

Merck & Co., Inc.  
Form 11-K  
June 17, 2016

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549  
FORM 11-K  
FOR ANNUAL REPORTS OF EMPLOYEE STOCK PURCHASE, SAVINGS AND SIMILAR PLANS  
Pursuant to Section 15(d) of the Securities Exchange Act of 1934  
(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2015

OR  
TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission File Number: 1-06571  
Employer Identification Number: 22-1918501  
Plan Number: 004  
MSD EMPLOYEE STOCK PURCHASE AND SAVINGS PLAN

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(Full title of the plan)  
MERCK & CO., INC.

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(Name of issuer of the securities held pursuant to the plan)  
2000 Galloping Hill Road  
Kenilworth, New Jersey 07033

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(Address of principal executive office)

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MSD Employee Stock Purchase and Savings Plan  
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\* Other schedules required by Section 2520.103-10 of the Department of Labor Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974 are omitted because they are not applicable.

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Report of Independent Registered Public Accounting Firm

To the Administrator of  
MSD Employee Stock Purchase and Savings Plan

In our opinion, the accompanying statements of net assets available for benefits and the related statement of changes in net assets available for benefits present fairly, in all material respects, the net assets available for benefits of MSD Employee Stock Purchase and Savings Plan (the "Plan") at December 31, 2015 and 2014, and the changes in net assets available for benefits for the year ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America. 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 of these statements 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The supplemental schedule of assets (held at end of year) as of December 31, 2015 has been subjected to audit procedures performed in conjunction with the audit of the Plan's financial statements. The supplemental schedule is the responsibility of the Plan's management. Our audit procedures included determining whether the supplemental schedule reconciles to the financial statements or the underlying accounting and other records, as applicable, and performing procedures to test the completeness and accuracy of the information presented in the supplemental schedule. In forming our opinion on the supplemental schedule, we evaluated whether the supplemental schedule, including its form and content, is presented in conformity with the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. In our opinion, the supplemental schedule of assets (held at end of year) is fairly stated, in all material respects, in relation to the financial statements as a whole.

/s/ PricewaterhouseCoopers LLP  
New York, New York  
June 17, 2016

MSD Employee Stock Purchase and Savings Plan  
 Statements of Net Assets Available for Benefits

|                                    | December 31, |           |
|------------------------------------|--------------|-----------|
| (in thousands)                     | 2015         | 2014      |
| Assets                             |              |           |
| Investments                        |              |           |
| Investments, at fair value         | \$386,898    | \$392,038 |
| Receivables                        |              |           |
| Employer contributions             | 65           | 169       |
| Participant contributions          | 207          | 528       |
| Notes receivable from participants | 11,625       | 12,301    |
| Total receivables                  | 11,897       | 12,998    |
| Net assets available for benefits  | \$398,795    | \$405,036 |

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



MSD Employee Stock Purchase and Savings Plan  
Statement of Changes in Net Assets Available for Benefits

| (in thousands)                                      | Year<br>Ended<br>December<br>31,<br>2015 |
|-----------------------------------------------------|------------------------------------------|
| Additions to net assets attributed to               |                                          |
| Investment income                                   |                                          |
| Plan interest in Master Trust investment income     | \$ 1,208                                 |
| Interest income, notes receivable from participants | 610                                      |
| Contributions to the Plan                           |                                          |
| By participants                                     | 19,327                                   |
| By employer                                         | 6,054                                    |
| Total contributions                                 | 25,381                                   |
| Transfers in                                        | 402                                      |
| Total additions                                     | 27,601                                   |
| Deductions from net assets attributed to            |                                          |
| Benefits paid to participants                       | (32,538 )                                |
| Transfers out                                       | (1,304 )                                 |
| Total deductions                                    | (33,842 )                                |
| Net decrease                                        | (6,241 )                                 |
| Net assets available for benefits                   |                                          |
| Beginning of year                                   | 405,036                                  |
| End of year                                         | \$398,795                                |

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

MSD Employee Stock Purchase and Savings Plan  
Notes to Financial Statements

1. Description of Plan

The following description of the MSD Employee Stock Purchase and Savings Plan (the “Plan”) provides only general information. Participants should refer to the Plan document for a more complete description of the Plan’s provisions.

