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 September 30, 2018

OR

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

For the transition period from __________ to __________

Commission file number 001-38161

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

Delaware	001-38161	27-1967997
(State or Other Jurisdiction of Incorporation or Organization)	(Commission File Number)	(IRS Employer Identification Number)

2800 Mount Ridge Road
Roseville, MN 55113-1127
(Address of Principal Executive Offices)

(651) 683-2807
(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 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 (check one):

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

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

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

As of November 8, 2018, there were 32,572,359 shares of common stock, $0.0001 par value per share, outstanding.

Terms

When we use the terms “we,” “us,” the “Company,” or “our” in this report, unless the context otherwise requires, we are referring to Calyxt, Inc. When we use the term “Cellectis” we are referring to Cellectis S.A., our controlling stockholder.

The name and trademark, “Cellectis”® and “TALEN”®, and other trademarks, trade names and service marks of Cellectis appearing in this Quarterly Report on Form 10-Q are the property of Cellectis. We own the name and trademark, “Calyxt”™, and own or license other trademarks, trade names and service marks of Calyxt appearing in this Quarterly Report on Form 10-Q. This Quarterly Report on Form 10-Q also contains additional trade names, trademarks and service marks belonging to other companies. We do not intend our use or display of other parties’ trademarks, trade names or service marks to imply, and such use or display should not be construed to imply, a relationship with, or endorsement or sponsorship of us by, these other parties.

Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains “forward-looking statements” within the meaning of the federal securities laws, including Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the Securities Exchange Act).

We have made these forward-looking statements in reliance on the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. In some cases, you can identify these statements by forward-looking words such as “may,” “might,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential” or “continue,” the negative of these terms and other comparable terminology. These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, our anticipated growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events.

There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements, including, without limitation, factors relating to:

- Our limited operating history;
- Our lack of commercial products and our inexperience with the commercialization of product candidates;
- Our incurrence of significant losses since our inception and likelihood that we will continue to incur significant losses for the foreseeable future;
- Our reliance on contractual counterparties;
- Significant competition from competitors with substantially greater resources than us;
- Public perceptions of genetically engineered products and ethical, legal, environmental, health and social concerns;
- Uncertain and evolving regulatory requirements within and outside of the United States;
- Government policies and regulations affecting the agricultural sector and related industries;
- Commodity prices and other market risks facing the agricultural sector;
- Our product development efforts use complex integrated technology platforms and require substantial time and resources;
- Our success in obtaining or maintaining necessary rights to product components and processes for our development pipeline through acquisitions and in-licenses;
- Our reliance on gene-editing technologies that may become obsolete in the future;
- Our need to raise additional funding and the availability of additional capital or capital on acceptable terms;
- Our reliance on third parties in connection with our field trials and research services;
- The recognition of value in our products by farmers, and the ability of farmers and food processors to work effectively with our crops;
- Our ability to secure third party contractors necessary for the commercial launch of our product;
- Our ability to accurately forecast demand for our products;
- The needs of food manufacturers and the recognition of shifting consumer preferences;
- Adverse natural conditions and the highly seasonal and weather-sensitive nature of our business;
- Our exposure to product liability claims;
- The geographic concentration of our business activities;
- Our ability to use net operating losses to offset future taxable income;
- The adequacy of our patents and patent applications;
- Our licensing of intellectual property from Cellectis and reliance on Cellectis to prosecute, maintain, defend or enforce such intellectual property;
- Uncertainty relating to our patent positions that involve complex scientific, legal and factual analysis;
- The limited lifespan of our patents and limitations in intellectual property protection in some countries outside the United States;
- Developments in patent and other intellectual property law;
- Our ability to identify relevant third-party patents and to interpret the relevance, scope and expiration of third party patents;
- Potential assertions of infringement, misappropriation or other violations of intellectual property rights, including licensing agreements;
- Loss or damage to our germplasm libraries;
- Our ability to retain and attract senior management and key employees;

- Our relationship with Cellectis, our controlling stockholder, and its ability to control the direction of our business;
- Our being a “controlled company” and, as a result, qualifying for, and intending to rely on, exemptions from certain corporate governance requirements;
- Our status as an emerging growth company; and
- Those factors discussed under the caption entitled “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the U.S. Securities and Exchange Commission, or the SEC, on March 14, 2018 (our “Annual Report”).

While the list of factors presented here is considered representative, no such list should be considered to be a complete statement of all potential risks and uncertainties. Unlisted factors may present significant additional obstacles to the realization of forward-looking statements. Consequences of material differences in results as compared with those anticipated in the forward-looking statements could include, among other things, business disruption, operational problems, financial loss, legal liability to third parties and similar risks, any of which could have a material adverse effect on our financial condition, results of operations, credit rating or liquidity. Therefore, you should not rely on any of these forward-looking statements.

Any forward-looking statement made by us in this Quarterly Report on Form 10-Q is based only on information currently available to us and speaks only as of the date of this report. We do not assume any obligation to publicly provide revisions or updates to any forward-looking statements after the date of this Quarterly Report on Form 10-Q, whether as a result of new information, future developments or otherwise, should circumstances change, except as otherwise required by securities and other applicable laws.

Market Data

Unless otherwise indicated, information contained in this Quarterly Report on Form 10-Q concerning our industry and the markets in which we operate is based on information from various sources, including independent industry publications. In presenting this information, we have also made assumptions based on such data and other similar sources, and on our knowledge of, and our experience to date in, the potential markets for our product. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section entitled “Risk Factors” in our Annual Report. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

Website Disclosure

We use our website (www.calyxt.com) and our corporate Twitter account (@Calyxt_Inc) as routine channels of distribution of company information, including press releases, analyst presentations, and supplemental financial information, as a means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD. Accordingly, investors should monitor our website and our corporate Twitter account in addition to following press releases, filings with the SEC, and public conference calls and webcasts. Additionally, we provide notifications of announcements as part of our website. Investors and others can receive notifications of new press releases posted on our website by signing up for email alerts.

None of the information provided on our website, in our press releases or public conference calls and webcasts or through social media is incorporated into, or deemed to be a part of, this Quarterly Report on Form 10-Q or in any other report or document we file with the SEC, and any references to our website or our corporate Twitter account are intended to be inactive textual references only.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Calyxt, Inc.
Condensed Balance Sheets
(Amounts in Thousands, Except Share Data and Per Share Data)

	September 30, 2018 (unaudited)	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 101,796	$ 56,664
Restricted cash	50	—
Trade accounts receivable	—	—
Due from related parties	166	167
Prepaid expenses and other current assets	967	626
Total current assets	102,979	57,457
Property and equipment, net	21,305	14,353
Other long-term assets	341	357
Total assets	$ 124,625	$ 72,167
Liabilities and stockholders' equity		
Current liabilities:		
Due to related parties	$ 1,937	$ 1,350
Accounts payable	1,240	1,023
Accrued salaries, wages, and other compensation	1,016	945
Accrued liabilities	2,669	893
Current deferred revenue	7	43
Total current liabilities	6,869	4,254
Non-current deferred revenue	91	289
Finance lease obligations and other long term liabilities	17,433	10,148
Total liabilities	24,393	14,691
Stockholders' equity:		
Common stock, $0.0001 par value; 275,000,000 shares authorized, 32,463,407 and 27,718,780 shares issued and outstanding as of September 30, 2018 and December 31, 2017, respectively	3	3
Preferred stock, $0.0001 par value; 50,000,000 shares authorized, no shares issued or outstanding as of September 30, 2018 and December 31, 2017, respectively	—	—
Additional paid-in capital	174,206	112,021
Accumulated deficit	(73,977)	(54,548)
Total stockholders' equity	100,232	57,476
Total liabilities and stockholders' equity	$ 124,625	$ 72,167

See accompanying notes to the Unaudited Condensed Financial Statements.

Calyxt, Inc.
Condensed Statements of Operations

(Amounts in Thousands except Shares Outstanding and Per Share Amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
	(unaudited)		(unaudited)	
Revenue	$ 27	$ 44	$ 234	$ 322
Operating expenses:				
Cost of revenue	—	—	—	—
Research and development	3,307	6,438	7,493	9,157
Selling, general, and administrative	4,419	6,553	12,228	10,141
Total operating expenses	7,726	12,991	19,721	19,298
Loss from operations	(7,699)	(12,947)	(19,487)	(18,976)
Interest income, net	228	48	88	4
Foreign currency transaction loss	(12)	(5)	(30)	(159)
Loss before income taxes	(7,483)	(12,904)	(19,429)	(19,131)
Income tax expense	—	—	—	—
Net loss	$ (7,483)	$ (12,904)	$ (19,429)	$ (19,131)
Basic and diluted loss per share	$ (0.23)	$ (0.51)	$ (0.65)	$ (0.89)
Weighted average shares outstanding—basic and diluted	$32,381,010	$25,531,572	$30,040,926	$21,615,703

See accompanying notes to the Unaudited Condensed Financial Statements.

Calyxt, Inc.
Condensed Statement of Stockholders' Equity
(Amounts in Thousands except Shares Outstanding)

	Shares Outstanding	Common Stock	Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity
Balances at December 31, 2017	27,718,780	$ 3	$ 112,021	$ (54,548)	$ 57,476
Net loss	—			(19,429)	(19,429)
Common shares issued upon exercise of options and other	687,127		2,128		2,128
Stock-based compensation	—		3,016		3,016
Issuance of common stock	4,057,500		57,041		57,041
Balances at September 30, 2018 (unaudited)	32,463,407	$ 3	$ 174,206	$ (73,977)	$ 100,232

See accompanying notes to the Unaudited Condensed Financial Statements.

Calyxt, Inc.
Condensed Statements of Cash Flows
(Amounts in Thousands)

	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
	(unaudited)	
Operating activities		
Net loss	$ (19,429)	$(19,131)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation	727	414
Stock-based compensation	3,016	9,980
Unrealized transaction gain (loss) on related party activity	12	(8)
Changes in operating assets and liabilities:		
Trade accounts receivable	—	110
Due to/from related parties	576	1,534
Prepaid expenses and other assets	(325)	(260)
Accounts payable	217	205
Accrued salaries, wages, and other compensation	70	160
Accrued liabilities	1,770	1,250
Deferred revenue	(234)	(222)
Net cash used in operating activities	(13,600)	(5,968)
Investing activities		
Purchases of property and equipment, net	(830)	(1,614)
Net cash used in investing activities	(830)	(1,614)
Financing activities		
Advances from Cellectis	—	3,000
Repayment of advances from Cellectis	—	(3,000)
Costs incurred related to the issuance of stock	(222)	(3,330)
Proceeds from common stock issuance	57,706	61,292
Proceeds from the exercise of stock options	2,128	182
Financing lease obligation	—	6,957
Net cash provided by financing activities	59,612	65,101
Net increase in cash, cash equivalents and restricted cash	45,182	57,519
Cash, cash equivalents and restricted cash—beginning of period	56,664	5,026
Cash, cash equivalents and restricted cash—end of period	$101,846	$ 62,545
Supplemental cash flow information		
Interest paid	$ 856	$ 44
Supplemental non-cash investing and financing transactions:		
Property and equipment included in financing lease obligations	$ 6,849	—
Offering costs in accounts payable and accrued liabilities	$ 443	$ 2,081
The following presents cash, cash equivalents and restricted cash by category within the condensed balance sheet:		
Cash and cash equivalents	$101,796	$ 62,545
Restricted cash	50	—
Total	$101,846	$ 62,545

See accompanying notes to the Unaudited Condensed Financial Statements.

