

UC San Diego

UC San Diego Previously Published Works

Title

Author Correction: Germline variation at 8q24 and prostate cancer risk in men of European ancestry

Permalink

<https://escholarship.org/uc/item/7tj1c8hk>

Journal

Nature Communications, 10(1)

ISSN

2041-1723

Authors

Matejcic, Marco
Saunders, Edward J
Dadaev, Tokhir
et al.

Publication Date

2019

DOI

10.1038/s41467-019-08293-z

Peer reviewed

<https://doi.org/10.1038/s41467-019-08293-z>

OPEN

Author Correction: Germline variation at 8q24 and prostate cancer risk in men of European ancestry

Marco Matejic¹, Edward J. Saunders et al.[#]

Correction to: *Nature Communications*; <https://doi.org/10.1038/s41467-018-06863-1>, published online 5 November 2018.

The original version of this Article contained an error in the spelling of the author Manuela Gago-Dominguez, which was incorrectly given as Manuela G. Dominguez. This has now been corrected in both the PDF and HTML versions of the Article.

Published online: 17 January 2019



Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit <http://creativecommons.org/licenses/by/4.0/>.

© The Author(s) 2019

Correspondence and requests for materials should be addressed to C.A.H. (email: Christopher.Haiman@med.usc.edu). [#]A full list of authors and their affiliations appears at the end of the paper.

Marco Matejic¹, Edward J. Saunders², Tokhir Dadaev², Mark N. Brook², Kan Wang¹, Xin Sheng¹, Ali Amin Al Olama^{3,4}, Fredrick R. Schumacher^{5,6}, Sue A. Ingles¹, Koveela Govindasami², Sara Benlloch^{2,3}, Sonja I. Berndt⁷, Demetrius Albanes⁷, Stella Koutros⁷, Kenneth Muir^{8,9}, Victoria L. Stevens¹⁰, Susan M. Gapstur¹⁰, Catherine M. Tangen¹¹, Jyotsna Batra^{12,13}, Judith Clements^{12,13}, Henrik Gronberg¹⁴, Nora Pashayan^{15,16}, Johanna Schleutker^{17,18,19}, Alicja Wolk²⁰, Catharine West²¹, Lorelei Mucci²², Peter Kraft²³, Géraldine Cancel-Tassin^{24,25}, Karina D. Sorensen^{26,27}, Lovise Maehle²⁸, Eli M. Grindedal²⁸, Sara S. Strom²⁹, David E. Neal^{30,31}, Freddie C. Hamdy³², Jenny L. Donovan³³, Ruth C. Travis³⁴, Robert J. Hamilton³⁵, Barry Rosenstein^{36,37}, Yong-Jie Lu³⁸, Graham G. Giles^{39,40}, Adam S. Kibel⁴¹, Ana Vega⁴², Jeanette T. Bensen⁴³, Manolis Kogevinas^{44,45,46,47}, Kathryn L. Penney⁴⁸, Jong Y. Park⁴⁹, Janet L. Stanford^{50,51}, Cezary Cybulski⁵², Børge G. Nordestgaard^{53,54}, Hermann Brenner^{55,56,57}, Christiane Maier⁵⁸, Jeri Kim⁵⁹, Manuel R. Teixeira^{60,61}, Susan L. Neuhausen⁶², Kim De Ruyck⁶³, Azad Razack⁶⁴, Lisa F. Newcomb^{50,65}, Davor Lessel⁶⁶, Radka Kaneva⁶⁷, Nawaid Usmani^{68,69}, Frank Claessens⁷⁰, Paul A. Townsend⁷¹, Manuela Gago-Dominguez^{72,73}, Monique J. Roobol⁷⁴, Florence Menegaux⁷⁵, Kay-Tee Khaw⁷⁶, Lisa A. Cannon-Albright^{77,78}, Hardev Pandha⁷⁹, Stephen N. Thibodeau⁸⁰, Daniel J. Schaid⁸¹, The PRACTICAL Consortium Fredrik Wiklund¹⁴, Stephen J. Chanock⁷, Douglas F. Easton^{3,15}, Rosalind A. Eeles^{2,82}, Zsafia Kote-Jarai², David V. Conti¹ & Christopher A. Haiman¹

