Open program
Public private partnerships
2020

The Dutch Heart Foundation focuses on creating and implementing new ways to detect and treat cardiovascular diseases at an earlier stage.
With this program for public private partnerships (PPP), we aim to stimulate translational and innovative research projects that promote the application of cardiovascular research results in clinical care for cardiovascular patients and stimulate the involvement of relevant stakeholders.
We do this by making PPP funds available for cardiovascular research groups that must be matched by investments from private parties.

This program is an open call throughout 2020 and 2021 without a deadline for the submission of proposals.

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General information

In the next ten years the number of people with a cardiovascular disease (CVD) in the Netherlands is estimated to increase by 30%. If nothing is done, seven million people will suffer from a chronic disease in 2030, of which nearly two million will be chronically ill due to CVD.

The Dutch Heart Foundation (DHF) is a Netherlands-based charity that aims to reduce the burden of CVD and keep hearts healthy by stimulating cardiovascular research and collaboration and enhancing knowledge and awareness of these devastating diseases. The DHF depends solely on donations from the public. The DHF works together with patients, scientists, doctors, societal and industrial partners, and numerous volunteers on solutions to detect CVD earlier and to treat it better and faster. The DHF stimulates research and innovation, provides support and information to (at-risk) patients, and wants to save extra lives in the event of a cardiac arrest.

In 2014, the first national cardiovascular research agenda was developed together with the Dutch public and major stakeholders, including (at-risk) patients, healthcare professionals, scientists. This resulted in the following five research priorities (link to our website):

1. Earlier recognition of cardiovascular diseases
2. Cardiovascular disease in women
3. Better treatment of heart failure and arrhythmias
4. Acute treatment of strokes
5. New ways to keep up a healthy lifestyle

Based on the research agenda and in line with our partners in the DCVA (www.dcvalliance.nl), the DHF further strengthened its focus on finding and implementing new possibilities to detect and solve CVD at an earlier stage. Preventing damage due to CVD as early as possible is essential to reduce the increase in chronic CVD and the accompanying loss in quality of life. Therefore, it is important to detect CVD earlier and develop better treatments to prevent, reduce and/or repair any damage.

With this focus we endorse the research agenda for CVD and contribute to the roadmaps (Molecular diagnostics, Imaging, Homecare, Regenerative medicine, Enabling technologies and HTA) of the 'Knowledge and Innovation agenda LSH-TKI' as well as the 'Personalized medicine', 'Regenerative Medicine' and 'Healthcare research, Prevention and Treatment' routes of the 'National Science agenda'.

Innovative solutions and research methods are essential

Preventing damage due to CVD as early as possible is essential to maintain a good quality of life and reduce complications, intensive treatments and premature death. Therefore, it is necessary to determine with more precision if someone is developing a CVD before clear symptoms are present. Additionally, we aim to contribute to earlier and better treatments to prevent, lessen and/or repair (early) damage.
This important societal challenge calls for the engagement of both excellent researchers and direct users and end users. Industrial parties will be among the users of the research results, which can help them develop new products and/or services.

Aim of this program

With this program for public private partnerships, we aim to stimulate innovative research projects that are necessary for the next step in translating cardiovascular research findings towards application in health care. The DHF focusses on creating and implementing new ways to detect and treat cardiovascular diseases at an earlier stage.

This program is looking for innovative, translational, and multidisciplinary research in which knowledge institutes and private partners are collaborating. It will be open for applications throughout 2020 and

2021 in order to facilitate partnerships precisely when they are ready to use these funds, thereby maximizing the contribution of this program to the further development and implementation of research findings.

Who can apply?

Scientists employed by a Dutch knowledge institute can submit a proposal. There is a real collaboration with at least one private partner that contribute to the project. Upon approval of the research proposal, the applicant bears the ultimate responsibility for the realisation of the research project.

How can I apply?

