SASB index

SASB disclosure 2023

We included our Sustainability Accounting Standards Board (SASB) disclosures into our Sustainability Report 2023. In addition to our disclosures pursuant to the SASB standard “Biotechnology & Pharmaceuticals”, we voluntarily report information for the “Medical Equipment & Supplies” and “Semiconductors” industries. We thus cover our three business sectors. With our voluntary SASB disclosures, we want to meet the increasing demands of our investors and other stakeholders. The reported data provide transparent, financially material and meaningful information on sustainability of our company. To meet the evolving interests and requirements of our stakeholders in the future as well, we will continuously develop and expand our SASB reporting.

The SASB disclosures were not part of the **limited assurance engagement** conducted by an independent auditor for our 2023 Sustainability Report.

Biotechnology & Pharmaceuticals

Safety of Clinical Trial Participants

Code	Metrics	Reference/Comment
HC-BP-210a.1	Discussion, by world region, of management process for ensuring quality and patient safety during clinical trials	**Clinical studies** **Patient safety** **R&D: Positions & Policies (Healthcare)**
HC-BP-210a.2	Number of FDA Sponsor Inspections related to clinical trial management and pharmacovigilance that resulted in: (1) Voluntary Action Indicated (VAI) and (2) Official Action Indicated (OAI)	In 2023, there were no FDA Good Clinical Practice (GCP) sponsor inspections related to clinical trials. Accordingly, there are no VAI or OAI.
HC-BP-210a.3	Total amount of monetary losses as a result of legal proceedings associated with clinical trials in developing countries	Not reported due to confidentiality constraints/legal prohibitions.

Access to Medicines

Code	Metrics	Reference/Comment
HC-BP-240a.1	Description of actions and initiatives to promote access to health care products for priority diseases and in priority countries as defined by the Access to Medicine Index	**Global Health** **Open Innovation sharing**

Code	Metrics	Reference/Comment
		Prices of medicines **Health capacity & awareness**
HC-BP-240a.2	List of products on the WHO List of Prequalified Medicinal Products as part of its Prequalification of Medicines Programme (PQP)	Currently there is no product on the list.

Affordability & Pricing

Code	Metrics	Reference/Comment
HC-BP-240b.1	Number of settlements of Abbreviated New Drug Application (ANDA) litigation that involved payments and/or provisions to delay bringing an authorized generic product to market for a defined time period	Not reported due to confidentiality constraints.
HC-BP-240b.2	Percentage change in: (1) average list price and (2) average net price across U.S. product portfolio compared to previous year	The following overview shows the percentage change (2023 vs. 2022) in the average list price (WAC) of our Healthcare US product portfolio compared to the previous year (numbers in brackets: 2022 vs. 2021): • Rebif®: 7.3% (4.0%) • Mavenclad®: 4.5% (4.7%) • Bavencio®: 3.8% (3.3%) • Gonal-f®: 7.2% (6.4%) • Cetrotide®: 7.2% (7.3%) • Ovidrel®: 7.2 % (6.4%) • Serostim®: 6.9% (6.1%) • Tepmetko®: 5.5% (4.1%) See also: **Prices of medicines** We do not report any net price for confidentiality reasons.
HC-BP-240b.3	Percentage change in: (1) list price and (2) net price of product with largest increase compared to previous year	We only report the percentage change in average list price across our U.S. product portfolio. The largest increase compared with the previous year amounted to 3.3% for Rebif®. We do not report any net price for confidentiality reasons.

Drug Safety

Code	Metrics	Reference/Comment
HC-BP-250a.1	List of products listed in the Food and Drug Administration's (FDA) MedWatch Safety Alerts for Human Medical Products database	See FDA website: **Safety information and adverse event reporting program** **Adverse event reporting system (FAERS) public dashboard**
HC-BP-250a.2	Number of fatalities associated with products as reported in the FDA Adverse Event Reporting System	See FDA website: **Adverse event reporting system (FAERS) public dashboard**
HC-BP-250a.3	Number of recalls issued, total units recalled	In 2023, we had two drug product recalls in total. None of these recalls was global they affected individual countries only. None of the recalls was related to the USA. None of the recalls was related to serious injury or fatality, all were either Class II or III. According to our internal policies, any recall type is reported and discussed with the relevant national regulatory authority, including the U.S. FDA. All recall processes are managed under a Global Standard Procedure "Product Recall and Withdrawal Management" which is applied worldwide for medicinal products (pharmaceutical prescription, biological) and devices.
HC-BP-250a.4	Total amount of product accepted for take-back, reuse, or disposal	We do not take back products for reuse. In line with legal requirements in each country we take back products for disposal. The take back for disposal is organized on a local level and not tracked at global level.
HC-BP-250a.5	Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practices (cGMP), by type	We had no such FDA enforcement actions in 2023.

