From a cost factor to an investment

The economic impact of innovative medicines

Expenditure on pharmaceutical innovations is largely viewed as a cost – and this perception becomes all the more pronounced the greater the financial problems within the statutory health insurance system (GKV). Thus, in the first report of the Health Finance Commission dated 30 March 2026, medicines are also regarded as cost drivers.[1] The Cabinet's draft bill for a Statutory Health Insurance Contribution Rate Stabilisation Act (BStabG) also falls back on old patterns and provides for significant savings on patent-protected medicines.[2]

>> The trend in expenditure on medicines has always been the subject of heated debate.[3] This debate will not be repeated here. The facts show:[4]

• The share of expenditure on medicines attributable to manufacturers, as a proportion of statutory health insurance benefit expenditure, has remained constant at around 12 per cent for years. Of this, around 50 per cent is attributable to patented medicines – a figure that has remained constant for years.

• The AMNOG procedure is expected to deliver savings of €12 billion for the statutory health insurance system in 2026 alone. Overall, the savings are now estimated at €55 billion.

• Through levies and discounts, the pharmaceutical sector generated savings of around €29 billion in 2025.

The trend in expenditure on medicines is largely[attributable] to the consumption[component][5] – driven by a wider range of treatment options and an ageing population. This figure is below the level that would be expected given general price trends and higher utilisation resulting from an ageing population.[6]

Focus on medicines obscures indirect and consequential costs

However, it is often the case that only the costs of medicines are considered. It would be more appropriate, however, to consider

• firstly, all direct costs of treating a condition, i.e. expenditure incurred directly for medical care: outpatient and inpatient treatment, diagnostics, medicines, etc., not just the cost of medicines. In this way, savings achieved through treatment with innovative medicines could be weighed against the costs of the medicines themselves. This would enable the total costs of a treatment to be managed.

• Secondly, indirect costs – also known as consequential costs – place a burden on the statutory health insurance system and, beyond that, on social security systems and the national economy due to productivity losses resulting from incapacity for work, absenteeism, presenteeism (reduced performance despite being present), early retirement and incapacity for work, or premature mortality, also place a burden on social security systems and the national economy. The direct costs of cancer care in Europe amounted to around 146 billion euros in 2023. Almost 50 per cent of the total burden lies outside the direct treatment costs. The situation is similar for the treatment of diabetes: the costs are estimated at over 40 billion euros in Germany, around half of which are attributable to indirect costs.[7]

• Thirdly, the hidden costs arising from long-term, often invisible societal burdens caused by unpaid care provided by relatives, reduced labour force participation among family members, social tensions and a loss of trust. In 2019, 57 million people worldwide were living with dementia, with societal costs of around 1.3 trillion US dollars. Around half of these costs are attributable to unpaid care provided by relatives.[8]

Positive effects of medicines beyond improved patient care

A one-sided view of expenditure on medicines significantly distorts the overall picture and overlooks more than just the medical benefits to patients. Study results show that new medicines play a significant role in increasing average life expectancy.[Lichtenberg9] estimates this contribution to be between 66% and 73% of the observed increase. Antiretroviral therapies have transformed HIV/AIDS from a death sentence into a manageable chronic condition. Medicines for hepatitis C can cure many patients, with fewer side effects and shorter treatment durations. GLP-1 receptor agonists and SGLT-2 inhibitors have improved blood sugar control for diabetes patients, reduced the incidence of heart disease, stroke and kidney disease, and improved survival rates.[10]

Innovative medicines do not merely have positive effects on patients' health. Unlike consumer goods, they have wider-reaching effects. Neither current methods of health technology assessment (HTA) nor cost-benefit analyses are currently suitable for capturing this complexity.[11] However, quantifying as many of these effects as possible is crucial for the efficient allocation of scarce resources. Recently, a number of research papers on the various effects have been published.[12] The studies focus on selected effects and diseases. They are not generally put into practice. For example, only the Dutch HTA authority (ZIN) currently recommends the use of the iPCQ questionnaire to measure the benefits of paid and unpaid work.[13]

In Spain, the Ministry of Health presented a new Medicines Act at the beginning of June 2026: According to the draft bill, pricing should explicitly take into account not only the clinical benefits but also the macroeconomic effects of a medicinal product, such as savings resulting from reduced hospital stays, lower care requirements and fewer productivity losses.[14]

To enable a more comprehensive assessment of the societal value of medical innovation, it seems sensible to distinguish between the micro-, meso-, macro- and macroeconomic levels. Figure 1 describes these levels of impact and their respective mechanisms.

