercise of stock options.

Off-Balance Sheet Arrangements

As of March 31, 2019, we had no off-balance sheet arrangements (as defined in Item 303(a)(4)(ii) of Regulation S-K under the Exchange Act).

Contractual Obligations

We conduct our commercial activities and research and development programs internally and through third parties that include, among others, arrangements with vendors, consultants, contract research organizations (CRO) and universities. We have contractual arrangements with these parties, however our contracts with them are cancelable generally on reasonable notice within one year and our obligations under these contracts are primarily based on services performed. We do not have any purchase commitments under any collaboration arrangements.

We have agreements with certain clinical research organizations to conduct our clinical trials and with third parties relative to our commercialization of TAVALISSE. The timing of payments for any amounts owed under the respective agreements will depend on various factors including, but not limited to, patient enrollment and other progress of the clinical trial and various activities related to commercial launch. We will continue to enter into contracts in the normal course of business with various third parties who support our clinical trials, support our preclinical research studies, and provide other services related to our operating purposes as well as our commercial launch of TAVALISSE. We can terminate these agreements at any time, and if terminated, we would not be liable for the full amount of the respective agreements. Instead, we will be liable for services provided through the termination date plus certain cancellation charges, if any, as defined in each of the respective agreements. In addition, these agreements may, from time to time, be subjected to amendments as a result of any change orders executed by the parties. As of March 31, 2019, we do not have contractual commitments with respect to the arrangements discussed above, but we had the following contractual commitments related to our facilities lease:

		Payment Due By Period			
	Total	Less than 1 Year	1 - 3 Years	3 - 5 Years	More than 5 Years
	(in thousands)				
Facilities lease (1)	$ 38,152	$ 9,414	$ 19,972	$ 8,766	$ —

(1) In December 2014, we entered into a sublease agreement, which was amended in 2017, with an unrelated third party to lease up a portion of the research and office space. The facilities lease obligations above do not include the sublease income of approximately $17.2 million which we expect to receive over the term of the sublease through January 2023.

We are also subject to claims related to the patent protection of certain of our technologies, as well as purported securities class action lawsuit, other litigations, and other contractual agreements. We are required to assess the likelihood of any adverse judgments or outcomes to these matters as well as potential ranges of probable losses. A determination of the amount of reserves required, if any, for these contingencies is made after careful analysis of each individual matter.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

During the three months ended March 31, 2019, there were no material changes to our market risk disclosures as set forth in Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk," of our Annual Report on Form 10-K for the year ended December 31, 2018.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. Based on the evaluation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), our chief executive officer (who serves as our principal executive officer) and our chief financial officer (who serves as our principal financial officer) have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective.

Changes in Internal Controls. There were no changes in our internal control over financial reporting that occurred during the quarter ended March 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the controls are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Accordingly, our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met and, as set forth above, our chief executive officer and chief financial officer have concluded, based on their evaluation as of the end of the period covered by this report, that our disclosure controls and procedures were sufficiently effective to provide reasonable assurance that the objectives of our disclosure control system were met.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

In evaluating our business, you should carefully consider the following risks, as well as the other information contained in this Quarterly Report on Form 10-Q. These risk factors could cause our actual results to differ materially from those contained in forward-looking statements we have made in this Quarterly Report on Form 10-Q and those we may make from time to time. If any of the following risks actually occurs, our business, financial condition and operating results could be harmed. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business.

We have marked with an asterisk (*) those risk factors below that reflect a substantive change from the risk factors included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission on February 28, 2019.

Our prospects are highly dependent on the successful commercialization of TAVALISSE® (fostamatinib disodium hexahydrate), which received approval in April 2018 from the FDA for patients with chronic ITP who have had an

insufficient response to a previous treatment. To the extent that TAVALISSE is not commercially successful, our business, financial condition and results of operations may be materially adversely affected and the price of our common stock may decline.*

TAVALISSE is our only drug that has been approved for sale and it has only been approved in the United States for patients with chronic ITP who have had an insufficient response to a previous treatment. We are focusing a significant portion of our activities and resources on fostamatinib, and we believe our prospects are highly dependent on, and a significant portion of the value of our Company relates to, our ability to successfully commercialize TAVALISSE in the United States.

Successful commercialization of TAVALISSE is subject to many risks. We have never, as an organization, launched or commercialized a product, and there is no guarantee that we will be able to do so successfully with fostamatinib for its approved indication. There are numerous examples of unsuccessful product launches and failures to meet high expectations of market potential, including by pharmaceutical companies with more experience and resources than us.

Market acceptance of fostamatinib and any of our or collaborative partners' future product candidates that may receive approval, will depend on a number of factors, including:

- the efficacy and safety as demonstrated in clinical trials;
- the timing of market introduction of the product as well as competitive products;
- the clinical indications for which the product is approved;
- acceptance by physicians, the medical community and patients of the product as a safe and effective treatment;
- the ability to distinguish safety and efficacy from existing, less expensive generic alternative therapies, if any;
- the convenience of prescribing, administrating and initiating patients on the product and the length of time the patient is on the product;
- the potential and perceived advantages of the product over alternative treatments;
- the potential and perceived value of the product over alternative treatments;
- the cost of treatment in relation to alternative treatments, including any similar generic treatments;
- the availability of coverage and adequate reimbursement and pricing by third-party payors and government authorities;
- the prevalence and severity of adverse side effects; and
- the effectiveness of sales and marketing efforts.

Even if we are successful in building out our commercial team, there are many factors that could cause the launch and commercialization of TAVALISSE to be unsuccessful, including a number of factors that are outside our control. The commercial success of TAVALISSE depends on the extent to which patients and physicians accept and adopt TAVALISSE for patients with chronic ITP who have had an insufficient response to a previous treatment. We also do not know how physicians, patients and payors will respond to our future price increases of fostamatinib.

Physicians may not prescribe TAVALISSE and patients may be unwilling to useTAVALISSE if coverage is not provided or reimbursement is inadequate to cover a significant portion of the cost. Additionally, any negative development for fostamatinib in clinical development in additional indications, may adversely impact the commercial results and potential of fostamatinib. Thus, significant uncertainty remains regarding the commercial potential of fostamatinib.

If the launch or commercialization of TAVALISSE is unsuccessful or perceived as disappointing, our stock price could decline significantly and the long-term success of the product and our company could be harmed.

We also may not be successful entering into arrangements with third parties to sell and market one or more of our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, including Kissei's development and commercialization of fostamatinib in all indications in Japan, China, Taiwan, and the Republic of Korea, and Grifols' future commercialization of fostamatinib in Europe and Turkey, and any of them may fail to devote the necessary resources and attention to sell and market one or more of our product candidates effectively, which could damage our reputation. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates.

Even if we, or any of our collaborative partners, are able to continue to commercialize TAVALISSE or any product candidate that we, or they, develop, the product may become subject to unfavorable pricing regulations, third-party payor reimbursement practices or labeling restrictions, any of which could harm our business.

The commercial success of any product for which we have obtained regulatory approval, or for which we obtain regulatory approval in the future will depend substantially on the extent to which the costs of our product candidates will be paid by third-party payors, including government health care programs and private health insurers. If coverage is not available, or reimbursement is limited, we, or any of our collaborative partners, may not be able to successfully commercialize TAVALISSE or any of our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us, or any of our collaborative partners, to establish or maintain pricing sufficient to realize a sufficient return on our or their investments. In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors and coverage and reimbursement levels for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time consuming and costly process that may require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

There is significant uncertainty related to third-party payor coverage and reimbursement of newly approved drugs. Marketing approvals, pricing and reimbursement for new drug products vary widely from country to country. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we, or any of our collaborative partners, might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay commercial launch of the product, possibly for lengthy time periods, which may negatively impact the revenues we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability or the ability of any future collaborators to recoup our or their investment in one or more product candidates, even if our product candidates obtain marketing approval.

Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Therefore, our ability, and the ability of any of our collaborative partners, to successfully commercialize fostamatinib or any of our product candidates will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from third-party payors.

Additionally, the labeling ultimately approved for any of our product candidates for which we have or may obtain regulatory approval may include restrictions on their uses and may be subject to ongoing FDA or international

regulatory authority requirements governing the labeling, packaging, storage, distribution, safety surveillance, advertising, promotion, record-keeping and reporting of safety and other post-market information. If we or any of our collaborative partners do not timely obtain or comply with the labeling approval by the FDA or international regulatory authorities on any of our product candidates, it may delay or inhibit our ability to successfully commercialize our products and generate revenues.

If we are unable to successfully launch TAVALISSE and retain experienced sales force, our business will be substantially harmed.

We currently have limited experience in marketing and selling pharmaceutical products. TAVALISSE is a newly-marketed drug and, therefore, none of the members of our sales force will have ever promoted TAVALISSE prior to its launch. As a result, we will be required to expend significant time and resources and to continuously to train our sales force to be credible, persuasive and compliant with applicable laws in marketing TAVALISSE for patients with chronic ITP who have had an insufficient response to a previous treatment. In addition, we must continually train our sales force to ensure that an appropriate and compliant message about TAVALISSE is being delivered. If we are unable to effectively train our sales force and equip them with compliant and effective materials, including medical and sales literature to help them appropriately inform and educate regarding its potential benefits and proper administration, our efforts to successfully commercialize TAVALISSE could be put in jeopardy, which would negatively impact our ability to generate product revenues.

We have only recently established our distribution and reimbursement capabilities, all of which will be necessary to successfully commercialize TAVALISSE. As a result, we will be required to expend significant time and resources to market, sell, and distribute TAVALISSE to hematologists and hematologists-oncologists. There is no guarantee that the marketing strategies, or the distribution and reimbursement capabilities, that we have developed will be successful. Particularly, we are dependent on third-party logistics, specialty pharmacies and distribution partners in the distribution of TAVALISSE. If they are unable to perform effectively or if they do not provide efficient distribution of the medicine to patients, our business may be harmed.

If the market opportunities for TAVALISSE and product candidates are smaller than we believe they are, our revenues may be adversely affected, and our business may suffer.

Certain of the diseases that TAVALISSE and our other product candidates being developed to address are in underserved and underdiagnosed populations. Our projections of both the number of people who have these diseases, as well as the subset of people with these diseases who will seek treatment utilizing our products or product candidates, may not be accurate. If our estimates of the prevalence or number of patients potentially on therapy prove to be inaccurate, the market opportunities for fostamatinib and our other product candidates may be smaller than we believe they are, our prospects for generating expected revenue may be adversely affected and our business may suffer.

We have recently increased, and will continue to increase, the size of our organization. We may encounter difficulties with managing our growth, which could adversely affect our results of operations.*

As of March 31, 2019, we had approximately 160 full-time employees. Although we have substantially increased the size of our organization, we may need to add additional qualified personnel and resources, especially now that we have a commercial sales force. Our current infrastructure may be inadequate to support our development and commercialization efforts and expected growth. Future growth will impose significant added responsibilities on members of management, including the need to identify, recruit, maintain and integrate additional employees, and may take time away from running other aspects of our business, including development and commercialization of TAVALISSE and our other product candidates.

Our future financial performance and our ability to commercialize TAVALISSE and our other product candidates that may receive regulatory approval will depend, in part, on our ability to manage any future growth effectively. In particular, as we commercialize TAVALISSE, we will need to support the training and ongoing activities of our sales force and will likely need to continue to expand the size of our employee base for managerial, operational, financial and other resources. To that end, we must be able to successfully:

- manage our development efforts effectively;
- integrate additional management, administrative and manufacturing personnel;
- further develop our marketing and sales organization; and
- maintain sufficient administrative, accounting and management information systems and controls.

We may not be able to accomplish these tasks or successfully manage our operations and, accordingly, may not achieve our research, development, and commercialization goals. Our failure to accomplish any of these goals could materially and adversely affect our business and operations.

Regulatory approval for any approved product is limited by the FDA to those specific indications and conditions for which clinical safety and efficacy have been demonstrated, and we may incur significant liability if it is determined that we are promoting the "off-label" use of TAVALISSE or any of our future product candidates if approved.

Any regulatory approval is limited to those specific diseases, indications and patient populations for which a product is deemed to be safe and effective by the FDA. For example, the FDA-approved label for TAVALISSE is only approved for use in adults with ITP who have had an insufficient response to other treatments. In addition to the FDA approval required for new formulations, any new indication for an approved product also requires FDA approval. If we are not able to obtain FDA approval for any desired future indications for our products and product candidates, our ability to effectively market and sell our products may be reduced and our business may be adversely affected.

While physicians may choose to prescribe drugs for uses that are not described in the product's labeling and for uses that differ from those tested in clinical studies and approved by the regulatory authorities, our ability to promote the products is limited to those indications and patient populations that are specifically approved by the FDA. These "off-label" uses are common across medical specialties and may constitute an appropriate treatment for some patients in varied circumstances. We have implemented compliance and monitoring policies and procedures, including a process for internal review of promotional materials, to deter the promotion of TAVALISSE for off-label uses. We cannot guarantee that these compliance activities will prevent or timely detect off-label promotion by sales representatives or other personnel in their communications with health care professionals, patients and others, particularly if these activities are concealed from the Company. Regulatory authorities in the United States generally do not regulate the behavior of physicians in their choice of treatments. Regulatory authorities do, however, restrict communications by pharmaceutical companies on the subject of off-label use. If our promotional activities fail to comply with the FDA's regulations or guidelines, we may be subject to warnings from, or enforcement action by, these regulatory authorities. In addition, our failure to follow FDA rules and guidelines relating to promotion and advertising may cause the FDA to issue warning letters or untitled letters, suspend or withdraw an approved product from the market, require a recall or institute fines, which could result in the disgorgement of money, operating restrictions, injunctions or civil or criminal enforcement, and other consequences, any of which could harm our business.

Notwithstanding the regulatory restrictions on off-label promotion, the FDA and other regulatory authorities allow companies to engage in truthful, non-misleading and non-promotional scientific exchange concerning their products. We engage in medical education activities and communicate with investigators and potential investigators regarding our clinical trials. If the FDA or other regulatory or enforcement authorities determine that our communications regarding our marketed product are not in compliance with the relevant regulatory requirements and that we have improperly promoted off-label uses, or that our communications regarding our investigational products are not in compliance with the relevant regulatory requirements and that we have improperly engaged in pre-approval promotion, we may be subject to significant liability, including civil and administrative remedies as well as criminal sanctions.

Enacted or future legislation, including potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain regulatory approval of our product candidates and/or commercialize fostamatinib or our product candidates, once approved, and affect the prices we may set or obtain.

The regulations that govern, among other things, regulatory approvals, coverage, pricing and reimbursement for new drug products vary widely from country to country. In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay regulatory approval of our product candidates, restrict or regulate post-approval activities and affect our ability to successfully sell fostamatinib or any product candidates for which we obtain regulatory approval in the future. In particular, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively, the Affordable Care Act, was enacted, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The Affordable Care Act and its implementing regulations, among other things, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for certain drugs and biologics, including our approved product and product candidates, that are inhaled, infused, instilled, implanted or injected, increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program, extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjected manufacturers to new annual fees and taxes for certain branded prescription drugs, provided incentives to programs that increase the federal government's comparative effectiveness research and established a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 70% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D.

Other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in April 2013, and, due to subsequent legislative amendments, will remain in effect through 2027, unless additional Congressional action is taken. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, or the ATRA, which, among other things, further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for fostamatinib or our product candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability.

Since its enactment, there have been judicial and Congressional challenges to numerous provisions of the Affordable Care Act, as well as recent efforts by the Trump administration to repeal or replace certain aspects of the Affordable Care Act. Since January 2017, President Trump has signed two Executive Orders designed to delay the implementation of certain provisions of the Affordable Care Act or otherwise circumvent some of the requirements for health insurance mandated by the Affordable Care Act. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the Affordable Care Act. While Congress has not passed comprehensive repeal legislation, two bills affecting the implementation of certain taxes under the Affordable Care Act have been enacted. More recently, in July 2018, the Centers for Medicare and Medicaid Services, or CMS, published a final rule permitting further collections and payments to and from certain Affordable Care Act qualified health plans and health insurance issuers under the Affordable Care Act risk adjustment program in response to the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment. On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas ruled that the individual mandate is a critical and inseverable feature of the Affordable Care Act, and because it was repealed as part of the Tax Cuts and Jobs Act of 2017, the remaining provisions of the Affordable Care Act are invalid as well. While neither the Texas District Court Judge, Trump administration nor CMS have stated that the ruling will have an immediate effect, it is unclear how this decision, subsequent appeals, if any, and other efforts will impact the Affordable Care Act. Additional policy changes, including potential modification or repeal of all or parts of the Affordable Care Act or the implementation of new health care legislation could result in significant changes to the health care system, which could have a material adverse effect on our business, results of operations and financial condition.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the regulatory approvals of our product candidates, if any, may be.

In the United States, the European Union and other potentially significant markets for our current and future products, government authorities and third-party payors are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which has resulted in lower average selling prices. For example, in the United States, there have been several recent Congressional inquiries and proposed federal legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the federal level, the Trump administration's budget proposal for fiscal year 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. Further, the Trump administration released a "Blueprint", or plan, to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase drug manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products, and reduce the out of pocket costs of drug products paid by consumers. The United States Department of Health and Human Services has already started the process of soliciting feedback on some of these measures while concurrently implementing others under its existing authority. For example, in September 2018, CMS announced that it will allow Medicare Advantage Plans the option to use step therapy for Part B drugs beginning January 1, 2019, and in October 2018, CMS proposed a new rule that would require direct-to-consumer television advertisements of prescription drugs and biological products, for which payment is available through or under Medicare or Medicaid, to include in the advertisement the Wholesale Acquisition Cost, or list price, of that drug or biological product. On January 31, 2019, the HHS Office of Inspector General proposed modifications to federal Anti-Kickback Statute safe harbors which, among other things, may affect rebates paid by manufacturers to Medicare Part D plans, the purpose of which is to further reduce the cost of drug products to consumers. While some proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, to encourage importation from other countries and bulk purchasing. Furthermore, the increased emphasis on managed healthcare in the United States and on country

and regional pricing and reimbursement controls in the E.U. will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our sales and results of operations. These pressures can arise from rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical reimbursement policies and pricing in general.

We may be subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws and other federal and state healthcare laws, and the failure to comply with such laws could result in substantial penalties. Our employees, independent contractors, consultants, principal investigators, CROs, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payers and customers, may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell and distribute any product for which we have obtained regulatory approval, or for which we obtain regulatory approval in the future. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, including off-label uses of our products, structuring and commission(s), certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use or misrepresentation of information obtained in the course of patient recruitment for clinical trials, creating fraudulent data in our preclinical studies or clinical trials or illegal misappropriation of drug product, which could result in regulatory sanctions and cause serious harm to our reputation. The laws that may affect our ability to operate include, but are not limited to:

- the Federal Anti-Kickback Statute, which prohibits, among other things, individuals and entities from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- federal civil and criminal false claims laws and civil monetary penalty laws, including the federal civil False Claims Act, which impose criminal and civil penalties, through government or civil whistleblower, or qui tam, actions, on individuals and entities for, among other things, knowingly presenting, or causing to be presented, claims for payment or approval from the federal government, including federal healthcare programs, such as Medicare, Medicaid that are false, fictitious or fraudulent, or knowingly making, using or causing to be made or used, a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. Entities can be held liable under the federal civil False Claims Act if they are deemed to "cause" the submission of false or fraudulent claims by, for example, providing inaccurate billing or coding information to customers, promoting a product off label, or for providing medically unnecessary services or items. In addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

- the Federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private), willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false, fictitious or fraudulent statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare

matters. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the healthcare fraud statute implemented under HIPAA or specific intent to violate it in order to have committed a violation;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses, as well as their respective business associates that perform services for them that involve the creation, use, maintenance or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization;

- the federal physician payment transparency requirements, sometimes referred to as the Physician Payments Sunshine Act, created under the Affordable Care Act, and its implementing regulations, which require certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to CMS, information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;

- the U.S. Federal Food, Drug and Cosmetic Act, or FDCA, which prohibits, among other things, the adulteration or misbranding of drugs and medical devices; and

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.

Additionally, we are subject to state and foreign equivalents of each of the healthcare fraud and abuse laws described above, among others, some of which may be broader in scope and may apply regardless of the payor. We may also be subject to: state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; state and local laws that restrict payments that may be made to healthcare providers; state and local laws that require pharmaceutical manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers and entities, or marketing expenditures; state and local laws that require the registration of pharmaceutical sales representatives; state laws that require information to be reported related to drug pricing; and equivalent foreign laws and regulations. Further, we may be subject to state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

We are also exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, consultants, principal investigators, CROs, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and/or negligent conduct that fails to: comply with the laws of the FDA and other similar foreign regulatory bodies; provide true, complete and accurate information to the FDA and other similar foreign regulatory bodies; comply with manufacturing standards we have established; comply with federal and state data privacy, security, fraud and abuse and other healthcare laws and regulations in the United States and similar foreign fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities to us. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent inappropriate conduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations.

We are also subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. Efforts to ensure that our business arrangements will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not

successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of civil, criminal and administrative penalties, damages, disgorgement, monetary fines, individual imprisonment, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

If manufacturers obtain approval for generic versions of TAVALISSE, or of products with which we compete, our business may be harmed.

Under the U.S. Food, Drug and Cosmetic Act, or FDCA, the FDA can approve an Abbreviated New Drug Application, or ANDA, for a generic version of a branded drug without the ANDA applicant undertaking the clinical testing necessary to obtain approval to market a new drug. Generally, in place of such clinical studies, an ANDA applicant usually needs only to submit data demonstrating that its product has the same active ingredient(s), strength, dosage form, route of administration and that it is bioequivalent to the branded product.

The FDCA requires that an applicant for approval of a generic form of a branded drug certify either that its generic product does not infringe any of the patents listed by the owner of the branded drug in the Orange Book or that those patents are not enforceable. This process is known as a paragraph IV challenge. Upon notice of a paragraph IV challenge, a patent owner has 45 days to bring a patent infringement suit in federal district court against the company seeking ANDA approval of a product covered by one of the owner's patents. If this type of suit is commenced, the FDCA provides a 30-month stay on the FDA's approval of the competitor's application. If the litigation is resolved in favor of the ANDA applicant or the challenged patent expires during the 30-month stay period, the stay is lifted and the FDA may thereafter approve the application based on the standards for approval of ANDAs. Once an ANDA is approved by the FDA, the generic manufacturer may market and sell the generic form of the branded drug in competition with the branded medicine.

The ANDA process can result in generic competition if the patents at issue are not upheld or if the generic competitor is found not to infringe the owner's patents. If this were to occur with respect to TAVALISSE or products with which it competes, our business would be materially harmed. We have a number of patents listed in the Orange Book, the last of which is expected to expire in July 2032.

Unforeseen safety issues could emerge with TAVALISSE that could require us to change the prescribing information to add warnings, limit use of the product, and/or result in litigation. Any of these events could have a negative impact on our business.

Discovery of unforeseen safety problems or increased focus on a known problem could impact our ability to commercialize TAVALISSE and could result in restrictions on its permissible uses, including withdrawal of the medicine from the market.

If we or others identify additional undesirable side effects caused by TAVALISSE after approval:

- regulatory authorities may require the addition of labeling statements, specific warnings, contraindications, or field alerts to physicians and pharmacies;
- regulatory authorities may withdraw their approval of the product and require us to take our approved drugs off the market;
- we may be required to change the way the product is administered, conduct additional clinical trials, change the labeling of the product, or implement a Risk Evaluation and Mitigation Strategy, or REMS;

- we may have limitations on how we promote our drugs;
- third-party payers may limit coverage or reimbursement for TAVALISSE;
- sales of TAVALISSE may decrease significantly;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of TAVALISSE and could substantially increase our operating costs and expenses, which in turn could delay or prevent us from generating significant revenue from sale of TAVALISSE.

If a safety issue emerges post-approval, we may become subject to costly product liability litigation by our customers, their patients or payers. Product liability claims could divert management's attention from our core business, be expensive to defend, and result in sizable damage awards against us that may not be covered by insurance. If we cannot successfully defend ourselves against claims that TAVALISSE caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we may develop;
- the inability to commercialize any products that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of patients from clinical studies or cancellation of studies;
- significant costs to defend the related litigation;
- substantial monetary awards to patients; and
- loss of revenue.

We currently hold $10.0 million in product liability insurance coverage, which may not be adequate to cover all liabilities that we may incur. Insurance coverage is increasingly expensive. We may not be able to obtain insurance coverage at a reasonable cost or in amounts adequate to satisfy any liability or associated costs that may arise in the future. These events could harm our business and results of operations and cause our stock price to decline.

If we fail to comply with our reporting and payment obligations under the Medicaid Drug Rebate Program or other governmental pricing programs in the United States, we could be subject to additional reimbursement requirements, fines, sanctions and exposure under other laws which could have a material adverse effect on our business, results of operations and financial condition.

We participate in the Medicaid Drug Rebate Program, as administered by the CMS, and other federal and state government pricing programs in the United States, and we may participate in additional government pricing programs in the future. These programs generally require us to pay rebates or otherwise provide discounts to government payers in connection with drugs that are dispensed to beneficiaries/recipients of these programs. In some cases, such as with the Medicaid Drug Rebate Program, the rebates are based on pricing that we report on a monthly and quarterly basis to the government agencies that administer the programs. Pricing requirements and rebate/discount calculations are complex, vary among products and programs, and are often subject to interpretation by governmental or regulatory agencies and

the courts. The requirements of these programs, including, by way of example, their respective terms and scope, change frequently. Responding to current and future changes may increase our costs, and the complexity of compliance will be time consuming. Invoicing for rebates is provided in arrears, and there is frequently a time lag of up to several months between the sales to which rebate notices relate and our receipt of those notices, which further complicates our ability to accurately estimate and accrue for rebates related to the Medicaid program as implemented by individual states. Thus, there can be no assurance that we will be able to identify all factors that may cause our discount and rebate payment obligations to vary from period to period, and our actual results may differ significantly from our estimated allowances for discounts and rebates. Changes in estimates and assumptions may have a material adverse effect on our business, results of operations and financial condition.

In addition, the Office of Inspector General of the Department of Health and Human Services and other Congressional enforcement and administrative bodies have recently increased their focus on pricing requirements for products, including, but not limited to the methodologies used by manufacturers to calculate average manufacturer price, or AMP, and best price, or BP, for compliance with reporting requirements under the Medicaid Drug Rebate Program. We are liable for errors associated with our submission of pricing data and for any overcharging of government payers. Failure to make necessary disclosures and/or to identify overpayments could result in allegations against us under the Federal False Claims Act and other laws and regulations. Any required refunds to the U.S. government or responding to a government investigation or enforcement action would be expensive and time consuming and could have a material adverse effect on our business, results of operations and financial condition. In addition, in the event that CMS were to terminate our rebate agreement, no federal payments would be available under Medicaid or Medicare for our covered outpatient drugs.

Even for those product candidates that have or may receive regulatory approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors and others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.

