

TO OUR SHAREHOLDERS

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Dear shareholders,
dear friends of Merck

As we reflect upon our business performance and development in 2022, I would like to begin by expressing my appreciation for your ongoing trust and support as a Merck shareholder.

For Merck, the past year has been one of continued growth, both financially and with respect to the value generated for patients, partners, customers and shareholders. At the same time, 2022 was another challenging year for society and the global economy.

Russia's war of aggression against Ukraine, Covid-19, climate change, and geopolitical tensions are of profound concern to us at Merck. Against this backdrop, I am very proud that we continued to care, pioneer, and outperform for our patients and customers while creating high impact across the Group for society as a whole. Many of our colleagues across Germany, Poland, Hungary, and other countries helped those affected by the war, welcoming Ukrainian refugees into their homes and organizing the transport of aid packages. Overall, we donated more than € 4 million as well as medicines such as Euthyrox® and Erbitux®. We delivered innovations to support manufacturers of mRNA vaccines. And we embedded sustainability even more firmly into our enterprise strategy, taking numerous concrete steps, as described in this Annual Report and in our Sustainability Report for 2022.

As geopolitical tensions increase in many parts of the world, I believe it has rarely been so important to be a value-driven company. Merck will need to continue to adapt to the various challenges and uncertainties worldwide. Yet resilience has always been a competitive advantage of ours, enabling us to anticipate change, continuously evolve, and thrive during challenging times.

This tremendous capacity for resilience is reflected by our overall business performance in 2022. Once again, our "Big 3", namely Process Solutions and Life Science Services, new Healthcare products as well as Semiconductor Solutions, were key in driving growth, combined with the strong performance of established portfolio products. All three of our business sectors made significant contributions to the success of Merck.



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Belén Garijo

Across our Life Science sector, we collaborate with the global scientific community to drive scientific breakthroughs by delivering a broad and deep portfolio of more than 300,000 products.

To meet growing demand and seize new emerging opportunities, our Life Science business sector continued to expand across sites in the United States, Europe and Asia in 2022. For example, in Cork, Ireland, we announced an investment of around € 440 million to expand our membrane and filtration manufacturing capabilities. This represents the largest investment in a single site ever for our Life Science business sector.

In Rockville, Maryland, United States, we are investing more than € 290 million in our biosafety testing capacity, making this our largest investment in this essential requirement for drug development and commercialization to date. Further highlights include the significant expansion and regionalization of our single-use manufacturing capabilities with additional investments of € 130 million in Molsheim, France, and € 100 million in Wuxi, China.

Organic expansions like these are part of our ambitious, multi-year program to increase production capacity and our overall Life Science capabilities. They will support growing global demand for lifesaving therapies, including vaccines, as well as provide products and services for biopharmaceutical manufacturing.

In Healthcare, patients are at the center of everything we do. With every medical breakthrough, we contribute to creating, improving and prolonging lives.

In 2022, our oncology drug Tepmetko® was approved in the European Union for the treatment of adult patients with an aggressive form of non-small cell lung cancer.

We are also pleased with the advances in our development pipeline. This includes, for example, our oral compound enpatoran, which is in Phase II development for lupus, and xevinapant, which is being investigated in head and neck tumors in two Phase III studies.

Bringing to market innovative, specialized medicines that make a meaningful difference to patients globally is important to us – and the outlook is promising. That is why in 2022 we announced our ambition to launch one new Healthcare product or major indication every 1.5 years on average, bolstered by external innovation. We will build on our expertise in the underlying biology of our focused therapeutic areas of oncology, neurology and immunology and leverage our technological capabilities, in particular our industry-leading antibody-drug conjugate (ADC) technology.

To accelerate the discovery and availability of future medicines for patients, we laid the cornerstones for our Translational Science Center as well as the Launch and Technology Center at our global headquarters in Darmstadt, Germany. They are part of a € 1.5 billion investment package announced in March 2022 and are expected to be fully operational by end of 2025.

In Electronics, we are at the heart of the industry enabling the digital transformation. As almost every electronic device uses one of our products, we are advancing virtually every aspect of digital living. Our materials and solutions are changing the way information is generated, accessed, stored, processed, and displayed.