Micro-level: patient-centred outcomes as the basis of benefit

The micro-level focuses on the immediate, individual benefits for patients. New therapies can prolong survival and increase life expectancy whilst improving health. For example, the mortality rate from cardiovascular diseases was reduced by 43% between 2000 and 2022. The number of years of life lost due to type 2 diabetes mellitus was reduced from 21 years (1945) to 6 years (2017).[15] In general, innovative medicines often lead to significant symptom relief, a reduction in the burden of disease, and an improvement in physical and mental functioning. These effects contribute significantly to an increase in health-related quality of life. In benefit assessment, these effects are reflected in the endpoint categories of morbidity, mortality, quality of life and adverse effects . In benefit-based pricing, they form the basis for price setting.[16]

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This micro-level thus forms the basis from which the positive effects are derived at the downstream levels. People who remain healthy for longer can participate in working life; they contribute to growth, pay taxes and relieve the burden on social security systems and family carers. These effects are not considered further within the framework of benefit assessment and pricing of new medicinal products (AMNOG).

Meso level: Effects on social security systems

At the level of social security systems, economic effects arise from direct and long-term savings. For the statutory health insurance scheme (GKV), innovative medicines can lead to immediate cost reductions, for example through reduced use of inpatient or emergency medical services. Furthermore, more effective treatment can reduce the incidence of serious complications, which are often associated with complex and cost-intensive therapies.

Guideline-based drug therapy for people with type 2 diabetes mellitus (T2D) can, for example, reduce total treatment costs by €1,679 per patient-year, particularly through savings on inpatient costs.[17] The[EDGE-COS study][18] shows that treatment with the SGLT-2 inhibitor empagliflozin reduces the burden on the healthcare system, particularly due to fewer hospital admissions and, depending on the care context, lower medication costs. In people with T2D, the average annual costs per person can be reduced by up to a third compared with comparator therapies (DPP-4 inhibitors, GLP-1 receptor agonists). This corresponds to an estimated annual savings potential of 2 billion euros.[19]



Fig. 1: Levels of action of a medicinal product. Source: own illustration.

Beyond these cost-saving effects visible in the short term, SGLT-2 inhibitors also reduce the long-term follow-on costs of renal diseases. Model calculations show that they can delay the need for dialysis in cases of renal insufficiency by 7 years, and by up to 13 years if used at an early stage. [20Prognos21] estimates the associated potential savings at €460 million per year.

Overall,[Prognos22] estimates the efficiency potential arising from the industrial healthcare sector at €20.8 billion in 2023. This could result in savings of 7.2% of statutory health insurance expenditure, whilst maintaining the quality of care at a minimum and, in the best-case scenario, even improving it. Of the estimated total savings,

- €9 billion to the medical technology sector, particularly from the potential for shifting care to outpatient settings,
- €7.2 billion to the e-health sector, in particular through the use of artificial intelligence and the digitalisation of processes
- and a further €4.6 billion to the field of human medicines and biotechnology, of which €2.6 billion relates directly to medicines through early, guideline-based treatment.

If this 'priority for innovation' scenario is continued, cost savings of €47.8 billion (7.1 per cent) for the statutory health insurance system could be achieved by 2045 compared with the reference scenario.[23] Broken down by service area, the greatest potential for savings lies in hospital treatment at €21.8 billion, followed by medical treatment at €13.5 billion and medicines at €6.2 billion.

The statutory pension insurance scheme (GRV) also benefits from longer working lives and the prevention of incapacity for work as a result of a healthier workforce. For example, the[InnovationsRadar24] shows that, thanks to treatments with innovative medicines, the proportion of the working population with rheumatoid arthritis has risen from 42 per cent in 1997 to 68 per cent today. In 2020, cancer patients remained in the workforce for an average of more than four years longer than they did in 2005.

For statutory long-term care insurance (GPV), positive effects result in particular from a delayed or reduced onset of the need for care. A more stable state of health reduces the likelihood of intensive care interventions. Furthermore, other state transfer payments, such as unemployment benefit or social security benefits, areclaimed less frequently when patients are able to remain in the labour force for longer. For example, sickness-related absences among patients with rheumatoid arthritis have fallen from 30 per cent in 2010 to 19 per cent in 2022.[25]

This takes the strain off social security systems; after all, investment in human capital through preventive measures and early treatment has been shown to reduce absenteeism and can prevent or delay secondary conditions.[26] For example, preventing one day of sickness absence increases gross value added by an average

of 16.4 billion euros. Preventing one year of incapacity for work could save the German Pension Insurance (GRV) an average of 2.4 billion euros. The benefit to society as a whole is estimated at 16.2 billion euros. These figures illustrate the significant positive impact of a healthier population.

