

LISTING PROSPECTUS



**NOVARTIS FINANCE S.A.**

*(a public company limited by shares (société anonyme) incorporated under the laws of the Grand Duchy of Luxembourg, having its registered office at 20, rue Eugène Ruppert, L-2453 Luxembourg and registered with the Luxembourg trade and companies register under number B141096)*

**EUR 600,000,000 1.625% Notes due 2026**

unconditionally and irrevocably guaranteed by

**NOVARTIS AG**

*(incorporated in Switzerland)*

This listing prospectus (the "**Listing Prospectus**") relates to the EUR 600,000,000 1.625% Notes due 2026 (the "**Notes**") of Novartis Finance S.A. (the "**Issuer**"). The Notes were issued by the Issuer on 7 November 2014 (the "**Issue Date**") at an issue price of 99.697% of their aggregate principal amount (before commissions and expenses) and are unconditionally and irrevocably guaranteed by Novartis AG (the "**Guarantor**") pursuant to a deed of guarantee dated 7 November 2014 (such guarantee, the "**Guarantee**").

The Notes constitute direct, unconditional and unsubordinated obligations of the Issuer ranking *pari passu* amongst themselves and with all other unsecured and unsubordinated obligations of the Issuer. The Guarantee constitutes an unsubordinated obligation of the Guarantor ranking *pari passu* with all other unsecured and unsubordinated obligations of the Guarantor. The Notes and the Guarantee are governed by and construed in accordance with English law. The place of jurisdiction for the Notes, the Guarantee and all related contractual documentation shall be England.

The Notes bear interest from the Issue Date at a rate of 1.625% per annum, payable annually in arrear, on 9 November of each year, commencing 9 November 2015. Unless they are redeemed earlier, the Notes will mature on 9 November 2026. The Issuer may redeem some or all of the Notes at any time and from time to time at the redemption prices determined in the manner described in Condition 7.3 of the terms and conditions of the Notes (the "**Terms and Conditions of the Notes**" and each condition, a "**Condition**") set forth in this Listing Prospectus. In accordance with Condition 7.2 of the Terms and Conditions of the Notes, the Issuer may also redeem Notes before their stated maturity at a price equal to 100% of their principal amount plus accrued interest to the redemption date in the event of certain changes in withholding taxes applicable to payments of interest on the Notes in Switzerland, Luxembourg or any other Relevant Jurisdiction (as defined in Condition 8).

This Listing Prospectus has been approved by the United Kingdom Financial Conduct Authority (the "**FCA**"), which is the United Kingdom competent authority for the purposes of Directive 2003/71/EC, as amended (the "**Prospectus Directive**") and relevant implementing measures in the United Kingdom, as a prospectus issued in compliance with the Prospectus Directive and relevant implementing measures in the United Kingdom. Application has also been made for the Notes to be admitted to listing on the Official List of the FCA and to trading on the regulated market (the "**Regulated Market**") of London Stock Exchange plc (the "**London Stock Exchange**"). The Regulated Market of the London Stock Exchange is a regulated market for the purposes of Directive 2004/39/EC on markets in financial instruments. The Notes were also provisionally admitted to trading on the SIX Swiss Exchange on the Issue Date and were listed in accordance with the Standard for Bonds on the SIX Swiss Exchange with effect from 3 December 2014.

The Notes have been assigned a rating of AA- by Standard & Poor's Ratings Services ("**Standard & Poor's**") and Aa3 by Moody's Investors Service, Inc. ("**Moody's**"). Such ratings may not reflect the potential impact of all risks related to structure, market, additional factors discussed above, and other factors that may affect the value of the Notes. Each of Standard & Poor's and Moody's is established in the European Union and is registered under Regulation (EC) No. 1060/2009 (as amended) (the "**CRA Regulation**"). A credit rating is not a recommendation to buy, sell or hold the Notes and may be revised or withdrawn by the rating agency at any time.

The Notes are in bearer form and were initially represented by a temporary global note (the "**Temporary Global Note**"), without interest coupons, which was deposited on or around the Issue Date with Clearstream, Luxembourg as common safekeeper. The Temporary Global Note is exchangeable, in whole or in part, for interests in a permanent global note (the "**Permanent Global Note**"), and together with the Temporary Global Note, the "**Global Notes**" and each a "**Global Note**"). The Permanent Global Note will not be exchangeable for Notes in definitive form, except in certain limited circumstances as described in this Listing Prospectus. No Notes in definitive form will be issued with a denomination above EUR 199,000.

***Investing in Notes involves certain risks. The principal risk factors that may affect the abilities of the Issuer and the Guarantor to fulfil their respective obligations under the Notes are discussed under "Risk Factors" below.***

The date of this Listing Prospectus is 9 May 2016

## CONTENTS

	<b>Page</b>
IMPORTANT NOTICES.....	ii
RISK FACTORS.....	1
INFORMATION INCORPORATED BY REFERENCE.....	22
USE OF PROCEEDS.....	23
TERMS AND CONDITIONS OF THE NOTES.....	24
THE GUARANTEE.....	37
SUMMARY OF PROVISIONS RELATING TO THE NOTES WHILE IN GLOBAL FORM.....	40
DESCRIPTION OF NOVARTIS FINANCE S.A. ....	43
DESCRIPTION OF NOVARTIS AG.....	45
TAXATION IN LUXEMBOURG.....	57
TAXATION IN SWITZERLAND.....	60
GENERAL INFORMATION.....	62

## IMPORTANT NOTICES

This Listing Prospectus has been prepared by the Issuer and the Guarantor solely for use in connection with the listing of the Notes described in this Listing Prospectus. This Listing Prospectus does not constitute an offer to any person or to the public generally to subscribe for or otherwise acquire securities.

Each of the Issuer and the Guarantor accepts responsibility for the information contained in this Listing Prospectus and declares that, having taken all reasonable care to ensure that such is the case, the information contained in this Listing Prospectus is, to the best of its knowledge, in accordance with the facts and contains no omission likely to affect its import.

In making an investment decision, prospective investors must rely on their own examination of the Issuer and the Guarantor, including the merits and risks involved. Prospective investors should not construe anything in this Listing Prospectus as legal, business or tax advice. Each prospective investor should consult its own advisers as needed to make its investment decision and to determine whether it is legally permitted to purchase the securities under applicable legal investment or similar laws or regulations.

This Listing Prospectus is to be read in conjunction with all documents which are deemed to be incorporated herein by reference (see "*Documents Incorporated by Reference*"). This Listing Prospectus should be read and construed on the basis that such documents are incorporated and form part of the Listing Prospectus.

No person has been authorised by the Issuer or the Guarantor to give any information or to make any representation not contained in or not consistent with this Listing Prospectus or any other document entered into in relation to the Notes or any information supplied by any of the Issuer or the Guarantor or such other information as is in the public domain and, if given or made, such information or representation should not be relied upon as having been authorised by any of the Issuer or the Guarantor.

Neither this Listing Prospectus nor any other information supplied in connection with the Notes (a) is intended to provide the basis of any credit or other evaluation or (b) should be considered as a recommendation by the Issuer or the Guarantor that any recipient of the Listing Prospectus or any other information supplied in connection with the Notes should purchase any Notes. Each investor contemplating purchasing any Notes should make its own independent investigation of the financial condition and affairs, and its own appraisal of the creditworthiness, of the Issuer and/or the Guarantor. Neither the delivery of this Listing Prospectus nor the offering, sale or delivery of any Note shall, in any circumstances, create any implication that the information contained in this Listing Prospectus is true subsequent to the date hereof or that there has been no adverse change, or any event reasonably likely to involve any adverse change, in the prospects or financial or trading position of the Issuer or the Guarantor since the date hereof.

The distribution of this Listing Prospectus and the offering, sale and delivery of the Notes in certain jurisdictions may be restricted by law. Persons into whose possession this Listing Prospectus comes are required by the Issuer and the Guarantor to inform themselves about and to observe any such restrictions. In particular, Notes have not been and will not be registered under the United States Securities Act of 1933 (as amended) (the "**Securities Act**") and are subject to U.S. tax law requirements. Subject to certain exceptions, Notes may not be offered, sold or delivered within the United States or to U.S. persons.

In this Listing Prospectus, unless otherwise specified, references to "**Novartis**", the "**Novartis Group**" or the "**Group**" are to Novartis AG and its subsidiaries, references to "**GSK**" are to GlaxoSmithKline plc, references to "**Lilly**" are to Eli Lilly and Company, references to "**CSL**" are to CSL Limited, references to the "**FDA**" are to the United States Food and Drug Administration, references to "**£**" or "**Sterling**" are to the lawful currency of the United Kingdom, references to "**U.S.\$**", "**USD**", "**\$**", "**U.S. dollars**" or "**dollars**" are to United States dollars, references to "**€**", "**EUR**" or "**euro**" are to the single currency introduced at the start of the third stage of European Economic and Monetary Union pursuant to the Treaty establishing the European Community, as amended, references to "**Yen**", "**Japanese Yen**" or "**¥**" are to the lawful currency of Japan and references to "**CHF**" or to "**Swiss Francs**" are to the lawful currency in Switzerland.

Certain figures included in this Listing Prospectus have been subject to rounding adjustments; accordingly, figures shown for the same category presented in different tables may vary slightly and figures shown as totals in certain tables may not be an arithmetic aggregation of the figures which precede them.

Where information in this Listing Prospectus has been sourced from a third party, the Issuer and the Guarantor each confirms that such information has been accurately reproduced and, so far as they are aware and have been able to ascertain from information published by third parties, no facts have been omitted which would render the reproduced information inaccurate or misleading. Where information in this Listing Prospectus has been sourced from third parties, the source of such information has been stated next to the reproduced information.

## RISK FACTORS

*Prospective investors should read the entire Listing Prospectus. Words and expressions defined in the "Terms and Conditions of the Notes" below or elsewhere in this Listing Prospectus have the same meanings in this section.*

*Investing in Notes involves certain risks. Prospective investors should consider, among other things, the following risk factors.*

*The Group's businesses face significant risks and uncertainties. You should carefully consider all of the information set forth or incorporated by reference in this Listing Prospectus, including the following risk factors, before deciding to invest in or to maintain an investment in the Notes. The Group's business, as well as the Group's financial condition or results of operations could be materially adversely affected by any of these risks, as well as other risks and uncertainties not currently known to the Group or not currently considered material.*

### **Risks Facing the Group's Business**

*The Group's products face important patent expirations and significant competition.*

The products of the Group's Pharmaceuticals and Alcon Divisions, as well as certain key products of the Group's Sandoz Division, are generally protected by patent and other intellectual property rights, which are intended to provide the Group with exclusive rights to market the products. However, those intellectual property rights have varying strengths and durations. Loss of market exclusivity for one or more important products has had, and can be expected to continue to have a material adverse effect on the Group's results of operations.

The introduction of generic competition for a patented medicine typically results in a significant and rapid reduction in net sales and net income for the patented product because generic manufacturers typically offer their unpatented versions at sharply lower prices. Such competition can occur after successful challenges to intellectual property rights or the regular expiration of the term of the patent or other intellectual property rights. Such competition can also result from the entry of generic versions of another medicine in the same therapeutic class as one of the Group's drugs, or in another competing therapeutic class, from the compulsory licensing of the Group's drugs by governments, or from a general weakening of intellectual property laws in certain countries around the world. In addition, generic manufacturers sometimes take an aggressive approach to challenging patents, conducting so-called "launches at risk" of products that are still under legal challenge for patent infringement, before final resolution of legal proceedings.

The Group also relies in all aspects of the Group's businesses on unpatented proprietary technology, know-how, trade secrets and other confidential information, which the Group seeks to protect through various measures including confidentiality agreements with licensees, employees, third-party collaborators, and consultants who may have access to such information. If these agreements are breached, the Group's contractual or other remedies may not be adequate to cover the Group's losses.

Some of the Group's best-selling products have begun or are about to face significant competition due to the end of market exclusivity resulting from the expiry of patent or other intellectual property protection.

- The Group already faces generic competition in the US, Japan and some EU countries for the Group's best-selling product *Gleevec/Glivec* (cancer). In the US, the Group has resolved patent litigation with certain generic manufacturers. The Group licensed one generic manufacturer to market a generic version of *Gleevec* in the US as of 1 February 2016. In the EU, the Group's *Glivec* intellectual property rights also are being challenged by generic manufacturers.
- *Diovan* and *Co-Diovan/Diovan HCT* (high blood pressure), which had long been the Group's best-selling product, has generic competitors for *Diovan* in the US, EU and Japan and for *Co-Diovan/Diovan HCT* in the US and EU. In Japan, Novartis has resolved patent litigation related to *Co-Diovan* with a generic manufacturer. Compound patent protection for *Co-Diovan* expired in Japan on 19 February 2016. In addition, valsartan, the active ingredient in *Diovan*, is also used in the single-pill combination therapies *Exforge/Exforge HCT* (high blood pressure), and despite the existence of separate patents covering the product, *Exforge* faces generic competition in the US and Japan. The Group's *Exforge* patents also face challenges in the EU.

- Patent protection for octreotide acetate, the active ingredient in *Sandostatin*, has expired. Generic versions of *Sandostatin* SC are available in the US, EU and Japan. A US patent protects *Sandostatin* LAR, the long-acting version of *Sandostatin* which represents a majority of the Group's *Sandostatin* US sales. This patent is expected to expire in 2017. Patents protecting the *Sandostatin* LAR formulation in the EU and Japan have expired. There is currently no generic competition for *Sandostatin* LAR in the US, EU or Japan.
- Patent protection on rivastigmine, the active ingredient in *Exelon*, has expired and *Exelon* capsules are subject to generic competition in major markets, including the US, Japan and all of Europe. The Group holds additional patents with respect to *Exelon* Patch, which makes up a substantial portion of the Group's *Exelon* sales, but generic versions of *Exelon* Patch are on the market in the US and most EU countries.
- Certain patents and extensions protecting the Group's top-selling products, *Afinitor* and *Gilenya* will begin to expire in 2018 and 2019, and some of the patents protecting these products are being challenged in the US.

For more information on the patent status of the Group's Pharmaceuticals Division's products see "Item 4. Information on the Company—Item 4.B Business Overview—Pharmaceuticals—Intellectual Property" and "Item 18. Financial Statements—Note 20" each in the 2015 Form 20-F, which is incorporated by reference in this Listing Prospectus.

In 2016, the Group expects an impact on the Group's net sales of approximately \$3.2 billion as a result of the loss of intellectual property protection for the Group's products, including *Gleevec/Glivec*. Because the Group typically has substantially reduced marketing and research and development expenses related to products that are in its final year of exclusivity, the Group expects that this loss of intellectual property protection also will have an impact on the Group's 2016 operating income in an amount corresponding to a significant portion of the products' lost sales. The magnitude of the impact of generic competition could depend on a number of factors, including the time of year at which such exclusivity would be lost; the ease or difficulty of manufacturing a competitor product and obtaining regulatory approval to market it; the number of generic competitor products approved, including whether, in the US, a single competitor is granted an exclusive marketing period, and whether an authorized generic is launched; and the geographies in which generic competitor products are approved, including the strength of the market for generic pharmaceutical products in such geographies and the comparative profitability of branded pharmaceutical products in such geographies.

Clearly, with respect to major products for which the patent terms are expiring, the loss of exclusivity of these products can be expected to have a material adverse effect on the Group's business, financial condition and results of operations. In addition, should the Group unexpectedly lose exclusivity on additional products as a result of patent litigation or other reasons, this could also have a material adverse effect on the Group's business, financial condition and results of operations, both due to the loss of revenue and earnings, and the difficulties in planning for such losses.

Similarly, all of the Group's businesses are faced with intense competition from new products and technological advances from competitors, including new competitors from other industries such as Google and IBM that are entering the healthcare field. Physicians, patients and third-party payors may choose the Group's competitors' products instead of the Group's if they perceive them to be safer, more effective, easier to administer, less expensive, more convenient, or more cost-effective.

Products that compete with the Group's, including products competing against some of the Group's best-selling products, are launched from time to time. The Group cannot predict with accuracy the timing of the introduction of such competitive products or their possible effect on the Group's sales. However, products significantly competitive to the Group's major products *Gleevec*, *Lucentis*, *Gilenya* and *Afinitor* have been launched. Such products, and other competitive products, could significantly affect the revenues from the Group's products and the Group's results of operations.

Similarly, the Group's Alcon Division, a leader in the eye care industry, has recently suffered declining growth rates due in part to increased competition for its products, across its business franchises. To counter this, the Group is taking steps to accelerate growth to improve the division's sales and profits. The Group's efforts under this plan are expected to take time to succeed. As a result, such competition and other factors can be expected to affect Alcon's business, financial condition or results of operations in the near term. In addition, despite the implementation of the growth plan, the Group's efforts to improve Alcon's performance may prove insufficient. Should the Group's growth plan fail to accomplish its goals, or fail to do so in a timely manner, it could have a

material adverse impact on the Group's business, financial condition or results of operations beyond the near term, as well. See also the discussion of Alcon's new product development efforts in "*—The Group's research and development efforts may not succeed in bringing new products to market, or may fail to do so cost efficiently enough, or in a manner sufficient to grow the Group's business, replace lost revenues and income and take advantage of new technologies*" below.

***The Group's research and development efforts may not succeed in bringing new products to market, or may fail to do so in a cost-efficient manner, or in a manner sufficient to grow the Group's business, replace lost revenues and income and take advantage of new technologies.***

The Group's ability to continue to maintain and grow the Group's business, to replace sales lost due to competition, entry of generics or other reasons, and to bring to market products and medical advances that take advantage of new, and potentially disruptive technologies depends in significant part upon the success of the Group's research and development activities in identifying, and successfully and cost-effectively developing new products that address unmet medical needs, are accepted by patients and physicians, and are reimbursed by payors. To accomplish this, the Group commits substantial effort, funds and other resources across the Group's divisions to research and development, both through the Group's own dedicated resources and through collaborations with third parties. Developing new healthcare products and bringing them to market, however, is a highly costly, lengthy and uncertain process. In spite of the Group's significant investments, there can be no guarantee that the Group's research and development activities will produce commercially viable new products that will enable the Group to grow the Group's business and replace revenues and income lost to generic and other competition.

Using the products of the Group's Pharmaceuticals Division as an example, the research and development process for a new product can take up to 15 years, or even longer, from discovery to commercial product launch—and with limited available intellectual property protections, the longer it takes to develop a product, the less time there will be for the Group to recoup the Group's research and development costs. New products must undergo intensive preclinical and clinical testing, and must be approved by means of highly complex, lengthy and expensive approval processes which can vary from country to country. During each stage, there is a substantial risk that the Group will encounter serious obstacles that will further delay the Group and add substantial expense, that the Group will develop a product with limited potential for commercial success, or that the Group will be forced to abandon a product in which the Group has invested substantial amounts of time and money. These risks may include failure of the product candidate in preclinical studies, difficulty enrolling patients in clinical trials, clinical trial holds or other delays in completing clinical trials, delays in completing formulation and other testing and work necessary to support an application for regulatory approval, adverse reactions to the product candidate or other safety concerns, insufficient clinical trial data to support the safety or efficacy of the product candidate, an inability to manufacture sufficient quantities of the product candidate for development or commercialisation activities in a timely and cost-effective manner, and failure to obtain, or delays in obtaining, the required regulatory approvals for the product candidate or the facilities in which it is manufactured.

In addition, following a series of widely publicised issues, health regulators have increased their focus on product safety. Governmental authorities and payors around the world have also paid increased attention to whether new products offer a significant benefit over other products in the same therapeutic class. These developments have led to requests for more clinical trial data, for the inclusion of a significantly higher number of patients in clinical trials, and for more detailed analyses of the trials. As a result, the already lengthy and expensive process of obtaining regulatory approvals and reimbursement for pharmaceutical products has become even more challenging.

For the same reason, the post-approval regulatory burden has also increased. Approved drugs are subject to various requirements such as risk evaluation and mitigation strategies (REMS), risk management plans, comparative effectiveness studies, health technology assessments and requirements to conduct post-approval Phase IV clinical trials to gather additional safety and other data on products. These requirements have the effect of making the maintenance of regulatory approvals and of achieving reimbursement for the Group's products increasingly expensive, and further heightening the risk of recalls, product withdrawals, loss of revenues or loss of market share.

The Group's Alcon Division faces similar challenges in developing new products and bringing them to market. Alcon's Surgical and Vision Care products face medical device development and approval processes that are often similarly difficult to products in the Group's Pharmaceuticals Division. Alcon is taking steps to accelerate

its growth, and this can be expected to be costly and to require extensive efforts over time. There can be no certainty that Alcon will be successful in these efforts, in either the short- or the long-term, and if Alcon is not successful, there could be a material adverse effect on the success of the Alcon Division, and on the Group as a whole. See also the discussion of Alcon in "*The Group's products face important patent expirations and significant competition*" above.

In addition, the Group's Sandoz Division has made, and expects to continue to make, significant investments in the development of differentiated, "difficult-to-make" generic products, including biotechnology-based, "biologic" medicines intended for sale as bioequivalent or "biosimilar" generic versions of currently-marketed biotechnology products. While the development of such products typically is significantly less costly and complex than the development of the equivalent originator medicines, it is nonetheless significantly more costly and complex than for non-differentiated generic products. In addition, despite significant efforts by the Group and others, to date many countries do not yet have a fully-developed legislative or regulatory pathway which would facilitate the development of biosimilars and permit biosimilars to be sold in a manner in which the biosimilar product would be readily substitutable for the originator product. Further delays in the development and completion of such regulatory pathways, or any significant impediments that may ultimately be built into such pathways, or any other significant difficulties that may arise in the development or marketing of biosimilars or other differentiated products, could put at risk the significant investments that Sandoz has made, and will continue to make, in the development of differentiated products in general, and in its biopharmaceuticals business in particular, and could have a material adverse effect on the long-term success of the Sandoz Division and the Group as a whole.

Further, in all of the Group's divisions, the Group's research and development activities must be conducted in an ethical and compliant manner. Among other things, the Group must be concerned with patient safety, Good Clinical Practices requirements, data integrity requirements, the fair treatment of patients in developing countries, and animal welfare requirements. Should the Group fail to properly manage such issues, the Group risks injury to third parties, damage to the Group's reputation, negative financial consequences as a result of potential claims for damages, sanctions and fines, and the potential that the Group's investments in research and development activities could have no benefit to the Group.

If the Group is unable to cost-effectively maintain an adequate flow of successful new products and new indications for existing products sufficient to maintain and grow the Group's business, cover the Group's substantial research and development costs and the decline in sales of older products that become subject to generic or other competition, and take advantage of technological and medical advances, then this could have a material adverse effect on the Group's business, financial condition or results of operations. For a description of the approval processes which must be followed to market the Group's products, see the sections headed "Regulation" included in the descriptions of the Group's operating divisions under "Item 4. Information on the Company—Item 4.B Business Overview" in the 2015 Form 20-F, which is incorporated by reference in this Listing Prospectus.

***The Group's business is affected by pressures on pricing for the Group's products.***

The growth of overall healthcare costs as a percentage of gross domestic product in many countries means that governments and payors are under intense pressure to control healthcare spending even more tightly. These pressures are particularly strong given the persistently weak economic and financial environment in many countries and the increasing demand for healthcare resulting from the aging of the global population and the prevalence of behaviours that increase the risk of obesity and other chronic diseases. In addition, in certain countries, governments, patients, healthcare providers and the media are increasingly raising questions about healthcare pricing issues. As a result, the Group's businesses and the healthcare industry in general are operating in an ever more challenging environment with very significant pricing pressures. These ongoing pressures affect all of the Group's divisions, and involve a number of cost-containment measures, such as government-imposed industry-wide price reductions, mandatory pricing systems, reference pricing systems, payors limiting access to treatments based on cost-benefit analyses, an increase in imports of drugs from lower-cost countries to higher-cost countries, shifting of the payment burden to patients through higher co-payments, limiting physicians' ability to choose among competing medicines, mandatory substitution of generic drugs for the patented equivalent, and growing pressure on physicians to reduce the prescribing of patented prescription medicines. For more information on such price controls see "Item 4. Information on the Company—Item 4.B Business Overview—Pharmaceuticals—Price Controls" in the 2015 Form 20-F, which is incorporated by reference in this Listing Prospectus.



As a result of such measures, the Group faced downward pricing pressures on the Group's patented and generic drugs in countries around the world in 2015. These pressures ranged from efforts by many governments and proposals by politicians to reduce the amounts the Group would be paid for the Group's medicines, intense publicity regarding the pricing of pharmaceuticals, including publicity and pressure resulting from prices charged by competitors and peer companies for new products as well as price increases by competitors and peer companies on older products that the public deemed excessive, and government investigations into pharmaceutical pricing practices.

The Group expects these challenges to continue and possibly increase in the remainder of 2016 as political pressures mount, and healthcare payors around the globe, including government-controlled health authorities, insurance companies and managed care organisations, step up initiatives to reduce the overall cost of healthcare, restrict access to higher-priced new medicines, increase the use of generics and impose overall price cuts. Such pressures could have a material adverse impact on the Group's business, financial condition or results of operations, as well as on the Group's reputation.

***Failure to comply with law, legal proceedings and government investigations may have a significant negative effect on the Group's results of operations.***

The Group is obligated to comply with the laws of all of the countries around the world in which the Group operates and sells products with respect to an extremely wide and growing range of activities. Such legal requirements can vary from country to country and new requirements may be imposed on the Group from time to time as government and public expectations regarding acceptable corporate behaviour change. For example, there are new laws in the US and in other countries around the world that require the Group to be more transparent with respect to the Group's interactions with healthcare professionals. To help the Group in the Group's efforts to comply with the many requirements that impact the Group, the Group has a significant global ethics and compliance program in place, and the Group devotes substantial time and resources to efforts to ensure that the Group's business is conducted in a lawful and publicly acceptable manner. Nonetheless, despite the Group's efforts, any actual or alleged failure to comply with law or with heightened public expectations could lead to substantial liabilities that may not be covered by insurance, or to other significant losses, and could affect the Group's business and reputation.

