

SPECTRUM PHARMACEUTICALS INC

Form 11-K

June 29, 2011

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

FORM 11-K

(Mark One)

**ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE
ACT OF 1934**

For the fiscal year ended December 31, 2010

OR

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

For the transition period from _____ to _____

Commission File Number 001-35006

A. Full title of the plan and the address of the plan, if different from that of the issuer named below:

**SPECTRUM PHARMACEUTICALS, INC.
401(k) PLAN**

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

**SPECTRUM PHARMACEUTICALS, INC.
11500 South Eastern Avenue, Suite 240
Henderson, Nevada 89052**

**Spectrum Pharmaceuticals, Inc. 401(k) Plan
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Report of Independent Registered Public Accounting Firm

To the Administrative Committee of
The Spectrum Pharmaceuticals, Inc. 401(k) Plan:

We have audited the accompanying statements of net assets available for benefits of The Spectrum Pharmaceuticals, Inc. 401(k) Plan (the Plan) as of December 31, 2010 and 2009, and the related statement of changes in net assets available for benefits for the year ended December 31, 2010. These financial statements are the responsibility of the Plan s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2010 and 2009, and the changes in net assets available for benefits for the year ended December 31, 2010 in conformity with accounting principles generally accepted in the United States of America.

Our audits were made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules of delinquent participant contributions for the year ended December 31, 2010 and assets (held at year-end) as of December 31, 2010, are presented for purposes of additional analysis and are not a required part of the basic financial statements, but are supplementary information required by the Department of Labor s Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. These supplemental schedules are the responsibility of the Plan s management. The supplemental schedules have been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ Windes & McClaughry Accountancy Corporation

Irvine, California

June 28, 2011

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**Spectrum Pharmaceuticals, Inc. 401(k) Plan
Statements of Net Assets Available for Benefits**

	December 31,	
	2010	2009
ASSET		
Investments, at fair value		
Registered investment companies	\$ 3,001,835	\$ 2,070,093
Common/collective trust	775,958	833,215
Spectrum Pharmaceuticals, Inc. common stock fund	1,892,537	1,174,168
	5,670,330	4,077,476
Receivables:		
Employer contributions	35,501	
Participant contributions	666	
Notes receivable from participants	96,433	84,036
	132,600	84,036
NET ASSETS REFLECTING INVESTMENTS AT FAIR VALUE	5,802,930	4,161,512
Adjustment from fair value to contract value for fully benefit-responsive investment contract	(16,752)	(1,668)
NET ASSETS AVAILABLE FOR BENEFITS	\$ 5,786,178	\$ 4,159,844

The accompanying notes are an integral part of these financial statements.

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**Spectrum Pharmaceuticals, Inc. 401(k) Plan
Statement of Changes in Net Assets Available for Benefits**

	Year Ended December 31, 2010
ADDITIONS TO NET ASSETS ATTRIBUTED TO:	
Contributions:	
Participant	\$ 1,059,173
Participant rollover contributions	16,526
Employer contributions	600,189
	1,675,888
Investment income (loss):	
Interest and dividends	61,292
Net appreciation in fair value of investments	1,087,346
	1,148,638
Interest income from notes receivable from participants	8,227
Total additions	2,832,753
DEDUCTIONS TO NET ASSETS ATTRIBUTED TO:	
Distributions to participants	1,205,144
Administrative expenses	1,275
Total deductions from net assets	1,206,419
NET INCREASE IN PLAN NET ASSETS	1,626,334
NET ASSETS AVAILABLE FOR BENEFITS, AT BEGINNING OF YEAR	4,159,844
NET ASSETS AVAILABLE FOR BENEFITS, AT END OF YEAR	\$ 5,786,178

The accompanying notes are an integral part of these financial statements.

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**Spectrum Pharmaceuticals, Inc. 401(k) Plan
Notes to Financial Statements
December 31, 2010**

1. Description of the Plan

The following description of the Spectrum Pharmaceuticals, Inc. 401(k) Plan (the Plan) is provided for general information purposes only. Participants should refer to the Plan document for a more complete description of the Plan s provisions.

General

The Plan is a defined contribution pension plan covering eligible employees of Spectrum Pharmaceuticals, Inc. (the Company or Spectrum) as defined in the Plan Document. The Plan was adopted January 1, 1990 and established for the purpose of providing retirement benefits for eligible employees of the Company. The Plan is subject to regulation under the Employee Retirement Income Security Act of 1974 (ERISA) and the qualification provisions of the Internal Revenue Code (the Code).

Effective as of January 1, 2007, the Plan was amended to allow hardship distributions for expenses of beneficiaries.

Effective as of January 1, 2008, the Plan was amended to permit non-spouse beneficiaries to rollover their portion of a death benefit to which they are entitled to an individual retirement account described in Section 408(a) or (b) of the Code.

Effective as of January 1, 2009, the Plan permits Qualified Reservist Distributions. A Qualified Reservist Distribution is any distribution to an individual who is ordered or called to active duty after September 11, 2001.

Effective as of January 1, 2010, the Plan was amended to comply with the additional guidance provided in Internal Revenue Service (IRS) Notice 2010-15 regarding the Heroes Earnings Assistance and Relief Tax Act of 2008 (HEART Act) and the Worker, Retiree and Employer Recovery Act of 2008 (WRERA).

Administration

The Plan has designated Rajesh C. Shrotriya, MD, President and Chief Executive Officer, and Shyam K. Kumaria, Senior Vice President of Finance, as Trustees of the Plan. MG Trust Company, LLC, (MG Trust) serves as the account custodian for the Plan. Digital Retirement Solutions, Inc. (DRS) performs administrative and recordkeeping services for the Plan.

Eligibility

All employees of the Company may become eligible to participate in the Plan, provided the employee has completed three months of employment, and is not covered by a collective bargaining agreement as to which retirement benefits were the subject of good faith bargaining. An eligible employee may enter the Plan on the first day of the month following his or her satisfaction of the eligibility requirements.

The Plan gives employees of newly acquired entities credit for years of service earned prior to the Company s ownership. If this credit for prior service allows the acquisition employee to meet Plan eligibility requirements, they are granted the option of entering the Plan on the first day of the month following their date of hire.

Contributions

Each year, participants may elect to make pre-tax contributions up to 75% of their eligible compensation, as defined in the Plan. In addition, participants may elect to make after-tax contributions up to 75% of their eligible compensation. Compensation deferrals cannot exceed the maximum deferral, as determined by the IRS each year. Such deferral limitation was \$16,500 in 2010 and 2009. Employees who attained the age of 50 before the end of the plan year are eligible to make catch-up contributions of up to \$5,500 during those respective Plan years.

The Company provides matching contributions equal to 100 percent of the first 3 percent of compensation deferred by a participant and 50 percent of the next 2 percent of compensation deferred by a participant. The Company s matching contribution made on behalf of any participant for any Plan year shall not exceed 4 percent of compensation. The Company has the right under the Plan to discontinue or modify its matching contributions at any time. The Company s aggregate matching contribution under the Plan was \$600,189 for the year ended December 31, 2010. Additional amounts may be contributed at the option of the Company s board of directors.

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**Spectrum Pharmaceuticals, Inc. 401(k) Plan
Notes to Financial Statements
December 31, 2010**

1. Description of the Plan (Continued)***Participant Accounts***

MG Trust maintains an account in the name of each participant. Each eligible participant's account is credited with (a) the participant's contributions, (b) the Company's Safe Harbor matching contributions, and (c) an allocation of interest, dividends and any change in the market value of the various investment funds. Each eligible participant's account is charged with any withdrawals or distributions requested by the participant and an allocation of administrative expenses, if applicable. Allocations are based on the ratio that each participant's account balance in the fund bears to the total account balances of all participants in the respective fund.

Investment Options

Participants direct the investment of their contributions and the Company's matching contributions into various investment options offered by the Plan. These options include numerous registered investment companies, a common/collective trust and Spectrum's common stock. Participants may change their investment elections daily for both existing account balances and future contributions.

Vesting

Participant contributions are fully vested when made. Company Safe Harbor matching contributions are fully vested when made. Participants in the Plan receive vesting credit for Company discretionary matching contributions, if any, based upon years of service, beginning with the date of employment with the Company or one of its subsidiaries, as follows:

Years of Service**(whole years)**

	Vesting
Less than 2	0%
2	20%
3	40%
4	60%
5	80%
6 or more	100%

Distributions and Payments of Benefits

On termination of service due to death, disability, retirement, or other reasons, a participant may receive the value of the vested interest in his or her account as a lump-sum distribution. The Plan also permits distributions for hardships, as defined in the Plan document. Withdrawals by participants from their accounts are permitted in accordance with the Plan's provisions.

Forfeitures

Forfeitures of terminated participants' non-vested account balances may be used to pay administrative expenses or reduce any Company contributions. There were no forfeitures during the year ended December 31, 2010.

Administrative Expenses

The compensation or fees of accountants, counsel and other specialists and any other costs of administering the Plan or the trust are generally paid by the Company. Administrative expenses that are not paid by the Company are paid by the Plan. Administrative expenses for the year ended December 31, 2010 paid by the Plan were \$1,275, and are included in administrative expenses.

Plan Termination

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan, subject to the provisions of ERISA. In the event of Plan termination, participants will become fully vested in their accounts.

Notes Receivable From Participants

Loans to participants are secured by the participant's account balance and may not exceed the lesser of 50% of the participant's account balance or \$50,000 in the aggregate for any individual participant. Loans bear interest at fixed annual rates that are computed as the prime interest rate plus 2 percent on the date the loan is processed. At December 31, 2010 and 2009, the annual interest rate of all loans outstanding was between 5.25% and 10.25%. Principal and interest are paid ratably through payroll deductions over a term not to exceed 5 years. A participant applying for a loan through the Plan will be charged a \$100 loan application fee. The loan application fee is nonrefundable and will be used to offset the administrative expenses associated with the loan.

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**Spectrum Pharmaceuticals, Inc. 401(k) Plan
Notes to Financial Statements
December 31, 2010**

2. Summary of Significant Accounting Policies

Basis of Accounting

The Plan's financial statements are prepared on the accrual basis, in conformity with generally accepted accounting principles in the United States of America.

The Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic No. 962 *Plan Accounting Defined Contribution Pension Plans*, requires investment contracts held by a defined-contribution plan to be reported at fair value. However, contract value is the relevant measurement attribute for that portion of the net assets available for benefits of a defined-contribution plan attributable to fully benefit-responsive investment contracts because contract value is the amount participants would receive if they were to initiate permitted transactions under the terms of the plan. As required by the ASC Topic No. 962, the Statement of Net Assets Available for Benefits presents the fair value of the investment contracts as well as the adjustment of the fully benefit-responsive investment contracts from fair value to contract value. The Statement of Changes in Net Assets Available for Benefits is prepared on a contract value basis.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities at the date of the financial statements. Significant estimates are made in determining fair value of investments. Actual results could differ from those estimates. The current economic environment has increased the level of uncertainty inherent in these estimates and assumptions.

Investment Valuation and Income Recognition

The Plan's investments are stated at fair value. See Note 3 for discussion of fair value measures.