In 2022, we continued to serve as a strong and reliable partner to our global base of customers. This applies especially to the chip industry, where over the past years demand for semiconductors has risen sharply thanks to the rapid adoption of modern digital technologies.

With the industry growth there is also an increasing need to innovate sustainable materials. One example is the joint development of gas solutions with a low global warming potential (GWP) used in the production of semiconductors together with Micron Technology, Inc., an industry leader in innovative memory and storage solutions. Micron is now testing an alternative low-GWP Etch gas from Merck's research and development unit to validate its process performance to replace a traditional, high-GWP material.

Thanks to the solid performance of our three business sectors in all our geographic regions in 2022, Group net sales totaled € 22.2 billion – an organic increase of 6.4% over the previous year. At € 6.8 billion, Group EBITDA pre, our key financial indicator used to steer our operating business, also saw significant organic growth of 6.1%. We now have excellent financial flexibility, which I believe is key to realizing our very ambitious investment and growth plans. And once again you as a shareholder also benefit. We will propose to the Annual General Meeting a dividend of € 2.20 for 2022.

These successes would not have been possible without the unwavering commitment of our more than 64,000 colleagues worldwide. On behalf of the Executive Board, I want to thank them for their dedication in these challenging times.

Thanks to our resilient business model, we are well-positioned to further consolidate our position and move forward as one of the world's leading science and technology companies.

Our mid-term outlook remains robust and we are committed to our target of € 25 billion in sales by 2025. Our "Big 3" businesses will continue to grow strongly and generate the majority of our sales in 2025. Additionally, we will clearly invest for growth by following our strategic roadmap.

In Life Science, we are focusing on driving growth in important areas such as bioprocessing through innovation and significant capacity expansions. We will focus on building scale across our products and services for novel modalities to further consolidate our position in this attractive, growing market. In addition, we are digitalizing our offerings to meet evolving customer needs and we will continue to explore inorganic growth opportunities across our portfolios.

In Healthcare, securing the next wave of growth from our pipeline by advancing the evobrutinib and xevinapant programs will remain vital for us. At the same time, in order to continue to drive profitable growth, we will focus on delivering on the growth prospects of our wave 1 launches of Mavenclad®, Bavencio® and Tepmetko®, and maximizing the value of our strong established portfolio.

As we look to the future of Electronics, we are committed to harnessing unprecedented opportunities within our markets. To ensure that we are prepared adequately, we intend to heavily invest in our capabilities and drive innovation leadership in our businesses, especially in Semiconductor Solutions. As part of this strategy, we are also building on our expertise in data analytics to bolster our core businesses and establish new business models.

Our goals are ambitious, and that must be our aspiration. The external market environment is not getting any easier – on the contrary. Demanding times lie ahead of us – with persistent increases in the costs of raw materials, energy and logistics.

Despite a macro environment of major uncertainty, we remain confident about our prospects thanks to our "Mobilize for Growth" strategy and the resilience we have built over our extraordinary 355-year history. Our financial position is favorable, with a strong balance sheet, sufficient cash reserves and moderate fixed-cost exposure. Our operating model is based on a high degree of diversification in the three business sectors and low cyclicity. We have robust supply chains due to increasing localization. Thanks to our broad geographic footprint, we are not dependent on one single region.

At the same time, we have placed a strong focus on sustainability as an integral part of our strategy, linked with clear sustainability goals. In 2022, the independent Science Based Targets initiative (SBTi) confirmed that our emissions targets for 2030 correspond to the current status of climate science. Consequently, Merck is helping to limit global warming to 1.5 °C, thus meeting the requirements of the Paris Agreement.

As you continue to read this Annual Report, I hope it becomes even more clear how we at Merck are fully committed to creating attractive and sustainable value for our owners, shareholders, customers, employees, and society at large.

I am honored by your trust as shareholders of Merck and look forward to your continued support in these endeavors.