¹Department of Preventive Medicine, Keck School of Medicine, University of Southern California/Norris Comprehensive Cancer Center, Los Angeles, CA 90033, USA. ²The Institute of Cancer Research, London SW7 3RP, UK. ³Centre for Cancer Genetic Epidemiology, Department of Public Health and Primary Care, Strangeways Research Laboratory, University of Cambridge, Cambridge CB1 8RN, UK. ⁴Department of Clinical Neurosciences, University of Cambridge, Cambridge CB2 0QQ, UK. ⁵Department of Population and Quantitative Health Sciences, Case Western Reserve University, Cleveland, OH 44106-7219, USA. ⁶Seidman Cancer Center, University Hospitals, Cleveland, OH 44106, USA. ⁷Division of Cancer Epidemiology and Genetics, National Cancer Institute, NIH, Bethesda, MD 20892, USA. ⁸Institute of Population Health, University of Manchester, Manchester M13 9PL, UK. ⁹Warwick Medical School, University of Warwick, Coventry CV4 7AL, UK. ¹⁰Epidemiology Research Program, American Cancer Society, 250 Williams Street, Atlanta, GA 30303, USA. ¹¹SWOG Statistical Center, Fred Hutchinson Cancer Research Center, Seattle, WA 98109, USA. ¹²Australian Prostate Cancer Research Centre-Qld, Institute of Health and Biomedical Innovation and School of Biomedical Science, Queensland University of Technology, Brisbane, QLD 4059, Australia. ¹³Translational Research Institute, Brisbane, QLD 4102, Australia. ¹⁴Department of Medical Epidemiology and Biostatistics, Karolinska Institute, SE-171 77 Stockholm, Sweden. ¹⁵Centre for Cancer Genetic Epidemiology, Department of Oncology, Strangeways Research Laboratory, University of Cambridge, Cambridge CB1 8RN, UK. ¹⁶Department of Applied Health Research, University College London, London WC1E 7HB, UK. ¹⁷Department of Medical Biochemistry and Genetics, Institute of Biomedicine, University of Turku, FI-20014 Turku, Finland. ¹⁸Tyks Microbiology and Genetics, Department of Medical Genetics, Turku University Hospital, 20521 Turku, Finland. ¹⁹BioMediTech, University of Tampere, 33520 Tampere, Finland. ²⁰Division of Nutritional Epidemiology, Institute of Environmental Medicine, Karolinska Institutet, SE-171 77 Stockholm, Sweden. ²¹Division of Cancer Sciences, Manchester Academic Health Science Centre, Radiotherapy Related Research, Manchester NIHR Biomedical Research Centre, The Christie Hospital NHS Foundation Trust, University of Manchester, Manchester M13 9PL, UK. ²²Department of Epidemiology, Harvard School of Public Health, Boston, MA 02115, USA. ²³Program in Genetic Epidemiology and Statistical Genetics, Department of Epidemiology, Harvard T.H.Chan School of Public Health, Boston, MA 02115, USA. ²⁴GRC N°5 ONCOTYPE-URO, UPMC Univ Paris 06, Tenon Hospital, F-75020 Paris, France. ²⁵CeRePP, Tenon Hospital, F-75020 Paris, France. ²⁶Department of Molecular Medicine, Aarhus University Hospital, 