Purchases and sales of securities are recorded on a trade date basis. The Plan presents in the Statement of Changes in Net Assets Available for Benefits the net appreciation in the fair value of its investments which consists of the related gains and the unrealized appreciation on these investments. Dividends are recorded on the record date. Interest income is recorded on the accrual basis.

Fully Benefit-Responsive Benefit Contracts

One of the investment options offered by the Plan, the Wells Fargo Stable Return Fund N (the Stable Return Fund), is a common collective trust that is fully invested in Wells Fargo Stable Return Fund G, which is fully invested in contracts deemed to be fully benefit-responsive. The Plan reports its investment in the Stable Return Fund at fair value. However, contract value is the relevant measure to the Plan because it is the amount that is available for Plan benefits. Accordingly, in the Statement of Net Assets Available for Benefits, the Stable Return Fund, along with the Plan's other investments, is stated at fair value with a corresponding adjustment to reflect the investment in the Stable Return Fund at contract value.

Notes Receivable From Participants

Notes receivable from participants are measured at their unpaid principal balance plus any accrued but unpaid interest. Delinquent participant loans are reclassified as distributions based upon the terms of the Plan document.

Risks and Uncertainties

The Plan assets consist of various investments which are exposed to a number of risks, such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, it is at least reasonably possible that changes in risks in the near term could materially affect participants' account balances and the amounts reported in the Statements of Net Assets available for Benefits and the Statement of Changes in Net Assets Available for Benefits.

Payment of Benefits

Benefit payments to participants are recorded when paid.

Contributions

Contributions made by participants and the Company are recorded on an accrual basis. Contributions are recognized during the period in which the related compensation was paid.

Operating Expenses

All expenses of maintaining the Plan are paid by the Company

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Spectrum Pharmaceuticals, Inc. 401(k) Plan

Notes to Financial Statements

December 31, 2010

2. Summary of Significant Accounting Policies (Continued)

New Accounting Pronouncements

In January 2010, the FASB issued ASC Topic 820 Update 2010-06, *Fair Value Measurements and Disclosures Improving Disclosures* about Fair Value Measurements. This guidance requires: (i) separate disclosure of significant transfers between Level 1 and Level 2 and reasons for the transfers; (ii) disclosure, on a gross basis, of purchases, sales, issuances, and net settlements within Level 3; (iii) disclosures by class of assets and liabilities; and (iv) a description of the valuation techniques and inputs used to measure fair value for both recurring and nonrecurring fair value measurements. This guidance is effective for reporting periods beginning after December 15, 2009, except for the Level 3 disclosure requirements, which will be effective for fiscal years beginning after December 15, 2010. The adoption of this guidance is reflected, where applicable, throughout these financial statements.

In September 2010, the FASB issued ASU 2010-25, *Reporting Loans to Participants by Defined Contribution Pension Plans* (ASU 2010-25). ASU 2010-25 requires participant loans to be measured at their unpaid principal balance plus any accrued but unpaid interest and to be classified as notes receivable from participants. Previously, loans were measured at fair value and classified as investments. Participant loans have been reclassified to notes receivable from participants as of December 31, 2010 and 2009. Interest income related to notes receivable has been reclassified to interest income.

3. Fair Value Measurements

ASC Topic 820, *Fair Value Measurements and Disclosures*, provides the framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under ASC Topic 820 are described as follows:

Level 1 Quoted prices in active markets for *identical* assets or liabilities.

Level 2 Inputs other than Level 1 that are observable, either directly or indirectly; such as quoted prices for *similar* assets or liabilities, quoted prices in markets that are not active; or other inputs that can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The registered investment companies are valued at the net asset value (NAV) of shares held by the Plan at year-end, based upon quoted market prices. The common/collective trust is valued at the net unit value (NUV) of units held by the Plan at year-end. The NUV is determined by the total value of fund assets divided by the total number of units of the fund owned. Spectrum common stock is valued at the NAV at year-end, based upon the quoted market price of the Company common stock held at year-end.

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Spectrum Pharmaceuticals, Inc. 401(k) Plan
Notes to Financial Statements
December 31, 2010

3. Fair Value Measurements (Continued)

The following tables represent the Plan's fair value hierarchy for its investments as of December 31, 2010 and 2009:

Investment Category	Fair Value Measurements as of December 31, 2010			
	Level 1	Level 2	Level 3	Total
Registered Investment Companies:				
Large Growth Funds	\$ 1,298,432	\$	\$	\$ 1,298,432
Small/Mid Growth Funds	523,336			523,336
Balanced Funds	762,085			762,085
Value Funds	211,180			211,180
Fixed Income Funds	206,802			206,802
Total Registered Investment Companies	3,001,835			3,001,835
Common Stocks:				
Spectrum Pharmaceuticals Common Stock Fund	1,892,537			1,892,537
Total Common Stocks	1,892,537			1,892,537
Common/Collective Trust*		775,958		775,958
Total Assets at Fair Value	\$ 4,894,372	\$ 775,958	\$	\$ 5,670,330

Investment Category	Fair Value Measurements as of December 31, 2009			
	Level 1	Level 2	Level 3	Total
Registered Investment Companies:				
Large Growth Funds	\$ 838,675	\$	\$	\$ 838,675
Small/Mid Growth Funds	355,238			355,238
Balanced Funds	591,444			591,444
Value Funds	150,512			150,512
Fixed Income Funds	134,224			134,224
Total Registered Investment Companies	2,070,093			2,070,093
Common Stocks:				
Spectrum Pharmaceuticals Common Stock Fund	1,174,168			1,174,168
Total Common Stocks	1,174,168			1,174,168
Common/Collective Trust*		833,215		833,215

Total Assets at Fair Value	\$ 3,244,261	\$ 833,215	\$	\$ 4,077,476
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* As stated in Note 2 above, the Stable Return Fund, which is deemed to be fully benefit-responsive, is stated at fair value on the Statements of Net Assets Available for Benefits, with a corresponding adjustment to reflect contract value. The fair value of this fund as of December 31, 2010 and 2009 was \$775,958 and \$833,215, respectively. The contract value of the fund as of December 31, 2010 and 2009, which is a component of net assets available for benefits, totaled \$759,206 and \$831,547, respectively.

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Spectrum Pharmaceuticals, Inc. 401(k) Plan
Notes to Financial Statements
December 31, 2010

4. Investments

The following presents the Plan's individual investments, at fair value, that represent 5% or more of the Plan's net assets available for benefits at December 31, 2010 and 2009.:

Investment	As of December 31,	
	2010	2009
Spectrum Pharmaceuticals Common Stock	\$ 1,892,537	\$ 1,174,168
Wells Fargo Stable Return	775,958	833,215
Oppenheimer Developing Markets	414,862	297,992
DWS Gold & Precious Metals Fund	404,264	234,644
American Funds American Balanced R3	**	211,147
American Funds EuroPacific R3	**	208,009

** Not applicable as amount represents less than 5% of the Plan's net assets available for benefits as of the applicable year end.

During the year ended December 31, 2010, the Plan's investments, including gains and losses on investments sold during the year, changed in value as follows:

Description	Year Ended
	December 31,
	2010
Registered Investment Companies	\$ 423,552
Common/Collective Trust	(526)
Spectrum Common Stock	664,320
Net increase in fair value of investments	\$ 1,087,346

5. Related Party Transactions

Transactions in shares of Spectrum's common stock qualify as exempt party-in-interest transactions under the provisions of ERISA, since Spectrum is the Plan administrator.

6. Concentration, Market and Credit Risk

The Plan provides for various investment options including the Company's common stock. Investments are exposed to various risks, such as interest rate, market and credit risk. Due to the level of risk associated with certain investment securities, it is possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amount reported in the Statements of Net Assets Available for Benefits. As of December 31, 2010 and 2009, approximately 33% and 28% respectively, of the investments of the Plan consisted of securities of its sponsor, Spectrum Pharmaceuticals, Inc. As of December 31, 2010 and 2009, Spectrum's stock price closed at \$6.87 and \$4.44, respectively.

7. Tax Status of the Plan

The IRS has determined and informed the Company by a letter dated March 31, 2008, that the Plan and related trust are designed in accordance with applicable sections of the IRC. Although the Plan has been amended since receiving the opinion letter, the Plan administrator and the Plan's tax counsel believe that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC and therefore believe that the Plan is qualified and the related trust is tax-exempt.

Accounting principles generally accepted in the United States of America require Plan management to evaluate tax positions taken by the Plan and recognize a tax liability (or asset) if the organization has taken an uncertain position

that more likely than not would not be sustained upon examination by the IRS. The Plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2010 there are no uncertain positions taken or expected to be taken that would require recognition of a liability (or asset) or disclosure in the financial statements. The Plan is subject to routine audits by taxing jurisdictions; however, there are currently no audits for any tax periods in progress. The Plan administrator believes it is no longer subject to income tax examinations for year prior to 2007.

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**Spectrum Pharmaceuticals, Inc. 401(k) Plan
Notes to Financial Statements
December 31, 2010**

8. Subsequent Event

The Company evaluated all events and transactions that occurred from the balance sheet date of December 31, 2010 through June 28, 2011 the date the financial statements were available to be issued. During this period, there were no events or transactions occurring which require recognition or disclosure in the financial statements.

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**Spectrum Pharmaceuticals, Inc. 401(k) Plan
 EIN: 93-0979187, PN: 001
 Supplementary Information
 Schedule H, Part IV, Item 4a
 Schedule of Delinquent Participant Contributions
 For the Year Ended December 31, 2010**

Participant	Total That Constitute Nonexempt Prohibited Transactions
Contributions Transferred Late to Plan	
\$ 54,363	\$ 54,363

During the year ended December 31, 2010, contributions comprised of employee deferrals for one payroll period were not remitted timely to the Plan, thus constituting nonexempt transactions between the Plan and the Company. Lost earnings are being calculated and will be remitted during the 2011 plan year.

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Spectrum Pharmaceuticals, Inc. 401(k) Plan
EIN: 93-0979187, PN: 001
Supplementary Information
Schedule of Assets (Held at Year-End)
As of December 31, 2010

Identity of Issue	Description of Investment	Type of Investment	Current Value
AllianceBernstein L.P.	AllianceBernstein Small/Mid Cap Value	RIC	\$ 109,762
Capital Research and Management Co.	American Funds American Balanced R3	RIC	272,955
Capital Research and Management Co.	American Funds Bond Fund America R3	RIC	137,320
Capital Research and Management Co.	American Funds Capital World Bond R3	RIC	69,482
Capital Research and Management Co.	American Funds Capital World Growth & Income R3	RIC	101,418
Capital Research and Management Co.	American Funds EuroPacific R3	RIC	282,323
Capital Research and Management Co.	American Funds Growth Fund R3	RIC	228,610
Capital Research and Management Co.	American Funds Small Cap World R3	RIC	109,923
BlackRock Funds	BlackRock Energy & Resources	RIC	181,482
Columbia Management	Columbia Technology	RIC	222,254
DWS Mutual Funds, Inc.	DWS Gold & Precious Metals Fund	RIC	404,264
Federated Government Obligations	Federated Government Obligations IC	RIC	28,442
Janus Investment Funds	Janus Enterprise Fund	RIC	46,323
Lord, Abnett & Co.	Lord Abnett Small Cap Blend	RIC	107,690
Munder Capital Management	Munder Micro Cap Equity	RIC	65,108
Oppenheimer Funds	Oppenheimer Developing Markets	RIC	414,862
Selected Funds	Selected American Shares	RIC	141,699
* Spectrum Pharmaceuticals, Inc.	Spectrum Pharmaceuticals Common Stock Fund	SPCS	1,892,537
Victory Capital Management	Victory Special Value	RIC	77,918
Wells Fargo Bank, NA	Wells Fargo Stable Return	CCT*	775,958
	Total Investments		5,670,330
* Notes Receivable from Participants	Notes Receivable from Participant (maturing 2011 to 2025) at interest rates of 5.25% to 10.25%.		96,433

* Indicates a party-in-interest to the Plan.

