

Manifesto

Tackle tomorrow's healthcare issues by opting for medical innovation today!

Meeting treatment expectations while at the same time preventing a breakdown of our healthcare system: a joint task!

There's one ultimate goal in healthcare we all share: **maintaining and improving human health**. Thanks to growing prosperity, healthier lifestyles and advancing technology, this is now more possible than ever before. At the same time, chances are this will become more complex and challenging than ever before.

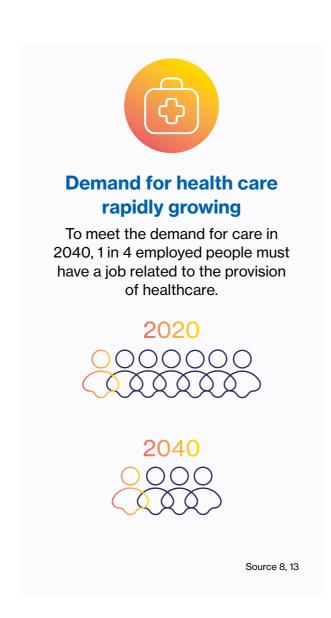
As a result of our **aging population** and a widening range of options, **demand for care** sees a steady growth **with an increase in absolute healthcare costs**^{1,2}, while, **in relative terms, the number of healthcare providers is decreasing**. As a result, a **healthcare system breakdown**³ might be imminent.

This calls for society to make well-considered choices3 to facilitate the most suitable care for everyone, regardless of socioeconomic status and region. We strive to minimize care inequality to the best of our ability. Always selecting **the right care for the right person at the right time and place**⁴. This is also what we collectively expect. And that creates enormous pressure on both the healthcare system and its budgets.

Furthermore, in order to ensure this is all feasible, the demand for continuous innovation is extremely high. This in turn demands customized, effective and efficient care, making intelligent use of scarce resources.

Realizing customized care, where we use innovation to address issues, such as the breakdown of healthcare.

That's the-job-to-be-done, by all of us together.



Medical innovation: catalyst for sustainable health care

Over the past decades, medical science has made tremendous headway, with breakthroughs in diagnostics and treatment options for numerous diseases and conditions. From trailblazing drugs, vaccines and implants to stem cells, gene therapy, robotics, digital applications and artificial intelligence.

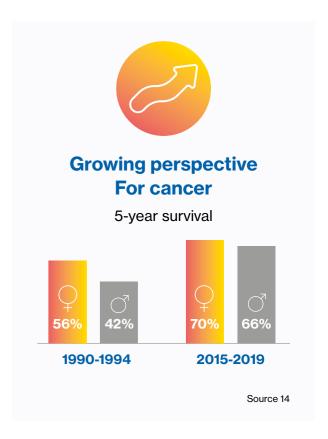
Innovation has contributed to a significant improvement of both patients' quality of life and life-expectancy. This dynamic cycle of progress at times comes with large steps overnight, sometimes more gradually over a longer period of time. The emergence of artificial intelligence will further speed up technological advances.

Embracing medical innovation can help ward off the looming health crisis^{5,6,7}. Think of a course of treatments that speed patients' return home or prevent hospitalization altogether. Or treatments that are less taxing and therefore reduce the need for care⁸. Or new treatments that might help people return to work sooner⁵.

By introducing new therapies and techniques more quickly, either on a conditional or unconditional basis, patients have earlier access to new options which in turn enable us to gather practice results more quickly and assess the effectiveness of innovations more accurately. But innovation also has to do with finding the right implementation. It requires organizing patient care differently and letting go of traditional standards and practices⁶.

This requires a different look at the role and assessment of innovation and thus new financing models are needed^{8,9,10}. This transformation goes hand in hand with facilitating a more seamless exchange of healthcare data¹¹. How can we measure the impact of medical innovations holistically, looking beyond

just healthcare, in order to optimize the allocation of resources? The ultimate goal is to ensure that **everyone has timely access** to the best fitting treatment. In pursuing this goal, we recognize that **innovation is not just a concept**, but an **imperative**.