If you are interested in applying for this program please contact the DHF in order to first discuss whether or not your project can be expected to be eligible and to determine whether there is sufficient budget available for your intended application.
Before submitting your application, we recommend that you visit the DHF website (www.hartstichting.nl) to check that you have the latest version of this brochure and the appendices.

Budget

For this program, the PPP allowance is used under the TKI Life Sciences & Health program allocated by Stichting LSH-TKI to the DHF from the Ministry of Economic Affairs, in accordance with the PPP Allowance Regulation. Consequently, specific rules apply for proposals submitted for this program. Please read the guidelines carefully and contact us in case you have any questions.

The maximum project duration is max **3.5** years, depending on the start date of the project. The end date should be before 1 September 2024.

As building a public private partnership takes time, often more time than anticipated, we advise you to carefully consider the planned start and end date of the research project. Before applying for funding, you should thoroughly check if you can meet these timelines.

The minimum **total** budget for a project is €200,000; there is no maximum.

In accordance with the PPP Allowance Regulation, the amount of allowance that can be requested depends on the type of research. Of the total eligible project costs, a maximum of 75% of the PPP Allowance may be used for fundamental research, a maximum of 50% for industrial research, and a maximum of 25% for experimental development. These maximum proportions and the co-funding demands are depicted in Table 1.

Type of research	**Fundamental research**	**Industrial research**	**Experimental development**
Maximum % PPP Allowance to de deployed	**75%**	**50%**	**25%**
Research organisation(s)	**min. 10%**	**min. 10%**	**min. 10%**
For-profit enterprise(s) **- large** **- SME****	**min. 15%** **- min. 2/3rd in cash*** **- may be fully in kind**	**min. 30%** **- min. 2/3rd in cash*** **- may be fully in kind**	**min. 45%** **- min. 2/3rd in cash*** **- may be fully in kind**

Table 1 Funding model by type of research

This table also shows the minimum percentage that a research organisation must contribute and the minimum percentage that a for-profit enterprise must contribute (in cash and/or in kind). In the case of industrial research and experimental development, the columns do not add up to 100% but to 90% and 80%, respectively. In these cases, the parties are free to decide how to obtain the remainder of the project funding required.

Conditions and points to note for PPP allowances:

- The conditions for a PPP project are described in the Health~Holland "TKI LSH Match Regulation for public-private partnerships ".
- Co-funding by private parties that are not "for-profit enterprises", such as foundations are appreciated however, do not count towards the compulsory company contribution.
- The definitions of small and medium-sized enterprises are explained in brief in Appendix A.
- The project covers fundamental research, industrial research or experimental development, or a combination thereof. For definitions of the types of research, see Appendix B.
- Appendix E provides examples of calculations.

Eligibility requirements

The proposals must satisfy at least the following requirements:

- The proposed research must fit within the strategy of the DHF.
- The project proposal must be in line with the challenges as set out in the "Knowledge and Innovation Agenda 2020–2023" (KIA);
- The project duration must not exceed 3.5 years.
- Its translational and innovative character should be clearly described in the proposal.
- The research described in the proposal is not already being funded in another ongoing research project of the DHF or other parties.
- The proposal must address all questions on the application form.
- The proposal and budget are in accordance with the PPP rules.
- Proposals should be written in English with a minimum font size of 10 points Arial.
- The proposal may not exceed the indicated number of pages (excluding the budget sheet, CVs, and letters).
- The proposal is not eligible for the First Fund of the DCVA (www.dcvalliance.nl).
- The project must start within six months after the letter confirming the award is received.
- The same application may not be submitted more than once within three years.
- An applicant may not submit more than two applications per year.