1. Nature of Business

Calyxt, Inc., formerly known as Cellectis Plant Sciences, Inc., was founded in 2010 and incorporated in Delaware. The Company is headquartered in Roseville, Minnesota. The Company is a consumer-centric, food- and agriculture-focused company. Prior to the Company's initial public offering (IPO) on July 25, 2017, Calyxt was a wholly owned subsidiary of Cellectis. As of September 30, 2018, Cellectis owned approximately 70.0% of the Company's outstanding common stock. Calyxt's common stock is listed on the Nasdaq market under the ticker symbol "CLXT".

Initial Public Offering

On July 25, 2017, the Company completed an IPO of its common stock. The Company sold an aggregate of 8,050,000 shares of common stock at a price of $8.00 per share, including 1,050,000 shares of common stock pursuant to the exercise of the underwriters' option to purchase additional shares. In the aggregate, the Company received net proceeds from the IPO and exercise of the overallotment option of approximately $58.0 million, after deducting underwriting discounts and commissions of $3.1 million and offering expenses totaling approximately $3.3 million. As part of the IPO, Cellectis purchased 2,500,000 shares of common stock for a value of $20.0 million, the proceeds of which are included in the net proceeds of approximately $58.0 million. The Company used $5.7 million of the proceeds from Cellectis to pay a portion of the outstanding obligations owed to Cellectis.

Follow-on Public Offering

On May 22, 2018, the Company completed a follow-on offering of its common stock. The Company sold an aggregate of 4,057,500 shares of common stock at a price of $15.00 per share, including 457,500 shares of common stock pursuant to the exercise of the underwriters' option to purchase additional shares. In the aggregate, the Company received net proceeds from the follow-on offering and exercise of the overallotment option of approximately $57.0 million, after deducting underwriting discounts and commissions of $3.2 million and offering expenses totaling approximately $0.7 million. As part of the follow-on offering, Cellectis purchased 550,000 shares of common stock for a value of $8.3 million, the proceeds of which are included in the net proceeds of approximately $57.0 million.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and related notes required by accounting principles generally accepted in the United States of America for complete financial statements. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation have been included in the accompanying financial statements. The results of operations for the period ended September 30, 2018 are not necessarily indicative of the results that may be expected for the full year.

This interim information should be read in conjunction with the audited financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the SEC on March 14, 2018 (the Annual Report).

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, the Company evaluates its estimates, including those related to stock-based compensation and the valuation allowance for deferred tax assets and derivatives. The Company bases its estimates on historical experience and on various other market-specific and relevant assumptions that it believes to be reasonable under the circumstances. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and term deposits with original maturities of three months or less. The carrying value of these instruments approximate fair value. The balances, at times, may exceed federally insured limits. The Company has not experienced any losses on its cash and cash equivalents.

Restricted Cash

Restricted cash consists of a deposit to secure a one-year grain broker license for $50 thousand entered into in July 2018.

Trade Accounts Receivable

Accounts receivable are unsecured, are recorded at net realizable value, and do not bear interest. The Company makes judgments as to its ability to collect outstanding receivables based upon patterns of collectability, historical experience, and management's evaluation of specific accounts and will provide an allowance for credit losses when collection becomes doubtful. The Company performs credit evaluations of its customers' financial condition on an as-needed basis. Payment is generally due 30 days from the invoice date, and accounts past 30 days are individually analyzed for collectability. When all collection efforts have been exhausted, the account is written off against the related allowance.

The Company had no trade accounts receivables as of September 30, 2018 or December 31, 2017.

Prepaid Expenses and Other Current Assets

Other current assets represent prepayments, research and development (R&D) tax credits, deferred costs, purchased seed contracts and deposits made by the Company.

Property and Equipment

Property and equipment is stated at cost less accumulated depreciation. Depreciation is computed based upon the estimated useful lives of the respective assets. Leasehold improvements are amortized using the straight-line method over the shorter of the lease term or the estimated useful life of the assets. Repairs and maintenance costs are expensed as incurred. The cost and accumulated depreciation of property and equipment retired, or otherwise disposed of, are removed from the related accounts, and any residual values are charged to expense. Depreciation expense has been calculated using the following estimated useful lives:

Buildings and other improvements	10–20 years
Leasehold improvements	Remaining lease period
Office furniture and equipment	5–7 years
Computer equipment and software	3–5 years

Leases

Leases are classified as either finance or operating leases, with such classification affecting the pattern of expense recognition in the income statement. In September 2017, the Company entered into a financing lease with respect to the Company's new corporate headquarters. Refer to Note 10 for more detail.

Long-Lived Assets

Management reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. If the impairment tests indicate that the carrying value of the asset, or asset group is greater than the expected undiscounted cash flows to be generated by such asset or asset group, further analysis is performed to determine the fair value of the asset or asset group. To the extent the fair value of the asset or asset group is less than its carrying value, an impairment loss is recognized equal to the amount the carrying value exceeds the fair value of the asset or asset group. Assets to be disposed of are carried at the lower of their carrying value or fair value less costs to sell.

There have been no impairment losses recognized for the three and nine months ended September 30, 2018 or September 30, 2017.

Fair Value of Financial Instruments

Pursuant to the requirements of Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 820, *Fair Value Measurement*, the Company's financial assets and liabilities measured at fair value on a recurring basis are classified and disclosed in one of the following three categories:

Level 1—Financial instruments with unadjusted quoted prices listed on active market exchanges.

Level 2—Financial instruments lacking unadjusted, quoted prices from active market exchanges, including over-the-counter traded financial instruments. The prices for the financial instruments are determined using prices for recently traded financial instruments with similar underlying terms, as well as directly or indirectly observable inputs, such as interest rates and yield curves that are observable at commonly quoted intervals.

Level 3—Financial instruments that are not actively traded on a market exchange. This category includes situations in which there is little, if any, market activity for the financial instrument. The prices are determined using significant unobservable inputs or valuation techniques.

The Company has derivative instruments that are classified as Level 2. The Company does not have any financial instruments classified as Level 3, and there were no movements between these categories during the nine months ended September 30, 2018 or September 30, 2017.

	Fair Value Measurements at September 30, 2018 (in thousands)			
	Level 1	**Level 2**	**Level 3**	**Net Balance**
Asset at Fair Value:				
Forward purchase contracts	—	$ —	—	$ —
Total Assets at Fair Value	—	$ —	—	$ —
Liabilities at Fair Value				
Forward purchase contracts	—	$ 413	—	$ 413
Total Liabilities at Fair Value	—	$ 413	—	$ 413

	Fair Value Measurements at December 31, 2017 (in thousands)			
	Level 1	**Level 2**	**Level 3**	**Net Balance**
Asset at Fair Value:				
Forward purchase contracts	—	$ 3	—	$ 3
Total Assets at Fair Value	—	$ 3	—	$ 3
Liabilities at Fair Value				
Forward purchase contracts	—	$ 4	—	$ 4
Total Liabilities at Fair Value	—	$ 4	—	$ 4

Forward Purchase Contracts and Derivatives

The Company enters into supply agreements for grain and seed production with settlement values based on commodity market futures pricing. The Company accounts for these derivative financial instruments utilizing the authoritative guidance in ASC Topic 815, *Derivatives and Hedging*. Realized gains and losses from derivative contracts are recorded as R&D expenses as a result of breeding contract activity. The fair value for forward purchase contracts is estimated based on exchange-quoted prices.

Unrealized gains and losses on all derivative contracts are recorded in other current assets or other current liabilities on the balance sheet at fair value.

The table below summarizes the carrying value of derivative instruments as of September 30, 2018 and December 31, 2017.

Derivatives not designated as hedging instruments under ASC Topic 815	Asset Derivatives			Liability Derivatives		
	Balance Sheet Location	Fair Value		Balance Sheet Location	Fair Value	
		September 30, 2018	December 31, 2017		September 30, 2018	December 31, 2017
		(in thousands)			(in thousands)	
Forward purchase contracts	Prepaid expenses and other current assets	$ —	$ 3	Accrued Liabilities —current	$ 413	$ 4
Total derivatives		$ —	$ 3		$ 413	$ 4

As of September 30, 2018, and December 31, 2017, the Company had asset derivatives of $0 thousand and $3 thousand, respectively, and liability derivatives related to forward purchase contracts of $413 thousand and $4 thousand, respectively. The number of farmers and bushels increased in 2018 compared to 2017. In addition, any decrease in the futures price of soybean would lead to an increase in the liability balance period-over-period. Increases or decreases of the grain futures price will impact these balances and could lead to significant changes in the balances.

Patents

The Company expenses patent costs, including related legal costs, as incurred. Costs to write, maintain, in-license, and defend patents are recorded as selling, general and administrative expenses in the statements of operations. Costs to support the research for filing patents are recorded as research and development expenses in the statements of operations.

Revenue Recognition

The Company enters into R&D agreements that may consist of nonrefundable up-front payments, milestone payments, royalties, and R&D Services. In addition, the Company may license its technology to third parties, which may be part of the R&D agreements.

For agreements that contain multiple elements, each element within a multiple-element arrangement is accounted for as a separate unit of accounting provided the following criteria are met: the delivered products or services have value to the customer on a standalone basis and, for an arrangement that includes a general right of return relative to the delivered products or services, delivery, or performance of the undelivered product or service is considered probable and is substantially controlled by the Company. The Company considers a deliverable to have standalone value if the product or service is sold separately by the Company or another vendor or could be resold by the customer. Further, the Company's revenue arrangements do not include a general right of return relative to the delivered products.

Nonrefundable up-front payments are deferred and recognized as revenue over the period of the R&D agreement. If an R&D agreement is terminated before the original term of the agreement is fulfilled, all the remaining deferred revenue is recognized at the date of termination.

Milestone payments represent amounts received from the Company's R&D partners, the receipt of which is dependent upon the achievement of certain scientific, regulatory, or commercial milestones. The Company recognizes milestone payments when the triggering event has occurred, there are no further contingencies or services to be provided with respect to that event, and the counterparty has no right to refund of the payment. The triggering event may be scientific results achieved by the Company or another party to the arrangement, regulatory approvals, or the marketing of products developed under the arrangement.

Royalty revenue arises from the Company's contractual entitlement to receive a percentage of product sales revenues achieved by counterparties. Royalty revenue is recognized on an accrual basis in accordance with the terms of the agreement when sales can be determined reliably and there is reasonable assurance that the receivables from outstanding royalties will be collected.

