

ROYAL BANK OF CANADA  
 Form FWP  
 February 05, 2019

Filed Pursuant to  
 Rule 433  
 Registration No.  
 333-227001  
 February 5, 2019

Free Writing Prospectus  
 (To the Prospectus dated September 7, 2018, the Prospectus Supplement dated September 7, 2018, and the Product Prospectus Supplement dated September 11, 2018)

\$  
 Capped Levered Market Plus Notes Due August 14, 2019

Royal Bank of Canada Linked to the Technology Select Sector SPDR® Fund

General

The Notes are designed for investors who seek to receive a return of 2.0 times the appreciation of the Technology Select Sector SPDR® Fund (the “Reference Asset”), subject to the Maximum Return set forth below. Investors should be willing to forgo interest and dividend payments and, if the price of the Reference Asset decreases, be willing to lose some or all of their principal.

- Senior unsecured obligations of Royal Bank of Canada maturing August 14, 2019.<sup>(a)(b)</sup>
- Minimum denominations of \$10,000 and integral multiples of \$1,000 in excess thereof.

The Notes are expected to price on or about February 8, 2019<sup>(b)</sup> (the “pricing date”) and are expected to be issued on or about February 13, 2019<sup>(b)</sup> (the “issue date”).

**Key Terms** Terms used in this free writing prospectus, but not defined herein, will have the meanings ascribed to them in the product prospectus supplement.

**Issuer:** Royal Bank of Canada

**Reference Asset:** Technology Select Sector SPDR® Fund (Bloomberg symbol “XLK”)

If the Final Level is greater than or equal to the Initial Level, you will receive a cash payment that provides you with a return equal to the Percentage Change multiplied by the Leverage Factor. Accordingly, if the Percentage Change is positive, your payment per \$1,000 in principal amount of the Notes will be calculated as follows:

$$\$1,000 + [\$1,000 \times (\text{Percentage Change} \times \text{Leverage Factor})]$$

**Payment at Maturity:** However, the payment on the Notes will not exceed \$1,107.60 for each \$1,000 in principal amount. If the Final Level is less than the Initial Level, you will lose 1% of the principal amount of your Notes for every 1% that the Final Level is less than the Initial Level. Accordingly, if the Percentage Change is negative, your payment per \$1,000 in principal amount of the Notes will be calculated as follows:

$$\$1,000 + [\$1,000 \times \text{Percentage Change}]$$

In this case, you will lose 1% of the principal amount of your Notes for every 1% that the Final Level is less than the Initial Level. Any payment on the Notes, including any repayment of principal, is subject to the creditworthiness of the Issuer and is not guaranteed by any third party.

**Percentage Change:** The performance of the Reference Asset from the Initial Level to the Final Level, calculated as follows:  

$$\frac{\text{Final Level} - \text{Initial Level}}{\text{Initial Level}}$$

**Leverage Factor:** 2.0

**Maximum Return:** \$1,107.60 for each \$1,000 in principal amount of the Notes.

**Initial Level:** The closing share price of the Reference Asset on the pricing date.

**Final Level:** The arithmetic average of the closing price of the Reference Asset on each of the valuation dates.

**Valuation Dates:** August 5, 2019, August 6, 2019, August 7, 2019, August 8, 2019 and August 9, 2019 (the “final valuation date”)<sup>(b)</sup>

**Maturity Date:** August 14, 2019<sup>(a)(b)</sup>

Calculation Agent: RBC Capital Markets, LLC (“RBCCM”)  
 CUSIP/ISIN: 78013XYT9/ US78013XYT98

Estimated Value: The estimated initial value of the Notes as of the date of this document is \$990.79 per \$1,000 in principal amount, which is less than the price to public. The final pricing supplement relating to the Notes will set forth our updated estimate of the initial value of the Notes as of the pricing date, which will not be more than \$20 less than this amount. The actual value of the Notes at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount.

(a) Subject to postponement if a market disruption event occurs, as described under “General Terms of the Notes—Market Disruption Events” in the product prospectus supplement.

(b) Expected. In the event we make any change to the expected pricing date and issue date, the valuation dates and the maturity date will be changed so that the stated term of the Notes remains the same.