In particular, in recent years, there has been a trend of increasing civil and criminal government investigations, litigations and law enforcement activities against companies operating in the Group's industry, both in the US and in an increasing number of countries around the world. A number of the Group's subsidiaries across each of the Group's divisions are, or may in the future be subject to various investigations and legal proceedings that arise or may arise from time to time, such as proceedings regarding sales and marketing practices, pricing, corruption, trade regulation and embargo legislation, product liability, commercial disputes, employment and wrongful discharge, antitrust, securities, insider trading, health and safety, environmental, tax, cybersecurity and data privacy, and intellectual property matters, and are increasingly challenging practices previously considered to be legal.

Such proceedings are inherently unpredictable, and large judgments sometimes occur. As a consequence, the Group may in the future incur judgments or enter into settlements of claims that could involve large cash payments, including the potential repayment of amounts allegedly obtained improperly, and other penalties, including treble damages. In addition, such proceedings may affect the Group's reputation, create a risk of potential exclusion from government reimbursement programs in the US and other countries, may lead to civil litigation and otherwise subject the Group to monetary penalties. Further, judgments and settlements sometimes require companies to enter into corporate integrity or similar agreements, which are intended to regulate company behaviour for a period of years. Any such resolutions could have a material adverse impact on the Group's business, financial condition or results of operations, as well as on the Group's reputation.

The Group's businesses are and have been subject to a number of these types of cases and governmental investigations, including the following:

- In 2014, the Tokyo District Public Prosecutor Office indicted the Group's Japanese affiliate, Novartis Pharma K.K. (NPKK), as well as a former NPKK employee on certain charges relating to the alleged manipulation of data in sub-analysis publications of the Kyoto Heart Study regarding valsartan. The charges against NPKK are subject to a maximum total fine of JPY 4 million. Trial in this matter commenced in December 2015. In addition, in February 2015, the Japanese Ministry of Health, Labor and Welfare (MHLW) issued a business suspension order for failure to report adverse events, which required

NPKK to halt manufacturing and sales in Japan for the period from 5 to 19 March 2015. NPKK has implemented a corrective and preventive action plan in response to a business improvement order and instruction issued by the MHLW in the fourth quarter of 2015 regarding additional instances of delayed adverse events reporting.

- In April 2013, the US government filed a civil complaint in intervention to a *qui tam* action against the Group's US affiliate, Novartis Pharmaceuticals Corporation (NPC) in the US District Court for the Southern District of New York. The complaint, as subsequently amended, asserted federal False Claims Act and state law claims related to alleged unlawful contractual discounts and rebates to specialty pharmacies in connection with *Myfortic*, and alleged unlawful contractual discounts, rebates and patient referrals to one specialty pharmacy in connection with *Exjade*. The US government alleged substantial damages, including treble damages and civil penalties of up to \$11,000 per claim, which according to the government could exceed \$2 billion. In January 2014, 11 states filed three complaints in intervention asserting similar claims related to *Exjade*; and the *qui tam* relator served on NPC an amended complaint also asserting similar claims with respect to *Myfortic* and *Exjade*, as well as claims involving *Tasigna*, *Gleevec* and *TOBI* that the federal and various state governments declined to pursue. In the second half of 2015, NPC reached a settlement with all plaintiffs, including the United States Department of Justice, 45 states (made up of the eleven intervening states, as well as all the other states which were either part of the relator's complaint, or which reimbursed prescriptions of *Myfortic* and *Exjade* during the relevant time period), the District of Columbia and the *qui tam* relator. This resolves all the above-described claims related to *Myfortic*, *Exjade*, *Tasigna*, *Gleevec* and *TOBI*. As part of the settlement, NPC agreed to pay \$390 million plus additional legal expenses to plaintiffs, and agreed with the Office of Inspector General of the US Department of Health & Human Services on an amendment and extension of its current Corporate Integrity Agreement until 2020.

A number of significant legal matters remain pending against the Group. For more detail see "*Description of Novartis AG—Legal Matters*". See also "*—The Group's reliance on outsourcing and third parties for the performance of key business functions heightens the risks faced by the Group's businesses*" below.

In addition, the Group's Sandoz Division may from time to time seek approval to market a generic version of a product before the expiration of patents claimed by the marketer of the patented product. The Group does this in cases where the Group believes that the relevant patents are invalid, unenforceable, or would not be infringed by the Group's generic product. As a result, affiliates of the Group's Sandoz Division frequently face patent litigation, and in certain circumstances, the Group may elect to market a generic product even though patent infringement actions are still pending. Should the Group elect to proceed in this manner and conduct a "launch at risk," the Group could face substantial damages if the final court decision is adverse to the Group.

Adverse judgments or settlements in any of the significant investigations or cases against the Group could have a material adverse effect on the Group's business, financial condition, results of operations and reputation.

***The manufacture of the Group's products is highly regulated and complex, and may result in a variety of issues that could lead to extended supply disruptions and significant liability.***

The manufacture of the Group's products is heavily regulated by governmental health authorities around the world, including the FDA. Whether the Group's products are manufactured at the Group's own dedicated manufacturing facilities or by third parties, the Group must ensure that all manufacturing processes comply with current Good Manufacturing Practices ("cGMP") and other applicable regulations, as well as with the Group's own high quality standards. In recent years, health authorities have substantially intensified their scrutiny of manufacturers' compliance with such requirements. If the Group or the Group's third-party suppliers fail to comply fully with these requirements and the health authorities' expectations, then the Group could be required to shut down the Group's production facilities or production lines, or could be prevented from importing the Group's products from one country to another. This could lead to product shortages, or to the Group's being entirely unable to supply products to patients for an extended period of time. And such shortages or shut downs have led to and could continue to lead to significant losses of sales revenue and to potential third-party litigation. In addition, health authorities have in some cases imposed significant penalties for such failures to comply with cGMP. A failure to comply fully with cGMP could also lead to a delay in the approval of new products to be manufactured at the impacted site.

Like many of the Group's competitors, the Group has faced significant manufacturing issues in recent years. As a result of such issues, the Group was unable to supply certain products to the market for significant periods of

time, and suffered significant losses in sales and market share. In October 2015, the FDA issued a warning letter to the Group's Sandoz Division concerning their sites in Kalwe and Turbhe, India, relating to documentation practices in Kalwe and sterile manufacturing practices in Turbhe that were identified during an inspection in August 2014. Though the Group has taken steps to respond to the warning letter, there can be no guarantee that FDA's concerns will be met.

In order to meet increasing health authority expectations and the Group's own high quality standards, the Group is devoting substantial time and resources to remediate issues, improve quality and assure consistency of product supply at the Group's manufacturing sites around the world. Ultimately, there can be no guarantee of the outcome of these efforts. Nor can there be any guarantee that the Group will not again face significant manufacturing issues, or that the Group will successfully manage such issues when they arise.

In addition to regulatory requirements, many of the Group's products involve technically complex manufacturing processes or require a supply of highly specialised raw materials. For some products and raw materials, the Group may rely on a single source of supply. In particular, a significant portion of the Group's portfolio are "biologic" products. Unlike traditional "small-molecule" drugs, biologic drugs or other biologic-based products cannot be manufactured synthetically, but typically must be produced from living plant or animal micro-organisms. As a result, the production of biologic-based products which meet all regulatory requirements is especially complex. Even slight deviations at any point in the production process may lead to production failures or recalls. In addition, because the production process is based on living plant or animal micro-organisms, the process could be affected by contaminants that could impact those microorganisms. As a result, the inherent fragility of certain of the Group's raw material supplies and production processes may cause the production of one or more of the Group's products to be disrupted, potentially for extended periods of time.

Also as part of the Group's portfolio of products, the Group has a number of sterile products, including oncology products, which are technically complex to manufacture, and require sophisticated environmental controls. Because the production process for such products is so complex and sensitive, the chance of production failures and lengthy supply interruptions is increased.

Finally, in addition to potential liability for government penalties, because the Group's products are intended to promote the health of patients, for some of the Group's products, any supply disruption or other production issue could endanger the Group's reputation and subject the Group to lawsuits or to allegations that the public health, or the health of individuals, has been harmed.

In sum, a disruption in the supply of certain key products—whether as a result of a failure to comply with applicable regulations or health authority expectations, the fragility of the production process, inability to obtain product or raw materials from a sole source of supply, natural or man-made disasters at one of the Group's facilities or at a critical supplier or vendor, or the Group's failure to accurately predict demand—could have a material adverse effect on the Group's business, financial condition or results of operations, as well as the Group's reputation. See also "*Earthquakes and other natural disasters could adversely affect the Group's business*" below.

***The persistently weak global economic and financial environment in many countries and increasing political and social instability may have a material adverse effect on the Group's results.***

Many of the world's largest economies and financial institutions continue to be impacted by a weak ongoing global economic and financial environment, with some continuing to face financial difficulty, liquidity problems and limited availability of credit. In addition, the Group continues to see weak economic growth or a slowing of economic growth rates in certain emerging growth markets, such as China, Russia, Brazil and India. It is uncertain how long these effects will last, or whether economic and financial trends will worsen or improve. In addition, these issues may be further impacted by the unsettled political conditions currently existing in the US and Europe, as well as the difficult conditions existing in parts of the Middle East and places such as Ukraine, as well as the ongoing refugee crisis, anti-immigrant activities, social unrest and fears of terrorism that have followed in many countries. Such uncertain times may have a material adverse effect on the Group's revenues, results of operations, financial condition and, if circumstances worsen, the Group's ability to raise capital at reasonable rates. For example, financial weakness in certain countries has increased pressures on those countries, and on payors in those countries, to force healthcare companies to decrease the prices at which the Group may sell them the Group's products. See also "Item 4. Information on the Company—Item 4.B Business Overview—Pharmaceuticals—Price Controls" in the 2015 Form 20-F, which is incorporated by reference in this Listing Prospectus.

Concerns continue that payors in some countries, including Greece, Italy, Portugal and Spain, may not be able to pay the Group in a timely manner. Certain other countries are experiencing high inflation rates and have taken steps to introduce exchange controls and limit companies from distributing retained earnings or paying intercompany payables due from those countries. The most significant country in this respect is Venezuela, where the Group is exposed to a potential devaluation loss in the income statement on the Group's total intercompany balances with the Group's subsidiaries there, which at 31 March 2016 amounted to \$0.3 billion. In November 2015, one of the Group's Venezuelan subsidiaries agreed with Venezuelan authorities to settle a substantial part of the Group's existing intercompany trade payables dated on or before 31 December 2014 in a transaction that, in turn, required the Group to use a significantly devalued US dollar/Venezuela bolivar exchange rate for consolidation of the financial statements of the Group's Venezuela subsidiaries. The use of the new exchange rate resulted in a \$211 million loss from the re-measurement of the intra-Group and third party liabilities. Ongoing conditions in Venezuela and other such countries could continue to lead to further devaluations of their currencies, which could in turn result in significant additional financial losses to the Group in the future. See also "Item 5. Operating and Financial Review and Prospects—Item 5.B Liquidity and Capital Resources—Effects of Currency Fluctuations" and "—Condensed Consolidated Balance Sheets," and "Item 18. Financial Statements—Notes 15 and 29" in the 2015 Form 20-F, which is incorporated by reference in this Listing Prospectus. Current economic conditions may adversely affect the ability of the Group's distributors, customers, suppliers and service providers to obtain the liquidity required to pay for the Group's products, or otherwise to buy necessary inventory or raw materials, and to perform their obligations under agreements with the Group, which could disrupt the Group's operations, and could negatively impact the Group's business and cash flow. Although the Group makes efforts to monitor these third parties' financial condition and their liquidity, the Group's ability to do so is limited, and some of them may become unable to pay their bills in a timely manner, or may even become insolvent, which could negatively impact the Group's business and results of operations. These risks may be elevated with respect to the Group's interactions with third parties with substantial operations in countries where current economic conditions are the most severe, particularly where such third parties are themselves exposed to payment risks from business interactions directly with fiscally-challenged government payors. See also "*—The Group's reliance on outsourcing and third parties for the performance of key business functions heightens the risks faced by the Group's businesses*" below.

In addition, the varying effects of difficult economic times on the economies, currencies and financial markets of different countries has impacted, and may continue to unpredictably impact, the Group's business and results of operations including the conversion of the Group's operating results into the Group's reporting currency, the US dollar, as well as the value of the Group's investments in the Group's pension plans. See "*—Foreign exchange fluctuations may adversely affect the Group's earnings and the value of some of the Group's assets*," below, and "*—If any of numerous key assumptions and estimates in calculating the Group's pension plan obligations turn out to be different from the Group's actual experience, the Group may be required to increase substantially the Group's contributions to pension plans as well as the Group's pension-related costs in the future*," below. In addition, the financial situation may also result in a lower return on the Group's financial investments, and a lower value on some of the Group's assets. Alternately, inflation could accelerate, which could lead to higher interest rates, which would increase the Group's costs of raising capital.

To the extent that the economic and financial conditions directly affect consumers, some of the Group's businesses, including the elective surgical business of the Group's Alcon Division, may be particularly sensitive to declines in consumer spending. In addition, the Group's Pharmaceuticals and Sandoz Divisions, and the remaining businesses of the Group's Alcon Division, may not be immune to consumer cutbacks, particularly given the increasing requirements in certain countries that patients pay a larger contribution toward their own healthcare costs. As a result, there is a risk that consumers may cut back on prescription drugs and medical devices to help cope with rising costs and difficult economic times.

At the same time, significant changes and volatility in the financial markets, in the consumer and business environment, in the competitive landscape and in the global political and security landscape make it increasingly difficult for the Group to predict the Group's revenues and earnings into the future. As a result, any revenue or earnings guidance or outlook which the Group has given or might give may be overtaken by events, or may otherwise turn out to be inaccurate. Though the Group endeavours to give reasonable estimates of future revenues and earnings at the time the Group gives such guidance, based on then-current knowledge and conditions, there is a significant risk that such guidance or outlook will turn out to be, or to have been, incorrect.

Similarly, increased scrutiny of corporate taxes and executive pay may lead to significant business disruptions or other adverse business conditions, and may interfere with the Group's ability to attract and retain qualified personnel. See "*—Changes in tax laws or their application could adversely affect the Group's results of*

operations" and "*An inability to attract and retain qualified personnel could adversely affect the Group's business*" below.

***Foreign exchange fluctuations may adversely affect the Group's earnings and the value of some of the Group's assets.***

Changes in exchange rates between the US dollar, the Group's reporting currency, and other currencies can result in significant increases or decreases in the Group's reported sales, costs and earnings as expressed in US dollars, and in the reported value of the Group's assets, liabilities and cash flows.

In 2015, the US dollar continued its significant increase in value against most currencies. In particular, the average value of the euro, the Japanese yen and emerging market currencies (especially the ruble) decreased in 2015 against the US dollar. However, in January 2015, following an announcement by the Swiss National Bank that it was discontinuing its minimum exchange rate with the euro, the value of the Swiss franc increased substantially. In addition, in 2015, China took steps to devalue its currency, and the value of its currency against the US dollar has continued to decline.

There is a risk that other countries could also take steps that could significantly impact the value of their currencies. Such steps could include "quantitative easing" measures and potential withdrawals by countries from common currencies. In addition, certain countries are or may experience periods of high inflation. This could lead these countries to devalue their currencies, and to set exchange controls, as, for example, Venezuela has done. Such steps taken by Venezuela have impacted the Group's financial results. See "*The persistently weak global economic and financial environment in many countries and increasing political and social instability may have a material adverse effect on the Group's results*" above. Ongoing conditions in Venezuela and other such countries could continue to lead to further devaluations of their currencies, which could in turn result in significant additional financial losses to the Group in the future.

Despite measures undertaken to reduce, or hedge against, foreign currency exchange risks, because a significant portion of the Group's earnings and expenditures are in currencies other than the US dollar, including expenditures in Swiss francs that are significantly higher than the Group's revenues in Swiss francs, such exchange rate volatility may negatively and materially impact the Group's business, results of operations and financial condition, and may impact the reported value of the Group's net sales, earnings, assets and liabilities. In addition, the timing and extent of such volatility can be difficult to predict. Further, depending on the movements of particular foreign exchange rates, the Group may be materially adversely affected at a time when the same currency movements are benefiting some of the Group's competitors.

For more information on the effects of currency fluctuations on the Group's consolidated financial statements and on how the Group manages currency risk, see "Item 5. Operating and Financial Review and Prospects—Item 5.B Liquidity and Capital Resources—Effects of Currency Fluctuations" "Item 11. Quantitative and Qualitative Disclosures about Market Risk", and "Item 18. Financial Statements—Note 29" in the 2015 Form 20-F, which is incorporated by reference in this Listing Prospectus.

***The Group may not successfully achieve the Group's goals in strategic transactions or reorganisations, including the portfolio transformation transactions, the strategic reorganisations the Group announced in January 2016, and the formation of Novartis Business Services.***

As part of the Group's strategy, from time to time the Group evaluates and pursues potential strategic business acquisitions and divestitures to expand or complement the Group's existing businesses, or to enable the Group to focus more sharply on the Group's strategic businesses. The Group cannot ensure that suitable acquisition candidates will be identified. Acquisition activities can be thwarted by overtures from competitors for the targeted assets, potentially increasing prices demanded by sellers, governmental regulation (including market concentration limitations) and replacement product developments in the Group's industry. Once an acquisition is agreed upon with a third party, the Group may not be able to complete the acquisition in the expected form or within the expected time frame, or at all, due to a failure to obtain required regulatory approvals or a failure to achieve contractual or other required closing conditions. Further, after an acquisition, efforts to integrate the business may not meet expectations, or may otherwise not be successful, as a result of corporate cultural differences, difficulties in retention of key personnel, customers and suppliers, coordination with other products and processes, or other reasons. Also, acquisitions and divestments could divert management's attention from the Group's existing businesses, and could result in the existing businesses failing to achieve expected results, or in

liabilities being incurred that were not known at the time of acquisition, or the creation of tax or accounting issues.

Similarly, the Group cannot ensure that suitable buyers will be identified for businesses or other assets that the Group might want to divest. Neither can the Group ensure that the Group will correctly select businesses or assets as candidates for divestiture, that the Group will be able to successfully complete any agreed upon divestments, or that any expected strategic benefits, synergies or opportunities will arise as a result of any divestiture.

In 2015, the Group completed a series of transactions intended to transform the Group's portfolio of businesses. In these transactions, the Group acquired GSK oncology products and certain related assets; created a joint venture with GSK in consumer healthcare of which Novartis owns 36.5%; divested the Group's vaccines business (excluding the influenza vaccines business) to GSK; divested the Group's Animal Health business to Lilly; and divested the Group's influenza vaccines business to CSL. In 2014, the Group had also divested the blood transfusion diagnostics unit to Grifols S.A. that had been part of the Group's former Vaccines and Diagnostics Division. In agreeing to these transactions, the Group expects to achieve certain strategic benefits, synergies and opportunities, including certain financial results, but there can be no certainty that such expected benefits will be fully realised or that they will be realised at any particular time.

In addition, as part of the Group's strategy, from time to time the Group reassesses the optimal organisation of the Group's business, including the allocation of products by division and the level of centralisation and simplification of certain functions across the Group, to better align those products and functions with the capabilities and expertise required for competitive advantage. As an example of this, in January 2016 the Group announced a series of strategic actions intended to further focus the Group's divisions, including focusing the Group's Alcon Division on its Surgical and Vision Care franchises, strengthening the Group's ophthalmic medicines business by transferring Alcon's Ophthalmic Pharmaceuticals products to the Group's Pharmaceuticals Division, and shifting selected mature pharmaceutical products from the Group's Pharmaceuticals Division into Sandoz. The Group also announced steps to increase Group-wide coordination of drug development, and to improve efficiency with an integrated manufacturing operation and more shared commercial and medical services at the country level. The Group expects these actions to further strengthen the Group's competitive position, enable the Group to maintain the Group's leading position in research and development, and free resources for the Group's growth priorities. But the expected benefits of this reorganisation may never be fully realised or may take longer to realise than expected. There can be no certainty that the numerous businesses and functions involved will be successfully integrated into the new organisations and that key personnel will be retained. Disruption from the reorganisations may make it more difficult to maintain relationships with customers, employees or suppliers, and may result in the Group not achieving the expected productivity and financial benefits, including potential sales declines and lost profits.

Similarly, in 2014 the Group created a shared services organisation, Novartis Business Services (NBS). NBS consolidates a number of business support services previously spread across divisions, including Information Technology, Financial Reporting and Accounting Operations, Real Estate & Facility Services, Procurement, Payroll and Personnel Administration and the Pharmaceuticals Global Business Services. This reorganisation was designed to improve profitability and free up resources that could be reinvested in growth and innovation, and to allow the Group's divisions to focus more on customer-facing activities. But the expected benefits of this reorganisation may never be fully realised or may take longer to realise than expected. There can be no certainty that the numerous business functions involved will be successfully integrated into a single organisation and that key personnel will be retained. Disruption from the reorganisation may make it more difficult to maintain relationships with customers, employees or suppliers, and may result in the Group not achieving the expected productivity and financial benefits.

Both with respect to the transactions and reorganisations previously announced, and to potential future transactions and reorganisations, if the Group fails to timely recognise or address these risks, or to devote adequate resources to them, the Group may fail to achieve the Group's strategic objectives, including the Group's growth strategy, or otherwise may not realise the intended benefits of the acquisition, divestiture or reorganisation.

***Intangible assets and goodwill on the Group's books may lead to significant impairment charges in the future.***

The Group carries a significant amount of goodwill and other intangible assets on the Group's consolidated balance sheet, primarily due to acquisitions. As a result, significant impairment charges may result in the future

if the expected fair value of the goodwill and other intangible assets would be less than their carrying value on the Group's consolidated balance sheet at any point in time.

The Group regularly reviews the Group's long-lived intangible and tangible assets, including identifiable intangible assets, investments in associated companies and goodwill, for impairment. Goodwill, acquired research and development, and acquired development projects not yet ready for use are subject to impairment review at least annually. Other long-lived assets are reviewed for impairment when there is an indication that an impairment may have occurred. Impairment testing under IFRS may lead to impairment charges in the future. Any significant impairment charges could have a material adverse effect on the Group's results of operations and financial condition. In 2015, for example, the Group recorded intangible asset impairment charges of \$347 million. For a detailed discussion of how the Group determines whether an impairment has occurred, what factors could result in an impairment and the increasing impact of impairment charges on the Group's results of operations, see "Item 5. Operating and Financial Review and Prospects—Item 5.A Operating Results— Critical Accounting Policies and Estimates—Impairment of Goodwill, Intangible Assets and Property, Plant and Equipment" and "Item 18. Financial Statements—Notes 1 and 11" in the 2015 Form 20-F, which is incorporated by reference in this Listing Prospectus.

***The Group's indebtedness could adversely affect the Group's operations.***

As of 31 March 2016, the Group had \$16.5 billion of non-current financial debt and \$11.6 billion of current financial debt. The Group's current and long-term debt requires the Group to dedicate a portion of the Group's cash flow to service interest and principal payments and, if interest rates rise, this amount may increase. In addition, the Group's existing debt may limit the Group's ability to engage in transactions or otherwise may place the Group at a competitive disadvantage relative to competitors that have less debt. The Group may also have difficulty refinancing the Group's existing debt or incurring new debt on terms that the Group would consider to be commercially reasonable, if at all.

***The Group's reliance on outsourcing and third parties for the performance of key business functions heightens the risks faced by the Group's businesses.***

The Group invests a significant amount of effort and resources into outsourcing and offshoring certain key business functions with third parties, including research and development collaborations, manufacturing operations, warehousing, distribution activities, certain finance functions, marketing activities, data management and others. The Group's reliance on outsourcing and third parties for certain functions, such as the research and development or manufacturing of products, may limit the potential profitability of such products. In addition, despite contractual relationships with the third parties to whom the Group outsources these functions, the Group cannot ultimately control how they perform their contracts. Nonetheless, the Group depends on these third parties to achieve results which may be significant to the Group. If the third parties fail to meet their obligations or to comply with the law, the Group may lose the Group's investment in the collaborations and fail to receive the expected benefits. In addition, should any of these third parties fail to comply with the law in the course of their performance of services for the Group, there is a risk that the Group could be held responsible for such violations of law, as well as that the Group's reputation may suffer. Any such failures by third parties could have a material adverse effect on the Group's business, financial condition, results of operations or reputation.

In particular, in many countries, including many developing markets, the Group relies heavily on third party distributors and other agents for the marketing and distribution of the Group's products. Many of these third parties do not have internal compliance resources comparable to those within the Group's organisation. Some of these countries are plagued by corruption. If the Group's efforts to screen the Group's third party agents and detect cases of potential misconduct fail, the Group could be held responsible for the noncompliance of these third parties with applicable laws and regulations, which may have a material adverse effect on the Group's reputation and on the Group's business, financial condition or results of operations.

***The Group may not be able to realise the expected benefits of the Group's significant investments in Emerging Growth Markets.***

At a time of slowing growth in sales of healthcare products in industrialised countries, many emerging markets have in recent years experienced proportionately higher sales growth and an increasing contribution to the industry's global performance. In 2015, the Group's Continuing Operations generated \$12.4 billion, or approximately 25% (2014: 26%) of the Group's net sales from emerging growth markets (the "**Emerging Growth Markets**")—which comprise all markets other than the established markets of the US, Canada, Western

Europe, Japan, Australia and New Zealand (the "**Established Markets**")—as compared with \$37.0 billion, or approximately 75% (2014: 74%) of the Group's net sales, in the Established Markets. However, combined net sales in the Emerging Growth Markets grew 7% in constant currencies in 2015, compared to 4% sales growth in constant currencies in the Established Markets during the same period. As a result of this trend, the Group continues to take steps to increase the Group's activities in the Emerging Growth Markets, and have been making significant investments in the Group's businesses in those countries.

In the past year, however, certain of these Emerging Growth Market countries, including Brazil, India, China and Russia, have experienced economic slowdowns. As a result, there can be no guarantee that the Group's efforts to expand the Group's sales in these countries will succeed, or that these countries will once again experience growth rates significantly in excess of the world's largest markets. In particular, some Emerging Growth Market countries may be especially vulnerable to the effects of the persistently weak global financial environment, may have very limited resources to spend on healthcare or may be susceptible to political and social instability. See "*The persistently weak global economic and financial environment in many countries and increasing political and social instability may have a material adverse effect on the Group's results*" above. Many of these countries are subject to increasing political and social pressures, including from a growing middle class seeking increased access to healthcare. Such pressures on local government may in turn result in an increased focus by the governments on the Group's pricing, and may put at risk the Group's intellectual property. See "*The Group's business is increasingly affected by pressures on pricing for the Group's products,*" and "*The Group's products face important patent expirations and significant competition*" above.