Novartis Manifesto 3

Novartis and innovation: We reimagine medicine

Novartis is firmly committed to discovering and evolving new potentials to improve and extend people's lives. Not by any means does every single discovery ultimately result in a new drug or successful treatment. We recognize that innovation comes with inherent uncertainty.

In the world of technology, research and development (R&D), we have been leading the way for decades. In the Netherlands, Novartis is one of the **largest investors in clinical research**. As pioneers in innovation, we also like to participate in thinking about new ways of access and financing (think pay for performance models) and are proactive in starting productive partnerships within the healthcare industry.

Scientific progress is rapid and constantly evolving. Novartis sees it as its mission to turn these new findings into essential, tangible drug development to address the most complex health issues. For example, we were the first with a so-called targeted therapy, CAR-T treatment and registered radioligand therapies.

The Novartis Institutes for BioMedical Research (NIBR) is Novartis' innovation motor. The **NIBR program** connects **academia and industry** worldwide. We share our expertise and insights with hospitals and universities so that this knowledge can contribute to further scientific development.

In addition to known forms of drugs, we also make use of other innovative methods of treatment, such as xRNA, radioligand and cell and gene therapies. This focus enables us to provide tailor-made innovations in response to healthcare needs now and in the future.



Our drug research:

A broad innovative approach with a clear focus.





chemical pharmaceuticals

biological pharmaceuticals







xRNA

radioligand therapies

cell and gene therapies



In 2022, more than 1370 patients in the Netherlands have participated in

104

Novartis clinical trials



Private dynamics in a public healthcare environment

It is a shared responsibility of all health care stakeholders to use the available resources in such a way that optimal health benefits are generated. This is easier said than done. In addition to believing in the endless possibilities, strict requirements for quality, reliability and sustainability have to be met. In doing so, we recognize that a multitude of technological possibilities must sometimes be weighed against budgetary space.

Being a listed company, we also have an added responsibility: to gain the trust of those who provide us with capital. **Investing requires audacity**. Drug development is a long and uncertain journey. Only a very small percentage, less than 10% of investigated compounds, make it to the finish line 12,16. This involves not only early research, but also the scaling up to actual treatments that lead to **standardized production, global distribution and safety guarantees**.

Without audacity, we will not make progress and the development of new drugs will grind to a halt. **To justify the risk**, we must achieve positive returns so that innovation and drug development can continue.

This is where private and public are at a tangle. Yet together we - health care providers, government, patient organizations and industry - form an inseparable entity needed to translate new scientific developments into tangible options for patients. This requires an environment in which constant pursuit of breakthroughs is rewarded.

To avert an impending breakdown of our healthcare system, it is necessary for all healthcare stakeholders **to band together and make room for innovation**⁸. Let us jointly secure the prerequisites for continued investment in medical innovation at both European and Dutch levels, acknowledging that it is sometimes difficult to find joint common ground.



Effective innovation: audacity and predictability balanced

Innovation is a dynamic process of trial and error, and for investors, a track of **daring to take risks**. Investing is about pursuing return on investment. In addition to strategic decisions within research and development (R&D), consistent and **predictable compensation policies and regulations** are important. This ensures that criteria and timelines are clear throughout the

entire process of drug development. This predictability not only promotes the attraction of venture capital, but also enables both healthcare providers and patients to know what can be expected. This way, we achieve customized care, as well as the earlier availability of medical innovation while, at the same time, helping to avert the threat of a healthcare breakdown.



Let us strive both in Europe and the Netherlands to protect investment conditions in medical innovation, for the provision of healthcare today and tomorrow.

Effective change: early adoption of medical innovation

Change is about searching for appropriate implementation. It only has a tangible impact when you dare to let go of old practices and are open to **change**. In this regard, a holistic view of the healthcare industry is essential; from the organization of care paths to the intelligent utilization of resources throughout the treatment process. Too often, technological advances are only used as a last resort when traditional

treatment methods do not have the desired effect. If we deploy novel options earlier in the care path, there are **opportunities to improve patient treatment, save time and even reduce costs**. Being hesitant to make use of medical change now can result in significantly larger investments later, not to mention the unused benefit for the patient involved.