Counterfeit Drugs

Code	Metrics	Reference/Comment
HC-BP-260a.1	Description of methods and technologies used to maintain traceability of products throughout the supply chain and prevent counterfeiting	**Product-related crime**

Code	Metrics	Reference/Comment
HC-BP-260a.2	Discussion of process for alerting customers and business partners of potential or known risks associated with counterfeit products	We have implemented processes and procedures to ensure that all suspected counterfeit medicines are assessed by a team of experts. The scope of any notification that we provide is the outcome of strategic alignment between relevant functions (e.g. Medical, Procurement, Legal, Quality, Corporate Security, Regulatory Affairs, Communications). Levels of details and format of any notification, including the HA information and collaboration, dedicated patient communication, information/ awareness communication to distributors, pharmacies, physicians etc. about the presence of counterfeit or diverted products in the market, is decided on a case-by-case basis in accordance with the identified risks and taking into account corporate, legal and regulatory responsibilities. See also: **Product-related crime**
HC-BP-260a.3	Number of actions that led to raids, seizure, arrests, and/or filing of criminal charges related to counterfeit products	We report the number of actions that lead to filed cases related to counterfeit products to the authorities. For our Group-wide approach to counterfeit products, please see: **Product-related crime**

Ethical Marketing

Code	Metrics	Reference/Comment
HC-BP-270a.1	Total amount of monetary losses as a result of legal proceedings associated with false marketing claims	Not reported due to confidentiality constraints/legal prohibitions.
HC-BP-270a.2	Description of code of ethics governing promotion of off-label use of products	**Patient safety**

Employee Recruitment, Development & Retention

Code	Metrics	Reference/Comment
HC-BP-330a.1	Discussion of talent recruitment and retention efforts for scientists and research and development personnel	Merck is a diverse company with three business sectors. Our Group approach to talent recruitment and retention efforts applies to everyone and does not differentiate between non-scientist and scientist employees.

Code	Metrics	Reference/Comment
		Career with us **Diversity, equity & inclusion**
HC-BP-330a.2	(1) Voluntary and (2) involuntary turnover rate for: (a) executives/ senior managers, (b) mid-level managers, (c) professionals, and (d) all others	We report the overall turnover rate (including voluntary as well as involuntary fluctuation) by gender, age and region. **Indicators: Employees**

Supply Chain Management

Code	Metrics	Reference/Comment
HC-BP-430a.1	Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in the Rx-360 International Pharmaceutical Supply Chain Consortium audit program or equivalent third-party audit programs for integrity of supply chain and ingredients	Our Healthcare business sector does not participate in the Rx-360 International Pharmaceutical Supply Chain Consortium. However, our facilities are frequently audited by the respective health authorities of the countries in which we distribute our healthcare products. As a major supplier to the pharmaceutical industry, our Life Science business sector participates in the **Rx-360 audit program**. Regarding our supplier base, we have access to sustainability audits and assessments of our suppliers through our membership in the industry initiatives**Together for Sustainability**and**Pharmaceutical Supply Chain Initiative**. See also: **Supply chain management**

Business Ethics

Code	Metrics	Reference/Comment
HC-BP-510a.1	Total amount of monetary losses as a result of legal proceedings associated with corruption and bribery	Not reported due to confidentiality constraints/legal prohibitions.
HC-BP-510a.2	Description of code of ethics governing interactions with health care professionals	**Interactions with health systems** **Compliance management**

Activity metrics

Code	Metrics	Reference/Comment
HC-BP-000.A	Number of patients treated	In 2023, our Healthcare products were used to treat around 93 million patients, thereof more than 57 million patients in low- and middle-income countries. Additionally, we donated more than 210 million praziquantel tablets, enough to treat schistosomiasis in around 84 million school-aged children in 2023. See also: **Global Health**
HC-BP-000.B	Number of drugs (1) in portfolio and (2) in research and development (Phases 1-3)	We disclose our drug portfolio and R&D pipeline in the Annual Report and our website: **Our Healthcare portfolio** **Research & Development (Healthcare)** **Our Healthcare pipeline**

Medical Equipment & Supplies

Affordability & Pricing

Code	Metrics	Reference/Comment
HC-MS-240a.1	Ratio of weighted average rate of net price increases (for all products) to the annual increase in the U.S. Consumer Price Index	Not reported due to confidentiality constraints.
HC-MS-240a.2	Description of how price information for each product is disclosed to customers or to their agents	We disclose price information for our products via our website (excluding custom requests): **Life Science portfolio**.