Investing in the Notes involves a number of risks. See “Additional Risk Factors Specific to the Notes” beginning on page PS-6 of the product prospectus supplement, “Risk Factors” beginning on page S-1 of the prospectus supplement and beginning on page 1 of the prospectus and “Selected Risk Considerations” beginning on page FWP-4 of this free writing prospectus.

The Notes will not be listed on any U.S. securities exchange or quotation system. Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined that this free writing prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The Notes will not constitute deposits insured by the Canada Deposit Insurance Corporation, the U.S. Federal Deposit Insurance Corporation or any other Canadian or U.S. government agency or instrumentality. The Notes are not subject to conversion into our common shares under subsection 39.2(2.3) of the Canada Deposit Insurance Corporation Act.

	Price to Public <sup>1</sup>	Underwriting Commission <sup>2</sup>	Proceeds to Royal Bank of Canada
Per Note \$1,000	\$5.00		\$995.00
Total \$	\$		\$

Certain fiduciary accounts purchasing the Notes will pay a purchase price of \$995.00 per Note, and the placement agents will forgo any fees with respect to sales made to those accounts. The price to the public for all other purchases of the Notes is 100%.

JPMorgan Chase Bank, N.A., J.P. Morgan Securities LLC and their affiliates will act as placement agents for the Notes and will receive a fee from the Issuer that will not exceed \$5.00 per \$1,000 in principal amount of the Notes, but will forgo any fees for sales to certain fiduciary accounts.

RBC Capital Markets, LLC JPMorgan Chase Bank, N.A. J.P. Morgan Securities LLC  
 Placement Agents

Royal Bank of Canada has filed a registration statement (including a product prospectus supplement, a prospectus supplement, and a prospectus) with the SEC for the offering to which this free writing prospectus relates. Before you invest, you should read those documents and the other documents relating to this offering that we have filed with the SEC for more complete information about us and this offering. You may obtain these documents without cost by visiting EDGAR on the SEC website at [www.sec.gov](http://www.sec.gov). Alternatively, Royal Bank of Canada, any agent or any dealer participating in this offering will arrange to send you the product prospectus supplement, the prospectus supplement and the prospectus if you so request by calling toll-free at 1-877-688-2301.

You may revoke your offer to purchase the Notes at any time prior to the pricing as described on the cover of this free writing prospectus. We reserve the right to change the terms of, or reject any offer to purchase the Notes prior to their issuance. In the event of any changes to the terms of the Notes, we will notify you and you will be asked to accept such changes in connection with your purchase. You may also choose to reject such changes, in which case we may reject your offer to purchase.

#### ADDITIONAL TERMS OF THE NOTES

You should read this free writing prospectus together with the prospectus dated September 7, 2018, as supplemented by the prospectus supplement dated September 7, 2018 and the product prospectus supplement dated September 11, 2018 relating to our Senior Global Medium-Term Notes, Series H, of which these Notes are a part. Capitalized terms used but not defined in this free writing prospectus will have the meanings given to them in the product prospectus supplement. In the event of any conflict, this free writing prospectus will control. You should read this free writing prospectus carefully.

This free writing prospectus, together with the documents listed below, contains the terms of the Notes and supersedes all prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in “Risk Factors” in the prospectus supplement dated September 7, 2018 and “Additional Risk Factors Specific to the Notes” in the product prospectus supplement dated September 11, 2018, as the Notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisors before you invest in the Notes. You may access these documents on the Securities and Exchange Commission (the “SEC”) website at [www.sec.gov](http://www.sec.gov) as follows (or if that address has changed, by reviewing our filings for the relevant date on the SEC website):

Prospectus dated September 7, 2018:

<https://www.sec.gov/Archives/edgar/data/1000275/000121465918005973/196181424b3.htm>

Prospectus Supplement dated September 7, 2018:

<https://www.sec.gov/Archives/edgar/data/1000275/000121465918005975/f97180424b3.htm>

Product Prospectus Supplement ERN-ETF-1 dated September 11, 2018:

<https://www.sec.gov/Archives/edgar/data/1000275/000114036118038211/form424b5.htm>

Our Central Index Key, or CIK, on the SEC website is 1000275. As used in this free writing prospectus, “Royal Bank”, “we,” “us,” or “our” refers to Royal Bank of Canada.

What Is the Total Return on the Notes at Maturity Assuming a Range of Performance for the Reference Asset?