General

The Plan is designed to provide a systematic means of saving and investing for the future as well as an easy, economical way for employees to become shareholders of Merck & Co., Inc. (“Merck” or the “Company”). Generally, any regular full time, part-time, or temporary employee, who is a U.S. resident covered by a collective bargaining agreement providing for participation in this Plan as defined by the Plan document, is eligible to participate in the Plan on or after the first day of the month following commencement of employment or as otherwise provided pursuant to the applicable collective bargaining unit agreement. Merck & Co., Inc. is the Plan sponsor (the “Sponsor”). Participants direct the investment of their contributions into any fund investment option available under the Plan, including Merck common stock. At December 31, 2015, the Plan offered two (2) registered investment companies (mutual funds), five (5) common/collective trusts, and 14 separately managed accounts.

The Plan is administered by management committees appointed by the Company’s Chief Executive Officer, the Compensation and Benefits Committee of the Board of Directors of Merck or their delegates.

The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (“ERISA”).

Master Trust

The assets of the Plan are maintained, for investment purposes only, on a commingled basis with a portion of the MSD Puerto Rico Savings Plan (the “Puerto Rico Plan”) and all of the assets of the Merck US Savings Plan and the Telerx Marketing, Inc. 401(k) Plan in a single master trust (the “Master Trust”). The Puerto Rico Plan participates in the Master Trust for the specific limited purpose of enabling participants in the Puerto Rico Plan to invest in separately managed accounts and certain common/collective trusts that are recordkept and trustee pursuant to the Master Trust agreement. The plans do not own specific Master Trust assets but rather maintain individual beneficial interests in such assets.

The portion of fund assets allocable to each plan is based upon the participants’ account balances within each plan. Investment income for each fund is allocated to each plan based on the relationship of each plan’s beneficial interest in the fund to the total beneficial interest of all plans in the fund.

Contributions

Participants may contribute up to 25% of their base pay on a before-tax basis and up to 10% of base pay on an after-tax basis to the Plan, but the total of the pre-tax and after-tax contributions cannot exceed a total of 25% of base pay. However, before-tax contributions cannot exceed the statutory limit (\$18,000 in 2015). Upon reaching the before-tax statutory limit, the participant may elect to suspend contributions for the remainder of the year or elect to continue on an after-tax basis. The combination of before-tax and after-tax contributions may not exceed the statutory limit (\$53,000 in 2015).

In addition, the Company makes matching contributions of \$0.65 for every \$1.00 of an employee's contributions, up to 6% of such employee's base pay (maximum match is 3.90% of base pay) per pay period (to the statutory limit).

Participant and Company matching contributions are invested according to a participant’s elections.

Age 50 and above — In addition, the Plan permits unmatched before-tax “catch-up contributions” of up to \$6,000 for 2015 by participants who are at least age 50 by year-end.

Participant Accounts

Each participant’s account is credited with the participant’s contributions, the Company’s contributions and an allocation of Plan earnings. The allocation is based on participants’ account balances, as defined in the Plan document.

Vesting

Participants are immediately vested in their contributions, all Company matching contributions, plus actual earnings thereon.





MSD Employee Stock Purchase and Savings Plan  
Notes to Financial Statements

Notes Receivable from Participants

Participants may borrow from their account balances with interest charged at the prime rate plus 1%. Loan terms range from one to five years for a short-term loan or up to thirty years for the purchase of a primary residence and bear interest at rates that range from 4.25% to 10.50%. The minimum loan is \$500 and the maximum loan is the lesser of (i) \$50,000 less the highest outstanding loan balance(s) during the one year period prior to the new loan application date, or (ii) 50% of the participant's account balance less any current outstanding loan balance(s) and defaulted loan amounts. Principal and interest is paid ratably through payroll deductions.

Payment of Benefits

Participants are entitled to receive automatic, voluntary, in-service (which include hardship withdrawals), or mandatory distributions as provided in the applicable Plan provisions.

Other Matters

Transfers in and out during 2015 primarily relate to transfers between the Plan and the Merck US Savings Plan for employees who changed their status during the year.

2. Summary of Accounting Policies

Basis of Accounting

The accompanying financial statements are prepared on the accrual basis of accounting.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities at the date of the financial statements. Management believes that these estimates are adequate. Actual results could differ from those estimates.

Investment Valuation and Income Recognition

All investments are recorded at fair value in the accompanying financial statements. Valuation of investments of the Plan represents the Plan's allocable portion of the Master Trust. The Plan's investment in the Master Trust is stated at fair value and is based on the beginning of year value of the Plan's interest in the Master Trust plus actual Plan contributions and allocated investment income less Plan distributions, allocated investment losses and allocated expenses.

