Quarterly Statement

3rd Quarter 2023

Merck – in brief*

Merck Group

Key figures

€ million	**Q3 2023**	Q3 2022	Change	**Jan.-Sept. 2023**	Jan.-Sept. 2022	Change
Net sales	5,173	5,806	-10.9%	15,768	16,572	-4.8%
Operating result (EBIT)[1]	983	1,234	-20.3%	2,988	3,585	-16.7%
Margin (% of net sales)[1]	19.0%	21.3%		18.9%	21.6%	
EBITDA[2]	1,418	1,704	-16.8%	4,361	5,016	-13.1%
Margin (% of net sales)[1]	27.4%	29.3%		27.7%	30.3%	
EBITDA pre[1]	1,446	1,810	-20.2%	4,586	5,221	-12.2%
Margin (% of net sales)[1]	27.9%	31.2%		29.1%	31.5%	
Profit after tax	740	926	-20.0%	2,246	2,680	-16.2%
Earnings per share (€)	1.70	2.12	-19.8%	5.15	6.14	-16.1%
Earnings per share pre (€)[1]	2.07	2.68	-22.8%	6.64	7.73	-14.1%
Operating cash flow	1,255	1,552	-19.1%	2,731	3,244	-15.8%
Net financial debt[3]	8,426	8,328	1.2%			
Number of employees[4]	63,297	63,731	-0.7%			

[1] Not defined by International Financial Reporting Standards (IFRS).

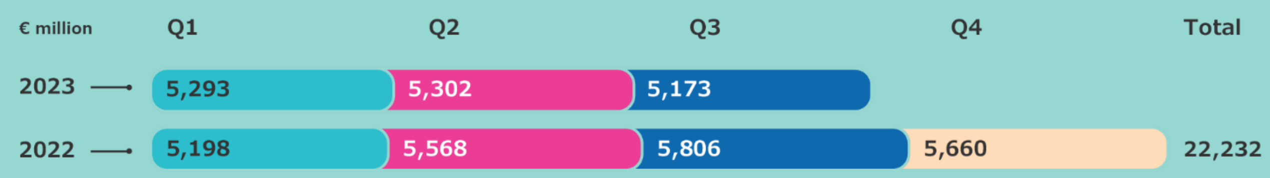
[2] Not defined by International Financial Reporting Standards (IFRS); EBITDA corresponds to operating result (EBIT) adjusted by depreciation, amortization, impairment losses, and reversals of impairment losses.

[3] Figures for the reporting period ending on September 30, 2023, prior-year figures as of December 31, 2022.

[4] Figures for the reporting period ending on September 30, 2023, prior-year figures as of September 30, 2022. Prior-year figures have been adjusted. This figure refers to all employees at sites of fully consolidated entities.

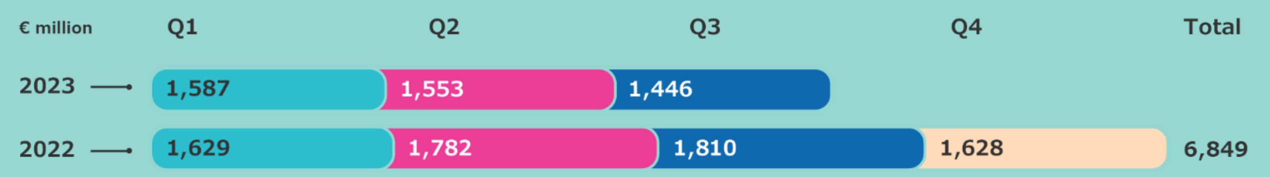
Merck Group

Net sales by quarter



Merck Group

EBITDA pre by quarter



* This document is a quarterly statement pursuant to section 53 of the Exchange Rules for the Frankfurt Stock Exchange. This quarterly statement contains certain financial indicators such as operating result (EBIT), EBITDA, EBITDA pre, net financial debt and earnings per share pre, which are not defined by International Financial Reporting Standards (IFRS). These financial indicators should not be taken into account in order to assess the performance of Merck in isolation or used as an alternative to the financial indicators presented in the consolidated financial statements and determined in accordance with IFRS. The figures presented in this quarterly statement have been rounded. This may lead to individual values not adding up to the totals presented.

It is our aim to ensure that our communication is inclusive and so we strive to use language that is both non-discriminatory and easy to read. This report attempts to use gender-neutral language, which may not yet be consistent in all instances. Even if masculine forms are used, all genders are explicitly meant.

The Annual Report for 2022 has been optimized for mobile devices and is available at **https://www.merckgroup.com/en/annualreport/2022/**.

Significant events during the reporting period

Termination of the strategic alliance with Pfizer Inc., USA, to co-develop and co-commercialize Bavencio® with effect from June 30, 2023

Merck announced on March 27, 2023 the termination of the alliance agreement with Pfizer Inc., USA, (Pfizer) to co-develop and co-commercialize the anti-PD-L1 antibody Bavencio® (avelumab) with effect from June 30, 2023. Bavencio® is approved for the treatment of multiple cancer indications. In the first nine months of 2023, net sales generated by Merck with Bavencio® amounted to € 530 million (fiscal 2022: € 611 million).

In accordance with the termination agreement, with effect from June 30, 2023, Merck receives the exclusive worldwide rights to develop, manufacture and commercialize Bavencio®, thus regaining full control over it. The current even split of net profits from sales and defined expense components by the alliance partners will be replaced by a 15% royalty to Pfizer on defined net sales of Bavencio®. While Merck and Pfizer will continue to operationalize their respective ongoing clinical trials for Bavencio®, Merck will control all future research and development activities. Likewise, product manufacturing and supply chain operation will remain solely with Merck.

Course of Business and Economic Position

Merck

Development of net sales

The development of Group net sales across the individual business sectors in the third quarter of 2023 was as follows:

Merck Group

Net sales by business sector

€ million	Q3 2023	Share	Organic growth[1]	Exchange rate effects	Acquisitions/ divestments	Total change	Q3 2022	Share
Life Science	2,191	42%	-13.2%	-5.1%	–	-18.3%	2,681	46%
Healthcare	2,066	40%	7.4%	-8.5%	–	-1.1%	2,089	36%
Electronics	916	18%	-4.0%	-7.9%	0.3%	-11.6%	1,036	18%
Merck Group	**5,173**	**100%**	**-4.1%**	**-6.8%**	**0.1%**	**-10.9%**	**5,806**	**100%**

[1] Not defined by International Financial Reporting Standards (IFRS).

