

## **Health economic research assessing the value of early detection of cardiovascular disease: a systematic review**

Martijn J. Oude Wolcherink<sup>a</sup>, Carina. M. Behr<sup>a</sup>, Xavier G. L.V. Pouwels<sup>a</sup>, Carine .J.M. Doggen<sup>a</sup>, Hendrik Koffijberg<sup>a</sup>,

a) Health Technology and Services Research, Techmed centre, University of Twente, Enschede, the Netherlands.

**Corresponding author:** [h.koffijberg@utwente.nl](mailto:h.koffijberg@utwente.nl)

**Journal:** Pharmacoeconomics

**Title:** Electronic supplementary material 4. Additional study characteristics and funders

Caption: Table including funding information and additional study characteristics

| <b>Publication@</b>      | <b>Funding @</b> | <b>Funder@</b>                                                                                                                                                                                                                                                                                            | <b>ED or S#</b> | <b>Setting of the early detection strategy@</b> | <b>Management strategy upon positive test results@</b> | <b>Multiple strategies analysed? @</b> | <b>Age-dependent changes in CVD risk reported? @</b> |
|--------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------|--------------------------------------------------------|----------------------------------------|------------------------------------------------------|
| Aronsson et al., 2017    | NI               | The Dental and Pharmaceutical Benefits Agency                                                                                                                                                                                                                                                             | ED              | National screening program                      | Pharmaceutical intervention                            | Yes                                    | Yes                                                  |
| Beyhaghi and Viera, 2019 | None             | None                                                                                                                                                                                                                                                                                                      | S               | Primary care                                    | Pharmaceutical intervention                            | Yes                                    | Yes                                                  |
| Birkemeyer et al., 2020  | I                | Preventicus GmbH                                                                                                                                                                                                                                                                                          | ED              | NR                                              | Pharmaceutical intervention                            | No                                     | Yes                                                  |
| Catchpool et al., 2019   | None             | NR                                                                                                                                                                                                                                                                                                        | S               | Tertiary centres                                | Periodical surveillance                                | No                                     | No                                                   |
| Crossan et al., 2017     | None             | None                                                                                                                                                                                                                                                                                                      | ED              | Primary care                                    | Pharmaceutical intervention                            | Yes                                    | Yes                                                  |
| Dehmer et al., 2017      | NI               | Centers for Disease Control and Prevention                                                                                                                                                                                                                                                                | S               | Primary care                                    | Pharmaceutical intervention                            | Yes                                    | Yes                                                  |
| Fite et al., 2021        | NI               | PERIS 2016-2020 medical research grant from Generalitat de Catalunya (Spain). Expedient number SLT002/16/00441                                                                                                                                                                                            | ED              | Primary care                                    | Lifestyle intervention; referral to cardiologist       | No                                     | No                                                   |
| Flahault et al., 2018    | NI               | Day-Solvay Foundation (partly)                                                                                                                                                                                                                                                                            | ED              | Tertiary centres                                | Invasive intervention; periodical surveillance         | Yes                                    | No                                                   |
| Giebel, 2020             | NI               | Ministry of Science, Research and Art Baden-Württemberg                                                                                                                                                                                                                                                   | ED              | NR                                              | Pharmaceutical intervention                            | Yes                                    | No                                                   |
| Hager et al., 2017       | None             | NR                                                                                                                                                                                                                                                                                                        | ED              | National screening program*                     | Invasive intervention; periodical surveillance         | Yes                                    | No                                                   |
| Hill et al., 2020        | I                | Bristol-Myers Squibb and Pfizer                                                                                                                                                                                                                                                                           | ED              | NR                                              | Pharmaceutical intervention                            | Yes                                    | No                                                   |
| Högborg et al., 2018     | NI               | Swedish Research Council(Grant #K2013-64X-20406-07-3) and THE R&D unit of theNU-hospital organisation, Sweden                                                                                                                                                                                             | ED              | National population program                     | Pharmaceutical intervention                            | No                                     | No                                                   |
| Hultgren et al., 2019    | NI               | Swedish Heart-Lung Foundation                                                                                                                                                                                                                                                                             | ED              | Tertiary centres*                               | Invasive intervention; periodical surveillance         | Yes                                    | No                                                   |
| Hynninen et al., 2019    | NI               | Aalto University in part by a grant from the Sal We Research Program for GET IT DONE and in part by a grant from the Academy of Finlandâ€™s IMPRO project.This research has been partly supported by the PVN project funding decision 293446 of the Strategic Research Council of the Academy of Finland. | S               | NR                                              | Pharmaceutical intervention                            | Yes                                    | No                                                   |