The following table illustrates the hypothetical total return at maturity on the Notes. The “total return,” as used in this free writing prospectus, is the number, expressed as a percentage, that results from comparing the payment at maturity per \$1,000 in principal amount of the Notes to \$1,000. The hypothetical total returns and examples set forth below are based on a hypothetical Initial Level of \$100.00, the Participation Rate of 200%, the Maximum Return of \$1,107.60 per \$1,000 in principal amount, and hypothetical Final Levels as set forth below. The actual Initial Level will be determined on the pricing date, and the actual Final Level will be determined based on the arithmetic average of the closing price of the Reference Asset on each of the valuation dates.

The hypothetical total returns and examples set forth below are for illustrative purposes only and may not be the actual total returns applicable to a purchaser of the Notes. The numbers appearing in the following table and examples have been rounded for ease of analysis. The examples below do not take into account any tax consequences from investing in the Notes.

Final Level	Percentage Change	Payment at Maturity	Total Return on the Notes
150.00	50.00%	\$1,107.60	10.76%
140.00	40.00%	\$1,107.60	10.76%
130.00	30.00%	\$1,107.60	10.76%
120.00	20.00%	\$1,107.60	10.76%
115.00	15.00%	\$1,107.60	10.76%
110.00	10.00%	\$1,107.60	10.76%
105.38	5.38%	\$1,107.60	10.76%
105.00	5.00%	\$1,100.00	10.00%
104.00	4.00%	\$1,080.00	8.00%
102.00	2.00%	\$1,040.00	4.00%
100.00	0.00%	\$1,000.00	0.00%
90.00	-10.00%	\$900.00	-10.00%
80.00	-20.00%	\$800.00	-20.00%
70.00	-30.00%	\$700.00	-30.00%
60.00	-40.00%	\$600.00	-40.00%
50.00	-50.00%	\$500.00	-50.00%
40.00	-60.00%	\$400.00	-60.00%
30.00	-70.00%	\$300.00	-70.00%
20.00	-80.00%	\$200.00	-80.00%
10.00	-90.00%	\$100.00	-90.00%
0.00	-100.00%	\$0.00	-100.00%

Hypothetical Examples of Amounts Payable at Maturity

The following examples illustrate how the payments set forth in the table above are calculated.

Example 1: The price of the Reference Asset increases from an Initial Level to a Final Level of 105, resulting in a Percentage Change of 5.00%.

Because the Percentage Change is positive, the investor receives a payment at maturity of \$1,100 per \$1,000 in principal amount of the Notes, calculated as follows:

$$\$1,000 + [\$1,000 \times (5.00\% \times 2)] = \$1,100.00$$

Example 2: The price of the Reference Asset increases from an Initial Level to a Final Level of 115.00, resulting in a Percentage Change of 15.00%.

In this example, the Percentage Change multiplied by the Leverage Factor would result in a payment that is greater than the Maximum Return. Accordingly, the payment on the notes would be \$1,107.60 per \$1,000 in principal amount, representing the Maximum Return.

Example 3: The price of the Reference Asset decreases from an Initial Level to a Final Level of 50.00, resulting in a Percentage Change of -50.00%.

Because the Percentage Change is negative the investor will receive a payment at maturity of \$500.00 per \$1,000 in principal amount of the Notes, calculated as follows:

$$\$1,000 + [\$1,000 \times -50.00\%] = \$500.00$$

FWP-3

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#### Selected Purchase Considerations

**Appreciation Potential**— The Notes provide the opportunity to enhance equity returns by multiplying a positive Percentage Change by the Leverage Factor, up to the Maximum Return.

**No Protection Against Loss**—Payment at maturity of the principal amount of the Notes is not protected against a decline in the Final Level as compared to the Initial Level. If the Final Level is less than the Initial Level, you will lose an amount equal to 1% of the principal amount of your Notes for every 1% that the Percentage Change is less than 0%.

#### Selected Risk Considerations

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Reference Asset. These risks are explained in more detail in the section “Additional Risk Factors Specific to the Notes,” beginning on page PS-6 of the product prospectus supplement. In addition to the risks described in the prospectus supplement and the product prospectus supplement, you should consider the following:

**Principal at Risk** — Investors in the Notes could lose all or a substantial portion of their principal amount if there is a decline in the price of the Reference Asset. You will lose 1% of the principal amount of your Notes for each 1% that the Final Level is less than the Initial Level.