Purchases and sales of securities are recorded on a trade-date basis. Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned. Realized gains and losses from security transactions are reported on the average cost method.

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 benefit payments based upon the terms of the plan document. No allowance for credit losses has been recorded as of December 31, 2015 and 2014.

Contributions

Employee and Company matching contributions are recorded in the period in which the Company makes the payroll deductions from the participants' earnings.

Payment of Benefits

Benefits are recorded when paid.

Expenses

The Plan's administrative expenses are generally paid by the Company. Inactive participants pay an annual recordkeeping fee from their account balance.

MSD Employee Stock Purchase and Savings Plan  
Notes to Financial Statements

Recently Issued Accounting Standards

In May 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2015-07, Disclosures for Investments in Certain Entities that Calculate Net Asset Value per Share (or Its Equivalent), which amends disclosure requirements of Accounting Standards Codification Topic 820, Fair Value Measurement ("Topic 820"), for reporting entities that measure the fair value of an investment using the net asset value per share (or its equivalent) as a practical expedient. The amendments remove the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share practical expedient, and also remove the requirements to make certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share practical expedient. ASU No. 2015-07 is effective for the Plan's fiscal years beginning after December 15, 2015, with early application permitted. The Plan Sponsor is currently evaluating the impact on the Plan of adopting ASU No. 2015-07.

In July 2015, the FASB issued ASU No. 2015-12, Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965): (Part I) Fully Benefit-Responsive Investment Contracts, (Part II) Plan Investment Disclosures, (Part III) Measurement Date Practical Expedient (Consensus of the Emerging Issues Task Force). ASU No. 2015-12 designates contract value as the only required measure for fully benefit-responsive investment contracts; eliminates the requirement to disclose (1) individual investments that represent five percent or more of net assets available for benefits and (2) the net appreciation or depreciation for investment by general type for both participant-directed investments and nonparticipant-directed investments; requires investments (both participant-directed and nonparticipant-directed investments) of employee benefit plans be grouped only by general type, eliminating the need to disaggregate the investments in multiple ways; removes the requirement to disclose an investment's strategy for investments measured using the net asset value per share (or its equivalent) practical expedient in Topic 820 and that are in a fund that files a U.S. Department of Labor Form 5500; and permits plans to measure investments and investment-related accounts as of a month-end date that is closest to the plan's fiscal year-end, when the fiscal period does not coincide with a month-end. ASU No. 2015-12 is effective for fiscal years beginning after December 15, 2015, with early application permitted. The Plan Sponsor is currently evaluating the impact on the Plan of adopting ASU No. 2015-12.

In January 2016, the FASB issued ASU No. 2016-01, Financial Instruments - Overall (Subtopic 825-10), Recognition and Measurement of Financial Assets and Financial Liabilities. ASU No. 2016-01 requires changes to how certain equity instruments are measured and recognized; simplifies the impairment assessment of equity investments without readily determinable fair values; eliminates certain disclosure requirements and requires changes to the presentation of financial assets and financial liabilities on the balance sheet and accompanying notes to the financial statements. The amendments in ASU No. 2016-01 are effective for the Plan's fiscal years beginning after December 15, 2018. The Plan Sponsor is currently evaluating the impact on the Plan of adopting ASU No. 2016-01.

Risks and Uncertainties

The Plan provides for various investment options in investment securities. Investment securities, in general, are exposed to various risks and may decline in value for a number of reasons, including changes in prevailing interest rates and credit availability, increases in defaults, increases in voluntary prepayments for investments that are subject to prepayment risk under normal market conditions, widening of credit spreads and overall market volatility. Due to the level of risk associated with certain investment securities, it is reasonably 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 amounts reported in the Statements of Net Assets Available for Benefits.

3. Related-Party Transactions

Contributions are held and managed by Fidelity Management Trust Company ("Fidelity" or the "Trustee"), which invests cash received, interest and dividend income and makes distributions to the participants. The Trustee also administers the participants' payment of interest and principal on the notes receivable from participants. These transactions qualify as permitted party-in-interest transactions.

Certain Plan investments are shares of registered investment companies (mutual funds) and common/collective trusts managed by the Trustee. Fidelity is the trustee as defined by the Plan and, therefore, these transactions qualify as party-in-interest transactions. The total market value of the Plan's allocated portion of the investments managed by the Trustee was \$34.0 million and \$35.5 million at December 31, 2015 and December 31, 2014, respectively. During 2015, the Plan's allocated portion of interest and dividends, realized gains and unrealized gains from investments managed by the Trustee was \$35,865, \$87,559 and \$245,274, respectively.