| Publication <sup>@</sup>   | Funding <sup>@</sup> | Funder <sup>@</sup>                                                                                                                                                       | ED or S <sup>#</sup> | Setting of the early detection strategy <sup>@</sup> | Management strategy upon positive test results <sup>@</sup> | Multiple strategies analysed? <sup>@</sup> | Age-dependent changes in CVD risk reported? <sup>@</sup> |
|----------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------|
| Itoga et al., 2018         | NI                   | National Institutes of Health; National Center for Advancing Translational Science; Clinical and Translational Science Award (TL1 TR000084) and NIH / NHLBI (5T3HL098049) | ED                   | Primary care                                         | Lifestyle intervention; pharmaceutical intervention         | No                                         | No                                                       |
| Jacobs et al., 2018        | I                    | NR                                                                                                                                                                        | ED                   | Primary care                                         | Pharmaceutical intervention                                 | No                                         | No                                                       |
| Jacobs et al., 2021        | I                    | NR                                                                                                                                                                        | ED                   | Community care                                       | Pharmaceutical intervention; referral to cardiologist       | Yes                                        | No                                                       |
| Kariuki et al., 2018       | NI                   | American Heart Association Founders Affiliate Pre-Doctoral Fellowship and Graduate Student Scholarship from the University of Massachusetts Boston                        | S                    | Primary care                                         | Lifestyle intervention; pharmaceutical intervention         | NA                                         | NR                                                       |
| Kievit et al., 2017        | none                 | NR                                                                                                                                                                        | S                    | Secondary care                                       | Pharmaceutical intervention                                 | Yes                                        | No                                                       |
| Kypriemos et al., 2018     | NI                   | Liverpool City Council provided modest funding to support the analysis                                                                                                    | S                    | Primary care                                         | Lifestyle intervention; pharmaceutical intervention         | Yes                                        | Yes                                                      |
| Lagerweij et al., 2020     | NI                   | CREW NHS project (grandnumber 2013T083), co-funded by the Dutch Heart Foundation.                                                                                         | S                    | NR                                                   | Lifestyle intervention                                      | Yes                                        | Yes                                                      |
| Lee et al., 2021           | NI                   | Research Grant of Korea Centers for Disease Control and Prevention (2015-E33006-00)                                                                                       | S                    | National screening program                           | Pharmaceutical intervention                                 | Yes                                        | Yes                                                      |
| Lindholt and Sogaard, 2021 | none                 | None                                                                                                                                                                      | ED                   | NR                                                   | Lifestyle intervention; pharmaceutical intervention         | Yes                                        | No                                                       |
| Malhotra et al., 2019      | none                 | NR                                                                                                                                                                        | ED                   | NR                                                   | Invasive intervention; periodical surveillance              | Yes                                        | No                                                       |
| McIntyre et al., 2020      | I                    | Grant in Aid:Bristol-Myers Squibb Company and Pfizer Canada. Grant in Kind:M-Health Solutions                                                                             | S                    | Primary care                                         | Pharmaceutical intervention                                 | No                                         | No                                                       |
| Monahan et al., 2018       | NI                   | National Institute for Health Research (NIHR) via a Programme Grant (RP-PG-1209â€“10051)                                                                                  | S                    | Primary care                                         | Pharmaceutical intervention                                 | Yes                                        | No                                                       |
| Moran et al., 2016         | none                 | NR                                                                                                                                                                        | ED                   | Primary care                                         | Pharmaceutical intervention                                 | Yes                                        | No                                                       |
| Nair et al., 2019          | NI                   | Ministry of Business, Innovation and Employment (grant number UOOX1406)                                                                                                   | ED                   | National screening program                           | Invasive intervention; periodical surveillance              | No                                         | No                                                       |
| Nguyen et al., 2016        | NI                   | NUFFIC project                                                                                                                                                            | ED                   | Community screening                                  | Pharmaceutical intervention                                 | Yes                                        | Yes                                                      |

| Publication <sup>@</sup> | Funding <sup>@</sup> | Funder <sup>@</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                              | ED or S <sup>#</sup> | Setting of the early detection strategy <sup>@</sup> | Management strategy upon positive test results <sup>@</sup> | Multiple strategies analysed? <sup>@</sup> | Age-dependent changes in CVD risk reported? <sup>@</sup> |
|--------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------|----------------------------------------------------------|
| Oguz et al., 2020        | I                    | "Pfizer, New York, NY, USA and Bristol-Myers Squibb; Lawrenceville, NJ; USA                                                                                                                                                                                                                                                                                                                                                                                      | ED                   | National screening program*                          | Pharmaceutical intervention                                 | Yes                                        | No                                                       |
| Orchard et al., 2020     | I                    | Heart Foundation/New South Wales Health Cardiovascular Research Network Research Development Project Grant (101133) with top up funding from an investigator-initiated grant from Pfizer/Bristol-Myers Squibb. AliveCor have provided free smartphone ECG covers for study purposes.                                                                                                                                                                             | ED                   | Rural primary care                                   | Pharmaceutical intervention                                 | No                                         | NR                                                       |
| Proietti et al., 2019    | I                    | The Belgian Heart Rhythm Week screening programme was funded with unconditioned grants from Boehringer Ingelheim; St Jude Medical; Sanofi; MSD and MSH                                                                                                                                                                                                                                                                                                           | ED                   | Nurse-led screening locations                        | Pharmaceutical intervention                                 | Yes                                        | No                                                       |
| Rosendaal et al., 2016   | NI                   | Health Insurance Fund                                                                                                                                                                                                                                                                                                                                                                                                                                            | S                    | Primary and secondary care clinics                   | Pharmaceutical intervention                                 | Yes                                        | Yes                                                      |
| Schnabel et al., 2021    | I                    | The Gutenberg Health Study is funded through the government of Rhineland-Palatinate ('Stiftung Rheinland-Pfalz für Innovation', contract AZ 961-386261/733), the research programmes 'Wissen schafft Zukunft' and 'CenterCentre for Translational Vascular Biology (CTVB)' of the Johannes Gutenberg-University of Mainz, and its contract with Boehringer Ingelheim and PHILIPS Medical Systems, including an unrestricted grant for the Gutenberg Health Study | ED                   | NR                                                   | Pharmaceutical intervention                                 | Yes                                        | No                                                       |
| Sciera et al., 2022      | I                    | Pfizer Denmark and Bristol-Myers SquibbDenmark                                                                                                                                                                                                                                                                                                                                                                                                                   | ED                   | Primary care                                         | Pharmaceutical intervention; referral to cardiologist       | Yes                                        | No                                                       |
| Smith et al., 2019       | NI                   | Caring for Colorado                                                                                                                                                                                                                                                                                                                                                                                                                                              | S                    | Community care                                       | Lifestyle intervention; referral to general practitioner    | No                                         | No                                                       |
| Stol et al., 2021        | NI                   | ZonMW (The Netherlands Organization forHealth Research and Development) under grant number 50-51515-98-192 & Lekker Lang Leven under grant number 2012.20.1595 and Innovatiefonds Zorgverzekeraars (HealthcareInsurance Innovation Fund) under grant number 2582                                                                                                                                                                                                 | S                    | Primary care                                         | Lifestyle intervention; pharmaceutical intervention         | No                                         | No                                                       |

