CALCULATION OF REGISTRATION FEE

		Proposed	Proposed	
	Amount	Maximum	Maximum	
Title of Each Class of Securities	to be	Offering Price	Aggregate	Amount of
to be Registered	Registered(1)	Per Share	Offering Price	Registration Fee(2)
Common Stock, par value \$0.0001	3,048,780	\$13.46 (3)	\$41,036,579	\$5,327

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement also covers any additional securities issuable in connection with any stock split, stock dividend, or similar transaction with respect to the common stock being registered pursuant to this registration statement.
- (2) Calculated in accordance with Rule 457(a) and Rule 457(r) under the Securities Act. This "Calculation of Registration Fee" table shall be deemed to update the "Calculation of Registration Fee" table in the registrant's Registration Statement on Form S-3 (File No. 333-228693) in accordance with Rule 457(r) under the Securities Act.
- (3) This estimate is made pursuant to Rule 457(c) of the Securities Act, solely for purposes of calculating the registration fee. The Proposed Maximum Offering Price Per Share is the average of the high and low prices for the registrant's common stock as reported on The Nasdaq Global Select Market on October 30, 2019.

3,048,780 Shares



Codexis, Inc.

Common stock

This prospectus supplement No. 1 supplements, updates and amends the prospectus dated December 6, 2018 (as amended, the "prospectus"), to provide for the resale by the selling stockholder named herein of up to 3,048,780 shares of common stock, par value \$0.0001 per share ("common stock"), of Codexis, Inc. that may be offered and sold from time to time by the selling stockholder.

You should read this prospectus supplement No. 1 in conjunction with the prospectus. This prospectus supplement No. 1 is not complete without, and may not be delivered or used except in conjunction with, the prospectus, including any amendments or supplements thereto. This prospectus supplement No. 1 is qualified by reference to the prospectus, except to the extent that the information provided by this prospectus supplement No. 1 supersedes information contained in the prospectus.

We are not selling any shares of common stock under this prospectus supplement, and we will not receive any of the proceeds from the sale of common stock by the selling stockholder. The selling stockholder (which term as used herein includes the stockholder listed below and its transferees, assignees, pledgees, donees and other successors) may sell the common stock described in this prospectus supplement through public or private transactions at market prices prevailing at the time of sale or at negotiated prices, as described in the prospectus under "Plan of Distribution."

Our common stock is listed on The Nasdaq Global Select Market under the symbol "CDXS". On November 5, 2019, the last reported sales price of our common stock on The Nasdaq Global Select Market was \$14.00 per share.

INVESTING IN OUR COMMON STOCK INVOLVES RISKS. SEE THE "RISK FACTORS" ON PAGE 5 OF THE PROSPECTUS CONCERNING FACTORS YOU SHOULD CONSIDER BEFORE INVESTING IN OUR COMMON STOCK.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is November 6, 2019.

The following sentence is hereby added to the section entitled "Use of Proceeds" in the prospectus:

We will not receive any proceeds from the sale of up to 3,048,780 shares of common stock by the selling stockholder.

The following section entitled "Selling Stockholder" is hereby added to the prospectus:

SELLING STOCKHOLDER

On June 20, 2019, we entered into a Securities Purchase Agreement, or the Securities Purchase Agreement, with the selling stockholder listed below, pursuant to which we sold in a private placement transaction 3,048,780 shares of our common stock. The term "selling stockholder" includes the stockholder listed below and its transferees, assignees, pledgees, donees and other successors. This prospectus covers the resale or other disposition by the selling stockholder of up to the total number of shares of common stock issued to the selling stockholder pursuant to the Securities Purchase Agreement. Throughout this prospectus, when we refer to the shares of our common stock being registered on behalf of the selling stockholder, we are referring to the shares issued to the selling stockholder under the Securities Purchase Agreement, and when we refer to the selling stockholder in this prospectus, we are referring to the purchaser under the Securities Purchase Agreement.

We are registering the above-referenced shares (and any shares issued as a dividend or other distribution with respect to, or in exchange for or in replacement of, such shares) to permit the selling stockholder and its transferees, assignees, pledgees, donees and other successors that receive their shares after the date of this prospectus to resell or otherwise dispose of the shares in the manner contemplated under "Plan of Distribution" below.