In the third quarter of 2023, the regional breakdown of Group net sales was as follows:

Merck Group

Net sales by region

€ million	Q3 2023	Share	Organic growth[1]	Exchange rate effects	Acquisitions / divestments	Total change	Q3 2022	Share
Europe	1,412	27%	-6.8%	-3.3%	–	-10.1%	1,571	27%
North America	1,447	28%	-8.7%	-6.8%	–	-15.4%	1,711	30%
Asia-Pacific (APAC)	1,752	34%	-2.6%	-9.6%	0.1%	-12.1%	1,993	34%
Latin America	371	7%	21.0%	-10.4%	–	10.6%	335	6%
Middle East and Africa (MEA)	191	4%	-1.2%	-1.1%	–	-2.3%	196	3%
Merck Group	**5,173**	**100%**	**-4.1%**	**-6.8%**	**0.1%**	**-10.9%**	**5,806**	**100%**

[1] Not defined by International Financial Reporting Standards (IFRS).

Results of operations

The following table presents the composition of EBITDA pre for the third quarter of 2023 in comparison with the year-earlier quarter. The IFRS figures have been modified to reflect the elimination of adjustments included in the respective functional costs.

Merck Group

Reconciliation EBITDA pre[1]

	Q3 2023			Q3 2022			Change
€ million	IFRS	Elimination of adjustments	Pre[1]	IFRS	Elimination of adjustments	Pre[1]	Pre[1]
Net sales	**5,173**	**–**	**5,173**	**5,806**	**–**	**5,806**	**-10.9%**
Cost of sales	-2,162	10	-2,151	-2,147	6	-2,141	0.5%
Gross profit	**3,011**	**10**	**3,022**	**3,658**	**6**	**3,664**	**-17.5%**
Marketing and selling expenses	-1,104	8	-1,096	-1,223	6	-1,217	-9.9%
Administration expenses	-312	34	-278	-328	31	-297	-6.2%
Research and development costs	-581	–	-581	-642	22	-620	-6.3%
Impairment losses and reversals of impairment losses on financial assets (net)	-28	–	-28	6	–	6	>100.0%
Other operating income and expenses	-2	-22	-24	-237	52	-186	-87.0%
Operating result (EBIT)[1]	**983**			**1,234**			
Margin (in % of net sales)[1]	19.0%			21.3%			
Depreciation/amortization/ impairment losses/reversals of impairment losses	435	-4	431	470	-11	459	-6.0%
EBITDA[2]	**1,418**			**1,704**			
Margin (in % of net sales)[1]	27.4%			29.3%			
Restructuring expenses	25	-25	–	63	-63	–	
Integration expenses/IT expenses	29	-29	–	23	-23	–	
Gains (−)/losses (+) on the divestment of businesses	-49	49	–	-4	4	–	
Acquisition-related adjustments	4	-4	–	7	-7	–	
Other adjustments	19	-19	–	18	-18	–	
EBITDA pre[1]	**1,446**	**–**	**1,446**	**1,810**	**–**	**1,810**	**-20.2%**
Margin (in % of net sales)[1]	27.9%			31.2%			
thereof: organic growth[1]							-13.2%
thereof: exchange rate effects							-6.6%
thereof: acquisitions/divestments							-0.3%

[1] Not defined by International Financial Reporting Standards (IFRS).

[2] Not defined by International Financial Reporting Standards (IFRS); EBITDA corresponds to operating result (EBIT) adjusted by depreciation, amortization, impairment losses, and reversals of impairment losses.

- In the third quarter of 2023, the operating result (EBIT) decreased in comparison with the year-earlier quarter. This was primarily due to the decline in gross profit and could only be partially offset by the reduction in operating expenses. Since the decrease in the operating result already observed in the first half of 2023 continued in the third quarter, Group EBIT declined in the first nine months of 2023. Consequently, the EBIT margin decreased by around three percentage points from 21.6% in the year-earlier period to 18.9% in the first nine months of 2023.
- EBITDA pre, the key financial indicator used to steer operating business, was lower in the first nine months of 2023 than in the year-earlier period. This resulted mainly from an organic earnings decline as well as negative foreign exchange effects. The Group EBITDA pre margin also decreased and amounted to 29.1% in the first nine months of 2023 (January-September 2022: 31.5%).
- Earnings per share pre (earnings per share after net of tax effect of adjustments and amortization of purchased intangible assets presented in the foregoing table) declined in the third quarter of 2023. In combination with the slight decline in the first half of 2023, earnings per share pre were € 6.64 in the first nine months of 2023 and thus below the corresponding year-earlier period (January-September 2022: € 7.73).

The following table presents the reconciliation of EBITDA pre of all operating businesses to the profit after tax of the Merck Group:

Merck Group

Reconciliation Profit after tax

€ million	Q3 2023	Q3 2022
EBITDA pre of the operating businesses[1]	**1,508**	**1,988**
Corporate and Other	-63	-178
EBITDA pre of the Merck Group[1]	**1,446**	**1,810**
Depreciation/amortization/impairment losses/reversals of impairment losses	-435	-470
Adjustments[1]	-27	-107
Operating result (EBIT)[1]	**983**	**1,234**
Financial result	-46	-47
Profit before income tax	**937**	**1,187**
Income tax	-197	-261
Profit after tax	**740**	**926**
Earnings per share (€)	**1.70**	**2.12**

[1] Not defined by International Financial Reporting Standards (IFRS).

Financial position

The composition and development of net financial debt were as follows:

Merck Group

Net financial debt[1]

€ million	Sept. 30, 2023	Dec. 31, 2022	Change € million	Change in %
Bonds and commercial paper	8,740	8,726	14	0.2%
Bank loans	145	203	-59	-28.9%
Liabilities to related parties	1,517	919	597	65.0%
Loans from third parties and other financial liabilities	58	59	–	-0.1%
Liabilities from derivatives (financial transactions)	14	30	-16	-52.3%
Lease liabilities	482	491	-9	-1.8%
Financial debt	**10,956**	**10,428**	**528**	**5.1%**
less:				
Cash and cash equivalents	2,365	1,854	512	27.6%
Current financial assets[2]	164	247	-83	-33.4%
Net financial debt[1]	**8,426**	**8,328**	**99**	**1.2%**

[1] Not defined by International Financial Reporting Standards (IFRS).