8200 Aarhus N, Denmark. ²⁷Department of Clinical Medicine, Aarhus University, 8200 Aarhus N, Denmark. ²⁸Department of Medical Genetics, Oslo University Hospital, 0424 Oslo, Norway. ²⁹Department of Epidemiology, The University of Texas MD Anderson Cancer Center, Houston, TX 77030, USA. ³⁰Department of Oncology, Addenbrooke's Hospital, University of Cambridge, Cambridge CB2 0QQ, UK. ³¹Cancer Research UK Cambridge Research Institute, Li Ka Shing Centre, Cambridge CB2 0RE, UK. ³²Nuffield Department of Surgical Sciences, University of Oxford, Oxford OX1 2JD, UK. ³³School of Social and Community Medicine, University of Bristol, Canynge Hall, 39 Whatley Road, Bristol BS8 2PS, UK. ³⁴Cancer Epidemiology, Nuffield Department of Population Health, University of Oxford, Oxford OX3 7LF, UK. ³⁵Department of Surgical Oncology, Princess Margaret Cancer Centre, Toronto, ON M5G 2M9, Canada. ³⁶Department of Radiation Oncology, Icahn School of Medicine at Mount Sinai, New York, NY 10029, USA. ³⁷Department of Genetics and Genomic Sciences, Icahn School of Medicine at Mount Sinai, New York, NY 10029-5674, USA. ³⁸Centre for Molecular Oncology, Barts Cancer Institute, John Vane Science Centre, Queen Mary University of London, London EC1M 6BQ, UK. ³⁹Cancer Epidemiology and Intelligence Division, Cancer Council Victoria, Melbourne, VIC 3004, Australia. ⁴⁰Centre for Epidemiology and Biostatistics, Melbourne School of Population and Global Health, The University of Melbourne, Melbourne, VIC 3010, Australia. ⁴¹Division of Urologic Surgery, Brigham and Womens Hospital, Boston, MA 02115, USA. ⁴²Fundación Pública Galega de Medicina Xenómica-SERGAS, Grupo de Medicina Xenómica, CIBERER, IDIS, 15706 Santiago de Compostela, Spain. ⁴³Department of Epidemiology, Gillings School of Global Public Health, University of North Carolina, Columbia, SC 29208, USA. ⁴⁴Centre for Research in Environmental Epidemiology (CREAL), Barcelona Institute for Global Health (ISGlobal), 08003 Barcelona, Spain. ⁴⁵CIBER Epidemiología y Salud Pública (CIBERESP), 28029 Madrid, Spain. ⁴⁶IMIM (Hospital del Mar Research Institute), 08003 Barcelona, Spain. ⁴⁷Universitat Pompeu Fabra (UPF), 08002 Barcelona, Spain. ⁴⁸Channing Division of Network Medicine, Department of Medicine, Brigham and Women's Hospital/Harvard Medical School, Boston, MA 02184, USA. ⁴⁹Department of Cancer Epidemiology, Moffitt Cancer Center, Tampa, FL 33612, USA. ⁵⁰Division of Public Health Sciences, Fred Hutchinson Cancer Research Center, Seattle, WA 98109-1024, USA. ⁵¹Department of Epidemiology, School of Public Health, University of Washington, Seattle, WA 98195, USA. ⁵²International Hereditary Cancer Center, Department of Genetics and Pathology, Pomeranian Medical University, 70-115 Szczecin, Poland. ⁵³Faculty of Health and Medical Sciences, University of Copenhagen, 2200