**The Notes Do Not Pay Interest and Your Return May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity** — There will be no periodic interest payments on the Notes as there would be on a conventional fixed-rate or floating-rate debt security having the same maturity. The return that you will receive on the Notes, which could be negative, may be less than the return you could earn on other investments. As a result, your return may be less than the return you would earn if you purchased one of our conventional senior interest bearing debt securities.

**Your Potential Payment at Maturity Is Limited** — The Notes will provide less opportunity to participate in the appreciation of the Reference Asset than an investment in a security linked to the Reference Asset providing full participation in the appreciation, because the return on the Notes will not exceed the Maximum Return. Accordingly, your return on the Notes may be less than your return would be if you made an investment in a security directly linked to the positive performance of the Reference Asset.

**Payments on the Notes Are Subject to Our Credit Risk, and Changes in Our Credit Ratings Are Expected to Affect the Market Value of the Notes** — The Notes are our senior unsecured debt securities. As a result, your receipt of the amount due on the maturity date is dependent upon our ability to repay our obligations at that time. This will be the case even if the price of the Reference Asset increases after the pricing date. No assurance can be given as to what our financial condition will be at the maturity of the Notes.

**There May Not Be an Active Trading Market for the Notes—Sales in the Secondary Market May Result in Significant Losses** — There may be little or no secondary market for the Notes. The Notes will not be listed on any securities exchange. RBCCM and our other affiliates may make a market for the Notes; however, they are not required to do so. RBCCM or any other affiliate of ours may stop any market-making activities at any time. Even if a secondary market for the Notes develops, it may not provide significant liquidity or trade at prices advantageous to you. We expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for your Notes in any secondary market could be substantial.

**You Will Not Have Any Rights to the Securities Included in the Reference Asset** — As a holder of the Notes, you will not have voting rights, rights to receive cash dividends or other distributions or any other rights that holders of the Reference Asset or the securities included in the Reference Asset would have. The Final Level will not reflect any dividends paid on the securities included in the Reference Asset.

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Many Economic and Market Factors Will Impact the Value of the Notes — In addition to the share price of the Reference Asset on any day, the value of the Notes will be affected by a number of economic and market factors that may either offset or magnify each other, including:

- the expected volatility of the Reference Asset;
- the time to maturity of the Notes;
- the dividend rate on the securities included in the Reference Asset;
- interest and yield rates in the market generally;
- a variety of economic, financial, political, regulatory or judicial events; and
- our creditworthiness, including actual or anticipated downgrades in our credit ratings.

The Estimated Initial Value of the Notes Will Be Less than the Price to the Public — The estimated initial value that will be set forth in the final pricing supplement for the Notes does not represent a minimum price at which we, RBCCM or any of our affiliates would be willing to purchase the Notes in any secondary market (if any exists) at any time. If you attempt to sell the Notes prior to maturity, their market value may be lower than the price you paid for them and the estimated initial value. This is due to, among other things, changes in the share price of the Reference Asset, the borrowing rate we pay to issue securities of this kind, and the inclusion in the price to the public of the underwriting discount and the costs relating to our hedging of the Notes. These factors, together with various credit, market and economic factors over the term of the Notes, are expected to reduce the price at which you may be able to sell the Notes in any secondary market and will affect the value of the Notes in complex and unpredictable ways. Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Notes prior to maturity may be less than your original purchase price. The Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.

The Estimated Initial Value of the Notes That We Will Provide in the Final Pricing Supplement Will Be an Estimate Only, Calculated as of the Pricing Date — The value of the Notes at any time after the pricing date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the Notes in any secondary market, if any, should be expected to differ materially from the estimated initial value of your Notes.

Market Disruption Events or Unavailability of the Share Price of the Reference Asset and Adjustments — The payment at maturity, the valuation dates and the Reference Asset are subject to adjustment as described in the product prospectus supplement. For a description of what constitutes a market disruption event as well as the consequences of that market disruption event and the unavailability of the share price of the Reference Asset on a valuation date, see “General Terms of the Notes— Unavailability of the Level of the Reference Asset on a Valuation Date” and “—Market Disruption Events” in the product prospectus supplement.