The consortium must satisfy the following eligibility requirements at least:

- A proposal must be jointly submitted by at least one partner from a public knowledge institute and one private partner.
- Scientists employed by a Dutch knowledge institute can submit a proposal.
- The main applicant is located in the Netherlands.
- Foreign for-profit enterprises and research organisations are also encouraged to participate in the consortium, as long as the results of the research project benefit the Dutch society, knowledge infrastructure and economy and this commitment is clearly described in the application.
- If the proposal links to an existing consortium financed (in part) by the Dutch Heart Foundation, a letter confirming the collaboration with the existing consortium signed by the consortium leader(s) must be included in the proposal. The form and added synergistic value of the collaboration must be clearly described and substantiated. Collaboration with an existing consortium will be a positive asset but is not a requirement.
- The research leader and principal investigators involved must be employed throughout the entire duration of the research project.
- The contribution of all partners must comply with the PPS rules.
- There is a real collaboration, and the partners in the consortium will jointly bear the costs and risks of realising the project.

- Besides a possible cash contribution, all consortium partners should make an in-kind contribution. This means that at least all consortium partners incur payroll costs. These costs must also be visible on the budget form (Excel).
- The consortium partners are willing to sign the agreement and intra-consortium agreement (see website). By submitting a proposal, all consortium partners agree with these agreements.

Theme and ambitions of the project

The following paragraphs are content parameters for writing the proposal.

Impact

With this program the DHF aims to create societal impact by focusing on creating and implementing solutions for cardiovascular healthcare problems. Therefore, in this proposal, the scope, size and impact of the healthcare problem are the starting points and play a central role.
The consortium must define which parts of the formulated ambitions are the subject of this research proposal and which parts are beyond the scope of the current proposal or require additional funding that will be sought elsewhere by the consortium. Explain how the consortium contributes to the Dutch national cardiovascular research agenda and other relevant research agendas.

Scientific excellence

The proposal includes a clear and solid description of scientific impact, reduces the burden of CVD and must be internationally competitive. The work packages of a proposal are coherent and synergistic. The proposal and scientific program must be innovative, and the aims and plan of work must be feasible.

Route to Societal Impact

Defining a clear healthcare problem and designing a research proposal that results in finding a solution for this problem is generally not sufficient to create real impact. The consortium must develop a clear strategy to translate their research findings into one or more solutions and thereafter introduce these solutions into clinical practice.
An impact strategy involves both valorisation and implementation and includes collaboration with the users and user committee (see below). Describe the relevance, needs and requirements of users related to the outcome of the project. How will the outcome of this project affect research and healthcare?
Short-term ambitions (outputs and outcomes) and a long-term impact ambition (2030-2040) must be included. For the short-term ambition (three to four years), clear objectives, deliverables and milestones need to be formulated. Define objectives, deliverables and milestones as specifically as possible and preferably phrase them as possible solutions. An example is given in the figure below:

The healthcare problem: too many people die of cardiovascular disease X
The cause: there is no effective therapy available that can be used to treat patients
The underlying knowledge cause: there is not sufficient knowledge of the pathophysiology, therefore it is not possible to find therapeutic targets

Project proposal
Deliverable 1: protein/gene Y causes the disease
Deliverable 2: a compound targeting protein/gene Y is identified
Objective 1: a company adopted the target and compound and developed a therapy
Objective 2: the treatment is taken up in guidelines
Objective 3: insurance companies reimburse the therapy
Impact: fewer people die of cardiovascular disease X because there are treatment options available

Valorisation strategy

A valorisation strategy is part of the so-called 'Route to Societal Impact'. Valorisation is typically described as the utilization of scientific results in clinical practice. Depending on the specific solution(s) a consortium is working on, valorisation can take different forms. Please get in touch with the DCVA valorisation pillar for support on this subject via email: info@dcvalliance.nl.

The consortium should present the steps needed to bring a solution to a clinical application. This does not necessarily have to take place within the timeframe of the proposal. The applicant should describe the envisioned product(s), the intended target group(s), and the impact of the product(s) on care. In addition, the consortium should indicate which stakeholders it is essential to involve in this process and the budget required to guarantee a successful next step.

An assessment of whether this strategy for valorisation is realistic and time- and cost-effective forms part of the evaluation of the application. The consortium can allocate a dedicated budget for valorisation activities; as a guideline, 10% of the total budget can be used. This includes the conduct of a feasibility study, the development of a business plan, or costs necessary to secure intellectual property that are not covered by the university's Knowledge Transfer Office or other services or funds. We would like to stress that we expect the consortium to investigate funding opportunities within the universities first.

