

ROYAL BANK OF CANADA  
Form 424B2  
February 19, 2019

RBC Capital Markets® Filed Pursuant to Rule 424(b)(2)  
Registration Statement No. 333-227001

This pricing supplement amends and restates the pricing supplement filed on February 14, 2019.

#### Pricing Supplement

Dated February 13, 2019 \$1,610,000  
To the Product Issuer Callable Fixed Coupon Notes due  
Prospectus Supplement February 19, 2021  
Dated September 10, 2018, the Prospectus Linked to the Lesser Performing of Three  
Supplement Dated Equity Securities  
September 7, 2018 and Royal Bank of Canada  
the Prospectus Dated  
September 7, 2018

Royal Bank of Canada is offering Issuer Callable Fixed Coupon Notes (the “Notes”) linked to the lesser performing of the three equity securities set forth below. The Notes are senior unsecured obligations of Royal Bank of Canada, will pay a monthly coupon at the interest rate specified below, and will have the terms described in the documents described above, as supplemented or modified by this pricing supplement, as set forth below.

The Notes do not guarantee any return of principal at maturity. Any payments on the Notes are subject to our credit risk.

Investing in the Notes involves a number of risks. See “Risk Factors” beginning on page S-1 of the prospectus supplement dated September 7, 2018, “Additional Risk Factors Specific to Your Notes” beginning on page PS-3 of the product prospectus supplement dated September 10, 2018 and “Selected Risk Considerations” beginning on page P-6 of this pricing supplement.

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. Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the Notes or determined that this pricing supplement is truthful or complete. Any representation to the contrary is a criminal offense.

Issuer:	Royal Bank of Canada	Stock Exchange Listing:	None
Trade Date:	February 13, 2019	Principal Amount:	\$1,000 per Note
Issue Date:	February 19, 2019	Coupon Payments:	Each coupon will be paid in equal monthly payments, unless the Notes are previously called

Reference Stocks and Reference Stock Issuers	Initial Stock Prices	Barrier Prices
Allergan PLC (“AGN”)	\$140.33	\$70.17, which is 50.00% of its Initial Stock Price*
Bristol-Myers Squibb Company (“BMY”)	\$50.98	\$25.49, which is 50.00% of

Gilead Sciences, Inc. ("GILD")	\$65.94	its Initial Stock Price \$32.97, which is 50.00% of its Initial Stock Price
--------------------------------	---------	--

\*Rounded to two decimal places

**Final Stock Price:** The closing price of each Reference Stock on the Valuation Date.

**Call Feature:** The Notes may be called at our discretion on any Coupon Payment Date, beginning six months after issuance, if we send prior written notice, as described below.

**Payment at Maturity (if held to maturity):** For each \$1,000 in principal amount of the Notes, the investor will receive \$1,000 plus any accrued and unpaid interest at maturity, unless: (i) the Final Stock Price of the Lesser Performing Reference Stock is less than its Initial Stock Price; and (ii) on any day during the Monitoring Period, the closing price of any Reference Stock is less than its Barrier Price. If the conditions described in (i) and (ii) are both satisfied, then the investor will receive at maturity, in addition to accrued and unpaid interest, for each \$1,000 in principal amount, the number of shares of the Lesser Performing Reference Stock equal to the Physical Delivery Amount, or at our election, the cash value of those shares.

Investors in the Notes could lose some or all of their initial investment if there has been a decline in the trading price of the Lesser Performing Reference Stock.

**Physical Delivery Amount:** For each \$1,000 in principal amount, a number of shares of the Lesser Performing Reference Stock equal to the principal amount divided by the Initial Stock Price, subject to adjustment as described in the product prospectus supplement.