Product Safety

Code	Metrics	Reference/Comment
HC-MS-250a.1	Number of recalls issued, total units recalled	We conduct monthly reviews of key performance quality indicators which include a review of multiple quality metrics including number of recalls. Quarterly trends are evaluated and reported through management reviews.

Code	Metrics	Reference/Comment
		In 2023, there were four recalls for our Life Science business.
HC-MS-250a.2	List of products listed in the FDA's MedWatch Safety Alerts for Human Medical Products database	In 2023, there were no Life Science products listed in the **FDA's MedWatch Safety Alerts for Human Medical Products database**.
HC-MS-250a.3	Number of fatalities related to products as reported in the FDA Manufacturer and User Facility Device Experience database	In 2023, there were no fatalities related to our Life Science products reported to the **FDA's Manufacturer and User Facility Device Experience database**.
HC-MS-250a.4	Number of FDA enforcement actions taken in response to violations of current Good Manufacturing Practices (cGMP), by type	Life Science received three U.S. FDA 483 forms in 2023.

Ethical Marketing

Code	Metrics	Reference/Comment
HC-MS-270a.1	Total amount of monetary losses as a result of legal proceedings associated with false marketing claims	Not reported due to confidentiality constraints/legal prohibitions.
HC-MS-270a.2	Description of code of ethics governing promotion of off-label use of products	Before any products can be purchased from our Life Science platform, we use a customer screening process to guard against the purchase of our products for illegal purposes. Core steps of this process cover data sourcing, hazard assessment, safe-use/risk assessment and labels/safety data sheets. Besides our own process, we cooperate with responsible authorities in the U.S. (FBI and the Bureau of Alcohol, Tobacco, Firearms and Explosives, ATF), as well as international authorities (Interpol). If we become aware that any of our Life Science products is used beyond our marketed intention, we evaluate the situation to determine whether to continue sales or not. Proper use of our products is included in**Terms and Conditions** under "Use of Products". See also: **Patient safety**

Product Design & Lifecycle Management

Code	Metrics	Reference/Comment
HC-MS-410a.1	Discussion of process to assess and manage environmental and human health considerations associated with chemicals in products, and meet demand for sustainable products	We assess environmental, human health, and further sustainability aspects of chemical products that we are sourcing and/or producing and selling. Furthermore, we screen our entire Life Science portfolio against growing demands arising from external stakeholders. For example, in alignment with the European Chemicals Strategy for Sustainability (CSS) we work towards a more sustainable product portfolio. Our Product Stewardship Council drives the transformation of existing products by considering appropriate measures like the substitution of chemical substances. Regarding future products, the selection of benign substance alternatives is done during ideation and early R&D through our Design for Sustainability program. In support of this, we have developed a tool which monitors latest chemical regulations. Besides flagging banned substances, it also flags substances that are already considered critical but not yet regulated. In addition to this, experts of the Chemicals Regulations teams are directly consulted for further insights and advice. See also: **Chemical product safety** **Sustainable Products & Packaging: Life Science**
HC-MS-410a.2	Total amount of products accepted for take-back and reused, recycled, or donated, broken down by: (1) devices and equipment and (2) supplies	Since 2013, we have been partnering with Seeding Labs, a non-profit organization dedicated to equipping scientists in resource-limited countries with scientific equipment and support. In 2023, we donated 153 items of scientific equipment valued at more than $243,102. See also: **Sustainable Products & Packaging: Life Science** **Sustainability and Social Business Innovation**