License revenue from licenses that were granted to third parties is recognized ratably over the period of the license agreements. Revenue from R&D services is recognized over the period the R&D services are performed. No new revenue arrangements were entered into during the nine months ended September 30, 2018.

Cost of Revenue

Cost of revenue relates to the performance of services or contract research and consists of direct external expenses relating to projects and internal costs, including overhead allocated on a full-time equivalent basis. Cost of revenue was $0 for each of the three and nine months ended September 30, 2018 and 2017.

Research and Development

R&D expenses represent costs incurred for the development of various products using licensed gene editing technology, including expenses allocated to Calyxt by Cellectis. R&D expenses consist primarily of salaries, stock compensation and related costs of the Company's scientists, in-licensing of technology, consumables, property and equipment depreciation, and fees paid to third-party consultants. All research and development costs are expensed as incurred.

The Company in-licenses certain technology from third-parties that is a component of ongoing research and product development. The Company expenses up-front license fees upon contracting due to the uncertainty of future commercial value, as well as expensing any ongoing annual fees when incurred.

Stock-Based Compensation

The Company measures employee and nonemployee stock-based awards at grant-date fair value and records compensation expense using the accelerated attribution method over the vesting period of the award. Stock-based awards issued to nonemployees are remeasured until the award vests. The Company uses the Black-Scholes option pricing model to value its stock option awards. Estimating the fair value of stock option awards requires management to apply judgment and make estimates, including the volatility of the Company's common stock, the expected term of the Company's stock options and the expected dividend. The Company accounts for forfeitures as they occur, rather than estimating expected forfeitures.

The expected term of stock options is estimated using the simplified method, or lattice method when appropriate, for employee options as the Company does not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior for its stock option grants. The simplified method is based on the average of the vesting tranches and the contractual life of each grant. For options granted to nonemployees, the Company uses the remaining contractual life. For stock price volatility, the Company uses comparable public companies as a basis for its expected volatility to calculate the fair value of option grants. The Company assumes no dividend yield because dividends are not expected to be paid to stockholders in the near future, which is consistent with the Company's history of not paying dividends to stockholders. The risk-free interest rate is based on U.S. Treasury notes with a term approximating the expected life of the option.

Interest Expense and Income

The Company nets interest expense incurred from the financing lease obligation and interest income earned from the interest on the cash balances within the condensed statement of operations. The following table summarizes the activity for the three and nine months ended September 30, 2018 and 2017:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Interest expense	$ 349	$ 3	$ 901	$ 46
Interest income	(578)	(93)	(989)	(93)
Interest income, net	$(229)	$(90)	$ (88)	$(47)

Foreign Currency Transactions

Transactions in foreign currencies are remeasured into the Company's functional currency, U.S. dollars, at the exchange rates effective at the transaction dates. Assets and liabilities denominated in foreign currencies at the reporting date are remeasured into the functional currency using the exchange rate effective at that date.

Income Taxes

Current income taxes are recorded based on statutory obligations for the current operating period for the jurisdictions in which the Company has operations.

Deferred taxes are provided on an asset and liability method, whereby deferred tax assets are recognized for deductible temporary differences and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax basis. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

The tax effects from an uncertain tax position can be recognized in the financial statements only if the position is more likely than not to be sustained on audit, based on the technical merits of the position. Calyxt recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more likely than-not threshold, the amount recognized in the financial statements is the largest benefit that has a greater than 50% likelihood of being realized upon settlement with the relevant tax authority. The Company is subject to income taxes in U.S. federal and state jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal and state income tax examinations by tax authorities for years ending prior to 2013. In the event of any future tax assessments, the Company's accounting policy is to record the income taxes and any related interest or penalties as current income tax expense on the statements of operations.

Recently Issued Accounting Pronouncements

As an emerging growth company, the Company has elected to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Securities Exchange Act.

In May 2014, the FASB issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers*, which creates ASC Topic 606, *Revenue from Contracts with Customers,* and supersedes the revenue recognition requirements in ASC Topic 605, *Revenue Recognition*. The guidance in ASU 2014-09 and subsequently issued amendments ASU 2016-08, *Revenue from Contracts with Customers: Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*; ASU 2016-10, *Revenue from Contracts with Customers: Identifying Performance Obligations and Licensing;* and ASU 2016-12, *Revenue from Contracts with Customers: Narrow-Scope Improvements and Practical Expedients,* outlines a comprehensive model for all entities to use in accounting for revenue arising from contracts with customers, as well as required disclosures. Entities have the option of using either a full retrospective or modified approach to adopt the new guidance. For public entities, certain not-for-profit entities, and certain employee benefit plans, the new revenue standard is effective for annual periods beginning after December 15, 2017, including interim periods within that reporting period. For all other entities, the new revenue standard is effective for annual periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019. Early adoption is permitted. The adoption of this standard is not expected to have a material effect on the Company as the Company currently has insignificant revenues from previously entered R&D contracts. The Company expects to recognize revenues when its first product is commercialized. The impact of adoption of the standard may be more significant once products are commercialized.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842).* The guidance requires that lessees recognize assets and liabilities on the balance sheet for the rights and obligations created by all leases with terms of more than 12 months. The amendment also requires disclosures designed to give financial statement users information on the amount, timing, and uncertainty of cash flows arising from leases. These disclosures include qualitative and quantitative information. For public entities, not-for-profit entities, or employee benefit plans, ASU 2016-02 is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods. For all other entities, ASU 2016-02 is effective for annual periods beginning after December 15, 2019, and interim periods within annual periods beginning after December 15, 2020. Entities are required to use a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. Early adoption is permitted. The Company is evaluating the impact of adopting this pronouncement.

In May 2017, the FASB issued ASU 2017-09, "*Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting*", which clarifies when to account for a change to the terms or conditions of a share-based payment award as a modification. Under the new guidance, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award (as equity or liability) changes as a result of the change in terms or conditions. The guidance is effective for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. The Company adopted the standard during the first quarter of 2018 and it did not have a material impact on the Company.

In June 2018, the FASB issued ASU 2018-07, *Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*, which expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. The guidance is effective for public entities, certain not-for-profit entities, and certain employee benefit plans for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. For all other entities, ASU 2018-07 is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, but no earlier than an entity's adoption date of Topic 606. The Company is evaluating the impact of adopting this pronouncement.

In November 2016, the FASB issued ASU 2016-15, *Statement of Cash Flow (Topic 230): Restricted Cash*, which requires that restricted cash be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period amounts shown on the statement of cash flows. The Company adopted ASU 2016-18 during the third quarter of 2018 upon the initial classification of amounts as restricted cash on the Company's balance sheet. As the Company did not have restricted cash in prior periods the prior period amounts in the statement of cash flows were unadjusted.

3. Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents, and trade accounts receivable.

Cash and cash equivalents concentration—The Company holds cash balances at financial institutions that, at times, may exceed federally insured limits. The Company evaluates the creditworthiness of these financial institutions in determining the risk associated with these deposits. Calyxt has not experienced any losses on such accounts.

Trade accounts receivable concentration—The Company had no trade accounts receivables as of September 30, 2018 and December 31, 2017.

Revenue concentration—For the three months ended September 30, 2018, two customers accounted individually for 94% and 6% of revenue. For the nine months ended September 30, 2018, three customers accounted individually for 86%, 11.0% and 2.0% of revenue. For the three months ended September 30, 2017, four customers accounted individually for 63.0%, 19.5%, 12.6% and 4.8% of revenue. For the nine months ended September 30, 2017, four customers accounted individually for 64.2%, 25.8%, 8.0% and 2.0% of revenue.

4. Property and Equipment

Property and equipment consists of the following:

(Amounts in Thousands)	**As of September 30, 2018**	**As of December 31, 2017**
Land	$ 5,690	$ 5,690
Buildings and other improvements	4,454	4,414
Leasehold improvements	10,076	169
Office furniture and equipment	2,875	1,672
Computer equipment and software	2	20
Assets under construction	34	3,671
	23,131	15,636
Less accumulated depreciation	(1,826)	(1,283)
Property and equipment, net	$ 21,305	$ 14,353

Depreciation expense was $356 thousand and $146 thousand for the three months ended September 30, 2018 and 2017, respectively. Depreciation expense was $727 thousand and $414 thousand for the nine months ended September 30, 2018 and 2017, respectively.

5. Related-Party Transactions

Due from related parties consists of receivables due from another subsidiary of Cellectis related to payroll services provided by Calyxt to this other subsidiary of Cellectis.

Due to related parties consists of license fees, amounts owed under the intercompany management agreement, and interest charged on outstanding amounts. Amounts due to Cellectis that are included in due to related parties on the balance sheet bear interest at a rate of the European Interbank Offered Rate for 12 months (EURIBOR 12) plus 5% per annum.

The Company has a management agreement with Cellectis, in which the Company pays Cellectis a monthly fee for certain services provided by Cellectis, which include general sales and administration functions, accounting functions, research and development, legal advice, human resources, and information technology. The Company recorded expenses associated with the management agreement of $975 thousand and $466 thousand for the three months ended September 30, 2018 and 2017, respectively. For the three months ended September 30, 2018 and 2017, the Company classified $918 thousand and $414 thousand, respectively, as a component of sales, general, and administrative expenses while $57 thousand and $52 thousand, respectively, were classified as a component of R&D expenses. The Company recorded expenses associated with the management agreement of $1,954 and $1,361 thousand for the nine months ended September 30, 2018 and 2017, respectively. For the nine months ended September 30, 2018 and 2017, the Company classified $1,817 thousand and $1,244 thousand, respectively, as a component of sales, general, and administrative expenses, while $137 thousand and $117 thousand, respectively, were classified as a component of R&D expenses.

As of September 30, 2018, and December 31, 2017, the Company had short-term Cellectis obligations of $1.9 million and $1.4 million, respectively, consisting of amounts owed under the intercompany management agreement for services provided by Cellectis and costs incurred by Cellectis on behalf of the Company.

Cellectis entered into a Lease Guaranty with the landlord for the Company's new headquarters, whereby Cellectis has guaranteed all of the Company's obligations under the Lease Agreement. Cellectis' guarantee of Calyxt's obligations under the sale-leaseback transaction will terminate at the end of the second consecutive calendar year in which Calyxt's tangible net worth exceeds $300 million, as determined in accordance with generally accepted accounting principles. On November 10, 2017, Calyxt agreed to indemnify Cellectis for any obligations incurred by Cellectis under the Lease Guaranty. This indemnification agreement will become effective at such time as Cellectis owns 50% or less of Calyxt's outstanding common stock.

TALEN technology was invented by researchers at the University of Minnesota and Iowa State University and exclusively licensed to Cellectis. Calyxt obtained from Cellectis an exclusive license for the TALEN technology for commercial use in plants. TALEN technology is the primary gene-editing technology used by Calyxt today. The Company will be required to pay a royalty to Cellectis on future sales for the licensing of the technology.

