

**Report of the Executive Board to the Annual General Meeting on agenda item 8 in accordance with Section 278 (3) and Section 221 (4) sentence 2 AktG in conjunction with Section 186 (4) sentence 2 AktG**

The Executive Board was authorized by resolution of the Annual General Meeting on May 9, 2014 under agenda item 10, to issue warrant and/or convertible bonds, participation rights or participation bonds, or a combination of these instruments to a total nominal amount of up to € 2,000,000,000.00. A Contingent Capital II amounting to € 16,801,491.20 was created to service the authorization in 2014 (Article 5 (5) of the Articles of Association), and has continued up to the date of publication of the invitation to this Annual General Meeting in its original amount.

The Executive Board and the Supervisory Board inter alia consider it expedient to increase flexibility to revoke the existing authorization from 2014 as well as the existing Contingent Capital II and to replace it with a new authorization and a new contingent capital (Contingent Capital II). The proposed authorization to issue warrant and/or convertible bonds, participation rights or participation bonds or a combination of these instruments ("bonds") for the total nominal amount of up to € 2,000,000,000.00 and to create associated contingent capital of up to € 16,801,491.20 should expand the options of the company for financing its activities described in more detail below and allow the Executive Board access to flexible and timely financing in the interests of the company, especially if there are favorable market conditions. The authorization is to be issued for a five-year term until April 26, 2023.

**Benefits of the financing instrument**

Adequate capital resources are an essential foundation for business development and a successful market presence of the company. By issuing convertible and/or warrant bonds ("bonds"), the company can, depending on the current market conditions, use attractive financing options and terms raise capital for the company at low interest rates. Conversion and/or warrant premiums achieved benefit the company. In addition, the issuance of bonds, possibly in conjunction with other instruments such as a capital increase, may open up new investor groups. The possibility provided of also establishing conversion right and/or option rights in addition to granting conversion obligations and/or option obligations broadens the scope of this

financing instrument. The proposed authorization provides the company with the flexibility to issue the bonds itself or through a subsidiary of the company. Bonds can also be issued in other legal currencies of OECD countries other than euros. In addition, the fulfillment of the bonds should be possible by a delivery of shares of the company or payment of an equivalent value in cashCompany.

### **Issue price**

With the exception of cases where a substitution authorization or an option obligation or conversion obligation is stipulated, the issue price for the new shares must correspond to at least 80% of the market price of the company's no-par-value shares immediately prior to the issue of the bonds that are attached with the option rights or conversion rights. By allowing a surcharge (which may be increased depending on the term of the warrant or convertible bond), the condition for this is created, so that the conditions of the convertible or warrant bonds may take the respective changes in market circumstances at the time that they are issued into consideration.

In the cases of a substitution authorization or a option/conversion obligation, the issue price of the new shares pursuant to the bond conditions can be at least either the minimum price stated above, or correspond to the volume-weighted average exchange price of the company's no-par-value shares in Xetra trading (or a comparable successor system on the Frankfurt Stock Exchange) on the last ten trading days before the day of final maturity or the other defined point, even if this average price is under the minimum price stated above (80%).

Without prejudice to Section 9 (1) and Section 199 (2) AktG, the conversion/option price may be adjusted as a result of a dilution protection clause or adjustment clause in accordance with the further provisions of the conditions underlying the respective bond, if in particular the company changes its capital structure during the term of the bonds, e.g. through a capital increase, a capital decrease or a stock split. Moreover dilution protection and/or other adjustments may be provided for in connection with dividend payouts, the issue of additional convertible and/or warrant bonds, transformation measures, and in the case of other events affecting the value of the options or conversion rights that may occur during the term of the bonds (e.g. control gained by a third party). Dilution protection or other adjustments may be provided in particular by granting subscription rights, by

changing the conversion or option price, and by amending or introducing cash components.

### **Subscription rights of shareholders**

The shareholders are generally entitled to the statutory subscription right on the bonds (Sections 278 (3), 221 (4) in conjunction with Section 186 (1) AktG). To facilitate the handling, the option should also be utilized to issue the bonds to a bank or a consortium of banks on the condition that the bonds are offered to the shareholders, according to their subscription right (indirect subscription rights as defined by Section 186 (5) AktG).

### **Exclusion of subscription rights in the case of fractional amounts**

The exclusion of subscription rights in the case of fractional amounts permits the utilization of the requested authorization with full amounts. This facilitates the handling of the shareholders' subscription right. This case of excluding subscription rights is thus in the interests of the company and the shareholders.