**Monitoring Period:** From and excluding the Trade Date to and including the Valuation Date

Term of Notes	CUSIP	Coupon Rate	Price to Public <sup>(1)</sup>	Agent's Commission <sup>(1)</sup>	Proceeds to Royal Bank of Canada
Two (2) years	78013GHP3	11% per annum	100%	1.85%	98.15%
			\$1,610,000	\$29.875	\$1,580,215

<sup>(1)</sup> Certain dealers who purchase the Notes for sale to certain fee-based advisory accounts may forego some or all of their underwriting discount or selling concessions. The public offering price for investors purchasing the Notes in these accounts may be between \$981.50 and \$1,000 per \$1,000 in principal amount.

The initial estimated value of the Notes as of the date of this pricing supplement is \$969.78 per \$1,000 in principal amount, which is less than the price to public. 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. We describe our determination of the initial estimated value in more detail below.

RBC Capital Markets, LLC, which we refer to as RBCCM, acting as agent for Royal Bank of Canada, will receive a commission of \$18.50 per \$1,000 in principal amount of the Notes and will use a portion of that commission to allow selling concessions to other dealers of up to \$18.50 per \$1,000 in principal amount of the Notes. The other dealers may forgo, in their sole discretion, some or all of their selling concessions. See "Supplemental Plan of Distribution (Conflicts of Interest)" below.

RBC Capital Markets, LLC

Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

SUMMARY

The information in this “Summary” section is qualified by the more detailed information set forth in this pricing supplement, the product prospectus supplement, the prospectus supplement, and the prospectus.

General: This pricing supplement relates to an offering of Issuer Callable Fixed Coupon Notes (the “Notes”) linked to the lesser performing of three equity securities (each a “Reference Stock,” and collectively, the “Reference Stocks”).

Issuer: Royal Bank of Canada (“Royal Bank”)

Trade Date (Pricing Date): February 13, 2019

Issue Date: February 19, 2019

Denominations: Minimum denomination of \$1,000, and integral multiples of \$1,000 thereafter.

Designated Currency: U.S. Dollars

Coupon Rate: 11% per annum (approximately 0.9167% per month).

Coupon Payment: Each coupon will be paid in equal monthly payments, unless the Notes are previously called.

Coupon Payment Dates: March 18, 2019, April 18, 2019, May 16, 2019, June 18, 2019, July 18, 2019, August 16, 2019, September 18, 2019, October 17, 2019, November 18, 2019, December 18, 2019, January 16, 2020, February 19, 2020, March 18, 2020, April 16, 2020, May 18, 2020, June 18, 2020, July 16, 2020, August 18, 2020, September 17, 2020, October 16, 2020, November 18, 2020, December 17, 2020, January 19, 2021 and the Maturity Date.

Record Dates: The record date for each Coupon Payment Date will be the date one business day prior to that date; provided, however, that the coupon payable at maturity or upon a call will be payable to the person to whom the payment at maturity or upon the call, as the case may be, will be payable.

Call Feature: The Notes may be called at our discretion on any Coupon Payment Date beginning in August 2019, if we send prior written notice to the trustee at least three business days prior to that Coupon Payment Date.

Payment if Called: If the Notes are called, then, on the applicable Coupon Payment Date, beginning August 2019, for each \$1,000 principal amount, you will receive \$1,000 plus any accrued and unpaid interest to but excluding the applicable Coupon Payment Date.

Valuation Date: February 16, 2021

Maturity Date: February 19, 2021, unless we call the Notes.

Reference Stocks: Allergan PLC (“AGN”), Bristol-Myers Squibb Company (“BMY”) and Gilead Sciences, Inc. (“GILD”).

Lesser Performing Reference Stock: The Reference Stock with the lowest Reference Stock Return.

