We Care For
Every Heartbeat

Towards positive change in cardiovascular disease care

Daiichi-Sankyo

We care for every heartbeat

Contents

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Introduction

At Daiichi Sankyo, we care for every heartbeat. Our goal in Specialty Medicines is to help protect people from cardiovascular disease (CVD) and provide solutions for those who suffer from it.

Although widely known, it is surprising to some that CVD is Europe's leading cause of death and is responsible for more than 10,000 lives lost every day.[1] For this reason, we tirelessly support healthcare professionals to make the best decisions for patients and work hard to be a positive inspiration for improved care in the cardiovascular (CV) landscape.

Despite the persistent need for better care, we are witnessing progress for the future of those living with CVD and greater support for the healthcare professionals dedicated to their care.

At Daiichi Sankyo, we are contributing through a collaborative approach with activities that raise the profile and understanding of CVD and through investment in research, including our European perception survey, which has given us constructive insights into what the public thinks and needs.

We support and foster patient-centric research and partnerships as well as a strong collaborative spirit among the wider CV community, and we are helping to improve patient care and aim to protect against CVD. We believe there is cause for optimism for improved prevention and patient outcomes in the future.

In the following pages, we draw on the findings of scientific studies, expert thinking and our own research and activities to highlight the collaborative efforts that the health community should focus on to inspire positive change in CVD care across Europe.

As part of the pharmaceutical industry, we can play a valuable role by identifying areas of unmet need, evolving new opportunities and innovations to support medical professionals, and advocating to inspire better care. Ultimately, as a united community, we aim to lessen the impact of heart disease on individuals and their loved ones across Europe.

> ***We believe that healthcare can be improved by bringing together like-minded people who share our passion and commitment to protecting lives from CVD. Our role within the industry enables us to support open dialogues between healthcare practitioners, patient groups and the scientific community so that, together, we can help protect lives."***
>
> **Dr Stefan Seyfried**
> Vice President Medical Affairs, Specialty Medicines, Daiichi Sankyo Europe

The current picture

Current CVD treatments, combined with improvements in clinical settings and preventative strategies have led to marked reductions in premature death from CVD in recent decades.[2]

However, we shouldn't be complacent. CVD is responsible for, on average, 10,000 deaths every day and remains a major social and economic challenge in Europe.[1,2] With the immense potential to improve a vast number of lives, we firmly believe that CVD must continue to be a public health priority.

In 2020, more than 60 million people were living with CVD in the European Union (EU), with almost 13 million people receiving a new diagnosis each year.[3] In addition to the effect on individuals' lives, CVD has a significant economic and societal impact, costing the European economy an estimated €210 billion each year.[3]

Thanks to advances in healthcare and positive lifestyle changes, we are now living longer lives,[4] so much so that the population of Europe aged over 65 years old is expected to increase by 39 million between 2019 and 2050.[4] While this is a huge positive, it will also have implications for CV care, as age is a major driver of CVD risk.[5]

An ageing population will undoubtedly increase rates of CVD; therefore, it is vital that we continue to focus on prevention, symptom awareness and early detection.

The impact of coronavirus disease (COVID-19)

Regrettably, the number of people with CVD has been exacerbated by the COVID-19 pandemic, further increasing the number of patients that the medical community will potentially have to treat in coming years.[6] This was clearly demonstrated in a review by Economist Impact, supported by Daiichi Sankyo, studying the effects of COVID-19 on CVD.[6]

There is an established link between infection and the development of CVD.[6] Studies have revealed that not only are people with CVD at increased risk of more severe COVID-19 symptoms but also that an infection with COVID-19 can induce CVD.[6] It is difficult to predict the consequences of long COVID, but its associated symptoms and health conditions could, in due course, further increase the challenges of CVD.[6]

The Economist Impact study also highlighted that there was a fall in CVD care during the pandemic, resulting from the essential redirection of healthcare services.[6] For many reasons, including a fear of infection, people also stopped seeking medical advice, meaning that CV events and cases of high blood pressure went undiagnosed and untreated for a significant time.[6]

Professor Fausto J. Pinto, Professor of Cardiology at Lisbon University Medical School, Portugal, explains how COVID-19 has impacted CVD, both directly and indirectly: *"Directly because it was responsible for inducing CV conditions and as a result created a substantial number of new patients, indirectly because hospital beds and systems were taken up with COVID-19 patients and the system was not elastic enough to cope with all situations."*