These countries also may have a relatively limited number of persons with the skills and training suitable for employment at an enterprise such as the Group's. See "*An inability to attract and retain qualified personnel could adversely affect the Group's business*" below. In some Emerging Growth Market countries, a culture of compliance with law may not be as fully developed as in the Established Markets—China's investigations of the activities of multinational healthcare companies, for example, have been well publicised—standards of acceptable behaviour may be lower than such standards in Established Markets, or the Group may be required to rely on third-party agents, in each case putting the Group at risk of liability and reputational damage. See "*Failure to comply with law, and resulting investigations and legal proceedings may have a significant negative effect on the Group's results of operations,*" and "*The Group's reliance on outsourcing and third parties for the performance of key business functions heightens the risks faced by the Group's businesses,*" above.

In addition, many of these countries have currencies that may fluctuate substantially. If these currencies devalue significantly against the US dollar—as happened in China and Russia, among others, in the past year—and the Group cannot offset the devaluations with price increases, then the Group's products may become less profitable, or may otherwise impact the Group's reported financial results. Currency devaluation risk may also exist in countries with high inflation economies. Should these countries take steps that cause their currencies to be devalued, the Group may realise a significant financial loss. See "*The persistently weak global economic and financial environment in many countries and increasing political and social instability may have a material adverse effect on the Group's results*" and "*Foreign exchange fluctuations may adversely affect the Group's earnings and the value of some of the Group's assets,*" above. Ongoing conditions in such high inflation countries could continue to lead to further devaluations of their currencies, which could in turn result in significant additional financial losses to the Group in the future.

For all these reasons, the Group's sales to Emerging Growth Markets carry significant risks. A failure to continue to expand the Group's business in Emerging Growth Markets could have a material adverse effect on the Group's business, financial condition or results of operations.

***Failure to obtain marketing exclusivity periods for new generic products, or to develop biosimilars and other differentiated products, as well as intense competition from patented and generic pharmaceuticals companies, may have an adverse effect on the success of the Group's Sandoz Division.***

The Group's Sandoz Division achieves significant revenue opportunities when it secures and maintains exclusivity periods granted for generic products in certain markets—particularly the 180-day exclusivity period granted in the US by the Hatch-Waxman Act for first-to-file generics—and when it is able to develop biosimilars and other differentiated products with few, if any, generic competitors. Failure to obtain and maintain these market opportunities could have an adverse effect on the success of Sandoz.

In addition, the division faces intense competition from companies that market patented pharmaceutical products, which sometimes take aggressive steps to prevent or delay the introduction of generic medicines, to



limit the availability of exclusivity periods or to reduce their value, and from other generic pharmaceutical companies, which aggressively compete for exclusivity periods and for market share of generic products that may be identical to certain of the Group's generic products. These activities may increase the costs and risks associated with the Group's efforts to introduce generic products and may delay or entirely prevent their introduction.

Sandoz has also invested heavily in the development of biosimilar drugs, despite the fact that regulations concerning their marketing and sale in certain countries, including in the US, are still under development or not entirely clear. If, despite ongoing efforts by the Group and others to encourage the development of such regulations, such regulations do not ultimately favour the development and sale of biosimilar products, then the Group may fail to achieve expected returns on the investments by Sandoz in the development of biosimilars. See also "*—The Group's research and development efforts may not succeed in bringing new products to market, or may fail to do so cost-efficiently enough, or in a manner sufficient to grow the Group's business and replace lost revenues and income*" above, with regard to the risks involved in the Group's efforts to develop differentiated generic products.

***If any of numerous key assumptions and estimates in calculating the Group's pension plan obligations turn out to be different from the Group's actual experience, the Group may be required to increase substantially the Group's contributions to pension plans as well as the amount the Group pays toward pension-related expenses in the future.***

The Group sponsors pension and other post-employment benefit plans in various forms. These plans cover a significant portion of the Group's current and former associates. While most of the Group's plans are now defined contribution plans, certain of the Group's associates remain under defined benefits plans. For these defined benefits plans, the Group is required to make significant assumptions and estimates about future events in calculating the present value of expected future expenses and liabilities related to these plans. These include assumptions used to determine the discount rates the Group applies to estimated future liabilities and rates of future compensation increases. In addition, the Group's actuarial consultants provide the Group's management with historical statistical information such as withdrawal and mortality rates in connection with these estimates. Assumptions and estimates used by Novartis may differ materially from the actual results the Group experiences due to changing market and economic conditions (including the effects of the persistently weak global financial environment, which, to date, have resulted in extremely low or negative interest rates in many countries), higher or lower withdrawal rates, or longer or shorter life spans of participants, among other variables. For example, a decrease in the interest rate the Group applies in determining the present value of expected future defined benefit obligations of one-quarter of one percent would have increased the Group's year-end defined benefit pension obligation for plans in Switzerland, US, UK, Germany and Japan, which represent about 95% of the Group total defined benefit pension obligation, by \$0.8 billion. Any differences between the Group's assumptions and estimates and the Group's actual experience could have a material effect on the Group's results of operations and financial condition. Further, additional employer contributions might be required if plan funding falls below the levels required by local rules. For more information on obligations under retirement and other post-employment benefit plans and underlying actuarial assumptions, see "Item 5. Operating and Financial Review and Prospects—Item 5.A Operating Results—Critical Accounting Policies and Estimates—Retirement and other post-employment benefit plans" and "Item 18. Financial Statements—Note 25" in the 2015 Form 20-F, which is incorporated by reference in this Listing Prospectus. See also "*—The persistently weak global economic and financial environment in many countries and increasing political and social instability may have a material adverse effect on the Group's results*" above.

***Changes in tax laws or their application could adversely affect the Group's results of operations.***

The integrated nature of the Group's worldwide operations enables the Group to achieve an attractive effective tax rate on the Group's earnings because a portion of the Group's earnings are earned in jurisdictions that tax profits at more favourable rates. In recent years, tax authorities around the world have increased their scrutiny of company tax structures, and have become more rigid in exercising any discretion they may have. As a result, companies' flexibility to optimally structure their organisations for business and tax purposes may be significantly reduced. In addition, the public is increasingly taking an interest in what the tax burden of multinational companies should be. Any changes in tax laws or in the laws' application that may result from this, including with respect to tax base or rate, transfer pricing, intercompany dividends and cross-border transactions, controlled corporations, and limitations on tax relief allowed on the interest on intercompany debt, could increase the Group's effective tax rate and adversely affect the Group's financial results.

***Counterfeit versions of the Group's products could harm the Group's patients and reputation.***

The Group's industry continues to be challenged by the vulnerability of distribution channels to illegal counterfeiting and the presence of counterfeit products in a growing number of markets and over the Internet. Counterfeit products are frequently unsafe or ineffective, and can potentially be life-threatening. To distributors and patients, counterfeit products may be visually indistinguishable from the authentic version. Reports of adverse reactions to counterfeit drugs or increased levels of counterfeiting could materially affect patient confidence in the authentic product, and harm the business of companies such as the Group's or lead to litigation. In addition, it is possible that adverse events caused by unsafe counterfeit products could mistakenly be attributed to the authentic product. If a product of the Group's was the subject of counterfeits, the Group could incur substantial reputational and financial harm.

***Ongoing consolidation among the Group's distributors and retailers is increasing both the purchasing leverage of key customers and the concentration of credit risk.***

Increasingly, a significant portion of the Group's global sales are made to a relatively small number of drug wholesalers, retail chains and other purchasing organisations. For example, the Group's three most important customers globally are all in the US, and accounted for approximately 14%, 11% and 5%, respectively, of Group net sales in 2015. The largest trade receivables outstanding were for these three customers, amounting to 13%, 9% and 6%, respectively, of the Group's trade receivables at 31 December 2015. The trend has been toward further consolidation among distributors and retailers, both in the US and internationally. As a result, the Group's customers are gaining additional purchasing leverage, which increases the pricing pressures facing the Group's businesses. Moreover, the Group is exposed to a concentration of credit risk as a result of this concentration among the Group's customers. If one or more of the Group's major customers experienced financial difficulties, the effect on the Group would be substantially greater than in the past. This could have a material adverse effect on the Group's business, financial condition and results of operations.

***An inability to attract and retain qualified personnel could adversely affect the Group's business.***

The Group highly depends upon skilled personnel in key parts of the Group's organisation, and the Group invests heavily in recruiting, training and retaining qualified individuals. The loss of the service of key members of the Group's organisation—including senior members of the Group's scientific and management teams, high-quality researchers and development specialists, and skilled personnel in emerging markets—could delay or prevent the achievement of major business objectives.

Future economic growth will demand talented associates and leaders, yet the market for talent has become increasingly competitive. In particular, emerging markets are expected to be a driving force in global growth, but in countries like Russia and China there is a limited pool of executives with the training and international experience needed to work successfully in a global organisation like Novartis.

In addition, shifting demographic trends are expected to result in fewer students, fewer graduates and fewer people entering the workforce in the Western world in the next 10 years. Moreover, many members of younger generations around the world have changing expectations toward careers, engagement and the integration of work in their overall lifestyles.

The supply of talent for certain key functional and leadership positions is decreasing, and a talent gap is visible for some professions and geographies—engineers in Germany, for example. Recruitment is increasingly regional or global in specialised fields such as clinical development, biosciences, chemistry and information technology. In addition, the geographic mobility of talent is expected to decrease in the future, with talented individuals in developed and emerging countries anticipating ample career opportunities closer to home than in the past. This decrease in mobility may be worsened by anti-immigrant sentiments in many countries, and laws discouraging immigration.

In addition, the Group's ability to hire qualified personnel also depends on the flexibility to reward superior performance and to pay competitive compensation. Laws and regulations on executive compensation, including legislation in the Group's home country, Switzerland, may restrict the Group's ability to attract, motivate and retain the required level of qualified personnel.

The Group faces intense competition for an increasingly limited pool of qualified individuals from numerous pharmaceutical and biotechnology companies, universities, governmental entities, other research institutions,

other companies seeking to enter the healthcare space, and companies in other industries. As a result, despite significant efforts on the Group's part, the Group may be unable to attract and retain qualified individuals in sufficient numbers, which could have an adverse effect on the Group's business, financial condition and results of operations.

***Significant breaches of data security or disruptions of information technology systems, including by cyber-attack or other security breach, and breaches of the privacy rights of third parties could adversely affect the Group's business.***

The Group's business is heavily dependent on critical, complex and interdependent information technology systems, including Internet-based systems, to support business processes. In addition, Novartis and the Group's employees rely on internet and social media tools and mobile technologies as a means of communications, and to gather information. The Group is also increasingly seeking to develop technology-based products such as mobile applications that go "beyond the pill" to improve patient welfare in a variety of ways, which could result in the Group gathering information about patients and others electronically.

The size and complexity of the Group's information technology systems, and, in some instances, their age, make them potentially vulnerable to external or internal security breaches, breakdowns, malicious intrusions, malware, misplaced or lost data, programming or human errors, or other similar events. Although the Group has devoted and continues to devote significant resources and management attention to the protection of the Group's data and information technology, like many companies, the Group has experienced such events and expect to continue to experience them in the future. The Group believes that the data security breaches the Group has experienced to date have not resulted in significant disruptions to the Group's operations, and will not have a significant adverse effect on the Group's current or future results of operations. However, the Group may not be able to prevent breakdowns or breaches in the Group's systems that could have a material adverse effect on the Group's business, financial condition, results of operation or reputation.

Any such events could negatively impact important business processes, such as the conduct of scientific research and clinical trials, the submission of the results of such efforts to health authorities in support of requests for product approvals, the functioning of the Group's manufacturing and supply chain processes, the Group's compliance with legal obligations and other key business activities. Such potential information technology issues could lead to the loss of important information such as trade secrets or other intellectual property and could accelerate development or manufacturing of competing products by third parties. In addition, malfunctions in software or devices that make significant use of information technology, including the Group's Alcon surgical equipment, could lead to a risk of harm to patients.

The Group's use of information technologies, including internet, social media, mobile technologies, and technology-based medical devices, as well as other routine business operations, sometimes involve the Group's gathering personal information (including sensitive personal information) regarding the Group's patients, vendors, customers, employees, collaborators and others. Breaches of the Group's systems or other failures to protect such information could expose the personal information of third parties to unauthorised persons. Any such information or other privacy breaches could give rise to significant potential liability and reputational harm. In addition, the Group makes substantial efforts to ensure that any international transfers of personal data are done in compliance with applicable law. Any restrictions that may be placed on the Group's ability to transfer such data could have a material adverse effect on the Group's business, financial condition, results of operations and reputation.

In addition, to the extent that the Group seeks as a company to use internet, social media and mobile tools as a means to communicate with the public about the Group's products or about the diseases the Group's products are intended to treat, there continue to be significant uncertainties as to the rules that apply to such communications, and as to the interpretations that health authorities will apply in this context to the rules that do exist. As a result, despite the Group's efforts to comply with applicable rules, there is a significant risk that the Group's use of social media and mobile technologies for such purposes may cause the Group to nonetheless be found in violation of them.

Any such breaches of data security or information technology disruptions or privacy violations could give rise to the loss of trade secrets or other intellectual property, to the public exposure of personal information, and to interruptions to the Group's operations, and could result in liability or enforcement actions, which could require the Group to expend significant resources to continue to modify or enhance the Group's protective measures and

to remediate any damage. Such events could have a material adverse effect on the Group's business, financial condition, results of operations and reputation.

***Environmental liabilities may adversely impact the Group's results of operations.***

The environmental laws of various jurisdictions impose actual and potential obligations on the Group to remediate contaminated sites, in some cases over many years. While the Group has set aside substantial provisions for worldwide environmental liabilities, there is no guarantee that additional costs will not be incurred beyond the amounts for which the Group has provided in the Group consolidated financial statements. If environmental contamination caused by the Group adversely impact third parties, if the Group fails to properly manage the safety of the Group's facilities and the environmental risks, or if the Group is required to further increase the Group's provisions for environmental liabilities in the future, this could have a material adverse effect on the Group's business, financial condition, results of operations, and on the Group's reputation. See also "Item 4.D Property, Plants and Equipment—Environmental Matters" and "Item 18. Financial Statements—Note 20" in the 2015 Form 20-F, which is incorporated by reference in this Listing Prospectus.

***Extreme weather events, earthquakes and other natural disasters could adversely affect the Group's business.***

In recent years, extreme weather events and changing weather patterns such as storms, flooding, drought, and temperature changes, appear to have become more common. The Group operates in countries around the world. As a result, the Group is potentially exposed to varying natural disaster or extreme weather risks like hurricanes, tornadoes or floods, or other events that may result from the impact of climate change on the environment. As a result of such events, the Group could experience business interruptions, destruction of facilities and loss of life, all of which could have a material adverse effect on the Group's business, financial condition and results of operations.

In addition, the Group's corporate headquarters, the headquarters of the Group's Pharmaceuticals Division, and certain of the Group's major Pharmaceuticals Division production and research facilities are located near earthquake fault lines in Basel, Switzerland. Other major facilities are located near major earthquake fault lines in various locations around the world. In the event of a major earthquake, the Group could experience business interruptions, destruction of facilities and loss of life, all of which could have a material adverse effect on the Group's business, financial condition and results of operations. See also "*—The manufacture of the Group's products is highly regulated and complex, and may result in a variety of issues that could lead to extended supply disruptions and significant liability,*" above.

**Risks Related to the Notes**

***Complexity of the Notes as financial instrument.***

The Notes are financial instruments that may not be suitable for all investors. Each prospective investor should (i) have sufficient knowledge and experience to make a meaningful evaluation of the Notes, the merits and risks of investing in the Notes and the information contained or incorporated by reference in this Listing Prospectus; (ii) have access to, and knowledge of, appropriate analytical tools to evaluate, in the context of the investor's particular financial situation, an investment in the Notes and the impact the Notes will have on the investor's overall investment portfolio; (iii) have sufficient financial resources and liquidity to bear all of the risks of an investment in the Notes and (iv) be able to evaluate (either alone or with the help of a financial adviser) possible scenarios for economic, Rate of Interest and other factors that may affect the investor's investment and the investor's ability to bear the applicable risks.

Before investing in the Notes, each prospective investor should have understood the Terms and Conditions of the Notes and be familiar with them and the content of this Listing Prospectus.

***There may not be a liquid market for the Notes.***

The liquidity of any market will depend upon the number of Noteholders, the market for similar securities, the interest of securities dealers in engaging in market-making activities with respect to the Notes and other factors. Although the Notes are listed on SIX Swiss Exchange and are expected to be listed on the Regulated Market of the London Stock Exchange, no assurance can be given as to the liquidity of any trading market that may develop for the Notes. Under certain circumstances, Noteholders may not be able to sell their Notes at the offer price, a higher price or at all.

***The market for and price of the Notes may be volatile.***

The trading prices of the Notes may be subject to fluctuations in response to numerous factors including, but not limited to, variations in the periodic operating results of the Group, changes in investor perceptions of the Group, the depth and liquidity of the market for the Notes and changes in actual or forecasted global or regional economic conditions and interest rate fluctuations. In addition, the global securities markets have from time to time experienced price and volume fluctuations.

Developments in and changes to securities analyst recommendations regarding the markets in which the Group is active may also influence and introduce volatility to the price of the Notes in the market. Any such broad market fluctuations may adversely affect the trading price of the Notes.

***The Issuer and/or the Group can incur additional debt.***

The Terms and Conditions of the Notes do not limit the amount of additional indebtedness that the Issuer, the Guarantor and/or the Group can create, incur, assume or guarantee, and therefore, the Issuer, the Guarantor and/or the Group may create, incur, assume or guarantee additional indebtedness and such debt may rank equally with the Notes or may be privileged, either by virtue of securities granted or by way of structural subordination of the Notes.

In particular, the Issuer may from time to time, without the consent of the Noteholders, create and issue further notes having the same terms and conditions in all respects as the Notes being offered hereby, except for the issue date, the issue price and the first payment of interest thereon. In addition, the Issuer may from time to time, without the consent of the Noteholders, issue additional debt, and the Guarantor may among other things issue additional guarantees.

***The Issuer relies on the Guarantor.***

The Issuer is a finance entity and relies on the credit of the Guarantor. Therefore, the credit ratings assigned to the Notes are based primarily on the financial strength of the Guarantor and may not reflect the potential impact of all risks related to structure and other factors on the value of the Notes. Accordingly, the assets of the Issuer should not be primarily relied upon by prospective investors in making an investment decision to purchase the Notes. Rather, any investment decision to purchase the Notes should be based primarily on the financial strength of the Guarantor.

***The right to receive payments under the Guarantee is structurally subordinated to the liabilities of the Guarantor's subsidiaries.***

The Guarantor is organised as a holding company, and substantially all of its operations are carried on through subsidiaries. The ability of the Guarantor to meet its financial obligations is dependent upon the availability of cash flows from its domestic and foreign subsidiaries and affiliated companies through dividends, intercompany advances, management fees and other payments.

The Notes are obligations of the Issuer and are guaranteed exclusively by the Guarantor. The subsidiaries of the Guarantor are separate and distinct legal entities, and have no obligations to pay any amounts due on the Guarantee or to provide the Issuer with funds for its payment obligations. The Guarantor's right to receive any assets of any of the subsidiaries, as an equity holder of such subsidiaries, upon their liquidation or reorganisation, and therefore the right of the Noteholders to participate in those assets through the Guarantee, will be effectively subordinated to the claims of that subsidiary's creditors. The Guarantee does not restrict the ability of the Guarantor's subsidiaries to incur additional indebtedness or other liabilities. Even if the Guarantor were a creditor of any of its subsidiaries, its rights as a creditor would be subordinated to any security interest in the assets of its subsidiaries and any indebtedness of its subsidiaries senior to that held by the Guarantor.

***The Notes will rank below any secured debt of the Issuer and the Guarantee will rank below the secured debt of the Guarantor.***

The Notes constitute unsecured obligations of the Issuer and will rank equal in right of payment to all other existing and future unsecured indebtedness of the Issuer. The Notes will be subordinated to all existing and future secured indebtedness of the Issuer to the extent of the assets securing that indebtedness. The Guarantee by the Guarantor will be subordinated to all existing and future secured indebtedness of the Guarantor to the extent

of the assets securing that indebtedness. If the Issuer or the Guarantor incurs additional indebtedness and secures such indebtedness with its assets, the Noteholders' right to receive payments under the Notes and the Guarantee will be subordinated to the rights of the holders of such future secured indebtedness. As of the date of this Listing Prospectus, neither the Guarantor nor the Issuer has any secured indebtedness.

***The right to receive payments under the Notes may be adversely affected by Luxembourg bankruptcy laws.***

The Issuer is established under the laws of Luxembourg. Consequently, in the event of a bankruptcy or insolvency of the Issuer, insolvency proceedings may be based on and governed by the insolvency laws of Luxembourg. The insolvency laws of Luxembourg may be less favourable to your interest as creditors than the bankruptcy laws of another jurisdiction with which you may be familiar, in particular with respect to priority creditors, ability to obtain post-petition interest and the duration of the insolvency proceedings. The application of these laws, and any conflict between them, may limit your ability to recover payments due on the Notes to an extent exceeding the limitations arising under other insolvency laws.

***The right to receive payments under the Guarantee of the Guarantor may be adversely affected by Swiss bankruptcy laws.***

The Guarantor is incorporated under the laws of Switzerland. Accordingly, bankruptcy proceedings with respect to the Guarantor are likely to proceed under, and to be governed primarily by, Swiss bankruptcy law. These provisions afford debtors and unsecured creditors only limited protection from the claims of secured creditors and it may not be possible for the Issuer or other unsecured creditors to prevent or delay the secured creditors from enforcing their security to repay the debts due to them under the terms that such security was granted.

***Legal investment considerations may restrict certain investments.***

The investment activities of certain investors are subject to legal investment laws and regulations, or review or regulation by certain authorities. Each prospective investor should consult its legal advisers to determine whether and to what extent (i) the Notes are lawful investments for it, (ii) the Notes can be used as collateral for various types of borrowing and (iii) other restrictions apply to its purchase or pledge of any Notes.

Financial institutions should consult their legal advisers or the appropriate regulators to determine the appropriate treatment of Notes under any applicable risk-based capital or similar rules.

***The Notes are subject to optional redemption by the Issuer.***

The Issuer may redeem the Notes at its option at any time and from time to time. See Condition 7.2 "Redemption for Taxation Reasons" and Condition 7.3 "Redemption at the option of the Issuer" of the Terms and Conditions of the Notes. The optional redemption features may limit the market value of the Notes.

***Modification, waivers and substitution.***

The Terms and Conditions of the Notes contain provisions for calling meetings of Noteholders to consider matters affecting their interests generally. These provisions permit defined majorities to bind all Noteholders, including Noteholders who did not attend and vote at the relevant meeting and Noteholders who voted in a manner contrary to the majority. The Terms and Conditions of the Notes also provide that the Fiscal Agent may, without the consent of Noteholders, agree to any modification of any of the Terms and Conditions of the Notes or any of the provisions of the Agency Agreement either (i) for the purpose of curing any ambiguity or of curing, correcting or supplementing any manifest or proven error or any other defective provision contained herein or therein or (ii) in any other manner which is not materially prejudicial to the interests of the Noteholders.

***Because the Global Notes are held by or on behalf of Euroclear and Clearstream, Luxembourg, Noteholders will have to rely on their procedures for transfer, payment and communication with the Issuer and/or the Guarantor.***

The Notes will be represented by the Global Notes except in certain limited circumstances described in the Permanent Global Note. The Global Notes will be deposited with a common safekeeper for Euroclear and Clearstream, Luxembourg. Except in certain limited circumstances described in the Permanent Global Note, Noteholders will not be entitled to receive definitive Notes. Euroclear and Clearstream, Luxembourg will maintain records of the beneficial interests in the Global Notes. While the Notes are represented by the Global

Notes, Noteholders will be able to trade their beneficial interests only through Euroclear and Clearstream, Luxembourg and their respective participants.

The Issuer and the Guarantor will discharge their payment obligations under the Notes by making payments to the common safekeeper for Euroclear and Clearstream, Luxembourg for distribution to their account holders. A holder of a beneficial interest in a Global Note must rely on the procedures of Euroclear and Clearstream, Luxembourg to receive payments under the Notes. The Issuer and the Guarantor have no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Notes.

Holders of beneficial interests in the Global Notes will not have a direct right to vote in respect of the Notes. Instead, such holders will be permitted to act only to the extent that they are enabled by Euroclear and Clearstream, Luxembourg to appoint appropriate proxies. Similarly, holders of beneficial interests in the Global Notes will not have a direct right under the Global Notes to take enforcement action against the Issuer or the Guarantor in the event of a default under the Notes but will have to rely upon their rights under the Deed of Covenant.

***Minimum Denomination.***

The Terms and Conditions of the Notes provide that Notes will be issued with a minimum denomination of EUR 100,000 and integral multiples of EUR 1,000 in excess thereof. As the Notes are traded in clearing systems, it is possible that the clearing systems may process trades which could result in amounts being held in denominations smaller than EUR 100,000. If definitive Notes are required to be issued in relation to such Notes in accordance with the provisions of the terms of the relevant Global Notes, a Noteholder who does not have an integral multiple of EUR 100,000 in his account with the relevant clearing system at the relevant time may not receive all of his entitlement in the form of definitive Notes unless and until such time as his holding becomes an integral multiple of EUR 100,000.

***Exchange rate risks and exchange controls.***

The Issuer will pay principal and interest on the Notes in Euro. This presents certain risks relating to currency conversions if an investor's financial activities are denominated principally in a currency or currency unit (the "**Investor's Currency**") other than Euro. These include the risk that exchange rates may significantly change (including changes due to devaluation of the Euro or revaluation of the Investor's Currency) and the risk that authorities with jurisdiction over the Investor's Currency may impose or modify exchange controls. An appreciation in the value of the Investor's Currency relative to the Euro would decrease (1) the Investor's Currency-equivalent yield on the Notes, (2) the Investor's Currency equivalent value of the principal payable on the Notes and (3) the Investor's Currency equivalent market value of the Notes.