Reference Stock Return: With respect to each Reference Stock:  
$$\frac{\text{Final Stock Price} - \text{Initial Stock Price}}{\text{Initial Stock Price}}$$

Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

Initial Stock Prices:	For each Reference Stock, its closing price on the Trade Date, as set forth on the cover page.
Barrier Prices:	For each Reference Stock, 50.00% of its Initial Stock Price, as set forth on the cover page.
Final Stock Prices:	For each Reference Stock, its closing price on the Valuation Date.
Payment at Maturity (if held to maturity):	<p>For each \$1,000 in principal amount of the Notes, the investor will receive \$1,000 plus any accrued and unpaid interest at maturity, unless: (i) the Final Stock Price of the Lesser Performing Reference Stock is less than its Initial Stock Price; and (ii) on any day during the Monitoring Period, the closing price of the Reference Stock is less than its Barrier Price (a “Barrier Event”).</p> <p>If the conditions described in (i) and (ii) are both satisfied, then the investor will receive at maturity, in addition to accrued and unpaid interest, for each \$1,000 in principal amount in the Notes, the number of shares of the Lesser Performing Reference Stock equal to the Physical Delivery Amount, or at our election, the Cash Delivery Amount. If we elect to deliver shares of the Lesser Performing Reference Stock, fractional shares will be paid in cash.</p> <p>The value of the cash or shares that you receive will be less than your principal amount, if anything, resulting in a loss that is proportionate to the decline of the Lesser Performing Reference Stock from the Trade Date to the Valuation Date. Investors in the Notes could lose some or all of their initial investment if there has been a decline in the trading price of the Lesser Performing Reference Stock. For each \$1,000 in principal amount, a number of shares of the Lesser Performing Reference Stock equal to the principal amount divided by its Initial Stock Price, subject to adjustment as described in the product prospectus supplement. If this number is not a round number, then the number of shares of the Lesser Performing Reference Stock to be delivered will be rounded down and the fractional part shall be paid in cash.</p>
Physical Delivery Amount:	The product of the Physical Delivery Amount multiplied by the Final Stock Price of the Lesser Performing Reference Stock.
Cash Delivery Amount:	From and excluding the Trade Date to and including the Valuation Date.
Monitoring Period:	Close of Trading Day.
Monitoring Method:	Not applicable. The payments on the Notes will be made solely in cash.
Physical Delivery:	RBC Capital Markets, LLC (“RBCCM”)
Calculation Agent:	RBCCM (or one of its affiliates), though not obligated to do so, may maintain a secondary market in the Notes after the Issue Date. The amount that you may receive upon sale of your Notes prior to maturity may be less than the principal amount of your Notes.
Secondary Market:	None
Listing:	DTC global (including through its indirect participants Euroclear and Clearstream, Luxembourg as described under “Description of Debt Securities—Ownership and Book-Entry Issuance” in the prospectus dated September 7, 2018).
Settlement:	
Terms Incorporated in the Master Note:	All of the terms appearing above the item captioned “Secondary Market” on the cover page and pages P-2 and P-3 of this pricing supplement and the terms appearing under the caption “General Terms of the Notes” in the product prospectus supplement, as modified by this pricing supplement.



Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

#### ADDITIONAL TERMS OF YOUR NOTES

You should read this pricing supplement 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 10, 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 pricing supplement will have the meanings given to them in the product prospectus supplement. In the event of any conflict, this pricing supplement will control. The Notes vary from the terms described in the product prospectus supplement in several important ways. You should read this pricing supplement carefully.

This pricing supplement, 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 Your Notes” in the product prospectus supplement dated September 10, 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 dated September 10, 2018:

<https://www.sec.gov/Archives/edgar/data/1000275/000114036118038094/form424b5.htm>

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

P-4 RBC Capital Markets, LLC

---

Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

**HYPOTHETICAL EXAMPLES OF AMOUNTS PAYABLE AT MATURITY**

The examples set forth below are provided for illustration purposes only. The assumptions in each of the examples are purely hypothetical and do not relate to the actual performance of any Reference Stock. The hypothetical terms do not purport to be representative of every possible scenario concerning increases or decreases in the price of each Reference Stock on the Valuation Date relative to its price on the Trade Date. We cannot predict the actual performance of each Reference Stock.