Changes that Affect the Underlying Index Will Affect the Market Value of the Notes and the Amount You Will Receive at Maturity — The policies of the sponsor of the of the Underlying Index (the “Index Sponsor”), concerning the calculation of the Underlying Index, additions, deletions or substitutions of the components of the Underlying Index and the manner in which changes affecting those components, such as stock dividends, reorganizations or mergers, may be reflected in the Underlying Index and, therefore, could affect the share price of the Reference Asset, the amount payable on the Notes at maturity, and the market value of the Notes prior to maturity. The amount payable on the Notes and their market value could also be affected if the Index Sponsor changes these policies, for example, by changing the manner in which it calculates the Underlying Index, or if the sponsor discontinues or suspends the calculation or publication of the Underlying Index.

An Investment in the Notes Is Subject to Risks Associated with the Technology Sector — All of the stocks held by the XLK and included in its Underlying Index are issued by companies whose primary lines of business are directly associated with the technology sector. The profitability of these companies is largely dependent on, among other things, consumer demand for the companies' products, the companies'

FWP-5

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ability to generate advertising revenue, continued innovation, talent attraction and retention, maintaining intellectual property rights and industry competition. In addition, adverse economic, business or tax developments affecting the U.S. and/or the technology sector could affect negatively the price of the XLK and, in turn, could have an adverse effect on the value of the Notes and the payments on the Notes.

**Adjustments to the Reference Asset Could Adversely Affect the Notes —** State Street Global Advisors (the “Advisor”), as the investment adviser of the Reference Asset, is responsible for calculating and maintaining the Reference Asset. The Advisor can add, delete or substitute the stocks comprising the Reference Asset. The Advisor may make other methodological changes that could change the share price of the Reference Asset at any time. If one or more of these events occurs, the calculation of the amount payable at maturity may be adjusted to reflect such event or events. Consequently, any of these actions could adversely affect the amount payable at maturity and/or the market value of the Notes.

**We Have No Affiliation with the Index Sponsor and Will Not Be Responsible for Any Actions Taken by the Index Sponsor —** The Index Sponsor is not an affiliate of ours and will not be involved in the offering of the Notes in any way. Consequently, we have no control over the actions of the Index Sponsor, including any actions of the type that would require the calculation agent to adjust the payment to you at maturity. The Index Sponsor has no obligation of any sort with respect to the Notes. Thus, the Index Sponsor has no obligation to take your interests into consideration for any reason, including in taking any actions that might affect the value of the Notes. None of our proceeds from the issuance of the Notes will be delivered to the Index Sponsor.

**We and Our Affiliates Do Not Have Any Affiliation with the Advisor and Are Not Responsible for its Public Disclosure of Information —** We and our affiliates are not affiliated with the investment adviser in any way and have no ability to control or predict its actions, including any errors in or discontinuance of disclosure regarding its methods or policies relating to the Reference Asset. The Advisor is not involved in the offering of the Notes in any way and has no obligation to consider your interests as an owner of the Notes in taking any actions relating to the Reference Asset that might affect the value of the Notes. Neither we nor any of our affiliates has independently verified the adequacy or accuracy of the information about the Advisor or the Reference Asset contained in any public disclosure of information. You, as an investor in the Notes, should make your own investigation into the Reference Asset.

**The Correlation Between the Performance of the Reference Asset and the Performance of the Underlying Index May Be Imperfect —** The performance of the Reference Asset is linked principally to the performance of the Underlying Index. However, because of the potential discrepancies identified in more detail in the product prospectus supplement, the return on the Reference Asset may correlate imperfectly with the return on the Underlying Index. Additionally, the performance of the Reference Asset may reflect transaction costs and fees that are not included in the calculation of the Underlying Index.

During periods of market volatility, securities held by the Reference Asset may be unavailable in the secondary market, market participants may be unable to calculate accurately its net asset value per share and its liquidity may be adversely affected. This kind of market volatility may also disrupt the ability of market participants to create and redeem shares of the Reference Asset. Further, market volatility may adversely affect, sometimes materially, the prices at which market participants are willing to buy and sell shares of the Reference Asset. As a result, under these circumstances, the market value of shares of the Reference Asset may vary substantially from the applicable net asset value per share. For all of the foregoing reasons, the performance of the Reference Asset may not correlate with the performance of the Underlying Index as well as its net asset value per share, which could materially and adversely affect the value of the Notes in the secondary market and/or reduce the payments on the Notes.

