



Business ethics

Compliance management

Goal: Bring compliance closer to the business

Action(s)	Ву	Progress by end of 2020	Status:
Third Party Risk Management	July 2020	Stepwise implementation of the new Third- Party Risk Management process commenced in November 2020.	•

Goal: Standardize process for disclosure and documentation and increase awareness

Action(s)	Ву	Progress by end of 2020	Status:
Global harmonization of the Conflict of Interest process	November 2020	The Group Conflict of Interest Policy went live in November 2020 and is applicable to all our employees worldwide, excluding the two Healthcare legal entities in France. A confirmation course was rolled out for a specific target group in November 2020. The self-service digital disclosure process, including the documentation of the respective mitigation actions, has been implemented in a new ServiceNow workflow in August 2020 but rolled out together with the policy and confirmation course in November 2020.	•

Supply chain standards

Goal: Ensure that suppliers adhere to ethical, social, environmental and compliance standards

Action(s)	Ву	Progress by end of 2020	Status:
Develop a due diligence process for Responsible Minerals Sourcing according to the OECD guidance for upstream processes and integrate it into the working processes of the affected units.	End of Q3/ 2019 – extended to Q4/2020	In 2020, we finalized a Group-wide conflict minerals due diligence process and published our respective Responsible Minerals Sourcing Charter.	
Develop a due diligence process for palm oil sourcing according to international guidance and implement it within the working processes of the affected units.	Extended to end of 2021	In 2020, ad-hoc validations of palm oil suppliers took place as needed. In 2021, we aim to develop a structured due diligence process for the procurement of palm oil.	•

Animal welfare

Goal: Consistently ensure high quality across our animal facilities

Action(s)	Ву	Progress by end of 2020	Status:
Re-accredit relevant animal facilities.	Ongoing	No AAALAC re-accreditation was due in 2020 and all accredited sites maintained their status. The next re-accreditation is due in 2021.	•
Implement organizational changes and create a new framework of rules for animal welfare to empower the businesses and manage risks.	End of 2021	A new Animal Affairs unit with independent Animal Welfare Officers has been set up. The implementation of other organizational changes will be finished by end of 2021. We have rewritten our Animal Affairs Policy and adopted six new standards.	•
Ensure transparency and ease processes by digitalizing the Animal Affairs unit and developing an internal reporting system for all animal-related activities.	End of 2025	We are implementing a centralized IT landscape to support cross-functional processes and knowledge exchange, to foster transparency and manage risks. We identified and set up working groups that will implement procedures to ensure that all external and internal animal work is reported and KPIs are managed.	•
Goal: Ensure animal welfare in our supply c	hain		
Action(s)	Ву	Progress by end of 2020	Status:
Develop and implement an audit plan for suppliers.	Ongoing	Due to Covid-19-related travel restrictions, only limited audits were performed. With the help of partners, we carried out a total of 11 on-site audits of CRO facilities. Additionally, we set up five remote audits. We have implemented standards across our vendors globally and will prioritize the qualifica-	•
		tion of vendors based on risk assessments.	
Goal: Promote the 4Rs (Reduction, Refinemation(s)	ent, Replacem By	ent, Responsibility) Progress by end of 2020	Status:
Develop a Group-wide 4R program.	Ongoing	We added a fourth R (Responsibility) and presented our internal 4Rs Award to increase awareness.	©
		By mid-2021, we will agree on aligned and binding 4Rs KPIs for all our businesses conducting animal work and for the Animal Affairs unit.	

products Health for all

Focus programs

Goal: Eliminate schistosomiasis

Hand in hand with partners, we aim to eliminate the tropical disease schistosomiasis worldwide.

Action(s)	Ву	Progress by end of 2020	Status:
Donate up to 250 million praziquantel tablets annually to the World Health Organization (WHO) for African school-age children	Ongoing	Following the orders for 2020 from WHO, we donated nearly 226 million tablets in 30 countries, 27 of which are in Africa. We continue to maintain production capacities at a level sufficient for manufacturing 250 million praziquantel tablets a year.	⊘
Optimize the praziquantel formulation	End of 2020	In 2020, we further analyzed the results of the first bioequivalence study. We also concluded the second bioequivalence study successfully and submitted the results to WHO for pre-qualification.	✓
Initiate new partnerships to promote behavioral change in African school children Milestone 2020: Extend the partnership with the NALA Foundation	End of 2020	We extended our partnership with the NALA Foundation for an additional three years.	⊘
Continue to strengthen the position of the Global Schistosomiasis Alliance (GSA) as a partner platform for advocacy, implementation, research, communication, and strategy development	Ongoing	In 2019 and 2020, the GSA contributed to the development of the WHO NTD roadmap 2021-2030 and will continue to work with its partners on its implementation.	⊘