He adds, *"Patients were also afraid to come to hospital, causing excess mortality and excess delays in clinical situations in the CVD area. There is a huge burden and backlog to deal with…for years to come."*

A delay in diagnosis and treatment is likely to result in poorer health outcomes. As detailed in Economist Impact, "Whether a patient is presenting to a family doctor with high blood pressure or at a hospital emergency department with a stroke, the sooner care commences, the better the long-term outcomes. Waiting, on the other hand, not only worsens the impact of current problems, it increases the risks of worse to come."[6]

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Lifestyle changes during the pandemic, especially during lockdowns, also increased overall CVD risk.[6] Although some people adopted a healthier lifestyle, there was an increase in tobacco and alcohol consumption as well as escalating cases of anxiety and depression – all of which are known risk factors for CVD.[6] The Economic Impact study concurs, "Unless populations reverse negative changes which occurred under the stress of the pandemic and lockdowns, it will leave a legacy of increased CVD."[6]

Awareness of CVD

At Daiichi Sankyo, we recognise the importance of seeking insights that can inform and shape preventative care. We know that one of the crucial ways to improve outcomes in CVD is by ensuring people are aware of it in the first place and know the signs and symptoms to look out for.

Our research shows that CVD is less of a consideration for some people than other diseases and that people don't always know and understand their own risk factors. This can be seen in the findings of our European Survey of Cardiovascular Disease*, which asked 6000 adults across Germany, Italy, the Netherlands, Spain and the UK questions about their understanding of heart disease.[7]

The results showed that less than one quarter (24%) of respondents were aware of CVD being the leading cause of death in Europe, and nearly twice as many (44%) thought that cancer causes the most deaths.[7] Furthermore, people across all ages were more concerned about cancer and dementia as they age than heart disease.[7]

These findings reinforce the important role that we, as an industry, have to play in being a voice for awareness of CVD, raising its profile and increasing public knowledge.

Which health conditions, if any, do you think contribute to the most deaths in Europe?

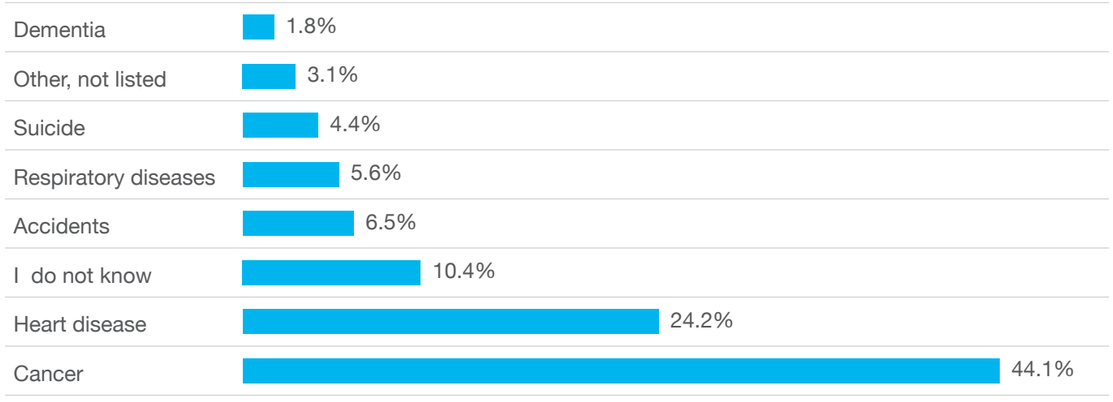

Figure from the European Survey of Cardiovascular Disease commissioned by Daiichi Sankyo, October 2021.[7]

There are many aspects of CVD risk that would be beneficial for people to be aware of, particularly two factors can have a substantial impact on someone's CV health – blood pressure and cholesterol levels.[5] However, our European survey showed that more than half of the participants were not aware of their blood pressure or cholesterol levels.[7] Knowledge varied considerably between countries; 41% of respondents from the Netherlands and 38% from the UK did not know either their blood pressure or cholesterol levels, compared with 16% from Spain.[7]

*European Survey of Cardiovascular Disease commissioned by Daiichi Sankyo, October 2021. Independent research consultancy, Censuswide asked 6000 adults from Germany, Italy, the Netherlands, Spain and the UK questions to assess public perception of CVD. The survey findings have not been influenced by Daiichi Sankyo.