[2] Excluding current derivatives (operational) and contingent considerations, which are recognized in the context of business combinations according to IFRS 3.

As one of the three key performance indicators alongside net sales and EBITDA pre, operating cash flow developed as follows:

Merck Group

Operating cash flow

€ million	Q3 2023	Q3 2022	Change
EBITDA pre[1]	**1,446**	**1,810**	**-20.2%**
Adjustments[1]	-27	-107	-74.5%
Financial result[2]	-46	-47	-2.3%
Income tax[2]	-197	-261	-24.6%
Changes in working capital[1]	-35	-181	-80.5%
thereof: changes in inventories[3]	92	-249	>100.0%
thereof: changes in trade accounts receivable[3]	52	149	-65.3%
thereof: changes in trade accounts payable/refund liabilities[3]	-179	-81	>100.0%
Changes in provisions[3,4]	30	111	-72.8%
Changes in other assets and liabilities[3,4]	143	235	-39.1%
Neutralization of gains/losses on disposals of fixed assets and other disposals[3]	-7	-4	90.2%
Other non-cash income and expenses[3]	-51	-5	>100.0%
Operating cash flow	**1,255**	**1,552**	**-19.1%**

[1] Not defined by International Financial Reporting Standards (IFRS).

[2] In accordance with the Consolidated Income Statement.

[3] In accordance with the Consolidated Cash Flow Statement.

[4] As of January 1, 2023, the tranche of the Merck Long-Term Incentive Plan to be paid out in the months following the balance sheet date is disclosed under other current non-financial liabilities and no longer under current provisions for employee benefits. For better comparability, the previous year’s figures have been adjusted.

Life Science

Development of net sales and results of operations

In the third quarter of 2023, the net sales of the Life Science business sector developed as follows:

Life Science

Net sales by business unit

€ million	Q3 2023	Share	Organic growth[1]	Exchange rate effects	Acquisitions/ divestments	Total change	Q3 2022[2]	Share
Science & Lab Solutions	1,111	51%	-5.0%	-5.8%	–	-10.9%	1,247	46%
Process Solutions	873	40%	-22.5%	-4.4%	–	-26.8%	1,193	45%
Life Science Services	206	9%	-9.8%	-4.7%	–	-14.5%	241	9%
Life Science	**2,191**	**100%**	**-13.2%**	**-5.1%**	**–**	**-18.3%**	**2,681**	**100%**

[1] Not defined by International Financial Reporting Standards (IFRS).

[2] Prior-year figures have been adjusted owing to an internal realignment.

- The Science & Lab Solutions business unit, which provides products and services to support life science research for pharmaceutical, biotechnology, academic research laboratories and researchers as well as scientific and industrial laboratories, remained flat organically in the first nine months of 2023. While the core business[1] generated moderate organic growth in the first half of 2023, sales saw an organic decline in the third quarter of 2023 amid further decreasing pandemic-related demand. Geographically, Europe showed organic growth in the first nine months of the year, while net sales in North America and Asia-Pacific (APAC) declined organically.
- The Process Solutions business unit, which markets products and services for the entire pharmaceutical production value chain, saw an organic decrease in sales in the first nine months of 2023. This was attributable to the continued decline in pandemic-related sales and a slowdown of the core business in the second and third quarters of 2023, driven mainly by the effects of destocking by key customers.
- The Life Science Services business unit, which offers fully integrated Contract Development and Manufacturing Organization (CDMO) and Contract Testing services, recorded a strong organic sales decline in the third quarter of 2023. Lower pandemic-related sales were partially offset by growth in the core business. Whereas the Life Science Services business unit generated sales growth in the core business from January-September 2023, decreasing pandemic-related sales led to an overall organic sales decline in the nine-month period.

[1] The core business consists of “Net sales excluding the Covid-19 business“. This is a financial indicator that is not defined by International Financial Reporting Standards (IFRS). It should not be taken into account in order to assess the performance of Merck in isolation or as an alternative to the financial indicators presented in the consolidated financial statements and determined in accordance with IFRS.

The following table presents the composition of EBITDA pre for the third quarter of 2023 in comparison with the year-earlier quarter. The IFRS figures have been modified to reflect the elimination of adjustments included in the respective functional costs.

Life Science

Reconciliation EBITDA pre[1]

	Q3 2023			Q3 2022			Change
€ million	IFRS	Elimination of adjustments	Pre[1]	IFRS	Elimination of adjustments	Pre[1]	Pre[1]
Net sales	**2,191**	**–**	**2,191**	**2,681**	**–**	**2,681**	**-18.3%**
Cost of sales	-1,031	3	-1,028	-1,071	2	-1,068	-3.7%
Gross profit	**1,160**	**3**	**1,163**	**1,610**	**2**	**1,613**	**-27.9%**
Marketing and selling expenses	-556	–	-555	-634	5	-629	-11.7%
Administration expenses	-103	9	-94	-112	10	-102	-8.0%
Research and development costs	-90	–	-90	-106	–	-106	-14.5%
Impairment losses and reversals of impairment losses on financial assets (net)	–	–	–	2	–	2	>100.0%
Other operating income and expenses	-15	2	-12	-41	23	-18	-30.2%
Operating result (EBIT)[1]	**396**			**719**	**–**		
Margin (in % of net sales)[1]	18.1%			26.8%	–		
Depreciation/amortization/ impairment losses/reversals of impairment losses	205	–	205	217	–	217	-5.6%
EBITDA[2]	**601**			**936**			
Margin (in % of net sales)[1]	27.4%			34.9%			
Restructuring expenses	4	-4	–	28	-28	–	
Integration expenses/IT expenses	10	-10	–	10	-10	–	
Gains (-)/losses (+) on the divestment of businesses	–	–	–	–	–	–	
Acquisition-related adjustments	–	–	–	2	-2	–	
Other adjustments	–	–	–	–	–	–	
EBITDA pre[1]	**615**	**–**	**615**	**976**	**–**	**976**	**-37.0%**
Margin (in % of net sales)[1]	28.1%			36.4%			
thereof: organic growth[1]							-31.5%
thereof: exchange rate effects							-4.8%
thereof: acquisitions/divestments							-0.7%

[1] Not defined by International Financial Reporting Standards (IFRS).

[2] Not defined by International Financial Reporting Standards (IFRS); EBITDA corresponds to operating result (EBIT) adjusted by depreciation, amortization, impairment losses, and reversals of impairment losses.

