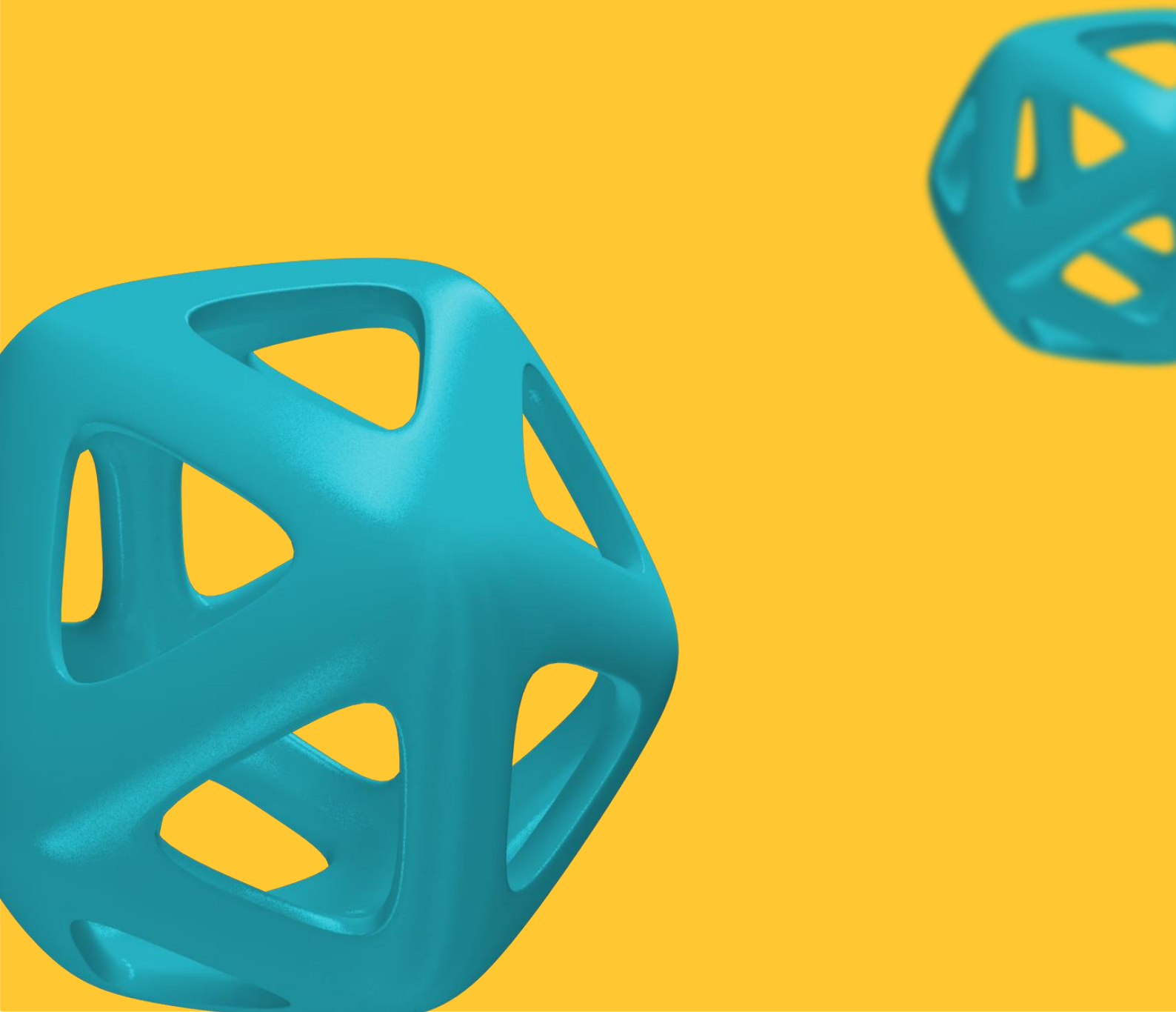


TO OUR SHAREHOLDERS

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Dear shareholders, dear
friends of Merck,

I am honored to address this letter to you for the first time as Chair of the Executive Board and CEO of Merck. It fills me with tremendous pride to pursue our purpose – advancing human progress – together with our team of more than 60,000 curious minds worldwide. As we strive to write the next successful chapter in our company’s 354-year history, we are working tirelessly to make our ambition of becoming the global 21st century science and technology pioneer a reality.