Part of the valorisation strategy is collaborating with a Health Technology Assessment (HTA) expert to advise on a realistic strategy. The outcome of the consultation/analyses with this HTA expert forms part of the proposal as well as how HTA expertise will be part of the project.

Implementation strategy

As part of the impact plan, applicants develop a strategy outlining how results will be implemented in daily clinical practice. The DHF stimulates researchers and clinicians to implement new solutions in daily practice at hospitals and other healthcare institutions. To find treatment that is less intrusive or stressful and helps lower healthcare costs, new methods and instruments are needed. Caregivers have to be trained in working with them safely. Planning and organising this at an early stage of research helps create fast tracks in this domain. Expertise and collaboration are key to develop and implement novel preventive and other therapies for CVD. Describe a strategy of how to implement new knowledge in cardiovascular healthcare practice. This strategy includes describing who will be involved, how implementation will be done, how implementation activities will be organized (also by others) and a stakeholder analysis. Please get in touch with the DCVA implementation pillar for support on this subject via email: implementation@dcvalliance.nl.

User committee

Relevant stakeholders are involved via a user committee. This committee advises the consortium on the steps needed to bring results into clinical practice and monitors the use of the acquired knowledge. Describe how collaboration with stakeholders will be organized, what expertise is needed, and how this expertise is present in the described composition of the committee. We advise reaching out to the envisioned user committee members in an early stage. By doing so, they can provide feedback on the proposal and align expectations. Patients are an essential part of a user committee. The consortium can contact patient organisation Harteraad for more information about patient participation. More information about the use of user committees can be found on the DHF website. Please also take note of our user committee guidelines.

External Collaboration

The consortium describes their collaboration with other consortia working on relevant healthcare problems, relevant stakeholder organizations and end users. Possible stakeholder organizations are, for example, the partner organisations of the DCVA.

The proposal includes a description of which stakeholders are involved (including names), both national as well as international. The proposal also includes how support is created and how patient groups and societal stakeholders are involved.

Points of attention

Diversity

The research proposal must address differences in CVD between men and women in both sex and gender. The term 'sex' refers to the biological attributes that distinguish male from female, while the term 'gender' refers to men's and women's socially constructed roles, identities and behaviours. See the website of Stanford university for tools that can be used to integrate sex and gender aspects in research applications.
Apart from sex and gender differences, also consider other aspects of diversity, e.g. age, social background, ethnicity, in all activities of the consortium and describe them in the proposal.

Open access & open science

The DHF aims to have all publications funded by the DHF published in an open access journal. Find out more about our open access policy on the DHF website, in Dutch.
Include a detailed description in the proposal of how the acquired data will be handled (data stewardship). The consortium is strongly advised to include a data expert in its ranks and is obliged to allocate resources for data management in the budget. After having been awarded the grant, the consortium will be asked to hand in a Data Management Plan (DMP; will be provided by the Durrer Center). The DMP is a dynamic document and will also be used to monitor progress on data management.

Agreements

Upon submission we expect that all partners are informed and agree with the conditions laid out in the agreements sent together with this brochure (see below).
We explicitly advise the initiators to carefully read the agreements and discuss them with the consortium partners before submitting the proposal.

Submission and Review process

Contact

For questions about the programme please contact Karin Eizema, k.eizema@hartstichting.nl, 070-3155566. Applications can be submitted via e-mail: research@hartstichting.nl.

Submission

If you are interested in applying for this program please contact the DHF in order to first discuss whether or not your project can be expected to be eligible, to determine whether there is sufficient budget available for your intended application and to answer any questions that you may have.

This program has no deadline. Per calendar year the total amount of PPS funding available will be divided into two or three tranches to make sure there is still funding available at the end of the year. The first application can be submitted from 1 July 2020 onwards. As soon as two applications are received that are eligible, or a maximum of two months has passed since the first application was received, the external reviewing process will start.