RIC Registered Investment Company

CCT Common Collective Trust

SPCS Spectrum Pharmaceutical Common Stock

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SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Plan administrator of the Spectrum Pharmaceuticals, Inc. 401(k) Plan has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

SPECTRUM PHARMACEUTICALS, INC. 401(k) PLAN

Date: June 28, 2011

By: /s/ Shyam Kumaria
Shyam Kumaria
Senior Vice President, Finance of Spectrum
Pharmaceuticals, Inc., and
Plan Trustee of Spectrum Pharmaceuticals, Inc.
401(k) Plan

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EXHIBIT INDEX

Exhibit Number	Exhibit Title
23.1	Consent of Independent Registered Public Accounting Firm, Windes & McClaughry Accountancy Corporation

ithout regard to the securities.

You should be aware that an investment in the securities does not entitle you to any ownership interest in the common stocks of the companies included in the Index. For a discussion of the Index, see “EURO STOXX 5[®] Index” below.

How has the Index performed historically?

You can find a graph setting forth the closing levels of the Index for the period from January 1, 2013 to a recent date, in the section entitled “EURO STOXX 5[®] Index— Historical Closing Levels of the Index” in this pricing supplement. We obtained the historical information from Bloomberg Financial Markets without independent verification. You should not take the past performance of the Index as an indication of how the Index will perform in the future.

What are the United States federal income tax consequences of investing in the securities?

The terms of the securities 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 securities for all tax purposes as pre-paid cash-settled derivative contracts in respect of the Index. If the securities are so treated, a U.S. holder should generally recognize capital gain or loss upon the sale, exchange or maturity of the securities in an amount equal to the difference between the amount a holder receives at such time and the holder’s tax basis in the securities.

Please read carefully the section entitled “Supplemental Discussion of U.S. Federal Income Tax Consequences” in this pricing supplement, the section entitled “Tax Consequences” in the accompanying prospectus and the section entitled “Certain Income Tax Consequences” in the accompanying prospectus supplement. You should consult your tax advisor about your own tax situation.

What are the Canadian federal income tax consequences of investing in the securities?

For a discussion of the Canadian federal income tax consequences of investing in the securities, please read carefully the section entitled “Tax Consequences” in the accompanying prospectus and the section entitled “Certain Income Tax Consequences” in the accompanying prospectus supplement. You should consult your tax advisor about your own tax situation.

Will the securities be listed on a stock exchange?

The securities will not be listed on any securities exchange. There can be no assurance that a liquid trading market will develop for the securities. Accordingly, if you sell your securities prior to maturity, you may have to sell them at a substantial loss. You should review the section entitled “Risk Factors—There may not be an active trading market for the securities” in this pricing supplement.

Are there any risks associated with my investment?

Yes, an investment in the securities is subject to significant risks, including the risk of loss of up to 75% of your principal. We urge you to read the detailed explanation of risks in “Risk Factors” beginning on page PS-9 of this document and page S-1 of the accompanying prospectus supplement.

ADDITIONAL INFORMATION

You should read this pricing supplement together with the prospectus dated September 7, 2018, as supplemented by the prospectus supplement dated September 7, 2018, relating to our Senior Global Medium-Term Notes, Series H, of which these securities are a part. This pricing supplement, together with these documents, contains the terms of the securities and supersedes all other 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 rely only on the information provided or incorporated by reference in this pricing supplement, the prospectus and the prospectus supplement. We have not authorized anyone else to provide you with different information, and we take no responsibility for any other information that others may give you. We and Wells Fargo Securities, LLC are offering to sell the securities and seeking offers to buy the securities only in jurisdictions where it is lawful to do so. The information contained in this pricing supplement and the accompanying prospectus supplement and prospectus is current only as of their respective dates.

If the information in this pricing supplement differs from the information contained in the prospectus supplement or the prospectus, you should rely on the information in this pricing supplement.

You should carefully consider, among other things, the matters set forth in “Risk Factors” in this pricing supplement and the accompanying prospectus supplement, as the securities involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisers before you invest in the securities.

You may access these documents on the SEC website at www.sec.gov as follows (or if such 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>

Our Central Index Key, or CIK, on the SEC website is 1000275.

Please see the section “Documents Incorporated by Reference” on page i of the above prospectus for a description of our filings with the SEC that are incorporated by reference therein.

The issuer has filed a registration statement (including a prospectus) with the SEC for the offering to which this communication relates. Before you invest, you should read the prospectus in that registration statement and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, any underwriter or any dealer participating in the offering will arrange to send you the prospectus if you request it by calling your financial advisor or by calling Royal Bank of Canada at 1-877-688-2301.

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RISK FACTORS

An investment in the securities is subject to the risks described below, as well as the risks described under “Risk Factors” in the accompanying prospectus supplement and prospectus. The securities have complex features and are a riskier investment than ordinary debt securities. Also, your securities are not equivalent to investing directly in the Index or the common stocks included in the Index. Investors in the securities are also exposed to further risks related to the Issuer of the securities, Royal Bank of Canada, which are described in Royal Bank of Canada’s most recent annual report on Form 40-F filed with the SEC and incorporated by reference herein. See the categories of risks identified and disclosed in the management’s discussion and analysis of financial condition and results of operations included in the annual report on Form 40-F. This section (and the management’s discussion and analysis section of the annual report on Form 40-F) describes the most significant risks relating to the securities. You should carefully consider whether the securities are suited to your particular circumstances.

Your investment may result in a loss of up to 75% of your principal

We will not repay you a fixed amount of principal on the securities at maturity. The payment at maturity on the securities will depend on the percentage change in the level of the Index based on the Final Index Level relative to the Initial Index Level, and whether or not the Final Index Level is below the Buffer Level. Because the level of the Index is subject to market fluctuations, the amount of cash you receive at maturity may be more or less than the principal amount of the securities. If the Final Index Level is less than the Buffer Level, you will be exposed on a 1-to-1 basis to declines in the level of the Index beyond the Buffer Level. Accordingly, if the level of the Index decreases below the Buffer Level, you will lose up to 75% of your principal.

You will not receive interest payments on the securities

You will not receive any periodic interest payments on the securities or any interest payment at maturity. Your payment at maturity will depend on the percentage change in the level of the Index based on the Final Index Level relative to the Initial Index Level, and whether or not the Final Index Level falls below the Buffer Level.

Your yield may be lower than the yield on a standard debt security of comparable maturity

The yield that you will receive on your securities, which could be negative, may be less than the return you could earn on other investments. Even if your yield is positive, your yield may be less than the yield you would earn if you bought a standard senior non-callable debt security of Royal Bank of Canada with the same maturity date. Your investment may not reflect the full opportunity cost to you when you take into account factors that affect the time value of money. Unlike conventional senior non-callable debt securities, the securities do not guarantee the return of all of the principal amount at maturity. In addition, no interest will be paid during the term of your securities.

Owning the securities is not the same as owning the common stocks underlying the Index

The return on your securities will not reflect the return you would realize if you actually owned and held the common stocks underlying the Index for a similar period. First, because the maturity payment amount will be determined based on the performance of the Index, which is a price-return index, the return on the securities will not take into account the value of any dividends that may be paid on the common stocks underlying the Index. Second, as a holder of the securities, you will not be entitled to receive any dividend payments or other distributions on the common stocks underlying the Index, nor will you have voting rights or any other rights that holders of those common stocks may have. Even if the level of the Index increases above the Initial Index Level during the term of the securities, the market value of the securities may not increase by the same amount. It is also possible for the level of the Index to increase while the market value of the securities declines.

There may not be an active trading market for the securities

The securities will not be listed on any securities exchange. There can be no assurance that a liquid trading market will develop for the securities. Even if a secondary market for the securities develops, it may not provide significant liquidity and transaction costs in any secondary market could be high. As a result, the difference between bid and asked prices for the securities in any secondary market could be substantial. If you sell your securities before maturity, you may have to do so at a discount from the initial public offering price, and, as a result, you may suffer substantial losses.

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Wells Fargo Securities, LLC and its broker-dealer affiliates may make a market for the securities, although they are not required to do so. As market makers, trading of the securities may cause Wells Fargo Securities, LLC or its broker-dealer affiliates to have long or short positions in the securities. Because we do not expect that any other market makers will participate in a secondary market for the securities, the price at which you may be able to sell your securities is likely to depend on the price, if any, at which Wells Fargo Securities, LLC or its broker-dealer affiliates may be willing to buy your securities. See “Supplemental Plan of Distribution.”

The amount to be paid at maturity is not linked to the level of the Index at any time other than the valuation date. The payment at maturity will be based on the level of the Index only on the valuation date. Therefore, for example, if the closing level of the Index decreased precipitously on the valuation date, the payment on the securities may be significantly less than it would otherwise have been had the payment been linked to the closing level of the Index prior to that decrease. Although the actual level of the Index on the maturity date or at other times during the term of the securities may be higher than the Index level on the valuation date, you will not benefit from the closing level of the Index at any time other than the valuation date.

Many factors affect the market value of the securities

The market value of the securities will be affected by factors that interrelate in complex ways. It is important for you to understand that the effect of one factor may offset any increase in the market value of the securities caused by another factor and that the effect of one factor may compound any decrease in the market value of the securities caused by another factor. For example, a change in the volatility of the Index may offset some or all of any increase in the market value of the securities attributable to another factor, such as an increase in the level of the Index. In addition, a change in interest rates may offset other factors that would otherwise change the level of the Index, and therefore, may change the market value of the securities. We expect that the market value of the securities will depend to a significant extent on the amount, if any, by which the Index level during the term of the securities exceeds or does not exceed the Initial Index Level. If you choose to sell your securities when the level of the Index exceeds the Initial Index Level, you may receive substantially less than the amount that would be payable at maturity based on this level because of the expectation that the Index will continue to fluctuate until the valuation date. We believe that other factors that may also influence the value of the securities include:

- the volatility (frequency and magnitude of changes in the level) of the Index and, in particular, market expectations regarding the volatility of the Index;
 - market interest rates in the U.S.;
 - the dividend yields of the common stocks included in the Index;
 - our creditworthiness, as perceived in the market;
 - changes that affect the Index, such as additions, deletions or substitutions;
 - the time remaining to maturity; and
- geopolitical, economic, financial, political, regulatory or judicial events as well as other conditions may affect the common stocks included in the Index.