Copenhagen, Denmark. ⁵⁴Department of Clinical Biochemistry, Herlev and Gentofte Hospital, Copenhagen University Hospital, Herlev, 2200 Copenhagen, Denmark. ⁵⁵Division of Clinical Epidemiology and Aging Research, German Cancer Research Center (DKFZ), D-69120 Heidelberg, Germany. ⁵⁶German Cancer Consortium (DKTK), German Cancer Research Center (DKFZ), D-69120 Heidelberg, Germany. ⁵⁷Division of Preventive Oncology, German Cancer Research Center (DKFZ) and National Center for Tumor Diseases (NCT), 69120 Heidelberg, Germany. ⁵⁸Institute for Human Genetics, University Hospital Ulm, 89075 Ulm, Germany. ⁵⁹Department of Genitourinary Medical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX 77030, USA. ⁶⁰Department of Genetics, Portuguese Oncology Institute of Porto, 4200-072 Porto, Portugal. ⁶¹Biomedical Sciences Institute (ICBAS), University of Porto, 4050-313 Porto, Portugal. ⁶²Department of Population Sciences, Beckman Research Institute of the City of Hope, Duarte, CA 91010, USA. ⁶³Faculty of Medicine and Health Sciences, Basic Medical Sciences, Ghent University, B-9000 Gent, Belgium. ⁶⁴Faculty of Medicine, Department of Surgery, University of Malaya, 50603 Kuala Lumpur, Malaysia. ⁶⁵Department of Urology, University of Washington, Seattle, WA 98195, USA. ⁶⁶Institute of Human Genetics, University Medical Center Hamburg-Eppendorf, D-20246 Hamburg, Germany. ⁶⁷Molecular Medicine Center, Department of Medical Chemistry and Biochemistry, Medical University of Sofia, 1431 Sofia, Bulgaria. ⁶⁸Department of Oncology, Cross Cancer Institute, University of Alberta, Edmonton, AB T6G 1Z2, Canada. ⁶⁹Division of Radiation Oncology, Cross Cancer Institute, Edmonton, AB T6G 1Z2, Canada. ⁷⁰Molecular Endocrinology Laboratory, Department of Cellular and Molecular Medicine, KU Leuven, BE-3000 Leuven, Belgium. ⁷¹Manchester Cancer Research Centre, Faculty of Biology Medicine and Health, Manchester Academic Health Science Centre, NIHR Manchester Biomedical Research Centre, Health Innovation Manchester, University of Manchester, Manchester M13 9WL, UK. ⁷²Genomic Medicine Group, Galician Foundation of Genomic Medicine, Instituto de Investigacion Sanitaria de Santiago de Compostela (IDIS), Complejo Hospitalario Universitario de Santiago, Servicio Galego de Saúde, SERGAS, 15706 Santiago de Compostela, Spain. ⁷³Moore's Cancer Center, University of California San Diego, La Jolla, CA 92037, USA. ⁷⁴Department of Urology, Erasmus University Medical Center, 3015 CE Rotterdam, The Netherlands. ⁷⁵Cancer and Environment Group, Center for Research in Epidemiology and Population Health (CESP), INSERM, University Paris-Sud, University Paris-Saclay, 94807 Villejuif Cédex, France. ⁷⁶Clinical Gerontology Unit, University of Cambridge, Cambridge CB2 2QQ, UK. ⁷⁷Division of Genetic Epidemiology, Department of Medicine, University of Utah School of Medicine, Salt Lake City, UT 84112, USA. ⁷⁸George E. Wahlen Department of Veterans Affairs Medical Center, Salt Lake City, UT 84148, USA. ⁷⁹The University of Surrey, Guildford, Surrey GU2 7XH, UK. ⁸⁰Department of Laboratory Medicine and Pathology, Mayo Clinic, Rochester, MN 55905, USA. ⁸¹Division of Biomedical Statistics and Informatics, Mayo Clinic, Rochester, MN 55905, USA. ⁸²Royal Marsden NHS Foundation Trust, London SW3 6JJ, UK. These authors contributed equally: Marco Matejic, Edward J. Saunders. These authors jointly supervised this work: Rosalind A. Eeles, Zsafia Kote-Jarai, David V. Conti, Christopher A. Haiman. A full list of authors and their affiliations appears at the end of the paper. The original article can be found online at <https://doi.org/10.1038/s41467-018-06863-1>.