For our product candidates that have or may receive regulatory approval, they may nonetheless fail to gain sufficient market acceptance by physicians, hospital administrators, patients, healthcare payors and others in the medical community. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including the following:

- relative convenience and ease of administration;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the willingness of physicians to change their current treatment practices;
- the willingness of hospitals and hospital systems to include our product candidates as treatment options;
- demonstration of efficacy and safety in clinical trials;
- the prevalence and severity of any side effects;
- the ability to offer product candidates for sale at competitive prices;
- the price we charge for our product candidates;
- the strength of marketing and distribution support; and
- the availability of third-party coverage and adequate reimbursement.

Efforts to educate the physicians, patients, healthcare payors and others in the medical community on the benefits of our product candidates may require significant resources and may not be successful. If any of our product candidates are approved, if at all, but do not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable on a sustained basis.

We rely and may continue to rely on two distribution facilities for the sale ofTAVALISSE and potential sale of any of our product candidates.*

Our distribution operations for the sale of TAVALISSE is concentrated in two distribution centers owned by a third party logistics provider. Our distribution operations, if and when we launch any of our product candidate in the future, may also be concentrated in a single distribution center owned by a third party logistics provider. Any significant disruption in the operation of the facility due to natural disaster or severe weather, or events such as fire, accidents, power outages, system failures, or other unforeseen causes, could devalue or damage a significant portion of our inventories and could adversely affect our product distribution and sales until such time as we could secure an alternative facility. If we encounter difficulties with our distribution facility or other problems or disasters arise, we cannot ensure that critical systems and operations will be restored in a timely manner or at all, and this would have a material adverse effect on our business. In addition, growth could require us to further expand our current facility, which could affect us adversely in ways that we cannot predict.

We lack the capability to manufacture compounds for clinical development and we intend to rely on third parties for commercial supply, manufacturing and distribution if any of our product candidates which receive regulatory approval and we may be unable to obtain required material or product in a timely manner, at an acceptable cost or at a quality level required to receive regulatory approval.

We currently do not have the manufacturing capabilities or experience necessary to produceTAVALISSE or any product candidates for clinical trials, including fostamatinib in AIHA and our IRAK inhibitor program. We currently use one manufacturer of fostamatinib. We do not currently have, nor do we plan to acquire the infrastructure or capability to supply, manufacture or distribute preclinical, clinical or commercial quantities of drug substances or products. For each clinical trial of our unpartnered product candidates, we rely on third-party manufacturers for the active pharmaceutical ingredients, as well as various manufacturers to manufacture starting components, excipients and formulated drug products. Our ability to develop our product candidates, and our ability to commercially supply our products will depend, in part, on our ability to successfully obtain the APIs and other substances and materials used in our product candidates from third parties and to have finished products manufactured by third parties in accordance with regulatory requirements and in sufficient quantities for preclinical and clinical testing and commercialization. If we fail to develop and maintain supply relationships with these third parties, we may be unable to continue to develop or commercialize our product candidates.

We rely and will continue to rely on certain third parties, including those located outside the U.S., as our limited source of the materials they supply or the finished products they manufacture. The drug substances and other materials used in our product candidates are currently available only from one or a limited number of supplier or manufacturer and certain of our finished product candidates are manufactured by one or a limited number of contract manufacturers. Any of these existing supplier or manufacturer may:

- fail to supply us with product on a timely basis or in the requested amount due to unexpected damage to or destruction of facilities or equipment or otherwise;
- fail to increase manufacturing capacity and produce drug product and components in larger quantities and at higher yields in a timely or cost-effective manner, or at all, to sufficiently meet our commercial needs;
- be unable to meet our production demands due to issues related to their reliance on sole-source suppliers and manufacturers;
- supply us with product that fails to meet regulatory requirements;

- become unavailable through business interruption or financial insolvency;
- lose regulatory status as an approved source;
- be unable or unwilling to renew current supply agreements when such agreements expire on a timely basis, on acceptable terms or at all; or
- discontinue production or manufacturing of necessary drug substances or products.

Our current and anticipated future dependence upon these third-party manufacturers may adversely affect our ability to develop and commercialize product candidates on a timely and competitive basis, which could have a material adverse effect on sales, results of operations and financial condition. If we were required to transfer manufacturing processes to other third-party manufacturers and we were able to identify an alternative manufacturer, we would still need to satisfy various regulatory requirements. Satisfaction of these requirements could cause us to experience significant delays in receiving an adequate supply of our products and products in development and could be costly. Moreover, we may not be able to transfer processes that are proprietary to the manufacturer, if any. These manufacturers may not be able to produce material on a timely basis or manufacture material at the quality level or in the quantity required to meet our development timelines and applicable regulatory requirements and may also experience a shortage in qualified personnel. We may not be able to maintain or renew our existing third-party manufacturing arrangements, or enter into new arrangements, on acceptable terms, or at all. Our third-party manufacturers could terminate or decline to renew our manufacturing arrangements based on their own business priorities, at a time that is costly or inconvenient for us. If we are unable to contract for the production of materials in sufficient quantity and of sufficient quality on acceptable terms, our planned clinical trials may be significantly delayed. Manufacturing delays could postpone the filing of our IND applications and/or the initiation or completion of clinical trials that we have currently planned or may plan in the future.

Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Administration, and other federal and state agencies to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards and they may not be able to comply. Switching manufacturers may be difficult because the number of potential manufacturers is limited. It may be difficult or impossible for us to find a replacement manufacturer quickly on acceptable terms, or at all. Additionally, if we are required to enter into new supply arrangements, we may not be able to obtain approval from the FDA of any alternate supplier in a timely manner, or at all, which could delay or prevent the clinical development and commercialization of any related product candidates. Failure of our third-party manufacturers or us to comply with applicable regulations could result in sanctions being imposed on us, including fines, civil penalties, delays in or failure to grant marketing approval of our product candidates, injunctions, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products and compounds, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect our business.

Forecasting potential sales for any of our product candidates will be difficult, and if our projections are inaccurate, our business may be harmed and our stock price may be adversely affected.

Our business planning requires us to forecast or make assumptions regarding product demand and revenues for any of our product candidates if they are approved despite numerous uncertainties. These uncertainties may be increased if we rely on our collaborators or other third parties to conduct commercial activities in certain geographies and provide us with accurate and timely information. Actual results may differ materially from projected results for various reasons, including the following, as well as risks identified in other risk factors:

- the efficacy and safety of any of our product candidates, including as relative to marketed products and product candidates in development by third parties;
- pricing (including discounting or other promotions), reimbursement, product returns or recalls, competition, labeling, adverse events and other items that impact commercialization;

- the rate of adoption in the particular market, including fluctuations in demand for various reasons;
- lack of patient and physician familiarity with the drug;
- lack of patient use and physician prescribing history;
- lack of commercialization experience with the drug;
- actual sales to patients may significantly differ from expectations based on sales to wholesalers; and
- uncertainty relating to when the drug may become commercially available to patients and rate of adoption in other territories.

We expect that our revenues from sales of any of our product candidates will continue to be based in part on estimates, judgment and accounting policies. Any incorrect estimates or disagreements with regulators or others regarding such estimates or accounting policies may result in changes to our guidance, projections or previously reported results. Expected and actual product sales and quarterly and other results may greatly fluctuate, including in the near-term, and such fluctuations can adversely affect the price of our common stock, perceptions of our ability to forecast demand and revenues, and our ability to maintain and fund our operations.

We might not be able to commercialize our product candidates successfully if problems arise in the clinical testing and approval process.

Commercialization of our product candidates depends upon successful completion of extensive preclinical studies and clinical trials to demonstrate their safety and efficacy for humans. Preclinical testing and clinical development are long, expensive and uncertain processes.

In connection with clinical trials of our product candidates, we face the risks that:

- the product candidate may not prove to be effective;
- the product candidate may cause harmful side effects;
- the clinical results may not replicate the results of earlier, smaller trials;
- we, or the FDA or similar foreign regulatory authorities, may terminate or suspend the trials;
- our results may not be statistically significant;
- patient recruitment and enrollment may be slower than expected;
- patients may drop out of the trials; and
- regulatory and clinical trial requirements, interpretations or guidance may change.

We do not know whether we will be permitted to undertake clinical trials of potential products beyond the trials already concluded and the trials currently in process. It will take us, or our collaborative partners several years to complete any such testing, and failure can occur at any stage of testing. Interim results of trials do not necessarily predict final results, and acceptable results in early trials may not be repeated in later trials. A number of companies in the pharmaceutical industry, including biotechnology companies, have suffered significant setbacks in advanced clinical trials, even after achieving promising results in earlier trials. For example, in April 2018, we announced that our Phase 2

clinical trial in patients with IgAN did not achieve statistical significance for its primary endpoint, which was mean change in proteinuria comparing fostamatinib dose groups to placebo controls in all patients studied.

We cannot assure you that we will be able to successfully complete the clinical development of our product candidates or receive regulatory approval to ultimately commercialize any of our other product candidates. For example, if we are unable to successfully commercialize fostamatinib, our business will be harmed.

Any product for which we have obtained regulatory approval, or for which we obtain approval in the future, is subject to, or will be subject to, extensive ongoing regulatory requirements by the FDA, EMA and other comparable regulatory authorities, and if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, we may be subject to penalties, we will be unable to generate revenue from the sale of such products, our potential for generating positive cash flow will be diminished, and the capital necessary to fund our operations will be increased.

In April 2018, we announced that the FDA had approved TAVALISSE for the treatment of thrombocytopenia in adult patients with chronic ITP who have had insufficient response to previous treatment. We launched fostamatinib in the United States on our own in late May 2018. In January 2019, we entered into an exclusive commercialization license agreement with Grifols to commercialize fostamatinib for the treatment, palliation, or prevention of human diseases, including chronic or persistent immune ITP, AIHA, and IgAN in Europe and Turkey, and in October 2018, we entered into an exclusive license and supply agreement with Kissei for the development and commercialization of fostamatinib in all indications in Japan, China, Taiwan, and the Republic of Korea. Any product for which we have obtained regulatory approval, or for which we obtain regulatory approval in the future, along with the manufacturing processes and practices, post-approval clinical research, product labeling, advertising and promotional activities for such product, are subject to continual requirements of, and review by, the FDA, the EMA and other comparable international regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, current good manufacturing practices (cGMP) requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians, import and export requirements and recordkeeping.

Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, we will not be able to promote any products we develop for indications or uses for which they are not approved.

In addition, the FDA often requires post-marketing testing and surveillance to monitor the effects of products. The FDA, the EMA and other comparable international regulatory agencies may condition approval of our product candidates on the completion of such post-marketing clinical studies. These post-marketing studies may suggest that a product causes undesirable side effects or may present a risk to the patient. Additionally, the FDA may require Risk Evaluation and Mitigation Strategies, or REMS, to help ensure that the benefits of the drug outweigh its risks. A REMS may be required to include various elements, such as a medication guide or patient package insert, a communication plan to educate healthcare providers of the drug’s risks, limitations on who may prescribe or dispense the drug, requirements that patients enroll in a registry or undergo certain health evaluations or other measures that the FDA deems necessary to ensure the safe use of the drug.

Discovery after approval of previously unknown problems with any of our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in actions such as:

- restrictions on our ability to conduct clinical trials, including full or partial clinical holds on ongoing or planned trials;
- restrictions on product manufacturing processes;
- restrictions on the marketing of a product;
- restrictions on product distribution;

- requirements to conduct post-marketing clinical trials;
- untitled or warning letters or other adverse publicity;
- withdrawal of products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- refusal to permit the import or export of our products;
- product seizure;
- fines, restitution or disgorgement of profits or revenue;
- refusal to allow us to enter into supply contracts, including government contracts;
- injunctions; or
- imposition of civil or criminal penalties.

If such regulatory actions are taken, the value of our company and our operating results will be adversely affected. Additionally, if the FDA, the EMA or any other comparable international regulatory agency withdraws its approval of a product that is or may be approved, we will be unable to generate revenue from the sale of that product in the relevant jurisdiction, our potential for generating positive cash flow will be diminished and the capital necessary to fund our operations will be increased. Accordingly, we continue to expend significant time, money and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance, post-marketing studies and quality control.

We do not and will not have access to all information regarding fostamatinib and product candidates we licensed to Kissei and Grifols.

We do not and will not have access to all information regarding fostamatinib and other product candidates, including potentially material information about commercialization plans, medical information strategies, clinical trial design and execution, safety reports from clinical trials, safety reports, regulatory affairs, process development, manufacturing and other areas known by Kissei and Grifols. In addition, we have confidentiality obligations under our agreement with Kissei and Grifols. Thus, our ability to keep our shareholders informed about the status of fostamatinib will be limited by the degree to which Kissei and/or Grifols keep us informed and allows us to disclose such information to the public. If Kissei and/or Grifols fail to keep us informed about commercialization efforts related to fostamatinib, or the status of the clinical development or regulatory approval pathway of other product candidates licensed to them, we may make operational and/or investment decisions that we would not have made had we been fully informed, which may materially and adversely affect our business and operations.

If we are unable to obtain regulatory approval to market products in the United States and foreign jurisdictions, we will not be permitted to commercialize products we or our collaborative partners may develop.

We cannot predict whether regulatory clearance will be obtained for any product that we, or our collaborative partners, hope to develop. Satisfaction of regulatory requirements typically takes many years, is dependent upon the type, complexity and novelty of the product and requires the expenditure of substantial resources. Of particular significance to us are the requirements relating to research and development and testing.

Before commencing clinical trials in humans in the United States, we, or our collaborative partners, will need to submit and receive approval from the FDA of an IND application. Clinical trials are subject to oversight by institutional review boards and the FDA and:

- must be conducted in conformance with the FDA's good clinical practices and other applicable regulations;
- must meet requirements for institutional review board oversight;
- must meet requirements for informed consent;
- are subject to continuing FDA and regulatory oversight;
- may require large numbers of test subjects; and
- may be suspended by us, our collaborators or the FDA at any time if it is believed that the subjects participating in these trials are being exposed to unacceptable health risks or if the FDA finds deficiencies in the IND or the conduct of these trials.

While we have stated that we intend to file additional INDs for future product candidates, this is only a statement of intent, and we may not be able to do so because we may not be able to identify potential product candidates. In addition, the FDA may not approve any IND we or our collaborative partners may submit in a timely manner, or at all.

Before receiving FDA approval to market a product, we must demonstrate with substantial clinical evidence that the product is safe and effective in the patient population and the indication that will be treated. Data obtained from preclinical and clinical activities are susceptible to varying interpretations that could delay, limit or prevent regulatory approvals. In addition, delays or rejections may be encountered based upon additional government regulation from future legislation or administrative action or changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. Failure to comply with applicable FDA or other applicable regulatory requirements may result in criminal prosecution, civil penalties, recall or seizure of products, total or partial suspension of production or injunction, adverse publicity, as well as other regulatory action against our potential products or us. Additionally, we have limited experience in conducting and managing the clinical trials necessary to obtain regulatory approval.

If regulatory approval of a product is granted, this approval will be limited to those indications or disease states and conditions for which the product is demonstrated through clinical trials to be safe and efficacious. We cannot assure you that any compound developed by us, alone or with others, will prove to be safe and efficacious in clinical trials and will meet all of the applicable regulatory requirements needed to receive marketing approval.

Outside the United States, our ability, or that of our collaborative partners, to market a product is contingent upon receiving a marketing authorization from the appropriate regulatory authorities. This foreign regulatory approval process typically includes all of the risks and costs associated with FDA approval described above and may also include additional risks and costs, such as the risk that such foreign regulatory authorities, which often have different regulatory and clinical trial requirements, interpretations and guidance from the FDA, may require additional clinical trials or results for approval of a product candidate, any of which could result in delays, significant additional costs or failure to obtain such regulatory approval. For example, there can be no assurance that we or our collaborative partners will not have to provide additional information or analysis, or conduct additional clinical trials, before receiving approval to market product candidates.

We will need additional capital in the future to sufficiently fund our operations and research.

We have consumed substantial amounts of capital to date as we continue our research and development activities, including preclinical studies and clinical trials and our preparation for the commercial launch of TAVALISSE. We may seek another collaborator or licensee in the future for further clinical development and commercialization of fostamatinib, as well as our other clinical programs, which we may not be able to obtain on commercially reasonable terms or at all. In January 2019, we entered into an exclusive commercialization license agreement with Grifols to

commercialize fostamatinib for the treatment, palliation, or prevention of human diseases, including chronic or persistent ITP, AIHA, and IgAN in Europe and Turkey, in which we received an upfront payment of $30.0 million. However, if by the second anniversary of the effective date of the agreement, the EMA has not approved the MAA for fostamatinib for ITP, Grifols will have the right to terminate such agreement in its entirety within six 6 months after such second anniversary by providing us with at 60 days' written notice, and in such event only, we are required to refund to Grifols $25.0 million of the upfront payment. In October 2018, we entered into an exclusive license and supply agreement with Kissei for the development and commercialization of fostamatinib in all indications in Japan, China, Taiwan, and the Republic of Korea in which we will receive an upfront cash payment of $33.0 million. We believe that our existing capital resources will be sufficient to support our current and projected funding requirements, including the commercial launch of TAVALISSE in the U.S. in late May 2018, through at least the next 12 months from the Form 10-K filing date. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with commercial launch, the development of our product candidates and other research and development activities, we are unable to estimate with certainty our future product revenues, our revenues from our current and future collaborative partners, the amounts of increased capital outlays and operating expenditures associated with our current and anticipated clinical trials and other research and development activities.

We will continue to need additional capital and the amount of future capital needed will depend largely on the success of our commercial launch of TAVALISSE and the success of our internally developed programs as they proceed in later and more expensive clinical trials, including any additional clinical trials that we may decide to conduct with respect to fostamatinib. Unless and until we are able to generate a sufficient amount of product, royalty or milestone revenue, which may never occur, we expect to finance future cash needs through public and/or private offerings of equity securities, debt financings or collaboration and licensing arrangements, as well as through proceeds from exercise of stock options and interest income earned on the investment of our cash balances and short-term investments. With the exception of product sales from TAVALISSE, contingent and royalty payments that we may receive under our existing collaborations, we do not currently have any commitments for future funding. We do not know whether additional financing will be available when needed, or that, if available, we will obtain financing on reasonable terms. To the extent we raise additional capital by issuing equity securities in the future, our stockholders could at that time experience substantial dilution. In addition, we have a significant number of stock options outstanding. To the extent that outstanding stock options have been or may be exercised or other shares issued, our stockholders may experience further dilution. Further, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans, including through an "at-the-market" equity offering program. Any debt financing that we are able to obtain may involve operating covenants that restrict our business. To the extent that we raise additional funds through any new collaboration and licensing arrangements, we may be required to refund certain payments made to us, relinquish some rights to our technologies or product candidates or grant licenses on terms that are not favorable to us.

Our future funding requirements will depend on many uncertain factors.

Our future funding requirements will depend upon many factors, many of which are beyond our control, including, but not limited to:

- the costs to commercialize fostamatinib for the treatment of ITP in the United States, or any other future product candidates, if any such candidate receives regulatory approval for commercial sale;
- our ability to successfully obtain EMA authorization on our MAA for fostamatinib in ITP in Europe;
- the progress and success of clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- the costs and timing of regulatory filings and approvals by us and our collaborators;
- the progress of research and development programs carried out by us and our collaborative partners;

- any changes in the breadth of our research and development programs;
- the ability to achieve the events identified in our collaborative agreements that may trigger payments to us from our collaboration partners;
- our ability to acquire or license other technologies or compounds that we may seek to pursue;
- our ability to manage our growth;
- competing technological and market developments;
- the costs and timing of obtaining, enforcing and defending our patent and other intellectual property rights; and
- expenses associated with any unforeseen litigation, including any arbitration and securities class action lawsuits.

Insufficient funds may require us to delay, scale back or eliminate some or all of our commercial efforts and/or research and development programs, to reduce personnel and operating expenses, to lose rights under existing licenses or to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose or may adversely affect our ability to operate as a going concern.

There is a high risk that drug discovery and development efforts might not generate successful product candidates.

At the present time, a significant portion of our operations are focused on various stages of drug identification and development. We currently have various product candidates in the clinical testing stage. In our industry, it is statistically unlikely that the limited number of compounds that we have identified as potential product candidates will actually lead to successful product development efforts. We have invested a significant portion of our efforts and financial resources into the development of fostamatinib. Our ability to generate product revenue, which will not occur until after regulatory approval, if ever, will depend on the successful development, regulatory approval and eventual commercialization of one of our product candidates.

Our compounds in clinical trials and our future leads for potential drug compounds are subject to the risks and failures inherent in the development of pharmaceutical products. These risks include, but are not limited to, the inherent difficulty in selecting the right drug and drug target and avoiding unwanted side effects, as well as unanticipated problems relating to product development, testing, enrollment, obtaining regulatory approvals, maintaining regulatory compliance, manufacturing, competition and costs and expenses that may exceed current estimates. In future clinical trials, we or our partners may discover additional side effects and/or higher frequency of side effects than those observed in previously completed clinical trials. The results of preliminary and mid-stage clinical trials do not necessarily predict clinical or commercial success, and larger later-stage clinical trials may fail to confirm the results observed in the previous clinical trials. Similarly, a clinical trial may show that a product candidate is safe and effective for certain patient populations in a particular indication, but other clinical trials may fail to confirm those results in a subset of that population or in a different patient population, which may limit the potential market for that product candidate. With respect to our own compounds in development, we have established anticipated timelines with respect to the initiation of clinical trials based on existing knowledge of the compounds. However, we cannot provide assurance that we will meet any of these timelines for clinical development. Additionally, the initial results of a completed earlier clinical trial of a product candidate do not necessarily predict final results and the results may not be repeated in later clinical trials.

Because of the uncertainty of whether the accumulated preclinical evidence (pharmacokinetic, pharmacodynamic, safety and/or other factors) or early clinical results will be observed in later clinical trials, we can make no assurances regarding the likely results from our future clinical trials or the impact of those results on our business. If our clinical trials fail to meet the primary efficacy endpoints, the commercial prospects of our business may be harmed, our ability to generate product revenues may be delayed or eliminated or we may be forced to undertake other strategic alternatives that are in our shareholders' best interests, including cost reduction measures. If we are unable

to obtain adequate financing or engage in a strategic transaction on commercially reasonable terms or at all, we may be required to implement further cost reduction strategies which could significantly impact activities related to our commercial efforts and/or research and development of our future product candidates, and could significantly harm our business, financial condition and results of operations. In addition, these cost reduction strategies could cause us to further curtail our operations or take other actions that would adversely impact our shareholders.

Delays in clinical testing could result in increased costs to us.

We may not be able to initiate or continue clinical studies or trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these clinical trials as required by the FDA or other regulatory authorities. Even if we are able to enroll a sufficient number of patients in our clinical trials, if the pace of enrollment is slower than we expect, the development costs for our product candidates may increase and the completion of our clinical trials may be delayed or our clinical trials could become too expensive to complete. Significant delays in clinical testing could materially impact our product development costs and timing. Our estimates regarding timing are based on a number of assumptions, including assumptions based on past experience with our other clinical programs. If we are unable to enroll the patients in these trials at the projected rate, the completion of the clinical program could be delayed and the costs of conducting the program could increase, either of which could harm our business.

Clinical trials can be delayed for a variety of reasons, including delays in obtaining regulatory approval to commence a study, delays from scaling up of a study, delays in reaching agreement on acceptable clinical trial agreement terms with prospective clinical sites, delays in obtaining institutional review board approval to conduct a study at a prospective clinical site or delays in recruiting subjects to participate in a study. In addition, we typically rely on third-party clinical investigators to conduct our clinical trials and other third-party organizations to oversee the operations of such trials and to perform data collection and analysis. The clinical investigators are not our employees, and we cannot control the amount or timing of resources that they devote to our programs. Failure of the third-party organizations to meet their obligations could adversely affect clinical development of our products. As a result, we may face additional delaying factors outside our control if these parties do not perform their obligations in a timely fashion. For example, any number of those issues could arise with our clinical trials causing a delay. Delays of this sort could occur for the reasons identified above or other reasons. If we have delays in conducting the clinical trials or obtaining regulatory approvals, our product development costs will increase. For example, we may need to make additional payments to third-party investigators and organizations to retain their services or we may need to pay recruitment incentives. If the delays are significant, our financial results and the commercial prospects for our product candidates will be harmed, and our ability to become profitable will be delayed. Moreover, these third-party investigators and organizations may also have relationships with other commercial entities, some of which may compete with us. If these third-party investigators and organizations assist our competitors at our expense, it could harm our competitive position.

We have obtained orphan drug designation from the FDA for fostamatinib for the treatment of ITP and AIHA, but we may not be able to obtain or maintain orphan drug designation or exclusivity for fostamatinib for the treatment of ITP, warm AIHA or our other product candidates, or we may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

We have obtained orphan drug designation in the United States for fostamatinib for the treatment of ITP and AIHA. We may seek orphan drug designation for other product candidates in the future. Under the Orphan Drug Act, the FDA may grant orphan drug designation to a drug or biologic intended to treat a rare disease or condition, which is defined as one occurring in a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, if a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications, including a full NDA, to market the same drug for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or where the manufacturer is unable to assure sufficient product quantity.

We cannot assure you that any future application for orphan drug designation with respect to any other product candidate will be granted. If we are unable to obtain orphan drug designation with respect to other product candidates in the United States, we will not be eligible to obtain the period of market exclusivity that could result from orphan drug designation or be afforded the financial incentives associated with orphan drug designation. Even though we have received orphan drug designation for fostamatinib for the treatment of ITP and warm AIHA, we may not be the first to obtain marketing approval for the orphan-designated indication due to the uncertainties associated with developing pharmaceutical products. In addition, exclusive marketing rights in the United States for fostamatinib for the treatment of ITP, AIHA or any future product candidate may be limited if we seek approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties can be approved for the same condition. Even after an orphan product is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is safer, more effective, or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.

Our research and development efforts will be seriously jeopardized if we are unable to attract and retain key employees and relationships.

As a small company, our success depends on the continued contributions of our principal management and scientific personnel and on our ability to develop and maintain important relationships with leading academic institutions, scientists and companies in the face of intense competition for such personnel. In particular, our research programs depend on our ability to attract and retain highly skilled chemists, other scientists, and development, regulatory and clinical personnel. If we lose the services of any of our key personnel, our research and development efforts could be seriously and adversely affected. Our employees can terminate their employment with us at any time.

Our success as a company is uncertain due to our history of operating losses and the uncertainty of any future profitability.*

We incurred a loss from operations of approximately $18.4 million during the three months ended March 31, 2019. Other than for 2010, we have historically incurred losses from operations each year since we were incorporated in June 1996, due in large part to the significant research and development expenditures required to identify and validate new product candidates and pursue our development efforts, and recently our significant expenses related to the costs of our ongoing commercial launch of TAVALISSE. We expect to continue to incur losses from operations, at least in the next twelve months, and there can be no assurance that we will generate annual operating income in the foreseeable future. Currently, our potential sources of revenues are our sales of TAVALISE, upfront payments, research and development contingent payments and royalty payments pursuant to our collaboration arrangements, which may never materialize if our collaborators do not achieve certain events or generate net sales to which these contingent payments are dependent on. If our future drug candidates fail or do not gain regulatory approval, or if our drugs do not achieve sustainable market acceptance, we may not be profitable. As of March 31, 2019, we had an accumulated deficit of approximately $1.2 billion. The extent of our future losses or profitability, if any, is highly uncertain.