The securities will be debt obligations of Royal Bank of Canada. No other company or entity will be responsible for payments under the securities

The securities will be issued by Royal Bank of Canada. The securities will not be guaranteed by any other company or entity. No other entity or company will be responsible for payments under the securities or liable to holders of the securities in the event Royal Bank of Canada defaults under the securities. Royal Bank of Canada’s credit ratings are an assessment of our ability to pay our obligations, including those on the securities. Consequently, if we default on our obligations, you could lose your entire investment, and actual or anticipated declines in our creditworthiness may affect the value of the securities. The securities will not be issued by or guaranteed by Wells Fargo Securities, LLC or any of its affiliates.

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Changes that affect the Index will affect the market value of the securities and the maturity payment amount. The policies of the Index Sponsor concerning the calculation of the Index, additions, deletions or substitutions of the common stocks underlying the Index and the manner in which changes affecting the issuers of those stocks, such as stock dividends, reorganizations or mergers, are reflected in the Index could affect the level of the Index, the maturity payment amount, and the market value of the securities prior to maturity. The amount payable on the securities 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 Index, or if the Index Sponsor discontinues or suspends calculation or publication of the Index, in which case it may become difficult to determine the market value of the securities. If events such as these occur, or if the level of the Index is not available on the valuation date because of a market disruption event or for any other reason and no successor index is selected, the calculation agent may determine the level of the Index — and thus the maturity payment amount — in its sole discretion.

We have no affiliation with the Index Sponsor and will not be responsible for any actions taken by the Index Sponsor. We have no affiliation with the Index Sponsor and the Index Sponsor will not be involved in the offering of the securities. Consequently, we have no control of the actions of the Index Sponsor, including any actions of the type that would affect the composition of the Index, and therefore, the level of the Index. The Index Sponsor has no obligation of any sort with respect to the securities. 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 securities.

Historical levels of the Index should not be taken as an indication of the future levels of the Index during the term of the securities.

The trading prices of the common stocks underlying the Index will determine the Index level at any given time. As a result, it is impossible to predict whether the level of the Index will rise or fall. Trading prices of the common stocks underlying the Index will be influenced by complex and interrelated political, economic, financial and other factors that can affect the issuers of those stocks.

Hedging transactions may affect the return on the securities.

As described below under “Use of Proceeds and Hedging” on page PS-28, we, through one or more hedging counterparties, may hedge our obligations under the securities by purchasing common stocks underlying the Index, futures or options on the Index or common stocks underlying the Index, or exchange-traded funds or other derivative instruments with returns linked or related to changes in the level of the Index or trading prices of common stocks underlying the Index, and may adjust these hedges by, among other things, purchasing or selling any of these assets at any time. Although they are not expected to, any of these hedging activities may adversely affect the trading prices of common stocks underlying the Index and/or the level of the Index and, therefore, the market value of the securities. It is possible that we or one or more of our hedging counterparties could receive substantial returns from these hedging activities while the market value of the securities declines.

Our initial estimated value of the securities will be less than the initial public offering price.

Our initial estimated value of the securities will be less than the initial public offering price of the securities. This is due to, among other things, the fact that the initial public offering price of the securities reflects the borrowing rate we pay to issue securities of this kind (an internal funding rate that is lower than the rate at which we borrow funds by issuing conventional fixed rate debt), and the inclusion in the initial public offering price of the underwriting discount and commission and hedging and other costs associated with the securities.

The price, if any, at which you may be able to sell your securities prior to maturity may be less than the initial public offering price and our initial estimated value.

Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your securities prior to maturity will be less than the initial public offering price and, subject to the discussion in the next paragraph, will be less than our initial estimated value. This is because any such sale price would not be expected to include the underwriting discount and commission or hedging or other costs associated with the securities, including the estimated profit our hedging counterparty(ies) expect to realize in consideration for assuming the risks inherent in hedging.

our obligations under the securities. In addition, any price at which you may sell the securities is likely to reflect customary bid-ask spreads for similar trades, and the cost of unwinding any related hedge transactions. In addition, the value of the securities determined for any secondary market price is expected to be based in part on the yield that is reflected in the interest rate on our conventional debt securities of similar maturity that are traded in the secondary market, rather than the internal funding rate that we used to price the securities and determine the initial estimated value. As a result, the secondary market price of the securities will be less than if the internal funding rate was used. These factors, together with various credit, market and economic factors over the term of the securities, and, potentially, changes in the level of the Index, are expected to reduce the price at which you may be able to sell the securities in any secondary market and will affect the value of the securities in complex and unpredictable ways. Moreover, we expect that any secondary market price will be based on Wells Fargo Securities, LLC's valuation of the securities, which may differ from (and may be lower than) the valuation that we would determine for the securities at that time based on the methodology by which we determined the initial estimated value set forth on the cover page of this document.

As set forth below in the section "Supplemental Plan of Distribution," for a limited period of time after the original issue date, Wells Fargo Securities, LLC may purchase the securities at a price that is greater than the price that would otherwise be determined at that time as described in the preceding paragraph. However, over the course of that period, assuming no changes in any other relevant factors, the price you may receive if you sell your securities is expected to decline.

The securities are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your securities to maturity.

The initial estimated value of the securities is an estimate only, calculated as of the time the terms of the securities are set

Our initial estimated value of the securities is based on the value of our obligation to make the payments on the securities, together with the mid-market value of the derivative embedded in the terms of the securities. See "Supplemental Plan of Distribution—Structuring the Securities" below. Our estimate is based on a variety of assumptions, including our internal funding rate (which represents a discount from our credit spreads), expectations as to dividends on the securities included in the Index, interest rates and volatility, and the expected term of the securities. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities, including Wells Fargo Securities, LLC in connection with determining any secondary market price for the securities, may value the securities or similar securities at a price that is significantly different than we do.

The value of the securities 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 securities in any secondary market, if any, should be expected to differ materially from our initial estimated value of your securities.

Potential conflicts of interest could arise

We, Wells Fargo Securities, LLC and our respective affiliates may engage in trading activities related to the Index or the common stocks underlying the Index that are not for the account of holders of the securities or on their behalf. These trading activities may present a conflict between the holders' interest in the securities and the interests we, Wells Fargo Securities, LLC and our respective affiliates will have in the proprietary accounts, in facilitating transactions, including options and other derivatives transactions, for our customers and in accounts under our management. These trading activities could be adverse to the interests of the holders of the securities.

We, Wells Fargo Securities, LLC and our respective affiliates may presently or from time to time engage in business with one or more of the issuers of the common stocks underlying the Index. This business may include extending loans to, or making equity investments in, such companies or providing advisory services to such companies, including merger and acquisition advisory services. In the course of business, we, Wells Fargo Securities, LLC and our respective affiliates may acquire non-public information relating to these companies and, in addition, one or more of our affiliates or the affiliates of the agent may publish research reports about these companies. Neither we nor the agent make any representation to any purchasers of the securities regarding any matters whatsoever relating to the issuers of the common stocks underlying the Index. Any prospective purchaser of the securities should undertake an independent investigation of these companies as in its judgment is appropriate to make an informed decision regarding an investment in the securities. The offering of the securities

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does not reflect any investment or sell recommendations as to the Index or the securities underlying the Index by us, Wells Fargo Securities, LLC or our respective affiliates.

The calculation agent may postpone the valuation date and, therefore, determination of the Final Index Level and the maturity date if a market disruption event occurs on the valuation date

The valuation date and, therefore, determination of the Final Index Level may be postponed if the calculation agent determines that a market disruption event has occurred or is continuing on the valuation date with respect to the Index. As a result, the maturity date for the securities would be postponed. You will not be entitled to compensation from us or the calculation agent for any loss suffered as a result of the occurrence of a market disruption event, any resulting delay in payment or any change in the level of the Index after the valuation date. See “Specific Terms of the Securities—Valuation Date” and “— Market Disruption Events” below.

There are potential conflicts of interest between you and the calculation agent

The calculation agent will, among other things, determine the amount of your payment at maturity on the securities. Our wholly-owned subsidiary, RBC Capital Markets, LLC, will serve as the calculation agent. We may change the calculation agent after the original issue date without notice to you. The calculation agent will exercise its judgment when performing its functions. For example, the calculation agent may have to determine whether a market disruption event affects the Index. Since this determination by the calculation agent will affect the payment at maturity on the securities, the calculation agent may have a conflict of interest if it needs to make a determination of this kind. In addition, the calculation agent determined the initial estimated value of the securities set forth on the cover page of this pricing supplement.

Risks associated with non-U.S. companies

The level of the Index depends upon the stocks of companies located within the Eurozone, and thus involve risks associated with the home countries of those non-U.S. companies, some of which are and have been experiencing economic stress. The prices of these non-U.S. stocks may be affected by political, economic, financial and social factors in the home country of each applicable company, including changes in that country’s government, economic and fiscal policies, currency exchange laws or other laws or restrictions, which could affect the value of the securities. These foreign securities may have less liquidity and could be more volatile than many of the securities traded in U.S. or other securities markets. Direct or indirect government intervention to stabilize the relevant foreign securities markets, as well as cross shareholdings in foreign companies, may affect trading levels or prices and volumes in those markets. The other special risks associated with foreign securities may include, but are not limited to: less liquidity and smaller market capitalizations; less rigorous regulation of securities markets; different accounting and disclosure standards; governmental interference; currency fluctuations; higher inflation; and social, economic and political uncertainties. These factors may adversely affect the performance of the Index and, as a result, the value of the securities.

The securities will not be adjusted for changes in exchange rates

Although the equity securities that comprise the Index are traded in euro, and your securities are denominated in U.S. dollars, the amount payable on your securities at maturity, if any, will not be adjusted for changes in the exchange rates between the U.S. dollar and the euro. Changes in exchange rates, however, may also reflect changes in the applicable non-U.S. economies that in turn may affect the level of the Index, and therefore your securities. The amount we pay in respect of your securities will be determined solely in accordance with the procedures described in this pricing supplement.

Significant aspects of the tax treatment of the securities are uncertain

The tax treatment of the securities is uncertain. We do not plan to request a ruling from the Internal Revenue Service or from the Canada Revenue Agency regarding the tax treatment of the securities, and the Internal Revenue Service, the Canada Revenue Agency or a court may not agree with the tax treatment described in this pricing supplement. The Internal Revenue Service has issued a notice indicating that it and the U.S. Treasury Department are actively considering whether, among other issues, a holder should be required to accrue interest over the term of an instrument such as the securities even though that holder will not receive any payments with respect to the securities until maturity or earlier sale or exchange and whether all or part of the gain a holder may recognize upon sale, exchange or maturity of an instrument such as the securities should be treated as ordinary income. The outcome of this process is uncertain and could apply on a retroactive basis.

Please read carefully the section entitled “Supplemental Discussion of U.S. Federal Income Tax Consequences” in this pricing supplement, the section entitled “Tax Consequences” in the accompanying prospectus and the section entitled “Certain Income Tax Consequences” in the accompanying prospectus supplement. You should consult your tax advisor about your own tax situation.