Goal: Availability – Address unmet needs through the research, development and optimization of health solutions We aim to improve global health for underserved populations in low- and middle-income countries, with a focus on combating infectious diseases

Action(s)	Ву	Progress by end of 2020	Status:
Develop a pediatric formulation of praziquantel for the treatment of schistosomiasis in children under six. Milestone 2020: Completion of the clinical Phase III trial	End of 2020	The Phase III trial started in September 2019 at the Homa Bay clinical center in Kenya. The study is implemented in Kenya and Côte d'Ivoire. The Covid-19 pandemic impacted the implementation of this study; it was paused in line with national restrictions. As a result, project timelines have shifted, with an estimated completion of the Phase III in 2021.	•
Develop a pediatric formulation of praziquantel for the treatment of schistosomiasis in children under six. Milestone 2020: Develop access strategy for selected countries	End of 2020	The access strategy identified the need for an implementation field study in African countries. As part of the strategy, procurement access mechanisms for the pediatric formulation of praziquantel, including local manufacturing, are being defined to ensure that the pediatric medication reaches pre-school age patients in need.	
Develop a new antimalarial (PeEF2 inhibitor) Milestone 2020: Design of Phase II and identification of combination partner	End of Q4 2020	In addition to bringing Phase Ib (for cure) to completion, our work focused on designing a Phase II study, identifying a combination partner, and devising a commercialization path to tailor further development.	⊘

Prices of medicines

Goal: Update our access to medicine strategic plan

Action(s)	Ву	Progress by end of 2020	Status
Create a dedicated cross-functional working group to update our universal strategy for equitable pricing.	Ongoing	In addition to existing initiatives, we have begun defining new equitable strategy plans to make Mavenclad [®] available in low- and middle-income countries. The lessons learnt will be evaluated in 2021 for upcoming projects and product launches as an ongoing initiative.	•

Goal: Provide patients with access to affordable, high-quality products by making more of our branded generics (branded off-patent products) available.

Action(s)	Ву	Progress by end of 2020	Status:
Continue with the expansion of our branded generics portfolio.	Ongoing	We are in the process of registering further branded generics in low- and middle-income markets.	•

Goal: Provide "beyond-the-pill" solutions to patients, caregivers and physicians to enable better management of the condition while maximizing treatment outcomes.

Action(s)	Ву	Progress by end of 2020	Status:
We entered a partnership on a leading medication adherence solution, Medisafe, to pilot a customized program to cardiometabolic patients in Brazil, Mexico and Russia.	Ongoing	Following the successful pilots of a customized program to cardiometabolic patients in Brazil, Mexico and Russia in 2018/2019, we continued to serve relevant patients in Brazil and Russia and observed important improvements in adherence rates.	©
We entered a partnership with a leading digital diabetes prevention program provider, Blue Mesa Health, to offer an effective and customized lifestyle counselling program to prediabetic patients across different regions.	Ongoing (2019 goals achieved, continue to develop/expand in 2020)	Following the successful piloting of the digital lifestyle intervention program in collaboration with Blue Mesa Health (acquired by Virgin Pulse), we are supporting the Virgin Pulse program in LATAM.	⊘
We entered a partnership with leading health technology and data science company Holmusk to offer a patient lifestyle support program on its GlycoLeap platform.	2021	We offer the digital lifestyle intervention program "GlycoLeap" in collaboration with Holmusk to prediabetics and/or diabetics in Asia, particularly in Hong Kong, Indonesia and Malaysia.	•

product safety and quality

Chemical product safety

Goal: Guided by the precautionary principle, establish a globally aligned hazard and risk communication system for all our relevant chemical products in the supply chain

Action(s)	Ву	Progress by end of 2020	Status:
Projects for hazard communication: Update safety data sheets for non-hazardous materials	End of 2020	In both our Life Science and Performance Materials business sectors, all safety data sheets for non-hazardous materials had been updated by the end of 2019, ahead of schedule.	⊘
		Since there are no non-hazardous materials in the Versum Materials portfolio and no chemicals at all in the Intermolecular portfolio, there were no safety data sheets for non-hazardous materials that required updating.	
Harmonize safety data sheets to align with a globally uniform standard	End of 2020	In our Life Science business sector, we have consolidated our SAP systems for hazard communication, creating a single platform approach.	⊘
		In Performance Materials, we generate safety data sheets through a centralized SAP system governed by globally consistent rules.	
		The continued integration of Versum Materials focuses on converging work processes and requirements related to product compliance and sustainability.	