Government and monetary authorities may impose (as some have done in the past) exchange controls that could adversely affect an applicable exchange rate. As a result, investors may receive less interest or principal than expected, or no interest or principal.

***Credit ratings may not reflect all risks.***

The Notes have been assigned a rating of AA- by Standard & Poor's Ratings Services and Aa3 by Moody's Investors Service, Inc. Such ratings may not reflect the potential impact of all risks related to structure, market, additional factors discussed above, and other factors that may affect the value of the Notes. A credit rating is not a recommendation to buy, sell or hold the Notes and may be revised or withdrawn by the rating agency at any time.

***Enforcement claims or court judgments against the Guarantor must be converted into Swiss francs.***

Enforcement claims, including for court judgments, against the Guarantor under Swiss debt collection or bankruptcy proceedings may only be made in Swiss francs and any foreign currency amounts must accordingly be converted into Swiss francs. With respect to enforcing creditors, any such foreign currency amounts will be converted at the exchange rate prevailing on (i) the date of instituting the enforcement proceedings (*Betriebsbegehren*), (ii) the date on which any amounts claimed first became due and payable (*Fälligkeit*), whichever date is more favourable for the creditors. With respect to non-enforcing creditors, foreign currency amounts will be converted at the exchange rate prevailing at the time of the adjudication of bankruptcy (*Konkurrenzeröffnung*).

### *Changes in Law.*

The Terms and Conditions of the Notes are governed and construed in accordance with English law in effect as at the date of this Listing Prospectus. Such laws and the interpretation thereof have been and are subject to change. No assurance can be given as to the impact of any possible judicial decision or change to English law or administrative practice after the date of this Listing Prospectus nor can any assurance be given as to whether any such change would adversely affect the ability of the Issuer (or the Guarantor) to make payments under the Notes.

### *The proposed financial transactions tax ("FTT").*

On 14 February 2013, the European Commission published a proposal (the "**Commission's Proposal**") for a Directive for a common FTT in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (the "**participating Member States**"). However, Estonia has since stated that it will not participate.

The Commission's Proposal has very broad scope and could, if introduced, apply to certain dealings in the Notes (including secondary market transactions) in certain circumstances.

Under the Commission's Proposal the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in the Notes where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the FTT proposal remains subject to negotiation between the participating Member States. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate.

Prospective Noteholders are advised to seek their own professional advice in relation to the FTT.

### *US Foreign Account Tax Compliance Withholding.*

Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986, and US Treasury regulations promulgated thereunder, (together "**FATCA**") impose a reporting regime and potentially a 30% withholding tax with respect to certain payments to (i) any non-U.S. financial institution (a "foreign financial institution", or "FFI" (as defined by FATCA)) that does not become a "Participating FFI" by entering into an agreement with the U.S. Internal Revenue Service ("**IRS**") to provide the IRS with certain information in respect of its account holders and investors or is not otherwise exempt from or in deemed compliance with FATCA and (ii) any investor (unless otherwise exempt from FATCA) that does not comply with information requests by the Issuer, or other payors (a "**Recalcitrant Holder**"). Investors will be required to provide certain information (which may include an IRS tax form) to the Issuer, or other payors.

FATCA implementation is being phased in from 1 July 2014 for payments from sources within the United States and is currently proposed to apply to "foreign passthru payments" (a term not yet defined) made by an FFI to a non-participating FFI or Recalcitrant Holder no earlier than 1 January 2019. This withholding would potentially apply to payments in respect of (i) any securities issued or materially modified on or after the "grandfathering date", which is the later of (a) 1 July 2014 and (b) the date that is six months after the date on which final U.S. Treasury regulations defining the term 'foreign passthru payment' are filed with the Federal Register; and (ii) any securities characterised as equity or which do not have a fixed term for U.S. federal tax purposes, whenever issued.

The United States and a number of other jurisdictions announced their intention to enter into intergovernmental agreements to facilitate the implementation of FATCA (each, an "**IGA**"). Pursuant to FATCA and the "Model 1" IGA released by the United States, FFIs in a Model 1 IGA jurisdiction treated as "Reporting FIs" would generally not be subject to withholding under FATCA on any payments they receive. Further, an FFI in a Model 1 IGA jurisdiction generally should not be required to withhold under FATCA or an IGA (any such withholding being a "**FATCA Withholding**") from payments it makes. Under the Model 1 IGA, a Reporting FI would still be required to report certain information in respect of its account holders and investors to its home



government. The United States and the Luxembourg have entered into an agreement (the "**US-Luxembourg IGA**") based on the Model 1 IGA. Therefore the Issuer will be required to report certain investors (and related information) to the Luxembourg tax authority.

Subject to complying with Luxembourg law implementing the US-Luxembourg IGA, the Issuer is currently not expected to suffer any FATCA Withholding. Although the Issuer will attempt to satisfy any obligations imposed on it to avoid the imposition of FATCA Withholding, no assurance can be given that the Issuer will be able to satisfy these obligations. Further, the Issuer is not expected to be required to make any FATCA Withholding from the payments it makes. There can be no assurance, however, that the Issuer would not in the future be required to deduct FATCA Withholding from future payments. Accordingly, the Issuer and financial institutions through which payments on the Notes are made may be required to withhold FATCA Withholding if (i) any FFI through or to which payment on such Notes is made is not a Participating FFI, a Reporting FI, or otherwise exempt from or in deemed compliance with FATCA or (ii) an investor is a Recalcitrant Holder.

If a FATCA Withholding were to be made from interest, principal or other payments made in respect of the Notes, neither the Issuer nor any paying agent nor any other person would, pursuant to the Terms and Conditions of the Notes, be required to pay any additional amounts as a result of the FATCA Withholding. As a result, investors may receive less interest or principal than expected.

While the Notes are in global form and held within the ICSDs (as defined below), in all but the most remote circumstances, it is not expected that FATCA will affect the amount of any payment received by the ICSDs. However, FATCA may affect payments made to custodians or intermediaries in the subsequent payment chain leading to the ultimate investor if any such custodian or intermediary generally is unable to receive payments free of FATCA Withholding. It may also affect payment to any ultimate investor that is a financial institution that is not entitled to receive payments free of withholding under FATCA, or an ultimate investor that fails to provide its broker (or other custodian or intermediary from which it receives payment) with any information, forms, other documentation or consents that may be necessary for the payments to be made free of FATCA Withholding. Investors should choose the custodians or intermediaries with care (to ensure that each is compliant with FATCA or other laws or agreements related to FATCA) and provide each custodian or intermediary with any information, forms and/or other documentation or consents that may be necessary for such custodian or intermediary to make a payment free of FATCA Withholding. Investors should consult their own tax adviser to obtain a more detailed explanation of FATCA and how FATCA may affect them. The Issuer's obligations under the Notes are discharged once it has made payment to, or to the order of, the common depository or common safekeep or for the ICSDs (as bearer of the Notes) and the Issuer has therefore no responsibility for any amount thereafter transmitted through the ICSDs and custodians or intermediaries.

THE ABOVE DESCRIPTION IS BASED IN PART ON REGULATIONS, OFFICIAL GUIDANCE AND IGAS, ALL OF WHICH ARE SUBJECT TO CHANGE OR MAY BE IMPLEMENTED IN A MATERIALLY DIFFERENT FORM. NOTHING IN THIS SECTION CONSTITUTES OR PURPORTS TO CONSTITUTE TAX ADVICE AND NOTEHOLDERS ARE NOT ENTITLED TO RELY ON ANY PROVISION SET OUT IN THIS SECTION FOR THE PURPOSES OF MAKING ANY INVESTMENT DECISION, TAX DECISION OR OTHERWISE. EACH INVESTOR SHOULD CONSULT ITS OWN TAX ADVISER TO OBTAIN A MORE DETAILED EXPLANATION OF THE FATCA PROVISIONS AND TO LEARN HOW THIS LEGISLATION MIGHT AFFECT IT IN ITS PARTICULAR CIRCUMSTANCE.

## INFORMATION INCORPORATED BY REFERENCE

The following information shall be deemed to be incorporated in, and to form part of, this Listing Prospectus:

- the annual report on Form 20-F of the Guarantor for the year ended 31 December 2015 (the "**2015 Form 20-F**") as filed with the U.S. Securities and Exchange Commission on 27 January 2016, including the audited consolidated financial statements of the Novartis Group for the years ended 31 December 2015 and 31 December 2014 on pages F-1 to F-118 of the 2015 Form 20-F;
- the statutory unconsolidated financial statements of Novartis AG for the years ended 31 December 2015 and 31 December 2014 set out on pages 245–253 of the 2015 annual report (the "**2015 Annual Report**") prepared for Swiss and other registered shareholders of the Novartis Group; and
- the earnings release and unaudited condensed interim financial report of the Guarantor for the first quarter of 2016, as published by the Guarantor on 21 April 2016.

Any statement contained in the information which is deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purpose of this Listing Prospectus to the extent that a statement contained herein modifies or supersedes such earlier statement (whether expressly, by implication or otherwise). Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Listing Prospectus. Certain information contained in the documents listed above has not been incorporated by reference in this Listing Prospectus. Such information is either not relevant to investors or is covered elsewhere in this Listing Prospectus.

Any documents themselves incorporated by reference in the documents listed above shall not form a part of this Listing Prospectus.

Copies of the documents specified above as containing information incorporated by reference in this Listing Prospectus (together with English translations thereof) may be inspected, free of charge, during normal business hours at the offices of Novartis AG at Lichtstrasse 35, 4056 Basel, Switzerland.

Copies of the documents specified above may also be found on <https://www.novartis.com/investors/financial-data>.

Save as explicitly set forth herein, information on the Guarantor's website, any website directly or indirectly linked to the Guarantor's website or any other website mentioned in this Listing Prospectus does not constitute in any way part of this Listing Prospectus and is not incorporated by reference into this Listing Prospectus, and investors should not rely on it in making their decision to invest in the Notes.

## **USE OF PROCEEDS**

The net proceeds of the issue of the Notes, which amounted to EUR 596,262,000 after deduction of commissions and expenses incurred in connection with the issue of the Notes, are being used for the Group's general corporate purposes outside of Switzerland, which may include the refinancing of existing short- and long-term indebtedness.

## TERMS AND CONDITIONS OF THE NOTES

*The following is the text of the Conditions of the Notes which (subject to modification) will be endorsed on each Note in definitive form. The terms and conditions applicable to any Note in global form will differ from those terms and conditions which would apply to the Note were it in definitive form to the extent described under "Summary of Provisions Relating to the Notes while in Global Form" below.*

The EUR 600,000,000 1.625 per cent. Guaranteed Notes due 2026 (the "**Notes**", which expression shall in these Conditions, unless the context otherwise requires, include any further notes issued pursuant to Condition 15 (*Further Issues*) and forming a single series with the Notes) of Novartis Finance S.A (the "**Issuer**") are issued subject to and with the benefit of an Agency Agreement dated 7 November 2014 (such agreement as amended and/or supplemented and/or restated from time to time, the "**Agency Agreement**") made between the Issuer, Novartis AG (the "**Guarantor**") as guarantor, Deutsche Bank AG, London Branch as fiscal agent and principal paying agent (the "**Fiscal Agent**", which expression includes any successor fiscal agent appointed from time to time in connection with the Notes), BNP Paribas (Suisse) SA as Swiss paying agent (the "**Swiss Paying Agent**", which expression includes any successor Swiss paying agent appointed from time to time in connection with the Notes) and the other initial paying agents named in the Agency Agreement (together with the Fiscal Agent, the "**Paying Agents**"). The holders of the Notes (the "**Noteholders**" and, each individually, a "**Noteholder**") and the holders of the interest coupons appertaining to the Notes (the "**Couponholders**" and the "**Coupons**") are entitled to the benefit of a Deed of Covenant (the "**Deed of Covenant**") dated 7 November 2014 and made by the Issuer. The original of the Deed of Covenant is held by the Fiscal Agent on behalf of the Noteholders and Couponholders at its specified office.

The statements in these Conditions include summaries of, and are subject to, the detailed provisions of and definitions in the Agency Agreement. Copies of the Agency Agreement and the Deed of Covenant are available for inspection during normal business hours by the Noteholders and Couponholders at the specified office of each of the Paying Agents. The Noteholders and the Couponholders are entitled to the benefit of, are bound by, and are deemed to have notice of, all the provisions of the Agency Agreement and the Deed of Covenant applicable to them. References in these Conditions to the Fiscal Agent and the Paying Agents shall include any successor appointed under the Agency Agreement.

### 1. **FORM, DENOMINATION AND TITLE**

#### 1.1 **Form and Denomination**

The Notes are in bearer form, serially numbered, in the denominations of EUR 100,000 and integral multiples of EUR 1,000 in excess thereof. Notes of one denomination may not be exchanged for Notes of the other denomination. No Notes in definitive form will be issued with a denomination above EUR 199,000.

#### 1.2 **Title**

Title to the Notes and to the Coupons will pass by delivery.

#### 1.3 **Holder Absolute Owner**

The Issuer, the Guarantor and any Paying Agent may (to the fullest extent permitted by applicable laws) deem and treat the bearer of any Note or Coupon as the absolute owner for all purposes (whether or not the Note or Coupon shall be overdue and notwithstanding any notice of ownership or writing on the Note or Coupon or any notice of previous loss or theft of the Note or Coupon).

### 2. **STATUS OF THE NOTES**

The Notes and the Coupons are direct, unconditional, unsubordinated and (subject to the provisions of Condition 4) unsecured obligations of the Issuer and (subject as provided above) rank and will rank *pari passu*, without any preference among themselves, with all other outstanding present and future unsecured and unsubordinated obligations of the Issuer but, in the event of insolvency, only to the extent permitted by applicable laws relating to creditors' rights.

### 3. **GUARANTEE**

#### 3.1 **Guarantee**

The Guarantor has, under a deed of guarantee (the "**Guarantee**") dated 7 November 2014, unconditionally and irrevocably guaranteed the due and punctual payment of all sums from time to time payable by the Issuer in respect of the Notes and the Coupons as and when the same become due and payable.

#### 3.2 **Status of the Guarantee**

The obligations of the Guarantor under the Guarantee constitute direct, unconditional, unsubordinated and (subject to the provisions of Condition 4) unsecured obligations of the Guarantor and (subject as provided above) rank and will rank *pari passu* with all other outstanding present and future unsecured and unsubordinated obligations of the Guarantor but, in the event of insolvency, only to the extent permitted by applicable laws relating to creditors' rights. The original of the Guarantee is held by the Fiscal Agent on behalf of, and copies are available for inspection by, the Noteholders and Couponholders at its specified office.

### 4. **NEGATIVE PLEDGE**

#### 4.1 **Negative Pledge**

So long as any Note remains outstanding (as defined in the Agency Agreement), neither the Issuer nor the Guarantor will create or have outstanding any mortgage, pledge, lien, charge or other security interest (each a "**Security Interest**") upon the whole or any part of its assets, present or future (including any uncalled capital) to secure any existing or future Relevant Indebtedness (or to secure any guarantee or indemnity in respect thereof) unless the Issuer or, as the case may be, the Guarantor, in the case of the creation of a Security Interest, before or at the same time and, in any other case, promptly, takes any and all action necessary to ensure that:

- (a) all amounts payable by it under the Notes and the Coupons are secured by the Security Interest equally and rateably with such Relevant Indebtedness; or
- (b) such other Security Interest or other arrangement (whether or not it includes the giving of a Security Interest) is provided as is approved by an Extraordinary Resolution (as defined in the Agency Agreement) of the Noteholders.

Notwithstanding the foregoing, the provisions of this Condition 4 do not, and will not, apply to:

- (i) any Security Interest arising by operation of law; and
- (ii) Security Interests on the assets of any person existing at the time such person is merged with or into or consolidated with the Guarantor.

#### 4.2 **Interpretation**

For the purposes of this Condition 4:

"**assets**" means the assets of the Issuer and the Guarantor, respectively, and does not include the assets of their respective subsidiaries; and

"**Relevant Indebtedness**" means any indebtedness in the form of, or represented or evidenced by, bonds, debentures, notes or other securities which are or are capable of being quoted, listed or traded on any stock exchange or in any securities market or over-the-counter market.

## 5. INTEREST

### 5.1 Interest Rate and Interest Payment Dates

The Notes bear interest from and including 7 November 2014 (the "**Issue Date**") at the rate of 1.625 per cent. per annum (the "**Rate of Interest**"), payable annually in arrear on 9 November (each an "**Interest Payment Date**"). The amount of interest payable on each Interest Payment Date shall be EUR 16.25 per EUR 1,000 of outstanding principal amount of the Notes (the "**Calculation Amount**"), save that the first payment of interest (which shall be made on 9 November 2015) shall amount to EUR 16.34 per EUR 1,000 of outstanding principal amount of the Notes.

### 5.2 Interest Accrual

Each Note will cease to bear interest from and including its due date for redemption unless, upon due presentation, payment of the principal in respect of the Note is improperly withheld or refused or unless default is otherwise made in respect of payment. In such event, interest will continue to accrue until whichever is the earlier of:

- (a) the date on which all amounts due in respect of such Note have been paid; and
- (b) five days after the date on which the full amount of the moneys payable in respect of such Notes has been received by the Fiscal Agent and notice to that effect has been given to the Noteholders in accordance with Condition 12.

### 5.3 Calculation of Broken Interest

If interest is required to be paid in respect of a Note on any date other than an Interest Payment Date, it shall be calculated by applying the Rate of Interest to the Calculation Amount, multiplying the product by the relevant Day Count Fraction, rounding the resulting figure to the nearest cent, with 0.5 cents being rounded upwards and multiplying such rounded figure by a fraction equal to the denomination of such Note divided by the Calculation Amount, where "**Day Count Fraction**" means, for these purposes, (a) the actual number of days in the period from and including the most recent Interest Payment Date (or, if none, the Issue Date) (the "**Accrual Date**") to but excluding the date on which it falls due divided by (b) the actual number of days from and including the Accrual Date to but excluding the next following Interest Payment Date.

## 6. PAYMENTS

### 6.1 Payments in respect of Notes

Payments of principal and interest in respect of each Note will be made against presentation and surrender (or, in the case of partial payment only, endorsement) of the Note, except that payments of interest due on an Interest Payment Date will be made against presentation and surrender (or, in the case of part payment only, endorsement) of the relevant Coupon, in each case at the specified office outside the United States of any of the Paying Agents.

### 6.2 Method of Payment

Payments will be made by credit or transfer to a euro account specified by the payee with a bank in a city in which banks have access to the TARGET System. For the purposes of these Conditions, "**TARGET System**" means the Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET2) payment system.

### 6.3 Missing Unmatured Coupons

Each Note should be presented for payment together with all relative unmatured Coupons, failing which the full amount of any relative missing unmatured Coupon (or, in the case of payment not being made in full, that proportion of the full amount of the missing unmatured Coupon which the amount so paid bears to the total amount due) will be deducted from the amount due for payment. Each amount so deducted will be paid in the manner mentioned above against presentation and surrender (or, in the case

of part payment only, endorsement) of the relative missing Coupon at any time before the expiry of 10 years after the Relevant Date (as defined in Condition 8.2) in respect of the relevant Note (whether or not the Coupon would otherwise have become void pursuant to Condition 9) or, if later, five years after the date on which the Coupon would have become due, but not thereafter.

#### 6.4 **Payments subject to Applicable Laws**

Payments in respect of principal and interest on Notes are subject in all cases to (a) any fiscal or other laws and regulations applicable in the place of payment, but without prejudice to the provisions of Condition 8 and (b) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the U.S. Internal Revenue Code of 1986 (the "**Code**") or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof ("**FATCA**"), or (without prejudice to the provisions of Condition 8) any law implementing an intergovernmental approach thereto.

#### 6.5 **Payment only on a Presentation Date**

A holder shall be entitled to present a Note or Coupon for payment only on a Presentation Date and shall not, except as provided in Condition 5, be entitled to any further interest or other payment if a Presentation Date is after the due date.

"**Presentation Date**" means a day which (subject to Condition 9):

- (a) is or falls after the relevant due date;
- (b) is a Business Day in the place of the specified office of the Paying Agent at which the Note or Coupon is presented for payment; and
- (c) in the case of payment by credit or transfer to a euro account as referred to above, is a TARGET2 Settlement Day.

In this Condition, "**Business Day**" means, in relation to any place, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in that place and "**TARGET2 Settlement Day**" means any day on which the TARGET System is open.

#### 6.6 **Initial Paying Agents**

The names of the initial Paying Agents and their initial specified offices are set out at the end of these Conditions. The Issuer and the Guarantor reserve the right at any time to vary or terminate the appointment of any Paying Agent and to appoint additional or other Paying Agents provided that the Issuer undertakes that:

- (a) there will at all times be a Fiscal Agent;
- (b) there will at all times be a Paying Agent (which may be the Fiscal Agent) in London;
- (c) so long as the Notes are listed on the SIX Swiss Exchange and so long as and to the extent that the rules and regulations of the SIX Swiss Exchange so require, there will be a Swiss Paying Agent; and
- (d) it will ensure that it maintains a Paying Agent in a Member State of the European Union (if any) that is not obliged to withhold or deduct tax pursuant to European Council Directive 2003/48/EC or any law implementing or complying with, or introduced in order to conform to, such Directive.

Notice of any termination or appointment and of any changes in specified offices given to the Noteholders promptly by the Issuer in accordance with Condition 12.

## 7. REDEMPTION AND PURCHASE

### 7.1 Redemption at Maturity

Unless previously redeemed or purchased and cancelled as provided below, the Issuer will redeem the Notes at their principal amount on 9 November 2026 (the "**Maturity Date**"), subject as provided in Condition 6.

### 7.2 Redemption for Taxation Reasons

If:

- (a) as a result of any change in, or amendment to, the laws or regulations of a Relevant Jurisdiction (as defined in Condition 8), or any change in the application or official interpretation of the laws or regulations of a Relevant Jurisdiction, which change or amendment becomes effective after 5 November 2014, on the next Interest Payment Date either (i) the Issuer would be required to pay additional amounts as provided or referred to in Condition 8 or (ii) the Guarantor would be unable for reasons outside its control to procure payment by the Issuer and in making payment itself would be required to pay such additional amounts; and
- (b) the requirement cannot be avoided by the Issuer or, as the case may be, the Guarantor taking reasonable measures available to it,

the Issuer may at its option, having given not less than 30 nor more than 60 days' notice to the Noteholders in accordance with Condition 12 (which notice shall be irrevocable), redeem all the Notes, but not some only, at any time at their principal amount, together with interest accrued to (but excluding) the date of redemption, provided that no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Issuer or, as the case may be, the Guarantor would be obliged to pay such additional amounts were a payment in respect of the Notes then due. Prior to the publication of any notice of redemption pursuant to this Condition 7.2, the Issuer shall deliver to the Fiscal Agent a certificate signed by one Authorised Signatory of the Issuer or, as the case may be, the Guarantor stating that the requirement referred to in subparagraph (a) above will apply on the next Interest Payment Date and cannot be avoided by the Issuer or, as the case may be, the Guarantor taking reasonable measures available to it and an opinion of independent legal advisers of recognised standing to the effect that the Issuer or, as the case may be, the Guarantor has or will become obliged to pay such additional amounts as a result of the change or amendment.

### 7.3 Redemption at the option of the Issuer

The Issuer may, having:

- (a) given not less than 30 nor more than 60 days' notice to the Noteholders in accordance with Condition 12; and
- (b) notified the Fiscal Agent prior to the provision of the notice referred to in subparagraph (a) above;

(which notice shall be irrevocable and shall oblige the Issuer to redeem the Notes specified in such notice on the date fixed for redemption), redeem the Notes at any time prior to the Maturity Date (each an "**Optional Redemption Date**"), in whole or, subject as provided below, in part, at a redemption price (the "**Optional Redemption Price**") in respect of each Note specified in such notice as aforesaid, calculated by the Calculation Agent, equal to the greater of the following amounts:

- (i) 100 per cent. of the principal amount of such Note being redeemed on the Optional Redemption Date; and
- (ii) the sum of the present values of the remaining scheduled payments of principal and interest on such Note being redeemed (exclusive of interest accrued to the date of redemption) discounted to the Optional Redemption Date on an annual basis



(assuming the actual number of days in a 365- or 366-day year) at the Comparable Government Bond Rate plus 12 basis points and accrued and unpaid interest (if any) on the principal amount being redeemed to (but excluding) the Optional Redemption Date.

For the purpose of these Conditions:

The "**Comparable Government Bond Rate**" will be determined on the third business day preceding the Optional Redemption Date and means, with respect to any Optional Redemption Date, the rate per annum equal to the yield to maturity calculated in accordance with customary financial practice in pricing new issues of comparable corporate debt securities paying interest on an annual basis (assuming the actual number of days in a 365- or 366-day year) of the applicable Comparable Government Bond, assuming a price for the applicable Comparable Government Bond (expressed as a percentage of its principal amount) equal to the applicable Comparable Government Bond Price for such Optional Redemption Date.

"**Calculation Agent**" means an independent investment banking or commercial banking institution of international standing appointed by the Issuer.

"**Comparable Government Bond**" means the European government security or securities selected by one of the Reference Government Bond Dealers appointed by the Issuer as having an actual or interpolated maturity comparable with the remaining term of the Notes that would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issues of euro-denominated corporate debt securities of a comparable maturity to the remaining term of the Notes.

"**Comparable Government Bond Price**" means, with respect to any Optional Redemption Date, (A) the arithmetic average of the Reference Government Bond Dealer Quotations for such Optional Redemption Date, after excluding the highest and lowest such Reference Government Bond Dealer Quotations, or (B) if the Calculation Agent obtains fewer than four such Reference Government Bond Dealer Quotations, the arithmetic average of all such quotations.

"**Reference Government Bond Dealer**" means each of five banks selected by the Issuer, or its affiliates, which are (A) primary European government securities dealers, and their respective successors, or (B) market makers in pricing corporate bond issues.