Let's work together as healthcare providers, government, patient organizations and industry to turn the ambition of the Integral Care Agreement into reality, giving medical change the role it deserves.

Effective investments to remain in the lead

Drug development has no boundaries.

If we in NL and EU do not want to lag behind, it is necessary to make the investments that are needed and support them with appropriate policies. This completely contradicts our national, political ambitions (namely to position the Netherlands as a 'Boston on the North Sea').

Therefore, it is important to **stimulate an attractive investment and research climate** within the Netherlands. Clinical research allows patients early access to new possibilities and offers scientists the chance to increase their scientific knowledge and therefore to conduct groundbreaking research.



Let's work together to ensure that treatment options in the Netherlands do not deviate further and fall behind compared to those available in Europe.

Effective collaboration: making healthy progress at full speed

The pace of innovation threatens to exceed the ability to provide patients with the latest drugs while ensuring those drugs remain affordable. **Slowing down is not the answer**. The search and demand for new treatment options continues undiminished. Regulations and policy measures often lag behind these developments. Justifiable, given the pace of medical progress. Together, we must figure out how to **continuously incorporate progress in the Dutch healthcare system**. Without slowing down and in

a way that meets the budgetary constraints and reduces the care divide. This places a significant responsibility on everyone's shoulders to effectively and efficiently use all available resources.

We like to share in the responsibility to find the right balance between medical need, patient expectations, budget constraints and advancing innovation. In order to sustainably help stave off a breakdown of our healthcare system.



As healthcare providers, industry, government and patient organizations, lets anchor innovation firmly and structurally within our society, supported by the appropriate regulations and policies.

8 Novartis Manifesto 9



Innovation is a joint effort

It is created by combining knowledge, networks and everyone's expertise.

We believe that by adopting medical innovation today, you also address tomorrow's healthcare issues.

Questions, ideas?

Or further exchange thoughts on this Manifesto? Let us know and send your mail to info.nederland@novartis.com.

About Novartis

Novartis is one of the largest pharmaceutical companies in the Netherlands and an essential player in the national pharmaceutical industry. Our passionate, diverse teams join forces to bring groundbreaking products and ideas to life. We stand for advanced medication that alleviates society's biggest disease burden, thanks to our technological leadership in R&D and new access options. Our drugs benefit nearly 600,000 Dutch patients per year (2022). In addition, the Netherlands is an important country for Novartis in terms of clinical research; in 2022 there were 500 clinical trials worldwide, of which 104 were conducted in the Netherlands. We believe in a people-centered approach with respect for the environment, ethical values and social responsibility. With the commitment of more than 200 passionate professionals, we make a significant contribution to both the economy and Dutch healthcare.

References

- RIVM, National Institute for Public Health and the Environment (2020), Futures study of health care spending 2015-2060.
- 2. Ministry of Finance (2015-2022), State budget and spending.
- The Netherlands Scientific Council for Government Policy (2021), Choosing Sustainable Care.
- 4. Ministry of Health, Welfare and Sports (2022), Integral Care Agreement
- PwC Strategy& on behalf of the Innovative Medicines Association (2022), Reducing staff shortages in health care
- Gupta Strategists on behalf of FME (2022), Finding a way out of scarcity
- 7. WiFOR Institute (2023), The social economic impact of medical innovation
- 8. Gupta Strategists (2021), Preventing the next wave
- 9. Council for Public Health and Society (2023), The art of innovation

- 10. EFPIA (2022) Shifting the paradigm for ATMPs.
- Ministry of Health, Welfare and Sports (2023), National Vision of the Health Information System - Letter to the House of Representatives.
- SiRM, L.E.K., RAND Europe on behalf of Ministry of Health, Welfare and Sports (2022), The financial ecosystem of pharmaceutical R&D.
- 13. Social and Economic Council of the Netherlands (2020), Caring
- 14. IKNL (2023 Trend report cancer in NL.
- Journal of Clinical Oncology (2016, Vol. 34, Issue 24), Life Expectancy of Patients With Chronic Myeloid Leukemia Approaches the Life Expectancy of the General Population
- 16. Innovative Medicines Association (2021), Medicine Monitor