The table below illustrates the Payment at Maturity of the Notes (excluding the final Coupon), assuming an Initial Stock Price of \$100, a Barrier Price of 50% and an initial investment of \$1,000. Hypothetical Final Stock Prices of the Lesser Performing Reference Stock are shown in the first column on the left. For this purpose, we have assumed that there will be no anti-dilution adjustments to the Final Stock Price and no market disruption events. The second column shows the Payment at Maturity (as a percentage of the principal amount) in a case where the closing price of none of the Reference Stocks falls below its Barrier Price at any time during the Monitoring Period. The third column shows the Payment at Maturity (as a percentage of the principal amount) in a case where the closing price of at least one Reference Stock falls below its Barrier Price during the Monitoring Period. The fourth column shows the Physical Delivery Amount as a number of shares of the Lesser Performing Reference Stock. The fifth column shows the Cash Delivery Amount, should we elect to deliver the Cash Delivery Amount instead of the Physical Delivery Amount.

Hypothetical Final Stock Price	If the closing market price of none of the Reference Stocks falls below the Barrier Price on any day during the Monitoring Period: Payment at Maturity as Percentage of Principal Amount	If the closing market price of at least one Reference Stock falls below its Barrier Price on any day during the Monitoring Period: Payment at Maturity as Percentage of Principal Amount	Physical Delivery Amount as Number of Shares of the Least Performing Reference Stock	Cash Delivery Amount
\$200.00	100.00%	100.00%	n/a	n/a
\$175.00	100.00%	100.00%	n/a	n/a
\$150.00	100.00%	100.00%	n/a	n/a
\$125.00	100.00%	100.00%	n/a	n/a
\$100.00	100.00%	100.00%	n/a	n/a
\$90.00	100.00%	90.00%	10	\$900
\$80.00	100.00%	80.00%	10	\$800
\$75.00	100.00%	75.00%	10	\$750
\$50.00	100.00%	50.00%	10	\$500
\$40.00	n/a	Physical Delivery Amount or Cash Settlement Amount	10	\$400
\$30.00	n/a	Physical Delivery Amount or Cash Settlement Amount	10	\$300
\$25.00	n/a	Physical Delivery Amount or Cash Settlement Amount	10	\$250

Edgar Filing: ROYAL BANK OF CANADA - Form 424B2

\$0.00	n/a	Physical Delivery Amount or Cash Settlement Amount	10	\$0.00
--------	-----	---	----	--------

The Payments at Maturity shown above are entirely hypothetical; they are based on market prices for the Reference Stocks that may not be achieved on the Valuation Date and on assumptions that may prove to be erroneous. The actual market value of your Notes on the Maturity Date or at any other time, including any time you may wish to sell your Notes, may bear little relation to the hypothetical Payments at Maturity shown above, and those amounts should not be viewed as an indication of the financial return on an investment in the Notes or on an investment in any Reference Stock. Please read “Additional Risk Factors Specific to Your Notes” and “Hypothetical Returns on Your Notes” in the accompanying product prospectus supplement.

P-5 RBC Capital Markets, LLC

---



Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

#### SELECTED RISK CONSIDERATIONS

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Reference Stocks. These risks are explained in more detail in the section “Additional Risk Factors Specific to Your Notes” in 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 closing price of the Lesser Performing Reference Stock between the Trade Date and the Valuation Date. If the Notes are not called, a Barrier Event has occurred, and the Final Stock Price of the Lesser Performing Reference Stock on the Valuation Date is less than its Initial Stock Price, the value of the cash or shares that you receive at maturity will represent a loss of your principal that is proportionate to the decline in the closing price of the Lesser Performing Reference Stock from the Trade Date to the Valuation Date. If you receive shares of the Lesser Performing Reference Stock, their value could decrease further between the Valuation Date and the Maturity Date. The rate of interest payable on the Notes may not be sufficient to compensate for any such loss.

**The Notes Are Subject to an Issuer Call** — We may call the Notes at our discretion on any Coupon Payment Date beginning in August 2019. If the Notes are called, then, for each \$1,000 in principal amount, you will receive \$1,000 plus any accrued and unpaid interest to but excluding the applicable Coupon Payment Date. You will not receive any coupon payments after the Notes are called. You may be unable to reinvest your proceeds from the call in an investment with a return that is as high as the return on the Notes would have been if they had not been called.