The PRACTICAL Consortium

Brian E. Henderson¹, Mariana C. Stern¹, Alison Thwaites², Michelle Guy², Ian Whitmore², Angela Morgan², Cyril Fisher², Steve Hazel², Naomi Livni², Margaret Cook³, Laura Fachal^{3,4,2}, Stephanie Weinstein⁷, Laura E. Beane Freeman⁷, Robert N. Hoover⁷, Mitchell J. Machiela⁷, Artitaya Lophatananon^{8,9}, Brian D. Carter¹⁰, Phyllis Goodman¹¹, Leire Moya^{12,13}, Srilakshmi Srinivasan^{12,13}, Mary-Anne Kedda^{12,13}, Trina Yeadon^{12,13}, Allison Eckert^{12,13}, Martin Eklund¹⁴, Carin Cavalli-Bjoerkman¹⁴, Alison M. Dunning¹⁵, Csilla Sipeky¹⁷, Niclas Hakansson²⁰, Rebecca Elliott²¹, Hardeep Ranu²², Edward Giovannucci²², Constance Turman²³, David J. Hunter²³, Olivier Cussenot^{24,25}, Torben Falck Orntoft^{26,27}, Athene Lane³³, Sarah J. Lewis³³, Michael Davis³³, Tim J. Key³⁴, Paul Brown³⁵, Girish S. Kulkarni³⁵, Alexandre R. Zlotta³⁵, Neil E. Fleshner³⁵, Antonio Finelli³⁵, Xueying Mao³⁸, Jacek Marzec³⁸, Robert J. MacInnis^{39,40}, Roger Milne^{39,40}, John L. Hopper⁴⁰, Miguel Aguado⁴², Mariona Bustamante⁴⁴, Gemma Castaño-Vinyals^{44,45,46,47}, Esther Gracia-Lavedan^{44,45,46,47}, Lluís Cecchini⁴⁶, Meir Stampfer⁴⁸, Jing Ma⁴⁸, Thomas A. Sellers⁴⁹, Milan S. Geybels⁴⁹, Hyun Park⁴⁹, Babu Zachariah⁴⁹, Suzanne Kolb⁵⁰, Dominika Wokolorczyk⁵², Jan Lubinski⁵², Wojciech Kluzniak⁵², Sune F. Nielsen^{53,54}, Maren Weisher⁵⁴, Katarina Cuk⁵⁵, Walther Vogel⁵⁸, Manuel Luedeke⁵⁸, Christopher J. Logothetis⁵⁹, Paula Paulo⁶⁰, Marta Cardoso⁶⁰, Sofia Maia⁶⁰, Maria P. Silva⁶⁰, Linda Steele⁶², Yuan Chun Ding⁶², Gert De Meerleer⁶³, Sofie De Langhe⁶³, Hubert Thierens⁶³, Jasmine Lim⁶⁴, Meng H. Tan⁶⁴, Aik T. Ong⁶⁴, Daniel W. Lin^{50,65}, Darina Kachakova⁶⁷, Atanaska Mitkova⁶⁷, Vanio Mitev⁶⁷, Matthew Parliament^{68,69}, Guido Jenster⁷⁴, Christopher Bangma⁷⁴, F.H. Schroder⁷⁴, Thérèse Truong⁷⁵, Yves Akoli Koudou⁷⁵, Agnieszka Michael⁷⁹, Andrzej Kierzek⁷⁹, Ami Karlsson⁷⁹, Michael Broms⁷⁹, Huihai Wu⁷⁹, Claire Aukim-Hastie⁷⁹, Lori Tillmans⁸⁰, Shaun Riska⁸⁰, Shannon K. McDonnell⁸¹, David Dearnaley^{2,82}, Amanda Spurdle⁸³, Robert Gardiner^{84,85}, Vanessa Hayes⁸⁶, Lisa Butler⁸⁷, Renea Taylor⁸⁸, Melissa Papargiris⁸⁸, Pamela Saunders⁸⁹, Paula Kujala⁹⁰, Kirsi Talala⁹¹, Kimmo Taari⁹², Søren Bentzen⁹³, Belynda Hicks⁹⁴, Aurelie Vogt⁹⁴, Amy Hutchinson⁹⁵, Angela Cox⁹⁶, Anne George⁹⁷, Ants Toi⁹⁸, Andrew Evans⁹⁹, Theodorus H. van der Kwast⁹⁹, Takashi Imai¹⁰⁰, Shiro Saito¹⁰¹, Shan-Chao Zhao¹⁰², Guoping Ren¹⁰³, Yangling Zhang¹⁰³, Yongwei Yu¹⁰⁴, Yudong Wu¹⁰⁵, Ji Wu¹⁰⁶, Bo Zhou¹⁰⁷, John Pedersen¹⁰⁸,