Patient safety

Goal: Enhance patient safety through stakeholder communication

Action(s)	Ву	Progress by end of 2020	Status:
Enhance patient interface in agReporter application and rollout of patient-centric pharmacovigilance videos.	Ongoing	We initiated the roll-out of the agReporter app in Kenya and Nigeria. As well optimized the usability of the app.	•

Goal: Empower early and fully informed decisions by addressing unmet medical needs, deep biology and drug safety

2023	We incorporated the product prioritization tool during the development of the risk-based operating model in the Global Patient Safety unit.	⊘
	We published the initial version of the product prioritization tool in January 2020. Further details are in the chapter.	
2023	We completed the design phase and started implementation of our risk-based operating model in the Global Patient Safety (GPS) unit.	•
2023	To ensure that requirements and guidance's of health authorities are met properly, we formed the Pharmacovigilance Intelligence Council. The council enables us to have better oversight and make decisions regarding our actions efficiently. To improve efficiency and timeliness in the assessment of new legislation, we are also	•
		details are in the chapter. We completed the design phase and started implementation of our risk-based operating model in the Global Patient Safety (GPS) unit. To ensure that requirements and guidance's of health authorities are met properly, we formed the Pharmacovigilance Intelligence Council. The council enables us to have better oversight and make decisions regarding our actions efficiently.

Goal: Provide up-to-date safety information to our customers worldwide, based on the benefit-risk profiles of our products

Action(s)	Ву	Progress by end of 2020	Status
Practice predictive safety by developing a robust, cross-functional benefit-risk strategy that helps us deliver therapies that are truly differentiated and provide transformational	2023	We developed concepts, principles as well as guidance documents on the strategy of benefit-risk assessment	•
value to patients.		We developed a change management plan to bring this new Benefit-Risk Strategy to every function.	
		We are testing the new Benefit-Risk Strategy through several pilots, using products from our Healthcare portfolio.	
Optimize and automate the processing of individual case safety reports (ICSRs) from collection to reporting, in order to significantly reduce manual efforts and further improve quality, while maintaining a high level of timely compliance in reporting.	2023	The project team has worked on actions to streamline our activities and to move forward into long-term automation	©

Product-related crime

Goal: Strengthening cross-functional collaboration within the global security network and raising awareness among

Action(s)	Ву	Progress by end of 2020	Status:
Expand organizational structures and certify employees who deal with product-related crime.	Ongoing	In 2020, we started to build a regional corporate security management structure, which incorporates Product Crime Officers. This regional corporate security structure is intended to enable strong cross-functional collaboration. This is supposed to make security performance, incidents and risks at our sites more transparent. In addition, the new structure helps to establish a risk-based approach for more efficient security risk management. The introduction of this new structure is likely to be completed in 2021. In 2020, we also revised both of our internal guidelines for fighting product-related crime.	•
Host conferences and seminars; share best practices and lessons learned through international networks	Ongoing	Due to Covid-19, no training sessions took place on site in 2020. We held virtual meetings.	•
Establishing the "Security Academy" learning and communication platform with the aim of better imparting all Security functions and key stakeholder-relevant know-how.	Ongoing	Kick-off held in mid-February 2020, thereafter quarterly calls.	©
Goal: Develop and implement security techi security of the product supply chain	nologies and	solutions for the authentication, identification, in	ntegrity, and
Action(s)	Ву	Progress by end of 2020	Status:
Support regional activities to counter product-related crime.	Ongoing	Completed a project in China in 2020 to monitor online marketplaces more purposefully and pinpoint suspected cases. As a result, we	\bigcirc

Action(s)	Ву	Progress by end of 2020	Status:
Support regional activities to counter product-related crime.	Ongoing	Completed a project in China in 2020 to monitor online marketplaces more purposefully and pinpoint suspected cases. As a result, we identified only a few counterfeit versions of our products.	⊘
Step up Internet research to detect counterfeit products, illegal parallel imports as well as trademark infringements	Ongoing	Completed a project in China in 2020 to monitor online marketplaces in a more focused manner and investigate suspected cases. As a result, we identified only a few counterfeit versions of our products.	⊘
Monitor counterfeit pharmaceuticals in conventional distribution channels as well as online sales	Ongoing	In 2020, we engaged a new Internet-monit- oring provider to monitor counterfeit medicines worldwide.	•

Goal: Provide and further develop the mobile compact laboratory $\mathbf{Minilab^{m}}$ by \mathbf{GPHF}

Action(s)	Ву	Progress by end of 2020	Status:
Update the Minilab manuals and consolidate all test methods into one single volume.	End of 2020	French and Spanish versions of the manuals were completed in 2020.	