For a discussion of the Canadian federal income tax consequences of investing in the securities, please read the section entitled “Tax Consequences” in the accompanying prospectus and the section entitled “Certain Income Tax Consequences” in the accompanying prospectus supplement. You should consult your tax advisor about your own tax situation.

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SPECIFIC TERMS OF THE SECURITIES

The securities are to be issued pursuant to the terms of the Indenture dated as of October 23, 2003, between Royal Bank of Canada and The Bank of New York Mellon (as supplemented, the “Indenture”).

The information contained in this section and in the prospectus supplement and the prospectus summarizes some of the terms of the securities and the Indenture. This summary does not contain all of the information that may be important to you as a potential investor in the securities. You should read the Indenture before making your investment decision. We have filed copies of the Indenture with the SEC.

Issuer: Royal Bank of Canada

Specified
Currency: U.S. dollars

Principal
Amount: \$1,000 per security

Aggregate
Principal
Amount: \$-

Agent: Wells Fargo Securities, LLC

The agent may make sales through its affiliates or selling agents.

Agent
Acting in
the
Capacity
of: Principal

Pricing
Date: December 13, 2018

Original
Issue Date: December 18, 2018

Maturity
Date: June 18, 2021, subject to postponement as described below. The maturity date will be a business day. In the event the maturity date would otherwise be a date that is not a business day, the maturity date will be postponed to the next succeeding date that is a business day and no interest shall accrue or be payable as a result of that postponement.

Valuation
Date: June 11, 2021. However, if that day occurs on a day that is not a trading day or on a day on which the calculation agent has determined that a market disruption event (as defined under “—Market Disruption Events” below) has occurred or is continuing, then the valuation date will be postponed until the next succeeding trading day on which the calculation agent determines that a market disruption event does not occur or is not continuing; provided that in no event will the valuation date be postponed by more than eight trading days. If the valuation date is postponed by eight trading days, and a market disruption event occurs or is continuing on that eighth trading day, the calculation agent will determine the closing level of the Index on such eighth trading day in accordance with the formula for and method of calculating the closing level of the Index last in effect prior to commencement of the market disruption event, using the closing price (or, with respect to any relevant security, if a market disruption event has occurred with respect to such security, its good faith estimate of the value of such security at the time at which the official closing level of the Index is calculated and published by the index sponsor) on such date of each security included in the Index. As used herein, “closing price” means, with respect to any security on any date, the relevant stock exchange traded or quoted price of

such security as of the time at which the official closing level of the Index is calculated and published by the index sponsor.

The Index: The return on the securities is linked to the performance of the EURO STOXX 50[®] Index (the Index).

Payment at Maturity: At maturity, for each security you own, you will receive a cash payment equal to the maturity payment amount. The maturity payment amount to which you will be entitled depends on the change in the level of the Index based on the Final Index Level relative to the Initial Index Level, and whether or not the Final Index Level is below the Buffer Level.

The maturity payment amount for each security will be determined by the calculation

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agent as described below:

- If the Final Index Level is greater than the Initial Index Level, the maturity payment amount per security will equal:

$$\$1,000 + (\$1,000 \times \frac{\text{Final Index Level} - \text{Initial Index Level}}{\text{Initial Index Level}} \times \text{Participation Rate})$$

- If the Final Index Level is less than or equal to the Initial Index Level but greater than or equal to the Buffer Level, the maturity payment amount per security will equal \$1,000.
- If the Final Index Level is less than the Buffer Level, the maturity payment amount per security will equal:

$$\$1,000 - (\$1,000 \times \frac{\text{Buffer Level} - \text{Final Index Level}}{\text{Initial Index Level}})$$

- In such a case, you will lose up to 75% of your principal.

If the Final Index Level is less than the Buffer Level, you will lose up to 75% of your principal. If the Final Index Level is zero, the maturity payment amount will be \$250.00 per security. If any payment is due on the securities on a day which is not a business day, then that payment may be made on the next day that is a business day, in the same amount and with the same effect as if paid on the original due date. No interest shall be payable as a result of such postponement.

Initial Index Level:	The closing level of the Index on the pricing date.
Final Index Level:	The closing level of the Index on the valuation date, as determined by the calculation agent.
Buffer Level:	75% of the Initial Index Level.
Closing Level of the Index:	The official closing level of the Index or any successor index (as defined under “—Discontinuation of the Index; Adjustments to the Index” below) published by the Index Sponsor or any successor index sponsor at the regular weekday close of trading on that trading day. In certain circumstances, the closing level will be based on the alternate calculation of the Index described under “—Discontinuation of the Index; Adjustments to the Index” below.
Participation Rate:	[130%-140%], to be determined on the pricing date.
Market Disruption Events:	As determined by the calculation agent in its sole discretion, a “market disruption event” means any of (A), (B), (C) or (D) below: <ul style="list-style-type: none"> A. Any of the following events occurs or exists with respect to any security included in the Index or any successor index, and the aggregate of all securities included in the Index or such successor index with respect to which any such event occurs comprise 20% or more of the level of the Index or such successor index: <ul style="list-style-type: none"> · a material suspension of or limitation imposed on trading by the relevant stock exchange for such security or otherwise at any time during the one-hour period that ends at the scheduled closing

time for the relevant stock exchange for such security on that day, whether by reason of movements in price exceeding limits permitted by the relevant stock exchange or otherwise;

- any event, other than an early closure, that materially disrupts or impairs the ability of market participants in general to effect transactions in, or obtain

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market values for, such security on its relevant stock exchange at any time during the one-hour period that ends at the scheduled closing time for the relevant stock exchange for such security on that day; or

- the closure on any exchange business day of the relevant stock exchange for such security prior to its scheduled closing time unless the earlier closing is announced by such relevant stock exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such relevant stock exchange and (ii) the submission deadline for orders to be entered into the relevant stock exchange system for execution at the scheduled closing time for such relevant stock exchange on that day.

B. Any of the following events occurs or exists with respect to futures or options contracts relating to the equity index or any successor index:

- a material suspension of or limitation imposed on trading by any related futures or options exchange or otherwise at any time during the one-hour period that ends at the close of trading on such related futures or options exchange on that day, whether by reason of movements in price exceeding limits permitted by the related futures or options exchange or otherwise;

- Any event, other than an early closure, that materially disrupts or impairs the ability of market participants in general to effect transactions in, or obtain market values for, futures or options contracts relating to the Index or such successor index on any related futures or options exchange at any time during the one-hour period that ends at the close of trading on such related futures or options exchange on that day; or

- the closure on any exchange business day of any related futures or options exchange prior to its scheduled closing time unless the earlier closing time is announced by such related futures or options exchange at least one hour prior to the earlier of (i) the actual closing time for the regular trading session on such related futures or options exchange and (ii) the submission deadline for orders to be entered into the related futures or options exchange system for execution at the close of trading for such related futures or options exchange on that day.

C. The Index Sponsor fails to publish the level of the Index or any successor index (other than as a result of the Index Sponsor having discontinued publication of the Index or successor index and no successor index being available).

D. Any related futures or options exchange fails to open for trading during its regular trading session.

For the purposes of determining whether a market disruption event has occurred:

- the relevant percentage contribution of a security included in the Index or any successor index to the level of such index will be based on a comparison of (x) the portion of the level of such index attributable to that security to (y) the overall level of such index, in each case using the official opening weightings as published by the relevant index sponsor as part of the market opening data;

- the “scheduled closing time” of any relevant stock exchange or related futures or options exchange on any trading day means the scheduled weekday closing time of such relevant stock exchange or related futures or options exchange on such trading day, without regard to after hours or any other trading outside the regular trading session hours; and

an “exchange business day” means any trading day on which (i) the relevant index sponsor publishes the level of the Index or any successor equity index and (ii) each

related futures or options exchange is open for trading during its regular trading session, notwithstanding any related futures or options exchange closing prior to its scheduled closing time.

Related Futures
or Options
Exchange:

An exchange or quotation system where trading has a material effect (as determined by the calculation agent) on the overall market for futures or options contracts relating to the Index.

Relevant Stock
Exchange:

For any security underlying the Index, the primary exchange or quotation system on which such security is traded, as determined by the calculation agent.

If the Index Sponsor discontinues publication of the Index and the Index Sponsor or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the Index (a successor index), then the calculation agent will substitute the successor index as calculated by the Index Sponsor or any other entity for the Index and calculate the Final Index Level as described above under “—Closing Level of the Index.”

If the Index Sponsor discontinues publication of the Index and:

- the calculation agent does not select a successor index, or
 - the successor index is no longer published on any of the relevant trading days,
- the calculation agent will compute a substitute level for the Index in accordance with the procedures last used to calculate the level of the Index before any discontinuation but using only those securities that were included in the Index prior to that discontinuation. If a successor index is selected or the calculation agent calculates a level as a substitute for the Index as described below, the successor index or level will be used as a substitute for the Index for all purposes going forward, including for purposes of determining whether a market disruption event exists, even if the Index Sponsor elects to begin republishing the Index, unless the calculation agent in its sole discretion decides to use the republished Index.

If the Index Sponsor discontinues publication of the Index before the valuation date and the calculation agent determines that no successor index is available at that time, then on each trading day until the earlier to occur of:

- the determination of the Final Index Level, or
 - a determination by the calculation agent that a successor index is available,
- the calculation agent will determine the level that would be used in computing the maturity payment amount as described in the preceding paragraph as if that day were a trading day. The calculation agent will cause notice of each level to be published not less often than once each month in The Wall Street Journal, another newspaper of general circulation or a website or webpage available to holders of the securities, and arrange for information with respect to these levels to be made available by telephone.

Notwithstanding these alternative arrangements, discontinuation of the publication of the Index would be expected to adversely affect the value of, liquidity of and trading in the securities.

If at any time the method of calculating the level of the Index or the successor index changes in any material respect, or if the Index or successor index is in any other way modified so that the level of the Index or successor index does not, in the opinion of the calculation agent, fairly represent the level of the Index had those changes or modifications not been made, then, from and after that time, the calculation agent will, at the close of business in The City of New York, on each date that the closing level of the Index is to be calculated, make any adjustments as, in the good faith judgment of the calculation agent, may be necessary in order to arrive at a calculation of a level of a stock index comparable to the Index or the successor index, as the case may be, as if those changes or modifications had not been made, and calculate the closing level with reference to the Index or the successor index, as so adjusted. Accordingly, if the method

Discontinuation
of/Adjustments
to the Index:

of calculating the Index or a successor index is modified and has a dilutive or concentrative effect on the level of that index e.g., due to a split, then the calculation agent will adjust that index in order to arrive at a level of that index as if it had not been modified, e.g., as if a split had not occurred. Neither the calculation agent nor Royal Bank of Canada will have any responsibility for good faith errors or omissions in calculating or disseminating information regarding the Index or any successor index or as to modifications, adjustments or calculations by the Index Sponsor or any successor index sponsor in order to arrive at the level of the Index or any successor index.