Knowledge of blood pressure and cholesterol levels can help motivate people to identify lifestyle changes that could reduce their risk of a heart attack or stroke.[7] One way this can be supported is through the use of digital technologies that make health information more accessible.[7]

At Daiichi Sankyo, we are scouting the digital landscape for solutions that, once implemented, will help educate patients about their risk factors and ways to manage these by offering behavioural nudging, lifestyle optimisation tips and risk reduction recommendations. This could help patients to achieve better and sustained adherence and compliance with their long-term chronic treatments.

With such solutions, we also aim to save time for healthcare professionals and increase confidence by providing timely and relevant information that helps them personalise the care they offer. Tools, such as a patient companion or risk simulators that integrate various health parameters (sourced from every relevant data point and presented in a dashboard), can support clinicians to make informed assessments efficiently and confidently and, if necessary, adjust care plans in more personalised ways.

With the implementation of such a digital ecosystem, we are striving to better support clinicians and increase the effectiveness of personalised patient healthcare, disease management and prevention measures across the population.

Are you aware of what your cholesterol and blood pressure levels are?

	UK	Germany	Spain	Italy	Netherlands
Yes, I know both my cholesterol and blood pressure levels	28.9%	38.6%	60.3%	56.4%	33.4%
I know my cholesterol but not my blood pressure levels	5.8%	6.8%	12.4%	10.3%	5.4%
I do not know my cholesterol, but I know my blood pressure levels	27.0%	26.1%	11.1%	15.6%	20.2%
No, I do not know either	38.3%	28.6%	16.2%	17.7%	41.0%

Figure from the European Survey of Cardiovascular Disease commissioned by Daiichi Sankyo, October 2021.[7]

"CVD doesn't have the public awareness it duly deserves. We echo the calls of patient and interest groups to continue shining a spotlight on this critical health issue. Together, we can draw attention – also among physicians and payer bodies – that there is a persistent need for further treatments in CVD.

Dan Ionescu
Vice President Value & Access, Specialty Medicines, Daiichi Sankyo Europe

Looking to the future

The past few decades have seen encouraging advances in CVD health outcomes.[8]

However, the decline in the CVD death rate seen in some countries in Europe has started to slow,[8] and there is the long-term impact of the COVID-19 pandemic to consider.

It is clear that work in the field of CVD never ends, and we must continue to seek and support innovative ways to inspire improvements in CV health.

The good news is that there is already significant momentum for positive change. To provide just one example, 12 key EU and international health organisations signed a joint statement in 2021 to call on the EU to develop a comprehensive EU Plan on CVD to ensure European citizens can live longer, healthier lives – regardless of where they are born or where they live.[9]

The signatories of the EU Plan further urge countries to take ambitious action to support prevention and early detection and widen access to treatment and rehabilitation.[9] We strongly support this call for action and take it as a reminder to constantly look for new ways to answer to the needs of the medical community, mobilise innovation in CVD and remain proactive in promoting public awareness about ways to keep in good health and optimise quality of life.

Guidelines from the European Society of Cardiology reflect the desire for preventative action and treatment access.[1] They provide clinicians with clear frameworks to work with their patients to reduce their risk of CV events and encourage better outcomes for CV patients across Europe.[1]

In addition, the European Society of Cardiology's 'CardioScape project' – a comprehensive online database of CVD funding throughout Europe – has shown that research in CVD is disproportionally low across Europe and that the research landscape is particularly fragmented.[10] The resulting Strategic Research Agenda for CVD identified the key areas in which clinical research is needed, including earlier recognition of CVD.[10] We are hopeful that this will help to guide future research priorities and that research in CVD will receive the attention it deserves.

These examples are only a few among many, and it is encouraging to see the increase in concerted action towards better CV health in Europe. Such efforts are much needed and should be persistently encouraged and pursued.

Considering 80% of CVD cases are estimated to be preventable, according to the World Heart Federation, we truly believe that prevention has to be at the heart of future CVD health activity.[11] Professor Pinto echoes this sentiment, saying *"As a society, as well as medical professionals, we should focus on preventing CVD and be putting more emphasis on providing conditions for having a healthier life because, ultimately, we want to help people to live longer."*

"Post-pandemic, the lens now needs to refocus on prevention, symptom detection and identification of risk factors, with the aim of reducing the impact of CVD on families, communities and society. I am excited to be bringing people together with this aim as part of our work at Daiichi Sankyo.