Macro level: macroeconomic effects of better health

This demonstrates that innovative medicines influence macroeconomic performance by improving the health of the population – a key component of productive human capital. This increases both individual income and overall labour productivity, with positive effects on growth and employment.[WiFOR27] identifies five effects of health as an economic factor that influences productivity, public finances and social stability:

1. Human capital: Health improves educational outcomes and long-term employment prospects. Healthy children achieve better learning and cognitive outcomes, attain higher educational qualifications and earn significantly higher incomes in adulthood (on average 12 per cent more than their peers, and up to 25 per cent more than their siblings).

2. Labour force and productivity: Health enhances the performance of the working-age population. Healthy adults remain in the labour market for longer, are absent from work less frequently due to illness and are more adaptable to new demands. Worldwide, annual productivity losses amounting to around 2 trillion US dollars are caused by cancer, cardiovascular diseases, chronic respiratory diseases, diabetes and mental health conditions.

3. Relief for family carers: Better health reduces the need for unpaid care and frees up the labour force. Informal care represents a major, often invisible economic burden. A significant proportion of the costs arises because family carers reduce their paid work or give it up entirely. Investment in health (prevention, effective treatments, long-term care) reduces the need for care and enables family members to participate more fully in the labour market. This increases the labour force participation rate, household income and overall economic productivity.

4. Innovation, competitiveness and resilience: A healthy population is a prerequisite for productivity gains. Countries with high life expectancy and a low burden of disease enjoy higher productivity growth and greater competitiveness. Good health encourages investment in research and development, technological innovation and the management of demographic change. This creates a virtuous circle of health, productivity and innovation.

5. Fiscal and social stability: A healthy population broadens the tax base through higher and longer periods of employment. Health expenditure therefore does not act as a fiscal burden, but rather as a double benefit: lower expenditure and higher revenue. For example, investment in prevention (e.g. cancer prevention) shows that every euro invested generates a multiple of economic benefit. Furthermore, equitable access to healthcare services strengthens trust in state institutions and social cohesion.

For Germany, the gains in value added resulting from medical progress are estimated at 310 billion euros. Medicines account for a significant share of this. In the USA, it is estimated that innovative medicines have secured earned income amounting to 221 billion US dollars.[28] Health through medicines is a macroeconomic factor.

Prevention

Prevention is of crucial importance. The Robert Koch Institute (RKI) puts expenditure on prevention and health protection at 298 euros per person. This corresponds to 5 per cent of healthcare expenditure.[29] "The real problem is that risk factors are not identified and treated early enough. The system is good for acute cases, but weak when it comes to long-term prevention," comments the Leibniz Institute for Prevention Research and Epidemiology (BIPS).[30] Yet early diagnosis and treatment in line with guidelines could avoid costs or at least reduce them significantly.

A basic distinction is made between three types of prevention:

- **Primary prevention** aims to prevent the first occurrence of a disease or serious complications in at-risk individuals. Medicines can play an important role here by influencing early pathophysiological processes. For example, SGLT-2 inhibitors can be used in high-risk patients (e.g. those with type 2 diabetes and cardiovascular risk factors) to prevent early loss of kidney function and thus avoid costly first events and long-term follow-up costs.
- **Secondary prevention** involves early interventions following diagnosis, with the aim of preventing disease progression and secondary events. In this context, SGLT-2 inhibitors help to slow the progression of the disease in patients with early-stage heart failure or chronic kidney disease (CKD) and delay cost-intensive escalations such as hospitalisations or the need for dialysis.
- **Tertiary prevention** is aimed at patients with established disease and seeks to reduce complications, relapses and mortality. For example, in cases of established heart failure or CKD, SGLT-2 inhibitors help to reduce hospitalisation rates and mortality, thereby also contributing to a sustainable reduction in the burden on the inpatient sector.