Supply Chain Management

Code	Metrics	Reference/Comment
HC-MS-430a.1	Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in third-party audit programs for manufacturing and product quality	As a major supplier to the pharmaceutical industry, our Life Science business participates in the Rx-360 audit program. The Life Science facilities are regularly audited by customers and respective health authorities for regulated products. (1) Rx-360 audit programs are conducted across the Life Science business on a multi-year cycle with approximately 15% of our manufacturing facilities audited annually. (2) Approximately 5% of our tier 1 supplier facilities participated in third party audit programs such as Rx-360.
HC-MS-430a.2	Description of efforts to maintain traceability within the distribution chain	**Product safety (Life Science)** **Quality & regulatory management (Life Science)** For our Group-wide approach see also: **Product-related crime**
HC-MS-430a.3	Description of the management of risks associated with the use of critical materials	**Supply chain management** **Mica supply chain** **Chemical product safety** **Report on risks and opportunities**

Business Ethics

Code	Metrics	Reference/Comment
HC-MS-510a.1	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	Not reported due to confidentiality constraints/legal prohibitions.
HC-MS-510a.2	Description of code of ethics governing interactions with health care professionals	**Interactions with health systems** **Compliance management**

Activity metrics

Code	Metrics	Reference/Comment
HC-MS-000.A	Number of units sold by product category	Not reported

Semiconductors

Greenhouse Gas Emissions

Code	Metrics	Reference/Comment
TC-SC-110a.1	(1) Gross global Scope 1 emissions	**Climate action** **Indicators: Environment**
	(2) amount of total emissions from perfluorinated compounds	**CDP Climate change**
TC-SC-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	**Climate action**

Energy Management in Manufacturing

Code	Metrics	Reference/Comment
TC-SC-130a.1	(1) Total energy consumed	We report our total energy consumed in terajoule (TJ) and gigawatt hours. (1 gigajoule = 0.001 TJ): **Indicators: Environment** **Climate action**
	(2) percentage grid electricity	42% (2022: 40%) See also: **Indicators: Environment**
	(3) percentage renewable	**Indicators: Environment** **Climate action**

Water Management

Code	Metrics	Reference/Comment
TC-SC-140a.1	(1) Total water withdrawn	We report our total water withdrawn in millions of cubic metres. (1 thousand m^3 = 0.001 million m^3): **Indicators: Environment** **Water management**
	(2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	**Water management** **CDP Water Security**

Waste Management

Code	Metrics	Reference/Comment
TC-SC-150a.1	Amount of hazardous waste from manufacturing, percentage recycled	We report our waste figures in metric kilotons. (1 metric ton = 0.001 metric kilotons): **Indicators: Environment**

Employee Health & Safety

Code	Metrics	Reference/Comment
TC-SC-320a.1	Description of efforts to assess, monitor, and reduce exposure of employees to human health hazards	**Health & safety**
TC-SC-320a.2	Total amount of monetary losses as a result of legal proceedings associated with employee health and safety violations	Not reported due to confidentiality constraints/legal prohibitions.

Recruiting & Managing a Global & Skilled Workforce

Code	Metrics	Reference/Comment
TC-SC-330a.1	Percentage of employees that are (1) foreign nationals and	We recruit, hire, train and promote our employees based on diversity, equity and inclusion. We report the number of employees by region, the number of

Code	Metrics	Reference/Comment
		nationalities and the percentage of non-Germans in management positions on Group level. **Indicators: Employees** **Diversity, equity & inclusion**
	(2) located offshore	We recruit, hire, train and promote our employees based on diversity, equity and inclusion. We report the number of employees by region, the number of nationalities and the percentage of non-Germans in management positions on Group level. **Indicators: Employees** **Diversity, equity & inclusion**

Product Lifecycle Management

Code	Metrics	Reference/Comment
TC-SC-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	Not reported
TC-SC-410a.2	Processor energy efficiency at a system-level for: (1) servers,	Not applicable
	(2) desktops,	Not applicable
	(3) laptops	Not applicable

Materials Sourcing

Code	Metrics	Reference/Comment
TC-SC-440a.1	Description of the management of risks associated with the use of critical materials	**Research & Development (Electronics)** **Report on risks and opportunities**

Intellectual Property Protection & Competitive Behavior

Code	Metrics	Reference/Comment
TC-SC-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	Not reported due to confidentiality constraints/legal prohibitions.

Activity metrics

Code	Metrics	Reference/Comment
TC-SC-000.A	Total production	Not reported
TC-SC-000.B	Percentage of production from owned facilities	Not reported