Calculation Agent: RBC Capital Markets, LLC will serve as the calculation agent. All determinations made by the calculation agent will be at the sole discretion of the calculation agent and, absent a determination of a manifest error, will be conclusive for all purposes and binding on the holders and beneficial owners of the securities.

Trustee: The Bank of New York Mellon

Business Day: For purposes of the securities, a business day means a Monday, Tuesday, Wednesday, Thursday or Friday that is not a day on which banking institutions in The City of New York generally are authorized or obligated by law, regulation or executive order to close.

Trading Day: A day, as determined by the calculation agent, on which (i) the Index Sponsor is scheduled to publish the level of the Index and (ii) each related futures or options exchange is scheduled to be open for trading for its regular trading session.

We will pay any amounts to be paid by us on the securities without deduction or withholding for, or on account of, any and all present or future income, stamp and other taxes, levies, imposts, duties, charges, fees, deductions or withholdings (taxes) now or hereafter imposed, levied, collected, withheld or assessed by or on behalf of Canada or any Canadian political subdivision or authority that has the power to tax, unless the deduction or withholding is required by law or by the interpretation or administration thereof by the relevant governmental authority. At any time a Canadian taxing jurisdiction requires us to deduct or withhold for or on account of taxes from any payment made under or in respect of the securities, we will pay such additional amounts (Additional Amounts) as may be necessary so that the net amounts received by each holder (including Additional Amounts), after such deduction or withholding, shall not be less than the amount the holder would have received had no such deduction or withholding been required.

Additional Amounts: However, no Additional Amounts will be payable with respect to a payment made to a holder of a security or of a right to receive payments in respect thereto (a Payment Recipient), which we refer to as an Excluded Holder, in respect of any taxes imposed because the beneficial owner or Payment Recipient:

- (i) is someone with whom we do not deal at arm's length (within the meaning of the Income Tax Act (Canada)) at the time of making such payment;
- (ii) is subject to such taxes by reason of its being connected presently or formerly with Canada or any province or territory thereof otherwise than by reason of the holder's activity in connection with purchasing the securities, the holding of securities or the receipt of payments thereunder;
- (iii) is, or does not deal at arm's length with a person who is, a specified shareholder (within the meaning of subsection 18(5) of the Income Tax Act (Canada)) of Royal Bank of Canada (generally a person will be a specified shareholder for this purpose if that person, either alone or together with persons with whom the person does not deal at arm's length, owns 25% or more of (a) our voting shares, or (b) the fair

market value of all of our issued and outstanding shares);

(iv) presents such security for payment (where presentation is required) more than 30 days after the relevant date (except to the extent that the holder thereof would have been entitled to such Additional Amounts on presenting a security for payment on the last day of such 30 day period); for this purpose, the relevant date in relation to any payments on any security means:

a. the due date for payment thereof, or
 b. if the full amount of the monies payable on such date has not been received by the Trustee on or prior to such due date, the date on which the full amount of such monies has been received and notice to that effect is given to holders of the securities in accordance with the Indenture;

(v) could lawfully avoid (but has not so avoided) such withholding or deduction by complying, or requiring that any agent comply with, any statutory requirements necessary to establish qualification for an exemption from withholding or by making, or requiring that any agent make, a declaration of non-residence or other similar claim for exemption to any relevant tax authority; or

(vi) is subject to deduction or withholding on account of any tax, assessment, or other governmental charge that is imposed or withheld by reason of the application of Section 1471 through 1474 of the United States Internal Revenue Code of 1986, as amended (Code) (or any successor provisions), any regulation, pronouncement, or agreement thereunder, official interpretations thereof, or any law implementing an intergovernmental approach thereto, whether currently in effect or as published and amended from time to time.

For the avoidance of doubt, we will not have any obligation to pay any holders Additional Amounts on any tax which is payable otherwise than by deduction or withholding from payments made under or in respect of the securities at maturity.

We will also make such withholding or deduction and remit the full amount deducted or withheld to the relevant authority in accordance with applicable law. We will furnish to the Trustee, within 30 days after the date the payment of any taxes is due pursuant to applicable law, certified copies of tax receipts evidencing that such payment has been made or other evidence of such payment satisfactory to the Trustee. We will indemnify and hold harmless each holder of the securities (other than an Excluded Holder) and upon written request reimburse each such holder for the amount of (x) any taxes so levied or imposed and paid by such holder as a result of payments made under or with respect to the securities, and (y) any taxes levied or imposed and paid by such holder with respect to any reimbursement under (x) above, but excluding any such taxes on such holder's net income or capital.

For additional information, see the section entitled "Tax Consequences—Canadian Taxation" in the accompanying prospectus.

Authorized Denominations: \$1,000 and integral multiples of \$1,000 in excess thereof.

Form of Securities: Book-entry

Listing: The securities will not be listed on any securities exchange.

Failure to Pay Maturity Payment Amount When Due: In the event we fail to pay the maturity payment amount on the maturity date, any overdue payment in respect of the maturity payment amount of the securities on the maturity date will bear interest until the date upon which all sums due in respect of such securities are received by or on behalf of the relevant holder, at a rate per annum which is the rate for deposits in U.S. dollars for a period of six months which appears on the

Reuters Page LIBOR01 (or any replacement page or pages for the purpose of displaying prime rates or base lending rates of major U.S. banks) as of 11:00 a.m. (London time) on the first business day following that failure to pay. That rate will be determined by the calculation agent. If interest is required to be calculated for a period of less than one year, it will be calculated on the basis of a 360-day year consisting of the actual number of days in the period.

Events of Default
and Acceleration:

If the maturity of the securities is accelerated upon an event of default under the Indenture, the amount payable upon acceleration will be determined by the calculation agent. The amount will be the maturity payment amount, calculated as if the date of declaration of acceleration were the valuation date.

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EURO STOXX 50® INDEX

All disclosures contained in this document regarding the Index, including, without limitation, its make-up, method of calculation, and changes in its components, have been derived from publicly available sources. The information reflects the policies of, and is subject to change by, STOXX Limited, as the sponsor of the Index (“STOXX”). STOXX, which owns the copyright and all other rights to the Index, has no obligation to continue to publish, and may discontinue publication of, the Index. None of us, Wells Fargo Securities, LLC or RBCCM accepts any responsibility for the calculation, maintenance or publication of the Index or any successor index.

The Index was created by STOXX and is currently wholly owned by Deutsche Börse AG. Publication of the Index began in February 1998, based on an initial index level of 1,000 at December 31, 1991. Changes to the component stocks are implemented on the third Friday in September and are effective the following trading day. Changes in the composition of the Index are made to ensure that the Index includes the 50 market sector leaders from within the EURO STOXX Total Market Index. Additional information about the Index is available on the STOXX Limited website: <http://www.stoxx.com>. However, information included in that website is not included or incorporated by reference in this document.

For each of the 19 EURO STOXX regional supersector indices, the stocks are ranked in terms of free-float market capitalization. The largest stocks are added to the selection list until the coverage is close to, but still less than, 60% of the free-float market capitalization of the corresponding supersector index. If the next highest-ranked stock brings the coverage closer to 60% in absolute terms, then it is also added to the selection list. All current stocks in the Index are then added to the selection list. All of the stocks on the selection list are then ranked in terms of free-float market capitalization to produce the final index selection list. The largest 40 stocks on the selection list are selected; the remaining 10 stocks are selected from the largest remaining current stocks ranked between 41 and 60; if the number of stocks selected is still below 50, then the largest remaining stocks are selected until there are 50 stocks. In exceptional cases, STOXX’s management board can add stocks to and remove them from the selection list.

The index components are subject to a capped maximum index weight of 10%, which is applied on a quarterly basis. The Index is composed of 50 component stocks of market sector leaders from within the EURO STOXX® supersector indices, which includes stocks selected from the Eurozone portion of the STOXX Europe 600® supersector indices. The component stocks have a high degree of liquidity and represent the largest companies across a wide range of market sectors.

Computation of the Index

The Index is calculated with the “Laspeyres formula,” which measures the aggregate price changes in the component stocks against a fixed base quantity weight. The formula for calculating the index level can be expressed as follows:

$$\text{Index} = \frac{\text{free float market capitalization of the index at the time}}{\text{divisor of the index at the time}}$$

The “free float market capitalization of the index” is equal to the sum of the products of the closing price, number of shares, free float factor, weighting cap factor, and the exchange rate from local currency into the index currency for the component company as of the time that the Index is being calculated.

The divisor of the Index is adjusted to maintain the continuity of the Index’s values across changes due to corporate actions, such as cash dividends, rights offerings, stock dividends from treasury shares, repurchases of shares and self tender, and spin-offs.

Index Maintenance

The composition of the Index is reviewed annually, based on the closing stock data on the last trading day in August. Changes in the composition of the Index are made to ensure that the Index includes the 50 market sector leaders from within the Index. The component stocks are announced on the first trading day in September.

The free float factors for each component stock used to calculate the Index, as described above, are reviewed, calculated, and implemented on a quarterly basis and are fixed until the next quarterly review.

The Index is subject to a “fast exit rule.” The index components are monitored for any changes based on the monthly selection list ranking. A stock is deleted from the Index if: (a) it ranks 75 or below on the monthly selection list and (b) it has been ranked 75 or below for a consecutive period of two months in the monthly selection list. The highest-ranked

stock that is not an index component will replace it. Changes will be implemented on the close of the fifth trading day of the month, and are effective the next trading day.

The Index is also subject to a “fast entry rule.” All stocks on the latest selection lists and initial public offering (IPO) stocks are reviewed for a fast-track addition on a quarterly basis. A stock is added, if (a) it qualifies for the latest STOXX blue-chip selection list generated end of February, May, August or November and (b) it ranks within the “lower buffer” on this selection list.

The Index is also reviewed on an ongoing basis. Corporate actions (including initial public offerings, mergers and takeovers, spin-offs, delistings, and bankruptcy) that affect the index composition are immediately reviewed. Any changes are announced, implemented, and made effective in line with the type of corporate action and the magnitude of the effect.

License Agreement

Royal Bank of Canada has entered into a non-exclusive license agreement with STOXX, which grants us a license in exchange for a fee to use the Index in connection with the issuance of certain securities, including the securities. STOXX has no relationship to Royal Bank of Canada, other than the licensing of the Index and its service marks for use in connection with the securities.

STOXX does not:

§ sponsor, endorse, sell or promote the securities.

§ recommend that any person invest in the securities or any other financial products.

§ have any responsibility or liability for or make any decisions about the timing, amount or pricing of the securities.

§ have any responsibility or liability for the administration, management or marketing of the securities.

§ consider the needs of the securities or the owners of the securities in determining, composing or calculating the § Index or have any obligation to do so.

STOXX will not have any liability in connection with the securities. Specifically, STOXX does not make any warranty, express or implied, and STOXX disclaims any warranty about:

- the results to be obtained by the securities, the owner of the securities or any other person in connection with the use of the Index and the data included in the Index;
- the accuracy or completeness of the Index or its data;
- the merchantability and the fitness for a particular purpose or use of the Index or its data;
- any errors, omissions or interruptions in the Index or its data; and
- any lost profits or indirect, punitive, special or consequential damages or losses, even if STOXX knows that they might occur.