Transport and warehouse safety

Goal: Ensure warehouse and transport safety within our company and at contract warehouses and prevent incidents that pose a risk to people and the environment

Action(s)	Ву	Progress by end of 2020	Status
Regularly evaluate audit results, incident reports and safety-related complaints and implement the resulting corrective actions	Ongoing	We drafted closure instructions for open shipping cartons intended for reuse and started implementing them in order to reduce our waste streams.	©
		Beyond this, in 2020 we did not identify any other aspects of transport and warehouse safety that could be improved by Group-wide measures.	

Employees

Career with us

Goal: Consistently fill at least two-thirds of leadership positions (Role 6+) with internal candidates

Action(s)	Ву	Progress by end of 2020	Status:
Use the Talent Management Process to identify suitable employees with leadership potential and optimize the process to systematically advance them	Ongoing	In 2020, 75% of vacant positions (Role 6+) were filled internally.	•
Build a high-potential talent pool that reflects our demographic structure	Ongoing	We are continuously developing the talent pool further. The set-up of the pool reflects the diversity of the company.	©

Goal: Position our Group as an attractive employer for university graduates

Action(s)	Ву	Progress by end of 2020	Status:
Participate in university fairs and organize inhouse recruiting events for graduates; position our company via employer branding channels; partner with target universities, student initiatives and organizations/associations	Ongoing	We are continuously positioning ourselves as an attractive employer for university graduates. Due to the Covid-19 pandemic, there was less direct interaction with young talent. Career fairs did not take place at universities. Instead, we participated in virtual fairs nationally and internationally. Since we were unable to welcome student visitor groups to the Darmstadt site, our Visitor Communications team carried out the remaining site tours in virtual formats. As a result, student groups also continued to gain an insight into our company and our recruiters remained in contact with the student talent.	•
Approach select target universities	Ongoing	We leveraged existing measures, for instance intensive collaboration with selected university departments and career services, to bolster our position as an attractive employer for university graduates.	©

Goal: Increase the share of employees (Group-wide) with development plans to 70% by 2020

Action(s)	Ву	Progress by end of 2020	Status:
Conduct extensive internal communications and people development campaigns and optimize existing tools	End of 2020	The percentage of employees with development plans increased from 75% (2019) to 77% (2020).	⊘
Create awareness and share knowledge	End of 2020	We are taking steps to raise awareness of development plans and help employees to create a solid one.	Ø

Fairness and dialogue

Goal: Measure and improve employee engagement

Action(s)	Ву	Progress by end of 2020	Status:
Implement a regularly occurring process to measure employee engagement and derive actions to improve it	Ongoing	In 2020 we once again conducted multiple employee surveys worldwide. Our leaders are responsible for analyzing the results, discussing them with their teams and taking appropriate action where necessary.	•

Diversity and inclusion

Goal: Our target is to maintain a 30% representation of women in leadership roles (Role 4+) until 2021.

Action(s)	Ву	Progress by end of 2020	Status:
Deploy teams at business sector level to develop goals and measures to move women into positions in various hierarchies	End of 2021	All business sectors founded their own teams that are networked with one another and occupy themselves with objectives and measures. For example, all areas introduced our inclusion training. Moreover, we again offered specific sponsoring or mentoring programs for women.	•

Health and safety

Goal: Reduce the lost time injury rate Group-wide (to 1.5 or less).

Action(s)	Ву	Progress by end of 2020	Status:
Reinforce our safety culture to prevent behavior- related accidents. Roll out our BeSafe! program at all legacy Sigma-Aldrich sites and monitor ongoing implementation via appropriate performance indicators.	End of 2020	In 2020, we achieved a Group-wide LTIR of 1.3. Manager training and safety walkabouts helped us maintain a high level of safety awareness. We implemented these measures across numerous sites.	

Environment

Environmental stewardship

Goal: Incorporate all production sites into our ISO 14001 Group certificate for environmental management systems.