- Adjusted gross profit for the Life Science business sector was lower in both the third quarter and the first nine months of 2023 than in the corresponding year-earlier periods. This was attributable to the organic sales decline as a result of the continued decrease in pandemic-related demand combined with a slowdown of the core business in the second and third quarters of 2023. At 55.8%, the adjusted gross margin for the first nine months of 2023 was below the year-earlier period (January-September 2022: 60.4%).
- The decrease in marketing and selling expenses in the third quarter of 2023 was largely driven by lower logistic costs. This was attributable to lower freight volumes as well as a better cost structure. In the first nine months of 2023, research and development costs remained largely stable compared with the first nine months of 2022, whereas in the third quarter they declined compared with the year-earlier quarter.
- EBITDA pre saw an organic decline in both the third quarter and the first nine months of 2023, resulting in an EBITDA pre margin of 31.7% for the first nine months of 2023 (January-September 2022: 37.4%).

Healthcare

Development of net sales and results of operations

Sales of the key product lines and products developed in the third quarter of 2023 as follows:

Healthcare

Net sales by major product lines/products

€ million	Q3 2023	Share	Organic growth[1]	Exchange rate effects	Total change	Q3 2022	Share
Oncology	**477**	**23%**	**18.1%**	**-12.8%**	**5.3%**	**453**	**22%**
thereof: Erbitux®	271	13%	13.3%	-14.4%	-1.1%	274	13%
thereof: Bavencio®	185	9%	21.6%	-10.0%	11.7%	166	8%
Neurology & Immunology	**401**	**19%**	**-11.5%**	**-5.6%**	**-17.2%**	**484**	**23%**
thereof: Rebif®	175	8%	-25.1%	-4.6%	-29.7%	249	12%
thereof: Mavenclad®	225	11%	2.9%	-6.7%	-3.8%	234	11%
Fertility	**386**	**19%**	**14.0%**	**-10.4%**	**3.6%**	**373**	**18%**
thereof: Gonal-f®	213	10%	5.1%	-8.9%	-3.8%	221	11%
Cardiovascular, Metabolism and Endocrinology	**724**	**35%**	**6.8%**	**-7.6%**	**-0.8%**	**730**	**35%**
thereof: Glucophage®	235	11%	8.3%	-9.0%	-0.6%	237	11%
thereof: Concor®	142	7%	2.3%	-9.1%	-6.8%	152	7%
thereof: Euthyrox®	149	7%	9.8%	-5.3%	4.5%	143	7%
thereof: Saizen®	89	4%	37.9%	-10.5%	27.4%	69	3%
Other	**78**	**4%**				**49**	**2%**
Healthcare	**2,066**	**100%**	**7.4%**	**-8.5%**	**-1.1%**	**2,089**	**100%**

[1] Not defined by International Financial Reporting Standards (IFRS).

- In the third quarter of 2023, sales of the oncology drug Erbitux® (cetuximab) grew organically in the low-teens percentage range, driven in particular by the Asia-Pacific, Latin America and Europe regions, whereas sales in the Middle East and Africa region decreased organically. In the first nine months of 2023, Erbitux® generated strong organic sales growth. The main contributors here were higher demand in the Asia-Pacific and Latin America regions.
- In Immuno-Oncology, sales of the oncology medicine Bavencio® (avelumab) grew organically in the low-twenties percentage range in the third quarter of 2023 with nearly all regions contributing. In particular, Europe, Asia-Pacific and Latin America generated favorable growth with organic increases in the double-digit percentage range. This development was mainly driven by further market share growth in first-line maintenance treatment for patients with locally advanced or metastatic urothelial carcinoma (UC). The first nine months of 2023 showed a similar development, also with Bavencio® generating strong organic increases in the mid-twenties percentage range.
- Sales of the drug Rebif®, which is used to treat relapsing forms of multiple sclerosis (MS), decreased organically in the mid-twenties percentage range in the third quarter of 2023. This sharp decline was due to positive one-off channel dynamics in the year-earlier period, among other things. The dynamics in the interferon market generally remain unchanged. Consequently, further sales declines are expected in the future due to the ongoing difficult competitive situation as well as competition from oral dosage forms and high-efficacy MS therapies. In the first nine months of 2023 and in line with the foregoing description of the overall trend in the interferon market, Rebif® showed an organic sales decline in the high-teens percentage range.
- Mavenclad®, for the oral short-course treatment of highly active relapsing multiple sclerosis, delivered moderate organic sales growth in the third quarter of 2023. The favorable sales development in North America and Latin America was partially offset by sales declines in Europe. In the first nine months of 2023, Mavenclad® delivered strong organic growth in the high-teens percentage range.

- In the third quarter of 2023, the Fertility franchise generated organic sales growth in the mid-teens percentage range. Gonal-f®, the leading recombinant hormone for the treatment of infertility, delivered solid organic growth, which was driven by stock-outs of a competing product as well as increased demand. Other products from the Fertility franchise also recorded organic sales growth, in some cases in the mid double-digit percentage range, thus contributing to the strong growth. This development occurred against the backdrop of a further stock-out of a competing product as well as increased demand. As a result of the aforementioned factors, the Fertility franchise saw favorable organic growth in the mid-teens percentage range in the first nine months of 2023.
- The Cardiovascular, Metabolism and Endocrinology franchise, which commercializes products to treat cardiovascular diseases, thyroid disorders, diabetes, and growth disorders, among other things, delivered strong organic sales growth in the third quarter of 2023 compared with the year-earlier quarter. Sales of the diabetes medicine Glucophage® generated strong organic growth, which was primarily driven by the Latin America region. In the third quarter of 2023, the beta-blocker Concor® saw slight organic growth while the thyroid medicine Euthyrox® recorded strong organic growth compared with the year-earlier period. The favorable organic growth of Saizen® in the high-thirties percentage range as a result of increasing demand and stock-outs of a competing product also had a positive impact on the franchise. In the first nine months of 2023, the Cardiovascular, Metabolism and Endocrinology franchise generated moderate organic growth overall.

The following table presents the composition of EBITDA pre for the third quarter of 2023 in comparison with the year-earlier quarter. The IFRS figures have been modified to reflect the elimination of adjustments included in the respective functional costs.