Sincerely,



Belén Garijo

Chair of the Executive Board and CEO

The Executive Board



Marcus Kuhnert
Member of the
Executive Board

Chief Financial
Officer

Kai Beckmann
Member of the
Executive Board

CEO Electronics

Belén Garijo
Chair of the
Executive Board
and
CEO

Peter Guenter
Member of the
Executive Board

CEO Healthcare

Matthias Heinzel
Member of the
Executive Board

CEO Life Science

Short biographies

More information can be found on our [website](#).

Merck Shares

At a glance

The stock markets were again subject to considerable uncertainty in 2022. Geopolitical turmoil, inflation, and the energy cost crisis were the most important factors depending on the respective industry. Accordingly, Merck's share price also fluctuated substantially over the course of 2022.

The first months of the year were dominated by the uncertainty caused by Russia's invasion of Ukraine, which adversely affected investor expectations in the Electronics business sector in particular. The Life Science business sector was also impacted by the uncertainty resulting from the contraction in business with products for combating the Covid-19 pandemic. Taken together, these developments meant that Merck's share price underperformed relative to the DAX® and the sector indices. However, most of this shortfall was recovered by the middle of the year thanks to the Group's relatively low energy intensity and the pronounced resilience of its business model.

The four sets of good quarterly figures we reported in 2022 in spite of the challenging market environment only served to offset the uncertainty on the market to a limited extent. Merck's share price declined by around 20% across the year as a whole. This meant it underperformed compared with the DAX®, which fell by around 12% on a full-year basis. The index for the pharmaceutical industry considerably outperformed Merck's shares, rising by almost 2%. The index for the chemicals industry also performed slightly better than Merck's shares with a fall of around 17%. However, the indices for the semiconductor industry (-36%) and the life science industry (-23%) performed worse than Merck's shares. Merck's shares closed at € 180.90 on December 30, 2022 (2021: € 227.00).

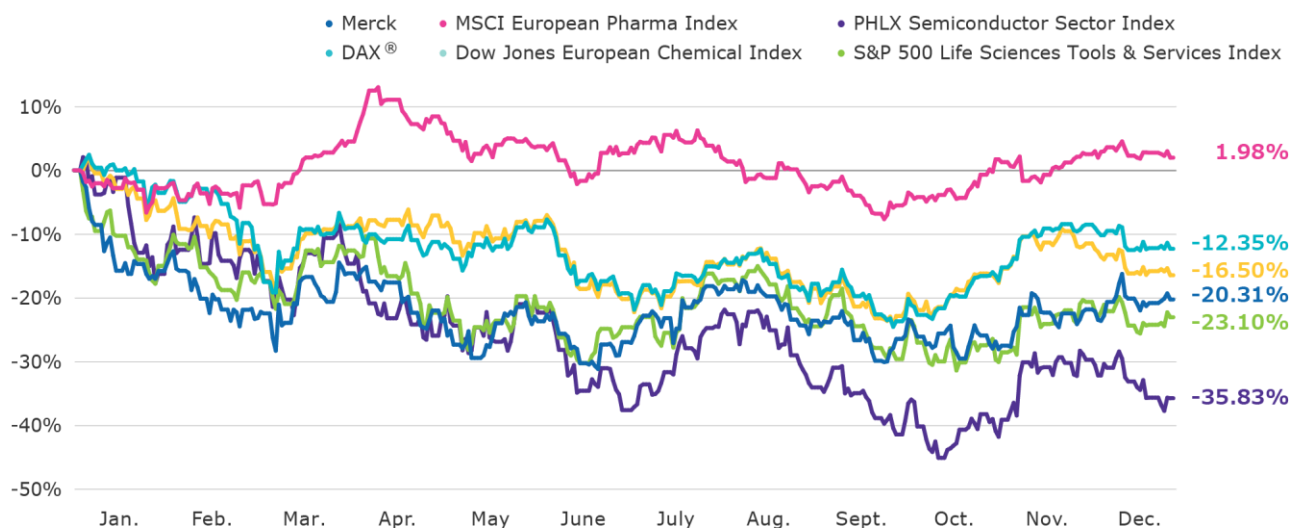
At approximately 321,000 shares per day, the average daily trading volume of Merck shares in 2022 was down around 7% on the prior-year figure of around 346,000. This meant Merck's shares followed the general trend of lower turnover on Germany's securities trading platforms in 2022 compared with the previous year. The uncertainty on the financial markets may have generally made investors more reluctant to trade in shares.