The selling stockholder does not have, and within the past three years has not had, any position, office or other material relationship with us.

The following table sets forth the name of the selling stockholder, the number of shares owned by the selling stockholder, the number of shares that may be offered under this prospectus and the number of shares of our common stock owned by the selling stockholder assuming all of the shares covered hereby are sold. The number of shares in the column "Number of Shares Being Offered" represents all of the shares that the selling stockholder may offer under this prospectus. The selling stockholder may sell some, all or none of its shares. We do not know how long the selling stockholder will hold the shares before selling them, and we currently have no agreements, arrangements or understandings with the selling stockholder regarding the sale or other disposition of any of the shares. The shares covered hereby may be offered from time to time by the selling stockholder.

The information set forth below is based upon information obtained from the selling stockholder and upon information in our possession regarding the issuance of shares of common stock to the selling stockholder in connection with the private placement transaction. The percentages of shares owned after the offering are based on 58,518,105 shares of our common stock outstanding as of October 31, 2019, including the shares of common stock covered hereby.

	Prior to th	Prior to the Offering			After the Offering	
	Number of					
	Shares of		Number of	Number of		
	Common Stock	Percent of	Common stock	Common stock	Percent of	
	Beneficially	Common Stock	Being Registered	Beneficially	Common stock	
Name of Selling Stockholder	Owned	Outstanding(l)	for Resale(2)	Owned(3)	Outstanding	
Casdin Partners Master Fund, L.P.(4)	5,073,780	8.7%	3,048,780	2,025,000	3.5%	

⁽¹⁾ Based on 58,518,105 shares of common stock outstanding as of October 31, 2019 (including the 3,048,780 shares issued to the selling stockholder pursuant to the Securities Purchase Agreement).

- (2) Represents the number of shares of common stock being offered hereby on behalf of the selling stockholder, which may be less than the total number of shares beneficially owned by such selling stockholder.
- (3) Assumes that the selling stockholder disposes of all of the common stock covered by this prospectus and does not acquire beneficial ownership of any additional common stock. The registration of these shares does not necessarily mean that the selling stockholder will sell all or any portion of the shares covered by this prospectus.
- (4) Eli Casdin is the managing member of Casdin Capital, LLC, which is the investment manager of the selling stockholder, and by virtue of such position exercises voting and investment control over the shares of common stock owned by the selling stockholder. The address of such entities and persons is 1350 Avenue of the Americas, Suite 2600, New York, NY 10019.

The following is hereby added to the section entitled "Plan of Distribution" in the prospectus:

PLAN OF DISTRIBUTION

We are registering the shares of common stock issued to the selling stockholder to permit the resale of these shares of common stock by the holder of the shares of common stock from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholder of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling stockholder and any of its transferees, donees, pledgees or other successors in interest may, from time to time, sell all or a portion of the shares of common stock beneficially owned by the selling stockholder and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling stockholder will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, in the over-the-counter market or in transactions otherwise than on these exchanges or systems or in the over-the-counter market and in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions. The selling stockholder may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal
 to facilitate the transaction;
- · purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- · privately negotiated transactions;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- in transactions through broker-dealers that agree with the selling stockholder to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether such options are listed on an options exchange or otherwise;
- · through one or more underwritten offerings on a firm commitment or best efforts basis;
- · a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholder also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, as permitted by that rule, or Section 4(a)(1) under the Securities Act, if available, rather than under this prospectus, provided that the selling stockholder meets the criteria and conforms to the requirements of those provisions.

