Supplementary Information

ECAC Collaborators

Amanda B. Spurdle¹, Frederic Amant², Daniela Annibali², Katie Ashton³⁻⁵, John Attia^{3, 6}, Paul L. Auer^{7, 8}, Matthias W. Beckmann⁹, Amanda Black¹⁰, Louise Brinton¹⁰, Daniel D. Buchanan¹¹⁻¹⁴, Stephen J. Chanock¹⁵, Chu Chen¹⁶, Maxine M. Chen¹⁷, Timothy H.T. Cheng¹⁸, Linda S. Cook^{19, 20}, Marta Crous-Bous¹⁷, ²¹, Kamila Czene²², Immaculata De Vivo^{17, 21}, Joe Dennis²³, Jeroen Depreeuw^{2, 24, 25}, Thilo Dörk²⁶, Sean C. Dowdy²⁷, Alison M. Dunning²⁸, Matthias Dürst²⁹, Douglas F. Easton^{23, 28}, Arif B. Ekici³⁰, Peter A. Fasching⁹, ³¹, Brooke L. Fridley³², Christine M. Friedenreich²⁰, Montserrat García-Closas^{15, 33}, Mia M. Gaudet³⁴, Graham G. Giles^{12, 35, 36}, Dylan M. Glubb¹, Ellen L. Goode³⁷, Maggie Gorman¹⁸, Christopher A. Haiman³⁸, Per Hall^{22, 39}, Susan E. Hankinson^{21, 40}, Catherine S. Healey²⁸, Alexander Hein⁹, Peter Hillemanns²⁶, Shirley Hodgson⁴¹, Erling Hoivik^{42, 43}, Elizabeth G. Holliday^{3, 6}, David J. Hunter^{17, 44, 45}, Angela Jones¹⁸, Peter Kraft^{17,} ⁴⁴, Camilla Krakstad^{42, 43}, Diether Lambrechts^{25, 46}, Loic Le Marchand⁴⁷, Xiaolin Liang⁴⁸, Annika Lindblom^{49,} ⁵⁰, Jolanta Lissowska⁵¹, Jirong Long⁵², Lingeng Lu⁵³, Anthony M. Magliocco⁵⁴, Lynn Martin⁵⁵, Mark McEvoy⁶, Roger L. Milne^{12, 35, 36}, Miriam Mints⁵⁶, Rami Nassir⁵⁷, Irene Orlow⁴⁸, Geoffrey Otton⁵⁸, Claire Palles¹⁸, Paul D.P. Pharoah^{23, 28}, Loreall Pooler³⁸, Jennifer Prescott²¹, Tony Proietto⁵⁸, Timothy R. Rebbeck^{59, 60}, Stefan P. Renner⁶¹, Harvey A. Risch⁵³, Matthias Rübner⁶¹, Ingo Runnebaum²⁹, Carlotta Sacerdote^{62, 63}, Gloria E. Sarto⁶⁴, Fredrick Schumacher⁶⁵, Rodney J. Scott^{3, 5, 66}, V. Wendy Setiawan³⁸, Mitul Shah²⁸, Xin Sheng³⁸, Xiao-Ou Shu⁵², Melissa C. Southey^{11, 36, 67}, Emma Tham^{49, 68}, Ian Tomlinson^{18, 55}, Jone Trovik^{42, 43}, Constance Turman¹⁷, David Van Den Berg³⁸, Adriaan Vanderstichele⁶⁹, Zhaoming Wang¹⁰, Penelope M. Webb⁷⁰, Nicolas Wentzensen¹⁰, Stacey J. Winham⁷¹, Lucy Xia³⁸, Yong-Bing Xiang⁷², Hannah P. Yang¹⁰, Herbert Yu⁴⁷, Wei Zheng⁵²

¹ Department of Genetics and Computational Biology, QIMR Berghofer Medical Research Institute, Brisbane, Queensland, Australia.

² Department of Obstetrics and Gynecology, Division of Gynecologic Oncology, University Hospitals KU Leuven, University of Leuven, Leuven, Belgium.

³ Hunter Medical Research Institute, John Hunter Hospital, Newcastle, New South Wales, Australia.

⁴ Centre for Information Based Medicine, University of Newcastle, Callaghan, New South Wales, Australia.