Misaligned incentives in the risk structure compensation scheme

Health insurance funds could play a key role here . However, they have no economic incentive to promote prevention or to avoid secondary conditions.[31] Through the risk structure adjustment (RSA), health insurance funds receive the expected expenditure for each insured person during the insurance year. This leads to a one-year perspective: if a health insurance fund invests in the health of its insured persons and their state of health improves as a result, future allocations from the RSA also fall in line with expenditure. Investments in prevention are not economically viable for a statutory health insurance scheme: whilst prevention may lead to lower healthcare expenditure, the associated costs are not reimbursed. "Investments that lead to a later onset of the disease do not pay off – from the statutory health insurance scheme's perspective. From the insured persons' perspective, they certainly do."[32] Consequently, there are few incentives for preventive measures or, more generally, for improving the quality of treatment – for example, by managing care through selective contracts or disease management programmes. Consequently, in 2016 the legislature introduced the Innovation Fund and the statutory obligation to allocate a fixed amount per insured person to prevention programmes (since 2019: 7.52 euros).[33]

Reforming the RSA into a sustainable RSA could eliminate these economic disincentives. To this end, RSA allocations could be extended to cover the insured person's expected healthcare expenditure over the next ten years. Investments in health would thus also be worthwhile for a health insurance fund; after all, successful programmes improve the health of insured persons and lead to lower expenditure in subsequent years. At the same time, however, RSA allocations would remain the same. Prevention would thus also bring financial benefits for the statutory health insurance system.[34]

Macroeconomic level: the pharmaceutical industry as a key sector

At the macroeconomic level, the pharmaceutical industry makes a direct contribution to growth and employment.[35] Overall, the healthcare sector in Germany accounts for around 12.5 per cent of gross value added and employs some 7.7 million people. This means that more than one in six people in employment in Germany now work in this sector. The industrial healthcare sector generates gross value added of

101.5 billion euros annually and employs around 1 million people. Indirect and induced effects add a further 1.1 million employees. It is therefore one of the most significant industrial and innovation sectors in Germany.[36]

The pharmaceutical industry plays a significant role in the healthcare sector's overall economic importance. The direct gross value added of the pharmaceutical industry in Germany amounts to around 31 billion euros per year.[37] In addition to this direct value added, the pharmaceutical industry generates indirect and induced effects of at least the same magnitude, resulting from its strong demand for intermediate inputs and from income-induced demand effects. In a sector-by-sector comparison, the pharmaceutical industry ranks among those industrial sectors with particularly high multiplier effects.[38] The pharmaceutical industry also has considerable spillover effects in terms of employment. In addition to the approximately 130,000 people directly employed in the pharmaceutical industry, there are significant indirect and induced employment effects in upstream and downstream economic sectors. The sector's overall impact on employment is thus significantly greater than direct employment and is on a par with that of major leading industrial sectors.[39] It is described as a leading industry or[key sector][40] for several reasons:

1 The pharmaceutical industry is one of the most research-intensive sectors in Germany. Measured by the ratio of internal R&D expenditure to turnover, it is the most research-intensive industrial sector. Currently, pharmaceutical companies in Germany reinvest 11.1 per cent of their turnover in internal research and development (R&D). Overall, the R&D intensity stands at around 16.9 per cent. This places the pharmaceutical industry well ahead of other major industrial sectors, including the automotive industry, whose R&D intensity is significantly lower.[41] No other industry in Germany invests a higher proportion of its turnover in research and development. This high R&D intensity reflects the sector's innovation-driven business model, in which medical progress, long development cycles and stringent regulatory requirements play central roles. The high proportion of R&D expenditure contributes significantly to the long-term viability of companies and to securing high-quality jobs. Despite increasing international competition, Germany continues to enjoy a high international reputation as a centre for research and development in the pharmaceutical and biotechnology sectors. This was particularly evident recently in the development of effective vaccines against Covid-19, where Germany played a leading role worldwide – especially in the field of mRNA technology.

2 The pharmaceutical industry is one of the sectors with the highest levels of investment in Germany. With investment of around 25,000 euros per employee and annual capital expenditure of 2 billion euros, it makes a key contribution to the modernisation of the country's industrial base and provides important impetus for upstream industries, particularly mechanical and plant engineering.[42] It makes a significant contribution to the state's fiscal capacity through corporation tax, income tax and social security contributions.