"**Reference Government Bond Dealer Quotations**" means, with respect to each Reference Government Bond Dealer and any Optional Redemption Date, the arithmetic average, as determined by the Calculation Agent, of the bid and offered prices for the applicable Comparable Government Bond (expressed in each case as a percentage of its nominal amount) at 11:00 a.m. Central European Time (CET) on the third business day preceding such Optional Redemption Date quoted in writing to the Calculation Agent by such Reference Government Bond Dealer.

In the case of a partial redemption, the Notes to be redeemed (the "**Redeemed Notes**") shall be selected by the drawing of lots, in such place as the Fiscal Agent approves and in such manner as the Fiscal Agent considers appropriate, subject to compliance with applicable law and the rules of each competent authority, stock exchange and/or quotation system (if any) by which the Notes have then been admitted to listing, trading and/or quotation upon the Issuer giving not less than 30 nor more than 60 days notice to the Noteholders before the Optional Redemption Date. Each notice to the Noteholders shall specify the serial numbers of the Redeemed Notes.

#### 7.4 **Purchases**

The Issuer, the Guarantor or any of the Guarantor's other Subsidiaries (as defined below) may at any time purchase Notes (provided that all unmatured Coupons appertaining to the Notes are purchased with the Notes) in any manner and at any price. Such Notes may be held, reissued or resold or, at the option of the Issuer, surrendered to the Fiscal Agent for cancellation.

For the purposes of this Condition 7.4:

**"Person"** means any individual, company, corporation, firm, partnership, joint venture, association, organisation, state or agency of a state or other entity, whether or not having separate legal personality; and

**"Subsidiary"** means, in relation to any Person (the **"first Person"**) at any particular time, any other Person (the **"second Person"**):

- (i) whose affairs and policies the first Person controls or has the power to control, whether by ownership of share capital, contract, the power to appoint or remove members of the governing body of the second Person or otherwise; or
- (ii) whose financial statements are, in accordance with applicable law and/or generally accepted accounting principles, consolidated with those of the first Person.

## 7.5 **Cancellations**

All Notes which are (a) redeemed or (b) purchased by or on behalf of the Issuer, the Guarantor or any of the Guarantor's other Subsidiaries and surrendered for cancellation will, in each case, forthwith be cancelled, together with all relative unmatured Coupons attached to, or surrendered with, the Notes, and accordingly may not be reissued or resold.

## 7.6 **Notices Final**

Upon the expiry of any notice as is referred to in Condition 7.2 and Condition 7.3, the Issuer shall be bound to redeem the Notes to which the notice refers in accordance with the terms of such Condition.

## 8. **TAXATION**

### 8.1 **Payment without Withholding**

All payments of principal and interest in respect of the Notes and the Coupons by or on behalf of the Issuer or the Guarantor shall be made free and clear of, and without withholding or deduction for or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of any of the Relevant Jurisdictions, unless the withholding or deduction of such taxes, duties, assessments, or governmental charges is required by law. In that event, the Issuer or (as the case may be) the Guarantor shall pay such additional amounts ("**Additional Amounts**") as will result in receipt by the Noteholders and the Couponholders after such withholding or deduction of such amounts as would have been received by them had no such withholding or deduction been required, except that no such Additional Amounts shall be payable in respect of any Note or Coupon presented for payment:

- (a) by or on behalf of a holder which is liable to such taxes, duties, assessments or governmental charges in respect of such Note or Coupon by reason of its having some connection with the jurisdiction by which such taxes, duties, assessments or charges have been imposed, levied, collected, withheld or assessed other than the mere holding of the Note or Coupon; or
- (b) where such withholding or deduction is imposed on a payment to an individual or a residual entity and is required to be made pursuant to European Council Directive 2003/48/EC on the taxation of savings income in the form of interest payments or any law (including the amended Luxembourg Law of June, 21 2005) implementing or complying with, or introduced in order to conform to, this Directive or the amended Luxembourg law of December 23, 2005; or
- (c) by or on behalf of a holder who would have been able to avoid such withholding or deduction by presenting the relevant Note or Coupon to another Paying Agent in a Member State of the European Union; or
- (d) by or on behalf of a holder who could lawfully avoid (but has not so avoided) such withholding or deduction by (a) complying with, or procuring that any third party complies

with, any statutory requirement or (b) making, or procuring that any third party makes, a declaration of non-residence or other similar claim for exemption to any tax authority in the place where the relevant Note or Coupon is presented for payment; or

- (e) more than 30 days after the Relevant Date except to the extent that the holder of such Note or Coupon would have been entitled to such Additional Amounts on presenting such Note or Coupon for payment on the last day of such period of 30 days.

Notwithstanding any other provision of these Conditions, in no event will the Issuer or the Guarantor be required to pay any additional amounts in respect of the Notes or, as the case may be, the Coupons for, or on account of, any withholding or deduction required pursuant to FATCA (including pursuant to any agreement described in Section 1471(b) of the Code) or any law implementing an intergovernmental approach to FATCA.

## 8.2 Interpretation

In these Conditions:

- (a) "**Relevant Date**" means the date on which the payment first becomes due but, if the full amount of the money payable has not been received by the Fiscal Agent on or before the due date, it means the date on which, the full amount of the money having been so received, notice to that effect has been duly given to the Noteholders by the Issuer in accordance with Condition 12; and
- (b) "**Relevant Jurisdiction**" means Luxembourg or any political subdivision or any authority thereof or therein having power to tax (in the case of payments by the Issuer) or Switzerland or any political subdivision or any authority thereof or therein having power to tax (in the case of payments by the Guarantor) or, in either case, any other jurisdiction or any political subdivision or any authority thereof or therein having power to tax to which the Issuer or the Guarantor, as the case may be, becomes subject in respect of payments made by it of principal and interest on the Notes and Coupons.

## 8.3 Additional Amounts

Any reference in these Conditions to any amounts in respect of the Notes shall be deemed also to refer to any additional amounts which may be payable under this Condition.

## 9. PRESCRIPTION

Notes and Coupons will become void unless presented for payment within periods of 10 years (in the case of principal) and five years (in the case of interest) from the Relevant Date in respect of the Notes or, as the case may be, the Coupons, subject to the provisions of Condition 6.

## 10. EVENTS OF DEFAULT

### 10.1 Events of Default

The holder of any Note may give notice to the Issuer that the Note is, and it shall accordingly forthwith become, immediately due and repayable at its principal amount, together with interest accrued to the date of repayment, if any of the following events ("**Events of Default**") shall have occurred and be continuing:

- (a) *Non-payment*: if the Issuer or the Guarantor is in default for a period of more than 10 days in the payment of any principal in respect of the Notes or more than 21 days in the payment of interest in respect of the Notes; or
- (b) *Breach of other obligations*: if the Issuer or the Guarantor fails to perform or observe any of its obligations under these Conditions or the Guarantee and (except in any case where the failure is incapable of remedy, when no continuation or notice as is hereinafter mentioned will be required) the failure continues for the period of 90 days following the service by holders of at

least one-quarter in principal amount of the Notes then outstanding of written notice on the Issuer and the Guarantor specifying such failure and requiring the same to be remedied and stating that such notice is a notice pursuant to this Condition 10.1(b); or

- (c) *Cross-acceleration of Issuer or Guarantor:* (i) any Indebtedness of, or guaranteed by, the Issuer or the Guarantor is not paid at its stated maturity or (as the case may be) within any originally applicable grace period, or (ii) any such Indebtedness, or guarantee, of the Issuer or the Guarantor (as the case may be) becomes due and payable prior to its stated maturity by reason of an event of default, provided that (x) the amount of Indebtedness referred to in sub-paragraph (i) and/or sub-paragraph (ii) above individually or in the aggregate exceeds USD 350,000,000 (or its equivalent in any other currency or currencies) and (y) there shall not be deemed to be a default (A) where the Issuer or the Guarantor in good faith claims a right of set-off or otherwise contests its obligations to pay or (B) if such acceleration is annulled or such payment or repayment is made within 10 days after service by holders of at least one-quarter in principal amount of the Notes then outstanding of written notice on the Issuer and the Guarantor specifying such failure and requiring the same to be remedied and stating that such notice is a notice pursuant to this Condition 10.1(c); or
- (d) *Security enforced:* an encumbrancer or a receiver or a person with similar functions appointed for execution (in Switzerland a Liquidator or *Konkursverwalter*) takes possession of the whole or any substantial part of the assets or undertaking of the Issuer or the Guarantor or a distress, execution or other process being levied or enforced upon or sued out against a substantial part of the property or assets of the Issuer or the Guarantor and not being paid, discharged, removed or stayed within 30 days; or
- (e) *Ceasing business:* the Issuer or the Guarantor stops payment or ceases to carry on all or substantially all of its business (except, in each case, (i) in circumstances previously approved by an Extraordinary Resolution of the Noteholders or (ii) as a result of, or in connection with, a Permitted Merger); or
- (f) *Insolvency of the Issuer:* the Issuer becomes bankrupt or insolvent or enters into a moratorium or makes a general assignment for the benefit of its creditors; or
- (g) *Insolvency of the Guarantor:* the Guarantor becomes bankrupt or insolvent (or is obliged to notify the court of its financial situation in accordance with Article 725 (2) of the Swiss Code of Obligations) or enters into a provisional or definitive moratorium (*provisorische or definitive Nachlassstundung*) or makes a general arrangement with its creditors (*Nachlassvertrag*); or
- (h) *Winding up, etc:* an order is made or effective resolution is passed for the winding-up or dissolution of the Issuer or the Guarantor, except a winding-up or dissolution, (i) the terms of which have previously been approved by an Extraordinary Resolution of the Noteholders or (ii) which results from, or occurs in connection with, a Permitted Merger; or
- (i) *Guarantee of the Notes not in force:* if the Guarantee ceases to be, or is claimed by the Guarantor not to be, in full force and effect.

## 10.2 Interpretation

For the purposes of Condition 10.1:

**"Default"** means any event that is, or after notice or passage of time or both would be, an Event of Default;

**"Indebtedness"** means any indebtedness for monies borrowed or raised including, without limitation, any debenture, note, bond or like security;

**"Permitted Merger"** means the Guarantor consolidating with, merging with or into, or selling, leasing, conveying or otherwise disposing of all or substantially all of its property and assets to (as an entirety or substantially as an entirety in one transaction or a series of related transactions), any Person (other than

with, or into, the Issuer) or permitting any Person to merge with, or into, the Guarantor in circumstances where:

- (a) either (i) the Guarantor shall be the continuing Person or (ii) the Person (if other than the Guarantor) formed by such consolidation or into which the Guarantor is merged or that acquired or leased such property and assets of the Guarantor shall expressly assume, by a supplemental deed, executed and delivered to the Issuer and to the Fiscal Agent, all of the obligations of the Guarantor under these Conditions and the Guarantee;
- (b) the continuing Person is organised and validly existing under the laws of Switzerland or is organised and validly existing under the laws of a jurisdiction that is a member country of the Organisation for Economic Co-operation and Development (or any successor thereto) and, if such continuing Person is not organised and validly existing under the laws of Switzerland, such continuing Person shall agree in such supplemental deed to be bound by a covenant comparable to the provisions of Condition 8.1 with respect to taxes imposed in the continuing Person's jurisdiction of organisation, and such continuing Person shall benefit from a redemption right comparable to that set out in Condition 7.2 in the event of changes in taxes in such jurisdiction after the date of such consolidation, merger or sale;
- (c) the Guarantor shall have delivered to the Fiscal Agent a certificate signed by one Authorised Signatory of the Guarantor, and, if the Guarantor shall not be the continuing Person, an opinion of independent legal counsel of recognised standing, in each case, stating that all conditions precedent set out in this definition of Permitted Merger relating to such consolidation, merger or transfer have been complied with, and that such supplemental deed constitutes the legal, valid and binding obligation of the Guarantor or such successor enforceable against such Person in accordance with its terms, subject to customary exceptions; and
- (d) the Guarantor shall have delivered to the Fiscal Agent a certificate signed by one Authorised Signatory to the effect that immediately after giving effect to such transaction as aforesaid, no Default or Event of Default shall have occurred and be continuing;

and "**Person**" means an individual, a corporation, a partnership, a limited liability company, an association, a trust or any other entity or organisation, including a government or political subdivision or an agency or instrumentality thereof.

## 11. **REPLACEMENT OF NOTES AND COUPONS**

Should any Note or Coupon be lost, stolen, mutilated, defaced or destroyed it may be replaced at the specified office of the Fiscal Agent, upon payment by the claimant of the expenses incurred in connection with the replacement and on such terms as to evidence and indemnity as the Issuer may reasonably require. Mutilated or defaced Notes or Coupons must be surrendered before replacements will be issued.

## 12. **NOTICES**

### **Notices to the Noteholders**

All notices to the Noteholders will be valid if published in a leading English language daily newspaper published in London or such other English language daily newspaper with general circulation in Europe as the Issuer may decide. It is expected that publication will normally be made in the Financial Times. The Issuer shall also ensure that notices are duly published in a manner which complies with the rules and regulations of any stock exchange or other relevant authority on which the Notes are for the time being listed. Any such notice will be deemed to have been given on the date of the first publication or, where required to be published in more than one newspaper, on the date of the first publication in all required newspapers. Couponholders shall be deemed for all purposes to have notice of the contents of any notice given to the Noteholders.

## 13. MEETINGS OF NOTEHOLDERS AND MODIFICATION

### 13.1 Meetings of Noteholders

The Agency Agreement contains provisions for convening meetings of the Noteholders to consider any matter affecting their interests, including the modification by Extraordinary Resolution of any of these Conditions or the Guarantee or any of the provisions of the Agency Agreement. The quorum at any meeting for passing an Extraordinary Resolution will be one or more persons present holding or representing more than 50 per cent. in principal amount of the Notes for the time being outstanding, or at any adjourned meeting one or more persons present whatever the principal amount of the Notes held or represented by him or them, except that at any meeting the business of which includes the modification of certain of these Conditions the necessary quorum for passing an Extraordinary Resolution will be one or more persons present holding or representing not less than two-thirds, or at any adjourned meeting not less than one-third, of the principal amount of the Notes for the time being outstanding. An Extraordinary Resolution passed at any meeting of the Noteholders will be binding on all Noteholders, whether or not they are present at the meeting, and on all Couponholders.

### 13.2 Modification

The Fiscal Agent may agree, without the consent of the Noteholders or Couponholders, to any modification of any of these Conditions or any of the provisions of the Agency Agreement either (i) for the purpose of curing any ambiguity or of curing, correcting or supplementing any manifest or proven error or any other defective provision contained herein or therein or (ii) in any other manner which is not materially prejudicial to the interests of the Noteholders. Any modification shall be binding on the Noteholders and the Couponholders and, unless the Fiscal Agent agrees otherwise, any modification shall be notified by the Issuer to the Noteholders as soon as practicable thereafter in accordance with Condition 12).

## 14. SUBSTITUTION

### 14.1 Conditions Precedent to Substitution

The Issuer (or any previous substitute under this Condition) may, without the consent of the Noteholders, be replaced and substituted by the Guarantor or any of its other wholly-owned subsidiaries as principal debtor (the "**Substituted Debtor**") in respect of the Notes provided that:

- (a) a deed poll in or substantially in the form scheduled to the Agency Agreement and such other documents (if any) shall be executed by the Substituted Debtor as may be necessary to give full effect to the substitution (together the "**Documents**") and (without limiting the generality of the foregoing) pursuant to which the Substituted Debtor shall undertake in favour of each Noteholder to be bound by the Conditions of the Notes and the provisions of the Agency Agreement and the Deed of Covenant as fully as if the Substituted Debtor had been named in the Notes and the Agency Agreement and the Deed of Covenant as the principal debtor in respect of the Notes in place of the Issuer (or any previous substitute) and pursuant to which the Guarantor (if the Guarantor is not the Substituted Debtor) shall irrevocably and unconditionally guarantee in favour of each Noteholder the payment of all sums payable by the Substituted Debtor as such principal debtor substantially in the form of the guarantee contained in the deed poll;
- (b) without prejudice to the generality of paragraph 14.1(a), where the Substituted Debtor is incorporated, domiciled or resident for taxation purposes in a territory other than Luxembourg, the Documents shall contain a covenant by the Substituted Debtor and/or such other provisions as may be necessary to ensure that each Noteholder has the benefit of a covenant in terms corresponding to the provisions of Condition 8 with the substitution for the references to Luxembourg of references to the territory or territories in which the Substituted Debtor is incorporated, domiciled and/or resident for taxation purposes;
- (c) the Documents shall contain a warranty and representation by the Substituted Debtor and (if the Guarantor is not the Substituted Debtor) the Guarantor (i) that each of the Substituted Debtor and (if the Guarantor is not the Substituted Debtor) the Guarantor has obtained all

necessary governmental and regulatory approvals and consents for such substitution and (if the Guarantor is not the Substituted Debtor) for the giving by the Guarantor of a guarantee in respect of the obligations of the Substituted Debtor and for the performance by each of the Substituted Debtor and (if the Guarantor is not the Substituted Debtor) the Guarantor of its obligations under the Documents and that all such approvals and consents are in full force and effect and (ii) that the obligations assumed by each of the Substituted Debtor and (if the Guarantor is not the Substituted Debtor) the Guarantor under the Documents are all legal, valid and binding in accordance with their respective terms;

- (d) each stock exchange on which the Notes are listed shall have confirmed that following the proposed substitution of the Substituted Debtor the Notes will continue to be listed on such stock exchange;
- (e) the Substituted Debtor shall have delivered to the Fiscal Agent or procured the delivery to the Fiscal Agent of a legal opinion from a leading firm established in the jurisdiction of incorporation of the Substituted Debtor to the effect that the Documents constitute legal, valid and binding obligations of the Substituted Debtor, such opinion to be dated not more than seven days prior to the date of the substitution of the Substituted Debtor for the Issuer and to be available for inspection by Noteholders at the specified office of the Fiscal Agent;
- (f) the Guarantor (if the Guarantor is not the Substituted Debtor) shall have delivered to the Fiscal Agent or procured the delivery to the Fiscal Agent of a legal opinion from a leading firm of Swiss lawyers to the effect that the Documents (including the guarantee given by the Guarantor in respect of the Substituted Debtor) constitute legal, valid and binding obligations of the Guarantor, such opinion to be dated not more than seven days prior to the date of substitution of the Substituted Debtor for the Issuer and to be available for inspection by Noteholders at the specified office of the Fiscal Agent;
- (g) the Guarantor (if the Guarantor is not the Substituted Debtor) shall have delivered to the Fiscal Agent or procured the delivery to the Fiscal Agent of a legal opinion from a leading firm of English lawyers to the effect that the Documents (including the guarantee given by the Guarantor in respect of the Substituted Debtor) constitute legal, valid and binding obligations of the parties thereto under English law, such opinion to be dated not more than seven days prior to the date of substitution of the Substituted Debtor for the Issuer and to be available for inspection by Noteholders at the specified office of the Fiscal Agent; and
- (h) if the Substituted Debtor is not incorporated in England, the Substituted Debtor shall have appointed the process agent appointed by the Issuer as described in Condition 16 or another person with an office in England as its agent in England to receive service of process on its behalf in relation to any legal action or proceedings arising out of or in connection with the Notes.

#### 14.2 **Assumption by Substitute Debtor**

Upon execution of the Documents as referred to in Condition 14.1, the Substituted Debtor shall be deemed to be named in the Notes as the principal debtor in place of the Issuer (or of any previous substitute under these provisions) and the Notes shall thereupon be deemed to be amended to give effect to the substitution. The execution of the Documents shall operate to release the Issuer as issuer (or such previous substitute as aforesaid) from all of its obligations as principal debtor in respect of the Notes.

#### 14.3 **Deposit of Documents**

The Documents shall be deposited with and held by the Fiscal Agent for so long as any Note remains outstanding and for so long as any claim made against the Substituted Debtor or (if the Guarantor is not the Substituted Debtor) the Guarantor by any Noteholder in relation to the Notes or the Documents shall not have been finally adjudicated, settled or discharged. The Substituted Debtor and (if the Guarantor is not the Substituted Debtor) the Guarantor shall acknowledge in the Documents the right of every Noteholder to production of the Documents for the enforcement of any of the Notes or the Documents.

#### 14.4 **Notice of Substitution**

Not less than 15 days after execution of the Documents, the Substituted Debtor shall give notice thereof to the Noteholders in accordance with Condition 12.

#### 15. **FURTHER ISSUES**

The Issuer may from time to time, without the consent of the Noteholders or Couponholders, create and issue further notes, having terms and conditions the same as those of the Notes, or the same except for the amount of the first payment of interest, which may be consolidated and form a single series with the outstanding Notes.

#### 16. **GOVERNING LAW AND SUBMISSION TO JURISDICTION**

##### 16.1 **Governing Law**

The Agency Agreement, the Guarantee, the Deed of Covenant, the Notes and the Coupons and any non-contractual obligations arising out of or in connection with the Agency Agreement, the Guarantee, the Deed of Covenant, the Notes and the Coupons are governed by, and will be construed in accordance with English law.

For the avoidance of doubt, Articles 86 to 94-8 (inclusive) of the Luxembourg law of 10 August 1915 on commercial companies, as amended, pertaining to the representation of noteholders shall be expressly excluded from, and not apply to, these Conditions and the Notes.

##### 16.2 **Jurisdiction of English Courts**

The Issuer and the Guarantor have irrevocably agreed for the benefit of the Noteholders and the Couponholders that the courts of England are to have exclusive jurisdiction to settle any disputes which may arise out of or in connection with the Notes or the Coupons and accordingly have submitted to the exclusive jurisdiction of the English courts. The Issuer and the Guarantor waive any objection to the courts of England on the grounds that they are an inconvenient or inappropriate forum.

The Noteholders and the Couponholders may take any suit, action or proceeding arising out of or in connection with the Notes or the Coupons respectively (together referred to as "**Proceedings**") against the Issuer or the Guarantor in any other court of competent jurisdiction and concurrent Proceedings in any number of jurisdictions.

##### 16.3 **Appointment of Process Agent**

The Issuer hereby irrevocably and unconditionally appoints Law Debenture Corporate Services Limited, whose registered office is at Fifth Floor, 100 Wood Street, London EC2V 7EX at its registered office for the time being as its agent for service of process in England in respect of any Proceedings and undertakes that in the event of such agent ceasing so to act it will appoint another person as its agent for that purpose.

##### 16.4 **Other Documents**

Each of the Issuer and the Guarantor has in the Agency Agreement, the Issuer has in the Deed of Covenant and the Guarantor has in the Guarantee submitted to the jurisdiction of the English courts and appointed an agent in England for service of process, in terms substantially similar to those set out above.

#### 17. **RIGHTS OF THIRD PARTIES**

No rights are conferred on any person under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this Note, but this does not affect any right or remedy of any person which exists or is available apart from that Act.



## THE GUARANTEE

### THE GUARANTEE OF NOVARTIS AG

THIS GUARANTEE is given on 7 November 2014 by NOVARTIS AG (the "**Guarantor**").

WHEREAS:

- (A) The Guarantor has agreed to guarantee the obligations of NOVARTIS FINANCE S.A. (the "**Issuer**") under the EUR 600,000,000 1.625 per cent. Guaranteed Notes due 2026 (the "**Notes**") to be issued by the Issuer pursuant to an Agency Agreement (the "**Agency Agreement**") dated 7 November 2014 between, *inter alios*, the Issuer, the Guarantor and Deutsche Bank AG, London Branch as Fiscal Agent (the "**Fiscal Agent**").
- (B) Terms defined in the Conditions of the Notes (the "**Conditions**") and in the Agency Agreement and not otherwise defined in this Guarantee shall have the same meaning when used in this Guarantee.