| Publication@              | Funding @ | Funder@                                                                                                                                                                                                                                                                                                                                                                                                                                            | ED or S# | Setting of the early detection strategy@ | Management strategy upon positive test results@ | Multiple strategies analysed? @ | Age-dependent changes in CVD risk reported? @ |
|---------------------------|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------|-------------------------------------------------|---------------------------------|-----------------------------------------------|
| Sweeting et al., 2021     | NI        | Funding from Public Health England/UK National Screening Committee for work undertaken in this manuscript. This work was supported by core funding from the UK Medical Research Council (MR/L003120/1), the British Heart Foundation (RG/13/13/30194;RG/18/13/33946), and the National Institute for Health Research(Cambridge Biomedical Research Centre at the Cambridge University Hospitals, and the National Health Services Foundation Trust | ED       | National screening program*              | Invasive intervention; periodical surveillance  | Yes                             | No                                            |
| Tarride et al., 2018      | I         | Canadian Stroke Prevention Intervention Network; Boehringer Ingelheim; and in-kind support from CardioComm and ManthaMed.                                                                                                                                                                                                                                                                                                                          | ED       | Primary care                             | Pharmaceutical intervention                     | Yes                             | No                                            |
| Tessler et al., 2021      | NI        | Hadassah–France Association; Center for Interdisciplinary Data Science Research; Israel Binational Science Foundation (2017265); Israel Science Foundation (1053/12)                                                                                                                                                                                                                                                                               | ED       | Secondary care                           | Invasive intervention; periodical surveillance  | No                              | No                                            |
| Thompson et al., 2018     | NI        | The National Institute for Health Research Health Technology Assessment programme.                                                                                                                                                                                                                                                                                                                                                                 | S        | National screening program               | Invasive intervention; periodical surveillance  | Yes                             | Yes                                           |
| Tseng et al., 2021        | NI        | Mayo Clinic internal research grant                                                                                                                                                                                                                                                                                                                                                                                                                | ED       | NR                                       | Pharmaceutical intervention                     | Yes                             | No                                            |
| van Giessen et al., 2016  | NI        | Fonds Nuts Ohra (Grant number 0702086) and Stichting Stoffels Hornstra.                                                                                                                                                                                                                                                                                                                                                                            | ED       | Primary care                             | Pharmaceutical intervention                     | Yes                             | Yes                                           |
| van Kempen et al., 2016   | none      | NR                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ED       | NR                                       | Pharmaceutical intervention                     | Yes                             | No                                            |
| Venkataraman et al., 2021 | NI        | Supported in part by a Project grant (1080582) and a Postgraduate Scholarship (PV) from the National Health and Medical Research Council from the National Health and Medical Research Council, Canberra, Australia                                                                                                                                                                                                                                | ED       | Secondary care*                          | Pharmaceutical intervention                     | No                              | Yes                                           |
| Wahler et al., 2022       | I         | The overall project is funded by the European Union's Horizon 2020 research and innovation program under grant agreement No. 829639 (Redstroke). The economic model was funded by Preventicus GmbH, Ernst-Abbe-Straße 15,D-07743 Jena, Germany                                                                                                                                                                                                     | ED       | Home care                                | Pharmaceutical intervention                     | No                              | No                                            |
| Wanhainen et al., 2016    | none      | none                                                                                                                                                                                                                                                                                                                                                                                                                                               | ED       | NR                                       | Invasive intervention                           | No                              | No                                            |

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