Internal review by DHF

The DHF will check within two weeks after submission whether the proposal fits within the research strategy of the DHF and whether all the eligibility criteria are fulfilled. If the application is not eligible but can be amended, the DHF will invite the applicants to amend the application. If the application is not eligible based on the requirements, if there is not enough budget or if there is no contribution to the strategy of the DHF the application is excluded from the review process.

External review

After this internal review, the application will be evaluated by an ad-hoc committee of members of the national Scientific Advisory Board (Wetenschappelijke Adviesraad (WAR)) or the International Scientific Advisory Committee (ISAC) and the Committee Societal Quality (CSQ). The members of the ad-hoc committee are selected based on the topic, the proposal's size and whether or not there is a connection to existing consortia. The committee is supplemented by valorisation and/or implementation experts (e.g. impact officers of the DCVA) and chaired by the chair of the WAR. The review of the application focuses on the criteria of Impact, Description of work, Route to Societal Impact, Internal and External Collaboration (see Appendix F).
The evaluation is done in writing, and the applicant will be given the opportunity to react to the comments (rebuttal). The final discussion and qualification will be done in principal through a teleconference by the committee.

Code of Conduct on Confidentiality and Conflicts of Interest

To ensure a fair assessment and transparency for researchers, the DHF uses a Code of Conduct on Confidentiality and Conflicts of Interest. This code stresses the necessity of confidentiality, identifies possible forms of conflicts of interest, and indicates the steps to be taken to avoid conflicts of interest. Parties subject to the code of conduct are referees, jury members, committee members, members of decision-making bodies and DHF officers. The full text of the code of conduct on conflicts of interest is available on the DHF website.

Decision process

The committee will advise whether the consortium is eligible for funding. With scores ranging between very good to excellent, the consortium will be eligible for funding. The management board of the DHF decides on the allocation of funds, based on the committee's recommendation and the available funds. When the proposal is eligible for funding but not enough funding is available, there is a possibility of partly funding the consortium, or of postponing the funding decision. In this case the best strategy will be discussed with the consortium.

Post-decision process

Complaints procedure

A research leader can submit a complaint about the procedure after the decision has been made about the grant. A form should be submitted to the DHF Complaints Committee. It is not possible to

appeal against the outcome of the procedure. The form can be found on the DHF website. Complaints should be submitted within four weeks after receiving the notice from the DHF.

After granting

After granting, the consortium partners must sign two legal documents:

1. A consortium agreement between the DHF and the consortium partners (available on the website) in which the legal and financial conditions are stated. This agreement is non-negotiable.
2. An intra-consortium agreement (ICA) (available on the website) containing paragraphs on IP, organisational and publication arrangements. The ICA becomes part of the consortium agreement. The ICA must be submitted two weeks before the review committee meeting (which will be communicated when the selection procedure starts). The IP paragraphs are non-negotiable.

The consortium is obliged to deliver signed agreements to the DHF office and start within 6 months after receipt of the grant approval letter.
We explicitly advise you to read the agreements carefully and discuss them with the consortium partners before submitting your proposal. Upon submitting a proposal, all consortium partners are assumed to agree with the agreements.

Monitoring

The Heart Foundation will assign a contact person for each project. He/she will be in close contact with the research leader to stay informed about the progress and discuss issues regarding the project. Official monitoring according to the LSH-TKI rules means that the Research Leader shall provide the Heart Foundation with (more details are stated in the agreement):

1. within 1 (one) month after the end of each calendar year, a periodic (scientific and financial) report.
2. within 1 (one) month upon completion of the Research Project, an integrated final report providing an overview of the progress and results of the entire Research Project.
3. within 1 (one) month upon completion of the Research Project, a final audit of the Research Project costs, including an audit certificate prepared and certified by an independent auditor. The PPP Allowance may not be used to cover audit costs.