### **Exclusion of subscription rights for outstanding warrant and convertible bonds**

The exclusion of subscription rights in favor of bearers, or creditors of the conversion rights/obligations and option rights/obligations already issued, has the advantage that the conversion or option price for the conversion rights or option rights or conversion rights or conversion obligations already issued does not need to be reduced, thus permitting a higher total inflow of funds. This case of excluding subscription rights as well is thus in the interests of the company and the shareholders.

### **Exclusion of subscription rights when issuing bonds for contributions in kind**

The bonds can also be issued in exchange for contributions in kind, provided this is in the interest of the company. In this case, the Executive Board is authorized, with the approval of the Supervisory Board, to exclude the subscription rights of the shareholders, provided that the value of the contribution in kind is appropriate in relation to the theoretical fair market value of the bonds as calculated Debt Instruments in suitable individual cases as currency for acquisitions, for e.g., in connection with the acquisition of

companies, participations (although these can also be achieved via merger or other legal transformation measures) or other assets.

The option of offering bonds as a consideration is essential, especially in the international competition for interesting acquisition targets, and creates the necessary scope to take advantage of opportunities arising to acquire companies, participations in companies or other assets while preserving liquidity. This can also be useful from the point of view of an optimal financing structure. In each individual case the Executive Board will carefully examine whether to use the authorization to issue bonds with conversion rights or conversion obligations and option rights or option obligations in exchange for contributions in kind, with the exclusion of subscription rights. The Executive Board will only do so when it is in the interests of the company and therefore its shareholders.

**Exclusion of subscription rights in accordance with Sections 278 (3), 221 (4), 186 (3) sentence 4 AktG**

Furthermore, the Executive Board shall be authorized, with the approval of the Supervisory Board, to fully exclude shareholders' subscription rights if the issue price of these bonds is not materially lower than the market price. As a result, the company obtains the option to exploit favorable market situations at very short notice and quickly, and to achieve better terms when defining interest rates, option or conversion prices and issue prices of warrant or convertible bonds by stipulating terms in line with the market. It would not be possible to stipulate terms in line with the market and to achieve uncomplicated placement of the shares if the subscription rights were preserved. Section 186 (2) AktG does permit publication of the subscription price (and thus the publication of the terms applicable to the bonds) up until three days before the end of the subscription period. However, given the frequently observed volatility on the stock markets, there is still a market risk lasting several days. This leads to precautionary discounts when setting the terms of the bond, thus creating terms that are not in line with the market. Also when subscription rights exist, successful placement with third parties is endangered or can involve additional expense due to the uncertainty about how they will be exercised (subscription behavior). Lastly, if subscription rights are granted, owing to the length of the subscription period the company cannot respond at short notice to favorable or unfavorable changes in market circumstances, but is exposed to declining

share prices during the subscription period, which can result in an unfavorable procurement of capital for the company.

In this case of complete exclusion of subscription rights, in accordance with Sections 278 (3), 221 (4) sentence 2 AktG, the provisions of Section 186 (3) sentence 4 AktG apply mutatis mutandis. The limit for the exclusion of subscription rights, regulated therein, of 10% of the share capital is to be complied with, pursuant to the content of the resolution. The volume of maximum contingent capital, which in this case is to be made available to ensure the option rights or conversion rights and/or option obligations or conversion obligations, amounts to just under 10% of the company's current share capital. A corresponding provision in the authorization resolution likewise ensures that, even in the case of a capital reduction, the 10% limit is not exceeded, since pursuant to the authorization to exclude subscription rights, exceeding 10% of the share capital is expressly not permitted, neither at the time the authorization becomes effective nor – if this amount is lower – at the time that this authorization is exercised.

When determining this limit of 10% of the registered share capital, shares shall also be taken into account which, during the term of this authorization until its exercise, are issued or sold by direct or analogous application of § 186 (3) sentence 4 AktG. Furthermore, also shares to be issued or granted on the basis of a convertible bond or warrant bond issued during the term of this authorization with the exclusion of shareholders' subscription rights in accordance with § 186 (3) sentence 4 shall count towards this limit of 10% of the registered share capital. This way, it is ensured that no bonds are issued with the exclusion of the shareholders' subscription rights if this would result in the exclusion of a subscription right of the shareholder for new or own shares of the Company within a scope of more than 10% of the currently outstanding shares, taking into consideration any capital increases or certain placements of own shares in direct, mutatis mutandis or analogous application of § 186 (3) sentence 4 AktG.