**The Notes Are Linked to the Lesser Performing Reference Stock, Even if the Other Reference Stocks Perform Better** — If a Barrier Event occurs, and if any of the Reference Stocks has a Final Stock Price that is less than its Initial Stock Price, your return will be linked to the lesser performing of the Reference Stocks. Even if the Final Stock Prices of the other Reference Stocks have increased compared to their Initial Stock Prices, or have experienced a decrease that is less than that of the Lesser Performing Reference Stock, your return will only be determined by reference to the performance of the Lesser Performing Reference Stock, regardless of the performance of the other Reference Stocks. **Your Payment on the Notes Will Be Determined by Reference to Each Reference Stock Individually, Not to a Basket, and the Payment at Maturity Will Be Based on the Performance of the Lesser Performing Reference Stock** — The Payment at Maturity will be determined only by reference to the performance of the Lesser Performing Reference Stock, regardless of the performance of the other Reference Stocks. The Notes are not linked to a weighted basket, in which the risk may be mitigated and diversified among each of the basket components. For example, in the case of notes linked to a weighted basket, the return would depend on the weighted aggregate performance of the basket components reflected as the basket return. As a result, the depreciation of one basket component could be mitigated by the appreciation of the other basket components, as scaled by the weighting of that basket component. However, in the case of the Notes, the individual performance of each Reference Stock would not be combined, and the depreciation of one Reference Stock would not be mitigated by any appreciation of the other Reference Stocks. Instead, if a Barrier Event has occurred, your return will depend solely on the Final Stock Price of the Lesser Performing Reference Stock.

**The Call Feature Limits Your Potential Return** — The return potential of the Notes is limited to the pre-specified Coupon Rate, regardless of the appreciation of the Reference Stocks. If the Notes are called due to the call, you will not receive any Coupon Payments after the applicable Coupon Payment Date. Since the Notes could be called as early as August 2019, the total return on the Notes could be minimal. If the Notes are not called, you may be subject to the full downside performance of the Lesser Performing Reference Stock, even though your potential return is limited to the Coupon Rate. As a result, the return on an investment in the Notes could be less than the return on a direct investment in the Reference Stocks.

Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

**Your Return May Be Lower than the Return on a Conventional Debt Security of Comparable 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. Even if your return is positive, your return may be less than the return you would earn if you bought a conventional senior interest bearing debt security of Royal Bank.

**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 Royal Bank's senior unsecured debt securities. As a result, your receipt of the coupons and the amount due on any relevant payment date is dependent upon Royal Bank's ability to repay its obligations on the applicable payment dates. This will be the case even if the prices of the Reference Stocks increase after the Trade Date. No assurance can be given as to what our financial condition will be during the term 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 other affiliates of Royal Bank may make a market for the Notes; however, they are not required to do so. RBCCM or any other affiliate of Royal Bank 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.

**The Initial Estimated Value of the Notes Is Less than the Price to the Public** — The initial estimated value set forth on the cover page of this pricing supplement 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 initial estimated value. This is due to, among other things, changes in the prices of the Reference Stocks, 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 estimated 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, as any such sale price would not be expected to include the underwriting discount and the hedging costs relating to the Notes. In addition to bid-ask spreads, the value of the Notes determined by RBCCM for any secondary market price is expected to be based on the secondary rate rather than the internal funding rate used to price the Notes and determine the initial estimated value. As a result, the secondary price will be less than if the internal funding rate was used. 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 Initial Estimated Value of the Notes on the Cover Page of this Pricing Supplement Is an Estimate Only, Calculated as of the Time the Terms of the Notes Were Set** — The initial estimated value of the Notes is based on the value of our obligation to make the payments on the Notes, together with the mid-market value of the derivative embedded in the terms of the Notes. See "Structuring the Notes" below. Our estimate is based on a variety of assumptions, including our credit spreads, expectations as to dividends, interest rates and volatility, and the expected term of the Notes. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the Notes or similar securities at a price that is significantly different than we do. The value of the Notes at any time after the Trade 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 initial estimated value of your Notes.



Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

**Market Disruption Events and Adjustments** — The payment at maturity, each Observation Date and the Valuation Date 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, see “General Terms of the Notes—Market Disruption Events” in the product prospectus supplement.

**Our Business Activities May Create Conflicts of Interest** — We and our affiliates expect to engage in trading activities related to the Reference Stocks that are not for the 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 share price of the Reference Stocks, 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 Reference Stock Issuers, 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 Stocks. 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 by us or one or more of our affiliates may affect the share price of the Reference Stocks, and, therefore, the market value of the Notes.

**Owning the Notes Is Not the Same as Owning the Reference Stocks** — The return on your Notes is unlikely to reflect the return you would realize if you actually owned shares of the Reference Stocks. For instance, you will not receive or be entitled to receive any dividend payments or other distributions on these securities during the term of your Notes. As an owner of the Notes, you will not have voting rights or any other rights that holders of these securities may have. Furthermore, the Reference Stocks may appreciate substantially during the term of the Notes, while your potential return will be limited to the applicable coupon payments.

**You Must Rely on Your Own Evaluation of the Merits of an Investment Linked to the Reference Stocks** — In the ordinary course of their business, our affiliates may have expressed views on expected movements in the Reference Stocks, and may do so in the future. These views or reports may be communicated to our clients and clients of our affiliates. However, these views are subject to change from time to time. Moreover, other professionals who transact business in markets relating to any Reference Stock may at any time have significantly different views from those of our affiliates. For these reasons, you are encouraged to derive information concerning the Reference Stocks from multiple sources, and you should not rely solely on views expressed by our affiliates.

**There Is No Affiliation Between the Reference Stock Issuers and RBCCM, and RBCCM Is Not Responsible for any Disclosure by the Reference Stock Issuers** — We are not affiliated with the Reference Stock Issuers. However, we and our affiliates may currently, or from time to time in the future engage, in business with any Reference Stock Issuer. Nevertheless, neither we nor our affiliates assume any responsibilities for the accuracy or the completeness of any information that any other company prepares. You, as an investor in the Notes, should make your own investigation into the Reference Stocks.

P-8 RBC Capital Markets, LLC

---

Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

#### INFORMATION REGARDING THE REFERENCE STOCKS

The Reference Stocks are registered under the Securities Exchange Act of 1934 (the “Exchange Act”). Companies with securities registered under that Act are required to file periodically certain financial and other information specified by the SEC. Information provided to or filed with the SEC can be obtained through the SEC’s website at [www.sec.gov](http://www.sec.gov). In addition, information regarding the Reference Stocks may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents.

The following information regarding the Reference Stock Issuers is derived from publicly available information. We have not independently verified the accuracy or completeness of reports filed by the Reference Stock Issuers with the SEC, information published by it on its website or in any other format, information about it obtained from any other source or the information provided below.

We obtained the information regarding the historical performance of the Reference Stocks set forth below from Bloomberg Financial Markets.

We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets. The historical performance of the Reference Stocks should not be taken as an indication of their future performance, and no assurance can be given as to the market prices of any Reference Stock at any time during the term of the Notes. We cannot give you assurance that the performance of any Reference Stock will not result in the loss of all or part of your investment.

Allergan PLC manufactures specialty pharmaceuticals. The company develops, manufactures, and distributes generic, brand, and over-the-counter products. The company’s ordinary shares are listed on the New York Stock Exchange (the “NYSE”) under the ticker symbol “AGN.”

Bristol-Myers Squibb Company develops, licenses, manufactures, markets, and sells pharmaceutical and nutritional products. The company’s products and experimental therapies address cancer, heart disease, HIV and AIDS, diabetes, rheumatoid arthritis, hepatitis, organ transplant rejection, and psychiatric disorders. The company’s common stock is listed on the NYSE under the ticker symbol “BMY.”

