



Q3 2021 ESG Update for investors and analysts

October 27, 2021

Dear investors and analysts,

In our Q3 ESG update, we reflect on our recent annual ESG Event hosted by our CEO, Vas Narasimhan and look at some of our updates during the quarter. As always, we include 'Top 10 ESG Questions' from the quarter with our corresponding responses.

We are grateful for your continued engagement and discussion on all ESG-related topics. We believe **shareholder engagement** is the optimal way to ensure a thorough understanding of our efforts and results on ESG.

We hope this update is of interest and welcome your feedback.

Contents

Click to go to section

ESG Event 2021	2
Reflections on Materiality Assessment 2021	6
·	
Looking Ahead: Governance Roadshow, Impact Summit	6
COVID-19 Update	7

ESG Event 2021

On September 30, 2021, Novartis held its 8th annual ESG event which included several small group meetings following the main plenary session. We would like to thank all the participants for taking the time to attend this event.

You may view the webcast of the presentation here, and the presentation deck can be accessed here.

In our discussions with asset managers, stewardship teams and sell-side analysts, we noted three general (not Novartis-specific) themes related to ESG investing that formed the basis of our content for the event. These were:

- a) Can ESG investing really deliver 'Alpha'?
- b) Can a focus on ESG by companies and institutions who invest in them, deliver 'Impact'?
- c) With purpose and profitability being so complex to operationalize, can companies do both successfully?

To summarize our views, we share our thoughts on these questions:

Can ESG investing really deliver 'Alpha'?

For Novartis, managing ESG is a high priority because it reduces risk, adds impact and value and it is the right thing to do (*exhibit 1 below*)

A correlation between strong ESG practices and reduction of risks is well accepted across industries. There is also growing evidence which suggests that a focus on material factors provides superior financial returns (see here). Possible reasons may include reducing risks, attracting and inspiring employees, and driving organizational innovation. Management of material ESG factors can also serve as a proxy for good leadership.

Feedback we hear from you, our investors has cited difficulty in assessing correlation between ESG and alpha, include the 'bluntness' of ESG performance indices, of which there are many and which are not industry-specific. This highlights the ongoing need for regular **engagement** between investors and companies to assess company ESG performance.

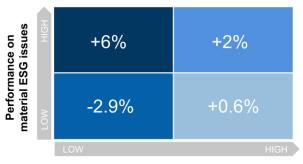
Effectively managing ESG:

1. Reduces risk

2. Adds impact/value

3. Right thing to do

Companies with superior adherence to material ESG factors provide superior financial returns¹



Potentially reducing risks, inspiring employees, attracting talent and driving innovation

Performance on immaterial ESG Issues

Exhibit 1 from ESG Event deck

^{1.} Serafeim, George et al. (2015): Corporate Sustainability: First evidence on materiality. HBS Working Paper 15-073.

Can a focus on ESG by companies and institutions who invest in them, deliver 'Impact'?

The ultimate aim of ESG is creating a lasting 'Impact'

"ESG funds are measured against benchmarks for financial returns; they are not measured on the impact they deliver"

Investor Impact mechanisms: Capital allocation Indirect impacts Shareholder engagement World Impact Innovative/quality medicines to as many people as possible

Exhibit 2 from ESG Event deck

'Impact' is change beyond what would have happened regardless and it needs to be intentional and measurable. Currently, impact measurement is still in its nascent phase, as indicated by recent research here from the Center for Sustainable Finance and Private Wealth.

Our recent efforts at Novartis include our 2020 **sustainability-linked bond (SLB)**, our **emerging growth brands** and our **Sub-Saharan strategy** focused on access and innovation. These initiatives were **intentional**, created to have **measurable** KPIs and are making an impact on society, furthering access to innovative medicines.