In 2021, we made a promising start on this important journey. We delivered excellent results across all three business sectors. Our company’s ‘Big 3’¹ growth drivers – Process Solutions in Life Science, new medicines in Healthcare, and Semiconductor Solutions in Electronics – led the way. At the same time, the safety of our global workforce continued to be our top priority in the face of the challenging environment created by the Covid-19 pandemic. And we succeeded yet again in avoiding significant disruptions to our supply chains and operations.

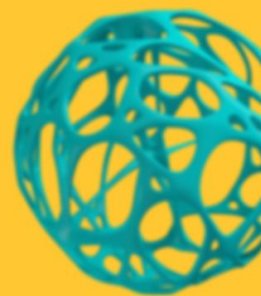
In Life Science, we empowered our 1.6 million customers to excel in fields such as scientific research and biotechnological manufacturing worldwide. Our strategic partnership with BioNTech is one example. In February 2021, we announced plans to accelerate the supply of urgently needed lipids, which are vital in the production of the Pfizer-BioNTech vaccine for Covid-19. Merck is one of a few companies in the world that are currently able to produce custom lipids in significant quantities. During the Covid-19 pandemic, we supported a total of more than 80 different vaccine developers to date along with numerous customers requiring solutions for research tools, diagnostics, and therapeutic products. By acquiring AmpTec, a leading mRNA contract manufacturing and developing organization based in Hamburg, Germany, we have further strengthened our capabilities to develop and manufacture mRNA for use in vaccines, treatments, and diagnostics. At the end of 2021, we also signed a definitive agreement to acquire Exelead, a biopharmaceutical contract development and manufacturing organization (CDMO). With the acquisition, we aim to provide our customers a unique and truly integrated offering across the mRNA manufacturing process.

¹ As of April 1, 2022, the Big 3 include the following businesses: Process Solutions & Life Science Services in Life Science, new Healthcare products and Semiconductor Solutions in Electronics.



Looking forward, our priorities are clear: We want to unlock our full potential to take Merck to the next level by creating superior value for our patients, customers, colleagues, and society.

Belén Garijo



Our global team also worked hard to meet increasing demand from Life Science customers in other areas. For example, we significantly expanded the capacity of our sites in France and the United States for highly durable plastic bioreactors known as single-use assemblies. We also enhanced capacity for monoclonal antibodies (mAbs) required for various medicines and vaccines.

Our Healthcare business has remained at the forefront of enabling innovative specialized medicines that can make a meaningful difference to patients worldwide. In 2021, the U.S. Food and Drug Administration (FDA) approved Tepmetko® as the first and only once-daily oral MET inhibitor for the treatment of adult patients with an aggressive form of lung cancer. This approval in the United States marked an important milestone in light of an increasing need for targeted treatments that have the potential to generate durable anti-tumor activity. In Neurology and Immunology, we generated significant growth thanks largely to Mavenclad®, which is now approved in more than 80 countries. Within Immuno-Oncology, sales of our oncology medicine Bavencio® more than doubled due to approvals as a first-in-line maintenance treatment for patients with advanced urothelial cancer.

Doing research also means accepting setbacks. Together with GlaxoSmithKline, we made a mutual decision in September 2021 to terminate our agreement on the investigational drug bintrafusp alfa. Mid-stage clinical trial data did not replicate the encouraging data observed in earlier studies. At the same time, our Healthcare pipeline remains very promising, focused on areas where we already have a strong position and knowledge base. We were pleased with important clinical advances made in 2021 for pipeline medicines to treat multiple sclerosis, head and neck cancer, as well as small-cell lung cancer.