During the nine months ended September 30, 2018, Cellectis purchased 550,000 shares of common stock in the Company's follow-on offering at the public offering price of $15.00 per share. In addition, in connection with the vesting on June 14, 2018, of restricted stock units for certain employees and nonemployees of the Company and Cellectis, Cellectis purchased 63,175 shares of common stock of the Company at a price of $19.49 per share (the closing price reported on the NASDAQ Global Market on June 14, 2018) directly from such employees and nonemployees in private transactions pursuant to share purchase agreements dated June 13, 2018.

6. Accrued Liabilities

As of September 30, 2018, and December 31, 2017, the Company had accrued liabilities of $2,669 thousand and $893 thousand, respectively, which consist of purchase commitments and miscellaneous operating expenses.

7. Net Loss per Share

Basic loss per share is computed based on the net loss allocable to common stockholders for each period, divided by the weighted average number of common shares outstanding. All outstanding stock options and restricted stock units (RSUs) are excluded from the calculation since they are anti-dilutive. Due to the existence of net losses for the three- and nine-month periods ended September 30, 2018 and 2017, basic and diluted loss per share were the same.

8. Stock-Based Compensation

Calyxt, Inc. Equity Incentive Plans

The Company adopted the Calyxt, Inc. Equity Incentive Plan, or the Initial Plan, which allows for the grant of stock options to attract and retain highly qualified employees. In June 2017, the Company also adopted an omnibus incentive plan, or the Omnibus Plan, under which the Company granted stock options and restricted stock units to certain of the Company's employees and nonemployees, as well as certain employees and nonemployees of Cellectis.

The options granted under the Initial Plan and the Omnibus Plan, which were only eligible for exercise following the completion of the IPO on July 25, 2017, have an exercise price equal to the estimated fair value of the stock at the grant date for the Omnibus Plan and the grant date for the Initial Plan, respectively.

The following table presents stock-based compensation expense included in the Company's condensed statements of operations (in thousands) for stock options and restricted stock unit awards under the plans:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Stock-based compensation expense for:				
Employee stock options	$ 150	$3,891	$ 726	$3,891
Employee restricted stock units	(26)	706	794	1,141
Nonemployee stock options	(132)	4,209	293	4,209
Nonemployee restricted stock units	693	385	1,096	393
	$ 685	$9,191	$2,909	$9,634

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2018	2017	2018	2017
Stock-based compensation expense/(benefit) in operating expenses:				
Research and development	$ (10)	$4,652	$ 878	$4,673
Selling, general and administrative	695	4,539	2,031	4,961
	$685	$9,191	$2,909	$9,634

For accounting purposes, the Company treats stock-based compensation awards granted to employees of Cellectis as deemed dividends to Cellectis, which are recorded quarterly. The Company recorded $415 thousand and $1,790 thousand and $2,769 thousand and $2,838 thousand in deemed dividends to Cellectis in the three and nine months ended September 30, 2018 and 2017, respectively, for RSUs and stock options granted to employees of Cellectis.

Equity instruments issued to non-employees include RSUs and options to purchase shares of the Company's common stock. These RSUs and options vest over a certain period during which services are provided. The Company expenses the fair market value of the awards over the period in which the related services are received. Unvested awards are remeasured to fair value until they vest.

Stock Options

The following table summarizes stock option activity for the nine months ended September 30, 2018:

	Number of Shares	**Weighted-Average Exercise Price Per Share**	**Aggregate Intrinsic Value (in thousands)**	**Weighted-Average Remaining Contractual Life (in years)**
Outstanding at December 31, 2017	3,883,432	$ 9.16	$ 49,965	8.8
Granted	295,443	$ 18.84		
Exercised	(461,200)	$ 4.62	$ 6,416	
Canceled	(576,853)	$ 12.42		
Outstanding at September 30, 2018	3,140,822	$ 10.14	$ 17,718	8.2
Exercisable at September 30, 2018	1,314,939	$ 7.01	$ 11,429	7.7

The weighted average grant date fair value for stock options granted during the nine months ended September 30, 2018 and 2017 was $9.60 and $2.17, respectively. The total fair value of stock options vested during the nine months ended September 30, 2018 and 2017 was $2.5 million and $10.2 million, respectively. The aggregate intrinsic value of stock options exercised during the nine months ended September 30, 2018 and 2017 was $6.4 million and $1.0 million, respectively. At September 30, 2018, the total unrecognized stock-based compensation expense related to non-vested stock options is approximately $4.1 million, which is expected to be recognized over a weighted-average period of 3.6 years.

The fair value of each stock option is estimated using the Black-Scholes option pricing model at each measurement date. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the stock price, and expected dividends. The awards currently outstanding were granted with vesting terms between two and six years. Certain awards contained a 25% acceleration vesting clause upon a triggering event or initial public offering as defined in the Initial Plan.

The Company has not historically paid dividends to its stockholders and currently does not anticipate paying any dividends in the foreseeable future. As a result, the Company has assumed a dividend yield of 0%. The risk-free interest rate is based upon the rates of U.S. Treasury bills with a term that approximates the expected life of the option. The Company uses the simplified method, or the lattice method when appropriate, to reasonably estimate the expected life of its option awards. Expected volatility is based upon the volatility of comparable public companies.

The following table provides the assumptions used in the Black-Scholes model for the stock option awards:

	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
Expected dividend yield	0%	0%
Risk-free interest rate	2.18% – 2.82%	1.25% – 2.31%
Expected volatility	40.86% – 57.2%	27.4% – 45.1%
Expected life (in years)	5.57 – 10.00	1.22 – 10.00

Restricted Stock Units

The following table summarizes the activity of restricted stock units:

	Number of Restricted Stock Units Outstanding	**Weighted-Average Grant Date Fair Value**
Unvested balance at December 31, 2017	1,373,933	$ 8.00
Granted	276,625	$ 16.95
Vested	(191,627)	$ 8.00
Canceled	(358,926)	$ 8.00
Unvested balance at September 30, 2018	1,100,005	$ 10.35

The weighted average grant date fair value for RSUs granted during the nine months ended September 30, 2018 and 2017 was $16.95 and $8.00, respectively. The total fair value of RSUs vested during the nine months ended September 30, 2018 and 2017 was $1.7 million and $0.3 million, respectively. As of September 30, 2018, the Company had approximately $6.3 million of unrecognized stock-based compensation expense related to restricted stock units that is expected to be recognized over a weighted-average period of 4.0 years.

Cellectis Equity Incentive Plans

Cellectis grants stock options to certain employees of Calyxt. Compensation costs related to the grant of Cellectis awards to Calyxt's employees has been recognized in the statements of operations with a corresponding entry to stockholders' equity, representing Cellectis' capital contribution to the Company. The fair value of each stock option is estimated at the grant date using the Black-Scholes option pricing model. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the Cellectis' stock price, and expected dividends.

The following table provides the range of assumptions used in the Black-Scholes model for Cellectis awards:

	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
Expected dividend yield	0%	0%
Risk-free interest rate	0.03%-0.94%	2.16%-2.31%
Expected volatility	59.09%-65.64%	37.5%-42.3%
Expected life (in years)	6.0-6.12	7.43-10

The Company recognized a reduction to compensation expense related to Cellectis' grants of stock options and warrants to its employees and consultants of $96 thousand for the three months ended September 30, 2018 and the Company recognized share-based compensation expense related to Cellectis' grants of stock options and warrants to Calyxt's employees and consultants of $98 thousand for the three months ended September 30, 2017. The Company recognized stock-based compensation expense related to Cellectis' grants of stock options and warrants to Calyxt employees and consultants of $107 thousand and $347 thousand for the nine-month periods ended September 30, 2018 and 2017, respectively. The following table summarizes the stock-based compensation expense for Cellectis awards (in thousands), which was recognized in the Company's statements of operations:

	Three Months Ended September 30, 2018	Three Months Ended September 30, 2017	Nine Months Ended September 30, 2018	Nine Months Ended September 30, 2017
Stock-based compensation expense in operating expenses:				
Selling, general and administrative	$(115)	$ 2	$ (9)	$ 7
Research and development	19	96	116	340
	$ (96)	$ 98	$107	$347

9. Income Taxes

The Company provides for a valuation allowance when it is more likely than not that it will not realize a portion of the deferred tax assets. The Company has established a full valuation allowance for deferred tax assets due to the uncertainty that enough taxable income will be generated in the taxing jurisdiction to utilize the assets. Therefore, the Company has not reflected any benefit of such deferred tax assets in the accompanying financial statements.

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act tax reform legislation. This legislation makes significant changes in U.S. tax law including a reduction in the corporate tax rates, changes to net operating loss carryforwards and carrybacks, and a repeal of the corporate alternative minimum tax. The legislation reduced the U.S. corporate tax rate from the current rate of 35% to 21%. As a result of the enacted law, the Company was required to revalue deferred tax assets and liability at the enacted rate. This revaluation didn't have any income tax expense impact due to the full valuation allowance. The other provisions of the Tax Cuts and Jobs Act [did not have a material impact] on the third quarter financial statements.

The Company has applied the guidance in ASU 2018-05, Income Taxes (Topic 740): Amendments to SEC Paragraphs Pursuant to SEC Staff Accounting Bulletin No. 118, when accounting for the enactment-date effects of the Tax Cut and Jobs Act. As of September 30, 2018, the Company had not completed its accounting for the tax effects of the Tax Cut and Jobs Act, as the Company is in the process of analyzing certain aspects of the Tax Cut and Jobs Act, obtaining information, and refining its calculations of the Tax Cut and Jobs Act's impact. There have been no material measurement period adjustments made during the three and nine months ended September 30, 2018 related to the provisional amounts recorded and disclosed in the Company's Annual Report. The Company expects to complete the accounting for the tax effects of the Tax Cut and Jobs Act during 2018.

As of September 30, 2018, there were no material changes to what the Company disclosed regarding tax uncertainties or penalties as of December 31, 2017.

10. Commitments and Contingencies

Litigation and Claims

Various legal actions, proceedings, and claims (generally, matters) are pending or may be instituted or asserted against the Company. The Company accrues for matters when losses are deemed probable and reasonably estimable. Any resulting adjustments, which could be material, are recorded in the period the adjustments are identified. Except as discussed in the following paragraph, the Company has not identified any legal matters needing to be recorded or disclosed as of September 30, 2018.

In December 2013, the Company entered into a Research and Commercial License Agreement (the License Agreement) with a subsidiary of Bayer Aktiengesellschaft (Bayer), pursuant to which we granted Bayer a license to certain patents for the research and commercialization of certain products developed with the Company's TALEN technology. The Company believed that Bayer breached the License Agreement by filing patent applications in violation of the License Agreement's provisions and by failing to make a payment due under the License Agreement. Accordingly, the Company gave notice to Bayer of its termination of the License Agreement, and on March 12, 2018, the Company filed a complaint in Delaware Chancery Court alleging that it properly terminated the License Agreement for Bayer's material breach.