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MSD Employee Stock Purchase and Savings Plan  
Notes to Financial Statements

Merck also is a party-in-interest to the Plan under the definition provided in Section 3(14) of ERISA. Therefore, Plan transactions of Merck common stock qualify as party-in-interest transactions. The market value of the Plan's allocated portion of the investments in Merck common stock was \$102.4 million and \$114.8 million at December 31, 2015, and December 31, 2014, respectively. During 2015, the Plan's allocated portion of dividends, realized gains and unrealized losses from Merck common stock was \$3.4 million, \$419,726 and (\$7.8) million, respectively. The Plan's allocated portion of purchases and sales of Merck common stock during 2015 was \$3.8 million and \$10.6 million, respectively.

#### 4. 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. Upon termination of the Plan, each participant thereby affected would receive the entire value of his or her account as though he or she had retired as of the date of such termination.

#### 5. Tax Status

The Plan obtained a tax determination letter from the Internal Revenue Service ("IRS") dated March 4, 2015, indicating that the Plan had been designed in accordance with applicable sections of the Internal Revenue Code ("IRC"). The Sponsor believes that the Plan is designed and currently operates in compliance with the IRC. Therefore, no provision for income taxes has been made.

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 Plan 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, 2015, 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 years prior to 2012.

#### 6. Master Trust

The Plan had a 4.7% and 4.6% interest in the Master Trust at December 31, 2015 and December 31, 2014, respectively. The Plan's interest in the Master Trust represents more than 5% of the Plan's net assets as of year-end. The net assets of the Master Trust are as follows:

|                                                | December 31, |             |
|------------------------------------------------|--------------|-------------|
| (in thousands)                                 | 2015         | 2014        |
| Registered investment companies (mutual funds) | \$1,238,958  | \$1,232,151 |
| Common/collective trusts                       | 4,257,789    | 4,496,033   |
| Fixed income securities                        | 180,713      | 196,979     |
| Merck common stock                             | 888,558      | 1,012,306   |
| Other common stocks                            | 1,675,838    | 1,644,998   |
| Accrued interest and dividends                 | 9,862        | 9,969       |
| Other net assets/(liabilities)                 | (16,875 )    | (30,774 )   |
|                                                | \$8,234,843  | \$8,561,662 |

MSD Employee Stock Purchase and Savings Plan  
Notes to Financial Statements

Total investment income of the Master Trust for the year ended December 31, 2015, is as follows:

| (in thousands)                                                     | Year<br>Ended<br>December<br>31,<br>2015 |
|--------------------------------------------------------------------|------------------------------------------|
| Investment income, net                                             |                                          |
| Interest and dividends                                             | \$58,397                                 |
| Net depreciation in Registered investment companies (mutual funds) | (48,297 )                                |
| Net appreciation in Common/collective trusts                       | 48,052                                   |
| Net depreciation in Merck common stock                             | (63,445 )                                |
| Net appreciation in Other common stocks                            | 86,609                                   |
| <br>Total investment income                                        | <br>\$81,316                             |

The following presents investments that represent 5% or more of the Master Trust net assets as of year-end:

| (in thousands)                             | December 31, |             |
|--------------------------------------------|--------------|-------------|
|                                            | 2015         | 2014        |
| SSgA S&P 500 NL Series Fund                | \$1,075,759  | \$1,110,047 |
| Merck Common Stock Fund                    | 896,088      | 1,024,375   |
| Fidelity Retirement Money Market Portfolio | 456,272      | 479,336     |

#### 7. Fair Value Measurements – Master Trust

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Entities are required to use a fair value hierarchy that maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value. There are three levels of inputs that may be used to measure fair value:

Level 1 – Quoted prices in active markets for identical assets or liabilities. The Plan's Level 1 investments primarily include registered investment companies (mutual funds) and common stocks.

Level 2 – Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. The Plan's Level 2 investments primarily include investments in common/collective trusts, certain fixed income investments such as government and agency obligations, corporate obligations and mortgage and asset-backed securities.

MSD Employee Stock Purchase and Savings Plan  
Notes to Financial Statements

Level 3 – Unobservable inputs that are supported by little or no market activity and that are financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant judgment or estimation. The Plan did not hold any Level 3 investments at December 31, 2015 and 2014.