If our corporate collaborations or license agreements are unsuccessful, or if we fail to form new corporate collaborations or license agreements, our research and development efforts could be delayed.*

Our strategy depends upon the formation and sustainability of multiple collaborative arrangements and license agreements with third parties now and in the future. We rely on these arrangements for not only financial resources, but also for expertise we need now and in the future relating to clinical trials, manufacturing, sales and marketing, and for licenses to technology rights. To date, we have entered into several such arrangements with corporate collaborators; however, we do not know if these collaborations or additional collaborations with third parties, if any, will dedicate sufficient resources or if any development or commercialization efforts by third parties will be successful. In addition, our corporate collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a

clinical trial or abandon a drug candidate or development program. Should a collaborative partner fail to develop or commercialize a compound or product to which it has rights from us for any reason, including corporate restructuring, such failure might delay our ongoing research and development efforts, because we might not receive any future payments, and we would not receive any royalties associated with such compound or product. We are conducting a Phase 3 clinical program to study fostamatinib in AIHA on our own. We may seek another collaborator or licensee in the future for clinical development and commercialization of fostamatinib, as well as our other clinical programs, which we may not be able to obtain on commercially reasonable terms or at all. If we are unable to form new collaborations or enter into new license agreements, our research and development efforts could be delayed. In addition, the continuation of some of our partnered drug discovery and development programs may be dependent on the periodic renewal of our corporate collaborations.

Each of our collaborations could be terminated by the other party at any time, and we may not be able to renew these collaborations on acceptable terms, if at all, or negotiate additional corporate collaborations on acceptable terms, if at all. If these collaborations terminate or are not renewed, any resultant loss of revenues from these collaborations or loss of the resources and expertise of our collaborative partners could adversely affect our business.

Conflicts also might arise with collaborative partners concerning proprietary rights to particular compounds. While our existing collaborative agreements typically provide that we retain milestone payments, royalty rights and/or revenue sharing with respect to drugs developed from certain compounds or derivative compounds, any such payments or royalty rights may be at reduced rates, and disputes may arise over the application of payment provisions or derivative payment provisions to such drugs, and we may not be successful in such disputes. For example, in September 2018, BerGenBio served us with a notice of arbitration seeking declaratory relief related to the interpretation of provisions under our June 2011 license agreement, particularly as they relate to the rights and obligations of the parties in the event of the license or sale of a product in the program by BerGenBio and/or the sale of BerGenBio to a third party. The arbitration panel dismissed four of the six declarations sought by BerGenBio, and we thereafter consented to one of the remaining declarations requested by BerGenBio. On February 27, 2019, the arbitration panel issued a determination granting thedeclaration sought by BerGenBio on the remaining issue, and held that in the event of a sale of shares by BerGenBio's shareholders where there is no monetary benefit to BerGenBio, we would not be entitled to a portion of the proceeds from such a sale In this circumstance where the revenue share provision is not triggered, the milestone and royalty payment provisions remain in effect. While we do not believe that the determination will have a material adverse effect on our operations, cash flows or financial condition, we can make no assurance regarding any such impact. Additionally, the management teams of our collaborators may change for various reasons including due to being acquired. Different management teams or an acquiring company of our collaborators may have different priorities which may have adverse results on the collaboration with us.

We are also a party to various license agreements that give us rights to use specified technologies in our research and development processes. The agreements pursuant to which we have in-licensed technology permit our licensors to terminate the agreements under certain circumstances. If we are not able to continue to license these and future technologies on commercially reasonable terms, our product development and research may be delayed or otherwise adversely affected.

If conflicts arise between our collaborators or advisors and us, any of them may act in their self-interest, which may be adverse to our stockholders' interests.

If conflicts arise between us and our corporate collaborators or scientific advisors, the other party may act in its self-interest and not in the interest of our stockholders. Some of our corporate collaborators are conducting multiple product development efforts within each disease area that is the subject of the collaboration with us or may be acquired or merged with a company having a competing program. In some of our collaborations, we have agreed not to conduct, independently or with any third party, any research that is competitive with the research conducted under our collaborations. Our collaborators, however, may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by our collaborators or to which our collaborators have rights, may result in their withdrawal of support for our product candidates.

If any of our corporate collaborators were to breach or terminate its agreement with us or otherwise fail to conduct the collaborative activities successfully and in a timely manner, the preclinical or clinical development or commercialization of the affected product candidates or research programs could be delayed or terminated. We generally do not control the amount and timing of resources that our corporate collaborators devote to our programs or potential products. We do not know whether current or future collaborative partners, if any, might pursue alternative technologies or develop alternative products either on their own or in collaboration with others, including our competitors, as a means for developing treatments for the diseases targeted by collaborative arrangements with us.

Our success is dependent on intellectual property rights held by us and third parties, and our interest in such rights is complex and uncertain.*

Our success will depend to a large part on our own, our licensees' and our licensors' ability to obtain and defend patents for each party's respective technologies and the compounds and other products, if any, resulting from the application of such technologies. For example, fostamatinib is covered as a composition of matter in a U.S. issued patent that has an expected expiration date of September 2031, after taking into account patent term adjustment and extension rules.

As of March 31, 2019, we had 62 pending patent applications and 390 issued and active patents in the United States, as well as corresponding pending foreign patent applications and issued foreign patents. In the future, our patent position might be highly uncertain and involve complex legal and factual questions. For example, we may be involved in post-grant proceedings before the United States Patent and Trademark Office. Post-grant proceedings are complex and expensive legal proceedings and there is no assurance we will be successful in any such proceedings. A post-grant proceeding could result in our losing our patent rights and/or our freedom to operate and/or require us to pay significant royalties. Additional uncertainty may result because no consistent policy regarding the breadth of legal claims allowed in biotechnology patents has emerged to date. Accordingly, we cannot predict the breadth of claims allowed in our or other companies' patents.

Because the degree of future protection for our proprietary rights is uncertain, we cannot assure you that:

- we were the first to make the inventions covered by each of our pending patent applications;
- we were the first to file patent applications for these inventions;
- others will not independently develop similar or alternative technologies or duplicate any of our technologies;
- any of our pending patent applications will result in issued patents;
- any patents issued to us or our collaborators will provide a basis for commercially-viable products or will provide us with any competitive advantages or will not be challenged by third parties;
- we will develop additional proprietary technologies that are patentable; or
- the patents of others will not have a negative effect on our ability to do business.

We rely on trade secrets to protect technology where we believe patent protection is not appropriate or obtainable; however, trade secrets are difficult to protect. While we require employees, collaborators and consultants to enter into confidentiality agreements, we may not be able to adequately protect our trade secrets or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information.

We are a party to certain in-license agreements that are important to our business, and we generally do not control the prosecution of in-licensed technology. Accordingly, we are unable to exercise the same degree of control over this intellectual property as we exercise over our internally-developed technology. Moreover, some of our academic institution licensors, research collaborators and scientific advisors have rights to publish data and information in which

we have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations, our ability to receive patent protection or protect our proprietary information may otherwise be impaired. In addition, some of the technology we have licensed relies on patented inventions developed using U.S. government resources.

The U.S. government retains certain rights, as defined by law, in such patents, and may choose to exercise such rights. Certain of our in-licenses may be terminated if we fail to meet specified obligations. If we fail to meet such obligations and any of our licensors exercise their termination rights, we could lose our rights under those agreements. If we lose any of our rights, it may adversely affect the way we conduct our business. In addition, because certain of our licenses are sublicenses, the actions of our licensors may affect our rights under those licenses.

If a dispute arises regarding the infringement or misappropriation of the proprietary rights of others, such dispute could be costly and result in delays in our research and development activities and partnering.

Our success will depend, in part, on our ability to operate without infringing or misappropriating the proprietary rights of others. There are many issued patents and patent applications filed by third parties relating to products or processes that are similar or identical to our licensors or ours, and others may be filed in the future. There may also be copyrights or trademarks that third parties hold. There can be no assurance that our activities, or those of our licensors, will not violate intellectual property rights of others. We believe that there may be significant litigation in the industry regarding patent and other intellectual property rights, and we do not know if our collaborators or we would be successful in any such litigation. Any legal action against our collaborators or us claiming damages or seeking to enjoin commercial activities relating to the affected products, our methods or processes could:

- require our collaborators or us to obtain a license to continue to use, manufacture or market the affected products, methods or processes, which may not be available on commercially reasonable terms, if at all;
- prevent us from using the subject matter claimed in the patents held by others;
- subject us to potential liability for damages;
- consume a substantial portion of our managerial and financial resources; and
- result in litigation or administrative proceedings that may be costly, whether we win or lose.

The recently passed comprehensive tax reform bill could adversely affect our business and financial condition.

On December 22, 2017, President Trump signed into law new tax legislation, or the Tax Act, which significantly reforms the Internal Revenue Code of 1986, as amended. The Tax Act, among other things, contains significant changes to corporate taxation, including reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%; limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses); limitation of the deduction for net operating losses generated after 2017 to 80% of current year taxable income, indefinite carryforward of net operating losses and elimination of net operating loss carrybacks; changes in the treatment of offshore earnings regardless of whether they are repatriated; mandatory capitalization of research and development expenses beginning in 2022; immediate deductions for certain new investments instead of deductions for depreciation expense over time; further deduction limits on executive compensation; and modifying, repealing and creating many other business deductions and credits, including the reduction in the orphan drug credit from 50% to 25% of qualifying expenditures. Our federal net operating loss carryovers will be carried forward indefinitely pursuant to the Tax Act. We continue to examine the impact this tax reform legislation may have on our business. Notwithstanding the reduction in the corporate income tax rate, the overall impact of the Tax Act is uncertain and our business and financial condition could be adversely affected. The impact of this tax reform on holders of our common stock is also uncertain and could be adverse. This periodic report does not discuss any such tax legislation or the manner in which it might affect us or our stockholders in the future. We urge our stockholders to consult with their legal and tax advisors with respect to such legislation.

Our ability to use net operating losses and certain other tax attributes is uncertain and may be limited.

Our ability to use our federal and state net operating losses to offset potential future taxable income and related income taxes that would otherwise be due is dependent upon our generation of future taxable income before the expiration dates of the net operating losses, and we cannot predict with certainty when, or whether, we will generate sufficient taxable income to use all of our net operating losses. Federal net operating losses generated prior to 2018 will continue to be governed by the net operating loss tax rules as they existed prior to the adoption of the new Tax Act, which means that generally they will expire 20 years after they were generated if not used prior thereto. Many states have similar laws. Accordingly, our federal and state net operating losses could expire unused and be unavailable to offset future income tax liabilities. Under the newly enacted Tax Act, federal net operating losses incurred in 2018 and in future years may be carried forward indefinitely, but the deductibility of such federal net operating losses is limited to 80% of current year taxable income. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law. In addition, utilization of net operating losses to offset potential future taxable income and related income taxes that would otherwise be due is subject to annual limitations under the "ownership change" provisions of Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (Internal Revenue Code) and similar state provisions, which may result in the expiration of net operating losses before future utilization. In general, under the Code, if a corporation undergoes an "ownership change," generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period, the corporation's ability to use its pre-change net operating losses and other pre-change tax attributes (such as research and development credit carryforwards) to offset its post-change taxable income or taxes may be limited. Our equity offerings and other changes in our stock ownership, some of which are outside of our control, may have resulted or could in the future result in an ownership change. Although we have completed studies to provide reasonable assurance that an ownership change limitation would not apply, we cannot be certain that a taxing authority would reach the same conclusion. If, after a review or audit, an ownership change limitation were to apply, utilization of our domestic net operating losses and tax credit carryforwards could be limited in future periods and a portion of the carryforwards could expire before being available to reduce future income tax liabilities.

Because we expect to be dependent upon collaborative and license agreements, we might not meet our strategic objectives.

Our ability to generate revenue in the near term depends on the timing of recognition of certain upfront payments, achievement of certain payment triggering events with our existing collaboration agreements and our ability to enter into additional collaborative agreements with third parties. Our ability to enter into new collaborations and the revenue, if any, that may be recognized under these collaborations is highly uncertain. If we are unable to enter into one or more new collaborations, our business prospects could be harmed, which could have an immediate adverse effect on our ability to continue to develop our compounds and on the trading price of our stock. Our ability to enter into a collaboration may be dependent on many factors, such as the results of our clinical trials, competitive factors and the fit of one of our programs with another company's risk tolerance, including toward regulatory issues, patent portfolio, clinical pipeline, the stage of the available data, particularly if it is early, overall corporate goals and financial position.

To date, a portion of our revenues have been related to the research or transition phase of each of our collaborative agreements. Such revenues are for specified periods, and the impact of such revenues on our results of operations is at least partially offset by corresponding research costs. Following the completion of the research or transition phase of each collaborative agreement, additional revenues may come only from payments triggered by milestones and/or the achievement of other contingent events, and royalties, which may not be paid, if at all, until certain conditions are met. This risk is heightened due to the fact that unsuccessful research efforts may preclude us from receiving any contingent payments under these agreements. Our receipt of revenues from collaborative arrangements is also significantly affected by the timing of efforts expended by us and our collaborators and the timing of lead compound identification. We have received payments from our collaborations with Grifols, Kissei, Aclaris, BMS, AZ, BerGenBio, Janssen Pharmaceutica N.V., a division of Johnson & Johnson, Novartis Pharma A.G., Daiichi, Merck & Co., Inc., Merck Serono and Pfizer. Under many agreements, future payments may not be earned until the collaborator has advanced product candidates into clinical testing, which may never occur or may not occur until some time well into the future. If we are not able to generate revenue under our collaborations when and in accordance with our expectations or

the expectations of industry analysts, this failure could harm our business and have an immediate adverse effect on the trading price of our common stock.

Our business requires us to generate meaningful revenue from royalties and licensing agreements. To date, we have not received any revenue from royalties for the commercial sale of drugs, and we do not know when we will receive any such revenue, if at all.

Securities class action lawsuits or other litigation could result in substantial damages and may divert management's time and attention from our business.*

We have been subject to class action lawsuits in the past and we may be subject to lawsuits in the future, such as those that might occur if there was to be a change in our corporate strategy. These and other lawsuits are subject to inherent uncertainties, and the actual costs to be incurred relating to the lawsuit will depend upon many unknown factors. The outcome of litigation is necessarily uncertain, and we could be forced to expend significant resources in the defense of such suits, and we may not prevail. Monitoring and defending against legal actions is time-consuming for our management and detracts from our ability to fully focus our internal resources on our business activities. In addition, we may incur substantial legal fees and costs in connection with any such litigation. We have not established any reserves for any potential liability relating to any such potential lawsuits. It is possible that we could, in the future, incur judgments or enter into settlements of claims for monetary damages. A decision adverse to our interests on any such actions could result in the payment of substantial damages, or possibly fines, and could have a material adverse effect on our cash flow, results of operations and financial position.

Global economic conditions could adversely impact our business.

The U.S. government has indicated its intent to alter its approach to international trade policy and in some cases to renegotiate, or potentially terminate, certain existing bilateral or multi-lateral trade agreements and treaties with foreign countries, including the North American Free Trade Agreement ("NAFTA"). In addition, the U.S. government has initiated or is considering imposing tariffs on certain foreign goods. Related to this action, certain foreign governments, including China, have instituted or are considering imposing tariffs on certain U.S. goods. It remains unclear what the U.S. Administration or foreign governments will or will not do with respect to tariffs, NAFTA or other international trade agreements and policies. A trade war or other governmental action related to tariffs or international trade agreements or policies has the potential to disrupt our research activities, affect our suppliers and/or the U.S. economy or certain sectors thereof and, thus, could adversely impact our businesses.

If our competitors develop technologies that are more effective than ours, our commercial opportunity will be reduced or eliminated.

The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. Many of the drugs that we are attempting to discover will be competing with existing therapies. In addition, a number of companies are pursuing the development of pharmaceuticals that target the same diseases and conditions that we are targeting. For example, the commercialization of new pharmaceutical products is highly competitive, and we face substantial competition with respect to TAVALISSE in which there are existing therapies and drug candidates in development for the treatment of ITP that may be alternative therapies to TAVALISSE. Many of our competitors, including a number of large pharmaceutical companies that compete directly with us, have significantly greater financial resources and expertise commercializing approved products than we do. Also, many of our competitors are large pharmaceutical companies that will have a greater ability to reduce prices for their competing drugs in an effort to gain market share and undermine the value proposition that we might otherwise be able to offer to payers. We face, and will continue to face, intense competition from pharmaceutical and biotechnology companies, as well as from academic and research institutions and government agencies, both in the United States and abroad. Some of these competitors are pursuing the development of pharmaceuticals that target the same diseases and conditions as our research programs. Our competitors including fully integrated pharmaceutical companies have extensive drug discovery efforts and are developing novel small-molecule pharmaceuticals. We also face significant competition from organizations that

are pursuing the same or similar technologies, including the discovery of targets that are useful in compound screening, as the technologies used by us in our drug discovery efforts.

Competition may also arise from:

- new or better methods of target identification or validation;
- other drug development technologies and methods of preventing or reducing the incidence of disease;
- new small molecules; or
- other classes of therapeutic agents.

Our competitors or their collaborative partners may utilize discovery technologies and techniques or partner with collaborators in order to develop products more rapidly or successfully than we or our collaborators are able to do. Many of our competitors, particularly large pharmaceutical companies, have substantially greater financial, technical and human resources and larger research and development staffs than we do. In addition, academic institutions, government agencies and other public and private organizations conducting research may seek patent protection with respect to potentially competitive products or technologies and may establish exclusive collaborative or licensing relationships with our competitors.

We believe that our ability to compete is dependent, in part, upon our ability to create, maintain and license scientifically-advanced technology and upon our and our collaborators' ability to develop and commercialize pharmaceutical products based on this technology, as well as our ability to attract and retain qualified personnel, obtain patent protection or otherwise develop proprietary technology or processes and secure sufficient capital resources for the expected substantial time period between technological conception and commercial sales of products based upon our technology. The failure by any of our collaborators or us in any of those areas may prevent the successful commercialization of our potential drug targets.

Many of our competitors, either alone or together with their collaborative partners, have significantly greater experience than we do in:

- identifying and validating targets;
- screening compounds against targets; and
- undertaking preclinical testing and clinical trials.

Accordingly, our competitors may succeed in obtaining patent protection, identifying or validating new targets or discovering new drug compounds before we do.

Our competitors might develop technologies and drugs that are more effective or less costly than any that are being developed by us or that would render our technology and product candidates obsolete and noncompetitive. In addition, our competitors may succeed in obtaining the approval of the FDA or other regulatory agencies for product candidates more rapidly. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before us may achieve a significant competitive advantage, including certain patent and FDA marketing exclusivity rights that would delay or prevent our ability to market certain products. Any drugs resulting from our research and development efforts, or from our joint efforts with our existing or future collaborative partners, might not be able to compete successfully with competitors' existing or future products or obtain regulatory approval in the United States or elsewhere.

We face and will continue to face intense competition from other companies for collaborative arrangements with pharmaceutical and biotechnology companies, for establishing relationships with academic and research institutions

and for licenses to additional technologies. These competitors, either alone or with their collaborative partners, may succeed in developing technologies or products that are more effective than ours.

Our ability to compete successfully will depend, in part, on our ability to:

- identify and validate targets;
- discover candidate drug compounds that interact with the targets we identify;
- attract and retain scientific and product development personnel;
- obtain patent or other proprietary protection for our new drug compounds and technologies; and
- enter commercialization agreements for our new drug compounds.

Our stock price may be volatile, and our stockholders' investment in our common stock could decline in value.

The market prices for our common stock and the securities of other biotechnology companies have been highly volatile and may continue to be highly volatile in the future. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

- the progress and success of our clinical trials and preclinical activities (including studies and manufacture of materials) of our product candidates conducted by us;
- our ability to sell TAVALISSE in the United States;
- our ability to enter into partnering opportunities across our pipeline;
- the receipt or failure to receive the additional funding necessary to conduct our business;
- selling by large stockholders;
- presentations of detailed clinical trial data at medical and scientific conferences and investor perception thereof;
- announcements of technological innovations or new commercial products by our competitors or us;
- developments concerning proprietary rights, including patents;
- developments concerning our collaborations;
- publicity regarding actual or potential medical results relating to products under development by our competitors or us;
- regulatory developments in the United States and foreign countries;
- changes in the structure of healthcare payment systems;
- litigation or arbitration;
- economic and other external factors or other disaster or crisis; and
- period-to-period fluctuations in financial results.

If we fail to continue to meet the listing standards of Nasdaq, our common stock may be delisted, which could have a material adverse effect on the liquidity of our common stock.

Our common stock is currently listed on the Nasdaq Global Market. The Nasdaq Stock Market LLC has requirements that a company must meet in order to remain listed on Nasdaq. In particular, Nasdaq rules require us to maintain a minimum bid price of $1.00 per share of our common stock. If the closing bid price of our common stock were to fall below $1.00 per share for 30 consecutive trading days or we do not meet other listing requirements, we would fail to be in compliance with Nasdaq listing standards. There can be no assurance that we will continue to meet the minimum bid price requirement, or any other requirement in the future. If we fail to meet the minimum bid price requirement, The Nasdaq Stock Market LLC may initiate the delisting process with a notification letter. If we were to receive such a notification, we would be afforded a grace period of 180 calendar days to regain compliance with the minimum bid price requirement. In order to regain compliance, shares of our common stock would need to maintain a minimum closing bid price of at least $1.00 per share for a minimum of 10 consecutive trading days. In addition, we may be unable to meet other applicable Nasdaq listing requirements, including maintaining minimum levels of stockholders' equity or market values of our common stock in which case, our common stock could be delisted. If our common stock were to be delisted, the liquidity of our common stock would be adversely affected and the market price of our common stock could decrease.

The UK's planned withdrawal from the EU, commonly referred to as Brexit, may have a negative effect on global economic conditions, financial markets and our business.*

Brexit has created significant uncertainty concerning the future relationship between the UK and the EU, particularly if the UK withdraws from the EU without a ratified withdrawal agreement in place. From a regulatory perspective, there is uncertainty about which laws and regulations will apply. A significant portion of the regulatory framework in the UK is derived from EU laws. However, it is unclear which EU laws the UK will decide to replace or replicate in connection with its withdrawal from the EU and the regulatory regime applicable to our operations may change.

A basic requirement related to the grant of a marketing authorization for a medicinal product in the EU is the requirement that the applicant be established in the EU. Following withdrawal of the UK from the EU, marketing authorizations previously granted to applicants established in the UK through the centralized, mutual recognition or decentralized procedures may no longer be valid. Moreover, depending upon the exact terms of the UK's withdrawal, there is a risk that the scope of a marketing authorization for a medicinal product granted by the European Commission pursuant to the centralized procedure, or by the competent authorities of other EU member states through the decentralized or mutual recognition procedures, would not encompass the UK. In that circumstance, a separate authorization granted by the UK competent authorities would be required to place medicinal products on the UK market.

Brexit has also given rise to calls for the governments of other EU member states to consider withdrawal from the EU. The Brexit could also cause disruptions to and create uncertainty surrounding the business environment in which we operate. For example, we conduct clinical trials in the U.K. and other E.U. member states. These developments, or the perception that they could occur, have had and may continue to have a material adverse effect on global economic conditions and the stability of global financial markets, including by significantly reducing global market liquidity or restricting the ability of key market participants to operate in certain financial markets.

Any of these risks, if encountered, could significantly harm our future international operations and, consequently, negatively impact our financial condition, results of operations and cash flows.

If product liability lawsuits are successfully brought against us, we may incur substantial liabilities and may be required to limit commercialization of our products.

The testing and marketing of medical products and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, health care providers, pharmaceutical companies or others selling or otherwise coming into contact with our

products. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products. We carry product liability insurance that is limited in scope and amount and may not be adequate to fully protect us against product liability claims. If and when we obtain marketing approval for our product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of pharmaceutical products we develop, alone or with corporate collaborators. We, or our corporate collaborators, might not be able to obtain insurance at a reasonable cost, if at all. While under various circumstances we are entitled to be indemnified against losses by our corporate collaborators, indemnification may not be available or adequate should any claim arise.

We depend on various scientific consultants and advisors for the success and continuation of our research and development efforts.

We work extensively with various scientific consultants and advisors. The potential success of our drug discovery and development programs depends, in part, on continued collaborations with certain of these consultants and advisors. We, and various members of our management and research staff, rely on certain of these consultants and advisors for expertise in our research, regulatory and clinical efforts. Our scientific advisors are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. We do not know if we will be able to maintain such consulting agreements or that such scientific advisors will not enter into consulting arrangements, exclusive or otherwise, with competing pharmaceutical or biotechnology companies, any of which would have a detrimental impact on our research objectives and could have a material adverse effect on our business, financial condition and results of operations.

If we use biological and hazardous materials in a manner that causes injury or violates laws, we may be liable for damages, penalties or fines.

Our research and development activities involve the controlled use of potentially harmful biological materials as well as hazardous materials, chemicals, animals, and various radioactive compounds. We cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling or disposal of these animals and materials. In the event of contamination or injury, we could be held liable for damages that result or for penalties or fines that may be imposed, and such liability could exceed our resources. We are also subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with, or any potential violation of, these laws and regulations could be significant.

Our internal computer systems, or those used by our contract research organizations or other contractors or consultants, may fail or suffer security breaches.

Despite the implementation of security measures, our internal computer systems and those of our contract research organizations and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. While we have not experienced any such system failure, accident or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a disruption of our drug development programs. For example, the loss of clinical trial data from completed or ongoing clinical trials for a product candidate could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development of any product candidates could be delayed.

Our facilities are located near known earthquake fault zones, and the occurrence of an earthquake or other catastrophic disaster could cause damage to our facilities and equipment, which could require us to cease or curtail operations.

Our facilities are located in the San Francisco Bay Area near known earthquake fault zones and are vulnerable to significant damage from earthquakes. We are also vulnerable to damage from other types of disasters, including fires, floods, power loss, communications failures and similar events. If any disaster were to occur, our ability to operate our business at our facilities would be seriously, or potentially completely, impaired, and our research could be lost or destroyed. In addition, the unique nature of our research activities and of much of our equipment could make it difficult for us to recover from a disaster. The insurance we maintain may not be adequate to cover our losses resulting from disasters or other business interruptions.

Future equity issuances or a sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.