Ramón Lobato-Busto¹⁰⁹, José Manuel Ruiz-Dominguez¹¹⁰, Lourdes Mengual^{111,112}, Antonio Alcaraz¹¹³, Julio Pow-Sang¹¹⁴, Kathleen Herkommer¹¹⁵, Aleksandrina Vlahova¹¹⁶, Tihomir Dikov¹¹⁶, Svetlana Christova¹¹⁶, Angel Carracedo^{42,117,118}, Brigitte Tretarre¹¹⁹, Xavier Rebillard¹²⁰, Claire Mulot¹²¹, Jan Adolfsson^{122,123}, Par Stattin^{124,125}, Jan-Erik Johansson¹²⁶, Richard M. Martin^{33,127,128}, Ian M. Thompson Jr.¹²⁹, Suzanne Chambers^{130,131}, Joanne Aitken^{130,131}, Lisa Horvath^{132,133}, Anne-Maree Haynes^{86,133}, Wayne Tilley¹³⁴, Gail Risbridger^{135,136}, Markus Aly^{14,137}, Tobias Nordström^{14,138}, Paul Pharoah^{3,139}, Teuvo L. J. Tammela¹⁴⁰, Teemu Murtola^{140,141}, Anssi Auvinen¹⁴², Neil Burnet¹⁴³, Gill Barnett¹⁴³, Gerald Andriole¹⁴⁴, Aleksandra Klim¹⁴⁴, Bettina F. Drake¹⁴⁴, Michael Borre^{27,145}, Sarah Kerns¹⁴⁶, Harry Ostrer¹⁴⁷, Hong-Wei Zhang¹⁴⁸, Guangwen Cao¹⁴⁸, Ji Lin¹⁴⁸, Jin Ling¹⁴⁸, Meiling Li¹⁴⁸, Ninghan Feng¹⁴⁹, Jie Li¹⁵⁰, Weiyang He¹⁵⁰, Xin Guo^{150,151}, Zan Sun¹⁵¹, Guomin Wang¹⁵², Jianming Guo¹⁵², Melissa C. Southey¹⁵³, Liesel M FitzGerald^{40,154}, Gemma Marsden^{32,155}, Antonio Gómez-Caamaño¹⁵⁶, Ana Carballo¹⁵⁶, Paula Peleteiro¹⁵⁶, Patricia Calvo¹⁵⁶, Robert Szulkin^{157,158}, Javier Llorca^{45,159}, Trinidad Dierssen-Sotos^{45,159}, Ines Gomez-Acebo^{45,159}, Hui-Yi Lin¹⁶⁰, Elaine A. Ostrander¹⁶¹, Rasmus Bisbjerg¹⁶², Peter Klarskov¹⁶², Martin Andreas Røder¹⁶³, Peter Iversen^{53,163}, Bernd Holleczeck¹⁶⁴, Christa Stegmaier¹⁶⁴, Thomas Schnoeller¹⁶⁵, Philipp Bohnert¹⁶⁵, Esther M. John^{166,167}, Piet Ost¹⁶⁸, Soo-Hwang Teo¹⁶⁹, Marija Gamulin¹⁷⁰, Tomislav Kulis¹⁷¹, Zeljko Kastelan¹⁷¹, Chavdar Slavov¹⁷², Elenko Popov¹⁷², Thomas Van den Broeck^{70,173}, Steven Joniau¹⁷³, Samantha Larkin¹⁷⁴, Jose Esteban Castelao¹⁷⁵, Maria Elena Martinez¹⁷⁶, Ron H.N. van Schaik¹⁷⁷, Jianfeng Xu¹⁷⁸, Sara Lindström¹⁷⁹, Elio Riboli¹⁸⁰, Clare Berry¹⁸⁰, Afshan Siddiq¹⁸¹, Federico Canzian¹⁸², Laurence N. Kolonel¹⁸³, Loic Le Marchand¹⁸³, Matthew Freedman¹⁸⁴, Sylvie Cenee^{75,185} & Marie Sanchez^{75,185}