Healthcare

Reconciliation EBITDA pre[1]

	Q3 2023			Q3 2022			Change
€ million	IFRS	Elimination of adjustments	Pre[1]	IFRS	Elimination of adjustments	Pre[1]	Pre[1]
Net sales	**2,066**	**–**	**2,066**	**2,089**	**–**	**2,089**	**-1.1%**
Cost of sales	-540	–	-540	-481	1	-480	12.3%
Gross profit	**1,526**	**–**	**1,527**	**1,608**	**1**	**1,609**	**-5.1%**
Marketing and selling expenses	-405	6	-400	-413	1	-412	-2.9%
Administration expenses	-79	5	-74	-84	4	-79	-7.2%
Research and development costs	-391	–	-391	-431	22	-409	-4.4%
Impairment losses and reversals of impairment losses on financial assets (net)	-28	–	-28	5	–	5	>100.0%
Other operating income and expenses	31	-49	-18	-79	–	-78	-76.6%
Operating result (EBIT)[1]	**653**			**606**			
Margin (in % of net sales)[1]	31.6%			29.0%			
Depreciation/amortization/impairment losses/reversals of impairment losses	70	–	70	77	–	76	-7.8%
EBITDA[2]	**723**			**683**			
Margin (in % of net sales)[1]	35.0%			32.7%			
Restructuring expenses	3	-3	–	24	-24	–	
Integration expenses/IT expenses	5	-5	–	4	-4	–	
Gains (-)/losses (+) on the divestment of businesses	-46	46	–	–	–	–	
Acquisition-related adjustments	–	–	–	–	–	–	
Other adjustments	–	–	–	–	–	–	
EBITDA pre[1]	**685**	**–**	**685**	**711**	**–**	**711**	**-3.6%**
Margin (in % of net sales)[1]	33.2%			34.0%			
thereof: organic growth[1]							17.2%
thereof: exchange rate effects							-20.8%
thereof: acquisitions/divestments							–

[1] Not defined by International Financial Reporting Standards (IFRS).

[2] Not defined by International Financial Reporting Standards (IFRS); EBITDA corresponds to operating result (EBIT) adjusted by depreciation, amortization, impairment losses, and reversals of impairment losses.

- In the third quarter of 2023, adjusted gross profit declined, resulting in a gross margin of 73.9% (Q3 2022: 77.0%). By contrast, in the first nine months of 2023, adjusted gross profit showed a moderate increase amid a stable gross margin of 75.5% (January-September 2022: 75.5%).
- Marketing and selling expenses as well as research and development costs were lower in the third quarter of 2023 than the year-earlier period, whereas in the first nine months of 2023 both items were roughly at the level of the year-earlier period. The improvement in the net balance of other operating expenses and income after adjustments in the third quarter was due mainly to the termination of the strategic alliance with Pfizer Inc., USA, to co-develop and co-commercialize the oncology medicine Bavencio®. Since July 2023, royalties have replaced the profit share payments to Pfizer Inc., USA, previously included other operating expenses. These royalties are now included in cost of sales, reflecting the corresponding increase in this line item. In the first nine months of 2023, the net balance of other operating expenses and income after the elimination of adjustments grew in a mid-single digit percentage range in comparison with the year-earlier period. This was due in particular to lower royalty income in comparison with the year-earlier period.
- In the third quarter of 2023, EBITDA pre saw a moderate decline, leading to an EBITDA pre margin of 33.2% (Q3 2022: 34.0%). In the first nine months of 2023, the EBITDA pre margin was 32.9% (January-September 2022: 31.7%).

Electronics

Development of net sales and results of operations

In the third quarter of 2023, net sales of the Electronics business sector developed as follows:

Electronics

Net sales by business unit

€ million	Q3 2023	Share	Organic growth[1]	Exchange rate effects	Acquisitions/ divestments	Total change	Q3 2022	Share
Semiconductor Solutions	612	67%	-9.3%	-7.2%	0.4%	-16.1%	729	71%
Display Solutions	201	22%	11.9%	-11.6%	–	0.4%	200	19%
Surface Solutions	103	11%	2.6%	-5.6%	–	-3.0%	106	10%
Electronics	**916**	**100%**	**-4.0%**	**-7.9%**	**0.3%**	**-11.6%**	**1,036**	**100%**

[1] Not defined by International Financial Reporting Standards (IFRS).

- The Semiconductor Solutions business unit, which comprises two businesses, namely Semiconductor Materials and Delivery Systems & Services (DS&S), saw an organic decline in sales in the third quarter of 2023. The cyclical slowdown in the semiconductor industry, which impacted sales in the first nine months of 2023, continued to be the main driver of the decline and has been longer in duration than initially expected. DS&S partially compensated for the decline in Semiconductor Materials thanks to continued strong demand for equipment. The portfolio effect was due to the acquisition of the chemical business of Mecaro Co. Ltd., Korea, trading as M Chemicals Inc., Korea, on December 30, 2022.
- Net sales of the Display Solutions business unit, consisting mainly of the business with liquid crystals, photoresists for display applications as well as OLED materials, increased in the third quarter of 2023 as utilization at key liquid crystal customers improved significantly versus a very weak third quarter of 2022. In the first nine months of 2023, net sales nevertheless showed an organic decline in the low teens percentage range compared with the year-earlier period as the stronger third quarter only partially offset the unfavorable pricing and product mix in the first half of 2023.
- The Surface Solutions business unit generated moderate organic net sales growth in the third quarter as stronger Cosmetics sales more than compensated for weaker automotive coatings demand. In the first nine months of 2023, net sales of the business unit showed a moderate organic decline compared with the year-earlier period.

The following table presents the composition of EBITDA pre for the reporting period in comparison with the year-earlier quarter. The IFRS figures have been modified to reflect the elimination of adjustments included in the respective functional costs.