Investors (*exhibit 2 above*) can contribute with a company to ensure impact made. Mechanisms that investors could use include deploying sustainable and long-term capital allocation strategies, addressing indirect impacts, and engaging directly with corporates. Capital allocation by removing corporates from portfolios may actually not have the desired impact as the investor loses his seat at the table to influence change. Therefore, **engagement** remains the main tool for shareholders, who can influence corporates through active communications on both short and long-term efforts.

Select Impact initiatives

For the past six years, Novartis has been exploring and evaluating impact valuation. Understanding and measuring what matters to our stakeholders is essential to us as we seek to improve and extend people's lives.

Select initiatives:

- We delivered a 5-year forecast of the social impact of Adakveo
- Partnership with Saudi Arabia to deliver an impact estimate to national 2030 targets
- Engagement with stakeholders at the Global Solutions Summit
- Annual Impact Summit (2021 December event will focus on impact valuation methods)
- We aim to publish our White Paper on the health utility of income and measure the social impact of Leqvio (Inclisiran) for cardiovascular disease in 10+ countries.

Impact Partnerships:

- Novartis participates in several initiatives and platforms. We were a founding member of
 the 'Value Balancing Alliance' (VBA), a non-profit organization rethinking the value
 contribution of business to society, the economy and the environment, and developing a
 standard for impact measurement and valuation.
- The VBA is supported by Deloitte, EY, KPMG, PwC, the Organization for Economic Cooperation and Development, European Union commission, leading universities and stakeholders from government, civil society and standard-setting organizations.

We appreciate it is difficult to measure impact *Any thoughts or ideas you have* on the subject would be valuable feedback.

With purpose and profitability being so complex to operationalize, can companies do both successfully?

Novartis believes key to success in operationalizing profit with purpose is integrating ESG considerations in normal business activities. Our vision is to create long-term stakeholder value (*exhibit 3 below*).

An example of our efforts is our Sub-Saharan Africa strategy, which has successfully prioritized patient reach to drive access, since it was launched in 2019. Our innovative and sustainable business model has remained profitable and continues to deliver on access to medicine.

ESG is integrated into the Novartis strategy and is critical to delivering on our purpose

Delivering on stated purpose whilst balancing and integrating different components of **capital**¹ to create **stakeholder value**

- 1. Colin Mayer, Nov 2018, Prosperity 1st edition
- 2. Source: International Integrated Reporting Council, Integrated Reporting Framework

Exhibit 3 from ESG Event deck



Our Materiality assessment 2021 has clearly demonstrated what the most important priorities are for our stakeholders. These are listed below in *exhibit 4* and are integrated into the Novartis strategy and our ESG targets.

We use stakeholder materiality analyses to determine our ESG focus and priorities

Where to play | our focus

Priorities ranked highest by external/ internal stakeholders in materiality analysis 2021 (shaded are priorities listed highest)

Patient health Access to and safety healthcare Innovation Ethical business practices **Human capital** Good governance Sustainable **Environmental** financial sustainability performance

Exhibit 4 from ESG Event deck

How to win | our ESG targets (select)



100% of launches with global access strategy annually



100% of Ph3 studies with US participation to have diversity & inclusion principles annually



Sustainabilitylinked bond 2025 patient access targets



Gender balance in management by 2023



Invest \$100m to advance R&D of next-generation anti-malarials by 2023



NEW Net zero by 2040 Carbon (across value chain), plastic and water neutrality by 2030 Novartis has launched nearly 250 Emerging Market Brands (EMBs) (*exhibit 5*) in Low and Middle-income countries (LMICs). Our EMBs have been an effective approach, helping us to expand access to more patients globally in a financially sustainable way. We have also developed other sustainable business models such as our 'Healthy Family programs'.

Novartis Access Principles in practice: Emerging Market Brands

Our Emerging Market Brands improve speed to market of innovative brands for LMICs, patient reach & business model sustainability. Examples are provided below.