The licensing relating to the use of the Index and trademark referred to above by Royal Bank of Canada is solely for the benefit of Royal Bank of Canada, and not for any other third parties.

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Historical Closing Levels of the Index

Since its inception, the level of the Index has experienced significant fluctuations. Any historical upward or downward trend in the closing level of the Index during any period shown below is not an indication that the closing level of the Index is more or less likely to increase or decrease at any time during the term of the securities. The historical levels of the Index do not give an indication of future performance of the Index. We cannot make any assurance that the future performance of the Index or the trading prices of the common stocks underlying the Index will result in holders of the securities receiving a positive total return on their investment.

We obtained the closing levels of the Index listed below from Bloomberg Financial Markets without independent verification. The actual levels of the Index at or near maturity of the securities may bear little relation to the historical levels shown below.

The following graph sets forth the daily closing levels of the Index for the period from January 1, 2013 to November 28, 2018. This historical data on the Index is not indicative of the future level of the Index or what the market value of the securities may be. Any historical upward or downward trend in the level of the Index during any period set forth below is not any indication that the level of the Index is more or less likely to increase or decrease at any time during the term of the securities.

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SUPPLEMENTAL DISCUSSION OF CANADIAN FEDERAL INCOME TAX CONSEQUENCES

An investor should read carefully the description of material Canadian federal income tax considerations relevant to a Non-resident Holder owning debt securities under “Tax Consequences—Canadian Taxation” in the accompanying prospectus.

SUPPLEMENTAL DISCUSSION OF U.S. FEDERAL INCOME TAX CONSEQUENCES

The following, together with the discussion of U.S. federal income taxation in the accompanying prospectus and prospectus supplement, is a general description of the material U.S. tax considerations relating to the securities. It does not purport to be a complete analysis of all tax considerations relating to the securities. Prospective purchasers of the securities should consult their tax advisors as to the consequences under the tax laws of the country of which they are resident for tax purposes and the tax laws of the U.S. of acquiring, holding and disposing of the securities and receiving payments under the securities. This summary is based upon the law as in effect on the date of this pricing supplement and is subject to any change in law that may take effect after such date.

Supplemental U.S. Tax Considerations

The following section supplements the discussion of U.S. federal income taxation in the accompanying prospectus under “Tax Consequences – United States Taxation” and prospectus supplement under “Certain Income Tax Consequences – United States Taxation” with respect to U.S. holders (as defined in the accompanying prospectus). It applies only to those initial holders who are not excluded from the discussion of U.S. federal income taxation in the accompanying prospectus. It does not apply to holders subject to special rules including holders subject to Section 451(b) of the Code. You should consult with your own tax advisor concerning the consequences of investing in and holding the securities.

NO STATUTORY, JUDICIAL OR ADMINISTRATIVE AUTHORITY DIRECTLY DISCUSSES HOW THE SECURITIES SHOULD BE TREATED FOR U.S. FEDERAL INCOME TAX PURPOSES. AS A RESULT, THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF AN INVESTMENT IN THE SECURITIES ARE UNCERTAIN. BECAUSE OF THE UNCERTAINTY, YOU SHOULD CONSULT YOUR TAX ADVISOR IN DETERMINING THE U.S. FEDERAL INCOME TAX AND OTHER TAX CONSEQUENCES OF YOUR INVESTMENT IN THE SECURITIES, INCLUDING THE APPLICATION OF STATE, LOCAL OR OTHER TAX LAWS AND THE POSSIBLE EFFECTS OF CHANGES IN FEDERAL OR OTHER TAX LAWS.

In the opinion of our counsel, Morrison & Foerster LLP, it would generally be reasonable to treat the securities as pre-paid cash-settled derivative contracts in respect of the Index for U.S. federal income tax purposes, and the terms of the securities 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 securities for all tax purposes in accordance with such characterization. If the securities are so treated, a U.S. holder should generally recognize capital gain or loss upon the sale, exchange or maturity of the securities in an amount equal to the difference between the amount a holder receives at such time and the holder’s tax basis in the securities. In general, a U.S. holder’s tax basis in the securities will be equal to the price the holder paid for the securities. Capital gain recognized by an individual U.S. holder is generally taxed at preferential rates where the property is held for more than one year and is generally taxed at ordinary income rates where the property is held for one year or less. The deductibility of capital losses is subject to limitations.

We will not attempt to ascertain whether the issuer of any of the component stocks included in the Index would be treated as a “passive foreign investment company” within the meaning of Section 1297 of the Code, or a “United States real property holding corporation” within the meaning of Section 897 of the Code. If the issuer of one or more of such stocks were so treated, certain adverse U.S. federal income tax consequences could possibly apply. You should refer to any available information filed with the SEC by the issuers of the component stocks included in the Index and consult your tax advisor regarding the possible consequences to you in this regard.

Alternative Treatments. Alternative tax treatments of the securities are also possible and the Internal Revenue Service might assert that a treatment other than that described above is more appropriate. For example, it would also be possible to treat a security, and the Internal Revenue Service might assert that a security should be treated, as a single debt instrument. Pursuant to such characterization, since the securities have a term that exceeds one year, such a debt instrument would be subject to the special tax rules governing contingent payment debt instruments. If the securities are so treated, a

holder would generally be required to accrue interest currently over the term of the securities even though that holder will not receive any payments from us prior to maturity. In addition, any gain a holder might recognize upon the sale, exchange or maturity of the securities would be ordinary income, and any loss recognized by a holder at such time would be ordinary loss to the extent of interest included in income in the current or previous taxable years in respect of the securities, and thereafter, would be capital loss.

Because of the absence of authority regarding the appropriate tax characterization of the securities, it is also possible that the Internal Revenue Service could seek to characterize the securities in a manner that results in tax consequences that are different from those described above. For example, the Internal Revenue Service could possibly assert that any gain or loss that a holder may recognize upon the sale, exchange or maturity of the securities should be treated as ordinary gain or loss.

The Internal Revenue Service has released a notice that may affect the taxation of holders of the securities. According to the notice, the Internal Revenue Service and the U.S. Treasury Department are actively considering whether the holder of an instrument such as the securities should be required to accrue ordinary income on a current basis. It is not possible to determine what guidance they will ultimately issue, if any. It is possible, however, that under such guidance, holders of the securities will ultimately be required to accrue income currently and this could be applied on a retroactive basis. The Internal Revenue Service and the U.S. Treasury Department are also considering other relevant issues, including whether additional gain or loss from such instruments should be treated as ordinary or capital and whether the special “constructive ownership rules” of Section 1260 of the Code, which very generally can operate to recharacterize certain long-term capital gains as ordinary income and impose an interest charge, might be applied to such instruments. Holders are urged to consult their tax advisors concerning the significance, and the potential impact, of the above considerations. We intend to treat the securities for U.S. federal income tax purposes in accordance with the treatment described in this document unless and until such time as the U.S. Treasury Department and Internal Revenue Service determine that some other treatment is more appropriate.

Backup Withholding and Information Reporting. Please see the discussion under “Tax Consequences — United States Taxation — Information Reporting and Backup Withholding” in the accompanying prospectus for a description of the applicability of the backup withholding and information reporting rules to payments made on the securities.

Non-U.S. Holders. The following discussion applies to non-U.S. holders of the securities. A non-U.S. holder is a beneficial owner of a security that, for U.S. federal income tax purposes, is a non-resident alien individual, a foreign corporation, or a foreign estate or trust.

Except as described below, a non-U.S. holder will generally not be subject to U.S. federal income or withholding tax for amounts paid in respect of the securities, provided that (i) the holder complies with any applicable certification requirements, (ii) the payment is not effectively connected with the conduct by the holder of a U.S. trade or business, and (iii) if the holder is a non-resident alien individual, such holder is not present in the U.S. for 183 days or more during the taxable year of the sale, exchange or maturity of the securities. In the case of (ii) above, the holder generally would be subject to U.S. federal income tax with respect to any income or gain in the same manner as if the holder were a U.S. holder, and, in the case of a holder that is a corporation, the holder may also be subject to a branch profits tax equal to 30% (or such lower rate provided by an applicable U.S. income tax treaty) of a portion of its earnings and profits for the taxable year that are effectively connected with its conduct of a trade or business in the U.S., subject to certain adjustments. Payments made to a non-U.S. holder may be subject to information reporting and to backup withholding unless the holder complies with applicable certification and identification requirements as to its foreign status.

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 Internal Revenue Service has issued guidance that states that the U.S. Treasury Department and the Internal Revenue Service 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 securities are not delta-one instruments,

non-U.S. holders should not be subject to withholding on

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dividend equivalent payments, if any, under the securities. However, it is possible that the securities could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the Index or the securities (for example, upon an Index rebalancing), and following such occurrence the securities 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 Index or the component stocks should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the securities 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.

As discussed above, alternative characterizations of the securities for U.S. federal income tax purposes are possible. Should an alternative characterization, by reason of change or clarification of the law, by regulation or otherwise, cause payments on the securities to become subject to withholding tax, we will withhold tax at the applicable statutory rate. The Internal Revenue Service has also indicated that it is considering whether income in respect of instruments such as the securities should be subject to withholding tax. We will not be required to pay any additional amounts in respect of such withholding. Prospective investors should consult their own tax advisors in this regard.

Foreign Account Tax Compliance Act. The Foreign Account Tax Compliance Act (FATCA) will impose a 30% U.S. withholding tax on certain U.S.–source payments, including interest (and original issue discount), dividends, other fixed or determinable annual or periodical gain, profits, and income, and on the gross proceeds from a disposition of property of a type which can produce U.S.–source interest or dividends (Withholdable Payments), if paid to a foreign financial institution (including amounts paid to a foreign financial institution on behalf of a holder), unless such institution enters into an agreement with the U.S. Treasury Department to collect and provide to the U.S. Treasury Department certain information regarding U.S. financial account holders, including certain account holders that are foreign entities with U.S. owners, with such institution or otherwise complies with FATCA. In addition, the securities may constitute a “financial account” for these purposes and thus be subject to information reporting requirements pursuant to FATCA. FATCA also generally imposes a withholding tax of 30% on Withholdable Payments made to a non-financial foreign entity unless such entity provides the withholding agent with a certification that it does not have any substantial U.S. owners or a certification identifying the direct and indirect substantial U.S. owners of the entity. Under certain circumstances, a holder may be eligible for refunds or credits of such taxes.

The U.S. Treasury Department and the Internal Revenue Service have announced that withholding on payments of gross proceeds from a sale or redemption of the securities will only apply to payments made after December 31, 2018. We will not pay any additional amounts in respect of any FATCA withholding. Therefore, if such withholding applies, any payments on the securities will be significantly less than what you would have otherwise received. Foreign financial institutions and non-financial foreign entities located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules. Prospective investors are urged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in the securities.

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USE OF PROCEEDS AND HEDGING

The net proceeds from the sale of the securities will be used as described under “Use of Proceeds” in the accompanying prospectus supplement and prospectus and to hedge market risks of Royal Bank of Canada associated with its obligation to pay the maturity payment amount at maturity of the securities.