On May 15, 2018, Bayer agreed to settle the lawsuit that the Company brought. Under the settlement terms, the parties agreed that the License Agreement is terminated, that Bayer will destroy any technology, related product and confidential information covered by the License Agreement, and that Bayer will permanently abandon patent applications that are based on or include data related to the covered technology. This settlement confirms that Bayer and its subsidiaries have no access to Calyxt technology or intellectual property. The settlement was filed in Delaware Chancery Court on May 15, 2018.

Leases

The Company has several leases that are classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. Significant leases are described below.

Prior Building Lease

The Company leased office space at 600 County Road D West, Suite 8, New Brighton, Minnesota 55112, under an operating lease that expired in June 2018. Rent expense with respect to this lease was recognized using the straight-line method over the term of the lease. In addition to minimum lease payments, the office lease required payment of a proportionate share of real estate taxes and building operating expenses. Total rent expense for the office space was $0 thousand and $65 thousand for the three months ended September 30, 2018 and 2017, respectively. Total rent expense for the office space was $154 thousand and $195 thousand for the nine months ended September 30, 2018 and 2017, respectively.

Financing Lease

The Company entered into a sale-leaseback transaction on September 6, 2017 with respect to certain real property and improvements located in Roseville, MN, whereby the Company sold the land and other improvements to a third party in exchange for approximately $7 million in cash and the Company committed to an initial lease term of twenty years, with four options to extend the term of the Lease Agreement for five years each. The transaction also included a construction contract for the Company's nearly 40,000 square-foot corporate headquarters which includes office, research laboratory space and outdoor growing plots.

During the construction period, which ended in June 2018, the Company initially paid annual base rent of $490 thousand until the property was substantially completed in May, at which time, the lease commenced. Under the lease, the Company now pays an annual base rent of approximately $1.4 million. The Lease Agreement is a net lease, whereby the Company is responsible for the other costs and expenses associated with the use of the property. Cellectis entered into a Lease Guaranty with the landlord for the facilities, whereby Cellectis has guaranteed the Company's obligations under the Lease Agreement. Cellectis' guarantee of Calyxt's obligations under the sale-leaseback transaction will terminate at the end of the second consecutive calendar year in which Calyxt's tangible net worth exceeds $300 million, as determined in accordance with generally accepted accounting principles. On November 10, 2017, Calyxt agreed to indemnify Cellectis for any obligations incurred by Cellectis under the Lease Guaranty. This indemnification agreement will become effective at such time as Cellectis owns 50% or less of Calyxt's outstanding common stock.

The Company was responsible for construction cost overruns during the construction period. As a result of this involvement, the Company was deemed the "owner" for accounting purposes during the construction period and was required to capitalize the construction costs on the balance sheet. Lease payments will decrease the finance obligation recorded on the balance sheet, net of implied interest. The sale of the land and structures does not qualify for sale-leaseback accounting under ASC Topic 840, *Leases*, as a result of "continuing involvement" and the guarantee of the transaction by Cellectis. Under Topic 840, the "continuing involvement" precludes the Company from derecognizing the assets from the balance sheet. Following substantial completion in May 2018, the assets associated with the project were capitalized and will be depreciated over the term of the lease.

The Company's total financing obligation is classified as a non-current liability of $17.2M and $10.1M as of September 30, 2018 and December 31, 2017, respectively. The increase in the obligation as of September 30, 2018 compared to December 31, 2017 is due to additional construction costs for building and site improvements, office equipment and furniture and architect fees related to construction of the Company's new corporate headquarters. Based on the terms of the lease no principal payments are due within the next twelve months from the current balance sheet date. The Company recognized $897 thousand and $46 thousand of interest expense related to this arrangement for the nine months ended September 30, 2018 and 2017, respectively.

Obligations to Cellectis

As of September 30, 2018, and December 31, 2017, the Company had short-term Cellectis obligations of $1.9 million and $1.4 million, respectively, consisting of amounts owed under the intercompany management agreement for services provided by Cellectis and costs incurred by Cellectis on behalf of the Company (Note 5).

Forward Purchase Commitments

As of September 30, 2018, and December 31, 2017, the Company has forward purchase commitments with growers to purchase seed and grain at future dates in the amount of approximately $7.3 million and $1.6 million, respectively, which are estimated based on anticipated yield and expected price. This amount is not recorded in the financial statements because the Company has not taken delivery of the seed and grain.

11. Employee Benefit Plan

The Company provides a 401(k) defined contribution plan (the Plan) for participation by all regular fulltime employees who have completed three months of service. The Plan provides for a matching contribution equal to 100% of the amount of the employee's salary deduction up to 3% of the salary per employee and an additional 50% match from 3% to 5% of salary. Employees' rights to the Company's matching contributions vest immediately. Company contributions to the Plan totaled $28 thousand and $22 thousand for the three months ended September 30, 2018 and 2017, respectively. Company contributions to the Plan totaled $104 thousand and $67 thousand for the nine months ended September 30, 2018 and 2017, respectively.

12. Segment and Geographic Information

The Company has one operating and reportable segment, R&D of plant gene editing. The Company derives substantially all of its revenue from R&D contracts related to plant gene editing located in the United States.

13. Subsequent Events

None.

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

The following discussion and analysis of our financial condition and results of operations should be read together with our financial statements and related notes, which are included elsewhere in this Quarterly Report on Form 10-Q. Our actual results could differ materially from those anticipated in the forward-looking statements included in this discussion as a result of certain factors, including, but not limited to, those discussed in "Risk Factors" in our Annual Report.

Overview

We are a consumer-centric, food- and agriculture-focused company. We are pioneering a paradigm shift to deliver healthier food ingredients, such as healthier oils and high fiber wheat, for consumers and crop traits that benefit the environment and reduce pesticide applications, such as disease resistance, for farmers. We develop non-transgenic crops leveraging processes that occur in nature by combining our leading gene-editing technology and technical expertise with our innovative commercial strategy. While the traits that enable these characteristics may occur naturally and randomly through evolution—or under a controlled environment through traditional agricultural technologies—those processes are imprecise and take many years, if not decades. Our technology enables us to precisely and specifically edit a plant genome to elicit the desired traits and characteristics, resulting in a final product that has no foreign DNA. We believe the precision, specificity, cost effectiveness and development speed of our gene-editing technologies will enable us to provide meaningful disruption to the food and agriculture industries. Food-related issues, including obesity and diabetes, are some of the most prevalent health issues today and continue to grow rapidly. As awareness of diet-related health issues grows, consumers have emphasized a healthier lifestyle and a desire for nutritionally rich foods that are better tasting, less processed and more convenient. This trend is leading to an increase in the demand for higher valued, premium segments of the food industry, such as higher fiber, reduced gluten and reduced fat products. As a result of these trends, food companies are looking for specialty ingredients and solutions that can help them satisfy their customers' evolving needs and drive growth in market share and new value-added products.

Our first product candidate, for which we expect to commence commercialization by the end of 2018 or early in 2019, is a high oleic soybean designed to produce a healthier oil that has increased heat stability with zero trans fats. Among our other product candidates are high fiber wheat and disease resistant wheat. We are developing our high fiber wheat to create flour with up to three times more dietary fiber than standard white flour while maintaining the same flavor and convenience of use. Our high fiber wheat may provide benefits associated with a high fiber diet, including reduced risk of coronary heart disease. Our disease resistant wheat is designed to provide farmers with wheat varieties exhibiting disease resistance options to increase yields. We believe each of these three product candidates addresses a multi-billion-dollar market opportunity.

Our highest-priority product candidate, our high oleic soybean, is in Phase III testing, which is the final phase before commercialization. Phase III testing includes developing commercial-scale pilot production, building out supply chain and inventory, and performing customer testing. In the third quarter of 2017, we completed the harvest for our high oleic soybeans and produced sufficient seeds for the commercialization of our first product candidate.

We are an early-stage company and have incurred net losses since our inception. As of September 30, 2018, we had an accumulated deficit of $74 million. Our net losses for the three and nine months ended September 30, 2018, were $7.5 million and $19.4 million, respectively. Substantially all of our net losses resulted from costs incurred in connection with our R&D programs and from selling, general and administrative expenses associated with our operations. As we continue to develop our product pipeline, we expect to continue to incur significant expenses and increasing operating losses for the foreseeable future and those expenses and losses may fluctuate significantly from quarter-to-quarter and year-to-year. We expect that our expenses will increase substantially as we:

- establish a sales, marketing and distribution infrastructure, including relationships across our supply chain, to commercialize any products that have completed the development process;
- conduct additional field trials of our current and future product candidates;
- secure manufacturing arrangements for commercial production;
- continue to advance the research and development of our current and future product candidates;
- seek to identify and validate additional product candidates;
- acquire or in-license other product candidates, technologies, germplasm or other biological material;
- are required to seek regulatory and marketing approvals for our product candidates;
- make royalty and other payments under any in-license agreements;
- maintain, protect, expand and defend our intellectual property portfolio;
- seek to attract and retain new and existing skilled personnel; and

- experience any delays or encounter issues with any of the above.

We do not expect to generate significant revenue from product sales unless and until we obtain regulatory approval of and commercialize one or more of our current or future product candidates. We anticipate that we will continue to generate losses for the foreseeable future, and we expect the losses to increase as we continue the development of our product candidates and begin to commercialize our product candidates that complete the development process. Until such time that we can generate substantial revenues from sales of our product candidates, if ever, we expect to finance our operating activities through a combination of cash on hand, equity offerings, debt financings, government or other third-party funding, and licensing arrangements. However, we may be unable to raise additional funds or enter into such arrangements when needed on favorable terms, or at all, which would have a negative impact on our financial condition and could force us to delay, limit, reduce or terminate our development programs or commercialization efforts or grant to others rights to develop or market product candidates that we would otherwise prefer to develop and market ourselves. Failure to receive additional funding could cause us to cease operations, in part or in full.

Comparability of Our Results and Our Relationship with Cellectis

We are a majority-owned subsidiary of Cellectis. As a result, our historical financial information does not reflect the financial condition, results of operations or cash flows we would have achieved as a standalone company and not a subsidiary of Cellectis during the periods presented or those we will achieve in the future. This is primarily the result of the following factors:

- our historical financial information reflects expense allocations for certain support functions that are provided on a centralized basis within Cellectis, such as expenses for business technology, facilities, legal, finance, human resources and business development that may be higher or lower than the comparable expenses we would have actually incurred, or will incur in the future, as a standalone company and not a subsidiary of Cellectis; and
- significant increases in our cost structure as a result of becoming a public company, including costs related to public company reporting, investor relations and compliance with the Sarbanes-Oxley Act, which expenses may increase at such time as we operate as a standalone company and not a subsidiary of Cellectis.

In the future, we expect to incur internal costs to implement certain new systems, including infrastructure and an enterprise resource planning system.

Financial Operations Overview

Revenue

We recognized approximately $27 thousand and $44 thousand of revenue for the three months ended September 30, 2018 and 2017, respectively, and $234 thousand and $322 thousand of revenue for the nine months ended September 30, 2018 and 2017, respectively, from payments we received pursuant to our R&D agreements under which we conduct research activities for a number of companies. Our R&D agreements provide for non-refundable upfront payments that we receive upon execution of the relevant agreement; milestone payments upon the achievement of certain scientific, regulatory or commercial milestones; license payments from licenses that we grant to third parties; and R&D cost reimbursements that are recognized over the period of these services and royalty payments. Our reliance on revenue from our R&D agreements has been systematically diminishing as we purposely reduce the number of R&D contracts we enter into with other companies and focus on in-house product development.

