

Evaluation of Breast Cancer Mortality in the German Mammography Screening Program (Evaluation of Mortality) - Main Study I

Overview

The primary objective of the project is to investigate whether and to what extent the German MSP contributes to a reduction of breast cancer mortality. The project is coordinated by the Federal Office for Radiation Protection (BfS) and carried out under the direction of the University of Muenster. Project partners are the SOCIUM Research Center on Inequality and Social Policy, the Leibniz Institute for Prevention Research and Epidemiology - BIPS, the Cancer Registry of North Rhine-Westphalia and the Working Group of German Tumor Centers.

Duration:

01 January 2018 - 31 March 2021

Research Team:

[Dr. Jonas Czwikla](#) (Head of project)

[Prof. Dr. Heinz Rothgang](#) (Head of project)

Dr. Klaus Giersiepen

Franziska Heinze

Funding:

Bundesministerium für Gesundheit (BMG); Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (BMU); Kooperationsgemeinschaft Mammographie (KoopG)

Volume: 352.930,56

Coordination:

Bundesamt für Strahlenschutz (BfS)

Institut für Epidemiologie und Sozialmedizin, Westfälische Wilhelms-Universität Münster

Details

Between 2005 and 2009, the German Mammography Screening Program (MSP) was implemented nationwide in accordance with §25 Section 2, Article 2 of the German X-Ray Regulations. Since then, women aged 50 to 69 years are biennially invited to a breast X-Ray examination with two images per breast for the early diagnosis of breast cancer. In collaboration with the SOCIUM, the first part of the two-phase research program (feasibility and main study) has already investigated whether and how different data sources (i.e. clinical and population-based cancer registry data, Statutory Health Insurance claims data and MSP data) are

appropriate for the evaluation of the German MSP. The primary objective of the second part (main study I and II) is to investigate whether and to what extent the German MSP contributes to a reduction of breast cancer mortality.

Under coordination of the Federal Office for Radiation Protection (BfS), main study I has been started in January 2018. The study is conducted under the direction of the University of Muenster in cooperation with the SOCIUM Research Center on Inequality and Social Policy, the Leibniz Institute for Prevention Research and Epidemiology - BIPS, the Cancer Registry of North Rhine-Westphalia and the Working Group of German Tumor Centers. Funding is provided by the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, the Federal Ministry of Health and the Sponsors of the German Mammography Screening Office.

In main study I, the research team at SOCIUM, University of Bremen, uses Statutory Health Insurance claims data to establish a data basis for the evaluation of the German MSP which will be conducted in main study II. This task is processed in collaboration with the BARMER Statutory Health Insurance fund and in cooperation with the Leibniz Institute for Prevention Research and Epidemiology - BIPS.

Link to the feasibility study:

<https://www.socium.uni-bremen.de/projects/en/?proj=447>

Link to the principal investigator:

<https://www.medizin.uni-muenster.de/epi/forschung/projekte/zebra-msp/>

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Volume: 352.930,56

Project Type:

Third-party funded project

Project Partner:

Arbeitsgemeinschaft Deutscher Tumorzentren e.V. - ADT; Kompetenzzentrum für Klinische

Studien Bremen (KKSB), Universität Bremen und Klinikum Bremen-Mitte; Landeskrebsregister NRW; Leibniz-Institut für Präventionsforschung und Epidemiologie - BIPS GmbH

Coordination:

Bundesamt für Strahlenschutz (BfS)

Institut für Epidemiologie und Sozialmedizin, Westfälische Wilhelms-Universität Münster

Publications**Journal Article reviewed**

Heinze, Franziska; Czwikla, Jonas; Heinig, Miriam; Langner, Ingo; Haug, Ulrike, 2023: [German mammography screening program: program sensitivity between 2010 and 2016 estimated based on German health claims data](#), in: BMC Cancer, 23, pp. 852, [doi:10.1186/s12885-023-11378-0](#), 11.09.2023

Braitmaier, Malte; Kollhorst, Bianca; Heinig, Miriam; Langner, Ingo; Czwikla, Jonas; Heinze, Franziska; Buschmann, Laura; Minnerup, Heike; García-Albéniz, Xabiér; Hense, Hans-Werner; Karch, André; Zeeb, Hajo; Haug, Ulrike; Didelez, Vanessa, 2022: [Effectiveness of Mammography Screening on Breast Cancer Mortality – A Study Protocol for Emulation of Target Trials Using German Health Claims Data](#), in: Clinical Epidemiology, 14, pp. 1293 - 1303, [doi:10.2147/CLEP.S376107](#), 02.11.2022

Langner, Ingo; Riedel, Oliver; Czwikla, Jonas; Heinze, Franziska; Rothgang, Heinz; Zeeb, Hajo; Haug, Ulrike, 2019: [Linkage of Routine Data to Other Data Sources in Germany - A Practical Example Illustrating Challenges and Solutions](#), in: Gesundheitswesen, 82 (S 02), pp. 117 - 121, [doi:10.1055/a-0999-5509](#), 02.12.2019

Working Paper/Discussion Paper

Karch, André; Buschmann, Laura; Minnerup, Heike; Czwikla, Jonas; Heinze, Franziska; Haug, Ulrike; Langner, Ingo; Heinig, Miriam; Braitmaier, Malte; Eppe, Sven; Khil, Laura; Kleihues-van Tol, Kees, 2022: [Hauptstudie I zur Evaluation der Brustkrebs-assoziierten Sterblichkeit im deutschen Mammographie-Screening-Programm - Vorhaben 3617S42402](#), Bundesamt für Strahlenschutz (BfS) (Ed.), Ressortforschungsberichte zum Strahlenschutz/191/22/2022, Salzgitter: Bundesamt für Strahlenschutz (BfS), [Link](#) (Date: 08.04.2022)

Lecture

Czwikla, Jonas; Haug, Ulrike; Heinze, Franziska; Bartholomäus, Sebastian; Meyer, Martin; Kieschke, Joachim; Maaser, Kerstin; Langner, Ingo, 2020: [Anreicherung der GKV-Routinedaten verschiedener Kassen mit der versichertenbezogenen Todesursache über Abgleiche mit drei Krebsregistern. Poster](#), Zugang, Qualität und Effizienz: Gesundheitsversorgung international vergleichen und verbessern. 19. Deutscher Kongress für Versorgungsforschung, Deutsches Netzwerk Versorgungsforschung e.V. (DNVF), digital, Germany, 30.09.2020, [Download PDF](#), [Link](#) (Date: 30.09.2020)

Czwikla, Jonas; Haug, Ulrike; Minnerup, Heike; Heidinger, Oliver; Rothgang, Heinz; Langner, Ingo, 2018: [Aufbau einer auf GKV-Routinedaten basierenden Datengrundlage für die Mortalitätsevaluation des Deutschen Mammographie-Screening-Programms](#), In Extremen leben - aus Extremen lernen. 13. Jahrestagung der DGEpi, Deutsche Gesellschaft für Epidemiologie (DGEpi), Bremen, Germany, 28.09.2018, [Download PDF](#)