NOW THIS DEED WITNESSETH as follows:

1. The Guarantor hereby unconditionally and irrevocably guarantees to each Noteholder and Couponholder from time to time (each a "**Beneficiary**") the due and punctual payment of all sums expressed to be payable by the Issuer under the Notes or Coupons, as and when the same becomes due and payable, whether at maturity, upon early redemption, upon acceleration or otherwise, according to the terms of the Notes and Coupons. In case of the failure of the Issuer to pay any such sum as and when the same shall become due and payable, the Guarantor hereby agrees to cause such payment to be made as and when the same becomes due and payable, whether at maturity, upon early redemption, upon acceleration or otherwise, as if such payment were made by the Issuer.
2. The Guarantor agrees, as an independent primary obligation, that it shall pay to each Beneficiary on demand sums sufficient to indemnify the Beneficiaries against any liability sustained by them by reason of the non-payment as and when the same shall become due and payable of any sum expressed to be payable by the Issuer under the Notes or Coupons, whether by reason of any of the obligations expressed to be assumed by the Issuer in the Notes or Coupons being or becoming void, voidable or unenforceable for any reason, whether or not known to such Beneficiaries or for any other reason whatsoever.
3. The Guarantor covenants in favour of each Beneficiary that it will duly perform and comply with the obligations expressed to be undertaken by it in the Conditions.
4. If the Issuer defaults in the payment of any sum expressed to be payable by the Issuer under the Notes or Coupons as and when the same shall become due and payable, the Guarantor shall forthwith unconditionally pay or procure to be paid to or to the order of the Beneficiaries in London in Euro on the same day, freely transferable funds the amount in respect of which such default has been made; *provided that* every payment of such amount made by the Guarantor to the Fiscal Agent in the manner provided in the Agency Agreement shall be deemed to cure *pro tanto* such default by the Issuer and shall be deemed for the purposes of this Deed to have been paid to or for the account of the each relevant Beneficiary except to the extent that there is failure in the subsequent payment of such amount to the Noteholders and Couponholders in accordance with the Conditions, and everything so paid by the Guarantor in accordance with the Agency Agreement shall have the same effect as if it had been paid thereunder by the Issuer.
5. The Guarantor agrees that its obligations hereunder shall be unconditional, irrespective of the validity, regularity or enforceability of any Note or Coupon and shall not be affected by:
  - (a) any change in or amendment to this Deed, any Note or Coupon, including any amendment, novation, supplement, extension (whether of maturity or otherwise) or restatement (in each case, however fundamental and of whatsoever nature) or replacement, waiver or release of, any obligation of the Issuer under or in respect of this Deed, any Note or Coupon or any security or other guarantee or indemnity in respect thereof including without limitation and any extension

of or any increase of the obligations of the Issuer in respect of any Note or Coupon or the addition of any new obligations for the Issuer under the Notes and Coupons or this Deed;

- (b) the absence of any action to enforce the same;
  - (c) any waiver or consent by any Beneficiary with respect to any provision of the Notes or Coupons;
  - (d) any judgment obtained against the Issuer or any action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defence of a guarantor.
6. The Guarantor waives diligence, presentment, demand of payment, filing of claims with a court in the event of merger or bankruptcy of the Issuer, any right to require a proceeding first against the Issuer, protest or notice with respect to any Note or the indebtedness evidenced thereby and all demands whatsoever. The Guarantor agrees that the guarantee and indemnity contained in this Deed is a continuing guarantee and indemnity and shall remain in full force and effect until all amounts due as principal, interest or otherwise in respect of the Notes or Coupons or under the Notes or Coupons shall have been paid in full and that the Guarantor shall not be discharged by anything other than a complete performance of the obligations contained in the Notes and Coupons.
7. The Guarantor shall be subrogated to all rights of the Beneficiaries against the Issuer in respect of any amounts paid by such Guarantor pursuant hereto; *provided that* the Guarantor shall not without the consent of the relevant Beneficiary be entitled to enforce, or to receive any payments arising out of or based upon or prove in any insolvency or winding up of the Issuer in respect of, such right of subrogation until such time as the principal of and interest on all outstanding Notes and Coupons and all other amounts due under the Notes and Coupons have been paid in full. Furthermore, until such time as aforesaid the Guarantor shall not take any security or counter-indemnity from such Issuer in respect of the Guarantor's obligations under this Deed.
8. If any payment received by the Fiscal Agent pursuant to the provisions of the Notes, Coupons or the Conditions shall, on the subsequent bankruptcy, insolvency, corporate reorganisation or other similar event affecting the Issuer, be avoided, reduced, invalidated or set aside under any laws relating to bankruptcy, insolvency, corporate reorganisation or other similar events, such payment shall not be considered as discharging or diminishing the liability of the Guarantor whether as guarantor, principal debtor or indemnifier and the guarantee and indemnity contained in this Deed shall continue to apply as if such payment had at all times remained owing by the Issuer and the Guarantor shall indemnify and keep indemnified the Beneficiaries on the terms of the guarantee and indemnity contained in this Deed.
9. The Guarantor undertakes that its obligations hereunder will at all times (but subject to the Conditions) rank at least *pari passu* with all other outstanding present and future unsecured and unsubordinated obligations of the Guarantor but, in the event of insolvency, only to the extent permitted by applicable laws relating to creditors' rights.
10. Any amount received or recovered by a Beneficiary from the Guarantor in respect of any sum payable by the Issuer under the Notes or Coupons may be placed in a suspense account and kept there for so long as the relevant Beneficiary thinks fit.
11. The Deed shall take effect as a Deed Poll for the benefit of the Beneficiaries.
12. Other than the Beneficiaries, a person who is not a party to this Deed has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this Deed, but this does not affect any right or remedy of a third party which exists or is available apart from that Act.
13. This Deed shall enure for the benefit of the Beneficiaries and shall be deposited with and held by the Fiscal Agent.
14. This Deed and any non-contractual obligations arising out of or in connection with it shall be governed by, and shall be construed in accordance with, the laws of England.

15. (a) Subject to paragraph 15(c), the Guarantor irrevocably agrees for the benefit of the Beneficiaries that the courts of England are to have exclusive jurisdiction to settle any dispute which may arise out of or in connection with this Deed (including any dispute relating to any non-contractual obligations arising out of or in connection with this Deed) and accordingly submit to the exclusive jurisdiction of the English Courts.
- (b) The Guarantor waives any objection to the courts of England on the grounds that they are an inconvenient or inappropriate forum.
- (c) The Beneficiaries may take any suit, action or proceeding arising out of or in connection with this Deed (together referred to as "**Proceedings**") (including any Proceedings relating to any non-contractual obligations arising out of or in connection with this Deed) against the Guarantor in any other court of competent jurisdiction and concurrent Proceedings in any number of jurisdictions.
- (d) The Guarantor appoints Law Debenture Corporate Services Limited, whose registered office is at Fifth Floor, 100 Wood Street, London EC2V 7EX, to accept service of process on its behalf. If such person shall cease to have an office in London, the Guarantor shall appoint another person with an office in London to accept service. The Guarantor will procure that, so long as any of the Notes remains outstanding, a person with an office in London shall be appointed to accept service.
- (e) Nothing in this Deed shall affect the right to serve process in any other manner permitted by law.

IN WITNESS whereof this Deed has been entered into as a deed by the Guarantor.

## SUMMARY OF PROVISIONS RELATING TO THE NOTES WHILE IN GLOBAL FORM

*The following is a summary of the provisions which will apply to, and in some cases modify, the Terms and Conditions of the Notes while the Notes are represented by the Global Notes.*

### Form of Global Note

The Notes will be issued in new global note ("NGN") form. On 13 June 2006 the European Central Bank (the "ECB") announced that Notes in NGN form are in compliance with the "Standards for the use of EU securities settlement systems in ESCB credit operations" of the central banking system for the euro (the "Eurosystème"), provided that certain other criteria are fulfilled. At the same time the ECB also announced that arrangements for Notes in NGN form will be offered by Euroclear and Clearstream, Luxembourg as of 30 June 2006 and that debt securities in global bearer form issued through Euroclear and Clearstream, Luxembourg after 31 December 2006 will only be eligible as collateral for Eurosystem operations if the NGN form is used.

The Notes are intended to be held in a manner which would allow Eurosystem eligibility. This simply means, however, that the Notes are intended upon issue to be deposited with one of the International Central Securities Depositories (the "ICSDs") as common safekeeper and does not necessarily mean that the Notes will be recognised as eligible collateral for Eurosystem monetary policy and intra-day credit operations by the Eurosystem either upon issue or at any or all times during their life. Such recognition will depend upon the ECB being satisfied that Eurosystem eligibility criteria have been met.

### Exchange

The Temporary Global Note will be exchangeable in whole or in part for interests in the Permanent Global Note not earlier than 40 days after the Closing Date upon certification as to non-U.S. beneficial ownership. No payments will be made under the Temporary Global Note unless exchange for interests in the Permanent Global Note is improperly withheld or refused. In addition, interest payments in respect of the Notes cannot be collected without such certification of non-U.S. beneficial ownership.

The Permanent Global Note will be exchangeable in whole but not in part (free of charge to the holder) for definitive Notes only:

- (a) upon the happening of any of the events defined in the Terms and Conditions of the Notes as "**Events of Default**";
- (b) the Issuer has been notified that both Euroclear and Clearstream, Luxembourg has been closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or announces an intention permanently to cease business or does in fact do so and no successor clearing system is available; or
- (c) if the Issuer has or will become subject to adverse tax consequences which would not be suffered were the Notes in definitive form.

Thereupon (in the case of (a) and (b) above) the holder of the Permanent Global Note (acting on the instructions of one or more of the Accountholders (as defined below)) may give notice to the Issuer and (in the case of (c) above) the Issuer may give notice to the Fiscal Agent, of its intention to exchange the Permanent Global Note for definitive Notes on or after the Exchange Date (as defined below).

If:

- (a) Definitive Notes have not been delivered by 5.00 p.m. (London time) on the thirtieth day after the bearer has duly requested exchange of the Permanent Global Note for Definitive Notes in accordance with, and subject to the requirements of, the Permanent Global Note; or
- (b) the Permanent Global Note (or any part of it) has become due and payable in accordance with the Conditions or the date for final redemption of the Notes has occurred and, in either case, payment in full of the amount of principal falling due with all accrued interest thereon has not been made to the bearer in accordance with the terms of the Permanent Global Note and the Conditions on the due date for payment,

then the Permanent Global Note (including the obligation to deliver Definitive Notes) will become void at 5.00 p.m. (London time) on such thirtieth day (in the case of (a) above) or at 5.00 p.m. (London time) on such due date (in the case of (b) above) and the bearer of the Permanent Global Note will have no further rights thereunder (but without prejudice to the rights which the bearer of the Permanent Global Note or others may have under a deed of covenant dated 7 November 2014 (the "**Deed of Covenant**") executed by the Issuer). Under the Deed of Covenant, persons shown in the records of Euroclear and/or Clearstream, Luxembourg as being entitled to an interest in the Permanent Global Note will acquire directly against the Issuer all those rights to which they would have been entitled if, immediately before the Permanent Global Note became void, they had been the holders of Definitive Notes in an aggregate principal amount equal to the principal amount of Notes they were shown as holding in the records of Euroclear and/or (as the case may be) Clearstream, Luxembourg.

On or after the Exchange Date the holder of the Permanent Global Note may or, in the case of (c) above, shall surrender the Permanent Global Note to or to the order of the Fiscal Agent. In exchange for the Permanent Global Note the Issuer will deliver, or procure the delivery of, an equal aggregate principal amount of definitive Notes (having attached to them all Coupons in respect of interest which has not already been paid on the Permanent Global Note) and security printed in accordance with any applicable legal and stock exchange requirements. On exchange of the Permanent Global Note, the Issuer will procure that it is cancelled and, if the holder so requests, returned to the holder together with any relevant definitive Notes.

For these purposes, "**Exchange Date**" means a day specified in the notice requiring exchange falling not less than 60 days after that on which such notice is given and being a day on which banks are open for general business in the place in which the specified office of the Fiscal Agent is located and, except in the case of exchange pursuant to (b) above, in the place in which the relevant clearing system is located.

### **Payments**

On and after 17 December 2014, no payment will be made on the Temporary Global Note unless exchange for an interest in the Permanent Global Note is improperly withheld or refused. Payments of principal and interest in respect of Notes represented by a Global Note will, subject as set out below, be made to the bearer of such Global Note and, if no further payment falls to be made in respect of the Notes, against surrender of such Global Note to the order of the Fiscal Agent or such other Paying Agent as shall have been notified to the Noteholders for such purposes. The Issuer shall procure that the amount so paid shall be entered pro rata in the records of Euroclear and Clearstream, Luxembourg and the principal amount of the Notes recorded in the records of Euroclear and Clearstream, Luxembourg and represented by such Global Note will be reduced accordingly. Each payment so made will discharge the Issuer's obligations in respect thereof. Any failure to make the entries in the records of Euroclear and Clearstream, Luxembourg shall not affect such discharge.

### **Notices**

For so long as all of the Notes are represented by one or both of the Global Notes and such Global Note(s) is/are held on behalf of Euroclear and/or Clearstream, Luxembourg, notices to Noteholders may be given by delivery of the relevant notice to Euroclear and/or Clearstream, Luxembourg (as the case may be) for communication to the relative Accountholders rather than by publication as required by Condition 12 of the Terms and Conditions of the Notes provided that, so long as the Notes are listed on any stock exchange, the Notes are duly published in a manner which complies with the rules and regulations of any such stock exchange on which the Notes are for the time being listed. Any such notice shall be deemed to have been given to the Noteholders on the day on which such notice is delivered to Euroclear and/or Clearstream, Luxembourg (as the case may be) as aforesaid.

### **Accountholders**

For so long as all of the Notes are represented by one or both of the Global Notes and such Global Note(s) is/are held on behalf of Euroclear and/or Clearstream, Luxembourg, each person (other than Euroclear or Clearstream, Luxembourg) who is for the time being shown in the records of Euroclear or Clearstream, Luxembourg as the holder of a particular principal amount of such Notes (each an "**Accountholder**") (in which regard any certificate or other document issued by Euroclear or Clearstream, Luxembourg as to the principal amount of such Notes standing to the account of any person shall, in the absence of manifest error, be conclusive and binding for all purposes) shall be treated as the holder of such principal amount of such Notes for all purposes (including but not limited to, for the purposes of any quorum requirements of, or the right to demand a poll at, meetings of the Noteholders and giving notice to the Issuer pursuant to the Terms and Conditions of the Notes) other than with respect to the payment of principal, premium (if any) and interest on such principal amount of such Notes, the

right to which shall be vested, as against the Issuer, solely in the bearer of the relevant Global Note in accordance with and subject to its terms. Each Accountholder must look solely to Euroclear or Clearstream, Luxembourg, as the case may be, for its share of each payment made to the bearer of the relevant Global Note.

### **Prescription**

Claims against the Issuer and the Guarantor in respect of principal or premium (if any) and interest on the Notes represented by a Global Note will be prescribed after 10 years (in the case of principal and premium (if any)) and five years (in the case of interest) from the Relevant Date (as defined in Condition 8.2 of the Terms and Conditions of the Notes).

### **Partial exercise of Call Option**

For so long as all of the Notes are represented by a Global Note and a Global Note is held on behalf of Euroclear and/or Clearstream, Luxembourg, no selection of Notes to be redeemed will be required under Condition 7.3 of the Terms and Conditions of the Notes in the event that the Issuer exercises its option pursuant to Condition 7.3 of the Terms and Conditions of the Notes in respect of less than the aggregate principal amount of the Notes outstanding at such time. In such event, the standard procedures of Euroclear and/or Clearstream, Luxembourg shall operate to determine which interests in the Global Note are to be subject to such option.

### **Payments on Business Days**

In the case of all payments made in respect of the Temporary Global Note and the Permanent Global Note "**business day**" means any day on which the TARGET System is open.

## DESCRIPTION OF NOVARTIS FINANCE S.A.

### History and Development of the Issuer

Novartis Finance S.A. (the "**Issuer**") is a finance subsidiary that is indirectly owned 100 per cent. by Novartis AG (the "**Guarantor**") and was incorporated as a public company limited by shares (*société anonyme*) under the laws of the Grand Duchy of Luxembourg on 25 July 2008 for an indefinite duration. The registered office of the Issuer is at 20, rue Eugène Ruppert, L-2453 Luxembourg and the telephone number of its registered office is +352 26 29 42 10. The Issuer is registered with the Luxembourg trade and companies register under number B141096.

The subscribed share capital of the Issuer is U.S.\$100,000, divided into 1,000 ordinary shares of U.S.\$100 each. The share capital is held directly by Novartis Holding AG, Basel. The Issuer has no subsidiaries.

### Business Overview

The Issuer's principal business activity is financing activities for the Group.

In accordance with article 3 of the Issuer's articles of incorporation, the Issuer's principal purpose is the acquisition of participations, in Luxembourg or abroad, in any companies or enterprises in any form whatsoever and the management of such participations. The Issuer may in particular acquire by subscription, purchase and exchange or in any other manner any stock, shares and other participation securities, bonds, debentures, certificates of deposit and other debt instruments and more generally, any securities and financial instruments issued by any public or private entity. It may participate in the creation, development, management and control or any company or enterprise.

Furthermore, the Issuer may borrow in any form. It may issue bonds, notes and any kind of promissory notes, and any kind of debt and equity securities. The Issuer may lend funds including, without limitation, the proceeds of any borrowings, to its subsidiaries, affiliated companies and any other companies. It may also grant loans to affiliated companies and to any other corporation in which it takes direct or indirect interest. The Issuer may also give guarantees and pledge, transfer, encumber or otherwise create and grant security over all or some of its assets to guarantee its own obligations and those of any other company, and, generally, for its own benefit and that of any other company or person.

### Board of Directors

The Issuer is supervised by a board of directors, which comprises five members. The directors, none of whom have activities outside the Issuer which are significant with respect to the Issuer, and their respective business addresses and positions are listed below:

<u>Name of Director</u>	<u>Business address</u>	<u>Position</u>
Daniel Weiss	Novartis AG Lichtstrasse 35 CH-4056 Basel Switzerland	Class B Director
Urs Gfeller	Novartis AG Lichtstrasse 35 CH-4056 Basel Switzerland	Class B Director
Roman Schwarzenberger	Novartis Finance S.A. 20, rue Eugène Ruppert, L-2453 Luxembourg	Class A Director
Uwe Boesl	Novartis Finance S.A. 20, rue Eugène Ruppert, L-2453 Luxembourg	Class A Director
Marc Buhlig	Novartis Finance S.A. 20, rue Eugène Ruppert, L-2453 Luxembourg	Class A Director

There are no potential conflicts of interest between any duties of the directors to the Issuer and the directors' private interests or other duties.

#### **Financial Year**

The Issuer's financial year begins on 1 January and ends on 31 December of each calendar year.

#### **Share capital**

The following table shows the share capital of the Issuer as at the date of this Listing Prospectus:

<u>Share capital</u>	<u>U.S.\$</u>
1,000 ordinary shares of U.S.\$100 par value each.....	100,000



## DESCRIPTION OF NOVARTIS AG

### History and Development

Novartis AG (the "**Guarantor**") was incorporated on 29 February 1996 under the laws of Switzerland as a stock corporation (*Aktiengesellschaft*) with an indefinite duration. On 20 December 1996, its predecessor companies, Ciba Geigy AG and Sandoz AG, merged into this new entity, creating the Guarantor. The Guarantor is domiciled in and governed by the laws of Switzerland.

The registered office of the Guarantor is at Lichtstrasse 35, 4056 Basel, Switzerland and the telephone number of the registered office is 011-41-61-324-1111.

As at 31 December 2015, the share capital of the Guarantor was CHF 1,338,496,500 fully paid-in and divided into 2,676,993,000 registered shares of CHF 0.50 nominal value each. The Guarantor has neither authorised nor conditional capital and has no preferential voting shares. All shares in the Guarantor have equal voting rights. No participation certificates, non-voting equity securities (*Genussscheine*) or profit-sharing certificates have been issued by the Guarantor.

### Organisational Structure and Major Shareholders

Novartis is a multinational group of companies specialising in the research, development, manufacturing and marketing of a broad range of healthcare products led by innovative pharmaceuticals. Business operations are conducted through Group companies. Novartis AG, the Swiss holding company of the Group, owns, directly or indirectly, all of the Group's significant companies, including the Issuer. As of 31 December 2015, the Guarantor had approximately 161,000 registered shareholders.

According to the Guarantor's share register, as of 31 December 2015, the following registered shareholders (including nominees and the Guarantor's ADS depository) held more than 2% of the total share capital of Novartis AG with the right to vote these shares:<sup>1</sup>

- Shareholders: Novartis Foundation for Employee Participation, with its registered office in Basel, holding 2.6%; and Emasan AG, with its registered office in Basel, holding 3.3%;
- Nominees: Chase Nominees Ltd., London,<sup>2</sup> holding 8.8%; Nortrust Nominees, London, holding 3.2%; and The Bank of New York Mellon, New York, holding 4.6% through its nominees, Mellon Bank, Everett, holding 1.7% and The Bank of New York Mellon, Brussels, holding 2.9%; and
- ADS depository: JPMorgan Chase Bank, New York, holding 11.2%.

According to disclosure notifications filed with the Guarantor and the SIX Swiss Exchange, each of the following shareholders held between 3% and 5% of the share capital of the Guarantor as of 31 December 2015:

- Capital Group Companies Inc., Los Angeles; and
- BlackRock Inc., New York.

As of 31 December 2015, no other shareholder was registered as the owner of more than 2% of the registered share capital of the Guarantor. The Guarantor has not entered into any agreement with any shareholder regarding the voting or holding of the Guarantor's shares. The Guarantor is not aware of any arrangements, the operation of which may at a subsequent date result in a change of control of the Guarantor.

### Business Overview

Novartis provides healthcare solutions that address the evolving needs of patients and societies worldwide. Its broad portfolio includes innovative medicines, eye care products and cost-saving generic pharmaceuticals.

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<sup>1</sup> Excluding 6.2% of the share capital held as treasury shares by Novartis AG and its entities that restrict their availability for use.

<sup>2</sup> Previously reported as JPMorgan Chase Bank, New York, but changed to its affiliate Chase Nominees Ltd., London, which is entered as nominee in the Novartis share register.

Following the completion of a series of transactions in 2014 and 2015, the Group's portfolio is organised into three global operating divisions. In addition, Novartis separately reports the results of Corporate activities. The following disclosures focus on these continuing operations, which are made up of Pharmaceuticals, Alcon, Sandoz and Corporate activities. In addition, from 2 March 2015, the date of the completion of a series of transactions with GSK, continuing operations also includes the results from the oncology assets acquired from GSK and the 36.5% interest in the GSK consumer healthcare joint venture (the latter reported as an investment in associated companies). Novartis sold its Vaccines Division, excluding its influenza business, to GSK. The influenza vaccines business was sold to CSL and the Animal Health Division was sold to Lilly. For more detail on these transactions see, "*Material Contracts*" below. Following the Group's internal reorganisation announced on 27 January 2016, the Alcon Division's Ophthalmic Pharmaceuticals franchise was transferred from the Alcon Division to the Pharmaceuticals Division and selected mature products were transferred from the Pharmaceuticals Division to the Retail Generics and Oncology Injectables franchise of the Sandoz Division.

#### Continuing Operations:

- Pharmaceuticals: Innovative patent-protected prescription medicines.
- Alcon: Surgical and vision care products.
- Sandoz: Generic pharmaceuticals and biosimilars.
- Corporate activities.

#### Discontinued Operations:

- Vaccines and Diagnostics: Preventive human vaccines and blood-testing diagnostics.
- Consumer Health: OTC (over-the-counter medicines) and Animal Health.
- Corporate: certain transactional and other expenses related to the portfolio transformation.

Novartis has leading positions globally in each of the three areas of its continuing operations. To maintain its competitive positioning across these growing segments of the healthcare industry, Novartis places a strong focus on innovating to meet the evolving needs of patients around the world, growing its presence in new and emerging markets, and enhancing its productivity to invest for the future and increase returns to shareholders.

Novartis separately reports the financial results of its Corporate activities as part of its continuing operations. Income and expenses from Corporate activities include the costs of the Group headquarters and those of corporate coordination functions in major countries. In addition, Corporate includes other items of income and expense which are not attributable to specific segments such as certain expenses related to post-employment benefits, environmental remediation liabilities, charitable activities, donations and sponsorships.

Novartis' continuing operations are supported by the Novartis Institutes for BioMedical Research and Novartis Business Services.

- The Novartis Institutes for BioMedical Research ("**NIBR**") is the innovation engine of Novartis, and is headquartered in Cambridge, Massachusetts. More than 6,000 scientists and associates at NIBR conduct research into various disease areas at sites located in the US, Switzerland, Singapore and China.
- Novartis Business Services ("**NBS**"), the Group's shared services organisation, consolidates support services across Novartis divisions, helping to drive efficiency, standardisation and simplification. NBS includes six service domains: human resources services, real estate and facility management, procurement, information technology, product lifecycle services and financial reporting and accounting operations. Moving from division-specific services to a cross-divisional model, NBS continues to scale up the offshoring of transactional services to its five selected Global Service Centers in Mexico City, Mexico; Kuala Lumpur, Malaysia; Prague, Czech Republic; Hyderabad, India; and Dublin, Ireland.

The Group's continuing operations achieved net sales of \$49.4 billion in 2015, while net income from continuing operations amounted to \$7.0 billion. Research & Development expenditure in 2015 amounted to \$8.9 billion

(\$8.7 billion excluding impairment and amortisation charges). Of total net sales from continuing operations, \$12.4 billion, or 25%, came from Emerging Growth Markets, and \$37.0 billion, or 75%, came from Established Markets. Emerging Growth Markets comprise all markets other than the Established Markets of the US, Canada, Western Europe, Japan, Australia and New Zealand.

Headquartered in Basel, Switzerland, Novartis Group companies employed 118,700 full-time equivalent associates as of 31 December 2015. Novartis products are available in approximately 180 countries around the world.

In September 2015, Novartis announced the launch of Novartis Access, a portfolio of 15 medicines to treat chronic diseases in low- and middle-income countries. The portfolio addresses cardiovascular diseases, diabetes, respiratory illnesses, and breast cancer and will be offered to governments, non-governmental organisations ("NGOs") and other public-sector healthcare providers for \$1 per treatment, per month.

In January 2016, having completed its portfolio transformation and operationalised NBS, Novartis announced further steps to build on its strategy. Novartis is focusing its Alcon Division on its Surgical and Vision Care franchises. Within these franchises, Novartis has identified key actions to accelerate growth in 2016 and beyond. These include optimising intraocular lens ("IOL") innovation and commercial execution; prioritising and investing in promising pipeline opportunities; ensuring best-in-class service, training and education for eye care professionals; improving sales force effectiveness; and investing in direct to consumer activities for key brands.

Novartis is strengthening its ophthalmic medicines business by transferring Alcon's Ophthalmic Pharmaceuticals products to its Pharmaceuticals Division. This is expected to simplify its ophthalmic medicines business, leverage Alcon's strong brand with Pharmaceuticals Division development and marketing capabilities, and help Novartis accelerate innovation and growth in eye care.

At the same time, Novartis shifted selected mature, non-promoted pharmaceutical products from its Pharmaceuticals Division into Sandoz, which has proven experience in managing mature products successfully. Operationally, the transfer of products from Alcon's Ophthalmic Pharmaceuticals franchise to the Pharmaceuticals Division, and the transfer of selected mature products from the Pharmaceuticals Division to the Sandoz Division, were completed on 1 April 2016.

To increase innovation even further, Novartis is increasing Group-wide coordination of drug development. Novartis is establishing a single Global Head of Drug Development to improve resource allocation and standards across its divisions. Novartis is also centralising certain common functions, such as the Chief Medical Office, which will cover safety and pharmacovigilance policy for the Group.

To further improve efficiency, Novartis is centralising its manufacturing operations across its divisions within a single technical operations unit. The new unit is expected to optimise capacity planning and lower costs through simplification, standardisation and external spend optimisation. Centralisation is also expected to improve the Group's ability to develop next-generation technologies, implement continuous manufacturing and share best practices across divisions.

Novartis expects these changes to generate over \$1.0 billion in annual cost savings from 2020, with the ramp-up starting in 2016. Associated with these changes Novartis expects one-time restructuring costs of approximately \$1.4 billion spread over five years. Novartis plans to use the net savings to fund innovation and improve its profit margins.