Because we will continue to need additional capital in the future to continue to expand our business and our research and development activities, among other things, we may conduct additional equity offerings. For example, under the universal shelf registration statement filed by us in March 2018 and declared effective by the SEC in April 2018, we may offer and sell any combination of common stock, preferred stock, debt securities and warrants in one or more offerings, up to a cumulative value of $200 million. To date, we have $128.2 million remaining under such universal shelf registration statement. If we or our stockholders sell, or if it is perceived that we or they will sell, substantial amounts of our common stock (including shares issued upon the exercise of options and warrants) in the public market, the market price of our common stock could fall. A decline in the market price of our common stock could make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate. Furthermore, if we obtain funds through a credit facility or through the issuance of debt or preferred securities, these securities would likely have rights senior to the rights of our common stockholders, which could impair the value of our common stock.

Anti-takeover provisions in our charter documents and under Delaware law may make an acquisition of us, which may be beneficial to our stockholders, more difficult.

Provisions of our amended and restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us, even if doing so would benefit our stockholders. These provisions:

- establish that members of the board of directors may be removed only for cause upon the affirmative vote of stockholders owning a majority of our capital stock;
- authorize the issuance of “blank check” preferred stock that could be issued by our board of directors to increase the number of outstanding shares and thwart a takeover attempt;
- limit who may call a special meeting of stockholders;
- prohibit stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- establish advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings;
- provide for a board of directors with staggered terms; and
- provide that the authorized number of directors may be changed only by a resolution of our board of directors.

In addition, Section 203 of the Delaware General Corporation Law, which imposes certain restrictions relating to transactions with major stockholders, may discourage, delay or prevent a third party from acquiring us.

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

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

The exhibits listed on the accompanying index to exhibits are filed or incorporated by reference (as stated therein) as part of this Quarterly Report on Form 10-Q.

Exhibit Number	Description of Document
3.1	Amended and Restated Certificate of Incorporation. (1)
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation. (2)
3.3	Amended and Restated Bylaws. (3)
4.1	Form of warrant to purchase shares of common stock. (4)
4.2	Specimen Common Stock Certificate. (5)
4.3	Warrant issued to HCP BTC, LLC for the purchase of shares of common stock. (6)
10.1#	Exclusive Commercialization License Agreement between Rigel and Grifols Worldwide Operations Limited, dated January 22, 2019.
31.1#	Certification required by Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act.
31.2#	Certification required by Rule 13a-14(a) or Rule 15d-14(a) of the Exchange Act.
32.1#	Certification required by Rule 13a-14(b) or Rule 15d-14(b) of the Exchange Act and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. 1350).
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document

Filed herewith

(1) Filed as an exhibit to Rigel's Current Report on Form 8-K (No. 000-29889) filed on May 29, 2012, and incorporated herein by reference.

(2) Filed as an exhibit to Rigel's Current Report on Form 8-K (No. 000-29889) filed on May 18, 2018, and incorporated herein by reference.

(3) Filed as an exhibit to Rigel's Current Report on Form 8-K (No. 000-29889) filed on February 2, 2007, and incorporated herein by reference.

(4) Filed as an exhibit to Rigel's Registration Statement on Form S-1 (No. 333-45864), as amended, and incorporated herein by reference.

(5) Filed as an exhibit to Rigel's Current Report on Form 8-K (No. 000-29889) filed on June 24, 2003, and incorporated herein by reference.

(6) Filed as an exhibit to Rigel's Quarterly Report on Form 10-Q (No. 000-29889) for the quarter ended March 31, 2009, and incorporated herein by reference.

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.

RIGEL PHARMACEUTICALS, INC.

By: /s/ RAUL R. RODRIGUEZ
Raul R. Rodriguez
Chief Executive Officer
(Principal Executive Officer)

Date: May 7, 2019

By: /s/ DEAN L. SCHORNO
Dean L. Schorno
Chief Financial Officer
(Principal Financial Officer)

Date: May 7, 2019

Exhibit 10.1

EXCLUSIVE COMMERCIALIZATION LICENSE AGREEMENT

This Exclusive Commercialization License Agreement (the "**Agreement**") is entered into as of January 22nd, 2019 (the "**Effective Date**"), by and between **Rigel Pharmaceuticals, Inc.**, a Delaware company having an address at 1180 Veterans Blvd., South San Francisco, CA 94080, USA ("**Rigel**") and **Grifols Worldwide Operations Limited**, an Irish company having an address at Grange Castle Business Park, Clondalkin, Dublin 22, Dublin, Ireland ("**Grifols**"). Rigel and Grifols may be referred to herein individually as a "**Party**" or collectively as the "**Parties**".

Recitals

Whereas, Rigel, a biopharmaceutical company, owns or controls certain patents, know-how, and other intellectual property relating to its proprietary compound fostamatinib disodium hexahydrate, also known as TAVALISSE™ in the United States, which has been approved by the FDA (as defined below) for the treatment of chronic immune thrombocytopenia and is under development for the treatment of autoimmune hemolytic anemia, IgA nephropathy, and potentially other indications;

Whereas, Grifols, a healthcare company, possesses substantial resources and expertise in the development, commercialization, distribution and sale of pharmaceutical products;

Whereas, Grifols wishes to obtain, and Rigel wishes to grant Grifols, an exclusive license to develop, market, promote, distribute and sell the Product in the Field in the Grifols Territory (as such terms are defined below), subject to the terms and conditions included herein; and

Whereas, Rigel and Grifols are entering into a commercial supply agreement in relation to and for the purpose of this Agreement, pursuant to which Rigel shall manufacture and supply the Product to Grifols (the "**Commercial Supply Agreement**") for use in accordance with the terms of this Agreement.

Agreement

Now, Therefore, in consideration of the foregoing premises and the mutual covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Rigel and Grifols hereby agree as follows:

1. Definitions

1.1 "**Affiliate**" means, with respect to any party, any entity that, directly or indirectly through one or more intermediaries, controls, is controlled by, or is under common control with such party, but for only so long as such control exists. As used in this Section 1.1, "control" means (a) to possess, directly or indirectly, the power to direct the management or policies of an entity, whether through ownership of voting securities, by contract relating to voting rights or corporate governance; or (b) direct or indirect beneficial ownership of more than fifty percent (50%) (or such lesser percentage which is the maximum allowed to be owned by a foreign corporation in a particular jurisdiction) of the voting share capital or other equity interest in such entity.

1.2 "**AIHA**" means autoimmune hemolytic anemia.

1.3 "**Applicable Laws**" means the applicable provisions of any and all national, supranational, regional, state and local laws, treaties, statutes, rules, regulations, administrative codes, guidance, ordinances, judgments, decrees, directives, injunctions, orders, permits (including MAAs (as defined below)) of or from any court, Regulatory Authority or Governmental Authority (as such terms are defined below) having jurisdiction over or related to the subject item.

1.4 "**Auditor**" has the meaning set forth in Section 9.4.

1.5 "**Calendar Quarter**" means each respective period of three (3) consecutive months ending on March 31, June 30, September 30, and December 31.

1.6 "**Claim**" has the meaning set forth in Section 12.3.

1.7 "**Commercialization**" means the conduct of all activities undertaken (a)after Regulatory Approval (as defined below) relating to the promotion, sales, marketing, medical support, and distribution (including importing, exporting, transporting, customs clearance, warehousing, invoicing, handling, and delivering Products to customers) of Products in the Field in the Grifols Territory, including sales force efforts, detailing, advertising, market research, market access (including price and reimbursement activities), medical education and information services, publication, scientific and medical affairs, advisory and collaborative activities with opinion leaders and professional societies including symposia, marketing, sales force training, and sales (including receiving, accepting and filling Product orders) and distribution; and (b) any of the foregoing (but not marketing, promotion, sales, or distribution) that is conducted prior to Regulatory Approval in anticipation of and/or preparation for launch. "**Commercialize**" and "**Commercializing**" have correlative meanings.

1.8 "**Commercialization Plan**" has the meaning set forth in Section 6.2.

1.9 "**Commercially Reasonable Efforts**" means, with respect to a Party and its obligations under this Agreement, those commercially reasonable efforts and resources consistent with the usual practices of a similarly situated company for the development and commercialization of a pharmaceutical product originating from its own research and development department without a royalty obligation to others, which is at a similar stage of research, development, or commercialization, taking into account that product's profile of efficacy and safety; proprietary position, including patent and regulatory exclusivity; regulatory status, including anticipated or approved labeling and anticipated or approved post-approval requirements; present and future market and commercial potential, including competitive market conditions (but not taking into account any payment owed to the other Party under this Agreement), and all other relevant factors, including technical, legal, scientific and/or medical factors. Commercially Reasonable Efforts requires that a Party: (a) at a minimum establishes a plan to achieve objectives and assigns specific responsibilities for the achievement of that plan and (b) makes and implements decisions and allocate resources designed to advance progress with respect to such objectives.

1.10 "**Competing Product**" means any product or compound, other than the Compound (as defined below) and Product, that (a) [*], or (b) is [*], or (c) [*], or is any combination of (a), (b) or (c). For the avoidance of doubt, [*] Competing Products.

1.11 "**Compound**" means fostamatinib disodium hexahydrate, having the chemical structure set forth in Exhibit A.

1.12 "**Confidentiality Agreement**" means that certain Confidential Disclosure Agreement between Rigel and Grifols dated as of [*].

1.13 "**Confidential Information**" means all Know-How (as defined below) and other proprietary scientific, marketing, financial, or commercial information or data that is generated by or on behalf of a Party or its Affiliates or which one Party or any of its Affiliates has supplied or otherwise made available to the other Party or its Affiliates, whether made available orally, in writing, or in electronic form, including information comprising or relating to concepts, discoveries, inventions, data, designs, or formulae in relation to this Agreement; further all Rigel Technology (as defined below) will be deemed Rigel's Confidential Information.

1.14 "**Control**" or "**Controlled**" means, with respect to any Rigel Technology, the legal authority or right (whether by ownership, license, or otherwise, but without taking into account any rights granted by Rigel to Grifols pursuant to this Agreement) of Rigel to grant access, a license, or a sublicense of or under such Rigel

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Technology to Grifols, or to otherwise disclose proprietary or trade secret information to Grifols, without breaching the terms of any agreement with a Third Party (as defined below), or misappropriating the proprietary or trade secret information of a Third Party.

1.15 "**Data**" means any and all scientific, technical, test, marketing, or sales data pertaining to any Product that is generated by or on behalf of Rigel, Grifols, or their respective Affiliates and sublicensees, including research data, clinical pharmacology data, pre-clinical data, clinical data, clinical study reports, or submissions made in association with an IND or MAA with respect to any Product.

1.16 "**Development**" means all development activities for the Product that are directed to obtaining Regulatory Approval(s) of the Product in the Field and lifecycle management of the Product in any country in the world, including all non-clinical, preclinical, and clinical testing and studies of the Product; toxicology, pharmacokinetic, and pharmacological studies; statistical analyses; assay development; protocol design and development; the preparation, filing, and prosecution of any MAA for the Product; development activities directed to label expansion and/or obtaining Regulatory Approval for one or more additional indications following initial Regulatory Approval; development activities conducted after receipt of Regulatory Approval, including Phase 4 Clinical Trials; and all regulatory affairs related to any of the foregoing. "**Develop**" and "**Developing**" have correlative meanings.

1.17 "**EMA**" means the European Medicines Agency or its successor.

1.18 "**Europe**" means Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Switzerland, Poland, Portugal, Romania, Spain, Slovakia, Slovenia, Sweden, and the United Kingdom.

1.19 "**Executive Officers**" means [*] of Rigel and [*] of Grifols.

1.20 "**Export Control Laws**" means all applicable U.S. laws and regulations relating to (a) sanctions and embargoes imposed by the Office of Foreign Assets Control of the U.S. Department of Treasury or (b) the export or re-export of commodities, technologies, or services, including the Export Administration Act of 1979, 24 U.S.C. §§ 2401-2420, the International Emergency Economic Powers Act, 50 U.S.C. §§ 1701-1706, the Trading with the Enemy Act, 50 U.S.C. §§ 1 et. seq., the Arms Export Control Act, 22 U.S.C. §§ 2778 and 2779, and the International Boycott Provisions of Section 999 of the U.S. Internal Revenue Code of 1986, in each case, as amended.

1.21 "**FCPA**" means the U.S. Foreign Corrupt Practices Act (15 U.S.C. Section 78dd-1, et. seq.), as amended.

1.22 "**FDA**" means the U.S. Food and Drug Administration or its successor.

1.23 "**Field**" means the treatment, palliation, or prevention of human diseases, including chronic or persistent ITP, AIHA, and IgA nephropathy.

1.24 "**First Commercial Sale**" means, on a Product-by-Product and country-by-country basis, the first sale of such Product in a country of the Grifols Territory by Grifols or its Affiliates or Sublicensees (as defined below) to a Third Party after Regulatory Approval for such Product has been obtained in such country.

1.25 "**Generic Product**" means, with respect to a Product in a particular regulatory jurisdiction, any pharmaceutical product that (a) contains the same active pharmaceutical ingredient(s) as such Product; (b) is approved by the Regulatory Authority in such country as a substitutable generic for such Product on an expedited or abbreviated basis based on bioequivalence or interchangeability with the Product; and (c) is sold in such jurisdiction by a Third Party that is not a Sublicensee and did not purchase such product in a chain of distribution that included any of Rigel, Grifols, or their respective Affiliates, licensees, or sublicensees.

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1.26 "**Governmental Authority**" means any national, international, federal, state, provincial, or local government, or political subdivision thereof, or any multinational organization, or any authority, agency, or commission entitled to exercise any administrative, executive, judicial, legislative, police, regulatory, or taxing authority or power, or any court or tribunal (or any department, bureau or division thereof, or any governmental arbitrator or arbitral body).

1.27 "**Grifols Data**" has the meaning set forth in Section 10.1(a).

1.28 "**Grifols Indemnitee**" has the meaning set forth in Section 12.1.

1.29 "**Grifols Territory**" means Europe and Turkey.

1.30 "**ICH**" means the International Conference on Harmonization (of Technical Requirements for Registration of Pharmaceuticals for Human Use).

1.31 "**IFRS**" means the International Financial Reporting Standards, existing as of the Effective Date and as may be amended from time to time during the Term (as defined below).

1.32 "**IND**" means an investigational new drug application or equivalent application filed with the applicable Regulatory Authority, which application is required to commence human clinical trials in the applicable country.

1.33 "**Indemnitee**" has the meaning set forth in Section 12.3.

1.34 "**Indemnitor**" has the meaning set forth in Section 12.3.

1.35 "**Indication**" means a separate and distinct disease, disorder, illness, or health condition and all of its associated signs, symptoms, stages, or progression (including precursor conditions), in each case for which a separate MAA may be filed. For clarity, subpopulations or patients with a primary disease or condition, however stratified (including stratification by stages or progression, particular combinations of symptoms associated with the primary disease or condition, prior treatment courses, response to prior treatment, family history, clinical history, phenotype, or other stratification) shall not be deemed to be separate "Indications" for the purposes of this Agreement.

1.36 "**Inventions**" means all inventions, whether or not patentable, discovered, made, conceived, or reduced to practice in the course of activities contemplated by this Agreement.

1.37 "**ITP**" means immune thrombocytopenia.

1.38 "**JSC**" has the meaning set forth in Section 3.1.

1.39 "**Know-How**" means all technical information, know-how, and data, including inventions, discoveries, trade secrets, specifications, instructions, processes, formulae, compositions of matter, cells, cell lines, assays, animal models, and other physical, biological, or chemical materials, expertise, and other technology applicable to development, registration, use, or marketing or to methods of assaying or testing them, and including all biological, chemical, pharmacological, biochemical, toxicological, pharmaceutical, physical, and analytical safety, nonclinical, and clinical data, regulatory documents, data and filings, instructions, processes, formulae, expertise, and information relevant to the research, development, use, importation, offering for sale, or sale of, or which may be useful in studying, testing, developing, Products. Know-How excludes Patents and manufacturing know-how for the Compound or Product.

1.40 "**Losses**" has the meaning set forth in Section 12.1.

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1.41 "**MAA**" means a marketing authorization application or equivalent application, and all amendments and supplements thereto, filed with the applicable Regulatory Authority in any country or jurisdiction. For clarity, MAA does not include any application for Pricing and Reimbursement Approval (as such terms are defined below).

1.42 "**MAA Approval**" means approval of an MAA by the applicable Regulatory Authority for marketing and sale of a Product in the applicable country or jurisdiction, but excluding any Pricing and Reimbursement Approval.

1.43 "**Major Market Countries**" means: [*].

1.44 "**Medical Affairs**" or "**Medical Affairs Activities**" means activities designed to ensure or improve appropriate medical use of, conduct medical education of, or further research regarding, the Product, including by way of example: (a) activities of medical scientific liaisons who, among their other functions, may: (i) conduct service based medical activities including providing input and assistance with consultancy meetings, proposing investigators for clinical trials sponsored or co-sponsored by a Party or Affiliate, and providing input in the design of such trials and other research related activities; and/or (ii) deliver non-promotional communications and conduct non-promotional activities; (b) grants to support continuing medical education, symposia, or Third Party research related to the Product; (c) development, publication, and dissemination of publications relating to the Product; (d) medical information services provided in response to inquiries communicated via sales representatives or received by letter, phone call, or email; (e) conducting advisory board meetings, international advisory board activities, or other consultant programs, including the engagement of key opinion leaders and health care professional in individual or group advisory and consulting arrangements; and (f) the evaluation of applications submitted to Grifols for support of investigator-initiated trials.

1.45 "**Middle East and North Africa**" means Algeria, Bahrain, the Comoros Islands, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritiana, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, the United Arab Emirates, and Yemen.

1.46 "**Net Sales**" means those invoices issued by Grifols, its Affiliates and/or Sublicensees (but not distributors who purchase the Product from Grifols, its Affiliates or Sublicensees) for the sale of any Product to Third Parties (excluding sales among Grifols, Grifols' Affiliates and Sublicensees) but including any subsequent resale from Grifols, its Affiliates and Sublicensees to an unrelated Third Party), less the following deductions in accordance with IFRS, consistently applied:

(a) normal and customary trade, cash and quantity discounts actually allowed and properly taken directly with respect to sales of such Product;

(b) credits or allowances given or made for rejection or return of previously sold Products or for retroactive price reductions and billing errors;

(c) rebates and chargeback payments granted to managed health care organizations, pharmacy benefit managers (or equivalents thereof), national, state/provincial, local, and other governments, their agencies and purchasers and reimbursers, or to trade customers;

(d) costs of freight, carrier insurance, and other transportation and/or delivery charges directly related to the distribution of such Product;

(e) taxes, duties or other governmental charges (including any tax such as a value added or similar tax, other than any taxes based on income) directly levied on the sale, transportation, delivery or use of a Product which is paid by Grifols or measured by the billing amount for such Product, as adjusted for rebates and refunds; and

(f) any invoiced amounts (not to exceed [*]) not able to be reasonably collected by Grifols or its Affiliates or Sublicensees in each case written off by Grifols or its Affiliates or Sublicensees.

In no event will any particular amount identified above be deducted more than once in calculating Net Sales. Sales of a Product between Grifols and its Affiliates or Sublicensees for resale shall be excluded from the computation of Net Sales, but the subsequent resale of such Product to a Third Party shall be included within the computation of Net Sales.

The supply of Product as samples, for use in non-clinical or clinical trials, or for use in any test or studies reasonably necessary to comply with any Applicable Laws, or as is otherwise normal and customary in the industry, shall not be included in the computation of Net Sales, so long as Grifols, its Affiliates, and Sublicensees do not receive payment for such Product in excess of the transfer price paid by Grifols to Rigel for such Product pursuant to the Commercial Supply Agreement.

1.47 "**Option**" has the meaning set forth in Section 2.4.

1.48 "**Option Fee**" has the meaning set forth in Section 2.4(b).

1.49 "**Option Territory**" means (a) the Middle East and North Africa, and (b) Russia/CIS (as defined below).

1.50 "**Patents**" means (a) all patents, certificates of invention, applications for certificates of invention, priority patent filings, provisional patent applications and patent applications, and (b) any renewals, divisions, or continuations (in whole or in part) of any of such patents, certificates of invention and patent applications, and any all patents or certificates of invention issuing thereon, and any and all reissues, reexaminations, extensions, supplementary protection certificates, divisions, renewals, substitutions, confirmations, registrations, revalidations, revisions, and additions of or to any of the foregoing.

1.51 "**Pharmacovigilance Agreement**" has the meaning set forth in Section 5.4(a).

1.52 "**Pricing and Reimbursement Approval**" means, with respect to a Product, the approval, agreement, determination, or decision of any applicable Governmental Authority establishing the price or level of reimbursement for such Product, as required in a given country or jurisdiction prior to sale of such Product in such country or jurisdiction.

1.53 "**Product**" means any pharmaceutical product in the final form as of the Effective Date, containing the Compound as the sole active ingredient in the form set forth in Exhibit A.

1.54 "**Product Infringement**" has the meaning set forth in Section 10.3(a).

1.55 "**Public Official or Entity**" means (a) any officer, employee (including physicians, hospital administrators, or other healthcare professionals), agent, representative, department, agency, de facto official, representative, corporate entity, instrumentality, or subdivision of any government, military, or international organization, including any ministry or department of health or any state-owned or affiliated company or hospital, or (b) any candidate for political office, any political party, or any official of a political party.

1.56 "**Recall**" has the meaning set forth in Section 5.7.

1.57 "**Regulatory Approval**" means, with respect to a country or jurisdiction, any and all approvals (including MAA Approval, and Pricing and Reimbursement Approval, if applicable), licenses, registrations, permits, notifications and authorizations (or waivers) of any Regulatory Authority that are necessary for the use, storage, import, transport, promotion, marketing, distribution, offer for sale, sale, or other commercialization of a Product in such country or jurisdiction.

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1.58 "**Regulatory Authority**" means any Governmental Authority that has responsibility in its applicable jurisdiction over the testing, development, manufacture, use, storage, import, transport, promotion, marketing, distribution, offer for sale, sale, or other commercialization of pharmaceutical products in a given jurisdiction, including the FDA and EMA. For countries where Pricing and Reimbursement Approval is required, Regulatory Authority shall also include any Governmental Authority whose grant of Pricing and Reimbursement Approval of the Product is required.

1.59 "**Regulatory Filing**" means all applications, filings, submissions, approvals, licenses, registrations, permits, notifications, and authorizations (or waivers) with respect to the testing, development, manufacture, or Commercialization of any Product made to or received from any Regulatory Authority in a given country, including any INDs and MAAs .

1.60 "**Rigel Data**" has the meaning set forth in Section 10.1(a).

1.61 "**Rigel Indemnitee**" has the meaning set forth in Section 12.2.

1.62 "**Rigel Know-How**" means all Know-How that Rigel Controls as of the Effective Date or during the Term, that is necessary or reasonably useful for the use, importation, offer for sale, or sale of the Compound or Product in the Field in the Grifols Territory. For clarity, the Rigel Know-How includes the Rigel Data.

1.63 "**Rigel Patents**" means all Patents in the Grifols Territory that Rigel Controls as of the Effective Date or during the Term that would be infringed, absent a license or other right to practice granted under such Patents, by the Development, use, importation, offer for sale or sale of any Compound or Product in the Field in the Grifols Territory (considering patent applications to be issued with the then-pending claims). The Rigel Patents existing as of the Effective Date are set forth in Exhibit B.

1.64 "**Rigel Technology**" means the Rigel Know-How and the Rigel Patents.

1.65 "**Rigel Territory**" means the world outside the Grifols Territory.

1.66 "**Royalty Term**" has the meaning set forth in Section 8.4(b).

1.67 "**Russia/CIS**" means Russia, Armenia, Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, and Uzbekistan.

1.68 "**Safety Data**" means Data related solely to any adverse drug experiences and serious adverse drug experience as such information is reportable to Regulatory Authorities. Safety Data also includes "adverse events", "adverse drug reactions", and "unexpected adverse drug reactions" as defined in the ICH Harmonised Tripartite Guideline for Clinical Safety Data Management: Definitions and Standards for Expedited Reporting.

1.69 "**SEC**" means the U.S. Securities and Exchange Commission, or any successor entity or its foreign equivalent, as applicable.

1.70 "**Sublicensee**" means a Third Party to whom Grifols grants a sublicense to use, import, promote, offer for sale, or sell any Product in the Field in the Grifols Territory, beyond the mere right to purchase Products from Grifols and its Affiliates, and excluding wholesalers and full-service distributors that do not promote the sale of the Product, and other similar physical distributors. In no event shall Rigel or any of its Affiliates be deemed a Sublicensee.

1.71 "**Sunshine Reporting Laws**" has the meaning set forth in Section 6.10.

1.72 "**Term**" has the meaning set forth in Section 14.1.

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1.73 "**Third Party**" means any entity that is not Rigel or Grifols or an Affiliate of Rigel or Grifols.

1.74 "**Valid Claim**" means (a) a claim of an issued and unexpired patent that has not been revoked or held unenforceable, unpatentable, or invalid by a decision of a court or other governmental agency of competent jurisdiction that is not appealable or has not been appealed within the time allowed for appeal, and that has not been abandoned, disclaimed, denied, or admitted to be invalid or unenforceable through reissue, re-examination, or disclaimer or otherwise, or (b) a claim of a pending patent application that has not been cancelled, withdrawn or abandoned or finally rejected by an administrative agency action from which no appeal can be taken.

1.75 "**Year**" means, initially, the period of time commencing on the date of the first shipment of Product from Rigel to Grifols under the Commercial Supply Agreement intended for the First Commercial Sale in any country of the Grifols Territory and ending December 31st of the same calendar year, and, thereafter, each consecutive 365-day period (or 366-day period in the event of a leap year) beginning on January 1st and ending on December 31st of each calendar year during the Term.

2. Grant of License and Option

2.1 **License Grant to Grifols**. Subject to the terms and conditions of this Agreement, Rigel hereby grants to Grifols, during the Term, (a) an exclusive (even as to Rigel and its Affiliates, except as expressly set forth herein), royalty-bearing license, with the right to grant sublicenses (through multiple tiers) solely as provided in Section 2.2, under the Rigel Technology to use, promote, sell, offer for sale, import, export, and otherwise Commercialize (but not to make or have made) the Product in the Field in the Grifols Territory and (b) a non-exclusive license, with the right to grant sublicenses (through multiple tiers) solely as provided in Section 2.2, under the Rigel Technology to Develop (but not to make or have made) the Product in the Grifols Territory and to use the Product for that purpose.

2.2 **Sublicenses**. Grifols shall have the right to grant sublicenses under the licenses granted in Section 2.1:

(a) to an Affiliate of Grifols without providing any written notice to Rigel;

(b) to a Third Party in up to [*] Major Market Countries upon written notice to Rigel and to a Third Party in any of the remaining [*] Major Market Countries with Rigel's express prior written consent; and

(c) to a Third Party in any country in the Grifols Territory other than a Major Market Country upon written notice to Rigel.