Depending on the size of the project, a midterm review can form part of the monitoring.
The Heart Foundation may participate in the user committee, this will be discussed after granting support of the project.

Appendix A: European Commission Recommendation 2003/361/EC regarding SME definition

Micro-enterprises are defined as enterprises that employ fewer than 10 persons and whose annual turnover or annual balance sheet total does not exceed EUR 2 million.

Small enterprises are defined as enterprises that employ fewer than 50 persons and whose annual turnover or annual balance sheet total does not exceed EUR 10 million.

Medium-sized enterprises are defined as enterprises that employ fewer than 250 persons and either have an annual turnover that does not exceed EUR 50 million, or an annual balance sheet not exceeding EUR 43 million.

For more details, 'The revised User Guide to the SME definition' can be downloaded here.

Appendix B: Definitions of the three types of research[1]

Fundamental research means experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any direct commercial application or use in view.

Industrial research means the planned research or critical investigation aimed at the acquisition of new knowledge and skills for developing new products, processes or services or for bringing about a significant improvement in existing products, processes or services. It comprises the creation of component parts of complex systems, and may include the construction of prototypes in a laboratory environment or in an environment with simulated interfaces to existing systems as well as of pilot lines, when necessary for the industrial research and notably for generic technology validation.

Experimental development means acquiring, combining, shaping and using existing scientific, technological, business and other relevant knowledge and skills with the aim of developing new or improved products, processes or services. This may also include, for example, activities aiming at the conceptual definition, planning and documentation of new products, processes or services. Experimental development may comprise prototyping, demonstrating, piloting, testing and validation of new or improved products, processes or services in environments representative of real-life operating conditions where the primary objective is to make further technical improvements of products, processes or services that are not substantially set. This may include the development of a commercially usable prototype or pilot which is necessarily the final commercial product, and which is too expensive to produce for it to be used only for demonstration and validation purposes. Experimental development does not include routine or periodic changes made to existing products, production lines, manufacturing processes, services and other operations in progress, even if those changes may represent improvements.

[1] In case of drug development, pre-clinical research in animals falls within the research category 'industrial research'. In principle, clinical phases 1 and 2 fall within the research category 'experimental development'. Phase 3 clinical trials (and beyond) are seen as competitive development and fall outside the scope of the PPP Allowance Regulation.

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Appendix C: Definitions of the ten roadmaps

The roadmaps are designed to address priorities in health outcomes (age-related, chronic, acute, infectious, orphan and neglected diseases) and along the healthcare chain (from prevention through diagnosis to cure and care). They represent the areas in which public and private parties are committed to co-innovate and asking the government to co-invest. Companies, research institutes, practitioners, patient organizations, health foundations, health insurers, regulators and many others have contributed and endorsed these roadmaps. Seven roadmaps (1 through 7) are product-oriented. They are supported by two that deliver health technology assessment (8) and enabling technologies & infrastructure (9). The latter also links to other Top Sectors with a strong life sciences component, such as agro-food, horticulture and chemistry. A final roadmap (10) is centred around diseases that cause a high burden mainly in the developing world, but which the developed world can make strides in solving.