If the inputs used to measure the financial assets and liabilities fall within more than one level described above, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument. There have been no changes in the valuation methodology used at December 31, 2015 and 2014. The policy of the Master Trust and the Plan is to recognize transfers between levels at the end of the reporting period. There were no transfers between Levels 1 and 2.

Within the Master Trust, investments are recorded at fair value as follows:

Registered Investment Companies (Mutual Funds)

Registered investment companies (mutual funds) are valued at their respective net asset values. The net asset values are typically determined by the fund at the close of regular trading on the New York Stock Exchange. Investments in registered investment companies (mutual funds) generally may be redeemed daily.

Common/Collective Trusts

The common/collective trusts are valued at their respective net asset values. The fair value of investments in the common/collective trusts are determined by their trustee. The Plan's investments in common/collective trusts generally may be redeemed daily.

Fixed Income Securities

Fixed income securities, including U.S. government and agency obligations, corporate obligations and mortgage and asset-backed securities, are generally valued on the basis of valuations furnished by a pricing service approved by the Trustee or at fair value as determined in good faith by the Trustee and the Company. The Trustee has the discretionary authority to hire a pricing service to determine valuations using methods based on current market transactions, prices for comparable securities and various relationships between securities which are generally recognized by institutional traders.

Common Stocks

Common stocks, for which market quotations are readily available, are generally valued at the last reported sales price on their principal exchange on valuation date, or official close price for certain markets. If no sales are reported for that day, investments are valued at the more recent of (i) the last published sale price or (ii) the mean between the last reported bid and asked prices for long positions, or at fair value as determined in good faith by the Trustee and the Company.

MSD Employee Stock Purchase and Savings Plan  
Notes to Financial Statements

Investments Measured at Fair Value

Investments measured at fair value are summarized below:

|                                       | December 31, 2015                                                                   |                                                           |                                                    |             |
|---------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------|----------------------------------------------------|-------------|
|                                       | Fair Value Measurements Using                                                       |                                                           |                                                    |             |
|                                       | Quoted<br>Prices<br>In Active<br>Markets<br>for<br>Identical<br>Assets<br>(Level 1) | Significant<br>Other<br>Observable<br>Inputs<br>(Level 2) | Significant<br>Unobservable<br>Inputs<br>(Level 3) | Total       |
| (in thousands)                        |                                                                                     |                                                           |                                                    |             |
| Assets                                |                                                                                     |                                                           |                                                    |             |
| Investments in the Master Trust       |                                                                                     |                                                           |                                                    |             |
| Registered Investment Companies       |                                                                                     |                                                           |                                                    |             |
| Non-US Equity                         | \$761,182                                                                           | \$-                                                       | \$ -                                               | \$761,182   |
| Cash and Short Term Investments       | 477,776                                                                             | -                                                         | -                                                  | 477,776     |
| Common/Collective Trusts              |                                                                                     |                                                           |                                                    |             |
| US Large Cap Equity                   | -                                                                                   | 2,379,169                                                 | -                                                  | 2,379,169   |
| US Small/Mid Cap Equity               | -                                                                                   | 280,976                                                   | -                                                  | 280,976     |
| Non-US Equity                         | -                                                                                   | 839,191                                                   | -                                                  | 839,191     |
| Fixed Income                          | -                                                                                   | 726,375                                                   | -                                                  | 726,375     |
| Cash and Short Term Investments       | -                                                                                   | 32,078                                                    | -                                                  | 32,078      |
| Fixed Income Securities               |                                                                                     |                                                           |                                                    |             |
| Government and agency obligations     | -                                                                                   | 55,575                                                    | -                                                  | 55,575      |
| Corporate obligations                 | -                                                                                   | 40,440                                                    | -                                                  | 40,440      |
| Mortgage and asset-backed securities  | -                                                                                   | 84,698                                                    | -                                                  | 84,698      |
| Merck Common Stock                    | 888,558                                                                             | -                                                         | -                                                  | 888,558     |
| Other Common Stocks                   |                                                                                     |                                                           |                                                    |             |
| U.S. Small Cap Equities               | 652,327                                                                             | -                                                         | -                                                  | 652,327     |
| Large Cap Equities                    | 1,023,511                                                                           | -                                                         | -                                                  | 1,023,511   |
| Total Investments in the Master Trust | \$3,803,354                                                                         | \$4,438,502                                               | \$ -                                               | \$8,241,856 |