All sublicenses granted under the licenses granted to Grifols in Section 2.1 other than to an Affiliate of Grifols shall be in writing and shall be subject to, and consistent with, the terms and conditions of this Agreement and shall provide that any such Sublicensee shall not further sublicense except with the consent of Rigel. Grifols shall ensure that each agreement with a Sublicensee grants Rigel the same rights with respect to Regulatory Filings and Compound Inventions made or generated by such Sublicensee as if such Regulatory Filings and Compound Inventions were made or generated by Grifols pursuant to the terms and conditions set forth herein. Grifols shall be responsible for the compliance of its Affiliates, Sublicensees, and subcontractors with the terms and conditions of this Agreement.

2.3 **Reserved Rights**. Rigel hereby expressly reserves:

(a) the right under the Rigel Technology to exercise its rights and perform its obligations under this Agreement, whether directly or through one or more licensees or subcontractors; and

(b) all rights to practice, and to grant licenses under, the Rigel Technology outside of the scope of the licenses granted in Section 2.1, including the exclusive right to make and have made the Compound and Product anywhere in the world, the exclusive rights to practice the Rigel Patents and Rigel Know-How with respect to

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compounds and products other than Compound and Product anywhere in the world, and the non-exclusive right to develop the Compound and Product anywhere in the world.

2.4 Option Grant to Grifols. Subject to the terms and conditions of this Agreement, Grifols shall be entitled to expand the Grifols Territory to include the Option Territory (the "**Option**") as set forth below. Grifols may exercise the Option:

(a) subject to remainder of this Section 2.4, at any time during the Term by providing written notice thereof to Rigel; or

(b) in the case Rigel notifies Grifols in writing of its intention to commercialize, directly or indirectly, the Product within the Option Territory, Grifols shall have a maximum term of [*] from receipt of Rigel's notice to exercise the Option by providing Rigel with written notice of such exercise.

Once Grifols exercises the Option, it shall pay to Rigel a one-time payment of [*] (the "**Option Fee**") within [*] from the date of the corresponding invoice issued by Rigel and the Parties shall amend this Agreement to include the Option Territory as part of the Grifols Territory. For the avoidance of doubt, the Commercialization of the Products in the Field in the Option Territory will be subject to the same terms and conditions set forth in this Agreement and in the Commercial Supply Agreement and any and all references herein to the Grifols Territory will be understood as including the Option Territory. For the further avoidance of doubt, the Option Fee payment includes all countries of the Option Territory.

If Grifols fails to exercise the Option as set forth in this Section 2.4(b), the Option shall expire and Rigel shall have no further obligation to Grifols with respect to the Option Territory.

2.5 No Implied Licenses; Negative Covenant Except as set forth in this Agreement, neither Party shall acquire any license or other intellectual property interest, by implication or otherwise, under or to any Patents, Know-How, or other intellectual property owned or controlled by the other Party. Neither Party shall, nor shall it permit any of its Affiliates or sublicensees to, practice any Patents or Know-How licensed to it by the other Party outside the scope of the licenses granted to it under this Agreement.

2.6 Third Party Licenses.

(a) Grifols shall promptly notify Rigel if it becomes aware of any Third Party Know-How or Patent that is necessary to assure the Commercialization in the Grifols Territory of the Product [*]. Rigel shall negotiate in good faith to obtain a license from such Third Party under such Know-How or Patent and [*] or [*] in the Grifols Territory. It is understood that any such Third Party license will [*] herein.

(b) If the Parties become aware of any Third Party Know-How or Patent that is useful, but not necessary, to exploit the license granted to Grifols in Section 2.1, the Parties will notify one another of such Know-How or Patent and evaluate, through the JSC, the benefit of obtaining a license under such Know-How or Patent. If the JSC and the Parties determine that obtaining a license to such Know-How or Patent is desirable, the Parties, through the JSC, will work together to determine the best strategy to obtaining such license.

2.7 Non-Compete.

(a) For the period starting from the Effective Date and for [*] of the Product in the first Indication in the Grifols Territory, Grifols shall not, directly or indirectly (including through an Affiliate or a Third Party), [*] any Competing Product to be sold or distributed in the Field in the Grifols Territory (a "**Competing Program**"). For the avoidance of doubt, Grifols is free to [*] any Competing Product outside the Grifols Territory (and/or inside of the Grifols Territory but outside the Field), either directly or indirectly.

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(b) In the event that a Third Party becomes an assignee of this Agreement or an Affiliate of Grifols after the Effective Date through merger, acquisition, consolidation, or other similar transaction, and such Third Party, as of the closing date of such transaction, is engaged in the conduct of a Competing Program, then Rigel shall have the right to terminate this Agreement upon immediate written notice to Grifols if, within [*] after the closing of such transaction, the successor-in-interest of such Competing Program does not completely Divest such Competing Program. An additional [*] shall be provided as long as such assignee is using commercially reasonable efforts to Divest such Competing Program. "**Divest**" means (i) the sale or transfer of rights to the Competing Program to a Third Party (i.e., not an Affiliate of either Grifols or such successor-in-interest) without receiving a continuing share of profit, royalty payment, or other economic interest in the success of such Competing Program, or (ii) the termination of any direct or indirect commercialization activity for or in relation to such Competing Product.

3. Governance

3.1 Joint Steering Committee. On or about the Effective Date, the Parties will establish a joint steering committee (the "**JSC**"), composed of an equal number of up to [*] senior employees of each Party, to oversee and guide the strategic direction of the collaboration of the Parties under this Agreement. The JSC shall act as a joint consultative body and, to the extent expressly provided herein, a joint decision-making body. The JSC shall in particular:

(a) review and discuss the strategy and progress of the Development and Commercialization of the Product in the Grifols Territory;

(b) monitor and coordinate regulatory actions and pharmacovigilance and safety matters for the Product in the Grifols Territory;

(c) review and discuss the Commercialization Plan for the Grifols Territory, including proposed amendments;

(d) review the manufacturing and supply strategy and supply needs for the Grifols Territory;

(e) establish joint subcommittees as it deems necessary or advisable to further the purpose of this Agreement; and

(f) perform such other functions as appropriate to further the purposes of this Agreement, as expressly set forth in this Agreement or allocated to it by the Parties' written agreement.

3.2 JSC Membership and Meetings.

(a) **Committee Members**. Each JSC representative shall have appropriate knowledge and expertise and sufficient seniority within the applicable Party to make decisions arising within the scope of the JSC's responsibilities. Each Party may replace its representatives on the JSC on written notice to the other Party, but each Party shall strive to maintain continuity in the representation of its JSC members. The JSC chairperson shall [*]. The chairperson shall prepare and circulate agendas to JSC members at least [*] before each JSC meeting and shall direct the preparation of reasonably detailed minutes for each JSC meeting, which shall be approved by the chairperson and circulated to JSC members within [*] after such meeting. The Parties shall determine their respective initial members of the JSC promptly following the Effective Date.

(b) **Meetings**. The JSC shall hold meetings at such times as it elects to do so, but in no event shall meetings of the JSC be held less frequently than once every [*] prior to [*] unless otherwise agreed to by the parties. The first JSC meeting shall be held within [*] after the Effective Date, at which meeting the dates for the first calendar year shall be set. JSC meetings may be held in person or by audio or video teleconference; provided that, unless otherwise agreed by both Parties, at least one (1) meeting per calendar year shall be held in person. In-person JSC meetings shall be held at locations alternately selected by the Parties. Each Party shall be responsible for

all of its own expenses of participating in any JSC meeting. No action taken at any JSC meeting shall be effective unless at least [*] of each Party is participating. In addition, upon written notice to the other Party, either Party may request that a special ad hoc meeting of the JSC be convened for the purpose of resolving any disputes in connection with, or for the purpose of reviewing or making a decision pertaining to any material subject-matter within the scope of the JSC, the review or resolution of which cannot be reasonably postponed until the following scheduled JSC meeting. Such ad hoc meeting shall be convened at such time as may be mutually agreed by the Parties, but no later than [*] following the notification date of request that such meeting be held.

(c) **Non-Member Attendance**. Each Party may from time to time invite a reasonable number of participants, in addition to its representatives, to attend JSC meetings in a non-voting capacity; provided that if either Party intends to have any Third Party (including any consultant) attend such a meeting, such Party shall provide reasonable prior written notice to the other Party and obtain the other Party's approval for such Third Party to attend such meeting, which approval shall not be unreasonably withheld or delayed. Such Party shall ensure that such Third Party is bound by written confidentiality and non-use obligations consistent with the terms of this Agreement.

3.3 **Decision-Making**.

(a) All decisions of the JSC shall be made by unanimous vote, with each Party's representatives collectively having one (1) vote. If after reasonable discussion and good faith consideration of each Party's view on a particular matter, the representatives of the Parties cannot reach an agreement as to such matter within [*] after such matter was brought to the JSC for resolution, then either Party at any time may refer such issue to the following Senior Managers of each Party:

- For Rigel: [*]
- For Grifols: [*]

(b) If the Seniors Managers of the Parties cannot resolve such matter within [*] after such matter has been referred to them, then Article 15 of this Agreement applies.

3.4 **Limitations on Authority**. The JSC shall have only such powers as are expressly assigned to it in this Agreement, and such powers shall be subject to the terms and conditions of this Agreement. Without limiting the generality of the foregoing, the JSC will not have the power to amend this Agreement, and no JSC decision may be in contravention of any terms and conditions of this Agreement.

3.5 **Discontinuation of the JSC**. The activities to be performed by the JSC shall solely relate to governance under this Agreement, and are not intended to be or involve the delivery of services. The JSC shall continue to exist until the first to occur of the following: (a) the Parties mutually agree to disband the JSC; or (b) Rigel provides written notice to Grifols of its intention to disband and no longer participate in the JSC, provided that Rigel shall not give such notice within the first [*] following the Effective Date. Once the Parties mutually agree or Rigel has provided written notice to disband the JSC, the JSC shall have no further obligations under this Agreement and, thereafter, each Party shall designate a contact person for the exchange of information under this Agreement that would have otherwise been exchanged through the JSC or such exchange of information shall be made through Alliance Managers, and decisions formerly made by the JSC shall be decisions as between the Parties, subject to the other terms and conditions of this Agreement.

3.6 **Alliance Managers**. Promptly after the Effective Date, each Party shall appoint an employee of such Party having appropriate qualification and experience to act as the alliance manager for such Party (the "**Alliance Manager**"). Each Alliance Manager shall be responsible for coordinating and managing processes and interfacing between the Parties on a day-to-day basis throughout the Term and shall be permitted to attend meetings of the JSC as non-voting participants. The Alliance Managers shall be the primary contact for the Parties regarding the activities contemplated by this Agreement and shall facilitate all such activities hereunder. Each Party shall bear its own costs of its Alliance Manager.

4. Development

4.1 Development Activities.

(a) Rigel Responsibilities. Rigel shall be responsible, and bear all associated costs and expenses, for and shall use Commercially Reasonable Efforts to continue the extension portion of the phase 3 clinical trial for ITP currently on-going until MAA Approval or until such clinical trial is concluded, and to the extent agreed by both Parties, conduct any other follow up clinical trials of the Product for ITP required by the EMA to obtain MAA approval as of the Effective Date until MAA Approval is obtained from the EMA. Rigel shall also be responsible, and bear all associated costs and expenses, for and shall use Commercially Reasonable Efforts to conduct the phase 3 clinical trial for AIHA planned as of the Effective Date, and, to the extent agreed by both Parties, conduct any other follow up clinical trials of the Product for AIHA required by the EMA to obtain MAA approval as of the Effective Date. For clarity, Rigel shall also have the right, but not the obligation, to conduct any other Development activities with respect to the Product in the Grifols Territory.

(b) Grifols Responsibilities. Except for the activities specified in Section 4.1(a), Grifols shall be responsible for all territory-specific Development activities that are for the benefit of the countries within the Grifols Territory.

(c) Indications Other Than ITP and AIHA. For any Indication that either Party seeks a MAA for in the Grifols Territory, other than ITP and AIHA, for which Rigel conducted Phase 3 clinical trials, or the equivalent thereof, the Parties shall negotiate in good faith to reimburse Rigel for its expenses related to such trials [*]. If an agreement is reached, Grifols shall proceed to reimburse [*] within the following [*]. In the event an agreement is not reached, such Indication shall be excluded from the Field.

4.2 Rigel's Right to Develop. If Grifols elects to not conduct a clinical trial of the Product for an Indication other than ITP and AIHA required by a Regulatory Authority in the Grifols Territory to obtain MAA Approval of the Product for such Indication, or any Development activities required in the Grifols Territory for Pricing and Reimbursement Approval of the Product for an Indication other than ITP and AIHA, Grifols shall promptly provide Rigel written notice of such election. Following Rigel's receipt of such notice, [*] Rigel shall have the right, but not the obligation, to conduct such clinical trial or other Development activity of the Product for such Indication in the Grifols Territory, in Rigel's sole discretion. In such event, the Parties will negotiate in good faith the terms of an amendment to this Agreement or side letter between the Parties to govern such Development activities by Rigel.

4.3 Data Use. Grifols shall have the right to use and reference, without additional consideration, any and all Rigel Data generated pursuant to Section 4.1(a) for obtaining and maintaining Regulatory Approval of the Product and Commercializing the Product in the Grifols Territory in accordance with the terms of this Agreement. Rigel shall have the right to use and reference, without additional consideration, any and all Grifols Data for obtaining and maintaining Regulatory Approval of the Product and Commercializing the Product in the Rigel Territory and, subject to the terms of this Agreement, in the Grifols Territory.

4.4 Diligence. Each Party shall use Commercially Reasonable Efforts to perform its obligations under this Article 4.

4.5 Development Records. Each Party shall maintain complete, current, and accurate records of all Development activities conducted by it under this Agreement, and all data and other information resulting from such activities. Such records shall fully and properly reflect all work done and results achieved in the performance of the Development activities in good scientific manner appropriate for regulatory and patent purposes. Each Party shall document all non-clinical studies and clinical trials in formal written study reports according to Applicable Laws and national and international guidelines (e.g., ICH).

4.6 Development Reports and Data Exchange. At each regularly scheduled JSC meeting, both Parties shall provide the JSC with a report detailing their Development activities for the Product under this Agreement, if any,

and the results of such activities. In addition, after the completion of any clinical trial or other study of the Product, Each Party shall in a timely manner provide the other party with a data package consisting of, at a minimum, tables, lists, and figures, as well as any other Data for such clinical trial or study. After the disbanding of the JSC, the Parties shall continue to exchange information regarding any remaining Development, regulatory and other related activities with respect to the Product by providing updates to each other on a periodic basis not less than [*], through a development review board. Decisions in such review board shall be made by unanimous vote with each Party's representative collectively having one (1) vote.

4.7 Use of Subcontractors. Each Party may perform its Development activities under this Agreement through one or more subcontractors, provided that (a) such Party will remain responsible for the work allocated to, and payment to, such subcontractors to the same extent it would if it had done such work itself, (b) each subcontractor undertakes in writing obligations of confidentiality and non-use regarding Confidential Information that are substantially the same as those undertaken by the Parties pursuant to Article 13, and (c) each subcontractor agrees in writing to assign all intellectual property developed in the course of performing any such work to such Party (or, in the event such assignment is not feasible, a license to such intellectual property with the right to sublicense to such other Party).

5. Regulatory Activities

5.1 Regulatory Responsibilities. Except as otherwise imposed by Applicable Law in any country of the Grifols Territory, Rigel shall be responsible for the preparation and submission of any and all Regulatory Fillings to, and for obtaining all Product registrations and MAAs (including Regulatory Approval) from, the EMA for the Commercialization of the Product in those countries of the Grifols Territory for which the EMA has jurisdiction. Rigel shall do so at its own expense for [*]. For other Indications, Grifols shall reimburse Rigel [*] once MAA Approval from the EMA is obtained. Grifols shall be responsible, at its own expense, for the preparation and submission of any and all Regulatory Filings to, and for obtaining all Product registrations and MAAs (including Regulatory Approval) from, the applicable Regulatory Authorities for the Commercialization of the Product for all countries in the Grifols Territory outside of the jurisdiction of the EMA. If by the [*] anniversary of the date of MAA Approval of the Product for [*] from the EMA, Grifols has not initiated efforts to obtain MAA Approval of the Product for the applicable Indication in any of the remaining countries in the Grifols Territory outside the jurisdiction of the EMA, then such countries shall cease to be included as part of the Territory under this Agreement. Each Party agrees to cooperate fully with the other in any Product registration and MAA activity or action that such Party may reasonably request of the other Party.

5.2 Rigel Transfer of Regulatory Filings and Right of Reference.

(a) Rigel shall transfer to Grifols the MAAs submitted to any Regulatory Authority in the Grifols Territory for the Compound and Product that are in Rigel's name and Controlled by Rigel promptly after the receipt of Regulatory Approval for the applicable MAA from such Regulatory Authority.

(b) To the extent that any such transfer is not permitted under Applicable Laws, Rigel shall provide to Grifols a right of reference or use to such Regulatory Approvals and Regulatory Filings. Rigel shall provide appropriate notification of Grifols' access and reference rights to the applicable Regulatory Authorities, at Rigel's expense. For the purposes of this Agreement, "right of reference" means the "right of reference or use" as defined in 21 C.F.R. §314.3(b) and any equivalent regulation outside the U.S., including Article 10c of Directive 2001/83/EC, as each may be amended.

5.3 Grifols Regulatory Information Sharing and Right of Reference.

(a) In the case where Grifols submits any Regulatory Filings with respect to the Product, Grifols shall promptly provide Rigel with copies of such Regulatory Filings and documents of communication prepared (including any drafts), submitted, or received by Grifols in the Grifols Territory pertaining to the Product, including English translations, and Rigel shall have the right to review and comment on drafts of such Regulatory

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Filings and communications. Grifols shall use Commercially Reasonable Efforts to grant to Rigel access and rights to use any such communications with any Regulatory Authority generated by or on behalf of any Sublicensee. Should Grifols fails to obtain such access and rights from any Sublicensee because under applicable laws prohibit such access or the market access is denied by Regulatory Authorities, Grifols shall not have the right to grant access or rights to such Sublicensee to any Regulatory Filing or right of reference granted to Grifols by Rigel pursuant to Section 5.2(b).

(b) Grifols hereby grants to Rigel a right of reference to all Regulatory Filings pertaining to the Compound and Product submitted by or on behalf of Grifols. Rigel may use such right of reference to seek, obtain, and maintain Regulatory Approval of the Product in the Rigel Territory.

5.4 Adverse Event Reporting; Pharmacovigilance Agreement

(a) As soon as reasonably practicable after the Effective Date, the Parties shall enter into a pharmacovigilance agreement setting forth the pharmacovigilance procedures for the Parties with respect to the Product, such as Safety Data sharing, adverse events reporting, and safety signal and risk management (the "**Pharmacovigilance Agreement**"), which agreement shall be amended by the Parties [*] to comply with any changes in Applicable Laws or any guidance received from Regulatory Authorities. Such procedures shall be in accordance with, and enable the Parties to fulfill, local and national regulatory reporting obligations under Applicable Laws (including, to the extent applicable, those obligations contained in ICH guidelines) to monitor patients' safety.

(b) Rigel has established, and shall continue to hold (either by itself or through a vendor engaged by Rigel) the global safety database for the Product, and shall maintain such global safety database for so long as such Product is under Development or Commercialization by the Parties. Rigel shall [*] such database and preparing such reports. Rigel will ensure that each Party is able to access the data from the global safety database in order to meet legal and regulatory obligations. Grifols shall maintain its own safety database for the Product in the Grifols Territory and shall provide all Safety Data, including adverse event reports, in such database to Rigel in accordance with this Section 5.4 and the Pharmacovigilance Agreement. Grifols shall [*] such database for the Grifols Territory and preparing reports for the Grifols Territory.

(c) Each Party shall be primarily responsible for reporting quality complaints, adverse events, and Safety Data related to the Product to any necessary Regulatory Authorities, and responding to safety issues and to all requests of Regulatory Authorities related to the Product under any MAA or Regulatory Approval for the Product held by such Party and filed with such Regulatory Authorities, [*]. Each Party agrees to comply with its respective obligations under the Pharmacovigilance Agreement and to cause its Affiliates, licensees, and sublicensees to comply with such obligations.

5.5 No Harmful Actions. If a Party reasonably believes that the other Party is taking or intends to take any action with respect to a Product that could reasonably be expected to have a material adverse impact upon the regulatory status of such Product in the first Party's territory, then such Party may bring the matter to the attention of the JSC and the Parties shall discuss in good faith to promptly resolve such concern.

5.6 Notification of Threatened Action. Each Party shall notify the other Party within [*] of any information it receives regarding any threatened or pending action, inspection, or communication by any Regulatory Authority which may adversely affect the safety or efficacy claims of any Product or the continued Development or Commercialization of any Product. Upon receipt of such information, the Parties shall promptly consult with each other in an effort to arrive at a mutually acceptable procedure for taking appropriate action.

5.7 Recalls. In the event that a recall, withdrawal, or correction (including the dissemination of relevant information) of any Product in a Party's territory is required by a Regulatory Authority of competent jurisdiction, or if any Regulatory Authority requires or advises either Party or such Party's Affiliates or sublicensees to distribute a "Dear Doctor" letter or its equivalent regarding use of such Product in a Party's territory, or if a recall, withdraw, or correction of a Product in its territory is deemed advisable by such Party in its sole discretion, such Party shall so notify the other Party no later than [*] in advance of the earlier of (a) initiation of a recall, withdrawal, or correction,

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or (b) the submission of plans for such an action to a Regulatory Authority. Any such recall, withdrawal, correction, or dissemination of information (e.g., "Dear Doctor" letter) shall be referred to herein as a "**Recall**". Promptly after being notified of a Recall, each Party shall provide the other Party with such assistance in connection with such Recall as may be reasonably requested by such other Party. All costs and expenses to conduct the Recall [*] shall be the responsibility of [*], including the costs and expenses related to the dissemination of relevant information. Each Party shall handle exclusively the organization and implementation of all Recalls of Products in its territory. Notwithstanding the foregoing, any Recall related to the manufacture and supply of the Product by Rigel to Grifols shall be governed by the terms and conditions of the Commercial Supply Agreement.

6. Commercialization

6.1 General. Subject to the terms and conditions of this Article 6, Grifols shall have the sole and exclusive responsibility, at its own expense, for all aspects of the Commercialization of the Product in the Field in the Grifols Territory, including (a) developing and executing a commercial launch and pre-launch plan, (b) negotiating with applicable Governmental Authorities and other payors regarding the price and reimbursement status of the Product, (c) marketing and promotion, (d) booking sales and distribution and performance of related services, (e) handling all aspects of order processing, invoicing and collection, inventory and receivables, (f) providing customer support, including handling medical queries, and performing other related functions, and (g) conforming its practices and procedures to Applicable Laws relating to the promotion, sales and marketing, access, and distribution of the Product in the Field in the Grifols Territory.

6.2 Knowledge Transfer. Grifols' and Rigel's employees dedicated to the Product shall participate in knowledge transfer meetings, at a mutually agreeable location, [*] to support Grifols' Product launch and as the JSC may consider necessary and convenient, provided however that at least [*] such meetings will be provided within the first [*] as of the Effective Date and, thereafter, [*] , or as mutually agreed between the Parties. Each Party shall bear their own travel and accommodation expenses if any, [*].

6.3 Commercialization Plan. As soon as reasonably practicable, but no later than [*] after the Effective Date, Grifols shall prepare and present to the JSC a [*] plan for the Commercialization of the Product in the Field in the Grifols Territory, [*] (the "**Commercialization Plan**"). The Commercialization Plan shall include such information [*] for the Grifols Territory. Grifols shall update and amend the Commercialization Plan [*] following the initial First Commercial Sale of the Product in the Grifols Territory and present such updates and any amendments to the JSC for review and discussion. Subject to the provisions of this Agreement and the terms of Commercialization Plan, Grifols shall have full control and authority with respect to the day-to-day Commercialization of the Product and implementation of the Commercialization Plan, except that Grifols will consider incorporating Rigel's reasonable suggestions [*] into the Commercialization Plan.

6.4 Diligence.

(a) General. During the Term, Grifols shall use Commercially Reasonable Efforts to Commercialize the Product for each and every Indication that has received or will receive Regulatory Approval in the Grifols Territory.

(b) Product Launch. Grifols shall launch the Product for each Indication that has received Regulatory Approval in the Grifols Territory as soon as reasonably possible following receipt of such Regulatory Approval. As applicable, Grifols shall obtain all necessary Pricing and Reimbursement Approvals necessary to launch such Product as soon as reasonably possible following receipt of MAA Approval of such Product in any such country. Without limiting the generality of the foregoing, with respect to the Product for ITP, Grifols shall launch the Product in (i) [*] within [*] after receiving Regulatory Approval of the Product for ITP from the EMA, and (ii) [*] within [*] after receiving such Regulatory Approval. Thereafter, Grifols shall utilize Commercially Reasonable Efforts in the ongoing support for the Commercialization of the Product for ITP in the Grifols Territory. If Grifols fails to timely achieve the obligation in the foregoing subsections (i) (ii), the rights granted herein to Grifols for [*] in the case (i)

is not achieved, and [*] in the case (ii) is not achieved, shall revert to Rigel, unless the Parties otherwise mutually agree on the terms and conditions for any extension to the launch timeline set forth above.

(c) Sales Force. Specifically and without limiting the infrastructure requirement as set forth in the Commercialization Plan, within [*] after obtaining Regulatory Approval of the Product for a new Indication in the Grifols Territory, Grifols shall use Commercially Reasonable Efforts to promote and detail the Product in the Grifols Territory for such new Indication. If Grifols does not apply Commercially Reasonable Efforts to achieve the obligations in this subsection (c) and/or does not, [*], significantly adhere to the Commercialization Plan, such failure shall be deemed a material breach and Rigel shall have the right to terminate this Agreement pursuant to Section 14.2(c).

6.5 Commercial Updates. Grifols shall update the JSC on [*] basis regarding its Commercialization activities with respect to the Product in the Grifols Territory. Each such update shall be in a form to be agreed by the JSC and shall summarize Grifols' and its Affiliates' and Sublicensees' significant Commercialization activities with respect to the Product in the Grifols Territory, and shall contain at least such information at such level of detail reasonably required by the JSC to determine Grifols' compliance with its diligence obligations set forth in this Section 6.4. Such updates shall include, [*], Grifols' promotion and marketing activities, sales and purchase forecasts for at least the next [*], and Medical Affairs Activities. All such updates shall be deemed Grifols' Confidential Information. After the disbanding of the JSC, the Parties shall continue to exchange information regarding their Commercialization activities with respect to the Product by providing updates to each other on a periodic basis [*], through a Commercialization review board. Decisions in such review board shall be made by unanimous vote with each Party's representative collectively having one (1) vote.

6.6 Rigel's Right to Promote. Notwithstanding the foregoing, if Grifols elects not to launch or Commercialize the Product for an Indication other than ITP [*] following receipt of MAA Approval of the Product for such Indication, Grifols shall promptly provide Rigel written notice of such election. Following Rigel's receipt of such notice, [*] Rigel shall have the right, but not the obligation, to Commercialize the Product for such Indication [*]. In such event, the Parties will negotiate in good faith the terms of an amendment to this Agreement or side letter between the Parties to govern such Commercialization activities by Rigel, including, without limitation, [*] for the corresponding Indication [*].