1. **Molecular diagnostics**: Development of candidate biomarkers into validated molecular diagnostics for clinical use
2. **Imaging & image-guided therapies**: Development of imaging applications for more accurate and less invasive diagnosis and treatment
3. **Homecare & self-management**: Development, assessment and implementation of technologies, infrastructure and services that promote clients' abilities to live independently and manage their own care, adequately supported by healthcare professionals
4. **Regenerative medicine**: Development of curative therapies for diseases caused by tissue damage and ensuing organ dysfunction, through repair or renewed growth of the original tissue or replacement by a synthetic or natural substitute
5. **Pharmacotherapy**: Discovery, development and stratified use of new, safe and (cost-) effective medicines in order to cure or prevent progression along the healthcare chain
6. **One health**: Development of solutions like vaccines, optimized antimicrobial use and early warning systems that improve the health status of humans and animals by coupling the know-how and infrastructure available in the human and veterinary/agricultural domains
7. **Specialized nutrition, health & disease**: Researching specialized nutrition for nutritional intervention as part of integrated health solutions in terms of prevention, cure, and care of chronic, acute and rare diseases
8. **Health technology assessment, individual functioning & quality of life**: Development of methods and knowledge for health technology assessments in which the impact of health innovations on quality of life, cost containment and productivity is assessed
9. **Enabling technologies & infrastructure**: Development and offering of expertise and infrastructure in cutting-edge molecular life science technologies (e.g. next generation sequencing, proteomics and bioinformatics), in biobanks and in ultramodern research facilities, all readily accessible to industry and academia, and with existing, strong links to other Top Sectors (Agro-food, Horticulture, Chemistry, Biobased Economy and High Tech Systems and Materials)
10. **Global health, emerging diseases in emerging markets**: Development and delivery of solutions to diseases associated with poverty, which affect more than 2 billion people in the developing world

Appendix D: Technology Readiness Levels

TRL level	Definition	Type of research *
TRL 1	Basic principles observed	Fundamental research
TRL 2	Technology concept formulated	Fundamental research
TRL 3	Experimental proof of concept	Fundamental research
TRL 4	Technology validated in lab	Fundamental/industrial research
TRL 5	Technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)	Industrial research
TRL 6	Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)	Industrial research
TRL 7	System prototype demonstration in operational environment	Industrial research/experimental development
TRL 8	System complete and qualified	Beyond the scope of the PPP Allowance Regulation
TRL 9	Actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)	Beyond the scope of the PPP Allowance Regulation

*The TRL is an indication of the type of research, but the definition of type of research (Appendix B) prevails.

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Appendix E: Calculated examples of project budgets

In the case of a project consisting entirely of fundamental research, 75% of funding may be requested. In addition, 25% matching is required, of which at least 10% of the total project budget should be contributed by the research organisation and at least 15% must be provided by for-profit enterprises.

Funding requested	€ 200,000
Contribution from research organisation (10%)	€ 26,667
Contribution from companies (15%)	€ 40,000
Total matching (25%)	€ 66,667
Total project budget	€ 266,667

In the case of a project consisting of two work packages of which one is fundamental research and one is industrial research, 62.5% of funding may be requested. In addition, 37.5% matching is required of which at least 10% of the total project budget should be contributed by the research organisation and at least 22.5% must be provided by for-profit enterprises.

Funding requested	€ 1,000,000
Contribution from research organisation (10%)	€ 160,000
Contribution from for-profit enterprises (22.5%)	€ 360,000
Contribution from other partners* (5%)	€ 80,000
Total matching (37,5%)	€ 600,000
Total project budget	€ 1,600,000

In the case of a project consisting entirely of industrial research, 50% of funding may be requested. In addition, 50% matching is required, of which at least 10% of the total project budget should be contributed by the research organisation. In addition, at least 30% must be provided by for profit enterprises and possibly the remainder (10%) by other partners.

Funding requested	€ 200,000
Contribution from research organisation (10%)	€ 40,000
Contribution from for-profit enterprises (30%)	€ 120,000
Contribution from a foundation	€ 10,000
Contribution from other partners*	€ 30,000
Total matching (50%)	€ 200,000
Total project budget	€ 400,000

*other partners may be not for-profit organisations but may also be for-profit enterprises

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Appendix F: Checklist for the evaluation

Below the specific questions that will act as a checklist for reviewers to evaluate the application:

A. Impact

A1. Cardiovascular health care problem. Does the proposal focus on an important cardiovascular healthcare problem?
A2. Solution. Does the proposal contribute to finding a solution for the cardiovascular healthcare problem?
A3. Contribution to the purpose of this program. Does the proposal contribute to the purpose of the program?
A4. Impact on the cardiovascular burden of disease. What is the impact of the proposed solution on the cardiovascular burden of disease?
A5. Main objective. Is the objective (short-term ambition) realistic?