Action(s)	Ву	Progress by end of 2020	Status:
At newly acquired production sites, introduce environmental management systems in line with our ISO 14001 Group certificate and certify them accordingly.	Ongoing	In 2020, 13 new sites were added to our Group certificate. All sites relevant to the Group certificate have already achieved ISO 14001:2015 certification.	•

Climate action

Goal: 20% reduction in our direct and indirect greenhouse gas emissions (Scope 1 and 2) relative to the 2006 baseline

Action(s)	Ву	Progress by end of 2020	Status
Systematically examine the energy consumption at our individual production sites	End of 2020	In 2020 we piloted a project on digital energy management. As part of the project, we developed software aimed at fully monitoring energy consumption, which will enable us to better analyze current consumption and devise targeted approaches to boosting energy efficiency.	lacksquare
Identify and implement potential energy savings	End of 2020	In 2020, a variety of energy efficiency initiatives helped us save around 1,700 metric tons of CO_2 eq at our global headquarters in Darmstadt.	⊘
Reduce process-related emissions	End of 2022 (will be continued under new target)	Throughout 2018/2019, we initiated two process emission reduction projects that will continue through the year 2022. Taking 2018 production volumes as our baseline, these efforts are expected to save 55,000 metric tons of CO ₂ eq.	•
Renewable energy	End of 2020	In 2020, we increased the percentage of electricity from renewable energy sources relative to total electricity purchased to 27% (2019: 19%).	⊘
		In line with the Greenhouse Gas Protocol (GHG Protocol), we are now capturing our emissions using both the market-based and the location-based approach.	
Goal: 50% reduction in our direct and indire Action(s)	ct greenhouse	e gas emissions (Scope 1 and 2) by 2030 (2020 Progress by end of 2020) baseline) Status:
We will start executing measures to achieve this goal in 2021.	2030	Progress by end of 2020	• Contraction of the contraction
Goal: 80% of purchased electricity will come	e from renewa	ble sources	
Action(s)	Ву	Progress by end of 2020	Status
We will start executing measures to achieve this goal in 2021.	2030		0
Goal: By 2040 achieve net zero carbon opera	ations in terms	s of GHG Protocol Scope 1, 2 and 3 emissions	
Action(s)	Ву	Progress by end of 2020	Status
We will start executing measures to achieve this goal in 2021 alongside our efforts to achieve our 2030 targets.	2040		

Waste and recycling

Goal: Reduce the environmental impact of our waste disposal practices by a 5% reduction of our Waste Score by 2025 (2016 baseline)

Action(s)	Ву	Progress by end of 2020	Status
Continuously look for ways to improve our production processes and disposal methods.	Ongoing	Through our ProMec initiative, we boosted the recycling rate of production waste at our Darmstadt site to 16%, thereby saving an additional 600 metric tons of waste in 2020.	•
		Furthermore, our site in St. Louis (Missouri, USA) shifted roughly 140 metric tons of its waste disposal from landfill to energy recovery in 2020.	

Water management

this goal starting in 2021.

Goal: Introduce a sustainable water management system at 24 of our manufacturing facilities with high water consumption by 2020

Action(c)	D.,	Drogress by and of 2020	Status
Action(s)	Ву	Progress by end of 2020	Status
Meet the "advanced" requirements set out in the CEFIC flagship self-assessment tool (stage 3). This will assess our sites' impact on the water situation in the vicinity of each individual site.	November 2020	During stage 3 of the self-assessment, we analyzed the environmental impacts caused by our discharged water. Building on this analysis, we stipulated mandatory requirements for our sites to be successfully implemented by the end of 2020.	⊘
Goal: Reduce our water use at sites in water Action(s)		reas by 10% relative to the 2014 baseline Progress by end of 2020	Status
Action(s)	Ву	Progress by end or 2020	Status
Processes optimized to curb water consumption at seven production sites in Mexico, Spain, Taiwan, and the United States.	2020	Water consumption has been reduced by 27% at the respective sites.	✓
Goal: Reduce our Water Intensity Score by 1	10% by 2025	5 (2019 baseline)	
Action(s)	Ву	Progress by end of 2020	Status
We will be implementing measures to achieve	2025		0

Goal: Reduce environmentally relevant trace substance residues in the wastewater of all production sites to below the no-effect threshold

Action(s)	Ву	Progress by end of 2020	Status:
	2030	To drive our wastewater quality goal, we drafted a mandatory standard detailing the individual steps needed to achieve it.	