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Edition no.23

Q3 2025 Impact and Sustainability Update to Investors

Dear investors and analysts,

Our Q3 newsletter starts with an update from the third-party ESG rating agency, MSCI, which has upgraded Novartis to AAA, its highest rating. We also highlight our recent milestones in Global Health innovation, including the Ghana launch of Coartem® Baby for the treatment of malaria in newborns and young infants and positive results from our trial investigating Entresto® in heart failure caused by Chagas disease. We then feature a Q&A with Rob Kowalski, our Chief People & Organization Officer, discussing what culture means to Novartis.

We also invite you to our 12th annual Social Impact & Sustainability investor event. As always, we include top questions from shareholders during Q3 and our responses.

We thank you for your continued engagement.

For any questions and comments, please reach out to:

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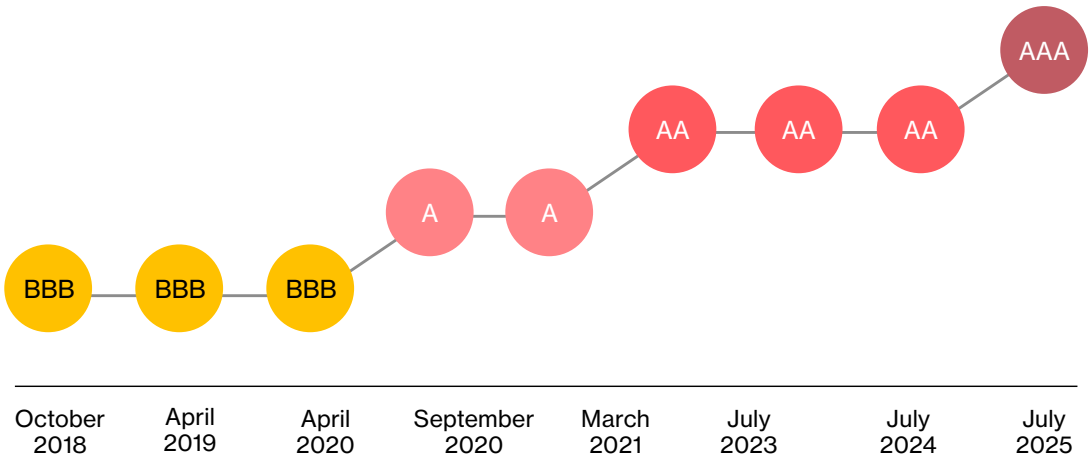
MSCI upgrades Novartis ESG rating to AAA, its highest rating

- In July, MSCI upgraded Novartis to AAA, its highest ESG rating. Novartis has consistently improved across all MSCI ESG pillars, with the upgrade driven by improvements in corporate governance, product safety and quality. Novartis is now the only company with an AAA rating among our global healthcare peer group[1].
- In addition, in October 2025, MSCI upgraded Novartis controversy rating to its highest level (from yellow to green), reflecting the company's sustained progress in resolving historical challenges and strengthening its compliance and governance practices.



1. Our peer group is defined in our 2024 Annual Report.

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Global Health innovation milestones in Q3

Coartem® Baby launched in Ghana

- In our → **Q2 newsletter**, we highlighted the July approval by Swissmedic of Coartem® Baby, the first clinically proven malaria treatment specifically designed for newborns and infants weighing between 2-5 kg. This milestone paves the way for registration in eight African countries through the Marketing Authorization for Global Health Products (MAGHP) procedure.
- In October, Ghana became the first malaria-endemic country to introduce Coartem® Baby. This milestone reinforces our three-decade commitment to the fight against malaria. Following the launch, we have seen strong early interest from healthcare providers in Ghana, supporting the need for a tailored malaria treatment for young infants.
- The Ghana launch event brought together key stakeholders from Novartis, including our CEO, Vas Narasimhan, government, healthcare, and civil society, underscoring the importance of cross-sector collaboration in global health innovation.

Novartis CEO Vas Narasimhan and Medical Superintendent Dr Mame Yaa Nyarko in conversation at the Princess Marie Louise Children's Hospital Ghana.