⁸³Molecular Cancer Epidemiology Laboratory, QIMR Berghofer Institute of Medical Research, Herston, QLD 4006, Australia. ⁸⁴School of Medicine, University of Queensland, Herston, QLD 4006, Australia. ⁸⁵Royal Brisbane and Women's Hospital, Herston, QLD 4029, Australia. ⁸⁶The Kinghorn Cancer Centre (TKCC), Victoria, NSW 2010, Australia. ⁸⁷Prostate Cancer Research Group, South Australian Health and Medical Research Institute, Adelaide, SA 5000, Australia. ⁸⁸Department of Physiology, Biomedicine Discovery Institute, Cancer Program, Monash University, Melbourne, VIC 3800, Australia. ⁸⁹University of Adelaide, North Terrace, Adelaide, SA 5005, Australia. ⁹⁰Fimlab Laboratories, Tampere University Hospital, FI-33520 Tampere, Finland. ⁹¹Finnish Cancer Registry, FI-00130 Helsinki, Finland. ⁹²Department of Urology, Helsinki University Central Hospital and University of Helsinki, FI-00014 Helsinki, Finland. ⁹³Division of Biostatistics and Bioinformatics, University of Maryland Greenebaum Cancer Center, and Department of Epidemiology and Public Health, University of Maryland School of Medicine, Baltimore, MD 21201, USA. ⁹⁴Cancer Genomics Research Laboratory (CGR), Division of Cancer Epidemiology and Genetics, FNLRC Leidos Biomedical Research, National Cancer Institute, Frederick, MD 21701, USA. ⁹⁵Division of Cancer Epidemiology and Genetics, DNA Extraction and Staging Laboratory (DESL), Cancer Genomics Research Laboratory (CGR), FNLRC Leidos Biomedical Research, National Cancer Institute, Frederick, MD 21701, USA. ⁹⁶Sheffield Institute for Nucleic Acids, University of Sheffield, Sheffield S10 2TN, UK. ⁹⁷Cambridge Cancer Trials Centre, Cambridge Clinical Trials Unit-Cancer Theme, Cambridge University Hospitals NHS Foundation Trust, Cambridge CB2 0QQ, UK. ⁹⁸Department of Medical Imaging, University Health Network, Toronto, ON M5G 2C4, Canada. ⁹⁹Department of Pathology, University Health Network, Toronto, ON M5G 2C4, Canada. ¹⁰⁰Advanced Radiation Biology Research Program, Research Center for Charged Particle Therapy, National Institute of Radiological Sciences, Chiba 263-8555, Japan. ¹⁰¹Department of Urology, National Hospital Organization Tokyo Medical Center, Tokyo 152-8902, Japan. ¹⁰²Department of Urology, Nanfang Hospital, Southern Medical University, 510515 Guangzhou, China. ¹⁰³Department of Pathology, The First Affiliated Hospital, Zhejiang University Medical College, 310009 Hangzhou, China. ¹⁰⁴Department of Pathology, Changhai Hospital, The Second Military Medical University, 200433 Shanghai, China. ¹⁰⁵Department of Urology, First Affiliated Hospital, Medical College, Zhengzhou University, 450003 Zhengzhou, China. ¹⁰⁶Department of Urology, North Sichuan Medical College, 637000 Nanchong, China. ¹⁰⁷Department of Nutrition Science, Shenyang Medical College, 110034 Shenyang, China. ¹⁰⁸Tissupath Pty Ltd., Melbourne, VIC 3122, Australia. ¹⁰⁹Department of Medical Physics, Complejo Hospitalario Universitario de Santiago, SERGAS, 15706 Santiago de Compostela, Spain. ¹¹⁰Urology Department, Hospital Germans Trias I Pujol, 08916 Barcelona, Spain. ¹¹¹Laboratory and Department of Urology, Hospital Clínic, Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Universitat de Barcelona, 08036 Barcelona, Spain. ¹¹²Centre de Recerca Biomèdica CELLEX, 08036 Barcelona, Spain. ¹¹³Department and Laboratory of Urology, Hospital Clínic, Institut d'Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS), Universitat de Barcelona, 08036 Barcelona, Spain. ¹¹⁴Genitourinary Program, Moffitt Cancer Center, Tampa, FL 33612, USA. ¹¹⁵Department of Urology, Klinikum rechts der Isar der Technischen Universität München, 81675 Munich, Germany. ¹¹⁶Department of General and Clinical Pathology, Alexandrovska University Hospital, Medical University, 1431 Sofia, Bulgaria. ¹¹⁷Center of Excellence in Genomic Medicine Research, King Abdulaziz University, Jeddah 2252 3270, Saudi Arabia. ¹¹⁸Grupo de Medicina Xenómica, CIBERER, CIMUS, Universidad de Santiago de Compostela, Avenida de Barcelona, 15782 Santiago de Compostela, Spain. ¹¹⁹Hérault Cancer Registry, Montpellier cedex 5, Montpellier 34298, France. ¹²⁰Urology Department, Clinique Beau Soleil, 34070 Montpellier, France. ¹²¹INSERM U1147, 75013 Paris, France. ¹²²Department of Clinical Science, Intervention and Technology, Karolinska Institutet, SE-171 77 Stockholm, Sweden. ¹²³Swedish Agency for Health Technology Assessment and Assessment of Social Services, SE-102 33 Stockholm, Sweden. ¹²⁴Department of Surgical and Perioperative Sciences, Urology and Andrology, Umeå University, SE-901 85 Umeå, Sweden. ¹²⁵Department of Surgical Sciences, Uppsala University, SE-751 85 Uppsala, Sweden. ¹²⁶Faculty of Medicine and Health, Department of Urology, Örebro University, SE-701 82 Örebro, Sweden. ¹²⁷Medical Research Council (MRC) Integrative Epidemiology Unit, University of Bristol, Bristol BS8 2BN, UK. ¹²⁸National Institute for Health Research (NIHR) Biomedical Research Centre, University of Bristol, Bristol BS8 1TH, UK. ¹²⁹Department of Urology, Cancer Therapy and Research Center, University of Texas Health Science Center at San Antonio, San Antonio, TX 78229, USA. ¹³⁰Menzies Health