**The Reference Asset Is Subject to Management Risks —** The Reference Asset is subject to management risk, which is the risk that the Advisor’s investment strategy, the implementation of which is subject to a number of constraints, may not produce the intended results.

Our Business Activities May Create Conflicts of Interest — We and our affiliates expect to engage in trading activities related to the Reference Asset or securities held by the Reference Asset that are not for the

FWP-6

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account of holders of the Notes or on their behalf. These trading activities may present a conflict between the holders' interests in the Notes and the interests we and our affiliates will have in their proprietary accounts, in facilitating transactions, including options and other derivatives transactions, for their customers and in accounts under their management. These trading activities, if they influence the prices of the Reference Asset, could be adverse to the interests of the holders of the Notes. We and one or more of our affiliates may, at present or in the future, engage in business with the issuers of securities held by the Reference Asset, including making loans to or providing advisory services. These services could include investment banking and merger and acquisition advisory services. These activities may present a conflict between our or one or more of our affiliates' obligations and your interests as a holder of the Notes. Moreover, we and our affiliates may have published, and in the future expect to publish, research reports with respect to the Reference Asset. This research is modified from time to time without notice and may express opinions or provide recommendations that are inconsistent with purchasing or holding the Notes. Any of these activities may affect the price of the Reference Asset, and, therefore, the market value of the Notes.

Additionally, we or our affiliates may serve as issuer, agent or underwriter for additional issuances of securities with returns linked or related to changes in the price of the Reference Asset or level of the Underlying Index. By introducing competing products into the marketplace in this manner, we could adversely affect the value of the Notes.

We may hedge our obligations under the Notes through certain affiliates, who would expect to make a profit on such hedge. We or our affiliates may adjust these hedges by, among other things, purchasing or selling those assets at any time, including around the time of the valuation dates, which could have an impact on the return of the Notes. Because hedging our obligations entails risk and may be influenced by market forces beyond our or our affiliates' control, such hedging may result in a profit that is more or less than expected, or it may result in a loss.

The Anti-dilution Adjustments That the Calculation Agent Is Required to Make Do Not Cover Every Event That Could Affect the Reference Asset — RBCCM, as calculation agent, will adjust the amount payable at maturity for certain events affecting the Reference Asset. However, the calculation agent will not make an adjustment for every event that could affect the Reference Asset. If an event occurs that does not require the calculation agent to adjust the amount payable at maturity, the market price of the Notes may be materially and adversely affected.

FWP-7

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The Technology Select Sector SPDR<sup>®</sup> Fund (“XLK”)

The XLK files periodic reports with the SEC. These reports may be obtained through the SEC website, at [sec.gov](http://sec.gov). Information filed by the XLK shall not be deemed to be included or incorporated by reference in this document. In connection with this offering, we have not made any due diligence inquiry with respect to the XLK, and we encourage investors to review publicly available information about the XLK prior to making an investment decision.

The XLK seeks to provide investment results that correspond generally to the price and yield performance, before fees and expenses, of the S&P<sup>®</sup> Technology Select Sector Index. The S&P<sup>®</sup> Technology Select Sector Index measures the performance of the technology sector of the U.S. equity market. The XLK trades on the NYSE Arca under the ticker symbol “XLK.”

The XLK utilizes a “replication” investment approach in attempting to track the performance of the Underlying Index. The XLK typically invests in substantially all of the securities which comprise the Underlying Index in approximately the same proportions as Underlying Index. The XLK will normally invest at least 95% of its total assets in the common stocks that comprise that index.

Eligibility Criteria for Index Components

The stocks included in each Select Sector Index are selected from the universe of companies represented by the S&P 500<sup>®</sup> Index. Standard & Poor’s Financial Services LLC (“S&P”) acts as index calculation agent in connection with the calculation and dissemination of each Select Sector Index. Each stock in the S&P 500<sup>®</sup> Index is allocated to only one Select Sector Index, and the Select Sector Indices together comprise all of the companies in the S&P 500<sup>®</sup> Index.

Index Maintenance

Each Select Sector Index was developed and is maintained in accordance with the following criteria:

Each of the component stocks in a Select Sector Index (the “SPDR Component Stocks”) is a constituent company of the S&P 500<sup>®</sup> Index.