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Phase IV trial investigating Entresto® in heart failure caused by Chagas disease met primary endpoint

Significant unmet need

- Chagas disease affects more than **10 million** people worldwide, and approximately one-third develop chronic Chagas cardiomyopathy[1,2], the leading cause of mortality among these patients[3].
- Although ~90% of cases occur in Latin America, Chagas disease is an emerging global health challenge[4], with more than **370k people** now living in **non-endemic countries**[5]. Between 1990 and 2023, reported cases increased by more than **50%** in North America, reaching ~230k, and tripled in Western Europe to ~125k[6].

About the PARACHUTE-HF trial

- The PARACHUTE-HF trial was the first ever randomized controlled trial for patients with heart failure with reduced ejection fraction (HFrEF) caused by Chagas disease. The trial compared clinical and biomarker outcomes associated with Entresto® (sacubitril/valsartan) to enalapril, an ACE inhibitor.
- The study was sponsored by Novartis and conducted in collaboration with the Brazilian Clinical Research Institute, responding to a request from the Latin American cardiology community to address the needs of this neglected population.
- Entresto® has more than ten years of evidence from both clinical trials and real-world studies showing it successfully treats HFrEF. The PARACHUTE-HF trial adds to this body of evidence, supporting physicians in the clinical decision-making process when treating heart failure in Chagas disease patients.

1. Cousin E, et al. Global, regional, and national burden of Chagas disease, 1990-2023: a systematic analysis for the Global Burden of Disease Study 2023. Available from: http://dx.doi.org/10.2139/ssrn.5381800. In press - accepted for publication at The Lancet Infectious Disease. 2. Nascimento BR et al. Prevalence of clinical forms of Chagas disease: a systematic review and meta-analysis - data from the RAISE study. Lancet Reg Health Am. 2024;30:100681. 3. World Health Organization.Accessed June 12, 2025. https://www.who.int/news-room/fact-sheets/detail/chagas-disease-(american-trypanosomiasis) and da Nóbrega AA et al. Am J Trop Med Hyg. 2014;91(3):528-533. 4. Cousin E, et al. Global, regional, and national burden of Chagas disease, 1990-2023: a systematic analysis for the Global Burden of Disease Study 2023. Available from: http://dx.doi.org/10.2139/ssrn.5381800. In press - accepted for publication at The Lancet Infectious Disease. 5. Cousin E, et al. Global, regional, and national burden of Chagas disease, 1990-2023: a systematic analysis for the Global Burden of Disease Study 2023. Available from: http://dx.doi.org/10.2139/ssrn.5381800. In press - accepted for publication at The Lancet Infectious Disease. 6. Lopes RD, et al. PARACHUTE-HF:. ESC 2025; September 1, 2025; abstract #7128. Madrid, Spain. Late Breaking Session.

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Trial outcomes

- The trial met its primary composite endpoint, driven by a significant reduction in NT-proBNP, an important prognostic biomarker in heart failure[7,8]. While there was no difference in cardiovascular death or heart failure hospitalization, reductions in NTproBNP are associated with lower risk of adverse cardiovascular events, including hospitalization and mortality[9].
- Entresto® was well tolerated and no new safety findings were identified[10].
- The large size of the study, with over 900 patients enrolled, also provided critical information to characterize the unique clinical profile of Chagas cardiomyopathy patients, demonstrating a lower prevalence of common cardiovascular comorbidities such as hypertension, diabetes, and history of acute myocardial infarction, along with higher prevalence of prior stroke, conduction system disease, and pacemaker implantation than in non-Chagas cardiac failure patients[11]. These findings reinforce that heart failure due to Chagas disease is more severe than other etiologies causing HFrEF.
- The trial was conducted at more than 80 sites in Brazil, Argentina, Mexico, and Colombia[12].

Expanding patient reach and impact

- Despite the health burden caused by Chagas disease, access to diagnosis and treatment remains limited, particularly in rural and peri-urban areas. Bolivia, with the highest global prevalence, faces acute challenges[13] – more than 25% of the population in endemic regions is estimated to be infected[14].
- Novartis launched the Bolivia Cardiovascular Health Program in 2021, aimed at improving access and strengthening health system capacity for cardiovascular diseases and chronic Chagas cardiomyopathy. The program integrates our portfolio of specialty cardiovascular medicines – including sacubitril/valsartan (Entresto®) – at reduced prices to expand treatment options for low-income populations.