Section 186 (3) sentence 4 AktG also indicates that the issue price may not be materially lower than the market price. This aims to ensure that there is no notable economic dilution of the share value. Whether such a diluting effect occurs for the issue without subscription rights of warrant bonds, option participation certificates, option participation bonds, convertible bonds, convertible participation certificates or convertible participation bonds can be determined by calculating the hypothetical stock market price of the warrant bonds, option participation certificates, option participation bonds,

convertible bonds, convertible participation certificates or convertible participation bonds on the basis of mathematical methods, and comparing it against the issue price. If, after due examination, this issue price is only insignificantly below the hypothetical price on the stock market at the time of issue of the bonds, then in line with the meaning and purpose of Section 186 (3) sentence 4 AktG, an exclusion of subscription rights is permitted due to the only insignificant discount. The resolution thus stipulates that after due examination and before the issue of bonds, the Executive Board must be of the opinion that the expected issue price will not lead to any notable dilution of the share value as the issue price of the bonds is not significantly lower than their hypothetical market value determined in accordance with recognized methods, in particular financial mathematical methods. The calculated market price of a subscription right would then sink to almost nil, so that the shareholders do not suffer any notable economic disadvantage as a result of the exclusion of subscription rights. This ensures that there is no notable dilution of the value of shares as a result of the exclusion of subscription rights.

In addition, by buying shares on the stock market the shareholders can retain their stake in the company's share capital at any time, even after exercising conversion or option rights. In contrast, the authorization to exclude subscription rights permits the company to stipulate terms in line with the market, the highest level of possible security in terms of placement with third parties and to take advantage of favorable market situations at short notice.

**Exclusion of subscription rights for participation rights or participation bonds with no option right or conversion right or obligation**

If participation rights or participation bonds are to be issued without option or conversion rights or obligations, the Executive Board shall be authorized, with the approval of the Supervisory Board, to exclude in full the subscription rights of the shareholders, if these participation rights or participation bonds have the features of obligations, i.e. they do not substantiate membership rights in the company, do not grant an interest in liquidation proceeds or do not calculate the amount of interest on the basis of the amount of the net income for the year, the net retained profit or the dividend. A further requirement is that the interest and the issue amount of the participation rights or participation bonds must be in line with current market conditions at the time of issue. If the cited conditions are fulfilled, then the

shareholders do not suffer any disadvantage as a result of the exclusion of subscription rights, since the participation rights or participation bonds do not substantiate membership rights, or grant any stake of liquidation proceeds or the profit of the company.

**Limiting the total volume of capital increases with no subscription rights**

Under this authorization, bonds may only be issued in exchange for cash and in-kind considerations with the exclusion of subscription rights if the total of the new shares of the company to be issued on the basis of such bonds does not exceed in aggregate a calculated portion of 20 percent of the share capital, either at the time when such authorization takes effect or – in the event this amount is lower – at the time this authorization is utilized. The company's shares that were issued during the term of this authorization based on other capital measures with the exclusion of shareholders' subscription rights should be credited against this maximum level of 20 percent. This includes in particular shares issued or granted from authorized capital or in connection with a bond issued during the term of this authorization on the basis of the utilization of another authorization with the exclusion of the subscription right. Applying these credits limits a possible dilution of voting rights for the shareholders excluded from subscription rights.

The Contingent Capital II is required in order to be able to settle the conversion and/or option rights and conversion and/or option obligations or tender rights with respect to shares of the company in connection with bonds, unless other types of fulfillment are used to ensure delivery.

There are currently no concrete plans to utilize the authorization to issue convertible bonds and/or warrant bonds. The Executive Board will carefully review in each case whether the use of the authorization is in the interests of the company and its shareholders. It will only exclude the subscription rights of the shareholders if this is in the well-understood interest of the company.

The Executive Board will inform the Annual General Meeting about each use of this authorization at the subsequent Annual General Meeting.

Darmstadt, on February 14, 2018

Report of the Executive Board  
on agenda item 8

**Merck KGaA, Darmstadt, Germany**

**The Executive Board**

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**Dr. Stefan Oschmann**

(Chairman of the Executive Board)

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**Dr. Udit Batra**

(Executive Board member)

[signature]

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**Dr. Kai Beckmann**

(Executive Board member)

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**Walter Galinat**

(Executive Board member)

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**Belén Garijo Lopez**

(Executive Board member)

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**Dr. Marcus Kuhnert**

(Executive Board member)