The several Select Sector Indices together will include all of the companies represented in the S&P 500<sup>®</sup> Index and each of the stocks in the S&P 500<sup>®</sup> Index will be allocated to one and only one of the Select Sector Indices.

Each constituent stock of the S&P 500<sup>®</sup> Index is assigned to a Select Sector Index on the basis of that company’s sales and earnings composition and the sensitivity of the company’s stock price and business results to the common factors that affect other companies in each Select Sector Index.

S&P has sole control over the removal of stocks from the S&P 500<sup>®</sup> Index and the selection of replacement stocks to be added to the S&P 500<sup>®</sup> Index. However, S&P plays only a consulting role in the Select Sector Indices.

Each Select Sector Index is calculated by S&P using a modified “market capitalization” methodology. This design ensures that each of the component stocks within a Select Sector Index is represented in a proportion consistent with its percentage with respect to the total market capitalization of that Select Sector Index. However, under certain conditions, the number of shares of a component stock within the Select Sector Index may be adjusted to conform to certain Internal Revenue Code requirements.

Calculation of the Underlying Index

Each Select Sector Index is calculated using the same methodology utilized by S&P in calculating the S&P 500<sup>®</sup> Index, using a base-weighted aggregate methodology. The daily calculation of each Select Sector Index is computed by dividing the total market value of the companies in the Select Sector Index by a number called the index divisor. A SPDR<sup>®</sup> Component Stock which has been assigned to one Select Sector Index may be determined to have undergone a transformation in the composition of its business, and that it should be removed from that Select Sector Index and assigned to a different Select Sector Index. In the event that a SPDR<sup>®</sup> Component Stock’s Select Sector Index assignment should be changed, S&P will disseminate notice of the change following its standard procedure for announcing index changes, and will implement the change in the affected Select Sector Indexes on a date no less than one week after the initial dissemination of information on the sector change to the maximum extent practicable. SPDR<sup>®</sup> Component Stocks removed from and added to the S&P 500<sup>®</sup> Index will be deleted from and added to the appropriate Select Sector Index on the same schedule used by S&P for additions and deletions from the S&P 500<sup>®</sup> Index insofar as practicable.

Historical Information

The following graph sets forth the historical performance of the Reference Asset for the period from January 1, 2014 to February 4, 2019. On February 4, 2019, the closing price of the Reference Asset was \$67.74.

We obtained the Reference Asset closing share prices below from Bloomberg L.P. We have not independently verified the accuracy or completeness of the information obtained from Bloomberg L.P. The historical share prices of the Reference Asset should not be taken as an indication of future performance, and no assurance can be given as to the Final Level. We cannot give you assurance that the performance of the Reference Asset will result in the return of any of your initial investment.

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

FWP-9

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### Supplemental Plan of Distribution

JPMorgan Chase Bank, N.A., J.P. Morgan Securities LLC and its affiliates will act as placement agents for the Notes and will receive a fee from the Issuer that will not exceed \$5.00 per \$1,000 in principal amount of the Notes, but will forgo any fees for sales to certain fiduciary accounts.

We expect that delivery of the Notes will be made against payment for the Notes on or about February 13, 2019 which is the third business day following the pricing date (this settlement cycle being referred to as “T+3”). Under Rule 15c6-1 of the Securities Exchange Act of 1934, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the Notes on any date prior to two business days before delivery will be required, by virtue of the fact that the Notes will settle in three business days (T+3), to specify alternative settlement arrangements to prevent a failed settlement. In addition, RBCCM or another of its affiliates or agents may use this document in market-making transactions after the initial sale of the Notes, but is under no obligation to do so and may discontinue any market-making activities at any time without notice.

The value of the Notes shown on your account statement will be based on RBCCM’s estimate of the value of the Notes if RBCCM or another of our affiliates were to make a market in the Notes (which it is not obligated to do). That estimate will be based upon the price that RBCCM may pay for the Notes in light of then prevailing market conditions, our creditworthiness and transaction costs. For a period of approximately three months after the issue date of the Notes, the price shown on your account statement may initially be higher than RBCCM’s estimated value of the Notes. This is because the estimated value of the Notes will reflect the reduction of the underwriting discount and our hedging costs and profits; however, the value of the Notes shown on your account statement during that period is expected to be a higher amount, reflecting the amortization of RBCCM’s underwriting discount and our estimated profit from hedging the Notes. After this period, if RBCCM repurchases your Notes, it expects to do so at prices that reflect its estimated value.