Key initiatives include

Community engagement

Promoting health literacy and participation in prevention and screening programs.

Specialized clinics

Establishing heart failure clinics to train healthcare professionals in early diagnosis and comprehensive care.

Technology integration

Deploying telemedicine tools and standardized protocols to streamline referrals and accelerate diagnosis in underserved areas.

Digital platform

Co-developing a low-margin distribution model for underserved populations in collaboration with local partners to tackle the high mark-ups traditionally seen across the supply chain.

7. Lopes RD, et al. PARACHUTE-HF:. ESC 2025; September 1, 2025; abstract #7128. Madrid, Spain. Late Breaking Session. 8. https://www.escardio.org/The-ESC/Press-Office/Press-releases/Positive-results-revealed-from-the-first-prospective-trial-in-heart-failure-due-to-Chagas-disease. 9. Januzzi, JL Jr. The role of natriuretic peptide testing in guiding chronic heart failure management: Review of available data and recommendations for use. Archives of Cardiovascular Disease. 2012;105:40-50. 10. Lopes RD, et al. PARACHUTE-HF:. ESC 2025; September 1, 2025; abstract #7128. Madrid, Spain. Late Breaking Session. 11. Bocchi EA, Echeverria LE, Demacq C. et al. JACC Heart Fail 2024;12:1473-86. 12. Lopes RD, et al. PARACHUTE-HF:. ESC 2025; September 1, 2025; abstract #7128. Madrid, Spain. Late Breaking Session. 13. Pinazo MJ, et al (2022) Results and evaluation of the expansion of a model of comprehensive care for Chagas disease within the National Health System: The Bolivian Chagas network. PLoS Negl Trop Dis 16(2):e0010072. 14. Rojas-Cortez, M., Pinazo, M.-J., Gascon, J., Gamarra, E., Grageda, R. M., Fernandez, R., et al. (2021). Community-based entomological surveillance in three Chagas disease-endemic regions in sub-Andean Bolivia. Transactions of The Royal Society of Tropical Medicine and Hygiene, 115(11), 1251–1259. https://doi.org/10.1093/trstmh/trab150.

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Meet Rob Kowalski

Chief People & Organization Officer

Sustainability and stewardship analysts often ask how Novartis is cultivating a culture that supports its strategic goals. Below is an interview with Rob, sharing his perspectives and learnings. Rob leads the Novartis people strategy, and since 2021, he has played a pivotal role in implementing a new operating model to support our next phase of innovation and growth. With a background of over 30 years in regulatory affairs and drug development, Rob has helped bring dozens of medicines to market, an experience that now informs how we shape our organization and culture.

What does culture mean at Novartis?

At Novartis, culture is not a slogan – it's a performance lever and a strategic enabler. Since 2018, we've been building an "**inspired, curious, and unbossed**" culture grounded in behavioral science and designed to help our people thrive and do their best work together. The concept is based on insights from various psychologists who have identified three key motivators for knowledge workers. First, a strong sense of purpose (inspired). Second, the opportunity for growth and learning (curious). Third, a sense of autonomy, creating an environment that allows for independence while providing appropriate guidelines and objectives (unbossed). Underpinning all three is an unwavering commitment to integrity.

Culture that creates impact isn't something you can copy and paste from another company. Nor is it something you can ignore. As Sanyin Siang, a member of the C-LAB[1], notes: "You will have a culture whether you like it or not. The question is: is it the culture you intentionally want, or is it the culture that just happens?" We've set out to build a culture that's uniquely aligned with our purpose and vision as a healthcare company – one that drives innovation, performance and impact.

How do you implement a cultural journey in a large organization such as Novartis?

Transforming culture in a global organization is complex and requires sustained intentionality. We define culture as "how we do things": how we show up, interact, and collaborate to deliver impact. It is not a poster or a slide deck, but a connected ecosystem of **symbols, systems and behaviors** that shape decisions and performance.