The initial public offering price of the securities includes the underwriting discount and commission, as well as hedging and other costs associated with the securities. Our hedging costs include the projected profit that our hedge counterparty expects to realize in consideration for assuming the risks inherent in hedging our obligations under the securities. We expect to hedge our obligations under the securities through an affiliate of Wells Fargo Securities, LLC and/or one or more of our affiliates. Because hedging our obligations entails risk and may be influenced by market forces beyond our or our counterparties’ control, this hedging may result in a profit that is more or less than expected, or could result in a loss.

We have no obligation to engage in any manner of hedging activity and will do so solely at our discretion and for our own account. No holder of the securities will have any rights or interest in our hedging activity or any positions we or any counterparty may take in connection with our hedging activity.

The hedging activity discussed above and other trading activities that we, Wells Fargo Securities, LLC and our respective affiliates may engage in may adversely affect the level of the Index, the market value of the securities from time to time and the maturity payment amount you will receive on the securities at maturity. See “Risk Factors — Hedging transactions may affect the return on the securities” and “— Potential conflicts of interest could arise” for a discussion of these adverse effects.

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SUPPLEMENTAL PLAN OF DISTRIBUTION

The securities are being purchased by Wells Fargo Securities, LLC (the agent) as principal, pursuant to a distribution agreement between the agent and us. The agent has agreed to pay certain of our out-of-pocket expenses of the issue of the securities.

From time to time, the agent and its affiliates have engaged, and in the future may engage, in transactions with and performance of services for us for which they have been, and may be, paid customary fees. In particular, an affiliate of the agent will be our swap counterparty for a hedge relating to our obligations under the securities.

In the future, the agent and its affiliates may purchase and resell the offered securities in market-making transactions, with resales being made at prices related to prevailing market prices at the time of resale or otherwise. Wells Fargo Securities, LLC may act as principal or agent in such transactions.

The agent has committed to purchase all of these securities in the initial public offering of the securities if any are purchased.

The agent proposes to offer the securities in part directly to the public at the public offering price set forth on the cover page of this pricing supplement and in part to WFA and Wells Fargo Advisors Financial Network, LLC or certain securities dealers at such price less a selling concession of \$17.50 per security. In addition to the selling concession allowed to WFA, the agent will pay \$0.75 per security of the underwriting discount and commission to WFA as a distribution expense fee for each security sold by WFA.

After the initial public offering of the securities is completed, the public offering price and concessions may be changed by the agent.

Proceeds to be received by Royal Bank of Canada in this offering will be net of the underwriting discount, commission and expenses payable by Royal Bank of Canada.

The securities are new issues of securities with no established trading markets. We have been advised by the agent that the agent intends to make a market in the securities. However the agent is not obligated to do so and may discontinue market making at any time without notice. No assurance can be given as to the liquidity of the trading market for the securities.

Any price that the agent makes available from time to time after the original issue date at which it would be willing to purchase the securities will generally reflect the agent's estimate of their value, less a customary bid-ask spread for similar trades and the cost of unwinding any related hedge transactions. That estimated value will be based upon a variety of factors, including then prevailing market conditions and our creditworthiness. However, for a period of four months after the original issue date, the price at which the agent may purchase the securities is expected to be higher than the price that would be determined based on the agent's valuation at that time less the bid-ask spread and hedging unwind costs referenced above. This is because, at the beginning of this period, that price will not include certain costs that were included in the initial public offering price, particularly a portion of the underwriting discount and commission (not including the selling concession) and the expected profits of our hedging counterparty(ies). As the period continues, these costs are expected to be gradually included in the price that the agent would be willing to pay, and the difference between that price and the price that would be determined based on the agent's valuation of the securities less a bid-ask spread and hedging unwind costs will decrease over time until the end of this period. After this period, if the agent continues to make a market in the securities, the prices that it would pay for them are expected to reflect the agent's estimated value, less the bid-ask spread and hedging unwind costs referenced above. In addition, the value of the securities shown on your account statement will generally reflect the price that the agent would be willing to pay to purchase the securities at that time.

Our broker-dealer subsidiary, RBC Capital Markets, LLC (RBCCM), does not expect to make a market in the securities. If RBCCM determines that the agent is unable or unwilling to make a market in the securities at any time, RBCCM may, but is not obligated to, make a market in the securities at that time. If RBCCM makes a market in the securities at any time, its valuation of the securities may differ from the agent's valuation, and consequently the price at

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which it may be willing to purchase the securities may differ from (and be lower than) the price at which the agent would have purchased the securities at that time.

Royal Bank of Canada has agreed to indemnify the agent against certain liabilities, including liabilities under the Securities Act of 1933.

No action has been or will be taken by Royal Bank of Canada, the agent or any broker-dealer affiliates of either Royal Bank of Canada or the agent that would permit a public offering of the securities or possession or distribution of this pricing supplement or the accompanying prospectus and prospectus supplement in any jurisdiction, other than the United States, where action for that purpose is required. No offers, sales or deliveries of the securities, or distribution of this pricing supplement or the accompanying prospectus supplement and prospectus, may be made in or from any jurisdiction except in circumstances which will result in compliance with any applicable laws and regulations and will not impose any obligations on Royal Bank of Canada, the agent or any broker-dealer affiliates of either Royal Bank of Canada or the agent.

Selling Restrictions

Argentina

Royal Bank of Canada U.S. Medium-Term Notes program and the related offer of securities and the sale of securities under the terms and conditions provided herein does not constitute a public offering in Argentina. Consequently, no public offering approval has been requested or granted by the Comisión Nacional de Valores, nor has any listing authorization of the securities been requested on any stock market in Argentina.

Brazil

The securities may not be offered or sold to the public in Brazil. Accordingly, this pricing supplement and the accompanying prospectus supplement and prospectus have not been submitted to the Comissão de Valores Mobiliários for approval. Documents relating to this offering may not be supplied to the public as a public offering in Brazil or be used in connection with any offer for subscription or sale to the public in Brazil.

Chile

The securities have not been registered with the Superintendencia de Valores y Seguros in Chile and may not be offered or sold publicly in Chile. No offer, sales or deliveries of the securities, or distribution of this pricing supplement or the accompanying prospectus supplement and prospectus, may be made in or from Chile except in circumstances that will result in compliance with any applicable Chilean laws and regulations.

China

This pricing supplement and the accompanying prospectus supplement and prospectus have not been filed with or approved by the People's Republic of China (for such purposes, not including Hong Kong and Macau Special Administrative Regions or Taiwan) authorities, and is not an offer of securities (whether public offering or private placement) within the meaning of the Securities Law or other pertinent laws and regulations of the People's Republic of China. These documents shall not be delivered to any party who is not an intended recipient or offered to the general public if used within the People's Republic of China, and the securities so offered cannot be sold to anyone that is not a qualified purchaser of the People's Republic of China. Each dealer has represented, warranted and agreed that the notes are not being offered or sold and may not be offered or sold, directly or indirectly, in the People's Republic of China, except under circumstances that will result in compliance with applicable laws and regulations.

European Union

No Prospectus (as defined in Directive 2003/71/EC (as amended, the "Prospectus Directive")) will be prepared in connection with these securities. Accordingly, these securities may not be offered to the public in any member state of the European Economic Area (the "EEA"), and any purchaser of these securities who subsequently sells any of these securities in any EEA member state must do so only in accordance with the requirements of the Prospectus Directive, as implemented in that member state.

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The securities are not intended to be offered, sold or otherwise made available to, and should not be offered, sold or otherwise made available to, any retail investor in the EEA. For these purposes, the expression “offer” includes the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe the securities, and a “retail investor” means a person who is one (or more) of: (a) a retail client, as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, “MiFID II”); or (b) a customer, within the meaning of Insurance Distribution Directive 2016/97/EU, as amended, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (c) not a qualified investor as defined in the Prospectus Directive. Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the “PRIIPs Regulation”) for offering or selling the securities or otherwise making them available to retail investors in the EEA has been prepared, and therefore, offering or selling the securities or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

Mexico

The securities have not been registered with the National Registry of Securities maintained by the Mexican National Banking and Securities Commission and may not be offered or sold publicly in Mexico. This pricing supplement and the accompanying prospectus supplement and prospectus may not be publicly distributed in Mexico.

Paraguay

This is a private and personal offering. The securities offered have not been approved by or registered with the National Securities Commission (Comisión Nacional de Valores) and are not part of a public offering as defined by the Paraguayan Securities Law. The information contained herein is for informational and marketing purposes only and should not be taken as an investment advice.

Peru

The securities have not been and will not be registered with the Capital Markets Public Registry of the Capital Markets Superintendence (SMV) nor the Lima Stock Exchange Registry (RBVL) for their public offering in Peru under the Peruvian Capital Markets Law (Law N°861/ Supreme Decree N°093-2002) and the decrees and regulations thereunder.

Consequently, the securities may not be offered or sold, directly or indirectly, nor may this pricing supplement, the accompanying supplements or any other offering material relating to the securities be distributed or caused to be distributed in Peru to the general public. The securities may only be offered in a private offering without using mass marketing, which is defined as a marketing strategy utilising mass distribution and mass media to offer, negotiate or distribute securities to the whole market. Mass media includes newspapers, magazines, radio, television, mail, meetings, social networks, Internet servers located in Peru, and other media or technology platforms.

Uruguay

The sale of the securities qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627. The securities must not be offered or sold to the public in Uruguay, except in circumstances which do not constitute a public offering or distribution under Uruguayan laws and regulations. The securities are not and will not be registered with the Financial Services Superintendency of the Central Bank of Uruguay.

Taiwan

The securities may be made available outside Taiwan for purchase by Taiwan residents outside Taiwan but may not be offered or sold in Taiwan.

Structuring the Securities

The securities are our debt securities. As is the case for all of our debt securities, including our structured notes, the economic terms of the securities reflect our actual or perceived creditworthiness. In addition, because structured notes result in increased operational, funding and liability management costs to us, we typically borrow the funds under these securities 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 securities, along with the underwriting discount and commission and hedging and other costs associated with the securities, typically reduces the initial estimated value of the securities at the time their terms are set.

In order to satisfy our payment obligations under the securities, we may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) with an affiliate of the agent and/or one of our subsidiaries. The terms of these hedging arrangements take into account a number of factors, including our creditworthiness, interest rate movements, and the tenor of the securities. The economic terms of the securities and their initial estimated value depend in part on the terms of these hedging arrangements. Our cost of hedging will include the projected profit that such counterparties expect to realize in consideration for assuming the risks inherent in hedging our obligations under the securities. Because hedging our obligations entails risks and may be influenced by market forces beyond the counterparties' control, such hedging may result in a profit that is more or less than expected, or could result in a loss. See "Use of Proceeds and Hedging" on page PS-28.

The lower implied borrowing rate, the underwriting discount and commission and hedging and other costs associated with the securities reduce the economic terms of the securities to you and result in the initial estimated value for the securities on the pricing date being less than their initial public offering price. See "Risk Factors—Our initial estimated value of the securities will be less than the initial public offering price" above.

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