Gilead Sciences, Inc. is a research-based biopharmaceutical company that discovers, develops, and commercializes therapeutics to advance the care of patients suffering from life-threatening diseases. The company primary areas of focus include HIV, AIDS, liver disease, and serious cardiovascular and respiratory conditions. The company’s common stock is listed on the Nasdaq under the ticker symbol “GILD.”

P-9 RBC Capital Markets, LLC

---

Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

#### HISTORICAL INFORMATION

The graphs below set forth the information relating to the historical performance of the Reference Stocks for the period from January 1, 2009 through February 13, 2019.

We obtained the information regarding the historical performance of the Reference Stocks in the graphs below from Bloomberg Financial Markets.

We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets. The historical performance of any Reference Stock should not be taken as an indication of its future performance, and no assurance can be given as to the prices of the Reference Stocks at any time. We cannot give you assurance that the performance of the Reference Stocks will not result in the loss of all or part of your investment.

P-10 RBC Capital Markets, LLC

---

Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

Historical Information for Allergan PLC (“AGN”)

The graph below illustrates the performance of this Reference Stock from January 1, 2009 to February 13, 2019, based on Initial Stock Price of \$140.33. The red line represents its Trigger Price of \$70.17, which is equal to 50.00% of its Initial Price, rounded to two decimal places.

P-11 RBC Capital Markets, LLC

---

Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

Historical Information for Bristol-Myers Squibb Company (“BMY”)

The graph below illustrates the performance of this Reference Stock from July 2, 2015 to February 13, 2019, based on its Initial Stock Price of \$50.98. The red line represents the Trigger Price of \$25.49, which is equal to 50.00% of its Initial Price.

P-12 RBC Capital Markets, LLC

---



Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

Historical Information for Gilead Sciences, Inc. ("GILD")

The graph below illustrates the performance of this Reference Stock from January 1, 2009 to February 13, 2019, based on its Initial Stock Price of \$65.94. The red line represents its Trigger Price of \$32.97, which is equal to 50.00% of its Initial Price.

P-13 RBC Capital Markets, LLC

---

Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

U.S. FEDERAL TAX INFORMATION

2.66% of each stated interest payment (11.00% in total) will be treated as an interest payment and 8.34% of each stated interest payment will be treated as payment for the Put Option for U.S. federal income tax purposes.

The following disclosure supplements, and to the extent inconsistent supersedes, the discussion in the product prospectus supplement dated September 10, 2018 under “Supplemental Discussion of U.S. Federal Income Tax Consequences.”

Under Section 871(m) of the Internal Revenue Code of 1986, as amended (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 Stocks 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 Stocks 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.

SUPPLEMENTAL PLAN OF DISTRIBUTION (CONFLICTS OF INTEREST)

Delivery of the Notes will be made against payment for the Notes on February 19, 2019, which is the third (3<sup>rd</sup>) business day following the Trade Date (this settlement cycle being referred to as “T+3”). See “Plan of Distribution” in the prospectus dated September 7, 2018. For additional information as to the relationship between us and RBCCM, please see the section “Plan of Distribution — Conflicts of Interest” in the prospectus dated September 7, 2018.

We expect to deliver the Notes on a date that is greater than two business days following the Trade Date. Under Rule 15c6-1 of the Exchange Act, 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 more than two business days prior to the original Issue Date will be required to specify alternative settlement arrangements to prevent a failed settlement.

The value of the Notes shown on your account statement may 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 value of the Notes that may be shown on your account statement may be higher than RBCCM's estimated

P-14 RBC Capital Markets, LLC

---

Issuer Callable Fixed Coupon Barrier Notes

Royal Bank of Canada

value of the Notes at that time. This is because the estimated value of the Notes will not include the underwriting discount and our hedging costs and profits; however, the value of the Notes shown on your account statement during that period may be a higher amount, reflecting the addition of the underwriting discount and our estimated costs and profits from hedging the Notes. This excess is expected to decrease over time until the end of this period. After this period, if RBCCM repurchases your Notes, it expects to do so at prices that reflect their estimated value.