As a pharmaceutical company, innovation is our lifeblood, and this often comes with **failure**. We need to create an environment – through the symbols we use, the systems we create and the behaviors we practice – where people feel safe to share and learn from those failures. When we do that well, we turn setbacks into progress and better serve patients.

1. Our Culture Leadership Advisory Board (C-LAB) is an advisory board of external experts and senior leaders from across our business – bringing together diversity of experience and perspectives to help us shape a forward-thinking culture.

What have been your key learnings in creating and maintaining the culture?

To keep our culture alive, we need to make it **discussable**. It remains a topic of active debate – a sign of healthy evolution in a complex and rapidly changing world. Culture isn't static; as our organization transforms, our culture grows with it.

Driving culture change requires intentional leadership that is consistently and authentically role-modeled across the organization. We focus on **leadership accountability** – not just in what we do, but in how we do it. Leaders play a central role in bringing our culture to life for their teams. They're often the reason people join, stay, and perform at their best. We also need leaders who foster open-mindedness and embrace innovation, especially in how we apply new technologies.

Finally, **culture takes time**. In a global, matrixed organization like Novartis, it requires patience and persistence. We've learned that building a culture that works for everyone means translating global principles into **local realities** – allowing space for adaptation.

Our cultural transformation hasn't always been easy. But seven years in, we're still talking about it. That tells us we're on the right path. Our voluntary turnover rate has declined year over year – 9% in 2022, 7% in 2023, and **6% in 2024** – below the life sciences industry average of 8%[2]. And our quarterly employee engagement scores continue to exceed external benchmarks, with an upward trend since the 2022 reorganization.

What do you see as some broader future trends in human capital and culture?

We're living in a time of extraordinary scientific progress, with the potential to dramatically improve global health. Realizing that potential requires not only expertise and technology, but a culture that supports people through change and drives innovation.

Artificial intelligence (AI) holds immense promise for our industry. As we evolve, so does our culture. If culture is defined by how we work, and AI is reshaping that work, then adaptability becomes not just a strategic priority, but a cultural imperative. That's why we're embedding AI across Novartis and upskilling our workforce to ensure fluency. We see AI as a foundation for human-centered experiences – making us more precise, scalable, and accessible. But it's our empathy, curiosity, and ability to connect that turn those capabilities into meaningful impact.

2. Insights 222 Pharma & Biotech Industry benchmarks June 2024.

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Upcoming investor event

Our 12th annual Social Impact & Sustainability investor event will take place on December 1, 2025

Virtual webcast from 16:00-17:00 CET (10:00 – 11:00 EST), focusing on our social impact and sustainability strategy.

Speakers will be:

Steffen Lang,
PhD, President of Operations, member of the Executive Committee

Korab Zuka,
Global Head of Social Impact & Chief Sustainability Officer

Lutz Hegemann,
MD, PhD, President of Global Health

We will also feature a fireside chat on our progress in malaria with:

Sujata Vaidyanathan,
PhD, Global Development Unit Head for Global Health

EXTERNAL GUEST
Martin Fitchet,
MD, CEO of Medicines for Malaria Venture

You may access the webcast on our website and add to your calendar by →**registering in advance.**

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Top 10 social impact and sustainability-related questions from shareholders and our responses

Thank you for your continued engagement. In Q3, we received questions related to pricing in low- and middle-income countries (LMICs) and clinical trial diversity in light of policy announcements in the US, as well as on our efforts in Global Health. Environmental topics were also a focus, specifically on our nature assessments, water management, and climate-related physical risks.

Access, Global Health, and clinical trial diversity

01

How do you price your medicines in LMICs, and do you anticipate an impact from the Most Favored Nation (MFN) policy introduced in the US?

- Novartis employs a value-based pricing approach. This approach incentivizes pharmaceutical companies to focus on the interventions that deliver the most effective, efficient, and sustainable outcomes. We believe medicine prices should be based on three value pillars:
  - Patient value, e.g. improvements in efficacy.
  - Value to the healthcare system, e.g. prevented hospitalizations.
  - Value to society as a whole, e.g. increased workforce participation for the patient and caregivers.
- Our access efforts in LMICs are not impacted by the US MFN policy. We remain committed to our access strategies, including adopting innovative pricing and access models (e.g., tiered pricing strategy that takes income levels, local affordability barriers, and economic realities into account), focusing research and development based on society's greatest healthcare needs, and supporting approaches to strengthen healthcare systems.