To date, we have not generated any product revenue. Our ability to generate future product revenue depends upon our R&D partners' ability to assist us in successfully developing and commercializing our products. If we fail to complete the development of our product candidates in a timely manner or fail to obtain any necessary regulatory approval, our ability to generate future revenue would be compromised.

We expect to commence commercialization of our high oleic soybean product by the end of 2018 or early in 2019. We intend to buy grain grown by the farmers utilizing our seeds that meets our quality specifications and expect to generate revenue by using the purchased grain to produce soybean meal and soybean oil, which we would then sell to food companies and animal feed companies.

Research and Development Expenses

R&D expenses consist of expenses incurred while performing R&D activities to discover and develop potential product candidates. We recognize R&D expenses as they are incurred.

Our R&D expenses consist primarily of:

- personnel costs, including salaries and related benefits including non-cash stock option expense, for our employees engaged in scientific R&D functions;
- cost of third-party contractors, such as contract research organizations, or CROs, and third-party contractors who support our product candidate development;
- seed increases (small-scale and large-scale testing) for trait validation;
- purchases and manufacturing of biological materials, real-estate leasing costs, as well as conferences and travel costs;
- certain other expenses, such as expenses for use of laboratories and facilities for our R&D activities; and
- costs of in-licensing or acquiring technology from third parties.

Our R&D efforts are focused on our existing product candidates and in broadening our pipeline with new product candidates. We use our employee and infrastructure resources across multiple R&D programs directed toward identifying and developing product candidates. We manage certain activities such as field trials and the manufacture of product candidates through third-party vendors. Due to the number of ongoing projects and our ability to use resources across several projects, we do not record or maintain information regarding the costs incurred for our R&D programs on a program-specific basis.

Our R&D efforts are central to our business and account for a significant portion of our operating expenses. We expect that our R&D expenses will increase for the foreseeable future as we expand our R&D and process development efforts, access and develop additional technologies and hire additional personnel to support our R&D efforts. Product candidates in later stages of product development generally have higher development costs than those in earlier stages of development, primarily due to the increased size of field trials and commercial scale product testing.

Cellectis provides us with R&D services, which include our use of database software for recording and tracking our research. We have a management agreement in which Cellectis charges us in euros at cost plus a markup ranging from 0% to 10%.

R&D expenses, including licensing fees, are expensed as incurred, due to the uncertainty of future commercial value. At this time, we cannot reasonably estimate or know the nature, timing and estimated costs of the efforts that will be necessary to complete the development of our current product candidates or any new product candidates we may identify and develop.

Selling, General and Administrative Expenses

Selling, general and administrative expenses consist primarily of employee-related expenses for executive, business development, intellectual property, finance and human resource functions. Other selling, general and administrative expenses include facility-related costs not otherwise allocated to R&D expense, professional fees for auditing, tax and legal services, expenses associated with obtaining and maintaining patents, consulting costs, management fees and costs of our information systems.

Cellectis provides us services, which include general sales and administration functions, accounting and finance functions, legal advice, human resources, and information technology. We have a management agreement in which Cellectis charges us in euros at cost plus a markup ranging from 0% to 10%. Amounts due to Cellectis pursuant to intercompany transactions bear interest at a rate of 12-month Euribor plus 5% per annum.

We expect that our selling, general and administrative expense will increase as we continue to operate as a public reporting company and continue to develop and commercialize our product candidates. We also expect to incur increased costs in order to comply with auditing requirements, corporate governance, internal controls, investor relations, disclosure and similar requirements applicable to public reporting companies.

Critical Accounting Policies and Estimates

Some of the accounting methods and policies used in preparing our financial statements under U.S. GAAP are based on complex and subjective assessments by our management or on estimates based on past experience and assumptions deemed realistic and reasonable based on the circumstances concerned. The actual value of our assets, liabilities and stockholders' equity and of our losses could differ from the value derived from these estimates if conditions changed and these changes had an impact on the assumptions adopted. We believe that the most significant management judgments and assumptions in the preparation of our financial statements and the notes thereto are named below. For further details, see our financial statements and the notes thereto, included elsewhere in this Quarterly Report on Form 10-Q.

Revenue Recognition

We enter into R&D agreements that may consist of nonrefundable up-front payments, milestone payments, royalties and R&D services. In addition, we may license our technology to third parties, which may be part of the R&D agreements.

For agreements that contain multiple elements, each element within a multiple-element arrangement is accounted for as a separate unit of accounting provided the following criteria are met: the delivered products or services have value to the customer on a standalone basis; and for an arrangement that includes a general right of return relative to the delivered products or services, delivery or performance of the undelivered product or service is considered probable and is substantially controlled by us. We consider a deliverable to have standalone value if the product or service is sold separately by us or another vendor or could be resold by the customer. Further, our revenue arrangements do not include a general right of return relative to the delivered products.

Nonrefundable up-front payments are deferred and recognized as revenue over the period of the R&D agreement. If an R&D agreement is terminated before the original term of the agreement is fulfilled, all the remaining deferred revenue is recognized at the date of termination.

Milestone payments represent amounts received from our R&D partners, the receipt of which is dependent upon the achievement of certain scientific, regulatory or commercial milestones. We recognize milestone payments when the triggering event has occurred, there are no further contingencies or services to be provided with respect to that event, and the counterparty has no right to refund of the payment. The triggering event may be scientific results achieved by us or another party to the arrangement, regulatory approvals, or the marketing of products developed under the arrangement.

Royalty revenue arises from our contractual entitlement to receive a percentage of product sales revenues achieved by counterparties. Royalty revenue is recognized on an accrual basis in accordance with the terms of the agreement when sales can be determined reliably and there is reasonable assurance that the receivables from outstanding royalties will be collected.

License revenue from licenses that we grant to third parties is recognized ratably over the period of the license agreements.

Revenue from R&D services is recognized over the duration of the service period.

Research and Development

R&D expenses represent costs incurred for the development of various products using licensed gene editing technology. R&D expenses consist primarily of salaries and related costs of our scientists, in-licensing of technology, consumables, property and equipment depreciation, and fees paid to third-party consultants. All R&D costs are expensed as incurred.

In the normal course of business, we enter into R&D contracts with third parties whereby we perform R&D of certain gene traits for the third parties. We have entered into various multi-year arrangements under which we perform the R&D of the gene technology and the third parties generally have primary responsibility for any commercialization of the technology. These arrangements are performed with no guarantee of either technological or commercial success.

We in-license certain technology from third parties that is a component of ongoing research and product development. We expense up-front license fees upon contracting due to the uncertainty of future commercial value, as well as expensing any ongoing annual fees when incurred.

Forward Purchase Contracts and Derivatives

We enter into supply agreements for grain and seed production with settlement values based on commodity market futures pricing. We account for these derivative financial instruments utilizing the authoritative guidance in ASC Topic 815, *Derivatives and Hedging*. We recognize the realized gains and losses from derivative contracts and record them as a component of R&D expenses as a result of breeding contract activity. We also recognize the unrealized derivative asset and unrealized derivative liability in other current assets and other current liabilities, respectively.

Stock-Based Compensation

Calyxt, Inc. Equity Incentive Plans

We adopted the Calyxt, Inc. Equity Incentive Plan, or the Initial Plan, which allows for the grant of stock options to attract and retain highly qualified employees. In June 2017, we also adopted an omnibus incentive plan, or the Omnibus Plan, under which we have granted stock options and restricted stock units to certain of our employees, nonemployees, and certain employees and nonemployees of Cellectis.

The options granted under the Initial Plan and the Omnibus Plan, which were only eligible for exercise following the completion of the IPO on July 25, 2017, have an exercise price equal to the estimated fair value of the stock at the grant date for the Omnibus Plan and the grant date for the Initial Plan, respectively.

We recognized stock-based compensation expense of $685 million and $9,191 thousand for stock options granted under the plans for the three-month period ended September 30, 2018 and 2017, respectively. We recognized stock-based compensation expense of $2,909 million and $9,634 thousand for stock options granted under the plans for the nine-month period ended September 30, 2018 and 2017, respectively.

For accounting purposes, we treat stock-based compensation awards granted to employees of Cellectis as deemed dividends to Cellectis, which we record quarterly. We recorded $415 thousand and $1,790 million and $2,769 thousand and $2,838 thousand in deemed dividends to Cellectis in the three and nine months ended September 30, 2018, and 2017, respectively, for such restricted stock units and stock options granted to employees of Cellectis.

At September 30, 2018, we had 3,140,822 stock options outstanding, of which 1,314,939 are vested. At September 30, 2018, the total unrecognized stock-based compensation expense related to non-vested stock options is approximately $4.1 million, which we expect to recognize over a weighted-average period of 3.6 years.

As of September 30, 2018, we had 1,505,399 shares of common stock issuable upon the exercise of outstanding stock options under the Initial Plan, 1,635,423 shares of common stock issuable upon the exercise of stock options under the Omnibus Plan and restricted stock units with respect to 1,100,005 shares of common stock outstanding under the Omnibus Plan. Of that total, 1,314,939 stock options and restricted stock units were fully vested as of September 30, 2018 or will vest within 60 days of quarter’s end.

Equity instruments issued to non-employees include RSUs and options to purchase shares of our common stock. These RSUs and options vest over a certain period during which services are provided. We expense the fair market value of the awards over the period in which the related services are received. Unvested awards are re-measured to fair value until they vest.

At September 30, 2018, we had 1,100,005 restricted stock units outstanding and unvested. As of September 30, 2018, we had approximately $6.3 million of unrecognized stock-based compensation expense related to restricted stock units that we expect to recognize over a weighted-average period of 4.0 years.

The fair value of each stock option is estimated using the Black- Scholes option pricing model at each measurement date. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the stock price, and expected dividends. The awards currently outstanding were granted with vesting terms between two and six years. Certain awards contain a 25% acceleration vesting clause, which was triggered in connection with our IPO. In addition, certain awards contain a provision for 100% accelerated vesting in the event of (a) the termination of employment without cause or (b) the resignation of the employee for good reason within twelve months following a triggering event as defined in the Initial Plan.

We have not historically paid dividends to our stockholders, and we currently do not anticipate paying any dividends in the foreseeable future. As a result, we assumed a dividend yield of 0%. The risk-free interest rate is based upon the rates of U.S. Treasury bills with a term that approximates the expected life of the option. We use the simplified method or the lattice method when appropriate, to reasonably estimate the expected life of our option awards. Expected volatility is based upon the volatility of comparable public companies.