In addition, Novartis announced leadership changes effective 1 February 2016. Mike Ball was appointed Division Head and CEO Alcon, and became a member of the Executive Committee of Novartis. Mr. Ball joined Novartis from Hospira, where he was CEO from 2011 until recently. Mr. Ball succeeds Jeff George, who decided to leave Novartis. Dr. Vas Narasimhan was appointed Global Head Drug Development and Chief Medical Officer, a new position in the ECN. André Wyss, already a member of the ECN, Head NBS and Country President for Switzerland, was appointed President, Novartis Operations. In his new role, he has assumed responsibility for the integrated Technical Operations organisation as well as for Global Public & Government Affairs, in addition to his previous responsibilities.

### ***Continuing Operations:***

#### *Pharmaceuticals Division*

The Group's Pharmaceuticals Division researches, develops, manufactures, distributes and sells patented prescription medicines. The Pharmaceuticals Division is organized into global business franchises responsible for the commercialization of various products. These franchises are: Oncology, Neuroscience, Ophthalmology, Immunology and Dermatology, Respiratory, Cardio-Metabolic, Established Medicines and Cell and Gene Therapies.

#### *Alcon Division*

The Group's Alcon Division researches, discovers, develops, manufactures, distributes and sells eye care products. The Alcon Division is the global leader in eye care with product offerings in surgical and vision care. The Alcon Division is organized globally in two global business franchises as follows: In Surgical, Alcon develops, manufactures, distributes and sells ophthalmic surgical equipment, instruments, disposable products and intraocular lenses. In Vision Care, Alcon develops, manufactures, distributes and sells contact lenses and lens care products.

#### *Sandoz Division*

The Group's Sandoz Division develops, manufactures, distributes and sells prescription medicines, as well as pharmaceutical active substances, which are not protected by valid and enforceable third-party patents. The Sandoz Division is organized globally in three franchises, Retail Generics and Oncology Injectables, Anti-Infectives and Biopharmaceuticals. In Retail Generics, Sandoz develops, manufactures and markets active ingredients and finished dosage forms of pharmaceuticals to third parties. Retail Generics includes the areas of dermatology, respiratory and ophthalmics, as well as cardiovascular, metabolism, central nervous system, pain, gastrointestinal, and hormonal therapies. Finished dosage form anti-infectives sold to third parties are also part of Retail Generics. In Oncology Injectables, Sandoz develops, manufactures and markets cytotoxic products for the hospital market. In Anti-Infectives, Sandoz manufactures active pharmaceutical ingredients and intermediates – mainly antibiotics – for internal use by Retail Generics and for sale to third party customers. In Biopharmaceuticals, Sandoz develops, manufactures and markets protein- or other biotechnology-based products known as biosimilars and provides biotechnology manufacturing services to other companies.

### ***Discontinued Operations:***

#### *Vaccines and Diagnostics Division*

Prior to the completion of certain transactions in 2014 and 2015, the Group's Vaccines and Diagnostics Division researched, developed, manufactured, distributed and sold human vaccines and blood-testing products worldwide. On 9 January 2014, Novartis completed the divestment of its blood transfusion diagnostics unit to Grifols S.A. On 2 March 2015, Novartis completed the divestment of its Vaccines Division (excluding its influenza vaccines business) to GSK. On 31 July 2015, Novartis completed the divestment of its influenza vaccines business to CSL Limited.

#### *Consumer Health*

Prior to the completion of certain transactions in 2015, Consumer Health consisted of the Group's OTC (Over-the-Counter) and Animal Health Divisions. On 1 January 2015 Novartis completed the divestment of its Animal Health Division to Lilly. On 2 March 2015, Novartis completed the divestment of its OTC Division, which Novartis contributed to a new consumer healthcare joint venture with GSK, of which Novartis owns 36.5%.

### **Administrative, Management and Supervisory Bodies**

#### ***Board of Directors***

The members of the board of directors of Novartis AG, none of whom have activities outside the Group which are significant with respect to the Group, are as follows:

<b><i>Name of Director</i></b>	<b><i>Function in Group</i></b>
Joerg Reinhardt, Ph.D.	Chairman
Enrico Vanni, Ph.D.	Vice Chairman
Nancy C. Andrews, M.D., Ph.D.	Director
Dimitri Azar, M.D., MBA	Director
Ton Buechner	Director
Srikant Datar, Ph.D.	Director
Elizabeth (Liz) Doherty	Director
Ann Fudge	Director
Pierre Landolt, Ph.D.	Director
Andreas von Planta, Ph.D.	Director
Charles L. Sawyers, M.D.	Director
William T. Winters	Director
Charlotte Pamer-Wieser, Ph.D.	Corporate Secretary

### ***Executive Committee***

The members of the Executive Committee of Novartis, none of whom have activities outside the Group which are significant with respect to the Group, are as follows:

<b><i>Name of Member</i></b>	<b><i>Function in Group</i></b>
Joseph Jimenez	Chief Executive Officer of Novartis
Steven Baert	Head of Human Resources of Novartis
F. Michael (Mike) Ball	Division Head and Chief Executive Officer, Alcon
Felix Ehrat, Ph.D.	Group General Counsel of Novartis
David Epstein	Division Head and Chief Executive Officer, Novartis Pharmaceuticals
James (Jay) Bradner, M.D.	President, Novartis Institutes for BioMedical Research (NIBR)
Richard Francis	Division Head and Chief Executive Officer, Sandoz
Harry Kirsch	Chief Financial Officer of Novartis
Vasant (Vas) Narasimhan, M.D.	Global Head Drug Development and Chief Medical Officer for Novartis
André Wyss	President, Novartis Operations Country President for Switzerland

The business address for each of the directors and each member of the Executive Committee is Lichtstrasse 35, 4056 Basel, Switzerland.

There are no potential conflicts of interest between any duties of the directors to the Guarantor and their private interests or other duties and between any duties of the members of the Executive Committee to the Guarantor and their private interest or other duties.

## Material Contracts

### *Transactions with GSK*

On 22 April 2014 (and as amended and restated on 29 May 2014), Novartis entered into an overarching framework agreement (the "**Implementation Agreement**") with GSK for the Consumer Healthcare Joint Venture, the Vaccines Sale and the Oncology Acquisition (each as defined below and, together with the Influenza Put Option (as defined below), the "**Transactions**"). The Consumer Healthcare Joint Venture, the Vaccines Sale and the Oncology Acquisition were completed on 2 March 2015.

#### *Consumer Healthcare Joint Venture with GSK*

On 22 April 2014 (and as amended and restated on 29 May 2014, and 1 March 2015), Novartis entered into a Contribution Agreement with GSK under which GSK contributed its consumer healthcare business (the "**GSK Consumer Healthcare Business**") and Novartis contributed its OTC Division, with certain limited exceptions which include the over-the-counter business of our Sandoz Division, into a newly-created joint venture which operates under the GSK Consumer Healthcare name (the "**Consumer Healthcare Joint Venture**"). In consideration for those contributions, GSK owns 63.5% of the issued share capital of the Consumer Healthcare Joint Venture and Novartis owns 36.5% of the issued share capital of the Consumer Healthcare Joint Venture.

The operation of the Consumer Healthcare Joint Venture is governed by a Shareholders' Agreement, under which GSK has the right to appoint seven directors to the board of the Consumer Healthcare Joint Venture and Novartis has the right to appoint four directors to the board of the Consumer Healthcare Joint Venture. The Shareholders' Agreement also contains certain minority shareholder protections, including the right to exit the Consumer Healthcare Joint Venture via a put option exercisable in certain windows in the period from the third to the twentieth anniversary of the creation of the Consumer Healthcare Joint Venture. The Shareholders' Agreement became operative concurrently with the creation of the Consumer Healthcare Joint Venture on 2 March 2015.

#### *Sale of Vaccines Business (Excluding the Influenza Vaccines Business) to GSK*

On 22 April 2014 (and as amended and restated on 29 May 2014, as further amended on 9 October 2014, and as further amended and restated on 1 March 2015), Novartis entered into a Sale and Purchase Agreement with GSK under which Novartis sold its Vaccines Division (with certain limited exceptions, and except for its influenza vaccines business) to GSK (the "**Vaccines Sale**") for up to \$7.1 billion, consisting of \$5.25 billion upfront and up to \$1.8 billion in milestones, of which Novartis has received \$450 million as of 31 December 2015, plus royalties. Novartis completed the Vaccines Sale on 2 March 2015.

#### *Oncology Acquisition from GSK*

On 22 April 2014 (and as amended and restated on 29 May 2014, 21 November 2014, and 1 March 2015), Novartis entered into a Sale and Purchase Agreement with GSK under which Novartis acquired GSK oncology products and certain related assets (the "**Oncology Acquisition**"). GSK has also granted Novartis a right of first negotiation over the co-development and commercialisation of GSK's current and future oncology R&D pipeline, excluding oncology vaccines, for a period of twelve and one half years from closing. Novartis completed the Oncology Acquisition on 2 March 2015. Novartis paid an aggregate cash consideration of \$16 billion for the Oncology Acquisition.

#### *Influenza Vaccines Business Put Option with GSK*

On 22 April 2014 (and as amended and restated on 29 May 2014), Novartis entered into a Put Option Deed with GSK pursuant to which Novartis had the right to unilaterally require GSK to acquire its Vaccines Division's influenza vaccines business for \$250 million, or certain parts of the influenza vaccines business for a pro-rata amount (the "**Influenza Put Option**") if the divestment to CSL discussed below was not completed. The Influenza Put Option expired concurrently with the closing of the divestment of our influenza vaccines business to CSL on 31 July 2015.

### ***Sale of Influenza Vaccines Business to CSL***

On 26 October 2014 (and as amended and restated on 31 July 2015), Novartis entered into a Share and Business Sale Agreement with CSL under which Novartis divested its Vaccines Division's influenza vaccines business to CSL for \$275 million. This transaction was completed effective 31 July 2015.

### ***Sale of Animal Health Division to Lilly***

On 22 April 2014 (and as amended on 17 December 2014), Novartis entered into a Stock and Asset Purchase Agreement with Lilly. Under this agreement, Lilly agreed to purchase our Animal Health Division (with certain limited exceptions) for approximately \$5.4 billion. This transaction was completed on 1 January 2015.

### **Legal Matters**

A number of Novartis companies are, and will likely continue to be, subject to various legal proceedings and investigations that arise from time to time, including proceedings regarding product liability, sales and marketing practices, commercial disputes, employment, and wrongful discharge, antitrust, securities, health and safety, environmental, tax, international trade, privacy, and intellectual property matters. As a result, the Group may become subject to substantial liabilities that may not be covered by insurance and could affect its business and reputation. While Novartis does not believe that any of these legal proceedings will have a material adverse effect on its financial position, litigation is inherently unpredictable and large judgments sometimes occur. As a consequence, Novartis may in the future incur judgments or enter into settlements of claims that could have a material adverse effect on its results of operations or cash flow.

Governments and regulatory authorities around the world have been stepping up their compliance and law enforcement activities in recent years in key areas, including marketing practices, pricing, corruption, trade restrictions, embargo legislation, insider trading, antitrust, cyber security and data privacy. Further, when one government or regulatory authority undertakes an investigation, it is not uncommon for other governments or regulators to undertake investigations regarding the same or similar matters. Responding to such investigations is costly and requires an increasing amount of management's time and attention. In addition, such investigations may affect our reputation, create a risk of potential exclusion from government reimbursement programs in the US and other countries, and may lead to (or arise from) litigation. These factors have contributed to decisions by Novartis and other companies in the healthcare industry, when deemed in their interest, to enter into settlement agreements with governmental authorities around the world prior to any formal decision by the authorities or a court. Those government settlements have involved and may continue to involve, in current government investigations and proceedings, large cash payments, sometimes in the hundreds of millions of dollars or more, including the potential repayment of amounts allegedly obtained improperly and other penalties, including treble damages. In addition, settlements of government healthcare fraud cases often require companies to enter into corporate integrity agreements, which are intended to regulate company behaviour for a period of years. Novartis Pharmaceuticals Corporation is a party to such an agreement, which will expire in 2020. Also, matters underlying governmental investigations and settlements may be the subject of separate private litigation.

The following is a summary of significant legal proceedings to which Novartis or its subsidiaries are a party or were a party and that concluded in 2015. See "*—Legal matters update*" below for a summary of potentially significant developments in those proceedings, as well as new potentially significant proceedings.

#### ***Investigations and related litigations***

##### ***Southern District of New York ("SDNY") marketing practices investigation and litigation***

In April 2013, the US government filed a civil complaint in intervention to an individual *qui tam* action against NPC in the United States District Court ("USDC") for the SDNY involving several of NPC's cardiovascular medications. The suit is related to a previously disclosed 2011 investigation of the United States Attorney's Office ("USAO") for the SDNY relating to marketing practices, including the remuneration of healthcare providers, in connection with three NPC products (*Lotrel*, *Starlix* and *Valturna*). The complaint, as subsequently amended, asserts federal False Claims Act and common law claims with respect to speaker programs and other promotional activities for certain NPC cardiovascular medications allegedly serving as mechanisms to provide kickbacks to healthcare professionals. It seeks unspecified damages, which according to the complaint are "substantial", including treble damages and maximum civil penalties per claim, as well as disgorgement of Novartis profits from the alleged unlawful conduct. In August 2013, New York State filed a civil complaint in

intervention asserting similar claims. Neither government complaint in intervention adopted the individual relator's claims with respect to off-label promotion of *Valturna*, which were subsequently dismissed with prejudice by the court. The individual relator continues to litigate the kickback claims on behalf of other states and municipalities. NPC vigorously contests the SDNY, New York State and individual claims, both as to alleged liability and amount of damages and penalties.

#### *SDNY / Western District of New York healthcare fraud investigation*

In 2011, Alcon Laboratories, Inc. ("**ALI**") received a subpoena from the United States Department of Health & Human Services relating to an investigation into allegations of healthcare fraud. The subpoena requests the production of documents relating to marketing practices, including the remuneration of healthcare providers, in connection with certain ALI products (*Vigamox*, *Nevanac*, *Omnipred*, *Econopred*; surgical equipment). ALI is cooperating with the investigation, which is civil in nature.

#### *Northern District of Texas ("**NDTX**") investigation*

In 2012, Alcon was notified that the USAO for the NDTX is conducting an investigation relating to the export of Alcon products to various countries subject to United States trade sanctions, including Iran, allegedly in violation of applicable trade sanctions, and received a grand jury subpoena requesting the production of documents for a period beginning in 2005 relating to this investigation. Alcon is cooperating with the investigation.

#### *SDNY Gilenya investigation*

In 2013, NPC received a civil investigative demand from the USAO for the SDNY requesting the production of documents and information relating to marketing practices for *Gilenya*, including the remuneration of healthcare providers in connection therewith. NPC is cooperating with this civil investigation.

#### *New York state investigation*

In November 2014, ALI received a civil subpoena from the New York state attorney general relating to an investigation into a unilateral pricing policy program. ALI is cooperating with this civil investigation.

#### *Lucentis/Avastin® matters in Italy and France*

In 2013, the Italian Competition Authority ("**ICA**") opened an investigation to assess whether Novartis Farma S.p.A., Novartis AG (NAG), F. Hoffmann-La Roche AG, Genentech Inc. and Roche S.p.A. colluded to artificially preserve the market positions of Avastin® and *Lucentis*. In March 2014, the ICA imposed a fine equivalent to \$125 million on NAG and Novartis Farma S.p.A. and a fine on F. Hoffmann-La Roche AG and Roche S.p.A. equivalent to \$122 million. As required by Italian law, Novartis has paid the ICA fine, subject to the right to later claim recoupment. In February 2015, Novartis appealed at the council of state the decision of the Tribunale amministrativo regionale ("**TAR**") del Lazio which had upheld the fines. The decision is pending. Novartis' appeal of a decision by the Italian Medicines Agency to include Avastin® in a list of drugs to be reimbursed off-label for age-related macular degeneration ("**AMD**") was rejected by the TAR Lazio in January 2016. Novartis will appeal this decision. In the second quarter of 2014, the Italian Ministry of Health ("**MoH**") indicated in a letter that it intended to seek a total equivalent of approximately \$1.3 billion in damages from Novartis and Roche entities based on the above allegations, and in the first quarter of 2015 the Lombardia region sent a payment request equivalent to approximately \$63 million. Novartis vigorously contests the MoH and Lombardia claims.

In France, Novartis' appeal is pending against an inspection in April 2014 by the French Competition Authority on the premises of Novartis Groupe France and Roche with respect to the French market for anti-vascular endothelial growth factor ("**VEGF**") products indicated for the treatment of wet AMD. Also in France, Novartis is appealing a temporary recommendation of use and reimbursement of off-label Avastin® for neovascular AMD by hospital ophthalmologists, in force since September 2015, as well as the decree on which the recommendation is based. In both Italy and France, Novartis believes that allowing the widespread off-label use and reimbursement of Avastin®, despite the presence of available licensed alternatives, would result in a breach of applicable regulations.



### *Japan investigation*

In December 2015, trial started against a former Novartis Pharma K.K. ("**NPKK**") employee, and also NPKK under the dual liability concept in Japanese law, over allegations brought by the Tokyo District Public Prosecutor Office in two counts for alleged manipulation of data in sub-analysis publications of the Kyoto Heart Study regarding valsartan. The charges against NPKK are subject to a maximum total fine of JPY 4 million.

In February 2015, the Japanese Ministry of Health, Labor and Welfare ("**MHLW**") issued a business suspension order for failure to report adverse events, which required NPKK to halt manufacturing and sales in Japan for the period from 5 to 19 March 2015. NPKK has implemented a corrective and preventive action plan in response to a business improvement order and instruction issued by the MHLW in the fourth quarter of 2015 regarding additional instances of delayed adverse events reporting.

### *Internal travel agencies investigation*

After reports of Chinese government investigations of competitors for alleged improper use of certain China-based travel agencies to reward healthcare providers, Novartis commenced an internal investigation in 2013 concerning its local affiliates' relationships with China-based travel agencies (and other vendors). Novartis is communicating with the US Securities and Exchange Commission about this internal investigation.

### *Italy MF59 investigation*

In May 2014, the public prosecutor of Siena initiated a criminal investigation with respect to allegations that the transfer price of the adjuvant MF59 was unlawfully marked up. The investigation concerns whether the *Focetria* and *Fluad* vaccines sold to the government were over-priced and whether the Italian Ministry of Health paid an inflated amount in a dispute settlement relating to the supply of *Focetria* during the 2009 pandemic.

### **Product liability matters**

#### *Reclast/Aclasta product liability litigation*

NPC is a defendant in 21 US product liability actions involving *Reclast* and alleging atypical femur fracture injuries, most of which are in New Jersey state or federal court coordinated with claims against other bisphosphonate manufacturers. There are also three Canadian putative class actions brought against numerous bisphosphonate manufacturers including NPC, Novartis Pharmaceuticals Canada Inc. and Novartis International AG in Quebec, Alberta and Saskatchewan. All claims are being vigorously contested.

#### *Metoclopramide product liability litigation*

Sandoz is a defendant, along with numerous manufacturers of brand pharmaceuticals, in 395 product liability actions in the state courts in Pennsylvania and California claiming that the use of metoclopramide, the generic version of the brand name drug Reglan®, caused personal injuries including tardive dyskinesia. Sandoz denies the allegations and is vigorously contesting the claims.

#### *Tekturna/Rasilez/Valturna product liability litigation*

NPC and certain other Novartis affiliates are defendants in 12 individual lawsuits pending in the USDC for the District of New Jersey ("**DNJ**"), and one in Alberta, Canada, claiming that treatment with *Tekturna*, *Rasilez* and/or *Valturna* caused renal failure, kidney disease or stroke. The claims are being vigorously contested.

### **Arbitration**

#### *Equa arbitration*

In 2013, Sanofi K.K. ("**Sanofi**") commenced an arbitration against NPKK relating to the termination of a co-promotion agreement in Japan of *Equa* (*Galvus*), which is used to treat type 2 diabetes. Sanofi seeks an award equivalent to \$356 million, at a minimum, together with a request for payment of additional interest and expenses as well as legal and other costs of the proceedings. NPKK is vigorously defending the action as well as prosecuting a counterclaim against Sanofi.

## ***Other matters***

### *Average Wholesale Price ("AWP") litigation*

Claims have been brought by various US state governmental entities against various pharmaceutical companies, including certain Sandoz entities and NPC, alleging that they fraudulently overstated the AWP that is or has been used by payors, including state Medicaid agencies, to calculate reimbursements to healthcare providers. NPC and Sandoz reached settlements in the first, third, and fourth quarters of 2015 of the Wisconsin and Utah claims against them for amounts that are not material to Novartis. Sandoz has filed a motion for reconsideration against a Mississippi Supreme Court decision which in the fourth quarter of 2015 upheld the \$30 million Chancery Court verdict against it. NPC remains a defendant in an action brought by the state of Illinois and in a putative class action brought by private payors in New Jersey. The claims are being vigorously contested.

### *Qui tam actions*

NPC is a defendant in a relator's *qui tam* action in the USDC for the Eastern District of Pennsylvania asserting federal and state False Claims Act claims relating to certain alleged marketing practices involving Elidel®. The federal government and several states declined to intervene in the relator's action. NPC is vigorously contesting the claims.

In 2006, 2010 and 2012, *qui tam* complaints were filed in the District of Massachusetts ("**D. Mass.**") asserting various federal False Claims Act and state claims relating to certain alleged improper marketing practices involving *Xolair* against various Novartis, Genentech and Roche entities. In 2011, the US and various state governments declined to intervene in the relators' actions, and closed their investigations. In June 2014, the relator in the 2010 action voluntarily dismissed his complaint with prejudice; the US and various states subsequently consented to the dismissal. In the first quarter of 2015, the USDC for the D. Mass. dismissed with prejudice all claims in connection with alleged improper marketing practices asserted by the relators and dismissed without prejudice all claims asserted in the name of the federal and various state governments. The relators have appealed. Novartis continues to vigorously contest the claims.

### *Antitrust class actions*

Since the third quarter of 2013, approximately sixteen putative class action complaints have been filed against manufacturers of the brand drug Solodyn® and its generic equivalents, including Sandoz Inc. The cases have been consolidated and transferred for pretrial purposes to a federal district court in Massachusetts. The plaintiffs purport to represent direct and indirect purchasers of Solodyn® branded products and assert violations of federal and state antitrust laws, including allegations in connection with separate settlements by Medicis with each of the other defendants, including Sandoz Inc., of patent litigation relating to generic Solodyn®. Sandoz is vigorously contesting the claims.

Since March 2015, more than 50 putative class action complaints have been filed in several courts across the US naming contact-lens manufacturers, including ALI, and alleging violations of federal antitrust law as well as state antitrust, consumer protection and unfair competition laws of various states in connection with the sale of contact lenses. The cases have been consolidated in the Middle District of Florida by the Judicial Panel on Multidistrict Litigation and the claims are being vigorously contested.

Since June 2015, NPC, Novartis Corporation ("**NC**") and NAG have been sued in five putative class action complaints brought in federal district court in Massachusetts on behalf of proposed classes of all direct and indirect purchasers, including end-payors, of *Gleevec*. The complaints assert violations of federal antitrust law and various state laws, and seek to prevent Novartis from enforcing a previously reported 2014 agreement under which Sun Pharmaceuticals agreed not to launch a generic version of *Gleevec*, until 1 February 2016, as well as damages and other relief. The claims are being vigorously contested.

In October 2015, Sandoz and Momenta Pharmaceuticals were sued in a putative antitrust class action in federal court in Tennessee alleging that Momenta and Sandoz engaged in anticompetitive conduct with regard to sales of enoxaparin, and the same allegations were made by Amphastar in a lawsuit filed in federal court in California (Sandoz, Momenta Pharmaceuticals and Amphastar are currently engaged in litigation concerning certain enoxaparin patents in federal court in Massachusetts). The claims are being vigorously contested.

### *Oriel litigation*

In October 2013, Shareholder Representative Services LLC filed a complaint in New York State Court against Sandoz Inc., two affiliates and two former officers of Sandoz AG asserting various common law and statutory contract, fraud and negligent misrepresentation claims arising out of the Sandoz Inc. purchase of Oriel Therapeutics, Inc. In March 2015, the court dismissed all claims except a breach of contract claim against Sandoz Inc. Sandoz Inc. continues to vigorously contest the claim.

### *Eye drop products consumer class actions*

Since November 2012, six putative consumer fraud class action litigations were commenced against Alcon (and in four cases Sandoz) in federal courts in the Southern Districts of Illinois ("**S.D. Ill.**") and Florida and the Districts of Missouri, Massachusetts and New Jersey. They claim that Alcon's, Sandoz's and many other manufacturers defendants' eye drop products were deceptively designed so that the drop dosage is more than necessary to be absorbed in the eye or there is too much solution in each bottle for the course of the treatment, leading to wastage and higher costs to patient consumers. Three cases remain pending in the S.D. Ill., D. Mass. and DNJ. Novartis is vigorously contesting the claims.

### *Employment action*

In March 2015, ALI and NC were sued in an individual and collective action filed in the SDNY. The parties negotiated a class settlement and a settlement for the individual plaintiffs (excluding one plaintiff) for an amount that is not material to Novartis, which settlements and amended complaint were filed with the court for approval in December 2015. The claims assert inter alia gender discrimination, pay discrimination and retaliation at Alcon. The one remaining individual claim continues to be vigorously contested.

### **Concluded legal matters**

#### *Western District of Kentucky ("**WDKY**") investigation*

In 2012, NPC received a subpoena from the USAO for the WDKY requesting the production of documents relating to marketing practices, including alleged remuneration of healthcare providers and off-label promotion, in connection with certain NPC products (including *Tekturna*, *Valturna*, *Reclast*, *Exelon* Patch and other products). In the third quarter of 2015, the USAO declined to intervene in the relators' complaint and has closed the investigation.