02

With other pharmaceutical companies announcing direct-to-patient (DTP) initiatives in the US, what are Novartis plans in this space?

- We have long recognized the need to remove barriers and complexities in the US healthcare system that delay or prevent access to our medicines.
- We announced plans to launch a DTP platform on November 1, 2025, offering Cosentyx® (a biologic that is FDA-approved for the treatment of multiple immune-mediated inflammatory diseases) at a 55% discount off the list price to cash-paying US patients. This price reflects the average savings that insurers and pharmacy benefit managers receive.
- In the US, Novartis intends to offer a DTP option for additional medicines in its portfolio as appropriate and is exploring a direct-to-business model, selling Cosentyx® and potentially additional medicines, to large employers as another way to increase access and affordability.
- We fully recognize this first iteration of our DTP effort does not solve all the access challenges US patients face. It serves as proof-of-concept for a direct-selling model for specialty medicines and ideally would work alongside insurance to help improve patient affordability.
- For patients who cannot afford the cost of their Novartis medication, are uninsured or have government insurance, and meet income guidelines and other eligibility criteria, the Novartis Patient Assistance Foundation, an independent, non-profit entity, provides Cosentyx® at no cost.

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03

With Novartis patient reach targets related to the sustainability-linked bond (SLB) expiring this year, are you planning to announce new social targets?

- Access to medicines is central to our purpose as a focused, innovative medicines company. We believe that measurement is fundamental to understanding our success and we recognize the importance of considering our impact beyond our existing patient reach targets. For example:
  - We track the time it takes for innovative medicines to be introduced in LMICs. In the industry, it typically takes 3 to 8 years for an innovative medicine to become available in an LMIC after its first launch in a developed country. Novartis has successfully reduced this timeframe on average to just 4 to 8 months[1].
- However, establishing meaningful social impact targets presents challenges, including data collection complexities, measurement difficulties, and the absence of established methodologies and industry standards. The establishment of new social targets is an area of ongoing internal discussion, and we will update you on our progress in 2026.
- We remain on track to meet the targets associated with our SLB. As of the end of Q3 2025, we have achieved[2]:
  - 1.6 million patients reached with strategic innovative therapies in LMICs (vs. 2025 target of 1.6 million patients); and
  - 15.7 million patients reached through our flagship Global Health programs (vs. 2025 target of 22.6 million patients).
- We remain focused on advancing our commitments in these areas and continue to explore ways to define and report clear, outcome-oriented metrics.

04

In 2022, Novartis initially pledged USD 250m for R&D into neglected tropical diseases (NTDs) and malaria, and plans to nearly double this to USD 490m by the end of 2025. What drove this increased commitment?

- Global health is at a critical turning point, with demographic and climate change accelerating the burden of disease, while global funding for R&D from intergovernmental organizations has decreased[3]. In the past two decades, only 15 novel medicines have been approved for global health diseases, highlighting persistent gaps in drug development for diseases that primarily affect underserved populations[4].
- In 2023 and 2024, we significantly increased our investment due to the strong potential for breakthrough treatments in our pipeline. We have now built the industry's largest pipeline of treatments for malaria and neglected tropical diseases.
- The funding is advancing ten new potential treatments[5], including next-generation malaria medicines with the potential to combat drug resistance, new treatments for Chagas disease and leishmaniasis, and the first antiviral for dengue fever as cases rise sharply around the world.
- The additional funding is new, but our commitment is not. We have been tackling diseases neglected by science, such as malaria and leprosy, for more than 85 years and have distributed more than 1.1bn antimalarial treatments, largely at no profit.
- Novartis is staying the course even as many longstanding donors pull back. We remain committed to global health and are investing to ensure innovation continues for those who need it most.