Oliver Appelhans
Vice President Commercial Operations, Affiliate & Partner Management, Specialty Medicines, Daiichi Sankyo Europe

Encouraging healthier lifestyles

Many heart and circulatory diseases are caused by conditions or habits that can be controlled, treated or modified. For example, living with excess weight or being physically inactive can increase your risk of heart attack and stroke.[12]

Our European Survey of Cardiovascular Disease highlighted encouraging signs that many people are willing to adopt healthier habits to improve their heart health. The survey found that having heart disease or knowing a friend or family member with heart disease was a decisive driver for making positive lifestyle changes.[7] As many as 43% of respondents said they adopted a healthier diet as a result of being affected by CVD.[7] In a cross-country comparison, this was most prevalent amongst Italian respondents, with 60% revealing that they subsequently followed a healthy, balanced diet.[7]

Furthermore, 36% of all respondents said they increased their exercise levels and approximately one quarter said they had reduced stress levels (30%), achieved a healthy weight (27%), quit smoking (26%) or reduced their alcohol intake (25%) as a result of being affected by CVD.[7]

Over two thirds of survey respondents aged 55 years and over said they had made lifestyle changes that may help reduce their risk of heart disease.[7] We were also positively surprised to find that 82% of the younger age group reported being willing to make positive changes and adopt a healthier lifestyle to help protect against heart disease.[7]

Professor Pinto advises, *"There are many ways we can influence and provide recommendations to help people to live healthy lives. If we can do this in a consistent way, we will be able to help prevent and reduce the burden of CVD. Having balanced nutrition is fundamental in CVD.[13] Regular exercise is also a very important component of healthy life and will go a long way to help prevent and manage disease.[13] Quitting smoking, including e-cigarettes and vapes, is also a vital recommendation to preserve good health."*[13]

It is encouraging that so many survey respondents stated that they are willing to make lifestyle changes as a result of a CVD diagnosis – whether it was themselves or someone close to them. However, a group remains who are not yet aware of the risks and symptoms of CVD.

Moving forward with digital innovations

At Daiichi Sankyo, we believe that digital health innovations offer a huge opportunity for monitoring and caring for people's CV health and, thus, helping to reduce CV events for those at risk.

The COVID-19 pandemic put a strain on health systems across the world; however, in many ways, it highlighted a willingness and capacity for change, specifically with the uptake of remote monitoring, telemedicine and digital solutions.[14] A recent study concluded that 87% of primary care physicians would recommend the use of a digital health strategy in the management of CVD risk factors.[14] Therefore, it is clear digital health is here to stay and is of vital importance in the future of CVD provision.[14]

Various studies demonstrate how simple and effective remote monitoring can be. For example, home blood pressure monitoring, which allows readings to be taken at home, has been found to be more accurate than when carried out in a clinic, and blood pressure control and cardiac outcomes are improved as a result.[15]

It is encouraging to see that patients are receptive to digital solutions, as Professor Pepe Zamorano, Chief of Cardiology at Ramón y Cajal University Hospital, Spain, explains, *"Patients feel more in control of their disease with digital devices, and healthcare professionals can keep a check on their levels remotely. It has become the cornerstone of controlling and following CV patients."*

With a positive response from both clinicians and patients, digital health interventions have become a more accepted solution for helping people to change their lifestyles, such as stopping smoking, reducing alcohol intake and increasing levels of physical exercise. According to our European Survey of Cardiovascular Disease, as many as 56% of respondents were using or would consider using a wearable device, such as a smartwatch or fitness device, to help them improve their heart health.[7]

Would you consider or have you previously used any of the following to help achieve a healthier lifestyle and/or heart health?

Table from the European Survey of Cardiovascular Disease commissioned by Daiichi Sankyo, October 2021.[7]

	Smartphone or online app	Wearable devices, such as a smartwatch or fitness device	Online support programme	Text messaging programme
I have used or currently using	26.2%	26.3%	6.6%	6.9%
I have not used it, but I would consider using	28.1%	29.2%	30.7%	23.2%
I have not used it, and I would not consider using	18.3%	19.9%	28.2%	36.8%
I would only use this if a healthcare professional recommended it to me	24.0%	21.1%	30.3%	28.5%
I prefer not to say	3.4%	3.4%	4.2%	4.7%

The survey further showed that a recommendation from a healthcare professional is a key motivator; with almost one third of respondents reporting that they would consider using a text messaging or online support programme if their doctor suggested it.[7]

In light of this, Daiichi Sankyo is striving to bring together digital and healthcare expertise to co-create innovative solutions that help to empower patients and provide them with the right tools to help monitor their health and reduce their CV risk.