6.7 Coordination of Commercialization Activities.

(a) Generally. Grifols, through the JSC, shall update Rigel on Commercialization strategies for the Product (e.g., for branding and messaging, international congresses, advisory boards) in the Grifols Territory, and the Parties shall work together to identify and take advantage of any potential global strategies and messaging. The foregoing shall not be construed as requiring Grifols to seek Rigel's consent in connection with Grifols establishing or implementing any sales, marketing, or medical affairs practices in the Grifols Territory.

(b) Pricing. Grifols shall keep Rigel timely informed on the status of any application for Pricing and Reimbursement Approval or material updates to an existing Pricing and Reimbursement Approval in the Grifols Territory, including any discussion with a Regulatory Authority with respect thereto. Grifols and its Affiliates and Sublicensees shall not sell any Product [*]. For the avoidance of doubt, Grifols and its Affiliates and Sublicensees are free to determine the resale price of the Products to its customers.

(c) Promotional Materials. Rigel shall provide Grifols with sufficient samples of Promotional Material (as defined below) produced and released for the US market so as to provide Grifols with ideas and information. Subsequently, Grifols shall, at its own expense, prepare, develop, produce, or otherwise obtain and utilize sales, promotional, advertising, marketing, website, educational, and training materials for the Products (the "**Promotional Materials**") to support its Commercialization activities in the Grifols Territory, and shall ensure that such Promotional Materials, as well as all information contained therein, are accurate and comply with all Applicable Laws and are consistent with any Regulatory Approvals obtained for the Product in the applicable jurisdiction in the

Grifols Territory. At Rigel's request, Grifols shall share samples of and updates to Promotional Materials with respect to the Commercialization of the Product with Rigel.

6.8 Medical Affairs Activities. Grifols shall be responsible for Medical Affairs Activities in the Grifols Territory. Rigel shall collaborate, at its own cost, in knowledge transfer to Grifols and in support of Grifols' execution of Medical Affairs Activities in the Grifols Territory in global support of the Product, based on the Commercialization Plan as discussed within the JSC from time to time.

6.9 Diversion. Each Party hereby covenants and agrees that it and its Affiliates shall not, and it shall contractually obligate (and use Commercially Reasonable Efforts to enforce such contractual obligation) its sublicensees not to, directly or indirectly, actively promote, market, distribute, import, sell, or have sold any Product, including via the Internet or mail order, to any Third Party or to any address or Internet Protocol address or the like in the other Party's territory. Neither Party shall engage, nor permit its Affiliates and sublicensees to engage, in any advertising or promotional activities relating to any Product for use directed primarily to customers or other buyers or users of such Product located in any country or jurisdiction in the other Party's territory, or solicit orders from any prospective purchaser located in any country or jurisdiction in the other Party's territory. If a Party or its Affiliates or sublicensees receives any order for a Product for use from a prospective purchaser located in a country or jurisdiction in the other Party's territory, such Party shall immediately refer that order to such other Party and shall not accept any such orders. Neither Party shall, nor permit its Affiliates and sublicensees to, deliver or tender (or cause to be delivered or tendered) any Product for use in the other Party's territory.

6.10 Sunshine Reporting Laws. Each Party acknowledges that the other Party may be subject to (or voluntarily applies) federal, state, local, and international laws, regulations, and rules related to the tracking and reporting of payments and transfers of value provided to health care professionals, health care organizations, and other relevant individuals and entities (collectively, "**Sunshine Reporting Laws**"), and agrees to provide the other Party with all information regarding such payments or transfers of value by such Party as necessary for such other Party to comply in a timely manner with its reporting obligations under the Sunshine Reporting Laws.

7. Manufacture and Supply

7.1 Manufacture and Supply. The Parties shall endeavor to negotiate and enter into the Commercial Supply Agreement within a reasonable period as of the Effective Date, pursuant to which Rigel will manufacture and supply, on an exclusive basis, by itself or through a Third Party contract manufacturer, the Product in fill and finished form as specified in the Commercial Supply Agreement, but without final packaging or labeling, for use by Grifols in the Commercialization of the Product under this Agreement. Grifols shall be responsible, at its expense, for the final packaging and labeling of the Product for all countries in the Grifols Territory, and shall ensure that such packaging and labeling, as well as all information contained therein, are accurate and comply with all Applicable Laws and are consistent with any Regulatory Approvals obtained for the Product in the applicable jurisdiction in the Grifols Territory.

7.2 After the disbanding of the JSC, the Parties shall continue to exchange information regarding the manufacturing and supply activities with respect to the Compound and the Product by providing updates to each other on a periodic basis [*], through a manufacturing and supply review board. Decisions in such review board shall be made by unanimous vote with each Party's representative collectively having one (1) vote.

8. Financial Provisions

8.1 Upfront Payment. Within ten (10) days after the Effective Date, Grifols shall make a (a) one-time, non-refundable, non-creditable upfront payment to Rigel of five million dollars ($5,000,000), and (b) one-time payment to Rigel of twenty-five million dollars ($25,000,000), which twenty-five million dollar ($25,000,000) payment shall be refundable to Grifols solely as set forth in Section 14.2(a).

8.2 Development and Advance Royalty Milestones.

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(a) **Development Milestone Payments**. Subject to the remainder of this Section 8.2, Grifols shall pay to Rigel the one-time, non-refundable payments set forth in the table below upon the achievement of the applicable milestone event (whether by or on behalf of Grifols or its Affiliates or Sublicensees or Rigel or its Affiliates or licensee(s) (other than Grifols)).

Milestone Event	Milestone Payment
1. MAA Approval by the EMA for the Product for the first Indication	$17.5 million
2. [*]	$[*]
3. [*]	$[*]
TOTAL	$40 million

(b) **Advance Royalty Milestone**. Upon obtaining MAA Approval by the EMA for the Product for the first Indication, Grifols shall pay to Rigel the one-time payment of two million five hundred thousand dollars ($2,500,000), which payment shall be creditable as an advanced royalty payment solely as set forth in Section 8.4(d).

(c) **Notice and Payment**. Each Party shall notify the other Party in writing within [*] after the achievement of any milestone set forth in this Section 8.2 by such Party or its Affiliates or Sublicensees. After the delivery or receipt of such notice, Grifols shall pay to Rigel the applicable milestone payment within [*] from the date of the corresponding invoice issued by Rigel.

8.3 **Net Sales Milestones Payments**.

(a) Grifols shall pay to Rigel the one-time, non-refundable payments set forth in the table below when the aggregated Net Sales of all Products in the Grifols Territory in any Year first reach the values indicated in the table below. For clarity, each payment in this Section 8.3 shall be payable only once upon first achievement of the applicable milestone event, regardless of the number of times such milestone is subsequently achieved.

Aggregate Net Sales of all Products in the Grifols Territory in a Year	Milestone Payment
Equal or exceed$[*]	$[*]
Equal or exceed$[*]	$[*]
Equal or exceed $[*]	$[*]
Equal or exceed $[*]	$[*]
Equal or exceed $[*]	$[*]
TOTAL	$255 million

(b) **Notice and Payment**. As part of the report set forth in Section 9.1, Grifols shall provide written notice to Rigel if the aggregated Net Sales of all Products in the Grifols Territory in any Year first reach the

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values set forth in Section 8.3(a) above, and Grifols shall pay to Rigel the corresponding Net Sales milestone payment within [*] upon receipt of the corresponding invoice.

8.4 Royalty Payments.

(a) Royalty Rate. During the Royalty Term, Grifols shall make non-refundable royalty payments to Rigel on the annual Net Sales of all Products sold in the Grifols Territory at the applicable rate set forth below:

Annual Net Sales of all Products in the Grifols Territory	Royalty Rate
Portion less than or equal to $[*]	[*]%
Portion greater than $[*] and less than or equal to $[*]	[*]%
Portion greater than $[*]	30%

(b) Royalty Term. Royalties shall be paid on a Product-by-Product and country-by-country basis in the Grifols Territory from the First Commercial Sale of such Product in such country by or on behalf of Grifols, its Affiliates, or Sublicensees, until the later of: (i) the expiration of the last-to-expire Valid Claim of the Rigel Patents covering such Product in such country, including its composition, method of manufacture, and/or method of use, in each case covering the Product as Commercialized, and (ii) twelve (12) years after the First Commercial Sale of such Product in such country (the "**Royalty Term**").

(c) Royalty Reductions.

(i) If one or more Generic Products to a Product is sold in any country in the Grifols Territory during the Royalty Term for such Product in such country, and such Generic Products in the aggregate have a unit market share in such country of [*], [*].

(ii) If the Applicable Laws (including legal doctrine) in a particular country or jurisdiction require a royalty reduction after the expiration of the relevant patents, and the Royalty Term for a particular Product in such country or jurisdiction extends beyond the time period set forth in Section 8.4(b)(i), [*].

(d) Royalty Credit for ITP. Following the initial First Commercial Sale of the Product for ITP in the Grifols Territory, Grifols shall be entitled to credit two and one-half million dollars ($2,500,000) of the milestone payment paid by Grifols to Rigel under Section 8.2(b) against the royalties owed by Grifols to Rigel pursuant to Section 8.4(a) with respect to the Net Sales of such Product.

9. Payment; Records; Audits

9.1 Payment; Reports. Royalty payments due by Grifols to Rigel under Section 8.4 shall be calculated and reported for and at the end of each Calendar Quarter . All royalty payments due under Section 8.4 shall be paid within [*] after the end of the relevant Calendar Quarter for which royalties are due and shall be accompanied by a report setting forth, on a country-by-country basis, Net Sales of the Products by Grifols and its Affiliates and Sublicensees in the Grifols Territory in sufficient detail to permit confirmation of the accuracy of the royalty payment made, including, for each country, the number of Products sold, the Net Sales of Products, including the deductions to arrive at Net Sales as provided for under Section 1.46, the royalties payable, the method used to calculate the royalties, the exchange rates used, any adjustments to royalties in accordance with Section 8.4(d), and whether any

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Net Sales milestone under Section 8.3 has been achieved. Prior to the First Commercial Sale of the Product in the Grifols Territory, the Parties will agree on the form of royalty report through the JSC. Grifols shall submit a single report for all Net Sales during a Calendar Quarter, including all of Grifols' and its Affiliates' and Sublicensees' Net Sales.

9.2 Exchange Rate; Manner and Place of Payment. All references to dollars and "$" herein shall refer to U.S. dollars. All payments hereunder shall be payable in U.S. dollars. When conversion of Net Sales from any currency other than U.S. dollars is required, such conversion shall be at the exchange rate equal to the conversion rate for the U.S. dollar for the currency of the country in which the applicable Net Sales were made as published by [*]. All payments owed under this Agreement shall be made by wire transfer in immediately available funds to a bank and account designated in writing by Rigel, unless otherwise specified in writing by Rigel.

9.3 Taxes.

(a) Taxes on Income. Each Party shall be solely responsible for the payment of all taxes imposed on its share of income arising directly or indirectly from the activities of the Parties under this Agreement.

(b) Tax Cooperation. The Parties agree to cooperate with one another and use reasonable efforts to avoid or reduce tax withholding or similar obligations in respect of the milestone payments, royalty payments, and other payments made by Grifols to Rigel under this Agreement. To the extent that Grifols is required by Applicable Laws to deduct and withhold taxes on any payment to Rigel, Grifols shall pay the amounts of such taxes to the proper Governmental Authority in a timely manner and promptly transmit to Rigel an official tax certificate or other evidence of such payment sufficient to enable Rigel to claim such payment of taxes. Rigel shall provide Grifols any tax forms that may be reasonably necessary in order for Grifols to not withhold tax or to withhold tax at a reduced rate under an applicable bilateral income tax treaty, to the extent legally able to do so. Rigel shall use reasonable efforts to provide any such tax forms to Grifols in advance of the due date. Grifols shall provide Rigel with reasonable assistance to enable the recovery, as permitted by Applicable Laws, of withholding taxes or similar obligations resulting from payments made under this Agreement, such recovery to be for the benefit of Rigel. Grifols shall have the right to deduct any such tax, levy, or charge actually paid from payment due to Rigel. Each Party agrees to assist the other Party in claiming exemption from such deductions or withholdings under double taxation or similar agreement or treaty from time to time in force and in minimizing the amount required to be so withheld or deducted.

(c) Taxes Resulting From Grifols' Action. Grifols represents and warrants that, as of the Effective Date, Grifols is not required by Applicable Law to deduct or withhold taxes on the upfront payment, milestone payments, royalty payments, or other payments payable to Rigel under this Agreement. If a Party takes any action of its own discretion (not required by a Regulatory Authority) which results in a withholding or deduction obligation ("**Withholding Tax Action**"), then such Party shall pay the sum associated with such Withholding Tax Action. For clarity, if Grifols undertakes a Withholding Tax Action, then the sum payable by Grifols (in respect of which such deduction or withholding is required to be made) shall be increased to the extent necessary to ensure that Rigel receives a sum equal to the sum which it would have received had no such Withholding Tax Action occurred. If a change in Applicable Laws results in a withholding or deduction obligation absent either Party taking a Withholding Tax Action, then the amount of such withholding or deduction obligation shall be paid by Grifols to the applicable Governmental Authority on behalf of Rigel, provided that Grifols shall assist Rigel in minimizing or recovering such withholding or deduction obligation. The Parties shall use commercially reasonable efforts to invoke the application of any applicable bilateral income tax treaty that would reduce or eliminate otherwise applicable taxes with respect to payments payable pursuant to this Agreement.

9.4 Records; Audit. Grifols shall maintain complete and accurate records in sufficient detail in relation to this Agreement to permit Rigel to confirm the achievement of Net Sales milestones and the amount of royalty and other payments payable under this Agreement. Each Party will keep such books and records for at least [*] following the Year to which they pertain. Upon reasonable prior notice, such records shall be inspected during regular business hours at such place or places where such records are customarily kept by an independent certified public accountant (the "**Auditor**") selected by Rigel and reasonably acceptable to Grifols for the sole purpose of verifying for the

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auditing Party the accuracy of the financial reports furnished by Grifols pursuant to this Agreement or of any payments made, or required to be made, by or to the audited Party pursuant to this Agreement. Before beginning its audit, the Auditor shall execute an undertaking acceptable to Grifols by which the Auditor agrees to keep confidential all information reviewed during the audit. Such audits may occur no more often than [*] each Year and not more frequently than [*] with respect to records covering any specific period of time. Rigel shall only be entitled to audit the books and records from the [*] prior to the Year in which the audit request is made. Other than the audit report, such Auditor shall not disclose the audited Party's Confidential Information to the auditing Party, its Affiliates or Third Parties. In the event that the final result of the inspection reveals an undisputed underpayment or overpayment, the underpaid or overpaid amount shall be settled within [*] after the Auditor's report. Rigel shall bear the full cost of such audit unless such audit reveals an underpayment by Grifols that resulted from a discrepancy in the financial report provided by Grifols for the audited period, which underpayment was more than [*] of the amount set forth in such report, in which case Grifols shall reimburse Rigel for the costs for such audit. In case of overpayment, Rigel shall, at Grifols' discretion, reimburse Grifols the amounts overpaid by Grifols or settle them against any amount due or to be due by Grifols to Rigel pursuant to this Agreement.

9.5 Late Payments. In the event that any payment due under this Agreement is not paid when due in accordance with the applicable provisions of this Agreement, the payment shall accrue interest from the date due [*]; provided, however, that in no event shall such rate exceed the maximum legal annual interest rate. The payment of such interest shall not limit the Party entitled to receive payment from exercising any other rights it may have as a consequence of the lateness of any payment.

10. Intellectual Property

10.1 Ownership.

(a) Data. All Data generated in connection with the Development or Commercial activities with respect to the Product conducted solely by or on behalf of Rigel and its Affiliates and licensees (other than Grifols, its Affiliates and Sublicensees) (the "**Rigel Data**") shall be the sole and exclusive property of Rigel or its Affiliates or licensees, as applicable. All Data generated in connection with any Development or Commercial activities with respect to the Product conducted solely by or on behalf of Grifols, its Affiliates or Sublicensees (the "**Grifols Data**") shall be the sole and exclusive property of Grifols or of its Affiliates or Sublicensees, as applicable. Grifols Data will be deemed Grifols' Confidential Information and Rigel Data will be deemed Rigel's Confidential Information. Notwithstanding the foregoing, Grifols shall receive reasonable and customary data fees for any Phase IV market support studies, excluding studies in ITP or AIHA, which would be utilized by Rigel outside the Grifols Territory for purposes beyond safety data sharing and regulatory compliance. Customary data fees shall be determined in good faith by the Parties.

(b) Inventions. Inventorship of any Inventions will be determined in accordance with the standards of inventorship and conception under U.S. patent laws. The Parties will work together to resolve any issues regarding inventorship or ownership of Inventions. Ownership of Inventions will be allocated as follows: Rigel shall solely own all data, Inventions, and Patents claiming such Inventions that relate to the composition, manufacture, or use of the Compound, or any improvement of any such composition, manufacture, or use, including in combination with other agents or components (each, a "**Compound Invention**"). All Compound Inventions will be included in the Rigel Know-How, and Patents in the Grifols Territory claiming such Inventions will be included in the Rigel Patents, including any Compound Invention made by Grifols, its Affiliates, employees, agents, and Sublicensees. Grifols hereby assigns, or shall assign if under any Applicable Law assignment of future rights is not deemed effective, all of Grifols' right, title, and interest in and to any and all Compound Inventions to Rigel and warrants that its Affiliates, employees, agents, and Sublicensees are or shall be contractually obliged to assign their right, title, and interest in and to any such Compound Inventions to Grifols to effectuate the foregoing assignment to Rigel.

10.2 Patent Prosecution and Maintenance.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(a) **Rigel Patents**. Rigel shall be responsible, [*], for the preparation, filing, prosecution, and continued maintenance and registration (including any interferences, reissue proceedings, reexaminations, inter partes review, patent term extensions, applications for supplementary protection certificates, oppositions, invalidation proceedings and defense of validity or enforceability challenges) of the Rigel Patents worldwide, using counsel of its own choice. Rigel shall keep Grifols informed of material progress with regard to the preparation, filing, prosecution, and maintenance of the Rigel Patents in the Grifols Territory, sufficiently in advance for Grifols to be able to review any material documents, including content, timing, and jurisdiction of the filing of such Rigel Patents in the Grifols Territory, and Rigel shall consult with, and consider in good faith the requests and suggestions of, Grifols with respect to strategies for filing, prosecuting, and defending, if any, the Rigel Patents in the Grifols Territory.

(b) **Patent Term Extension.** Rigel shall use Commercially Reasonable Efforts to maximize the term of the Rigel Patents, including obtaining any patent term extensions or supplementary protection certificates or their equivalents, where available.

(c) **Cooperation**. Notwithstanding Rigel's obligations under Section 10.2 (a), Grifols agrees to cooperate fully with Rigel, upon Rigel's request, in the preparation, filing, prosecution, maintenance, and defense, if any, of Patents under this Section 10.2 and in the obtaining and maintenance of any Patent term extensions and supplementary protection certificates and their equivalents. Such cooperation includes (i) executing all papers and instruments, or requiring its employees or contractors, to execute such papers and instruments, so as to enable Rigel to apply for and to maintain and prosecute patent applications in any country as permitted by this Section 10.2; and (ii) promptly informing Rigel of any matters coming to Grifols' attention that may affect the preparation, filing, prosecution, or maintenance of any such patent application and the obtaining of any patent term extensions or supplementary protection certificates or their equivalents.

10.3 **Patent Enforcement**.

(a) **Notice**. Each Party shall notify the other within [*] of becoming aware of any alleged or threatened infringement by a Third Party of any of the Rigel Patents in the Field in the Grifols Territory, which infringement adversely affects or is reasonably expected to adversely affect any Product, including any declaratory judgment, opposition, or similar action alleging the invalidity, unenforceability, or non-infringement of any of the Rigel Patents (collectively, "**Product Infringement**").

(b) **Enforcement Right**. Rigel shall have the first right to bring and control any legal action in connection with such Product Infringement [*] as it reasonably determines appropriate. If Rigel (i) decides not to bring such legal action against a Product Infringement (the decision of which Rigel shall inform Grifols promptly) or (ii) Rigel otherwise fails to bring such legal action against a Product Infringement within [*] of first becoming aware of such Product Infringement, Grifols shall have the right to bring and control any legal action in connection with such Product Infringement at its own expense as it reasonably determines appropriate after consultation with Rigel. Any recovery received by Grifols from legal action initiated pursuant to this Section 10.3(b), whether by judgment, award, decree or settlement, shall be [*]. The remainder of any recovery received by Grifols under this Section 10.3(b) shall be [*]. Any recovery received by Rigel from legal action initiated pursuant to this Section 10.3(b), whether by judgment, award, decree or settlement, shall be [*].

(c) **Collaboration**. Each Party shall provide to the enforcing Party reasonable assistance in such enforcement, at such enforcing Party's request and expense, including to be named in such action if required by Applicable Laws to pursue such action. The enforcing Party shall keep the other Party regularly informed of the status and progress of such enforcement efforts, shall reasonably consider the other Party's comments on any such efforts, including determination of litigation strategy and filing of material papers to the competent court. The non-enforcing Party shall be entitled to separate representation in such matter by counsel of its own choice and at its own expense, but such Party shall at all times cooperate fully with the enforcing Party.

10.4 **Infringement of Third Party Rights**. If any Product used or sold by Grifols, its Affiliates, or Sublicensees becomes the subject of a Third Party's claim or assertion of infringement of any intellectual property

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rights in a jurisdiction within the Grifols Territory, Grifols shall promptly notify Rigel and the Parties shall promptly meet to consider the claim or assertion and the appropriate course of action and may, if appropriate, agree on and enter into a "common interest agreement" wherein the Parties agree to their shared, mutual interest in the outcome of such potential dispute. Absent any agreement to the contrary, and subject to claims for indemnification under Article 12, each Party may defend itself from any such Third Party claim at its own cost and expense, provided, however, that the provisions of Section 10.3 shall govern the right of Grifols to assert a counterclaim of infringement of any Rigel Patents.

10.5 Patents Licensed From Third Parties. Each Party's rights under this Article 10 with respect to the prosecution and enforcement of any Rigel Patent shall be subject to the rights (a) retained by any upstream licensor to prosecute and enforce such Patent Right, if such Patent is subject to an upstream license agreement; and (b) granted to any Third Party prior to such Patent becoming subject to the license grant under this Agreement.

10.6 Parties Cooperation. Further to the above, in the event of a Product Infringement or a Third Party intellectual property right infringement set forth in Section 10.3 and 10.4, the Parties shall meet to consider the impact of such infringements on Grifols' rights pursuant to this Agreement.

10.7 Trademarks.

(a) Product Trademarks. Grifols shall utilize Rigel's trade names, trade dresses, branding, and logos, to be used for the Product in the Field in the Grifols Territory, which are included in Exhibit C attached herein (the "**Rigel Product Marks**"); provided, however, that if any Product Mark is not approved for use in a country in the Grifols Territory, Grifols shall be responsible for identifying a trademark for the Product for use in such country ("**Grifols Product Marks**"). Rigel shall own all Rigel Product Marks and Grifols shall own all Grifols Product Marks. Each Party shall be responsible for the registration, maintenance, defense, and enforcement of its respective Product Marks at its own cost and using counsel of its own choice. Rigel shall keep Grifols informed of material progress with regard to the registration, prosecution, maintenance, and defense, if any, of any Rigel Product Marks in the Grifols Territory, including content, timing, and jurisdiction of the filing of such Rigel Product Marks in the Grifols Territory.

(b) Trademark License. Grifols shall use the Rigel Product Marks and Grifols Product Marks, as applicable, to Commercialize the Product in the Field in the Grifols Territory. In addition, unless prohibited by Applicable Laws in any country of the Grifols Territory, Rigel's corporate trademark shall be included in the on the packaging and product information of the Products sold in the Field in the Grifols Territory to indicate that the Product is licensed from Rigel. Rigel hereby grants to Grifols a limited (as to the Term of this Agreement), royalty-free license to use Rigel's corporate trademark and Rigel Product Marks solely in connection with the Commercialization of the Product in the Field in the Grifols Territory under this Agreement. All use of the Rigel Product Marks and Rigel's corporate trademark shall comply with Applicable Laws and shall be subject to Rigel's review and approval. For clarity, Grifols may also include its (or its Affiliate's or Sublicensee's, as applicable) corporate trademarks and logo in the Product sold in the Grifols Territory.

11. Representations and Warranties

11.1 Mutual Representations and Warranties. Each Party represents and warrants to the other that, as of the Effective Date: (a) it is duly organized and validly existing under the laws of its jurisdiction of incorporation or formation, and has full corporate or other power and authority to enter into this Agreement and to carry out the provisions hereof, (b) it is duly authorized to execute and deliver this Agreement and to perform its obligations hereunder, and the person or persons executing this Agreement on its behalf has been duly authorized to do so by all requisite corporate or partnership action, (c) this Agreement is legally binding upon it, enforceable in accordance with its terms, and does not conflict with any agreement, instrument, or understanding, oral or written, to which it is a Party or by which it may be bound, nor violate any material law or regulation of any court, governmental body, or administrative or other agency having jurisdiction over it, and (d) it has the right to grant the licenses granted by it under this Agreement.

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11.2 Covenants.

(a) Debarment. Each Party represents, warrants, and covenants to the other Party that it is not debarred or disqualified under the U.S. Federal Food, Drug and Cosmetic Act, as may be amended, or comparable laws in any country or jurisdiction other than the U.S., and it does not, and will not during the Term, employ or use the services of any person who is debarred or disqualified, in connection with activities relating to any Product. In the event that either Party becomes aware of the debarment or disqualification or threatened debarment or disqualification of any person providing services to such Party, including the Party itself or its Affiliates or sublicensees, that directly or indirectly relate to activities contemplated by this Agreement, such Party shall immediately notify the other Party in writing and such Party shall cease employing, contracting with, or retaining any such person to perform any such services.

(b) Compliance. Each Party covenants as follows:

(i) In the performance of its obligations under this Agreement, each Party shall comply and shall cause its and its Affiliates' employees and contractors to comply with all Applicable Laws.

(i) Each Party and its and its Affiliates' employees and contractors shall not, in connection with the performance of their respective obligations under this Agreement, directly or indirectly through Third Parties, pay, promise, or offer to pay, or authorize the payment of, any money or give any promise or offer to give, or authorize the giving of anything of value to a Public Official or Entity or other person for purpose of obtaining or retaining business for or with, or directing business to, any person, including, such Party (and such Party represents and warrants that as of the Effective Date, such Party, and to its knowledge, its and its Affiliates' employees and contractors, have not directly or indirectly promised, offered, or provided any corrupt payment, gratuity, emolument, bribe, kickback, illicit gift, or hospitality or other illegal or unethical benefit to a Public Official or Entity or any other person in connection with the performance of such Party's obligations under this Agreement, and such Party covenants that it and its Affiliates' employees and contractors shall not, directly or indirectly, engage in any of the foregoing).