1. Information based on internal analysis and IQVIA data for launch dates. 2. Unassured but will be assured at year end. 3. Institute for Health Metrics and Evaluation (IHME). Financing Global Health 2025: Cuts in Aid and Future Outlook. Seattle, WA: IHME, 2025. 4. Innovation in medicines for Global Health: a 20-year landscape analysis. https://www.nature.com/articles/d41573-025-00164-1. 5. KAF156, KAE609, INE963, IWY357, EDI048, EYU688, LXE408 in leishmaniasis, LXE408 in Chagas disease, ITU512, Coartem® Baby.

05

With dengue and malaria cases rising in developed countries, do your efforts to develop treatments for climate-sensitive diseases present a potential business opportunity?

- Factors such as rising temperatures, extreme weather events, biodiversity loss, and poor air quality contribute to the broader emergence and spread of both infectious and non-communicable diseases.
- Novartis conducted a meta-analysis to assess the projected impact of climate change on disease prevalence. The review shows that our portfolio aligns well with diseases where there is strong evidence of increasing burden, including cardiovascular disease, malaria, dengue, and Chagas disease. Novartis has one of the most extensive pipelines in global health with eight new chemical entities[6] currently in human trials across five disease areas.
- While there are reports[7] of increasing prevalence of global health diseases in developed countries, which could theoretically make this a business opportunity for us, our commitment to this area is not driven by business opportunity. Our efforts are driven by our values, purpose and a commitment to long-term resilience.

06

Can you provide an update on clinical trial diversity efforts in the US (e.g. FDA's Diversity Action Plans), particularly in light of recent announcements from the US administration?

- In June 2024, the FDA issued draft guidance entitled "Diversity Action Plans (DAPs) to Improve Enrollment of Participants from Underrepresented Populations in Clinical Studies." The public comment period closed in September 2024. In accordance with the timeline, final guidance was anticipated within nine months of that date, with implementation of DAP submissions to follow 180 days thereafter. As of now, the final guidance has not yet been published.
- While we await further clarity from the FDA, our commitment to ensuring that we understand how patients we aim to treat will respond to a medicine remains steadfast. Novartis continues to prioritize inclusive representation in our clinical studies, ensuring they reflect the populations our investigational products are intended to benefit.
- To support this, we collaborate with representative patient communities on trial design and execution, and we explore innovative, technology-enabled solutions. For example, our Clinical Intelligence Platform (CLIP) integrates epidemiology and real-world data to help achieve our trial representation goals.

6. KAF156, KAE609, INE963, IWY357, EDI048, EYU688, LXE408, ITU512. 7. https://www.worldmosquitoprogram.org/en/news-stories/stories/explainer-how-climate-change-amplifying-mosquito-borne-diseases?

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Nature and physical climate risks

07

What were the main findings from your recent nature assessments?

- In 2024, we conducted a nature assessment for our own operations and upstream supply chain using the LEAP[8] approach developed by the TNFD[9]. Some of our findings are:
  - >50% of our sites are near nature-sensitive areas.
  - Our upstream supply chain comprises the majority of the impacts and is mainly driven by GHG emissions, water use, water pollution, and land use from raw materials.
  - We believe that our existing short and mid-term nature and climate targets[10] address the impacts derived from this assessment. We are currently piloting programs to help address the impact of raw materials sourcing on land use and the creation of biodiversity management plans for selected sites.
- In 2025, using a similar approach, we conducted a downstream nature assessment focused on three topics:
  - **Pharmaceuticals in the environment:** Most of our active pharmaceutical ingredients (API) have low impact and do not represent an environmental risk; however, we will continue to monitor impacts on this area and progress on our 2030 water quality target, which applies to all API suppliers.
  - **Product waste:** Except for paper, all other materials (such as product residues and primary packaging materials, including aluminium) are deemed non-recyclable and may pose challenges in terms of landfill accumulation, soil and marine pollution. We will continue to explore expanding downstream waste management initiatives, including packaging design optimization and e-leaflets in line with local regulations.
  - **Distribution of products:** Impact is considered minimal, accounting for less than 1% of Scope 3 GHG emissions, and this topic is already covered under our Net Zero 2040 strategy.