3 The pharmaceutical industry makes an important contribution to Germany's export strength. According to foreign trade statistics, exports of pharmaceutical products amounted to around 116.3 billion euros in 2025.[43] The domestic pharmaceutical industry has a strong international focus: a significant proportion of domestic production is sold on international markets. Over 60 per cent of the turnover of pharmaceutical companies manufacturing in Germany is generated abroad. In 2023, the sector's total turnover stood at 58.7 billion euros, of which 37.0 billion euros was generated abroad.[44]

4 Pharmaceutical companies make a significant contribution to the resilience of the country as a business location. The pharmaceutical industry not only produces for the German healthcare market but also contributes to healthcare provision in Europe and globally through exports. Conversely, healthcare provision in Germany is ensured by a European and global network of production sites. Investments in modern facilities for the manufacture of innovative medicines secure technological expertise and reserve capacity for times of crisis. They are also a key component of Europe's technological sovereignty. Geopolitical challenges highlight the importance of strategic independence, alongside preparing for future health crises. Strengthening production capacities within Europe increases resilience to global supply chain risks and improves the stability of the supply of medicines in the event of a crisis. A high-performing domestic pharmaceutical industry is essential for security policy, as in-house research and production reduce dependence on global supply chains, enable rapid responses to crises, retain knowledge within the system and thus strengthen the strategic autonomy of the healthcare system and of Europe. Pharmaceutical companies form part of this strategic infrastructure.



Fig. 2: Medicines prices within the research, development and production ecosystem. Source: own illustration.

5 The global market for healthcare services and medicines, which continues to grow, also presents an opportunity to reposition and further expand Germany's export-oriented economic model: researched, developed and produced in Germany. People are living longer, and demand is rising. This demand is further boosted by increasing prosperity in previously less developed economies. Through improved healthcare provision, the pharmaceutical industry can make a significant contribution to Germany's export strength.

Reimbursement as a location factor

Reimbursement conditions are also a key location factor for the sector's development. A study by[BASYS45] highlights the negative macroeconomic effects of a deterioration: In this scenario (where the discount is used to stabilise finances rather than to mitigate the rise in contribution rates), increasing the manufacturer's discount from 7% to 16% not only leads to a reduction in the revenue of pharmaceutical companies, with (direct) impact on their value added, but also (indirectly) on the value added of upstream economic sectors. Added to this are negative induced effects, which are linked, for example, to how employees spend – or fail to spend – their income when it is not generated. Over the period from 2026 to 2030, BASYS thus calculates a cumulative nominal loss in value added totalling 48.1 billion euros. At the same time, BASYS estimates that the increase to 16 per cent will yield savings of around ten billion euros.

This means that a one-euro increase in the discount results in negative income effects of 3.80 euros. This is because an increased mandatory discount affects not only the pharmaceutical industry but also value added in upstream economic sectors. Furthermore, funds that would otherwise flow into R&D are lost. Over the five years examined, around 106,400 working years (direct, indirect and induced) will be lost, equivalent to 21,000 full-time jobs. Assuming that the statutory health insurance scheme (GKV) uses the additional funds to curb contribution rates, the one-euro increase in the discount leads to a loss of 2.50 euros in economic value added. Accordingly, the Federal Government's pharmaceutical strategy of[202346] envisaged stabilising the manufacturer's discount at 7 per cent.

Location under pressure

Research, development, production and a market open to innovation are closely interlinked (Fig. 2). Whilst attractive business conditions are generally uncontroversial, pricing is often viewed critically. Empirical studies show a positive, albeit moderate, correlation between sales potential and investment in R&D.[47] Kourouklis et al.[48], for example, find that rising expenditure on medicines in EU countries is significantly associated with greater innovation activity in early stages of development (e.g. patents). Traditional economic analyses also show that higher prices go hand in hand with rising R&D expenditure, although these results depend heavily on the context and the underlying model assumptions.[49] More recent studies put the strength of this correlation into perspective and emphasise the importance of firm-specific factors as well as global market mechanisms. Developments in the USA and China, in particular, play a decisive role here.[50] Against this background, the assessment by the Health Expert Council (2025)[51] must be viewed critically when it rejects the idea of strengthening the pharmaceutical sector through higher prices and instead points to direct funding instruments. International evidence, however, suggests that prices and market size are relevant, albeit not the sole determining, factors for R&D expenditure.

Why should pharmaceutical manufacturers conduct research, development and production in Germany or Europe if the medicines subsequently find no market here? In the global competition for investment, capital follows the markets. This requires a reimbursement system open to innovation, with adequate prices and[genuine52] access for patients. This creates a mutually supportive ecosystem; for the effects of innovative medicines are multifaceted. They range from patient-centred improvements at the micro-level, through relief for social security systems, to macroeconomic value-added effects. A systematic examination of these levels enables a comprehensive assessment of the effects of medical innovation and thus provides a sound basis for health policy decisions aimed at the efficient allocation of resources.