Our Electronics business helped to serve the strong customer demand, especially from the semiconductor industry. This development is being driven by the rising adoption of digital technologies and highly impactful technology trends such as artificial intelligence, the Internet of Things, and 5G, resulting in exponential data growth. In light of our strong business performance, we announced the successful conclusion of our five-year Bright Future transformation program last September – two years ahead of schedule. At the same time, our teams in Electronics launched a new growth program called Level Up. Our goal is to capture the growth opportunities offered by significantly accelerating global demand for innovative semiconductor and display materials. Investments are an important building block for our ambitions. This is why we will invest significantly more than € 3 billion in innovation and capacities of our Electronics business sector by the end of 2025.

In addition to considerable ongoing investments in R&D, we have continued to significantly enhance our global electronics footprint. Plans for new or expanded sites for R&D and manufacturing were announced in all our relevant geographies, including China, Korea, Taiwan, Japan, the United States, and Germany, and in close proximity to our customers.

These are just a few examples of the numerous accomplishments we made in 2021. As our financial results show, we recorded an increase in organic sales of 13.8% over 2020, rising to a total of € 19.7 billion. EBITDA pre, the key financial indicator we use to steer our operating business, grew by 17.3% to € 6.1 billion. Our net financial debt fell from € 10.8 billion to € 8.8 billion. In 2021, the Merck share price at year-end rose to € 227.00 after closing 2020 at € 140.35 – a fantastic development, from which you, our shareholders, will benefit once again. For 2021, we will propose to the Annual General Meeting a dividend of € 1.85, an increase of 32% compared with the previous year.

All this was only possible thanks to the efforts of our teams at Merck worldwide. Their dedication and curiosity are a critical factor behind our successes. I would like to extend my sincere thanks to them on behalf of the entire Executive Board.

Looking forward, our priorities are clear: We want to unlock our full potential to take Merck to the next level by creating superior value for our patients, customers, colleagues, and society. Acting from a position of strength, we aim to expand our science and technology leadership and mobilize the entire organization for accelerated, long-term efficient growth, also through focused and disciplined capital allocation.

Our new medium-term growth target can be summarized as '25 by 25': In short, we are aiming for around € 25 billion in Group sales by 2025. This will see us add more than € 1 billion in organic sales growth every year on average. Our 'Big 3' will continue to be the main growth engines, with approximately 80% of projected growth to be generated from these three businesses. To succeed, we are ready to invest over € 30 billion in targeted research and development, capital expenditure, and acquisitions from 2021 until 2025. These planned investments represent an increase of more than 50% compared with the prior five-year period.

In Life Science, we will continue to strengthen our core business while expanding further into high-growth segments. These include contract development and manufacturing activities for mRNA technologies, viral vectors and high potency active pharmaceutical ingredients. Our key strategic priorities will be complemented by an increased focus on business enablers, namely innovation, digital technology, resource allocation, and targeted investment.

Serving patients and focusing on unmet medical needs in everything we do will continue to drive our Healthcare business. We aspire to become a global specialty innovator to maximize the value that we bring to patients. We will continue to drive the profitable growth of our core business while delivering on the strong potential of our new products Mavenclad[®], Bavencio[®] and Tepmetko[®]. We look forward to important clinical programs, for example for evobrutinib, xevinapant, M1231 or enpatoran, which are expected to help fuel our next wave of growth.

The transformation of our Electronics business has created one of the most relevant suppliers of materials and solutions for the semiconductor and display industries – and we are on track to further expand our position. This is why we will gear towards further enhancing our leading position in the electronic materials industry, driven by our investment plan and our Level Up growth initiatives. Much of this surge in investment is being done in close collaboration with leading global customers to support their own growth plans.

Overall, the continued long-term orientation that is anchored in our company's roots is and will remain part of our corporate DNA. This holds true not only for our business ambitions, but also for the positive impact we aspire to make on society through our products, technologies, and services. We will emphasize sustainability throughout our value chains and have formulated ambitious goals for this. To step up our sustainability efforts, we introduced concrete targets for reducing greenhouse gas emissions, water consumption, and waste in 2021. These targets complement our ambitious sustainability strategy, which we presented at the end of 2020. It is also integrated into the compensation of the Executive Board, with well-defined sustainability targets included in the non-financial performance criteria.