08

How do you plan to achieve your water quality targets?

- We know that pharmaceutical residues in water can impact aquatic ecosystems. To address this, we set a 2025 target to eliminate water quality impacts from manufacturing effluents at our own sites and high-risk suppliers, and extended a 2030 target covering our labs and API suppliers.
  - In 2024, this standard was met by 97% of our manufacturing sites (vs. 94% in 2023 and 2022) and 100% of our high-risk suppliers (vs. 88% in 2023, 26% in 2022). For example, we upgraded tertiary wastewater treatment with activated carbon filtration at our manufacturing sites in Slovenia and Romania.
- Key actions driving these achievements include:
  - **API risk assessment:** Implementing industry best practices via three steps: 1) training and compliance; 2) API loss quantification and risk assessment; 3) ensuring effluents meet safe thresholds[11].
  - **Engagement with suppliers:** Technical assessments, workshops, and supplier reviews to ensure water quality compliance.
  - **Compliance monitoring:** Ongoing risk assessments, compliance checks, and tracking of corrective actions to prevent non-compliance.

8. Locate, Evaluate, Assess, and Prepare. 9. Taskforce on Nature-related Financial Disclosures. 10. Climate: By 2025: Carbon neutrality for scope 1 & 2 (vs. 2016). By 2030: More than 90% reduction in Scope 1 and 2 emissions; 42% reduction in Scope 3 emissions (vs. 2022 baseline). By 2040: More than 90% reduction in all scopes (Scope 1, 2, and 3) (vs. 2022 baseline). Water quantity: We aim to reduce water use by 50% by 2025 (vs. 2016), and implement water reduction plans at our own and supplier sites located in water-stressed basins that have potential material impacts on these basins by 2030. Water quality: We aim to achieve no water quality impact from manufacturing effluents by 2025 (for manufacturing sites and high-risk suppliers), expanding to all labs and all API suppliers by 2030. Waste targets: -50% in waste disposal by 2025 (2016 baseline); -30% in waste disposal by 2030 vs. 2022 baseline. Plastic: Eliminate polyvinyl chloride (PVC) in packaging where feasible by 2025. 11. Predicted environmental concentration / Predicted no-effect concentration of <1.

09

Can you detail the key physical risks identified through your most recent climate-related scenarios analyses?

- We conduct climate-related scenario analyses annually. In 2024, we assessed Novartis operating sites and warehouses for vulnerability to 18 temperature-, water-, and wind-related physical risks across three Shared Socioeconomic Pathway emission scenarios by the Intergovernmental Panel on Climate Change (IPCC) in five-year increments until 2050. For example, our analysis identified:
  - High or very high exposures to **cyclone and flooding** events for multiple manufacturing sites, including those in Switzerland, Italy, Belgium, or Japan. As part of our efforts to mitigate these risks, we are implementing targeted water management practices, including the construction of retention basins and enhancements to stormwater drainage systems. We also maintain a vigilant approach to monitoring flooding risks, with a particular focus on the long-term perspective.
  - **Heat stress** is a chronic risk that could affect our sites in particular, with increased needs for cooling and related energy costs. We find this risk to be most pronounced at our manufacturing sites in locations such as Singapore, Egypt, or Indonesia. To mitigate this risk, we are optimizing energy demand by replacing older chillers with more efficient models, installing LED lighting, and implementing active energy management to monitor real-time consumption.

10

Can you elaborate on your efforts in green chemistry?

- Novartis sees green chemistry as a driver to improve resource efficiency, reduce emissions and waste, and support our 2040 Net Zero ambitions.
- **Sustainable design** is embedded across our portfolio, using insights from product lifecycle assessments to identify hotspots and optimize processes. We focus on recycling solvents, recovering catalysts, using bio-based or lower-emission alternatives where feasible, and investing in innovative manufacturing technologies like BioFuture[12] for biologics.
- We maintain close collaboration with suppliers and industry peers to share best practices and continuously improve manufacturing efficiency.

12. BioFuture: Futuristic approach for manufacturing of biologics using continuous, connected, cost-effective and flexible processes transitioning from traditional batch process.