Our shareholder structure remained largely stable in 2022 compared with the previous year: Europe continues to account for the largest proportion of the free float at around half, followed by the United States with around 29%. Compared with 2021, there was a slight shift away from growth investors in favor of value investors and GARP (growth at a reasonable price) investors, who combine growth and value investing attributes. The four biggest investors, who each exceed the threshold of 3%, currently hold around 19% of the free float cumulatively.

In 2022, the Merck Executive Board and the Investor Relations team held around 1,000 discussions with investors on topics such as strategy, the business model, business performance, corporate governance, and sustainability at Merck during investor conferences, roadshows, and conference calls.

Merck Shares

Share price development from January 1, 2022, to December 31, 2022, in %



Merck Shares

Key share price data¹

		2022	2021
Dividend ²	€	2.20	1.85
Share price high	€	222.90	229.40
Share price low	€	156.10	130.10
Year-end share price	€	180.90	227.00
Daily average number of Merck shares traded ³	Number	321,232	346,230
Market capitalization ⁴ (at year-end)	€ million	78,651	98,695
Market value of authorized shares ⁵ (at year-end)	€ million	23,380	29,338

¹ Share price-relevant figures relate to the closing price in Xetra® trading on the Frankfurt Stock Exchange.

² 2022 dividend subject to approval by the Annual General Meeting.

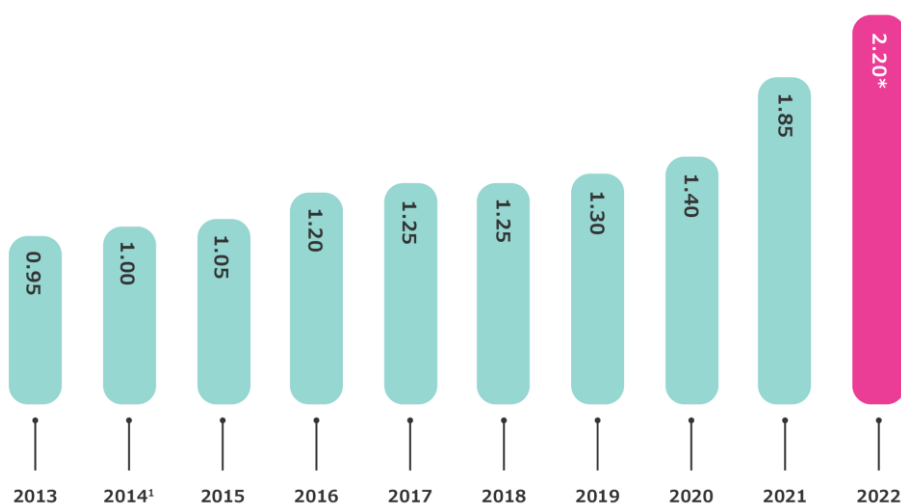
³ Based on the floor trading systems of all German exchanges and the regulated market on Xetra®.

⁴ Based on the theoretical number of shares (434.8 million).

⁵ Based on the number of shares in free float (129.2 million). Source: Bloomberg, Thomson Reuters.