Cellectis Awards

Cellectis has granted stock options to our employees from time to time. Compensation costs related to the grant of the Cellectis awards to our employees have been recognized in our statements of operations with a corresponding credit to stockholders’ equity, representing Cellectis’ capital contribution. The fair value of each stock option is estimated at the grant date using the Black-Scholes option pricing model. The fair value of stock options under the Black-Scholes model requires management to make assumptions regarding projected employee stock option exercise behaviors, risk-free interest rates, volatility of the stock price, and expected dividends.

Cellectis has also granted certain Calyxt employees and consultants warrants to purchase Cellectis stock in exchange for services provided to us. We recorded the fair value of the warrants as a dividend paid to Cellectis in exchange for the warrants issued to the consultants.

We recognized a reduction to compensation expense related to Cellectis' grants of stock options and warrants to our employees and consultants of $96 thousand for the three months ended September 30, 2018 and we recognized share-based compensation expense related to Cellectis' grants of stock options and warrants to our employees and consultants of $98 thousand for the three months ended September 30, 2017. We recognized share-based compensation expense related to Cellectis' grants of stock options and warrants to our employees and consultants of $107 thousand and $347 thousand for the nine months ended September 30, 2018 and 2017, respectively.

Recent Accounting Pronouncements

See Note 2 to the financial statements for a discussion of recent accounting pronouncements.

Results of Operations

Three Months Ended September 30, 2018 Compared to Three Months Ended September 30, 2017 (unaudited)

The following table summarizes key components of our results of operations for the periods indicated:

	Three Months Ended September 30, 2018	Three Months Ended September 30, 2017	% change 2018 vs 2017
	($ in thousands)		
Revenue	$ 27	$ 44	(38.6)%
Operating expenses:			
Cost of revenue	—	—	—
Research and development	3,307	6,438	(48.6)%
Selling, general, and administrative	4,419	6,553	(32.6)%
Total operating expenses	7,726	12,991	(40.5)%
Loss from operations	(7,699)	(12,947)	(40.5)%
Interest income, net	228	48	375%
Foreign currency transaction loss	(12)	(5)	140%
Loss before income taxes	(7,483)	(12,904)	(42.0)%
Income tax expense	—	—	—
Net loss	$(7,483)	$(12,904)	(42.0)%

Revenue

Revenue decreased to $27 thousand for the three months ended September 30, 2018 from $44 thousand for the three months ended September 30, 2017. The decrease was primarily attributable to a strategic decision to focus on in-house development of product candidates and to reduce the amount of subcontracted R&D that we were preforming for third parties.

Cost of revenue

We did not incur any cost of revenue associated with subcontracted R&D for the three months ended September 30, 2018 or for the three months ended September 30, 2017.

Research and development expenses

R&D expenses decreased $3.1 million, or 49%, from $6.4 million for the three months ended September 30, 2017 to $3.3 million for the three months ended September 30, 2018. This decrease was primarily attributable to a $4.6 million decline in stock-based compensation expense for the three months ended September 30, 2018 compared to the same period in 2017. The comparable period in 2017 included IPO related stock-based compensation expense. Excluding stock-based compensation, R&D expenses increased $1.5 million in the three months ended September 30, 2018 versus the same period last year. This was attributable to higher personnel costs combined with increases in outsourced R&D expenses for germplasm breeding and field trials combined with additional product testing.

Selling, general, and administrative expenses

Selling, general, and administrative expenses decreased $2.1 million, or 33%, from $6.5 million for the three months ended September 30, 2017 to $4.4 million for the three months ended September 30, 2018. This decrease was primarily attributable to a $3.8 million decline in stock-based compensation expense for the three months ended September 30, 2018 compared to the same period last year. The comparable period in 2017 included IPO related stock-based compensation expense. Excluding stock-based compensation, SG&A expenses increased $1.7 million in the three months ended September 30, 2018 versus the same period last year. The increase was primarily attributable to $0.6 million of higher professional services and management fees and $0.2 million of additional personnel costs, combined with $0.5 million of added facilities, intellectual property, and marketing related spending to support our commercialization efforts. Expenses related to our CEO transition also contributed $0.4 million to the increase for the three months ended September 30, 2018.

Interest income, net

Interest income, net increased $180 thousand from $48 thousand of interest income, net for the three months ended September 30, 2017 to $228 thousand of interest income, net for the three months ended September 30, 2018. The increase was attributable to an increase in interest income on our higher cash balances partially offset by increased interest expense associated with our new headquarters facility financing lease obligation.

Foreign currency transaction loss

Foreign currency transaction loss increased $7 thousand from a $5 thousand loss for the three months ended September 30, 2017 to a $12 thousand loss for the three months ended September 30, 2018.

Nine Months Ended September 30, 2018 Compared to Nine Months Ended September 30, 2017 (unaudited)

The following table summarizes key components of our results of operations for the periods indicated:

	Nine Months Ended September 30,		% change 2018 vs 2017
	2018	2017	
	($ in thousands)		
Revenue	$ 234	$ 322	(27.3)%
Operating expenses:			
Cost of revenue	—	—	—
Research and development	7,493	9,157	(18.2)%
Selling, general, and administrative	12,228	10,141	20.6%
Total operating expenses	19,721	19,298	2.2%
Loss from operations	(19,487)	(18,976)	2.7%
Interest income, net	88	4	2,100%
Foreign currency transaction loss	(30)	(159)	(81.1)%
Loss before income taxes	(19,429)	(19,131)	1.6%
Income tax expense	—	—	—
Net loss	$(19,429)	$(19,131)	1.6%

Revenue

Revenue decreased $88 thousand from $322 thousand for the nine months ended September 30, 2017 to $234 thousand for the nine months ended September 30, 2018. The decrease was attributable to a strategic decision to focus on in-house development of product candidates and to reduce the amount of subcontracted R&D that we were preforming for third parties.

Cost of revenue

We did not incur any cost of revenue associated with subcontracted R&D for the nine months ended September 30, 2017 or September 30, 2018, respectively.

Research and development expenses

R&D expenses decreased $1.7 million, or 18.2%, from $9.2 million for the nine months ended September 30, 2017 to $7.5 million for the nine months ended September 30, 2018. This decrease was primarily attributable to a $3.8 million decline in stock-based compensation expense for the nine months ended September 30, 2018 compared to the same period in 2017. The nine-month period ended September 30, 2017 included IPO related stock-based compensation expense. Excluding stock-based compensation, R&D expenses increased $2.1 million in the nine months ended September 30, 2018 versus the same period last year. This increase was attributable to higher personnel costs combined with increases in outsourced R&D expenses for germplasm breeding and field trials combined with additional product testing.

Selling, general, and administrative expenses

Selling, general, and administrative expenses increased $2.1 million, or 20.6%, from $10.1 million for the nine months ended September 30, 2017 to $12.2 million for the nine months ended September 30, 2018. Partially offsetting the increase was a $2.9 million decline in stock-based compensation for the nine-month period ended September 30, 2018 from that recorded for the nine-month period ended September 30, 2017. The comparable period in 2017 included IPO related stock-based compensation expense. Excluding stock-based compensation, SG&A expenses increased $ 5.0 million in the nine months ended September 30, 2018 versus the same period last year. The increase was attributable to a $1.4 million increase in intellectual property costs, $1.3 million of higher professional services and management fees, $1.2 million of additional personnel costs, combined with $0.7 million of additional facilities and marketing related spending to support our commercialization efforts. Expenses related to our CEO transition also contributed $0.4 million to the increase for the nine months ended September 30, 2018.

Interest income, net

Interest income, net increased $84 thousand from $4 thousand of interest income, net for the nine months ended September 30, 2017 to $88 thousand of interest income, net for the nine months ended September 30, 2018. The increase was attributable to an increase in interest income, net on our higher cash balances partially offset by increased interest expense associated with our new headquarters facility financing lease obligation.

Foreign currency transaction loss

Foreign currency transaction loss decreased $129 thousand from a $159 thousand loss for the nine months ended September 30, 2017 to a $30 thousand loss for the nine months ended September 30, 2018. The decrease was primarily attributable to decreased accounts payable balances owed to Cellectis subject to currency fluctuation for the nine months ended September 30, 2018.

Liquidity and Capital Resources

As of September 30, 2018, we had cash and cash equivalents of $101.8 million.

Sources of Liquidity

Until the completion of our IPO, we funded our operations primarily through cash infusions provided by Cellectis. On July 25, 2017, we completed our IPO of common stock. In the aggregate, we received net proceeds from the IPO of approximately $58.0 million, after deducting underwriting discounts and commissions of $3.1 million and offering expenses totaling approximately $3.3 million.

On May 22, 2018, we completed a follow-on offering of its common stock. We sold an aggregate of 4,057,500 shares at a public offering price of $15.00 per share. In the aggregate, we received net proceeds from the follow-on offering of approximately $57.0

million, after deducting underwriting discounts and commissions of $3.2 million and offering expenses of $0.7 million. As part of the follow-on offering, Cellectis purchased 550,000 shares of common stock for an aggregate purchase price of $8.3 million, the proceeds of which are included in the net proceeds of $57.0 million.

During the nine months ended September 30, 2018 and 2017, we incurred losses from operations of $19.4 million and $19.1 million, respectively, and used net cash in operating activities of $13.6 million and $6.0 million, respectively. At September 30, 2018, we had an accumulated deficit of $74.0 million and we expect to incur losses for the immediate future. Although we believe that we will be able to successfully fund our operations with our cash and cash equivalents as of September 30, 2018 through late 2020, there can be no assurance we will be able to do so or that we will ever operate profitably.

Historical Changes in Cash Flows

Nine Months Ended September 30, 2018 Compared to Nine Months Ended September 30, 2017 (unaudited)

The table below summarizes our sources and uses of cash for the nine months ended September 30, 2018 and 2017:

	Nine Months Ended September 30,	
	2018	2017
	(in thousands)	
Net cash used in operating activities	$(13,600)	$ (5,968)
Net cash used in investing activities	(830)	(1,614)
Net cash provided by financing activities	59,612	65,101
Total	$ 45,182	$57,519

Net cash used in operating activities was $13.6 million and $6.0 million in the nine months ended September 30, 2018 and 2017, respectively. The net cash used in each of these periods primarily reflects the net loss for the periods, partially offset by stock-based compensation, depreciation, and the effects of changes in operating assets and liabilities.

Net cash used in investing activities was $0.8 million and $1.6 million in the nine months ended September 30, 2018 and 2017, respectively. The majority of the cash used in investing activities in the nine months ended September 30, 2018 was attributable to equipment purchases related to our new headquarters and greenhouse facility in Roseville, Minnesota. The majority of the cash used in investing activities in the nine months ended September 30, 2017 was attributable to site improvements and architect fees for the design of our new headquarters and greenhouse facility in Roseville, Minnesota, and related equipment purchases.