The Notes are our debt securities, the return on which is linked to the performance of the Reference Asset. As is the case for all of our debt securities, including our structured notes, the economic terms of the Notes reflect our actual or perceived creditworthiness at the time of pricing. In addition, because structured notes result in increased operational, funding and liability management costs to us, we typically borrow the funds under these Notes at a rate that is more favorable to us than the rate that we might pay for a conventional fixed or floating rate debt security of comparable maturity. This relatively lower implied borrowing rate, which is reflected in the economic terms of the Notes, along with the fees and expenses associated with structured notes, typically reduces the estimated initial value of the Notes at the time the terms of the Notes are set.

In order to satisfy our payment obligations under the Notes, we may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) on the issue date with RBCCM or one of our other subsidiaries. The terms of these hedging arrangements take into account a number of factors, including our creditworthiness, interest rate movements, the volatility of the Reference Asset, and the tenor of the Notes. The economic terms of the Notes depend in part on the terms of these hedging arrangements.

The lower implied borrowing rate, the underwriting commission and the hedging-related costs relating to the Notes reduce the economic terms of the Notes to you and result in the estimated initial value for the Notes (estimated at the time the terms of the Notes are set) being less than their public offering price. See “Selected Risk Considerations—The Estimated Initial Value of the Notes Will Be Less than the Price to the Public” above.

### U.S. Federal Income Tax Consequences

The following disclosure supplements, and to the extent inconsistent, supersedes, the discussion in the product prospectus supplement dated September 11, 2018 under “Supplemental Discussion of U.S. Federal Income Tax Consequences.”

In the opinion of our counsel, Morrison & Foerster LLP, it would generally be reasonable to treat a Note with terms described herein as a pre-paid cash-settled derivative contract in respect of the Reference Asset for U.S. federal income tax purposes, and the terms of the Notes require a holder and us (in the absence of a change in law or an administrative or judicial ruling to the contrary) to treat the Notes for all tax purposes in accordance with such characterization. However, the U.S. federal income tax consequences of your investment in the Notes are uncertain and the Internal Revenue Service could assert that the Notes should be taxed in a manner that is different from that described in the preceding sentence.

Under Section 871(m) of the Code, a “dividend equivalent” payment is treated as a dividend from sources within the United States. Such payments generally would be subject to a 30% U.S. withholding tax if paid to a non-U.S. holder. Under U.S. Treasury Department regulations, payments (including deemed payments) with respect to equity-linked instruments (“ELIs”) that are “specified ELIs” may be treated as dividend equivalents if such specified ELIs reference an interest in an “underlying security,” which is generally any interest in an entity taxable as a corporation for U.S. federal income tax purposes if a payment with respect to such interest could give rise to a U.S. source dividend. However, the IRS has issued guidance that states that the U.S. Treasury Department and the IRS intend to amend the effective dates of the U.S. Treasury Department regulations to provide that withholding on dividend equivalent payments will not apply to specified ELIs that are not delta-one instruments and that are issued before January 1, 2021. Based on our determination that the Notes are not delta-one instruments, non-U.S. holders should not be subject to withholding on dividend equivalent payments, if any, under the Notes. However, it is possible that the Notes could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the Reference Asset or the Notes, and following such occurrence the Notes could be treated as subject to withholding on dividend equivalent payments. Non-U.S. holders that enter, or have entered, into other transactions in respect of the Reference Asset or the Notes should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the Notes and their other transactions. If any payments are treated as dividend equivalents subject to withholding, we (or the applicable withholding agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.

The accompanying product prospectus supplement notes that FATCA withholding on payments of gross proceeds from a sale or redemption of Notes will only apply to payments made after December 31, 2018. That discussion is modified to reflect regulations proposed by the U.S. Treasury Department in December 2018 indicating an intent to eliminate the requirement under FATCA of withholding on gross proceeds of the disposition of financial instruments. The U.S. Treasury Department has indicated that taxpayers may rely on these proposed regulations pending their finalization. Prospective investors are urged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in the Notes.