> ***We are convinced that digital technologies play a key role in driving the shift from a disease-focused healthcare system to one of prevention, early diagnostics and personalised care. By co-creating digital services that support healthcare professionals and patients in preventing CVD and managing CV risks more effectively, we intend to strengthen our customers' ability to purely focus on caring for their patients."***
>
> **Dr Patrick Markt-Niederreiter**
> Vice President Digital Excellence, Specialty Medicines, Daiichi Sankyo Europe

A collaborative approach

Over recent years, Daiichi Sankyo in Europe, and indeed the pharmaceutical industry as a whole, has been striving to be a better partner to the medical community to support improvements in CV health. In particular, the COVID-19 pandemic has encouraged us to find alternative ways to reach and engage with healthcare professionals.

We don't want to look at the challenges of CVD in the same way as we did a few years ago. Instead, as an industry, we want to listen even more carefully to the requirements of the clinical community. From our experiences and learnings, healthcare professionals require meaningful interactions based on a deep understanding of their needs to help patients.

At Daiichi Sankyo, we aim to identify new ways to deliver value and solutions through collaboration, co-creation and by building transparent relationships with the CVD community.

We know that a 'one size fits all' approach no longer works for interactions between industry and the clinical and scientific community to be truly impactful. Instead, we are going to focus on the individual needs of clinicians, change our ways of working to become better at truly addressing them and provide bespoke information and support to meet their needs.

We also believe that the industry should support healthcare professionals by going beyond the provision of medications and embracing a truly holistic approach to CV care. This means focusing on addressing physicians' and patients' needs in ways that are meaningful for them, being open to trying new ways of working and progressing and always taking away key learnings to improve our ability to support improvements in care.

If a patient's needs and preferences are understood, adherence to CVD treatment can be promoted.[16] To support this approach, Daiichi Sankyo provides funding for independent initiatives that investigate the patient experience and patient preferences around treatments and the experience of caregivers of patients with CVD.[16–19] Through our funding of the Economist Impact study and the commissioning of the European Survey of Cardiovascular Disease, we intended to bring timely and relevant data and insights to the medical community and help increase awareness of CVD among the general public to inspire better care.

Importantly, as an industry and company, we believe we must act as a voice for patients and healthcare professionals, calling for a fully integrated approach to inspire an even better future for CV care.

"Through our ongoing collaboration with medical, scientific and patient communities, we see a real sense of dedication and drive to seek solutions to the complex challenges we face to continue improving CV health. And as an industry, by listening to these communities' needs, partnering with them and supporting them, we can help drive this progress forward."

Berk Kiran
Head of Customer Experience Strategy, Specialty Medicines, Daiichi Sankyo Europe

Summary: A new chapter in CV care

Much remains to be done – but there are many reasons to be optimistic about the future of CV care. We are seeing promising developments in many areas for patients living with CVD as well as their families.

It is exciting to see the impact of collaborative efforts already driving positive action in CVD care. As a company, we are dedicated to bringing together individuals and groups from the wider CVD community and supporting open discussions and shared learnings that will lead to improvements in CV care. We work hard to amplify the voices of those speaking out about better CV health so that positive change can be made throughout society.

The COVID-19 pandemic has enabled experimentation with a range of models for CVD care,[6] and clinicians and patients have shown they are capable and willing to adopt new care delivery methods, including telemedicine.[6,7]

We believe that future digital solutions will help transform the quality of care and provide a more personalised approach for patients. Hence, we are committed to exploring holistic services and innovations that complement and expand CV care beyond the provision of medicines.

The public's willingness for behaviour change provides robust foundations to build on to improve CVD prevention and early detection. By supporting research and continuing to focus attention on CVD, we hope to raise awareness of the condition, its main risk factors and common symptoms, and we are hopeful this will empower more people to shift to healthier lifestyle behaviours.

We are confident that we are entering a new chapter in CV care. With focus and dedication, we can continue to make bold strides in the right direction, working to help prevent CVD in Europe and make a meaningful difference to people's lives.

We care for every heartbeat.

Daiichi Sankyo would like to thank Professor Pepe Zamorano and Professor Fausto J. Pinto for their contributions to this report

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