B. Description of work

B1. General hypothesis. How do you assess the general hypothesis of the study?
B2. Key objectives. How do you assess the key objectives of the study?
B3. Scientific quality. How do you assess the overall scientific quality of the research proposal?
B4. Relevance. Is the proposal innovative & scientifically relevant for the field?
B5. Aims. Are the aims of the proposal clearly defined and valid?
B6. Study design. Are study design and proposed methods appropriate to address the research questions?
B7. Work packages. How do you assess the overall scheme of the work packages in terms of coherence?
B8. Feasibility. How do you judge the proposed timetable & feasibility in relation to the aims of the programme?
B9. Budget. How do you judge the feasibility of the study in relation to the proposed budget?
B10. SWOT analysis and contingency plan. How do you assess the SWOT analysis and contingency plan?
B11. Statistics. How do you judge the statistical methods described in the application?
B12. Data management. How is data management (storage, sharing, etc.) described in the proposal?

C. (Pre)clinical studies

C1. Clinical studies/ studies with humans. How do you assess the clinical studies/studies with humans described in this proposal? Has the correct type of clinical study been proposed?
C2. Power calculation for clinical study/studies. Has a correct power calculation been performed?
C3. Pre-clinical studies. How do you assess the justification for using the described animal model(s)? Are the models relevant? Did the applicants consider alternative models? Has the 3R principle been considered?
C4. Power calculation for pre-clinical study/studies. Has a correct power calculation been performed?
C5. Does this proposal raise ethical questions?
C6. Diversity. All research proposals must consider diversity aspects such as gender, age, ethnicity, etc. How did the applicants consider diversity?

D. Route to societal Impact

D1.Valorisation. Valorisation is defined as the transformation of knowledge production to knowledge use (according to steps on the translational research pathway in terms of TRL), strategy and activities in time (during and beyond the timeline of the current project). Applicants are asked to describe the actions to be taken after the project to achieve next steps and to describe the interaction and collaboration with consortium partners and stakeholders outside the consortium. Did the applicants indicate which deliverables are foreseen in the valorisation activities? Does the proposal describe a clear vision, ambition, strategy and plan to bring the results of the research further to a next step in research, development and/or application in healthcare? Could

you give your opinion about whether attention has been paid to translation of the findings, and are the described plans to do so in the future clear and sufficient?

D2. Implementation. In this application, implementation is defined as the use of new knowledge in health care practice, strategy and activities in time (during and beyond the timeline of the current project). Applicants are asked to describe the interaction and collaboration with consortium partners and stakeholders outside the consortium and describe the interaction and collaboration with end-users. Did the applicants indicate which deliverables are foreseen in the implementation activities and the unique contribution of the consortium in the implementation process? Are all important users involved and to what extent is the specific knowledge of professionals and patients incorporated? How do you judge the plans for dissemination and implementation?

D3. User Committee. Have the applicants involved patients, health care professionals and other stakeholders in a relevant way? How do you assess the composition of the user committee and the activities that will take place? Is the currently proposed user committee capable of giving advice from the very beginning to the end of the project?

E. Collaboration

E1. Consortium. How do you judge the management and governance of the consortium?

E2. Composition. Is the right expertise available within the consortium and how do you judge the track record of the research leader(s) and other project partners?

E3. Private partners. Are relevant (private) partners involved and is their contribution to the project clear?

E4. Consortium alignment. How do you judge the alignment of the project to other relevant national and international initiatives, consortia and projects?

E5. DCVA collaboration. Please comment on the collaboration with the DCVA and with other stakeholder organisations outside the consortium. Comment on the multidisciplinary aspects of the consortium

Colofon

Dutch Heart Foundation
Prinses Catharina-Amaliastraat 10

Postal address: Postbus 300
2501 CH Den Haag

Telephone: 070-315 55 555
Website: www.hartstichting.nl

Written by: Hartstichting Team onderzoek & zorginnovatie
E-mail: research@hartstichting.nl
Website: https://professionals.hartstichting.nl/
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