Electronics

Reconciliation EBITDA pre[1]

	Q3 2023			Q3 2022			Change
€ million	IFRS	Elimination of adjustments	Pre[1]	IFRS	Elimination of adjustments	Pre[1]	Pre[1]
Net sales	**916**	**–**	**916**	**1,036**	**–**	**1,036**	**-11.6%**
Cost of sales	-592	7	-585	-591	3	-588	-0.6%
Gross profit	**324**	**7**	**331**	**445**	**3**	**447**	**-26.0%**
Marketing and selling expenses	-144	2	-142	-173	–	-172	-17.7%
Administration expenses	-40	8	-32	-33	1	-32	1.4%
Research and development costs	-75	–	-74	-78	–	-78	-5.1%
Impairment losses and reversals of impairment losses on financial assets (net)	–	–	–	–	–	–	–
Other operating income and expenses	-13	9	-4	-16	14	-3	50.5%
Operating result (EBIT)[1]	**52**			**144**			
Margin (in % of net sales)[1]	5.7%			13.9%			
Depreciation/amortization/ impairment losses/reversals of impairment losses	133	-4	130	150	-10	140	-7.1%
EBITDA[2]	**186**			**294**			
Margin (in % of net sales)[1]	20.3%			28.4%			
Restructuring expenses	10	-10	–	3	-3	–	
Integration expenses/IT expenses	9	-9	–	-1	1	–	
Gains (-)/losses (+) on the divestment of businesses	–	–	–	–	–	–	
Acquisition-related adjustments	4	-4	–	5	-5	–	
Other adjustments	–	–	–	–	–	–	
EBITDA pre[1]	**208**	**–**	**208**	**302**	**–**	**302**	**-31.1%**
Margin (in % of net sales)[1]	22.7%			29.1%			
thereof: organic growth[1]							-17.8%
thereof: exchange rate effects							-12.6%
thereof: acquisitions/divestments							-0.7%

[1] Not defined by International Financial Reporting Standards (IFRS).

[2] Not defined by International Financial Reporting Standards (IFRS); EBITDA corresponds to operating result (EBIT) adjusted by depreciation, amortization, impairment losses, and reversals of impairment losses.

- Adjusted gross profit for the Electronics business sector decreased in the third quarter of 2023, driven first and foremost by the aforementioned decline in sales. At 36.1%, the adjusted gross margin declined compared with the year-earlier quarter (Q3 2022: 43.1%) owing mainly to lower volumes to cover fixed costs, the unfavorable pricing and product mix in Liquid Crystals, and adverse foreign exchange effects. The effects seen in the third quarter were the primary drivers of the decline in the first nine months of 2023 as well.

- Marketing and selling expenses decreased in both the third quarter and in the first nine months of 2023, reflecting strict cost discipline, focus on efficiencies, and favorable foreign exchange rates. Research and development costs were stable in the first nine months of 2023 compared with the year-earlier period.

- Overall, EBITDA pre declined in the third quarter and in the first nine months of 2023 in comparison with the corresponding year-earlier periods. The EBITDA pre margin declined to 22.7% in the third quarter (Q3 2022: 29.1%) as the lower net sales and other gross profit effects discussed above were only partially offset by favorable operating cost management and lower logistics expenses.

Corporate and Other

Corporate and Other comprises administration expenses for Group functions that cannot be directly allocated to the business sectors.

Corporate and Other

Key figures

€ million	**Q3 2023**	Q3 2022	Change
Operating result (EBIT)[1]	-118	-235	-49.6%
EBITDA[2]	-92	-209	-56.2%
EBITDA pre[1]	-63	-178	-64.8%

[1] Not defined by International Financial Reporting Standards (IFRS).

[2] Not defined by International Financial Reporting Standards (IFRS); EBITDA corresponds to operating result (EBIT) adjusted by depreciation, amortization, impairment losses, and reversals of impairment losses.

The improvement in the operating result, EBITDA and EBITDA pre in the third quarter of 2023 compared with the year-earlier quarter was due in particular to the positive currency result from cash flow hedging. In the first nine months of 2023, the operating result deteriorated slightly compared with the year-earlier period while EBITDA remained virtually stable and EBITDA pre improved in the low twenties percentage range.

Report on Expected Developments

With the publication of the interim management report within the half-yearly financial report as of June 30, 2023, we updated our forecast for the development of net sales and EBITDA pre for the Merck Group and the individual business sectors Life Science, Healthcare and Electronics as well as our forecast for Group operating cash flow in 2023. With the completion of the third quarter of 2023, we specify this forecast as follows:

Forecast for the Merck Group

Forecast for FY 2023

€ million	Net sales	EBITDA pre[1]	Operating cash flow
Merck Group	**~20,500 to 21,900** *Trending slightly below the mid-point* Organic -2% to +2% Foreign exchange effect -6% to -3%	**~5,800 to 6,400** *Trending in the lower half of the range* Organic -9% to -3% Foreign exchange effect -6% to -3%	**~3,500 to 4,100**
Life Science	**~9,100 to 9,950** *Trending in the lower half of the range* Organic -8% to -2% Foreign exchange effect -5% to -2%	**~2,750 to 3,200** *Trending in the lower half of the range* Organic -21% to -12% Foreign exchange effect -6% to -2%	*n/a*
Healthcare	**~7,750 to 8,300** *Trending slightly above the mid-point* Organic +6% to +9% Foreign exchange effect -7% to -4%	**~2,450 to 2,600** *Trending towards the top end of the range* Organic +14% to +19% Foreign exchange effect -17% to -13%	*n/a*
Electronics	**~3,500 to 3,800** *Trending around the mid-point* Organic -6% to -1% Foreign exchange effect -7% to -4%	**~870 to 980** *Trending in the lower half of the range* Organic -18% to -10% Foreign exchange effect -10% to -7%	*n/a*
Corporate and Other	–	*Mainly owing to an expected decrease in currency hedging gains, probably slightly below the previously communicated range of* **~-370 to -330**	*n/a*

[1] Not defined by International Financial Reporting Standards (IFRS); EBITDA corresponds to operating result (EBIT) adjusted by depreciation, amortization, impairment losses, and reversals of impairment losses.

EPS pre € 8.25 to € 9.35, trending in the lower half of the range, based on an underlying tax rate of 22%.

Full-year FX assumption for 2023: € 1 = US$ 1.08 to US$ 1.12

Fundamental assumptions

Against the backdrop of macroeconomic, geopolitical and industry-specific circumstances, the forecast is also subject to greater uncertainty and volatility in fiscal 2023 than is normally the case. It continues to assume an elevated level of inflation.

As regards the development of exchange rates, our assumption of a persistently volatile environment remains unchanged. We continue to expect negative foreign exchange impacts in 2023 resulting mainly from the development of the U.S. dollar and the Chinese renminbi. In the first nine months of 2023, the average euro-U.S. dollar exchange rate was at the lower end of the forecast range of 1.08 to 1.12. We confirm our expectations and assume that the average euro-U.S. dollar exchange rate for the full year will be at the lower end of this range.