⁵ Discipline of Medical Genetics, School of Biomedical Sciences and Pharmacy, Faculty of Health, University of Newcastle, Callaghan, New South Wales, Australia.

⁶ Centre for Clinical Epidemiology and Biostatistics, School of Medicine and Public Health, University of Newcastle, Callaghan, New South Wales, Australia.

⁷ Cancer Prevention Program, Fred Hutchinson Cancer Research Center, Seattle, WA, USA.

⁸ Zilber School of Public Health, University of Wisconsin-Milwaukee, Milwaukee, WI, USA.

⁹ Department of Gynecology and Obstetrics, Comprehensive Cancer Center ER-EMN, University Hospital Erlangen, Friedrich-Alexander-University Erlangen-Nuremberg, Erlangen, Germany.

¹⁰ Division of Cancer Epidemiology and Genetics, National Cancer Institute, Bethesda, MD, USA.

¹¹ Department of Clinical Pathology, The University of Melbourne, Melbourne, Victoria, Australia.

¹² Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne, Melbourne, Victoria, Australia.

¹³ Genomic Medicine and Family Cancer Clinic, Royal Melbourne Hospital, Parkville, Victoria, Australia.

- ¹⁴ University of Melbourne Centre for Cancer Research, Victorian Comprehensive Cancer Centre, Parkville, Victoria, Australia.
- ¹⁵ Division of Cancer Epidemiology and Genetics, National Cancer Institute, National Institutes of Health, Department of Health and Human Services, Bethesda, MD, USA.
- ¹⁶ Epidemiology Program, Fred Hutchinson Cancer Research Center, Seattle, WA, USA.
- ¹⁷ Department of Epidemiology, Harvard T.H. Chan School of Public Health, Boston, MA, USA.
- ¹⁸ Wellcome Trust Centre for Human Genetics and Oxford NIHR Biomedical Research Centre, University of Oxford, Oxford, UK.
- ¹⁹ University of New Mexico Health Sciences Center, University of New Mexico, Albuquerque, NM, USA.
- ²⁰ Department of Cancer Epidemiology and Prevention Research, Alberta Health Services, Calgary, AB, Canada.
- ²¹ Channing Division of Network Medicine, Department of Medicine, Brigham and Women's Hospital and Harvard Medical School, Boston, MA, USA.
- ²² Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden.
- ²³ Centre for Cancer Genetic Epidemiology, Department of Public Health and Primary Care, University of Cambridge, Cambridge, UK.
- ²⁴ Vesalius Research Center, VIB, Leuven, Belgium.
- ²⁵ Laboratory for Translational Genetics, Department of Human Genetics, University of Leuven, Leuven, Belgium.
- ²⁶ Gynaecology Research Unit, Hannover Medical School, Hannover, Germany.
- ²⁷ Department of Obstetrics and Gynecology, Division of Gynecologic Oncology, Mayo Clinic, Rochester, MN, USA.
- ²⁸ Centre for Cancer Genetic Epidemiology, Department of Oncology, University of Cambridge, Cambridge, UK.
- ²⁹ Department of Gynaecology, Jena University Hospital Friedrich Schiller University, Jena, Germany.
- ³⁰ Institute of Human Genetics, University Hospital Erlangen, Friedrich-Alexander University Erlangen-Nuremberg, Comprehensive Cancer Center Erlangen-EMN, Erlangen, Germany.
- ³¹ David Geffen School of Medicine, Department of Medicine Division of Hematology and Oncology, University of California at Los Angeles, Los Angeles, CA, USA.
- ³² Department of Biostatistics, Kansas University Medical Center, Kansas City, KS, USA.
- ³³ Division of Genetics and Epidemiology, Institute of Cancer Research, London, UK.
- ³⁴ Behavioral and Epidemiology Research Group, American Cancer Society, Atlanta, GA, USA.
- ³⁵ Cancer Epidemiology Division, Cancer Council Victoria, Melbourne, Victoria, Australia.
- ³⁶ Precision Medicine, School of Clinical Sciences at Monash Health, Monash University, Clayton, Victoria, Australia.
- ³⁷ Department of Health Science Research, Division of Epidemiology, Mayo Clinic, Rochester, MN, USA.
- ³⁸ Department of Preventive Medicine, Keck School of Medicine, University of Southern California, Los Angeles, CA, USA.
- ³⁹ Department of Oncology, Södersjukhuset, Stockholm, Sweden.
- ⁴⁰ Department of Biostatistics & Epidemiology, University of Massachusetts, Amherst, Amherst, MA, USA.
- ⁴¹ Department of Clinical Genetics, St George's, University of London, London, UK.
- ⁴² Centre for Cancer Biomarkers CCBIO, Department of Clinical Science, University of Bergen, Bergen, Norway.
- ⁴³ Department of Obstetrics and Gynecology, Haukeland University Hospital, Bergen, Norway.
- ⁴⁴ Program in Genetic Epidemiology and Statistical Genetics, Harvard T.H. Chan School of Public Health, Boston, MA, USA.
- ⁴⁵ Nuffield Department of Population Health, University of Oxford, Oxford, UK.