(i) Each Party and its Affiliates, and their respective employees and contractors, in connection with the performance of their respective obligations under this Agreement, shall not violate or cause the violation of the FCPA, Export Control Laws, or any other Applicable Laws, or otherwise cause any reputational harm to the other Party.

(i) Each Party shall immediately notify the other Party if such Party has any information or suspicion that there may be a violation of the FCPA, Export Control Laws, or any other Applicable Laws in connection with the performance of this Agreement or the Development, manufacture, or Commercialization of any Product.

(i) In connection with the performance of its obligations under this Agreement, each Party shall comply and shall cause its and its Affiliates' employees and contractors to comply with such Party's own anti-corruption and anti-bribery policy, a copy of which will be provided to the other Party upon request.

(i) Each Party will have the right, upon reasonable prior written notice and during the other Party's regular business hours, to conduct at its own cost and expenses inspections of and to audit such other Party's books and records in the event of a suspected violation or to ensure compliance with the representations, warranties, and covenants of this Section 11.2(b); provided, however, that in the absence of good cause for such inspections and audits, Rigel exercise this right no more than annually.

(i) In the event that a Party has violated or been suspected of violating any of the representations, warranties, or covenants in this Section 11.2(b), such Party will cause its or its

Affiliates' personnel or others working under its direction or control to submit to periodic training that such Party will provide on anti-corruption law compliance.

(i) Each Party will, at the other Party's prior written request, annually certify to such other Party in writing its compliance, in connection with the performance of its obligations under this Agreement, with the representations, warranties, or covenants in Section 11.2(b), which certification shall be issued by such Party's representative with sufficient authority.

(i) Each Party shall have the right to suspend or terminate this Agreement in its entirety where there is a credible finding, after a reasonable investigation, that the other Party, its Affiliates, or its Sublicensees, in connection with performance of its obligations under this Agreement, has engaged in chronic or material violations of the FCPA.

11.3 Additional Rigel Representations, Warranties, and Covenants. Rigel represents, warrants, and covenants, as applicable, to Grifols that, as of the Effective Date:

(a) **Exhibit B** lists all Rigel Patents in the Grifols Territory and the Option Territory as of the Effective Date that claim the composition of matter or method of use or manufacture of the Compound and have been filed, prosecuted, and maintained in a manner consistent with Rigel's standard practice, and in each applicable jurisdiction in which such Patent has been filed no official final deadlines with respect to prosecution thereof have been missed and all applicable fees have been paid on or before the due date for payment;

(b) All inventors of Inventions claimed in the Rigel Patents listed on **Exhibit B** have assigned their entire right, title, and interest in and to such inventions to Rigel and the inventors listed are correct and there are no claims or assertions in writing received by Rigel regarding the inventorship of such Patent alleging that additional or alternative Inventors ought to be listed;

(c) Rigel has the right to grant all rights and licenses it purports to grant to Grifols with respect to the Rigel Technology and the Rigel Product Marks under this Agreement;

(d) Rigel has not granted any liens or security interests on the Rigel Technology;

(e) to Rigel's knowledge, Rigel has not received any written notice from a Third Party that the commercialization of the Product prior to the Effective Date has infringed any Patents of any Third Party within the Grifols Territory;

(f) Rigel has not as of the Effective Date, and will not during the Term, grant any right to any Third Party under the Rigel Technology that would conflict with the rights granted to Grifols hereunder;

(g) no claim or action has been brought or, to Rigel's knowledge, threatened in writing, by any Third Party alleging that the Rigel Patents are invalid or unenforceable, and no Rigel Patent is the subject of any interference, opposition, cancellation, or other protest proceeding;

(h) to Rigel's knowledge, no Third Party is infringing or misappropriating or has materially infringed or misappropriated the Rigel Technology and Rigel Product Mark in the Grifols Territory;

(i) to Rigel's knowledge, it has disclosed to Grifols the clinical and non-clinical data in Rigel's Control that is material to the evaluation of the safety, efficacy, and manufacturing process of the Product;

(j) to Rigel's knowledge, there are no issues or information, which to Rigel's knowledge and reasonable opinion, are reasonably likely to have a material impact on the Product that have not been fully disclosed to Grifols in the course of Grifols' due diligence; and

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(k) Rigel shall at all times throughout the Term of this Agreement maintain Rigel Patents in force in the Grifols Territory that are deemed by Rigel as necessary for Grifols to Commercialize the Product in the Field in the Grifols Territory in accordance with the Commercialization Plan and as sole market supplier of the Product to customers under the Rigel Patents in the Field in the Grifols Territory.

11.4 Disclaimer. Except as expressly set forth in this Agreement, THE TECHNOLOGY AND INTELLECTUAL PROPERTY RIGHTS PROVIDED BY EACH PARTY HEREUNDER ARE PROVIDED "AS IS" AND EACH PARTY EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF DESIGN, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT OF THE INTELLECTUAL PROPERTY RIGHTS OF THIRD PARTIES, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICES, IN ALL CASES WITH RESPECT THERETO. Without limiting the foregoing, (a) neither Party represents or warrants that any Data obtained from conducting clinical trials in one country or jurisdiction will comply with the laws and regulations of any other country or jurisdiction, and (b) neither Party represents or warrants the success of any study or test conducted pursuant to this Agreement or the safety or usefulness for any purpose of the technology it provides hereunder.

12. Indemnification

12.1 Indemnification by Rigel. Rigel hereby agrees to defend, indemnify, and hold harmless Grifols and its Affiliates and their respective directors, officers, employees, and agents (each, a "**Grifols Indemnitee**") from and against any and all liabilities, expenses, and losses including any product liability, personal injury, property damage, including reasonable legal expenses and attorneys' fees (collectively, " **Losses**"), to which any Grifols Indemnitee may become subject as a result of any claim, demand, action, or other proceeding by any Third Party to the extent such Losses arise out of or result from: (a) the Development, use, handling, storage, Commercialization, or other disposition of any Compound or Product by Rigel or its Affiliates or licensees or the contractors of any of them (excluding any activities by or on behalf of Grifols or its Affiliates or Sublicensees), (b) the Commercialization of the Products under the Rigel Patents in accordance with the terms and conditions of this Agreement in the Field constitutes an infringement, violation or misappropriation of any Third Party's rights, including the promotion, offer, use, marketing, distribution, sale and/or otherwise Commercialization of the Products in the Grifols Territory, (c) the negligence or willful misconduct of any Rigel Indemnitee, or (d) the breach by Rigel of any warranty, representation, covenant, or agreement made by Rigel in this Agreement, except, in each case (a)-(d), to the extent such Losses arise out of any activities set forth in Section 12.2(a), (b), or (c) for which Grifols is obligated to indemnify any Rigel Indemnitee(s) under Section 12.2.

12.2 Indemnification by Grifols. Grifols hereby agrees to defend, indemnify, and hold harmless Rigel, its Affiliates, and licensees and their respective directors, officers, employees, and agents (each, a "**Rigel Indemnitee**") from and against any and all Losses to which any Rigel Indemnitee may become subject as a result of any claim, demand, action, or other proceeding by any Third Party to the extent such Losses arise out of: (a) the use, handling, storage, Commercialization, or other disposition of any Compound or Product by Grifols or its Affiliates or Sublicensees or the contractor of any of them, (b) the negligence or willful misconduct of any Grifols Indemnitee, or (c) the breach by Grifols of any warranty, representation, covenant, or agreement made by Grifols in this Agreement; except, in each case (a)-(c), to the extent such Losses arise out of any activities set forth in Section 12.1(a), (b), (c), or (d) for which Rigel is obligated to indemnify any Grifols Indemnitee(s) under Section 12.1.

12.3 Procedure. A party that intends to claim indemnification under this Article 12 (the "**Indemnitee**") shall promptly notify the indemnifying Party (the "**Indemnitor**") in writing of any Third Party claim, demand, action, or other proceeding (each, a "**Claim**") in respect of which the Indemnitee intends to claim such indemnification, and the Indemnitor shall have sole control of the defense or settlement thereof. The Indemnitee may participate at its expense in the Indemnitor's defense of and settlement negotiations for any Claim with counsel of the Indemnitee's own choice. The indemnity arrangement in this Article 12 shall not apply to amounts paid in settlement of any action with respect to a Claim if such settlement is effected without the consent of the Indemnitor, which consent shall not be unreasonably withheld or delayed. The failure to deliver written notice to the Indemnitor within a reasonable time

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after the commencement of any action with respect to a Third Party Claim shall only relieve the Indemnitor of its indemnification obligations under this Article 12 if and to the extent the Indemnitor is actually prejudiced thereby. The Indemnitee shall cooperate fully with the Indemnitor and its legal representatives in the investigation of any action with respect to a Claim covered by this indemnification.

12.4 **Insurance**. Each Party, at its own expense, for a period until [*] after expiration or termination of this Agreement, shall maintain commercial general liability insurance, including public and product liability and other appropriate insurance (e.g., contractual liability, bodily injury, property damage, business interruption insurance, and personal injury coverage) (or self-insure for Grifols and a reputable insurance company for Rigel) in an amount consistent with sound business practice and reasonable in light of its obligations under this Agreement during the Term, at a minimum equivalent to [*] for any one claim or in the aggregate. Each Party shall be an additional insured on any and all insurance policies of the other Party pertaining to this Agreement. Each Party shall provide a certificate of insurance evidencing such coverage to the other Party upon request. It is understood that such insurance shall not be construed to create any limit of either Party's obligations or liabilities with respect to its indemnification obligations hereunder. In the event of use by either Party of subcontractors, sublicensees, or any Third Party in the performance of such Party's obligations under the Agreement, such Party shall ensure that its subcontractor, sublicensee, or Third Party has a proper and adequate general liability insurance to cover its risks with respect to the other Party for damages mentioned above, and each Party shall remain liable at all times for their sublicensees' or subcontractors' conduct. Additionally, certificates of insurance shall be provided within [*] after renewal of any and all applicable policies of insurance, and each Party shall notify the other Party within [*] before cancellation of any such policies of insurance.

12.5 **Limitation of Liability**. EXCEPT IN THE EVENT OF NEGLIGENCE, FRAUD OR WILLFUL MISCONDUCT, NEITHER PARTY SHALL BE ENTITLED TO RECOVER FROM THE OTHER PARTY ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES, INCLUDING LOST PROFITS IN CONNECTION WITH THIS AGREEMENT OR ANY LICENSE GRANTED HEREUNDER, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES; provided, however, that this Section 12.5 shall not be construed to limit either Party's indemnification obligations under this Article 12 or damages available as a result of a Party's non-compete obligations under Sections 2.1 and 2.7 or confidentiality obligations under Article 13.

13. Confidentiality

13.1 **Confidential Information**. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing by the Parties, the Parties agree that, during the Term and for [*] thereafter, the receiving Party shall keep confidential and shall not publish or otherwise disclose and shall not use for any purpose other than as expressly provided for in this Agreement any Confidential Information of the other Party, and both Parties shall keep confidential and, subject to the remainder of this Article 13, shall not publish or otherwise disclose the terms of this Agreement. Each Party may use the other Party's Confidential Information only to the extent required to accomplish the purposes of this Agreement, including exercising its rights or performing its obligations under this Agreement. Each Party will use at least the same standard of care as it uses to protect proprietary or confidential information of its own (but no less than reasonable care) to ensure that its employees, agents, consultants, contractors, and other representatives do not disclose or make any unauthorized use of the Confidential Information of the other Party. Each Party will promptly notify the other upon discovery of any unauthorized use or disclosure of the Confidential Information of the other Party.

13.2 **Exceptions**. The obligations of confidentiality and restriction on use under Section 13.1 will not apply to any information that the receiving Party can prove by competent written evidence: (a) is at the time of disclosure, or thereafter becomes, through no act or failure to act on the part of the receiving Party, generally known or available to the public; (b) is known by the receiving Party at the time of receiving such information, other than by previous disclosure of the disclosing Party, or its Affiliates, employees, agents, consultants, or contractors; (c) is disclosed to the receiving Party without restriction by a Third Party who has no obligation of confidentiality or limitations on use with respect thereto; or (d) is independently discovered or developed by the receiving Party without the use of or reference to the Confidential Information belonging to the disclosing Party.

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13.3 Authorized Disclosure. Each Party may disclose Confidential Information belonging to the other Party as expressly permitted by this Agreement or if and to the extent such disclosure is reasonably necessary in the following instances:

(a) filing, prosecuting, or maintaining Patents as permitted by this Agreement;

(b) Regulatory Filings for Products that such Party has a license or right to Develop or Commercialize under this Agreement in a given country or jurisdiction;

(c) prosecuting or defending litigation as permitted by this Agreement;

(d) complying with applicable court orders or governmental regulations, including regulations promulgated by securities exchanges; and

(e) disclosure to its and its Affiliates' employees, consultants, contractors, and agents, to its licensees and sublicensees, in each case on a need-to-know basis in connection with the Commercialization of the Product in accordance with the terms of this Agreement, in each case under written obligations of confidentiality and non-use at least as stringent as those herein.

(f) disclosure to actual and bona fide potential investors, acquirors, licensees, and other financial or commercial partners solely for the purpose of evaluating or carrying out an actual or potential investment, acquisition, or collaboration, in each case under written obligations of confidentiality and non-use at least as stringent as those herein, provided that the disclosing Party redacts the financial terms and other provisions of this Agreement that are not reasonably required to be disclosed in connection with such potential investment, acquisition, or collaboration, which redaction shall be prepared in consultation with the other Party.

Notwithstanding the foregoing, in the event a Party is required to make a disclosure of the other Party's Confidential Information pursuant to Section 13.3(c) or 13.3(d), it will, except where impracticable, give reasonable advance notice to the other Party of such disclosure and use the same diligent efforts to secure confidential treatment of such Confidential Information as such Party would use to protect its own confidential information, but in no event less than reasonable efforts. In any event, the Parties agree to take all reasonable action to avoid disclosure of Confidential Information hereunder. Any information disclosed pursuant to Section 13.3(c) or 13.3(d) shall remain Confidential Information and subject to the restrictions set forth in this Agreement, including the foregoing provisions of this Article 13.

13.4 Publicity; Public Disclosures. The Parties agree to issue a press release substantially in a form agreed by the Parties and attached to this Agreement as Exhibit D announcing the signature of this Agreement at or shortly after the Effective Date within the time-period as required by relevant securities laws. It is understood that each Party may desire or be required to issue subsequent press releases relating to this Agreement or activities hereunder. The Parties agree to consult with each other reasonably and in good faith with respect to the text and timing of such press releases prior to the issuance thereof, to the extent practicable, provided that a Party may not unreasonably withhold, condition, or delay consent to such releases by more than [*], and that either Party may issue such press releases or make such disclosures to the SEC, the Spanish securities and exchange commission (*Comisión Nacional del Mercado de Valores* – "CNMV") or other applicable agency as it determines is reasonably necessary to comply with Applicable Laws or for appropriate market disclosure. Each Party shall provide the other Party with advance notice of legally required disclosures to the extent practicable. The Parties will consult with each other on the provisions of this Agreement to be redacted in any filings made by a Party with the SEC, the CNMV or as otherwise required by Applicable Laws; provided that each Party shall have the right to make any such filing as it reasonably determines necessary under Applicable Laws. In addition, following the initial joint press release announcing this Agreement, either Party shall be free to disclose, without the other Party's prior written consent, the existence of this Agreement, the identity of the other Party and those terms of the Agreement which have already been publicly disclosed in accordance with this Section 13.4.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

13.5 Prior Confidentiality Agreement. As of the Effective Date, the terms of this Article 13 shall supersede any prior non-disclosure, secrecy, or confidentiality agreement between the Parties (or their Affiliates) relating to the subject of this Agreement, including the Confidentiality Agreement. Any information disclosed pursuant to any such prior agreement shall be deemed Confidential Information under this Agreement.

13.6 Equitable Relief. Given the nature of the Confidential Information and the competitive damage that a Party would suffer upon unauthorized disclosure, use, or transfer of its Confidential Information to any Third Party, the Parties agree that monetary damages may not be a sufficient remedy for any breach of this Article 13. In addition to all other remedies, a Party shall be entitled to seek specific performance and injunctive and other equitable relief as a remedy for any breach or threatened breach of this Article 13.

14. Term and Termination

14.1 Term. This Agreement shall commence on the Effective Date and, unless terminated earlier as provided in this Article 14 or by mutual written agreement of the Parties, shall continue until the expiration of the last Royalty Term in the Grifols Territory (the "**Term**").

14.2 Termination for Cause.

(a) For Regulatory Reasons. If by the [*] anniversary of the Effective Date the EMA has not approved the MAA for the Product for ITP, Grifols shall have the right to terminate this Agreement in its entirety within [*] after such [*] anniversary by providing Rigel with at least [*] written notice from the date of issuance thereof. Within [*] as of the effective date of termination only pursuant to this Section **Error! Reference source not found.**, Rigel shall refund to Grifols the twenty-five million dollar ($25,000,000)-payment made by Grifols to Rigel pursuant to Section 8.1(b).

(b) For Manufacturing and Supply Reasons. The termination of the Commercial Supply Agreement at any time during its term and due to a breach by Rigel of its representations, warranties and/or covenants therein, shall result in the automatic termination of this Agreement.

(c) Material Breach. Each Party shall have the right to terminate this Agreement immediately in its entirety upon written notice to the other Party if such other Party materially breaches this Agreement and has not cured such breach to the reasonable satisfaction of the other Party within [*] ([*] with respect to any payment breach) after notice of such breach from the non-breaching Party.

(d) Bankruptcy. Each Party shall have the right to terminate this Agreement immediately in its entirety upon written notice to the other Party if such other Party makes a general assignment for the benefit of creditors, files an insolvency petition in bankruptcy, petitions for or acquiesces in the appointment of any receiver, trustee, or similar officer to liquidate or conserve its business or any substantial part of its assets, commences under the laws of any jurisdiction any proceeding involving its insolvency, bankruptcy, reorganization, adjustment of debt, dissolution, liquidation, or any other similar proceeding for the release of financially distressed debtors, or becomes a party to any proceeding or action of the type described above and such proceeding is not dismissed within [*] after the commencement thereof.

(e) Patent Challenge. Rigel shall have the right to terminate this Agreement immediately in its entirety upon written notice to Grifols if Grifols or any of its Affiliates or Sublicensees directly, or indirectly through any Third Party, commences any interference or opposition proceeding with respect to, challenges the validity or enforceability of, or opposes any extension of or the grant of a supplementary protection certificate with respect to, any Rigel Patent.

(f) Safety Reasons. Either Party shall have the right to terminate this Agreement in its entirety upon written notice to the other Party if the terminating Party reasonably determines, based upon additional information that becomes available or an analysis of the existing information at any time, that the medical risk/benefit

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of the Product is so unfavorable that it would be incompatible with the welfare of patients to Develop or Commercialize or to continue to Develop or Commercialize such Product. Prior to any such termination, the terminating Party shall comply with such internal review and management approval processes as it would normally follow in connection with the termination of the development and commercialization of its own products for safety reasons. The terminating Party shall document the decisions of such committees or members of management and the basis therefor and shall make such minutes and documentation available to the other Party promptly upon written request.

(g) Manufacturing and Supply related obligations. Grifols shall have the right to terminate this Agreement in its entirety upon written notice to Rigel and without penalty, under any of the following events:

(i) within a period of [*] as of the Effective Date (or such longer term as the Parties may agree to in writing), Grifols has not been able to identify and negotiate a satisfactory agreement with a Third Party for the provision of pharmacovigilance services within the scope of this Agreement and the Commercial Supply Agreement; and/or

(ii) within a period of [*] as of the Effective Date (or such longer term as the Parties may agree to in writing), Grifols has not been able to identify and negotiate a satisfactory agreement with a Third Party for the provision of testing, labeling and packaging services within the scope of this Agreement and the Commercial Supply Agreement; and/or

(iii) within a period of [*] as of the Effective Date (or such longer term as the Parties may agree to in writing), Grifols or a Grifols' Affiliate, has not been able to obtain approval from the Spanish or other Regulatory Authorities to amend its license and/or permits in order to include the Products; and/or

(iv) within a period of [*] as of the Effective Date (or such longer term as the Parties may agree to in writing), if the Parties have not executed the Commercial Supply Agreement.

14.3 Termination for Convenience. Following the [*] anniversary of the date of receipt of the first MAA Approval for the Product in the Grifols Territory, Grifols shall have the right to terminate this Agreement in its entirety without cause upon [*] written notice to Rigel. For clarity, termination under this Section 14.3 shall not trigger Rigel's refund obligation under Section 14.2(a).

14.4 Termination due to Acquisition of Rigel by a Competing Company. In the case Rigel is acquired by a Competing Company and Grifols has not provided its consent to an assignment or transfer of this Agreement to such Competing Company during the Consent Process, this Agreement shall terminate upon closing of such an acquisition of Rigel by such a Competing Company and [*] written notice, and Rigel or the acquiring party shall pay Grifols a one-time payment of [*], within [*] from the closing date of such acquisition. The "**Consent Process**" shall be [*]. Upon [*], Grifols will have [*] to provide Rigel with Grifols' written consent to assign or otherwise transfer this Agreement should such discussions result in an acquisition of Rigel. [*]. As used herein, a "**Competing Company**" means a company and/or its affiliated entities which [*].

14.5 Effects of Termination. Upon any termination of this Agreement by either Party, the following subsections (a)-(g) will apply. For clarity, during the pendency of any termination notice period, all of the terms and conditions of this Agreement shall remain in effect and the Parties shall continue to perform all of their respective obligations hereunder. For further clarity, if this Agreement is terminated only with respect to one or more countries pursuant to Section 5.1, the following shall apply only with respect to such terminated countries.

(a) Licenses. The licenses granted by Rigel to Grifols will automatically terminate, including all sublicenses granted by Grifols to any Sublicensee.

(b) Regulatory Materials; Data. Within [*] after the effective date of such termination, Grifols shall transfer and assign to Rigel all Regulatory Filings and Regulatory Approvals for the Product, Data from all preclinical, non-clinical, and clinical studies of the Product conducted by or on behalf of Grifols, its Affiliates, or Sublicensees, and all pharmacovigilance data (including all adverse event data) on the Product. Such transfer shall be [*] and shall be [*]. In addition, at Rigel's request, Grifols shall provide Rigel with reasonable assistance with any inquiries and correspondence with Regulatory Authorities regarding the Product in the Grifols Territory, such assistance shall be limited to a period of [*] after such termination.

(c) Development Wind-Down. Grifols shall either, as directed by Rigel, (i) wind-down any ongoing Development activities (including any Clinical Trials) of Grifols or its Affiliates and Sublicensees with respect to the Product in the Grifols Territory in an orderly fashion or (ii) promptly transfer such Development activities to Rigel or its designee, in each case in compliance with all Applicable Laws.

(d) Commercial Wind-Down. Grifols shall, as directed by Rigel and except when this Agreement has been terminated under Sections 14.2(a), (b), (c) (material breach by Rigel), (d) (insolvency of Rigel), and/or (f) , (i) continue certain ongoing Commercial activities of Grifols and its Affiliates and Sublicensees with respect to the Product in the Grifols Territory for a period of up to [*] after the effective date of termination, as determined by Rigel, and (ii) handoff such Commercial activities to Rigel or its designee, on a timetable to be set by Rigel, not to exceed [*] after the effective date of termination, and in compliance with all Applicable Laws. Except as necessary to conduct the foregoing activities as directed by Rigel, Grifols shall immediately discontinue its (and shall ensure that its Affiliates and Sublicensees immediately discontinue their) promotion, marketing, offering for sale, and servicing of the Product and its use of all Product Marks. If Grifols books any sales during such transition period, Grifols shall continue to pay Rigel royalties on such sales on the same terms as if this Agreement has not been terminated.

(e) Transition Assistance. Grifols shall use Commercially Reasonable Efforts to seek an orderly transition of the Development and Commercialization of the Product to Rigel or its designee as follows: (1) Grifols shall provide reasonable consultation and assistance for a period of no more than [*] after the effective date of termination for the purpose of transferring or transitioning to Rigel all Grifols Know-How not already in Rigel's possession and, at Rigel's request, all then-existing commercial arrangements relating to the Product that Grifols is able, using Commercially Reasonable Efforts, to transfer or transition to Rigel or its designee, in each case, to the extent reasonably necessary for Rigel to continue the Development or Commercialization of the Product in the Grifols Territory. (2) If any such contract between Grifols and a Third Party is not assignable to Rigel or its designee (whether by such contract's terms or because such contract does not relate specifically to the Product) but is otherwise reasonably necessary for Rigel to continue the Development or Commercialization of the Product in the Grifols Territory, or if Grifols is performing such work for the Product itself (and thus there is no contract to assign), then Grifols shall reasonably cooperate with Rigel to negotiate for the continuation of such services for Rigel from such entity, or Grifols shall continue to perform such work for Rigel, as applicable, for a reasonable period (not to exceed [*]) after the effective date of termination at Rigel's cost until Rigel establishes an alternate, validated source of such services. It is understood that (1) and (2) as set forth within this Section 14.4 (e) is subject to good faith negotiations among the Parties to set forth the terms and conditions applicable to these transition assistance activities.

(f) Remaining Inventories. Rigel shall acquire from Grifols any or all of the inventory of the Product held by Grifols as of the date of termination that has at least [*] of remaining shelf life and at the same price Grifols paid for it according to the terms of the Commercial Supply Agreement.

(g) Trademarks. Grifols shall transfer and assign to Rigel, upon Rigel's request, all or part of the Grifols Product Marks, under the terms and conditions that the Parties may agree to at that time.

14.6 Confidential Information. Upon expiration or termination of this Agreement in its entirety, except to the extent that a Party obtains or retains the right to use the other Party's Confidential Information, each Party shall promptly return to the other Party, or delete or destroy, all relevant records and materials in such Party's possession

or control containing Confidential Information of the other Party; provided that such Party may keep one copy of such materials for archival purposes only subject to continuing confidentiality obligations. All Grifols Data and Regulatory Filings assigned to Rigel upon termination of this Agreement will be deemed Rigel's Confidential Information and no longer Grifols' Confidential Information.

14.7 Survival. Expiration or termination of this Agreement shall not relieve the Parties of any obligation or right accruing prior to such expiration or termination. Except as set forth below or elsewhere in this Agreement, the obligations and rights of the Parties under the following provisions of this Agreement shall survive expiration or termination of this Agreement: Sections 2.5, 10.1, 11.4, 13.1, 13.2, 13.3, 13.6, 14.4, 14.5, 14.6, 14.7, 14.8 and 14.9, and Articles 1, 8 (solely to the extent any payment obligation has accrued prior to the effective date of termination), 9 (solely to the extent any payment obligation has accrued prior to the effective date of termination or as part of the transition activities pursuant to the terms and conditions under this Article 14), 12, 15 and 16.

14.8 Exercise of Right to Terminate. All rights and obligations of a Party accrued prior to the effective date of a termination (including the rights to receive reimbursement for costs incurred prior to the effective date of such termination and payments accrued or due prior to the effective date of such termination) shall survive such termination.