#### *SDNY specialty pharmacies investigation and litigation*

In April 2013, the US government filed a civil complaint in intervention to a *qui tam* action against NPC in the USDC for the SDNY. The complaint, as subsequently amended, asserted federal False Claims Act and state law claims related to alleged unlawful contractual discounts and rebates to specialty pharmacies in connection with *Myfortic*, and alleged unlawful contractual discounts, rebates and patient referrals to one specialty pharmacy in connection with *Exjade*. In January 2014, eleven states filed three complaints in intervention asserting similar claims related to *Exjade*; and the *qui tam* relator served on NPC an amended complaint also asserting similar claims with respect to *Myfortic* and *Exjade*, as well as claims involving *Tasigna*, *Gleevec* and *TOBI* that the federal and various state governments declined to pursue. In the second half of 2015, NPC reached a settlement with all plaintiffs, including the United States Department of Justice, 45 states (made up of the eleven intervening states, as well as all the other states which were either part of the relator's complaint, or which reimbursed prescriptions of *Myfortic* and *Exjade* during the relevant time period), the District of Columbia and the *qui tam* relator. This resolves all the above-described claims related to *Myfortic*, *Exjade*, *Tasigna*, *Gleevec* and *TOBI*. As part of the settlement, NPC agreed to pay \$390 million plus additional legal expenses to plaintiffs, and agreed with the Office of Inspector General of the US Department of Health & Human Services on an amendment and extension of its current Corporate Integrity Agreement until 2020.

#### *DNJ investigation*

In late September 2014, ALI received a subpoena from the USAO for the DNJ relating to an investigation of Alcon sales practices. In the third quarter of 2015, the USAO declined to proceed, and no charges were brought or sanctions imposed. The relator dismissed the complaint voluntarily.

### *Italy Sandostatin investigation*

In January 2014, the ICA opened an investigation to assess whether Novartis Farma S.p.A. and Italfarmaco S.p.A. colluded on the supply of octreotide acetate (*Sandostatin LAR* and Longastatina® LAR, respectively). In consideration of commitments to amend certain provisions of the co-marketing agreement with Italfarmaco, the ICA decided to close the investigation with no finding of an infringement and thus without a fine. The decision became final in October 2015.

### *Zometa/Aredia product liability litigation*

NPC had been a defendant in more than 880 cases brought in US courts in which plaintiffs generally claimed to have experienced osteonecrosis of the jaw or atypical femur fracture after treatment with *Zometa* or *Aredia*, which are used to treat patients whose cancer has spread to the bones. Nearly all the cases have been resolved through voluntary dismissals, pre-trial motion practice, trial, or settlements, the payments of which were not material to Novartis. Three cases where NPC prevailed at the trial level remain on appeal, and one other case remains pending. The remaining claims are being vigorously contested, but they are not material to Novartis.

### *Solodyn® Federal Trade Commission ("FTC") investigation*

The conduct challenged in the above-described Solodyn® antitrust class actions has also been the subject of an FTC investigation. In the fourth quarter of 2015, the FTC closed the investigation with no finding of an infringement or a fine. This matter is therefore concluded.

### *Excedrin consumer class actions*

Four putative class actions were brought in December 2013 and January 2014 against Novartis and its consumer health unit. They generally claim that it was a deceptive practice to sell Excedrin Migraine at a higher price than Excedrin Extra Strength when the two have the same active ingredients, even though the products have different labels and clearly disclose their active ingredients. In 2014, three of the four putative class actions were dismissed; the remaining one is not material to Novartis.

### *Legal matters update*

#### *Lucentis/Avastin® Italy*

Granting a request by Novartis, in March 2016 the council of state suspended Novartis' appeal against the decision of the TAR del Lazio and referred five legal questions to the European Court of Justice ("ECJ") for a preliminary ruling. As previously reported, the TAR del Lazio decision had upheld the fines imposed on the Guarantor, Novartis Farma S.p.A., and two Roche entities for alleged collusion to artificially differentiate Avastin® and *Lucentis* in order to avoid the erosion of the sales of *Lucentis* by off-label Avastin® with the aim of preserving the market position of *Lucentis* in Italy. The ECJ's decision is pending. Novartis continues to vigorously contest the claims.

#### *China investigations*

After reports of Chinese government investigations of other pharmaceutical companies for alleged improper use of certain China-based travel agencies to reward healthcare providers, Novartis commenced an internal investigation in 2013 concerning its local affiliates' relationships with China-based travel agencies (and other vendors). In March 2016, the Guarantor achieved a civil settlement with the US Securities and Exchange Commission (the "SEC") to pay \$25 million to settle charges that it violated the internal controls and books-and-records provisions of the Foreign Corrupt Practices Act, without admitting or denying the findings. Novartis also agreed for two years to report to the SEC on the status of its remediation and anti-corruption compliance.

#### *South Korea investigation*

In the first quarter of 2016, the Seoul Western District Prosecutor initiated a criminal investigation into allegations that Novartis Korea utilized medical journals to provide inappropriate economic benefits to healthcare professionals.

## TAXATION IN LUXEMBOURG

*The following summarises certain important Luxembourg taxation principles that may be relevant to you if you invest in, hold or dispose of the Notes. Unless otherwise indicated, all information contained in this section is based on laws, regulations, practice and decisions in effect in Luxembourg at the date of this Listing Prospectus. Any changes could apply retroactively and could affect the continued validity of this summary.*

*This summary does not purport to be a comprehensive description of all potential Luxembourg tax considerations that may be relevant to a decision to invest in, own or dispose of the Notes and is not intended as tax advice to any particular investor. You should consult your tax advisers about the tax consequences of investing in, holding or disposing of the Notes (including receiving interest and redeeming the Notes).*

*This summary does not describe any tax consequences arising under the laws of any state, locality or other taxing jurisdiction other than Luxembourg.*

### **Withholding Tax**

Except as provided for by the law of 23 December 2005 as amended (the "**Law of 23 December 2005**") introducing a domestic final withholding tax on certain interest payments to Luxembourg resident individuals only, under the existing laws of Luxembourg there is no withholding tax on payments of principal, at arm's length premium or at arm's length interest, or on accrued but unpaid interest, in respect of the Notes, nor is any Luxembourg withholding tax payable upon redemption or repurchase of the Notes.

In this section, "**interest**", "**residual entities**" and "**paying agent**" have the meaning given thereto in the Law of 23 December 2005 or the relevant Accords. "**Interest**" will include accrued or capitalised interest at the sale, repayment or redemption of the Notes. "**Residual entities**" include, in general, all entities established in a Member State or a Territory other than legal entities, undertakings for collective investments in transferable securities ("**UCITS**") authorised under the European Council directive 85/611/EEC, and entities taxed as enterprises. "**Paying agent**" is defined broadly for this purpose and in the context of the notes means any economic operator established in Luxembourg who pays interest on the Notes to or ascribes the payment of such interest to or for the immediate benefit of the beneficial owner or the residual entity whether the economic operator is, or acts on behalf of, the Issuer or is instructed by the beneficial owner, or the residual entity, as the case may be, to collect such payment of interest.

Further, according to the Law of 23 December 2005, interest payments on the Notes paid by a Luxembourg paying agent will be subject to a withholding tax of 10 % (the "**10% withholding tax**") if such payments are made for the immediate benefit of individuals resident in Luxembourg.

In the event that interest is paid to Luxembourg resident individuals or to a residual entity securing the payment for the benefit of such individuals by a paying agent established in a Member State (other than Luxembourg) or a Territory, the beneficiary may opt for the application of a 10% flat taxation in accordance with the Law of 23 December 2005 (the "**10% tax**").

The 10% withholding tax and the 10% tax will operate a full discharge of income tax for Luxembourg resident individuals acting in the context of the management of their private wealth.

Interest on the Notes paid by a Luxembourg paying agent to legal entities resident of Luxembourg will not be subject to any withholding tax.

### **Foreign account tax compliance act ("FATCA") requirements**

FATCA requires financial institutions to report on an annual basis to the U.S. Internal Revenue Service certain information on U.S. persons that hold accounts outside the U.S., as a safeguard against U.S. tax evasion. In addition, FATCA generally imposes a 30% withholding tax on certain U.S. source payments (including dividends and gross proceeds from the sale or other disposal of property that can produce U.S. source income) when made to an individual or entity that does not comply with FATCA provisions. The 30% withholding could also apply to payments otherwise attributable to U.S. source income (also known as "**foreign pass-through payments**").

On 28 March 2014, the U.S. and the Grand Duchy of Luxembourg signed an intergovernmental agreement ("**IGA**") in the form of Model 1, which requires Luxembourg financial institutions to report all FATCA-related information to their own governmental agencies, which would then report such information to the U.S. Internal Revenue Service. The IGA has been implemented in Luxembourg by a law dated 24 July 2015.

Investors should consult their own tax advisors regarding the FATCA requirements with respect to their own situation on their investment in the Company. In particular, investors who hold their investment through intermediaries should confirm the FATCA compliance status of those intermediaries to ensure that they do not suffer U.S. withholding tax on their investment returns.

### **Taxes on income and capital gains**

Noteholders resident in Luxembourg are taxed for income and possibly gains derived from the Notes depending on whether they hold the Notes in the context of carrying on an enterprise or in the context of managing their private wealth. Resident corporate Noteholders are deemed to hold the Notes in the context of carrying on an enterprise.

If held in the context of carrying on an enterprise, any interest income, whether paid or accrued, and any capital gain or foreign exchange result whether realised or accrued, derived from the Notes is subject to Luxembourg income taxes (income tax levied at progressive rates and municipal business tax for Luxembourg resident individuals, and corporate income tax and municipal business tax for Luxembourg corporate holders). For Luxembourg resident individuals receiving the interest as income from their professional assets, the 10% withholding tax levied is credited against their final tax liability.

If held in the context of managing private wealth, interest income received is subject to income tax at progressive rates unless the 10% withholding tax or the 10% tax applies. Furthermore, capital gains realised upon disposal of Notes are taxable if realised within six months from the acquisition of the Notes or their disposal precedes the acquisition of the Notes. Upon redemption of the Notes, Luxembourg resident individuals must include the portion of the redemption price corresponding to accrued but unpaid interest in their taxable income, unless the 10% withholding tax or the 10% tax has been levied or paid respectively.

Non-resident Noteholders are only subject to income taxes in Luxembourg in respect of their holding of Notes if such holding is effectively allocable to a fixed place of business in Luxembourg, through which the holder carries on an enterprise. In that case, any interest income, whether paid or accrued, and any capital gain or foreign exchange result whether realised or accrued, derived from the Notes is subject to Luxembourg income tax levied at progressive rates and municipal business tax in the case of individuals and corporate income tax and municipal business tax in the case of companies. Non-resident Noteholders, not having a permanent establishment, a permanent representative, or a fixed place of business in Luxembourg to which the Notes or income therefrom are attributable, are not subject to Luxembourg income taxes on income accrued or received, redemption premiums or issue discounts, under the Notes nor on capital gains realised on the disposal or redemption of the Notes. Non-residents holders who have a permanent establishment, a permanent representative, or a fixed place of business in Luxembourg to which the Notes or income therefrom are attributable are subject to Luxembourg income tax on interest accrued or received, redemption premiums or issue discounts, under the Notes and on any gains realised upon the sale or disposal of the Notes.

### **Net Wealth Tax**

Corporate Noteholders resident in Luxembourg, unless governed by (a) the law of 17 December 2010 on undertakings for collective investment (amending the law of 20 December 2002), or (b) the law of 22 March 2004 on securitisation, or (c) the law of 15 June 2004 on the investment company in risk capital, or (d) the law of 11 May 2007 on family estate management companies (as amended) or (e) the law of 13 July 2005 on Luxembourg pension structures or (f) the law of 13 February 2007 on specialised investment funds (as amended) are subject to annual net wealth tax on its net assets as determined for net wealth tax purposes ("**NWT**"). NWT is levied at the rate of 0.5% on net assets not exceeding €500 million and at the rate of 0.05% on the portion of net assets exceeding €500 million.

For corporate Noteholders resident in Luxembourg, a minimum net wealth tax ("**MNWT**") levied on companies having their statutory seat or central administration in Luxembourg. For entities for which the sum of fixed financial assets, transferable securities and cash in the bank exceeds 90% of their total gross assets and €350,000, the MNWT is set at €3,210. For all other companies with their statutory seat or central administration in

Luxembourg which do not fall within the scope of the €3,210 MNWT, the MNWT ranges from €535 to €32,100 depending on the company's total gross assets.

Non-resident corporate Noteholders are only subject to such net wealth tax in Luxembourg in respect of the Notes if such holding is effectively connected to a permanent establishment or a fixed place of business in Luxembourg, through which the holder carries on an enterprise.

Individuals are not subject to Luxembourg net wealth tax.

### **Registration tax**

There is no Luxembourg registration tax, stamp duty or any other similar tax or duty due in Luxembourg by the Noteholders as a consequence of the issuance of the Notes. No Luxembourg registration tax, stamp duty or other similar tax or duty is due either in case of a subsequent repurchase, redemption or transfer of the Notes. A registration duty may however apply (i) upon voluntary registration of the debt instruments in Luxembourg (there is in principle no obligation to register debt instruments in Luxembourg though), (ii) in case of legal proceedings before a Luxembourg court or (iii) in the case that the documents relating to the debt instruments must be produced before an official Luxembourg authority (*autorité constituée*).

### **Gift and inheritance tax**

Inheritance tax is levied in Luxembourg at progressive rates (depending on the value of the assets inherited and the degree of relationship). No Luxembourg inheritance tax will be due in respect of the Notes unless the holder of Notes resides in Luxembourg at the time of his decease. No Luxembourg gift tax is due upon the donation of notes to the extent such donation is not registered in Luxembourg.

### **Value added tax**

No Luxembourg value added tax is levied with respect to (i) any payment made in consideration of the issuance of the Notes, (ii) any payment of interest, (iii) any repayment of principal or upon redemption, and (iv) any transfer of the Notes. Luxembourg value added tax may, however, be payable in respect of fees charged for certain services rendered to the issuer, if for Luxembourg value added tax purposes such services are rendered, or are deemed to be rendered in Luxembourg and an exemption from value added tax does not apply with respect to such services.

## TAXATION IN SWITZERLAND

*The following discussion of taxation is only a summary of certain tax implications currently in force under the laws of Switzerland as they may affect investors in the Notes. It applies only to persons who are beneficial owners of the Notes and may not apply to certain classes of persons. The summary contains general information only; it is not exhaustive and does not constitute legal or tax advice and is based on taxation law and practice at the date of this Listing Prospectus.*

*Potential investors in Notes should be aware that tax law and interpretation, as well as the level and bases of taxation, may change from those described and that changes may alter the benefits of an investment in, holding or disposing of, Notes. The Issuer makes no representations as to the completeness of the information and assumes no liability of whatsoever nature for the tax implications for investors in Notes.*

*Potential investors in Notes are advised to consult their own professional advisers on the implications of making an investment in, holding or disposing of, Notes under the laws of the jurisdictions in which they are liable to taxation and in light of their particular circumstances.*

### **Swiss Federal Withholding Tax**

According to the present practice of the Swiss Federal Tax Administration, payments of principal and interest (and discount or premium, if any) or gains in respect of the Notes by the Issuer or the Guarantor are not subject to Swiss Withholding Tax (*Verrechnungssteuer*), if the proceeds from the Notes are neither directly nor indirectly used in Switzerland.

### **Swiss Federal Stamp Duty**

The issue of the Notes to their initial holders will not be subject to Swiss federal stamp duty on the dealing in securities (*Umsatzabgabe*) (primary market). Secondary market dealings in the Notes where a Swiss domestic bank or a Swiss domestic securities dealer (as defined in the Swiss Federal Stamp Duty Act) is a party to, or acts as an intermediary in connection with, the transaction may be subject to Swiss federal stamp duty on the dealing in securities at a rate of up to 0.3% of the consideration paid for the Notes.

### **Income Taxation on Principal or Interest**

#### *(i) Notes held by non-Swiss holders*

A holder of a Note who is not resident in Switzerland and who during the taxation year has not engaged in a trade or business carried on through a permanent establishment or fixed place of business in Switzerland will, in respect of payments of interest on, and repayment of principal of, the Notes, and gain realised on the sale or redemption of Notes, not be subject to income tax in Switzerland. See "Swiss Federal Withholding Tax" above for a summary on the deduction of Swiss federal withholding tax on payments of interest on the Notes.

#### *(ii) Notes held by Swiss resident holders as private assets*

An individual who resides in Switzerland and holds the Notes as private assets is required to include all payments of interest received on such Notes in his or her personal income tax return for the relevant tax period and will be taxed on the net taxable income (including the payments of interest on the Notes) for such tax period at the then prevailing tax rates.

Swiss resident individuals who sell or otherwise dispose of privately held Notes realise either a tax-free private capital gain or a non-tax-deductible capital loss. See "*Notes held as Swiss business assets*" below for a summary on the tax treatment of individuals classified as "professional securities dealers".

#### *(iii) Notes held as Swiss business assets*

Swiss resident corporate taxpayers, corporate taxpayers residing abroad holding Notes as part of a permanent establishment or fixed place of business situated in Switzerland, and individuals who hold Notes as part of a business situated in Switzerland are required to recognise payments of interest on, and any capital gain or loss realised on the sale or other disposal of, such Notes in their income



statement for the relevant tax period and will be taxed on any net taxable earnings for such tax period at the then prevailing tax rates. The same taxation treatment also applies to Swiss resident individuals who, for Swiss income tax purposes, are classified as "professional securities dealers" for reasons of, inter alia, frequent dealings or leveraged transactions in securities.

### **EU Savings Tax**

Under the agreement between the European Community and the Confederation of Switzerland dated as at 26 October 2004 (the "**Agreement**"), which provides for measures equivalent to those laid down in the EC Council Directive 2003/48/EC on the taxation of savings income and the relevant Swiss legislation, a Swiss paying agent (as defined in the Agreement) might be required to deduct EU savings tax on interest payments on the Notes paid to, or collected for, an individual resident or certain limited types of entity established in an EU Member State.

### **Final Withholding Tax Agreements between Switzerland and the United Kingdom and Austria**

On 1 January 2013, treaties on final withholding taxes entered into by Switzerland with the United Kingdom and Austria (each, a "**Contracting State**") came into force. The treaties and the Federal Act on International Tax Cooperation (*Bundesgesetz über die internationale Quellensteuer*) might require a Swiss paying agent (as defined in the treaties) to levy a flat-rate final withholding tax at rates specified in the treaties on certain capital gains and income items (including in respect of the Notes), all as defined in the treaties, deriving from assets (including the Notes) held in accounts or deposits with a Swiss paying agent by (i) an individual resident in a Contracting State, or (ii) if certain requirements are met, a domiciliary company (*Sitzgesellschaft*), an insurance company in connection with a so-called insurance wrapper (*Lebensversicherungsmantel*) or other individuals if the beneficial owner is an individual resident in a Contracting State. Under the treaty with the United Kingdom, the tax rate for individuals resident and domiciled in the United Kingdom is 43% on interest payments and 27% on capital gains, and, under the treaty with Austria, 27.5% on interest payments and capital gains. The flat-rate tax withheld substitutes the ordinary capital gains tax and income tax on the relevant capital gains and income items in the Contracting State where the relevant individual is tax resident, unless the individual elects for the flat-rate tax withheld to be treated as if it were a credit allowable against the income tax or, as the case may be, capital gains tax, due for the relevant tax year in the relevant Contracting State. Alternatively, instead of paying the flat-rate tax, such individual may opt for a disclosure of the relevant capital gains and income items to the tax authorities of the Contracting State where he or she is tax resident. Switzerland may conclude similar treaties with other European countries.

## GENERAL INFORMATION

### Authorisation

1. The issue of the Notes was duly authorised by a resolution of the Board of Directors of the Issuer dated 30 October 2014, the giving of the Guarantee was duly authorised by a resolution of the Board of Directors of the Guarantor dated 23 October 2014 and the publication of this Listing Prospectus and the listing of the Notes was duly authorised by a resolution of the Board of Directors of the Issuer dated 11 March 2016.

### Listing

2. Application has been made to the UK Listing Authority for the Notes to be admitted to the Official List and to the London Stock Exchange for the Notes to be admitted to trading on the Regulated Market. It is expected that the admission of the Notes to the Official List and to trading on the Regulated Market will be granted on or about 12 May 2016.

### Clearing of the Notes

3. The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg. The ISIN for the Notes is XS1134729794 and the Common Code is 113472979.

The address of Euroclear is Euroclear Bank SA/NV, 1 Boulevard du Roi Albert II, B-1210 Brussels and the address of Clearstream, Luxembourg is Clearstream Banking, 42 Avenue JF Kennedy, L 1855 Luxembourg.

### No Significant Change

4. Save as disclosed in this Listing Prospectus under "*Description of Novartis AG – Business Overview*", there has been no significant change in the financial or trading position of the Group since 31 March 2016, the date of the most recently published financial statements, and there has been no material adverse change in the financial position or prospects of the Issuer, the Guarantor or the Group since 31 December 2015, being the date of the most recently published audited financial statements.

### Legal Matters

5. Save as disclosed in this Listing Prospectus under "*Description of Novartis AG – Legal Matters*" above, there are no other governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened, of which the Issuer or the Guarantor are aware) which may have, or have had during the 12 months prior to the date of this Listing Prospectus, a significant effect on the financial position or profitability of the Issuer, the Guarantor or the Novartis Group.

### Auditors

6. The consolidated financial statements of Novartis AG and its subsidiaries as at 31 December 2015 and 2014 and for the two years ended 31 December 2015 and 2014 and the statutory unconsolidated financial statements of the Guarantor as of 31 December 2015 and 2014 and for the two years ended 31 December 2015 have been audited by PricewaterhouseCoopers AG, independent accountants, as stated in their reports as incorporated by reference in this Listing Prospectus. PricewaterhouseCoopers AG's business address is St. Jakobs-Strasse 25, CH-4052 Basel, Switzerland. PricewaterhouseCoopers AG is a member of EXPERTsuisse—Swiss Expert Association for Audit, Tax and Fiduciary.

### Agents

7. BNP Paribas (Suisse) SA is serving as Swiss Listing Agent and as Swiss Paying Agent and Deutsche Bank AG, London Branch is serving as Fiscal Agent and as Principal Paying Agent for the Notes.

## Legend

8. The Notes and any Coupons appertaining thereto will bear a legend to the following effect: "Any United States person who holds this obligation will be subject to limitations under the United States income tax laws, including the limitations provided in Sections 165(j) and 1287(a) of the Internal Revenue Code."

## Documents on Display

9. Copies of the following documents (together with English translations thereof) may be inspected during normal business hours at the offices of Novartis AG at Lichtstrasse 35, 4056 Basel, Switzerland:
  - (a) the constitutive documents the Issuer;
  - (b) the constitutive documents of the Guarantor;
  - (c) the Novartis Group's consolidated financial statements on pages F-1 to F-118 of the 2015 Form 20-F which include the consolidated financial statements for the years ended 31 December 2015 and 31 December 2014 and the statutory unconsolidated financial statements of Novartis AG for the years ended 31 December 2015 and 31 December 2014 set out on pages 245–253 of the 2015 Annual Report prepared for Swiss and other registered shareholders of the Novartis Group;
  - (d) the earnings release and unaudited condensed interim financial report of the Guarantor for the first quarter of 2016, as published by the Guarantor on 21 April 2016;
  - (e) the Agency Agreement; and
  - (f) the Deed of Covenant.

The documents incorporated by reference in this Listing Prospectus may also be found on <https://www.novartis.com/investors/financial-data>.

Save as explicitly set forth herein, information on the Guarantor's website, any website directly or indirectly linked to the Guarantor's website or any other website mentioned in this Listing Prospectus does not constitute in any way part of this Listing Prospectus and is not incorporated by reference into this Listing Prospectus, and investors should not rely on it in making their decision to invest in the Notes.

## Notices

10. All notices to the Noteholders will be valid if published in a leading English language daily newspaper published in London or such other English language daily newspaper with general circulation in Europe as the Issuer may decide. It is expected that publication will normally be made in the *Financial Times*. The Issuer shall also ensure that notices are duly published in a manner which complies with the rules and regulations of any stock exchange or other relevant authority on which the Notes are for the time being listed (currently, SIX Swiss Exchange requires all notices in relation to the Notes to be published in electronic form on the website of SIX Swiss Exchange under the section titled "Official Notices" (at [http://www.six-swiss-exchange.com/news/official\\_notices/search\\_en.html](http://www.six-swiss-exchange.com/news/official_notices/search_en.html)) or otherwise in accordance with the regulations of SIX Swiss Exchange)). Any such notice will be deemed to have been given on the date of the first publication or, where required to be published in more than one newspaper, on the date of the first publication in all required newspapers. Couponholders shall be deemed for all purposes to have notice of the contents of any notice given to the Noteholders.

For so long as all of the Notes are represented by one or both of the Global Notes and such Global Note(s) is/are held on behalf of Euroclear and/or Clearstream, Luxembourg, notices to Noteholders may be given by delivery of the relevant notice to Euroclear and/or Clearstream, Luxembourg (as the case may be) for communication to the relative Accountholders provided that, so long as the Notes are listed on any stock exchange, the notices are duly published in a manner which complies with the rules and regulations of any such stock exchange on which the Notes are for the time being listed. Any such notice shall be deemed to have been given to the Noteholders on the day on which such notice is delivered to Euroclear and/or Clearstream, Luxembourg (as the case may be) as aforesaid.

**Expense of the Admission to Trading**

11. The estimated total expenses related to the admission of the Notes to trading on the Regulated Market are €4,200.

**Indication of yield**

12. On the basis of the issue price of the Notes of 99.967% of their principal amount, the yield of the Notes on the Issue Date was 1.653% on an annual basis. It is not an indication of yield at any date after the Issue Date.

**REGISTERED OFFICE OF THE ISSUER**

**Novartis Finance S.A.**  
20, rue Eugène Ruppert,  
L-2453 Luxembourg

**REGISTERED OFFICE OF THE GUARANTOR**

**Novartis AG**  
Lichtstrasse 35  
CH-4056 Basel  
Switzerland

**SWISS LISTING AGENT AND SWISS PAYING AGENT**

**BNP Paribas (Suisse) SA**  
2, place de Hollande  
1204 Geneva  
Switzerland

**FISCAL AGENT AND PRINCIPAL PAYING AGENT**

**Deutsche Bank AG,**  
**London Branch**  
Winchester House  
1 Great Winchester Street  
London EC2N 2DB  
United Kingdom

**LEGAL ADVISERS TO THE ISSUER AND THE GUARANTOR AS TO ENGLISH LAW**

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United Kingdom

**AUDITORS TO THE GUARANTOR**

**PricewaterhouseCoopers AG**  
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