Merck Shares

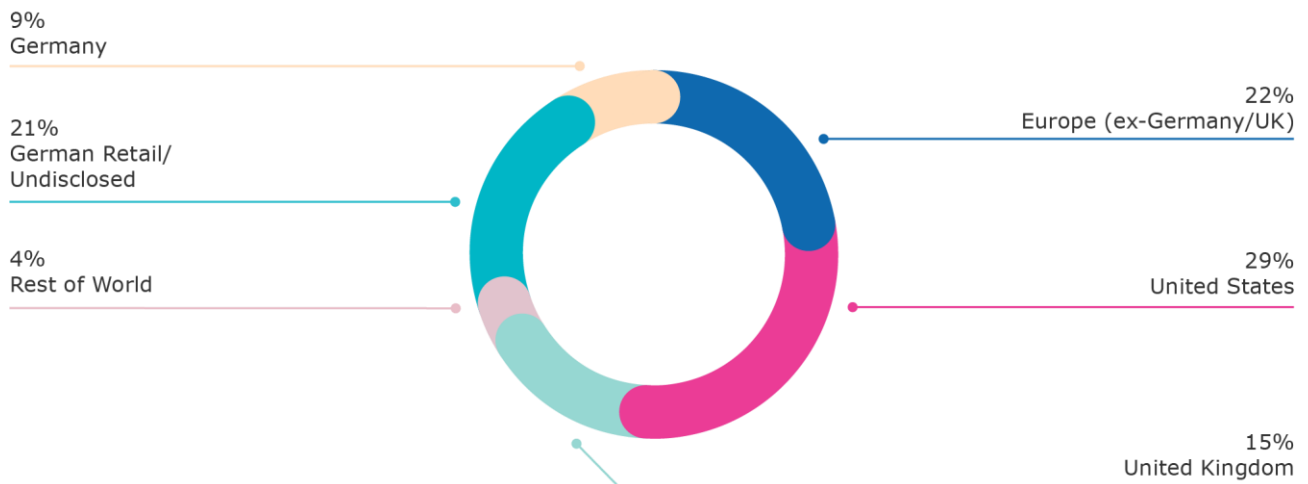
Dividend development since 2013



¹ Adjusted to the new number of shares after the share split (June 30, 2014).

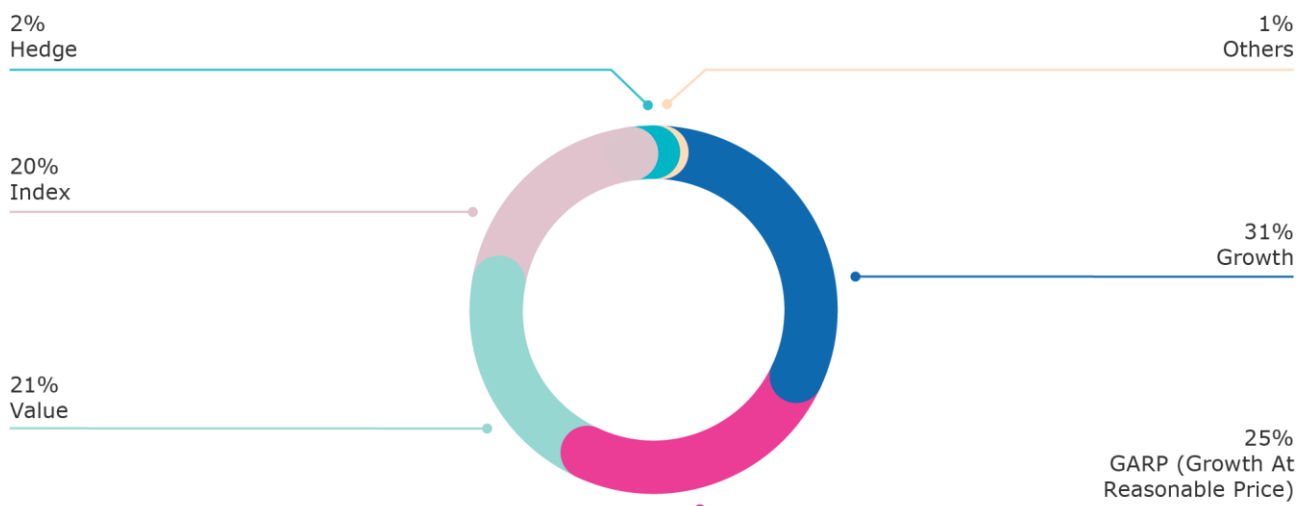
* 2022 dividend subject to approval by the Annual General Meeting.

Identified investors by region as of November 2022



Source: Nasdaq Shareholder Identification; Total Shares Outstanding: 129.2 million.

Identified investors by type as of November 2022



Source: Nasdaq Shareholder Identification.