We aim to empower everyone at Merck to thrive and be their best in serving our customers and patients and in creating value for our owners and investors. This is why we are working hard to cultivate a workplace environment where integrity, inclusion, and equity are ingrained behaviors. To us, diversity is not an add-on, but a business priority. For example, the proportion of women in leadership roles increased to 36% at the end of 2021. We are now aiming for gender parity by 2030.

As you read this Annual Report, you will find a wealth of examples which underscore that we at Merck have what it takes to deliver on our ambitions! Together with my Executive Board colleagues, I am convinced that this company is taking the right steps to shape a successful future. Thank you for being a part of our journey. And most importantly, thank you for supporting us as shareholders.

Sincerely,



Belén Garijo

Chair of the Executive Board and CEO

The Executive Board



Kai Beckmann
Member of the
Executive Board

CEO Electronics

Peter Guenter
Member of the
Executive Board

CEO Healthcare

Belén Garijo
Chair of the
Executive Board

CEO

Matthias Heinzel
Member of the
Executive Board

CEO Life Science

Marcus Kuhnert
Member of the
Executive Board

Chief Financial
Officer

Short biographies

More information can be found at

www.merckgroup.com -> [Company](#) -> [Who we are](#) -> [Management](#)

Merck Shares

At a glance

On the whole, the performance of Merck shares in 2021 was characterized by a strong increase in value. Merck shares developed broadly in line with the relevant pharmaceutical industry index in the first half of the year. Starting from the end of June, Merck shares significantly outperformed the MSCI European Pharma Index as well as the DAX® and the relevant reference index for the chemical industry.

Following a correction in September that affected the S&P 500 Life Sciences Tools & Services Index to a similar extent, the shares again performed substantially better than all the relevant reference indices in October, November, and December.

With its share price rising by around 62% across the year as a whole, Merck clearly outperformed the DAX®, which closed on December 31 approximately 16% higher than at the start of the year. Merck shares also closed 2021 up on the other relevant reference indices, which saw differing development over the course of the year.

The shares significantly outperformed the relevant reference index for the chemical industry, which saw full-year growth of around 23%. The pharmaceutical industry index rose by around 20% in 2021, meaning it was outperformed by Merck shares by 42 percentage points in the same period. Although the S&P 500 Life Sciences Tools & Services Index saw strong growth of around 39%, it was still bettered by the performance of Merck shares at around 62%.

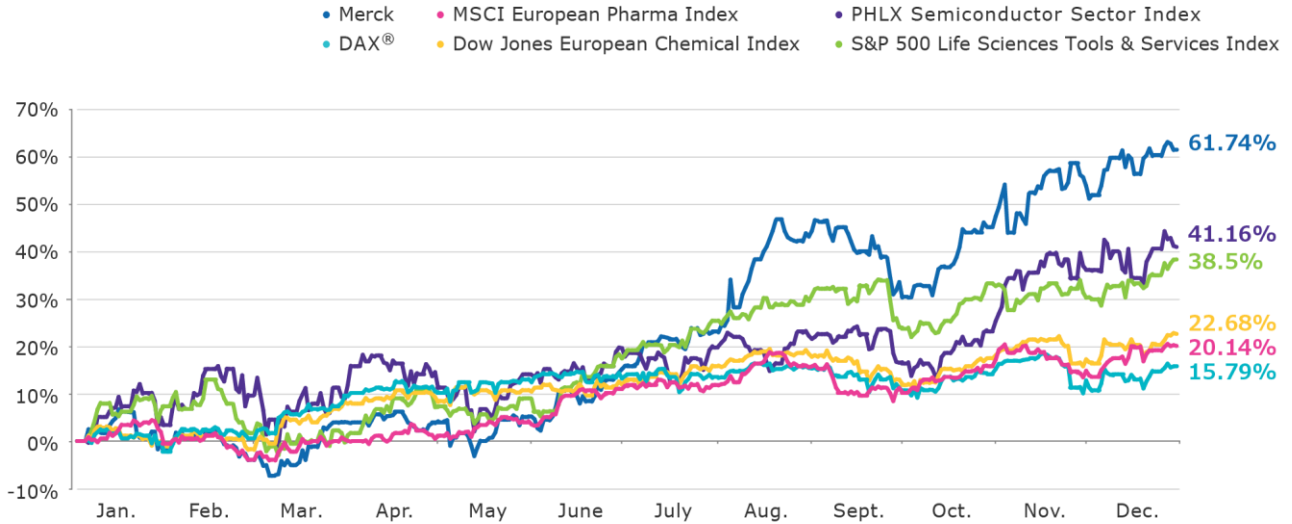
The extremely strong share price development compared with the indices was attributable to the considerable boost provided by products and services in connection with the Covid-19 pandemic, particularly in Life Science, as well as the excellent underlying financial performance in fiscal 2021.