This discussion is not entirely new. However, there is one crucialdifference: the geopolitical landscape has changed fundamentally. Germany as a business location is under considerable pressure from the USA and, increasingly, from China.[53]

The US dominates the pharmaceutical market

The US has the fastest regulatory approval process. Patients often receive new therapies earlier than in other regions. Donald Trump also introduced a 'voucher' mechanism in the Executive Order of 5 May 2025, which obliged the FDA to fast-track

approvals for medicines and manufacturing sites in the US if production takes place domestically. The advantage: companies with US production benefit from an accelerated approval process compared with the standard procedure.[54] At the same time, they are imposing tariffs on imports and threatening further increases. The Section 232 investigation (2025/26) assesses reliance on pharmaceutical imports as a risk to US national security. This results in tariffs of up to 100 per cent on selected patent-protected medicines, as well as strong incentives to relocate production to the US. The US is thus providing substantial incentives for investment within the country. For Europe and Germany, this entails serious disadvantages for exports. Overall, US policy is increasing the pressure on the European market, as tariffs, prices and investment in the US are interlinked.

The US refinances a large proportion of R&D expenditure on innovative medicines. With a share of the world's population of 4.2 per cent, it accounts for 66.9 per cent of global sales of new medicines (see Fig. 3).[55] This puts pressure on prices: Under President Biden, the US administration has introduced price negotiations for high-revenue medicines covered by Medicare through the Inflation Reduction Act.

President Trump introduced the so-called Most-Favoured-Nation principle for price setting.[56] This concept stipulates that the US pays no more than the second-lowest (net) price from a basket of G7 countries, plus Denmark and Switzerland. The GENEROUS model applies to Medicaid. Further programmes for Medicare – GLOBE and GUARD – are in the pipeline. Given the significantly higher prices in the US compared with Germany and Europe, this marks a turning point in the pricing of medicines. A new balance in global pricing is needed if European markets are not to fall further behind the US in terms of progress than they already have. One third of the medicines launched in the US between 2016 and 2025 are already unavailable in the EU/Germany (see Figure 4).[57]

China is promoting innovation

China, too, is putting pressure on Germany as a centre of innovation. Through a number of measures, China has significantly accelerated its regulatory approval processes and, upon joining the 'International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use' (ICH) in 2017, has adapted its evidence requirements.[58] China most recently conducted 29 per cent of all clinical trials worldwide – ten years ago, the figure was just 8 per cent.[59] This makes China the second-largest developer of new medicines after the US. As Figure 5 shows, in 2024, 28 new medicines originated in China, 25 in the US and 18 in Europe.[60] Many medicines developed in China only reach Europe years later, or are not authorised at all. This is due to lengthy EMA procedures and higher evidence requirements.[61] China has caught up significantly in recent years and overtaken Europe. China used to be regarded as a very slow process. Today, thanks to reforms and pilot programmes, China is almost on a par with the US. Europe, by contrast, remains strictly regulated, with additional hurdles in the form of national benefit assessments and reimbursement. China already dominates the production of generic medicines. 44 per cent of global pharmaceutical volume originates from China. Two-thirds of the active pharmaceutical ingredients required in Europe – and therefore also in Germany – are now manufactured in China and India.[62]

Sales of new medicines launched between 2019 and 2023, by region



Fig. 3:
Sales of new medicines launched between 2019 and 2023 by region. Source: EFPIA (2025), The Pharmaceutical Industry in Figures, p. 4.

Conclusion

Germany as a business location is under pressure: there is a lack of high-growth industries. Several years without growth are putting a strain on employment, the financing of social security systems and, ultimately, the stability of our democratic system. At the same time, the healthcare system is coming under increasing financial pressure due to demographic change, rising demands for care and growing expenditure. Long-term structural reforms and a targeted growth strategy for the pharmaceutical industry are key levers for change. There are many good reasons to strengthen Germany as a pharmaceutical hub.

Approvals for new medicines

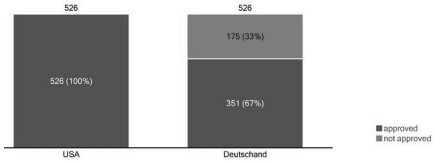


Fig. 4:
Approvals for new medicines in the US and Germany, including national approvals (2016–2025). Source: Wilsdon, T. et al. (2026), Europe's pharmaceutical innovation gap: An assessment of missing and delayed regulatory approvals compared with the US and China (2016–2025) and implications for Germany, pp. 14ff, 32ff.