Business sustainable EMB strategy for all Launch time lag in our major brands LMICs <12mos **Tiered Pricing Framework** vs first launch Entresto KISQALI 100% of launches **Brand** in Europe have global access strategy **EXJADE** (incl. developed countries Entresto 12 months & LMICs) Cosentyx* 10 months SEQVIO ZYKADIA 3-year CAGR 2017-20 S LEQVIO 7 months Patient reach +52% LUCENTIS **JADENU** Sales USD +55.5% Beovu 7 months ☆Cosentyx¹ RYDAPT aimovig 6 months «KISQALI 5 months PIQRAY Taimovia 7 ADAKVEO crizanlizumab-tmca 0 month 👀 PIQRAY -1 month1 & Kesimpta® Previous time-lag **MAYZENT** 24-48 months between launch in developed economies vs. LMICs

Example: Entresto® addresses a major global health concern in LMICs

Globally: 26m people affected by heart failure

LMICs: Increasing burden driven by surge in prevalence of etiological factors (hypertension, diabetes, obesity, lifestyle changes, etc.)



#1 growth driver in LMICs through EMBs

2020 Entresto® in LMICs

- Entresto[®] EMBs in 42 countries, contributing to 57% of Entresto[®] patient reach in LMICs
- Patient reach: ~470k, +47% vs. PY
- Sales: +50% vs. PY

Exhibit 5 from ESG Event deck

Other key announcements:

- Diversity in clinical trials: we have committed to including diversity and inclusion principles in 100% of our Phase 3 studies with US country participation starting in the second half of 2021, with the goal to increase and embed this evaluation across our global trials. More details are here.
- Environmental sustainability: we announced our ambition to achieving net-zero across our value chain by 2040.
 Given that our scope 3 emissions remain a challenge for us (as with most pharmaceutical companies), our efforts will be focused on this area. Our plans to achieve this goal include:
 - Commitment to Science-based targets
 - Set our expectations and provide support to our suppliers on their environmental footprint
 - Introduce environmental requirements in all our supplier contracts
 - Developing innovative and low-carbon footprint products such as our Breezhaler

Reflections on Materiality Assessment 2021

The 2021 Novartis Materiality Assessment (MA) was conducted earlier this year. To date, this was our most inclusive assessment with over 500 external and over 12,000 internal survey responses, backed by 140 interviews.

The overall results confirm the findings from previous assessment cycles with the top 4 material impact clusters being:

- · Patient Health and Safety
- Access to Healthcare
- Innovation
- Ethical Business Practice

The other four clusters were Human Capital, Good Governance, Sustainable Financial Performance and Environmental Sustainability.

Looking Ahead: Governance Roadshow, Impact Summit

Governance & Compensation Roadshow

During November 2021, we will hold our annual roadshow, comprised of a series of investor meetings to gather shareholder feedback and in preparation for our AGM. Participants are expected to include an Executive Committee member and Chairman of the Compensation Committee. We value our ongoing dialogue and **engagement** with investors and welcome all feedback.

Co-creating Impact Summit

On 2 December 2021, Novartis will hold its fourth annual Impact Summit, chaired by John Elkington and Sonja Haut. The event will bring together thought leaders and experts from academia, institutions, business and financial markets to discuss impact challenges, opportunities and how Novartis can continue to deliver impact.

Please register here for the summit. Our new virtual exhibition will go live on 10 November.

COVID-19 update

While the COVID-19 situation is now normalizing in most geographies and therapeutic areas, we still see a slight impact on parts of our business, mainly in oncology and generics.

The Group has not experienced liquidity or cash flow disruptions during Q3 2021 due to the COVID-19 pandemic.

We are confident that Novartis is well positioned to meet its ongoing financial obligations and has sufficient liquidity to support its normal business activities.