Despite the restrictions that remained in place in 2021, the Merck Executive Board and the Investor Relations team gave in-depth briefings in largely virtual form to more than 1,000 investors at investor conferences, as well as during roadshows and conference calls.

At approximately 346,000 shares per day, the average daily trading volume of Merck shares was down around 39% on the previous year, a development that should be viewed in light of the sharp rise in the share price. Europe accounted for the largest proportion of the free float in 2021, with its share remaining essentially unchanged at 48%. By investor type, growth investors and value investors dominated, as in the previous year. In 2021, the proportion of growth investors at Merck increased slightly year-on-year to around 36% of the free float. The top five investors held around 22% of the free float at the end of 2021, down around two percentage points on the previous year.

Merck shares

Share price development from January 1, 2021, to December 31, 2021, in %



Merck shares

Key share price data¹

		2021	2020
Dividend ²	€	1.85	1.40
Share price high	€	229.40	140.35
Share price low	€	130.10	81.26
Year-end share price	€	227.00	140.35
Daily average number of Merck shares traded ³	Number	346,230	566,911
Market capitalization ⁴ (at year-end)	€ million	98,695	61,021
Market value of authorized shares ⁵ (at year-end)	€ million	29,338	18,139

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

² 2021 dividend subject to approval by the Annual General Meeting.

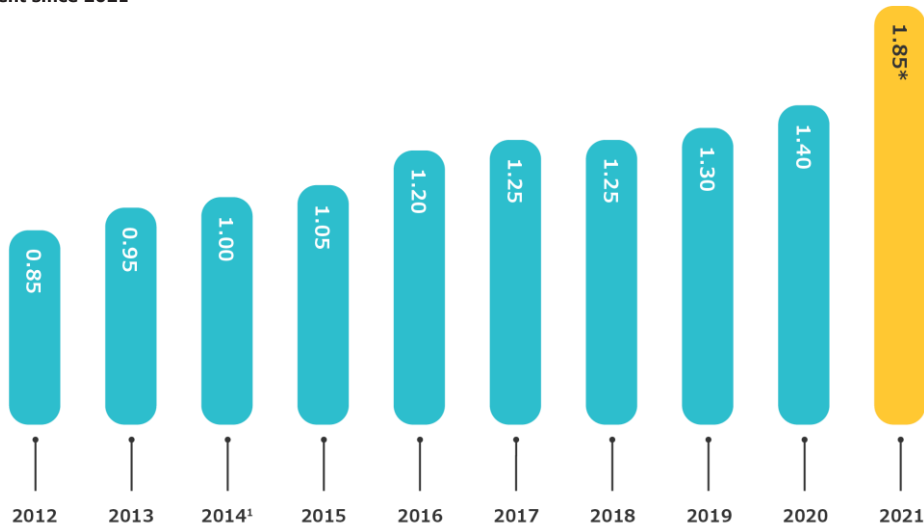
³ Based on the floor trading systems of all German exchanges and the regulated market on Xetra®.

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 2021



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

* 2021 dividend subject to approval by the Annual General Meeting.

Identified investors by region as of November 2021



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

Identified investors by type as of November 2021



Source: Nasdaq Shareholder Identification