Net sales

We confirm our forecast for Group net sales and continue to expect an organic development in fiscal 2023 of between -2% and 2%. Our net sales excluding the Covid-19 business[1] of Life Science are likely to grow organically by between 1% and 5%. As expected, the Healthcare business sector will be the main driver of net sales with not only Bavencio® and Mavenclad®, but also our established portfolio, especially products from our Fertility franchise, contributing to growth. For the Life Science business sector, we continue to expect an organic development of net sales excluding the Covid-19 business of between -3% and 4%. This development is due to the continued high inventory levels and investment restraint among our customers. We continue to assume that demand for products in connection with Covid-19 will decline significantly from around € 800 million in the previous year to around € 250 million in fiscal 2023. The development of the Electronics business sector reflects the declining Display Solutions business as well as the ongoing softness of the semiconductor materials market. In contrast to the previous forecast, we now assume that the semiconductor market will not stabilize until 2024. However, the positive development of the project business within Semiconductor Solutions will be sustained as expected and partly offset the decline in Semiconductor Materials. Including negative foreign exchange effects of -3% to -6%, we confirm the forecast for Group net sales of between € 20.5 billion and € 21.9 billion (2022: € 22.2 billion); the figure is likely to be slightly below the mid-point.

EBITDA pre[2]

For EBITDA pre, we also confirm our outlook for fiscal 2023 and expect an organic development in the previously communicated range of -3% to -9%. Overall, we expect a negative impact on earnings due to a partially higher level of costs stemming from inflation as well as a volume decline, impacting the Life Science and Electronics business sectors in particular. Therefore, EBITDA pre of both business sectors is likely to be in the lower half of the previously forecast range. We will mitigate the negative effects through active cost management. By contrast, we expect a positive organic development in Healthcare, the EBITDA pre of which is likely to be at the top end of the forecast range. This will be particularly attributable to the continued strong business performance. The termination of the alliance with Pfizer Inc., USA, as a result of which we will regain the exclusive global rights to develop, manufacture and commercialize Bavencio®, will also have a positive effect on the development of earnings. In fiscal 2023 we will generate income in the mid to high double-digit million euro range through active portfolio management. The forecast foreign exchange development is likely to lower Group EBITDA pre by between -6% and -3%. Positive effects of currency hedging transactions will mitigate the impact in comparison with the previous year. We expect Group EBITDA pre to be in the lower half of the range of € 5.8 billion to € 6.4 billion (2022: € 6.8 billion).

Operating cash flow

The forecast for operating cash flow is generally subject to a higher fluctuation corridor than the forecast for EBITDA pre. We provide an estimate of the development of operating cash flow only for the Group as a whole.

The development of operating cash flow is forecast to be largely in line with organic performance. For operating cash flow, we also expect negative foreign exchange impacts in fiscal 2023. Positive effects will result from a weaker rise in net working capital in comparison with the previous year. Fiscal 2022 was particularly impacted by inventory build-ups to secure production and supply capacities as well as higher material prices. Overall, for fiscal 2023 we forecast operating cash flow to be in the lower half of the range of € 3.5 billion to € 4.1 billion (2022: € 4.3 billion). As regards the composition of operating cash flow, we refer to the **Consolidated Cash Flow Statement** in this report.

[1] "Net sales excluding the Covid-19 business" refers to a financial indicator that is not defined by International Financial Reporting Standards (IFRS). It should not be taken into account in order to assess the performance of Merck in isolation or as an alternative to the financial indicators presented in the consolidated financial statements and determined in accordance with IFRS.

[2] Not defined by International Financial Reporting Standards (IFRS); EBITDA corresponds to operating result (EBIT) adjusted by depreciation, amortization, impairment losses, and reversals of impairment losses.

supplemental financial information

Consolidated Income Statement

€ million	**Q3 2023**	Q3 2022	**Jan.-Sept.2023**	Jan.-Sept.2022
Net sales	**5,173**	**5,806**	**15,768**	**16,572**
Cost of sales	-2,162	-2,147	-6,273	-6,243
Gross profit	**3,011**	**3,658**	**9,495**	**10,329**
Marketing and selling expenses	-1,104	-1,223	-3,353	-3,504
Administration expenses	-312	-328	-1,015	-946
Research and development costs	-581	-642	-1,779	-1,827
Impairment losses and reversals of impairment losses on financial assets (net)	-28	6	-40	-7
Other operating income	117	59	330	281
Other operating expenses	-119	-296	-651	-741
Operating result (EBIT)[1]	**983**	**1,234**	**2,988**	**3,585**
Finance income	38	31	139	83
Finance costs	-84	-78	-283	-219
Profit before income tax	**937**	**1,187**	**2,843**	**3,448**
Income tax	-197	-261	-597	-768
Profit after tax	**740**	**926**	**2,246**	**2,680**
thereof: attributable to Merck KGaA shareholders (net income)	739	923	2,238	2,671
thereof: attributable to non-controlling interests	2	3	8	9
Earnings per share (€)				
Basic	1.70	2.12	5.15	6.14
Diluted	1.70	2.12	5.15	6.14

[1] Not defined by International Financial Reporting Standard (IFRS).

Consolidated Statement of Comprehensive Income

€ million	**Q3 2023**	Q3 2022	**Jan.-Sept.2023**	Jan.-Sept.2022
Profit after tax	**740**	**926**	**2,246**	**2,680**
Items of other comprehensive income that will not be reclassified to profit or loss in subsequent periods				
Net defined benefit liability				
Changes in remeasurement	231	-190	199	1,601
Tax effect	-48	34	-42	-336
Changes recognized in equity	184	-157	157	1,265
Equity instruments				
Fair value adjustments	28	48	136	-8
Tax effect	1	-4	1	2
Changes recognized in equity	28	44	137	-6
	212	-113	294	1,259
Items of other comprehensive income that may be reclassified to profit or loss in subsequent periods				
Cash flow hedge reserve				
Fair value adjustments	-28	-100	45	-215
Reclassification to profit or loss	-39	88	-51	146
Reclassification to assets	–	–	–	–
Tax effect	9	-6	1	-5
Changes recognized in equity	-58	-19	-5	-74
Cost of cash flow hedge reserve				
Fair value adjustments	1	-11	-16	-14
Reclassification to profit or loss	5	5	18	10
Tax effect	–	6	–	10
Changes recognized in equity	7	–	3	5
Currency translation difference				
Changes taken directly to equity	622	1,519	46	3,308
Reclassification to profit or loss	–	-5	–	-7
Changes recognized in equity	622	1,514	46	3,301
	571	**1,495**	**44**	**3,233**
Other comprehensive income	**783**	**1,382**	**338**	**4,492**
Comprehensive income	**1,523**	**2,308**	**2,584**	**7,172**
thereof: attributable to Merck KGaA shareholders	1,522	2,305	2,579	7,162
thereof: attributable to non-controlling interests	1	3	5	10