Samir Shah

Samir N. Shal

Global Head of Investor Relations Novartis

Novartis ESG Investor Relations:

Madeleine Szeluch
Investor Relations F

Investor Relations ESG Director madeleine.szeluch@novartis.com +41 795 481 267

Maria Victoria Cuevas Investor Relations ESG I

Investor Relations ESG Director maria.cuevas@novartis.com +41 795 865 285 Samir Shah

Global Head of Investor Relations samir.shah@novartis.com +41 795 964 645





Top 10 ESG-related questions from shareholders and our responses

Investor questions in Q3 focused on topics ranging from AMR, impact on our supply chain and climate change.

Question Response 1 We have already committed to eliminating our own direct carbon emissions before the end of 2025 and becoming carbon-neutral by 2030. Recognizing the impact of climate change on the environment and Can you share our responsibility to our stakeholders, we want to increase this ambition even further. more detail on your net-zero At our recent ESG Event (Sept. 30), we committed to becoming a net-zero company by 2040. To ambitions? achieve this, we plan to reduce our scope 1, 2 and 3 emissions by more than 90% and offset the remaining emissions through carbon sequestration projects which remove CO2 from the atmosphere. On carbon offsets, our current science-based target (SBT) requires Novartis to reduce its absolute emissions by at least 35% by 2030 from 2016 baseline. We are committed to this and are evaluating carbon removal initiatives to reach our near and long-term targets. We are working with our suppliers to support them in the elimination/lowering of their carbon footprint within their own operations. We held our first supplier summit focused on environmental sustainability earlier this year and published our 'Green Expectations' document aimed at our suppliers to have a better understanding of our strategy and how they can partner with us for the long-term. 2 We have a comprehensive and risk-based approach, which forms the basis of our Third Party Risk Management program (TPRM), rolled out in 2019. The program requires a risk assessment on all third What is your party suppliers before contract initiation. approach to managing risks in All third parties undergo regular screening and monitoring. Our Board of Directors' Risk and Audit and your supply Compliance Committees are regularly informed about the status of our TPRM system. chain? Our success is defined by the metrics that we have set for Novartis access to medicines programs, which include number of low- and middle-income patients reached, people trained or providers How do you see your ESG metrics impacted. evolving? Beyond these output metrics, we also define impact by the increased availability of our medicines in health facilities or households, reduced registration timelines in LMICs or positive impact on survival rates. As access to medicines provides us with the opportunity for value creation from a business perspective, we also measure success on business performance metrics such as incremental sales. We strive to continually ensure that our investments are creating a positive return for the business. This is why we have developed a comprehensive measurement and evaluation framework applied across Novartis, which we review on a regular basis. 4 Please see pages 98 - 104 of the 2020 Annual Report for further details of Executive compensation. **How are ESG** Our CEO's annual incentive is measured according to a balanced scorecard (this includes a 60% targets linked to weighting on financial metrics and 40% on strategic objectives). The CEO has ambitious strategic executive objectives across 5 pillars, two of which are related to ESG matters. These include the themes of remuneration? 'People and Culture' and 'Building Trust with Society'. Our ECN leaders have a mandate to drive access to medicines, and have annual targets related to access metrics. These targets are an element of the 40% targets of the ECN scorecard, which are nonfinancial targets. 5 AMR represents a growing threat to the sustainable use of antibiotics. We focus on anti-AMR efforts where we can make a difference, to reduce need, unintentional exposure and optimize the use of What is your medicines. Our programs include: approach on AMR? Sandoz is the world's leading provider of generic antibiotics, which make up 80% of the antibiotics market, and is committed to innovation and delivering access. We recently announced plans for a joint investment of more than EUR150mn in Kundl, Austria to help secure the future of antibiotics manufacturing in Europe. Company-wide targets on water quality to minimize impact on environment. This includes our commitment to have no water quality impacts from manufacturing effluent by 2025. (Priority 1 suppliers include 100% of antibiotic suppliers).

Membership of the AMR Industry Alliance, which publishes a list of recommended antibacterial targets. We are also part of the Responsible Antibiotics Manufacturing Platform (RAMP),

managed by the Stockholm International Water Institute.