We may use this pricing supplement in the initial sale of the Notes. In addition, RBCCM or another of our affiliates may use this pricing supplement in a market-making transaction in the Notes after their initial sale. Unless we or our agent informs the purchaser otherwise in the confirmation of sale, this pricing supplement is being used in a market-making transaction.

P-15 RBC Capital Markets, LLC

---

Issuer Callable Fixed Coupon Barrier Notes  
Royal Bank of Canada

### STRUCTURING THE NOTES

The Notes are our debt securities, the return on which is linked to the performance of the Reference Stocks. 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. Using this relatively lower implied borrowing rate rather than the secondary market rate, is a factor that reduced the initial estimated value of the Notes at the time their terms were set. Unlike the estimated value included in this pricing supplement, any value of the Notes determined for purposes of a secondary market transaction may be based on a different funding rate, which may result in a lower value for the Notes than if our initial internal funding rate were used.

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 Stocks, and the tenor of the Notes. The economic terms of the Notes and their initial estimated value depend in part on the terms of these hedging arrangements.

The lower implied borrowing rate is a factor that reduced the economic terms of the Notes to you. The initial offering price of the Notes also reflects the underwriting commission and our estimated hedging costs. These factors result in the initial estimated value for the Notes on the Trade Date being less than their public offering price. See “Selected Risk Considerations — The Initial Estimated Value of the Notes Is Less than the Price to the Public” above.

### VALIDITY OF THE NOTES

In the opinion of Norton Rose Fulbright Canada LLP, the issue and sale of the Notes has been duly authorized by all necessary corporate action of the Bank in conformity with the Indenture, and when the Notes have been duly executed, authenticated and issued in accordance with the Indenture and delivered against payment therefor, the Notes will be validly issued and, to the extent validity of the Notes is a matter governed by the laws of the Province of Ontario or Québec, or the laws of Canada applicable therein, and will be valid obligations of the Bank, subject to equitable remedies which may only be granted at the discretion of a court of competent authority, subject to applicable bankruptcy, to rights to indemnity and contribution under the Notes or the Indenture which may be limited by applicable law; to insolvency and other laws of general application affecting creditors’ rights, to limitations under applicable limitations statutes, and to limitations as to the currency in which judgments in Canada may be rendered, as prescribed by the Currency Act (Canada). This opinion is given as of the date hereof and is limited to the laws of the Provinces of Ontario and Québec and the federal laws of Canada applicable thereto. In addition, this opinion is subject to customary assumptions about the Trustee’s authorization, execution and delivery of the Indenture and the genuineness of signatures and certain factual matters, all as stated in the letter of such counsel dated September 7, 2018, which has been filed as Exhibit 5.1 to Royal Bank’s Form 6-K filed with the SEC dated September 7, 2018. In the opinion of Morrison & Foerster LLP, when the Notes have been duly completed in accordance with the Indenture and issued and sold as contemplated by the prospectus supplement and the prospectus, the Notes will be valid, binding and enforceable obligations of Royal Bank, entitled to the benefits of the Indenture, subject to applicable bankruptcy, insolvency and similar laws affecting creditors’ rights generally, concepts of reasonableness and equitable principles of general applicability (including, without limitation, concepts of good faith, fair dealing and the lack of bad faith). This opinion is given as of the date hereof and is limited to the laws of the State of New York. This opinion is subject to customary assumptions about the Trustee’s authorization, execution and delivery of the Indenture and the genuineness of signatures and to such counsel’s reliance on the Bank and other sources as to certain factual matters, all as stated in the legal opinion dated September 7, 2018, which has been filed as Exhibit 5.2 to the Bank’s Form 6-K dated September 7, 2018.

P-16RBC Capital Markets, LLC

---