- ⁴⁶ VIB Center for Cancer Biology, Leuven, Belgium.
- ⁴⁷ Epidemiology Program, University of Hawaii Cancer Center, Honolulu, HI, USA.
- ⁴⁸ Department of Epidemiology and Biostatistics, Memorial Sloan-Kettering Cancer Center, New York, NY, USA.
- ⁴⁹ Department of Molecular Medicine and Surgery, Karolinska Institutet, Stockholm, Sweden.
- ⁵⁰ Department of Clinical Genetics, Karolinska University Hospital, Stockholm, Sweden.
- ⁵¹ Department of Cancer Epidemiology and Prevention, M. Sklodowska-Curie Cancer Center, Oncology Institute, Warsaw, Poland.
- ⁵² Division of Epidemiology, Department of Medicine, Vanderbilt Epidemiology Center, Vanderbilt-Ingram Cancer Center, Vanderbilt University School of Medicine, Nashville, TN, USA.
- ⁵³ Chronic Disease Epidemiology, Yale School of Medicine, New Haven, CT, USA.
- ⁵⁴ Department of Anatomic Pathology, Moffitt Cancer Center & Research Institute, Tampa, FL, USA.
- ⁵⁵ Institute of Cancer and Genomic Sciences, University of Birmingham, Birmingham, UK.
- ⁵⁶ Department of Women's and Children's Health, Karolinska Institutet, Stockholm, Sweden.
- ⁵⁷ Department of Biochemistry and Molecular Medicine, University of California Davis, Davis, CA, USA.
- ⁵⁸ School of Medicine and Public Health, University of Newcastle, Callaghan, New South Wales, Australia.
- ⁵⁹ Harvard T.H. Chan School of Public Health, Boston, MA, USA.
- ⁶⁰ Dana-Farber Cancer Institute, Boston, MA, USA.
- ⁶¹ Department of Gynaecology and Obstetrics, University Hospital Erlangen, Friedrich-Alexander University Erlangen-Nuremberg, Comprehensive Cancer Center Erlangen-EMN, Erlangen, Germany.
- ⁶² Center for Cancer Prevention (CPO-Peimonte), Turin, Italy.
- ⁶³ Human Genetics Foundation (HuGeF), Turino, Italy.
- ⁶⁴ Department of Obstetrics and Gynecology, School of Medicine and Public Health, University of Wisconsin, Madison, WI, USA.
- ⁶⁵ Department of Population and Quantitative Health Sciences, Case Western Reserve University, Cleveland, OH, USA.
- ⁶⁶ Division of Molecular Medicine, Pathology North, John Hunter Hospital, Newcastle, New South Wales, Australia.
- ⁶⁷ Cancer Epidemiology Division, Cancer Council Victoria, Melbourne, Victoria, Australia.
- ⁶⁸ Clinical Genetics, Karolinska Institutet, Stockholm, Sweden.
- ⁶⁹ Division of Gynecologic Oncology, Department of Obstetrics and Gynaecology and Leuven Cancer Institute, University Hospitals Leuven, Leuven, Belgium.
- ⁷⁰ Population Health Department, QIMR Berghofer Medical Research Institute, Brisbane, Queensland, Australia.
- ⁷¹ Department of Health Science Research, Division of Biomedical Statistics and Informatics, Mayo Clinic, Rochester, MN, USA.
- ⁷² State Key Laboratory of Oncogene and Related Genes & Department of Epidemiology, Shanghai Cancer Institute, Renji Hospital, Shanghai Jiaotong University School of Medicine, Shanghai, China.