- We are a founding member of the \$1bn AMR Action Fund, established to invest in cross-industry antibacterial R&D. As part of this partnership, we aim to accelerate antibiotic development and bring 2-4 new antibiotics to patients by 2030.
- Through Sandoz, we work with a range of HCPs worldwide to promote appropriate choice and use of antibiotics in the context of specific local needs. Examples include smart-phone technology (MedShr) and engagement with healthcare workers in developing countries.

6 How do you balance return on investment with ESG initiatives?

- Novartis believes that purpose and values are aligned with financial performance. Our Board of
 Directors and ECN are committed to our long-term vision that culture and having a positive impact on
 society will deliver long-term sustainable growth. ESG is important to us because it:
 - Reduces risk
 - Increases our impact
 - Is the right thing to do
 - There is also growing evidence that a focus on material factors provides superior financial returns (see <u>here</u>)
- An example of how ESG is incorporated in our commercial efforts: we launched our Sub-Saharan Africa strategy in 2019. It is delivering a sustainable and profitable business to reach underserved populations. Our patient reach is +29% in H1 2021 (vs H1 2020) and our net sales are +22% in H1 2021 (vs H1 2020).

7 How do you ensure diversity in Clinical Trials?

- Diversity in clinical trials is integral to our operations. Our focus is on enhancing diversity in our clinical trials, which is embedded in our Code of Ethics and our Access Principles. It is a core component of our commitment to patients and caregivers as we reimagine medicine, work to improve access and address healthcare inequity.
- In mid-2021, we wrote on our efforts, which include evaluating diversity & inclusion principles for 100% of Phase 3 studies with US participation starting in H2 2021 (with the goal to increase this across our global trials). Further information is https://example.com/here/beta/4021/
- Other efforts include working with policymakers to support advocacy work with local authorities, expanding engagement with clinical sites/investigators to include areas where diverse patients with particular diseases may be located and working with patient groups, medical institutions and communities to develop investigators of color and recruit broader patient populations.

What is your commitment to gender balance?

- Novartis has committed to achieving gender balance in management by 2023. We are on track to reach this target. As of June 2021, we have 46% of women in middle management, 39% in senior management and 35% in executive management.
- As part of our efforts to attract female talent, we have implemented gender neutral parental leave globally (minimum of 14 weeks as of January 2021), regularly monitor our efforts at monthly talent reviews and introduced diversity-focused hiring practices. This includes diverse candidates slates.
- We have also committed to closing the gender pay gap by 2023. To help prevent pay differences, Novartis is eliminating the use of historic salary data (already implemented across 75% of global hiring by end of 2020). In 2021, we have introduced pay transparency in 16 countries to enable our associates to compare salaries to external benchmarks.

How has your governance on ESG evolved?

9

- We have strengthened our ESG governance in Novartis over the last 12 months:
 - New Chief Sustainability Officer, focused on environmental sustainability
 - We have several committees at ECN and Board-level, which include the Governance, Nomination & Corporate Responsibilities Committee (GNCRC), the Trust & Reputation Committee and regularly discuss ESG matters.
 - ESG Council which ensures integration of ESG within units, and co-creates ESG strategy
 - ESG Management Office which is responsible for strengthening cross-functional coordination and is responsible for ESG strategy
 - We are also working on delivering integrating reporting in line with external disclosure standards and setting up a non-financial reporting system & governance for auditable ESG data.

10 On COVID-19, can you discuss your collaborations?

- The importance of collaboration has been validated by COVID-19. We have several collaborations to support on research and supply.
- On research: we have a collaboration with Molecular Partners to develop two DARPin® therapies designed for potential use against future pandemics.
- On Manufacturing capacity: we have signed an agreement with BioNTech to leverage our manufacturing capacity to increase the supply of mRNA vaccine (our site will fill vials of 75mn doses).
- We also announced that we will manufacture the mRNA and bulk drug product of CureVac's CVnCoV vaccine for up to 50mn doses by the end of 2021.