Broker-dealers engaged by the selling stockholder may arrange for other broker-dealers to participate in sales. If the selling stockholder effects such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholder or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal. Such commissions will be in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 2121 (and any successor); and in the case of a principal transaction a markup or markdown in compliance with FINRA 2121

In connection with sales of the shares of common stock or otherwise, the selling stockholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The selling stockholder may also sell shares of common stock short and if such short sale shall take place after the date that the registration statement of which this prospectus is a part is declared effective by the Commission, the selling stockholder may deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholder may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares, to the extent permitted by applicable law. The selling stockholder may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling stockholder may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by the selling stockholder and, if the selling stockholder defaults in the performance of its secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act, as amended, amending, if necessary, the list of selling stockholder to include the pledgee, transferee or other successors in interest as a selling stockholder under this prospectus. The selling stockholder also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholder and any broker-dealer or agents participating in the distribution of the shares of common stock may be deemed to be "underwriters" within the meaning of Section 2(a)(11) of the Securities Act in connection with such sales. In such event, any commissions paid, or any discounts or concessions allowed to, any such broker-dealer or agent and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. If the selling stockholder is deemed to be an "underwriter" within the meaning of Section 2(a)(11) of the Securities Act, it will be subject to the applicable prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Securities Exchange Act of 1934, as amended, or the Exchange Act.

The selling stockholder has informed us that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the common stock. Upon our being notified in writing by the selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of common stock through a block trade, special offering, exchange distribution or

secondary distribution or a purchase by a broker-dealer, a supplement to this prospectus will be filed, if required, pursuant to Rule 424(b) under the Securities Act, disclosing:

- the name of the selling stockholder and of the participating broker-dealer(s),
- the number of shares involved,
- · the price at which such the shares of common stock were sold,
- the commissions paid or discounts or concessions allowed to such broker-dealer(s), where applicable,
- that such broker-dealer(s) did not conduct any investigation to verify the information set out or incorporated by reference in this
 prospectus, and
- · other facts material to the transaction.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that the selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

The selling stockholder and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act, as amended, and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the selling stockholder and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

We will pay all expenses of the registration of the shares of common stock pursuant to the registration rights agreement, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, that the selling stockholder will pay all underwriting discounts and selling commissions, if any, relating to any shares offered and sold by or on behalf of the selling stockholder. We will indemnify the selling stockholder against certain liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreement, or the selling stockholder will be entitled to contribution. We may be indemnified by the selling stockholder against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the registration rights agreement, or we may be entitled to contribution.

To the extent required, this prospectus may be amended and/or supplemented from time to time to describe a specific plan of distribution.

The following sentence is hereby added to the section entitled "Legal Matters" in the prospectus:

LEGAL MATTERS

The validity of the issuance of our common stock offered hereby will be passed upon for us by Latham & Watkins LLP, Menlo Park, California.

EXPERTS

The financial statements as of December 31, 2018 and 2017 and for each of the three years in the period ended December 31, 2018 and management's assessment of the effectiveness of internal control over financial

reporting as of December 31, 2018 incorporated by reference in this Prospectus have been so incorporated in reliance on the reports of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

The following is hereby added to the section entitled "Information Incorporated by Reference" in the prospectus:

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future information filed (rather than furnished) with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act between the date of this prospectus and the termination of this offering; provided, however, that we are not incorporating any information furnished under Item 2.02 or Item 7.01 of any Current Report on Form 8-K:

- Our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC on March 1, 2019;
- The information specifically incorporated by reference into our Annual Report onForm 10-K for the year ended December 31, 2018 from our definitive proxy statement on Schedule 14A, filed with the SEC on April 26, 2019;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2019, June 30, 2019 and September 30, 2019, filed with the SEC on May 8, 2019, August 6, 2019 and November 6, 2019, respectively;
- Our Current Reports on Form 8-K filed with the SEC on <u>January 10, 2019</u>, <u>February 12, 2019</u>, <u>April 5, 2019</u>, <u>May 6, 2019</u> (Item 1.01), <u>June 12, 2019</u>, <u>June 20, 2019</u> (Items 1.01 and 3.02), <u>July 23, 2019</u>, <u>and August 6, 2019</u> (Item 5.02); and
- The description of our Common Stock contained in our Registration Statement on Form 8-A, filed with the SEC on April 19, 2010, including any amendments or reports filed for the purpose of updating such description.

These documents may also be accessed on our website athttp://www.codexis.com. Except as otherwise specifically incorporated by reference in this prospectus, information contained in, or accessible through, our website is not a part of this prospectus.

We will furnish without charge to you, upon written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents by writing or telephoning us at the following address:

Codexis, Inc. 200 Penobscot Drive Redwood City, California 94063 (650) 421-8100 Attention: Secretary