Number of new chemical and biological active substances

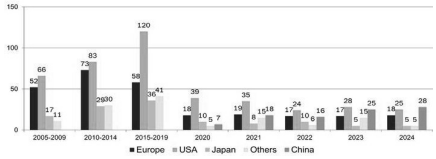


Fig. 5: Number of new chemical and biological active substances. Source: EFPIA (2025), The Pharmaceutical Industry in Figures, p. 8. China is included under 'Others' until 2019.

However, to capitalise on these opportunities and effectively address the new challenges, one thing is needed above all else: a fundamental shift in thinking. Expenditure on medicines should no longer be viewed primarily as a cost. Health is an investment – in the country as a business location, in growth and employment, and in resilience and sovereignty. This requires clear responsibilities in the spirit of a 'strategic investor'. At present, there is often a lack of incentives to invest in human capital, innovation and growth. This silo[mentality63]

results in high economic costs: investment in prevention, early treatment and innovative medicines is lacking. What is therefore needed is a governance structure that consistently consolidates responsibility within a cross-functional approach – with a clearly designated person in charge who takes overall control and reports on progress. It must ensure effective coordination between the ministries of economy, research, finance and health, the federal and state governments, as well as local authorities and health insurance funds . The Pharmaceutical Strategy and the Pharmaceutical Dialogue have set out important approaches. However, implementation has so far failed due to a relapse into traditional austerity patterns. Instead of organising progress, valuable time is being lost. The[coalition agreement64]

Summary

Introduction: Expenditure on innovative medicines is often viewed one-sidedly as a cost factor in health policy. This focus is too narrow, as it ignores consequential

costs such as productivity losses, early retirement or premature mortality. **Methods:** This paper uses a multidimensional impact model to systematically assess the societal value of medical innovations at the micro, meso, macro and macroeconomic levels. **Results:** New therapies improve patients' quality of life (micro-level) and relieve the burden on social security systems by preventing hospital admissions (meso-level). At the macro level, medical progress generates value-added gains of €310 billion, whilst purely cost-cutting measures jeopardise the country's position as a business location. **Discussion:** Healthcare must not be viewed primarily as a cost burden, but rather as a strategic investment in the country's economic standing and societal resilience. What is needed is cross-functional governance that specifically promotes medical innovations as a 'strategic investor'. **Keywords:** innovative medicines, health economics, investment, value creation, health policy.

From Cost Factor to Investment: The Economic Impact of Innovative Medicines in Germany

Introduction: Expenditure on innovative medicines is often viewed merely as a cost burden in health policy. This perspective is too narrow, as it ignores economic consequences such as loss of productivity, early retirement or premature mortality. **Methods:** The article applies a multidimensional framework to systematically evaluate the societal value of medical innovations across the micro, meso, macro and broader economic levels. **Results:** New therapies improve patients' quality of life (micro level) and relieve the burden on social security systems by preventing hospitalisations (meso level). At the macro level, medical progress generates €310 billion in value-added gains, whereas strict cost-containment measures threaten the pharmaceutical hub. **Discussion:** Health must be understood not primarily as a cost, but as a strategic investment in economic resilience and growth. A cross-functional governance model is urgently needed to holistically manage and promote medical innovation. **Keywords:** Innovative medicines, health economics, investment, value-added, health policy.

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has outlined a promising vision. This should be pursued with determination through concrete measures. A perspective within the statutory health insurance system that is more strongly focused on total costs and investment helps to improve healthcare provision, promote innovation and support economic growth. There is still an opportunity to further develop Germany as a pharmaceutical hub in the long term. <<

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Author's declaration

Marco Penske is Head of Market Access & Healthcare Affairs at Boehringer Ingelheim. He serves in a voluntary capacity as Deputy Chair of the German Society for Market Access. Due to his professional role at a pharmaceutical company, the author declares a potential conflict of interest in relation to this article. There are no other financial or personal relationships that may have influenced the results or their interpretation. The analysis on which this article is based was conducted independently and without external financial support or other assistance from third parties. At no point did third parties exert any influence on the study design, data collection, data analysis, interpretation of the results or the drafting of this article.

Note

Although the masculine form is used in this article and personal pronouns are therefore not gender-neutral, all genders are always implied.