Consolidated Balance Sheet

€ million	Sept. 30, 2023	Dec. 31, 2022
Non-current assets[1]		
Goodwill[1]	18,466	18,389
Other intangible assets[1]	6,716	7,335
Property, plant and equipment[1]	8,719	8,204
Investments accounted for using the equity method	3	3
Non-current receivables	24	27
Other non-current financial assets	990	957
Other non-current non-financial assets	96	99
Non-current income tax receivables	9	10
Deferred tax assets	1,315	1,310
	36,340	**36,334**
Current assets		
Inventories	4,971	4,632
Trade and other current receivables	4,195	4,114
Contract assets	122	128
Other current financial assets	218	321
Other current non-financial assets	1,140	705
Current income tax receivables	554	446
Cash and cash equivalents	2,365	1,854
	13,566	**12,201**
Total assets[1]	**49,906**	**48,535**
Total equity		
Equity capital	565	565
Capital reserves	3,814	3,814
Retained earnings	20,711	18,463
Gains/losses recognized in equity	3,132	3,086
Equity attributable to Merck KGaA shareholders	**28,222**	**25,927**
Non-controlling interests	73	78
	28,294	**26,005**
Non-current liabilities[1]		
Non-current provisions for employee benefits	1,774	2,030
Other non-current provisions	276	299
Non-current financial debt	9,540	9,200
Other non-current financial liabilities[2]	143	141
Other non-current non-financial liabilities[2]	18	19
Non-current income tax liabilities	41	38
Deferred tax liabilities[1]	1,134	1,287
	12,926	**13,015**
Current liabilities[1]		
Current provisions for employee benefits[3]	124	81
Current provisions	469	372
Current financial debt	1,416	1,228
Other current financial liabilities[2]	242	1,153
Trade and other current payables[1]	2,244	2,499
Refund liabilities	990	912
Current income tax liabilities	1,581	1,483
Other current non-financial liabilities[2, 3]	1,620	1,786
	8,685	**9,514**
Total equity and liabilities[1]	**49,906**	**48,535**

[1] Previous-year figures have been adjusted owing to the finalization of the purchase price allocation in connection with the acquisitions of the chemical business of Mecaro Co. Ltd., Korea, trading as M Chemicals Inc., Korea, as well as Erbi Biosystems Inc., USA.

[2] As of January 1, 2023, wage- and salary-related liabilities are disclosed under other non-financial liabilities instead of under other financial liabilities as in the past. For better comparability, the previous year's figures have been adjusted.

[3] As of January 1, 2023, the tranche of the Merck Long-Term Incentive Plan to be paid out in the months following the balance sheet date is disclosed under other current non-financial liabilities and no longer under current provisions for employee benefits. For better comparability, the previous year's figures have been adjusted.

Consolidated Cash Flow Statement

€ million	Q3 2023	Q3 2022	Jan.-Sept.2023	Jan.-Sept.2022
Profit after tax	**740**	**926**	**2,246**	**2,680**
Depreciation/amortization/impairment losses/reversals of impairment losses	435	470	1,373	1,432
Changes in inventories	92	-249	-337	-636
Changes in trade accounts receivable	52	149	-50	-388
Changes in trade accounts payable/refund liabilities	-179	-81	75	196
Changes in provisions[1]	30	111	76	125
Changes in other assets and liabilities[1]	143	235	-465	-132
Neutralization of gains/losses on disposals of fixed assets and other disposals	-7	-4	-153	-43
Other non-cash income and expenses	-51	-5	-35	10
Operating cash flow	**1,255**	**1,552**	**2,731**	**3,244**
Payments for investments in intangible assets	-34	-89	-144	-209
Payments from the disposal of intangible assets	5	10	135	35
Payments for investments in property, plant and equipment	-428	-388	-1,296	-1,065
Payments from the disposal of property, plant and equipment	4	4	18	14
Payments for investments in financial assets	-59	-169	-93	-216
Payments for acquisitions less acquired cash and net cash equivalents	-9	-1	-9	-696
Proceeds from the disposal of other financial assets	167	11	434	136
Payments from disposal of non-financial assets	-595	–	-2,699	-600
Proceeds from the disposal of non-financial assets	599	–	2,213	100
Payments from other divestments	–	–	–	4
Investing cash flow	**-350**	**-622**	**-1,441**	**-2,497**
Dividend payments to Merck KGaA shareholders	–	–	-284	-239
Dividend payments to non-controlling interests	–	–	-11	-11
Dividend payments to E. Merck KG	–	–	-868	-716
Payments from new borrowings from E. Merck KG	–	–	697	977
Repayments of financial debt to E. Merck KG	-100	-105	-100	-510
Payments from the issuance of bonds	–	–	–	995
Repayments of bonds	–	-228	–	-1,661
Changes in other current and non-current financial debt	-202	-576	-191	109
Financing cash flow	**-302**	**-909**	**-758**	**-1,057**
Cash changes in cash and cash equivalents	**603**	**21**	**531**	**-310**
Changes in cash and cash equivalents due to currency translation	2	4	-19	15
Cash and cash equivalents at the beginning of the reporting period	1,761	1,580	1,854	1,899
Changes in cash and cash equivalents due to reclassification to assets held for sale	–	–	–	–
Cash and cash equivalents as of September 30 (consolidated balance sheet)	**2,365**	**1,604**	**2,365**	**1,604**

[1] As of January 1, 2023, the tranche of the Merck Long-Term Incentive Plan to be paid out in the months following the balance sheet date is disclosed under other current non-financial liabilities and no longer under current provisions for employee benefits. For better comparability, the previous year’s figures have been adjusted.

Darmstadt, November 8, 2023

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financial calendar

March 7, 2024 Annual Report 2023

April 26, 2024 Annual General Meeting

May 15, 2024 Quarterly Statement Q1

August 1, 2024 Half-yearly financial report

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