Net cash provided by financing activities was $59.6 million and $65.1 million in the nine months ended September 30, 2018 and 2017, respectively. The majority of the cash received in financing activities in the nine months ended September 30, 2018 was related to net proceeds, after deducting underwriting discounts and commissions, of $57.7 million from our follow-on offering in May 2018, partially offset by $0.2 million of paid offering expenses, combined with proceeds from the exercise of stock options of $2.1 million. The majority of the cash received in financing activities in the nine months ended September 30, 2017 was attributable to net proceeds, after deducting underwriting discounts and commissions, of $61.3 million from our initial public offering in July 2017, partially offset by paid offering expenses of $3.3 million, combined with net proceeds from our sale leaseback agreement of $7.0 million.

Contractual Obligations, Commitments and Contingencies

Forward Purchase Contracts

We enter into supply agreements for grain and seed production with settlement values based on commodity market futures pricing. We account for these derivative financial instruments utilizing the authoritative guidance in ASC Topic 815, *Derivatives and Hedging*. Realized gains and losses from derivative contracts are recorded as R&D expenses as a result of breeding contract activity. The fair value for forward purchase contracts is estimated based on commodity market future prices. Increases or decreases of these prices will impact these estimates and could lead to significant changes in the gain or loss.

Sale-Leaseback

In September 2017 we consummated a sale-leaseback transaction including a Lease Agreement, dated September 6, 2017, with a third party with respect to our lease of certain real property and improvements located in Roseville, Minnesota for a term of twenty years, with four options to extend the term of the Lease Agreement for five years each (subject to there being no default under the terms of the Lease Agreement beyond any cure period and this property being occupied at the time of such extension).

Pursuant to the purchase agreement, we received approximately $7 million in connection with the sale of the property. The property serves as our new corporate headquarters and lab facilities. The facility is composed of a nearly 40,000 square-foot office and lab building, with greenhouses and outdoor research plots. We are deemed the owner for accounting purposes.

We obtained a temporary certificate of occupancy in May and moved into the new laboratory and office space during May and June of 2018. Because the property was substantially completed in May 2018, the lease commenced with lease payments of $115 thousand per month.

Under the lease, we pay an annual base rent of 8% of the total project cost (Annual Base Rent) with scheduled increases in rent of 7.5% on the sixth, eleventh and sixteenth anniversaries of the Initial Term Commencement Date as well as on the first day of each Renewal Term (as defined in the Lease Agreement). Currently, we pay an annual base rent of approximately $1.4 million.

The Lease Agreement is a net lease and the costs and expenses associated with the property are to be paid for by us. Beginning on the date that is 18 months following the Initial Term Commencement Date, if the landlord decides to sell the property during the term of the Lease Agreement and any extension thereof, we will have a right of first refusal to purchase the property on the same terms offered to any third party.

In consideration of, and as an inducement to, the landlord’s agreement to enter into the Lease Agreement, Cellectis entered into a Lease Guaranty with the landlord, whereby Cellectis has guaranteed all of our obligations under the Lease Agreement. Cellectis’ guarantee of Calyxt’s obligations under the sale-leaseback transaction will terminate at the end of the second consecutive calendar year in which Calyxt’s tangible net worth exceeds $300 million, as determined in accordance with generally accepted accounting principles.

On November 10, 2017, we agreed to indemnify Cellectis for any obligations incurred by Cellectis under the Lease Guaranty. This indemnification agreement will become effective at such time as Cellectis owns 50% or less of our outstanding common stock.

Operating Capital Requirements

To date, we have not generated any revenues from product sales. We do not know when, or if, we will generate any revenue from product sales. We do not expect to generate significant revenue from product sales unless and until we obtain regulatory approval of and commercialize one or more of our current or future product candidates. If we fail to complete the development of our product candidates in a timely manner or fail to obtain any necessary regulatory approvals for them, our ability to generate future revenue would be compromised.

We expect to commence commercialization of our high oleic soybean product by the end of 2018 or early in 2019. We intend to buy grain grown by the farmers utilizing our seeds that meets our quality specifications and expect to generate revenue by using the purchased grain to produce soybean meal and soybean oil, which we would then sell to food companies and animal feed companies.

Nevertheless, we anticipate that we will continue to generate losses for the foreseeable future, and we expect the losses to increase as we continue the development of our product candidates and begin to commercialize our product candidates that complete the development process. We are subject to all risks incident in the development of new agricultural products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. Sales of plant products depend upon planting and growing seasons, which vary from year to year, which is expected to result in both highly seasonal patterns and substantial fluctuations in quarterly sales and profitability. As we have not yet made any sales of our products, we have not experienced the full nature or extent to which this business may be seasonal. In addition, as a newly public company, we also anticipate we will continue to incur substantial expenses related to audit, legal, regulatory and tax-related services associated with our public company obligations in the United States and our compliance with applicable U.S. exchange listing and SEC requirements. We anticipate that we will need additional funding in connection with our continuing operations, including for the further development of our existing product candidates and to pursue other development activities related to additional product candidates.

During the years ended December 31, 2017 and 2016 and through September 30, 2018, we incurred losses from operations and net cash outflows from operating activities as disclosed in the statements of operations and cash flows, respectively. At September 30, 2018, we had an accumulated deficit of $74 million and we expect to incur losses for the immediate future. Taking into account our anticipated cash burn rate, we believe our cash and cash equivalents will be sufficient to fund our operations through late 2020. However, there can be no assurance that we will be able to do so or that we will ever operate profitably.

Until we can generate a sufficient amount of revenue from our products, if ever, we expect to finance a portion of future cash needs through cash on hand and public or private equity or debt financings. Additional capital may not be available on reasonable terms, if at all. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of one or more of our product candidates. If we raise additional funds through the issuance of additional debt or equity securities, it could result in dilution to our existing stockholders and increased fixed payment obligations, and these securities may have rights senior to those of our common shares. Any of these events could significantly harm our business, financial condition and prospects.

The period of time through which our financial resources will be adequate to support our operations is a forward-looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Our future funding requirements, both near and long-term, will depend on many factors, including, but not limited to:

- the initiation, progress, timing, costs and results of field trials for our product candidates;
- the outcome, timing and cost of regulatory approvals by U.S. and non-U.S. regulatory authorities, including the possibility that regulatory authorities will require that we perform studies;
- the ability of our product candidates to progress through late stage development successfully, including through field trials;
- the cost of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- our need to expand our research and development activities;
- our need and ability to hire additional personnel;
- our need to implement additional infrastructure and internal systems;
- the effect of competing technological and market developments; and
- the cost of establishing sales, marketing and distribution capabilities for any products we commercialize.

If we cannot expand our operations or otherwise capitalize on our business opportunities because we lack sufficient capital, our business, financial condition and results of operations could be materially adversely affected.

Off Balance Sheet Obligations

We enter into seed and grain production agreements with settlement value based on commodity market future pricing. We do not have any other off-balance sheet arrangements.

JOBS Act

We are an emerging growth company under the JOBS Act. The JOBS Act provides that an emerging growth company can delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to take advantage of this extended transition period for complying with new or revised accounting standards. As an emerging growth company, we have also elected to take advantage of certain reduced disclosure and other requirements that are otherwise generally applicable to public companies. In particular, subject to certain conditions set forth in the JOBS Act, we may not be required to, among other things, (i) provide an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404, (ii) provide all of the compensation disclosure that may be required of non-emerging growth public companies under the Dodd-Frank Wall Street Reform and Consumer Protection Act, (iii) comply with any requirement that may be adopted by the PCAOB regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis), and (iv) disclose certain executive compensation related items, such as, the correlation between executive compensation and performance and comparisons of the chief executive officer's compensation to median employee compensation. These exemptions will apply through December 31, 2022 or until we are no longer an emerging growth company, whichever is earlier.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

There have been no material changes in our exposure to foreign currency exchange risk or to market risk related to changes in interest rates from the information provided in our Annual Report.

Item 4. Controls and Procedures Internal

Management's Evaluation of Disclosure Controls and Procedures

Based on an evaluation under the supervision and with the participation of our management, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act, were effective as of September 30, 2018 to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms and (ii) accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended September 30, 2018 that have materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

In addition to the litigation described below, we are involved in various legal proceedings which are ordinary litigation incidental to our business, some of which are covered in whole or in part by insurance. While we believe the ultimate disposition of litigation will not have material adverse effect on our financial position, results of operations or liquidity, there exists the possibility that such litigation may have an impact on our results for a particular reporting period in which litigation effects become probable and reasonably estimable. Though we do not believe there is a reasonable likelihood that there will be a material change related to these matters, litigation is subject to inherent uncertainties and management’s view of these matters may change in the future.

In December 2013, we entered into a License Agreement (the License Agreement) with Bayer, pursuant to which we granted Bayer a license to certain patents for the research and commercialization of certain products developed with our TALEN technology. We believe that Bayer breached the License Agreement by filing patent applications in violation of the License Agreement’s provisions and by failing to make a payment due under the License Agreement. Accordingly, we gave notice to Bayer of our termination of the License Agreement, and on March 12, 2018, we filed a complaint in Delaware Chancery Court alleging that we properly terminated the License Agreement for Bayer’s material breach.

On May 15, 2018, Bayer agreed to settle the lawsuit that we brought. Under the settlement terms, the parties agreed that the License Agreement is terminated, that Bayer will destroy any technology, related product and confidential information covered by the License Agreement, and that Bayer will permanently abandon patent applications that are based on or include data related to the covered technology. This settlement confirms that Bayer and its subsidiaries have no access to Calyxt technology or intellectual property. The settlement was filed in Delaware Chancery Court on May 15, 2018.

Item 1A. Risk Factors

There were no material changes in risk factors for the Company in the period covered by this report. See the discussion of risk factors in our Annual Report.

Item 6. Exhibits

(a) Index of Exhibits

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q filed on September 1, 2017)
3.2	Amended and Restated Bylaws, as amended (incorporated by reference to Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q filed on May 7, 2018)
31.1*	Certification of the Chief Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act
31.2*	Certification of the Interim Chief Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act
32*	Certification of the Chief Executive Officer and Interim Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

*Filed herewith

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on November 13, 2018.

CALYXT, INC.

By: /s/ James A. Blome
Name: James A. Blome
Title: Chief Executive Officer

By: /s/ Eric Dutang
Name: Eric Dutang
Title: Interim Chief Financial Officer

Exhibit 31.1

CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a)
UNDER THE SECURITIES EXCHANGE ACT, AS AMENDED

I, James A. Blome, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Calyxt, Inc.;

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

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

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

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

    b. 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

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

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

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

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

Date: November 13, 2018

/s/ James A. Blome
James A. Blome
Chief Executive Officer

Exhibit 31.2

**CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a)
UNDER THE SECURITIES EXCHANGE ACT, AS AMENDED**

I, Eric Dutang, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Calyxt, Inc.;

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

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

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

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

    b. 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

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

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

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

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

Date: November 13, 2018

/s/ Eric Dutang
Eric Dutang
Interim Chief Financial Officer

Exhibit 32

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

In connection with the Quarterly Report of Calyxt, Inc. (the “Company”) on Form 10-Q for the period ended September 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), each of the undersigned hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: November 13, 2018

/s/ James A. Blome
James A. Blome
Chief Executive Officer

/s/ Eric Dutang
Eric Dutang
Interim Chief Financial Officer