14.9 Rights in Bankruptcy. All rights and licenses granted under or pursuant to this Agreement by one Party to the other Party are, and will otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws, licenses of right to "intellectual property" as defined under Section 101 of the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws. The Parties agree that a Party that is a licensee of such rights under this Agreement will retain and may fully exercise all of its rights and elections under the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against a Party to this Agreement under the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws, the other Party will be entitled to a complete duplicate of (or complete access to, as appropriate) any such intellectual property and all embodiments of such intellectual property, and same, if not already in its possession, will be promptly delivered to it (a) upon any such commencement of a bankruptcy or insolvency proceeding upon its written request therefor, unless the bankrupt Party elects to continue to perform all of its obligations under this Agreement, or (b) if not delivered under (a) above, following the rejection of this Agreement by or on behalf of the bankrupt Party upon written request therefor by the other Party.

15. Dispute Resolution

15.1 Objective. The Parties recognize that disputes as to matters arising under or relating to this Agreement or either Party's rights and obligations hereunder may arise from time to time. It is the objective of the Parties to establish procedures to facilitate the resolution of such disputes in an expedient manner by mutual cooperation and without resort to litigation. To accomplish this objective, the Parties agree to follow the procedures set forth in this Article 15 to resolve any such dispute if and when it arises.

15.2 Executive Mediation. The Parties shall attempt to settle any dispute, controversy, or claim that arises out of, or relates to, any provision of the Agreement ("Disputed Matter") by first referring the Disputed Matter to the Executive Officers (or their respective designees having the authority to settle such Disputed Matter). Either Party may initiate such informal dispute resolution by sending written notice of the Disputed Matter to the other Party, and, within [*] after such notice, the Executive Officers (or their respective designees) shall meet for attempted resolution by good faith negotiations. If the Executive Officers (or their respective designees) are unable to resolve such dispute within [*] of their first meeting for such negotiations, either Party may seek to have such dispute resolved in accordance with Section 15.3 below.

15.3 Dispute Resolution.

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(a) If the Parties are unable to resolve a Disputed Matter using the process described in Section 15.2, then a Party seeking further resolution of the Disputed Matter will submit the Disputed Matter to resolution by final and binding arbitration. Whenever a Party will decide to institute arbitration proceedings, it will give written notice to that effect to the other Party. Arbitration will be held in [*] and administered by the American Arbitration Association ("**AAA**") pursuant to its Rules then in effect (the "Rules"), except as otherwise provided herein and applying the substantive law specified in Section 16.1. The arbitration will be conducted by a panel of three (3) arbitrators appointed in accordance with the Rules; provided that each Party will, within [*] after the institution of the arbitration proceedings, appoint an arbitrator, and such arbitrators will together, within [*], select a third (3rd) arbitrator as the chairperson of the arbitration panel. Each arbitrator must have significant business or legal experience in the pharmaceutical business. If the two (2) initial arbitrators are unable to select a third (3rd) arbitrator within such [*] period, the third (3rd) arbitrator will be appointed in accordance with Rules. After conducting any hearing and taking any evidence deemed appropriate for consideration, the arbitrators will be requested to render their opinion within [*] of the final arbitration hearing. No panel of arbitrators will have the power to award damages excluded pursuant to Section 12.5 under this Agreement and any arbitral award that purports to award such damages is expressly prohibited and void ab initio. Decisions of the panel of arbitrators that conform to the terms of this Section 15.3 will be final and binding on the Parties and judgment on the award so rendered may be entered in any court of competent jurisdiction. The losing Party, as determined by the panel of arbitrators, will pay all of the AAA administrative costs and fees of the arbitration and the fees and costs of the arbitrators, and the arbitrators will be directed to provide for payment or reimbursement of such fees and costs by the losing Party. If the panel of arbitrators determines that there is no losing Party, the Parties will each bear one-half of those costs and fees and the arbitrators' award will so provide. Notwithstanding the foregoing, the prevailing Party in any legal action shall be entitled to its reasonable attorneys' fees, expert or witness fees, and any other fees and costs.

(b) Notwithstanding the terms of and procedures set forth in Section 15.2 or 15.3(a), any applications, motions, or orders to show cause seeking temporary restraining orders, preliminary injunctions, or other similar preliminary or temporary legal or equitable relief ("**Injunctive Relief**") concerning a Disputed Matter (including Disputed Matters arising out of a potential or actual breach of the confidentiality and non-use provisions in Article 13) may immediately be brought in the first instance and without invocation or exhaustion of the procedures set forth in subsections (a) and (b) for hearing and resolution in and by any court of competent jurisdiction. Alternatively, a party seeking Injunctive Relief may immediately institute arbitral proceedings without invocation or exhaustion of the procedures set forth in subsections (a) and (b), and any such Injunctive Relief proceedings will be administered by the AAA pursuant to its AAA emergency arbitration procedures then in effect and applying the substantive law specified in Section 16.1. In either event, once the Injunctive Relief proceedings have been conducted and a decision rendered thereon by the court or arbitral forum, the Parties shall, if the Disputed Matter is not finally resolved by the Injunctive Relief, proceed to resolve the Disputed Matter in accordance with the terms of Section 15.2 and 15.3(a).

(c) Notwithstanding the foregoing, this Section 15.3 shall not apply to any dispute, controversy, or claim that concerns (i) the validity, enforceability, or infringement of a patent, trademark, or copyright; or (ii) any antitrust, anti-monopoly, or competition law or regulation, whether or not statutory. Disputes regarding the foregoing shall be brought in a court of competent jurisdiction in which such patent or trademark or copyright was granted or arose, or in which such law or regulation applies, in each case as applicable.

16. General Provisions

16.1 Governing Law. This Agreement, and all questions regarding the existence, validity, interpretation, breach, or performance of this Agreement, shall be governed by, and construed and enforced in accordance with, the laws of the State of New York, United States, without reference to its conflicts of law principles.

16.2 Entire Agreement; Modification. This Agreement, including the exhibits, is both a final expression of the Parties' agreement and a complete and exclusive statement with respect to all of its terms. This Agreement supersedes all prior and contemporaneous agreements and communications, whether oral, written, or

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otherwise, concerning any and all matters contained herein. This Agreement may only be modified or supplemented in a writing expressly stated for such purpose and signed by the Parties to this Agreement.

16.3 Relationship Between the Parties. The Parties' relationship, as established by this Agreement, is solely that of independent contractors. This Agreement does not create any partnership, joint venture, or similar business relationship between the Parties. Neither Party is a legal representative of the other Party, and neither Party can assume or create any obligation, representation, warranty, or guarantee, express or implied, on behalf of the other Party for any purpose whatsoever.

16.4 Affiliates. Each Party may exercise its rights or fulfill its obligations under this Agreement through one or more of its Affiliates, provided that such Party shall remain primarily responsible to the other Party for the performance and action of such Affiliates.

16.5 Non-Waiver. The failure of a Party to insist upon strict performance of any provision of this Agreement or to exercise any right arising out of this Agreement shall neither impair that provision or right nor constitute a waiver of that provision or right, in whole or in part, in that instance or in any other instance. Any waiver by a Party of a particular provision or right shall be in writing, shall be as to a particular matter and, if applicable, for a particular period of time and shall be signed by such Party.

16.6 Assignment. Except as expressly provided hereunder, neither this Agreement nor any rights or obligations hereunder may be assigned or otherwise transferred by either Party without the prior written consent of the other Party (which consent shall not be unreasonably withheld); provided, however, that either Party may assign or otherwise transfer this Agreement and its rights and obligations hereunder without the other Party's consent:

(a) in connection with the transfer or sale of all or substantially all of the business or assets of such Party relating to the Compound and Product to a Third Party, whether by merger, consolidation, divesture, restructure, sale of stock, sale of assets, or otherwise, provided that in the event of any such transaction (whether this Agreement is actually assigned or is assumed by the acquiring Party by operation of law (e.g., in the context of a reverse triangular merger)), the intellectual property rights of the acquiring Party to such transaction (if other than one of the Parties to this Agreement) shall not be included in the technology licensed hereunder; or

(b) to an Affiliate, provided that the assigning Party shall remain liable and responsible to the non-assigning Party hereto for the performance and observance of all such duties and obligations by such Affiliate, and provided further that if the entity to which this Agreement is assigned ceases to be an Affiliate of the assigning Party, the Agreement shall be automatically assigned back to the assigning Party or its successor.

The rights and obligations of the Parties under this Agreement shall be binding upon and inure to the benefit of the successors and permitted assigns of the Parties specified above, and the name of a Party appearing herein will be deemed to include the name of such Party's successors and permitted assigns to the extent necessary to carry out the intent of this Section 16.6. Any assignment not in accordance with this Section 16.6 shall be null and void.

16.7 Severability. If, for any reason, any part of this Agreement is adjudicated invalid, unenforceable, or illegal by a court of competent jurisdiction, such adjudication shall not, to the extent feasible, affect or impair, in whole or in part, the validity, enforceability, or legality of any remaining portions of this Agreement. All remaining portions shall remain in full force and effect as if the original Agreement had been executed without the invalidated, unenforceable, or illegal part.

16.8 Notices. Any notice to be given under this Agreement must be in writing and delivered either in person, by (a) air mail (postage prepaid) requiring return receipt, (b) overnight courier, or (c) facsimile confirmed thereafter by any of the foregoing, to the Party to be notified at its address(es) given below, or at any address such Party may designate by prior written notice to the other in accordance with this Section 16.8. Notice shall be deemed sufficiently given for all purposes upon the earliest of: (i) the date of actual receipt, (ii) if air mailed, [*] after the date of postmark, (iii) if delivered by overnight courier, the next day the overnight courier regularly makes deliveries,

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or (iv) if sent by facsimile, the date of confirmation of receipt if during the recipient's normal business hours, otherwise the next business day.

If to Grifols, notices must be addressed to:

Grifols
Grifols Worldwide Operations Limited
Grange Castle Business Park
Clondalkin, Dublin 22, Ireland
Attention: [*]
Facsimile: [*]

If to Rigel, notices must be addressed to:

Rigel Pharmaceuticals, Inc.
1180 Veterans Blvd.
South San Francisco, CA 94080
USA
Attention: [*]
Facsimile: [*]

16.9 Force Majeure. Each Party shall be excused from liability for the failure or delay in performance of any obligation under this Agreement (other than failure to make payment when due) by reason of any event beyond such Party's reasonable control including Acts of God, fire, flood, explosion, earthquake, pandemic flu, or other natural forces, war, civil unrest, acts of terrorism, accident, destruction or other casualty, or any other event similar to those enumerated above. Such excuse from liability shall be effective only to the extent and duration of the event(s) causing the failure or delay in performance and provided that the Party has not caused such event(s) to occur and uses reasonable efforts to overcome such event. Notice of a Party's failure or delay in performance due to force majeure must be given to the other Party within [*] after its occurrence together with an estimate of its expected duration and impact on the performance of such Party's obligations under this Agreement. The Party affected by such force majeure event shall exercise reasonable commercial efforts to overcome it and mitigate or limit damages to the non-affected Party. All delivery dates under this Agreement that have been affected by force majeure shall be tolled for the duration of such force majeure. In no event shall any Party be required to prevent or settle any labor disturbance or dispute.

16.10 Interpretation. The headings of clauses contained in this Agreement preceding the text of the Sections, subsections, and paragraphs hereof are inserted solely for convenience and ease of reference only and shall not constitute any part of this Agreement, or have any effect on its interpretation or construction. All references in this Agreement to the singular shall include the plural where applicable. Unless otherwise specified, references in this Agreement to any Article shall include all Sections, subsections, and paragraphs in such Article, references to any Section shall include all subsections and paragraphs in such Section, and references in this Agreement to any subsection shall include all paragraphs in such subsection. The word "including" and similar words means including without limitation. The word "or" means "and/or" unless the context dictates otherwise because the subjects of the conjunction are, or are intended to be, mutually exclusive. The words "herein", "hereof", and "hereunder" and other words of similar import refer to this Agreement as a whole and not to any particular Section or other subdivision. All references to days in this Agreement mean calendar days, unless otherwise specified. Ambiguities and uncertainties in this Agreement, if any, shall not be interpreted against either Party, irrespective of which Party may be deemed to have caused the ambiguity or uncertainty to exist. This Agreement has been prepared in the English language and the English language shall control its interpretation. In addition, all notices required or permitted to be given hereunder, and all written, electronic, oral, or other communications between the Parties regarding this Agreement shall be in the English language.

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16.11 Counterparts; Electronic or Facsimile Signatures. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument. This Agreement may be executed and delivered electronically or by facsimile and upon such delivery such electronic or facsimile signature will be deemed to have the same effect as if the original signature had been delivered to the other Party.

{Signature Page Follows}

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In Witness Whereof, the Parties hereto have caused this **Exclusive Commercialization License Agreement** to be executed and entered into by their duly authorized representatives as of the Effective Date.

Rigel Pharmaceuticals, Inc.	**Grifols Worldwide Operations Limited**
By: /s/ Raul Rodriguez	By: /s/ Alfredo Arroyo
Name: Raul Rodriguez	Name: Alfredo Arroyo
Title: CEO & President	Title: CFO

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List of Exhibits:

Exhibit A:	**The Compound and Product**
Exhibit B:	**Rigel Patents**
Exhibit C:	**Product Marks**
Exhibit D:	**Press Release**

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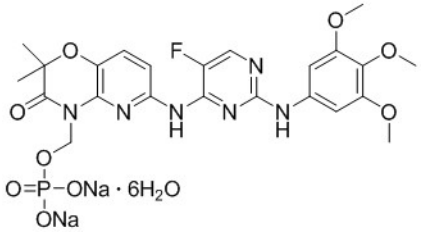
Exhibit A:
The Compound and Product

The chemical name for the Compound, fostamatinib disodium hexahydrate, is disodium [6-[[5-fluoro-2-(3,4,5-trimethoxyanilino) pyrimidin-4-yl]amino]-2,2-dimethyl-3-oxo-pyrido[3,2-b][1,4]oxazin-4-yl]methyl phosphate hexahydrate.

Fostamatinib disodium hexahydrate has the molecular formula $C_{23}H_{24}FN_6Na_2O_9P \cdot 6H_2O$, and the molecular weight is 732.52. The structural formula is:



The Product is an oral tablet containing fostamatinib disodium hexahydrate in the amount equivalent to 100 mg and 150 mg of fostamatinib free acid. The inactive ingredients are: (Tablet Core) mannitol, sodium bicarbonate, sodium starch glycolate, povidone, magnesium stearate, (Coating) polyvinyl alcohol, titanium dioxide, polyethylene glycol 3350, talc, iron oxide yellow and iron oxide red.

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Exhibit B:
Rigel Patents

[*]

{Redacted content comprises approximately 16 pages.}

[*] = Certain confidential information contained in this document, marked by brackets, has been omitted because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Exhibit C:
Trademark Protection Status

[*]

{Redacted content comprises approximately 2 pages.}

Exhibit D:

Press Release

Rigel Pharmaceuticals Enters Collaboration and License Agreement with Grifols, S.A. to Commercialize Fostamatinib in Europe

- **Grifols gains exclusive rights to fostamatinib in all potential indications in Europe and Turkey**
- **Rigel to receive an upfront payment of $30 million, with the potential for $297.5 million in total regulatory and commercial milestones, including a $20 million payment upon EMA approval of fostamatinib in chronic immune thrombocytopenia (ITP), which is currently under review**
- **Rigel to receive stepped royalty payments reaching 30% of net sales of fostamatinib**

SOUTH SAN FRANCISCO, Calif., [*] /PRNewswire/ -- Rigel Pharmaceuticals, Inc. (Nasdaq: RIGL) today announced that it has entered into an exclusive license and supply agreement with Spain-based Grifols, S.A (MCE: GRF, MCE: GRF.P, NASDAQ: GRFS) to commercialize fostamatinib disodium hexahydrate in all potential indications in Europe and Turkey. Grifols is a global healthcare company and a leading producer of plasma-derived medicines for the treatment of rare and chronic diseases, including intravenous immunoglobulin (IVIG) which is used in the treatment of ITP and AIHA. Fostamatinib is commercially available in the U.S. under the brand name TAVALISSE® (fostamatinib disodium hexahydrate) and is the first and only SYK inhibitor indicated for the treatment of thrombocytopenia in adult patients with chronic immune thrombocytopenia who have had an insufficient response to a previous treatment.

“Grifols has a broad presence in Europe and an established position in the hematology commercial landscape, which supports our goal of bringing fostamatinib to patients in these countries,” said Raul Rodriguez, president and CEO of Rigel. “Our marketing authorization application for fostamatinib in chronic ITP is currently under review by the European Medicines Agency, and we anticipate a decision by the end of 2019. This provides a potential opportunity for fostamatinib to begin generating revenue in the European market in 2020.”

Under terms of the agreement, Rigel will receive a $30 million upfront cash payment, with the potential for to $297.5 million in payments related to regulatory and commercial milestones, which includes a $20 million payment for EMA approval of fostamatinib for the treatment of chronic ITP. Rigel will receive significant stepped double-digit royalty payments based on tiered net sales which may reach 30% of net sales. In return, Grifols receives exclusive rights to fostamatinib in human diseases, including chronic ITP, autoimmune hemolytic anemia (AIHA), and IgA nephropathy (IgAN), in Europe and Turkey. Rigel retains the remaining global rights to fostamatinib outside the Grifols territories and those rights previously granted to Kissei Pharmaceuticals (in Japan, China, Taiwan and the Republic of Korea).

“Given our global leadership position as a manufacturer of plasma medicines and our in-depth knowledge and expertise in blood disorders, adding fostamatinib to our portfolio is a natural fit for Grifols,” said Joel Abelson, President, Bioscience Commercial Division of Grifols. “Its potential in multiple indications, including ITP, will provide significant benefit for patients and is a valuable addition to our portfolio.”

On October 4, 2018, the EMA validated the marketing authorization application for fostamatinib in adult chronic ITP, which was submitted by Rigel. The company anticipates a decision from the EMA’s Committee on Human Medicinal Products by the fourth quarter of 2019 and potential European approval by the end of 2019.

About ITP

In patients with ITP, the immune system attacks and destroys the body's own blood platelets, which play an active role in blood clotting and healing. Common symptoms of ITP are excessive bruising and bleeding. People suffering with chronic ITP may live with an increased risk of severe bleeding events that can result in serious medical

complications or even death. Current therapies for ITP include steroids, blood platelet production boosters (TPOs) and splenectomy. However, not all patients respond to existing therapies. As a result, there remains a significant medical need for additional treatment options for patients with ITP.

About TAVALISSE

Indication

TAVALISSE® (fostamatinib disodium hexahydrate) tablets is indicated in the US for the treatment of thrombocytopenia in adult patients with chronic immune thrombocytopenia (ITP) who have had an insufficient response to a previous treatment.

Important Safety Information

Warnings and Precautions

- Hypertension can occur with TAVALISSE treatment. Patients with pre-existing hypertension may be more susceptible to the hypertensive effects. Monitor blood pressure every 2 weeks until stable, then monthly, and adjust or initiate antihypertensive therapy for blood pressure control maintenance during therapy. If increased blood pressure persists, TAVALISSE interruption, reduction, or discontinuation may be required.
- Elevated liver function tests (LFTs), mainly ALT and AST, can occur with TAVALISSE. Monitor LFTs monthly during treatment. If ALT or AST increase to >3 x upper limit of normal, manage hepatotoxicity using TAVALISSE interruption, reduction, or discontinuation.
- Diarrhea occurred in 31% of patients and severe diarrhea occurred in 1% of patients treated with TAVALISSE. Monitor patients for the development of diarrhea and manage using supportive care measures early after the onset of symptoms. If diarrhea becomes severe (≥Grade 3), interrupt, reduce dose or discontinue TAVALISSE.
- Neutropenia occurred in 6% of patients treated with TAVALISSE; febrile neutropenia occurred in 1% of patients. Monitor the ANC monthly and for infection during treatment. Manage toxicity with TAVALISSE interruption, reduction, or discontinuation.
- TAVALISSE can cause fetal harm when administered to pregnant women. Advise pregnant women the potential risk to a fetus. Advise females of reproductive potential to use effective contraception during treatment and for at least 1 month after the last dose. Verify pregnancy status prior to initiating TAVALISSE. It is unknown if TAVALISSE or its metabolite is present in human milk. Because of the potential for serious adverse reactions in a breastfed child, advise a lactating woman not to breastfeed during TAVALISSE treatment and for at least 1 month after the last dose.

Drug Interactions

- Concomitant use of TAVALISSE with strong CYP3A4 inhibitors increases exposure to the major active metabolite of TAVALISSE (R406), which may increase the risk of adverse reactions. Monitor for toxicities that may require a reduction in TAVALISSE dose.
- It is not recommended to use TAVALISSE with strong CYP3A4 inducers, as concomitant use reduces exposure to R406.
- Concomitant use of TAVALISSE may increase concentrations of some CYP3A4 substrate drugs and may require a dose reduction of the CYP3A4 substrate drug.
- Concomitant use of TAVALISSE may increase concentrations of BCRP substrate drugs (eg, rosuvastatin) and P-Glycoprotein (P-gp) substrate drugs (eg, digoxin), which may require a dose reduction of the BCRP and P-gp substrate drug.

Adverse Reactions

- Serious adverse drug reactions in the ITP double-blind studies were febrile neutropenia, diarrhea, pneumonia, and hypertensive crisis, which occurred in 1% of TAVALISSE patients. In addition, severe adverse reactions occurred including dyspnea and hypertension (both 2%), neutropenia, arthralgia, chest pain, diarrhea, dizziness, nephrolithiasis, pain in extremity, toothache, syncope, and hypoxia (all 1%).

- Common adverse reactions (≥5% and more common than placebo) from the FIT-1 and FIT-2 phase 3 clinical trials included: diarrhea, hypertension, nausea, dizziness, ALT and AST increased, respiratory infection, rash, abdominal pain, fatigue, chest pain, and neutropenia.

Please see www.TAVALISSE.com for full Prescribing Information.

To report side effects of prescription drugs to the FDA, visit www.fda.gov/medwatch or call 1-800-FDA-1088 (800-332-1088).

TAVALISSE is a trademark of Rigel Pharmaceuticals, Inc.

About Rigel (www.rigel.com)
Rigel Pharmaceuticals, Inc., is a biotechnology company dedicated to discovering, developing and providing novel small molecule drugs that significantly improve the lives of patients with immune and hematologic disorders, cancer and rare diseases. Rigel's pioneering research focuses on signaling pathways that are critical to disease mechanisms. The company's first FDA approved product is TAVALISSE™ (fostamatinib disodium hexahydrate), an oral spleen tyrosine kinase (SYK) inhibitor, for the treatment of adult patients with chronic immune thrombocytopenia who have had an insufficient response to a previous treatment. Rigel's current clinical programs include an upcoming Phase 3 study of fostamatinib in autoimmune hemolytic anemia and an ongoing Phase 1 study of R835, a proprietary molecule from its interleukin receptor associated kinase (IRAK) program. In addition, Rigel has product candidates in clinical development with partners BerGenBio AS, Daiichi Sankyo, and Aclaris Therapeutics.

About Grifols
Grifols is a global healthcare company with more than 75 years of legacy dedicated to improving the health and well-being of people around the world. Grifols produces essential plasma-derived medicines for patients, and provides hospitals and healthcare professionals with the tools, information and services they need to help them deliver expert medical care.

Grifols' three main divisions – Bioscience, Diagnostic and Hospital – develop, produce and market innovative products and services that are available in more than 100 countries.

With a network of 250 plasma donation centers, Grifols is a leading producer of plasma-derived medicines used to treat rare, chronic and, at times, life-threatening conditions. As a recognized leader in transfusion medicine, Grifols offers a comprehensive portfolio of diagnostic products designed to support safety from donation through transfusion. The Hospital Division provides intravenous (IV) therapies, clinical nutrition products and hospital pharmacy systems, including systems that automate drug compounding and control drug inventory.

Grifols is headquartered in Barcelona, Spain, and has 20,000 employees in 30 countries. In 2017, sales exceeded 4,300 million euros. Grifols demonstrates its strong commitment to advancing healthcare by allocating a significant portion of its annual income to research, development and innovation.

The company's class A shares are listed on the Spanish Stock Exchange, where they are part of the Ibex-35 (MCE:GRF). Grifols non-voting class B shares are listed on the Mercado Continuo (MCE:GRF.P) and on the US NASDAQ via ADRs (NASDAQ:GRFS).

For more information, visit www.grifols.com

Forward Looking Statements
This release contains forward-looking statements relating to, among other things, Rigel's partnership with Grifols; Rigel's partnership with Kissei; Rigel's ability to achieve regulatory and commercial milestone payments under its agreement with Grifols; the potential opportunity for fostamatinib to begin generating revenue in the European market in 2020; Rigel's interactions with the EMA; and the timing of the EMA's MAA review process and when Rigel expects a decision. Any statements contained in this press release that are not statements of historical fact may be deemed to be forward-looking statements. Words such as "planned," "will," "may," "expect," "anticipate," and

similar expressions are intended to identify these forward-looking statements. These forward-looking statements are based on Rigel's current expectations and inherently involve significant risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in such forward looking statements as a result of these risks and uncertainties, which include, without limitation, risks and uncertainties associated with the commercialization and marketing of TAVALISSE; risks that the FDA, EMA or other regulatory authorities may make adverse decisions regarding fostamatinib; risks that TAVALISSE clinical trials may not be predictive of real-world results or of results in subsequent clinical trials; risks that TAVALISSE may have unintended side effects, adverse reactions or incidents of misuses; the availability of resources to develop Rigel's product candidates; market competition; as well as other risks detailed from time to time in Rigel's reports filed with the Securities and Exchange Commission, including its Quarterly Report on Form 10-Q for the period ended September 30, 2018. Rigel does not undertake any obligation to update forward-looking statements and expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein.

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Phone: 917.816.6712
Email: jessica.daitch@syneoshealth.com

Exhibit 31.1

CERTIFICATIONS

I, Raul R. Rodriguez, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Rigel Pharmaceuticals, 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(s) 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: May 7, 2019

/s/ RAUL R. RODRIGUEZ
Raul R. Rodriguez
Chief Executive Officer

Exhibit 31.2

CERTIFICATIONS

I, Dean L. Schorno, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Rigel Pharmaceuticals, 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(s) 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: May 7, 2019

/s/ DEAN L. SCHORNO
Dean L. Schorno
Chief Financial Officer

Exhibit 32.1

CERTIFICATION

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Raul R. Rodriguez, Chief Executive Officer of Rigel Pharmaceuticals, Inc. (the "Company"), and Dean L. Schorno, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2019, to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act, and

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

In Witness Whereof, the undersigned have set their hands hereto as of May 7, 2019.

/s/ RAUL R. RODRIGUEZ	/s/ DEAN L. SCHORNO
Raul R. Rodriguez	Dean L. Schorno
Chief Executive Officer	Chief Financial Officer

This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Rigel Pharmaceuticals, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.