MSD Employee Stock Purchase and Savings Plan  
Notes to Financial Statements

December 31, 2014

Fair Value Measurements Using

| (in thousands)                        | Quoted<br>Prices<br>In Active<br>Markets<br>for<br>Identical<br>Assets<br>(Level 1) |             |    | Significant<br>Other<br>Observable<br>Inputs<br>(Level 2) | Significant<br>Unobservable<br>Inputs<br>(Level 3) | Total       |
|---------------------------------------|-------------------------------------------------------------------------------------|-------------|----|-----------------------------------------------------------|----------------------------------------------------|-------------|
|                                       |                                                                                     |             |    |                                                           |                                                    |             |
| Assets                                |                                                                                     |             |    |                                                           |                                                    |             |
| Investments in the Master Trust       |                                                                                     |             |    |                                                           |                                                    |             |
| Registered Investment Companies       |                                                                                     |             |    |                                                           |                                                    |             |
| Non-US Equity                         | \$728,292                                                                           | \$-         | \$ | -                                                         |                                                    | \$728,292   |
| Cash and Short Term Investments       | 503,859                                                                             | -           |    | -                                                         |                                                    | 503,859     |
| Common/Collective Trusts              |                                                                                     |             |    |                                                           |                                                    |             |
| US Large Cap Equity                   | -                                                                                   | 2,511,064   |    | -                                                         |                                                    | 2,511,064   |
| US Small/Mid Cap Equity               | -                                                                                   | 295,724     |    | -                                                         |                                                    | 295,724     |
| Non-US Equity                         | -                                                                                   | 935,506     |    | -                                                         |                                                    | 935,506     |
| Fixed Income                          | -                                                                                   | 721,215     |    | -                                                         |                                                    | 721,215     |
| Cash and Short Term Investments       | -                                                                                   | 32,524      |    | -                                                         |                                                    | 32,524      |
| Fixed Income Securities               |                                                                                     |             |    |                                                           |                                                    |             |
| Government and agency obligations     | -                                                                                   | 69,403      |    | -                                                         |                                                    | 69,403      |
| Corporate obligations                 | -                                                                                   | 43,125      |    | -                                                         |                                                    | 43,125      |
| Mortgage and asset-backed securities  | -                                                                                   | 84,451      |    | -                                                         |                                                    | 84,451      |
| Merck Common Stock                    | 1,012,306                                                                           | -           |    | -                                                         |                                                    | 1,012,306   |
| Other Common Stocks                   |                                                                                     |             |    |                                                           |                                                    |             |
| U.S. Small Cap Equities               | 709,088                                                                             | -           |    | -                                                         |                                                    | 709,088     |
| Large Cap Equities                    | 935,910                                                                             | -           |    | -                                                         |                                                    | 935,910     |
| Total Investments in the Master Trust | \$3,889,455                                                                         | \$4,693,012 | \$ | -                                                         |                                                    | \$8,582,467 |

8. Subsequent Events

The Plan has evaluated subsequent events through the date the financial statements were issued.

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MSD Employee Stock Purchase and Savings Plan  
Notes to Financial Statements

MSD Employee Stock Purchase and Savings Plan  
Schedule H, Line 4i - Schedule of Assets (held at End of Year)  
December 31, 2015

Schedule H

| (a) | (b)                                                   | (c)                                                                                                    | (d)  | (e)           |
|-----|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------|---------------|
|     | Identity of Issuer, Borrower, Lessor or Similar Party | Description of Investment Including Maturity Date, Rate of Interest, Collateral, Par or Maturity Value | Cost | Current Value |
| **  | Master Trust                                          | Investment in Master Trust                                                                             | ***  | \$386,898,073 |
| *   | Notes receivable from participants                    | Interest rates ranging from 4.25% to 10.5% and with maturities through 2045                            |      | 11,624,942    |
|     |                                                       | Total                                                                                                  |      | \$398,523,015 |

\* Denotes a party-in-interest to the Plan.

\*\* There are certain investments within the Master Trust that are party-in-interest.

\*\*\* Cost information not required to be presented for participant directed investments.

SIGNATURE

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the Plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

MSD Employee Stock Purchase and  
Savings Plan

By: /s/ Mark E. McDonough

Mark E. McDonough  
Senior Vice President and Treasurer  
June 17, 2016

EXHIBIT INDEX

| Exhibit<br>Number | Document                                                 | Page |
|-------------------|----------------------------------------------------------|------|
| 23                | Consent of Independent Registered Public Accounting Firm | 15   |