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Specific challenges in the use of routine data

>> An international group of authors, including Tim Mathes from the IQWiG, describes the challenges involved in analysing routine data in their article 'Using routine data for research purposes: Challenges and mitigation strategies' (1) in the British Medical Journal (BMJ) and highlights how robust findings can nevertheless be obtained. "The use of routine data presents particular challenges, and targeted strategies are needed to utilise it effectively. We show that, in many cases, conducting an RCT that uses routine data is the better approach," explains Tim Mathes, Head of the Health Economics Department at IQWiG.

The growing availability of large datasets from routine surveys opens up numerous opportunities to answer more questions about health and disease – sometimes within a short timeframe. Particularly for research questions where there is no longer an incentive to conduct prospective clinical trials (such as generating evidence following marketing authorisation), studies based on routine data can help to reduce gaps in the evidence.

However, in order to answer a specific research question with sufficient reliability using routine data, particular challenges must be overcome. Mathes and 25 other national and international authors describe what these challenges are and which strategies can be used to avoid pitfalls in their article.

"Routine data is usually collected for purposes other than research, such as administrative purposes or documentation," explains Mathes, a member of the working group. He says: "Consequently, researchers have no influence over the selection of patients or the endpoints measured; treatments are not randomly assigned; and data collection is often flawed. Furthermore, highly complex statistical methods are required for the analysis." << **1:** https://t1p.de/3qg0d

HPV vaccination reduces deaths

>> In England, evidence has emerged for the first time at national level that the HPV vaccine can significantly reduce deaths from cervical cancer. An analysis of population data from 2001 to 2024, published in The Lancet (1), examined women in the age groups 20–24, 25–29 and 30–34. The study was based on the vaccination programme introduced in 2008 for girls aged 12 to 13, supplemented by a catch-up campaign for 14- to 18-year-olds.

The results are striking: among 20–24-year-olds who had been vaccinated early with high coverage, there were no deaths between 2020 and 2024 – statistically, around 23 would have been expected. This corresponds to a 100 per cent reduction in mortality. In cohorts born earlier, who were vaccinated later and less frequently, the reductions were lower, at 69 to 80 per cent. Overall, the vaccination programme is estimated to have prevented around 200 cancer deaths by the end of 2024.

The authors regard this as the first robust evidence that a high vaccination coverage rate could eliminate cervical cancer as a public health problem, provided that vaccination is carried out early and consistently worldwide. << **1:** DOI: 10.1016/S0140-6736(26)00918-9

EAES 2027 in Düsseldorf

>> London, Barcelona or Rome? No! Düsseldorf will host the 35th International Congress of the European Association for Endoscopic Surgery (EAES 2027) from 15 to 18 June 2027. The official signing of the contract at Düsseldorf City Hall in early June 2026 marked a significant success for the city on the Rhine as a centre for congresses, medicine and science. << **Link:** https://t1p.de/kxiue

Save the Date: 27 November 2026

>> On 27 November 2026, the next MVF Congress will take place in the Scharounsaal at AOK Nordost in Berlin. The title: 'Primary Care 2030 – Implementation and Mandatory Status'. Please make a note of the date in your diary. Detailed information on the topic, the speakers and the registration process will be available shortly on the MVF online portal. << **Link:** www.mvf.de

New funding calls

>> The Innovation Committee has published three new funding calls on its website. Interested parties can apply for funding for healthcare research projects via an open-topic or a topic-specific call.

A further funding call seeks project leaders to develop or refine medical guidelines in selected subject areas.

The topic-specific funding call is based on proposals received by the Innovation Committee through a consultation process and identifies the following priority areas:

- Needs-based management in outpatient psychiatric and psychotherapeutic care
- Patient education for disease management programmes
- Health services research to improve needs-based and patient-centred decision-making regarding invasive procedures for frail, very elderly patients
- The extent, nature and impact of AI applications already in use within the healthcare system Applications for project funding that do not fall within any of these thematic areas may be submitted via the open-topic funding call. The deadline for applications is 20 October 2026 at 12.00 noon. <<

Patient Experience in Bilbao

>> The 7th Congress on Patient Experience will take place on 27 November 2026 at the University of Deusto in Bilbao under the theme 'Patient Experience as a Driver of Change'. The Congress is organised by the Order of St John of God, the Institute for Patient Experience (IEXP) and the Basque Government's Ministry of Health – Osakidetza. The congress will address key issues for the present and future of healthcare: the use of artificial intelligence and PREMs for data-driven decision-making, transformation processes within various organisations, and the role of public participation in health policy. << **Link:** https://congresoiexp.com/en/inicio