Institute Queensland, Griffith University, Gold Coast, QLD 4222, Australia. ¹³¹Cancer Council Queensland, Fortitude Valley, QLD 4006, Australia. ¹³²Chris O'Brien Lifehouse (COBLH), Camperdown, Sydney, NSW 2010, Australia. ¹³³Garvan Institute of Medical Research, Sydney, NSW 2010, Australia. ¹³⁴Dame Roma Mitchell Cancer Research Centre, University of Adelaide, Adelaide, SA 5005, Australia. ¹³⁵Department of Anatomy and Developmental Biology, Biomedicine Discovery Institute, Monash University, Melbourne, VIC 3800, Australia. ¹³⁶Prostate Cancer Translational Research Program, Cancer Research Division, Peter MacCallum Cancer Centre, Melbourne, VIC 3000, Australia. ¹³⁷Department of Molecular Medicine and Surgery, Karolinska Institutet, and Department of Urology, Karolinska University Hospital, 171 76 Stockholm, Sweden. ¹³⁸Department of Clinical Sciences at Danderyd Hospital, Karolinska Institutet, 182 88 Stockholm, Sweden. ¹³⁹Cancer Genome Project, Wellcome Trust Sanger Institute, Hinxton, Cambridge CB10 1SA, UK. ¹⁴⁰Department of Urology, Tampere University Hospital, University of Tampere, Kalevantie 4, FI-33014 Tampere, Finland. ¹⁴¹Faculty of Medicine and Life Sciences, University of Tampere, FI-33014 Tampere, Finland. ¹⁴²Department of Epidemiology, School of Health Sciences, University of Tampere, FI-33014 Tampere, Finland. ¹⁴³University of Cambridge Department of Oncology, Oncology Centre, Cambridge University Hospitals NHS Foundation Trust, Cambridge CB1 8RN, UK. ¹⁴⁴Washington University School of Medicine, StLouis, MO 63110, USA. ¹⁴⁵Department of Urology, Aarhus University Hospital, 8200 Aarhus N, Denmark. ¹⁴⁶Department of Radiation Oncology, University of Rochester Medical Center, Rochester, NY 14620, USA. ¹⁴⁷Professor of Pathology and Pediatrics, Albert Einstein College of Medicine, Bronx, NY 10461, USA. ¹⁴⁸Second Military Medical University, 200433 Shanghai, China. ¹⁴⁹Wuxi Second Hospital, Nanjing Medical University, 214003 Wuxi, Jiangzhu, China. ¹⁵⁰Department of Urology, The First Affiliated Hospital, Chongqing Medical University, 200032 Chongqing, China. ¹⁵¹The People's Hospital of Liaoning Province and The People's Hospital of China Medical University, 110001 Shenyang, China. ¹⁵²Department of Urology, Zhongshan Hospital, Fudan University Medical College, 200032 Shanghai, China. ¹⁵³Precision Medicine, School and Clinical Sciences at Monash Health, Monash University, Clayton, VIC 3168, Australia. ¹⁵⁴Menzies Institute for Medical Research, University of Tasmania, Hobart, TAS 7000, Australia. ¹⁵⁵Faculty of Medical Science, John Radcliffe Hospital, University of Oxford, Oxford OX1 2JD, UK. ¹⁵⁶Department of Radiation Oncology, Complejo Hospitalario Universitario de Santiago, SERGAS, 15706 Santiago de Compostela, Spain. ¹⁵⁷Division of Family Medicine, Department of Neurobiology, Care Science and Society, Karolinska Institutet, Huddinge, SE-171 77 Stockholm, Sweden. ¹⁵⁸Scandinavian Development Services, 182 33 Danderyd, Sweden. ¹⁵⁹University of Cantabria-IDIVAL, 39005 Santander, Spain. ¹⁶⁰School of Public Health, Louisiana State University Health Sciences Center, New Orleans, LA 70112, USA. ¹⁶¹National Human Genome Research Institute, National Institutes of Health, Bethesda, MD 20892, USA. ¹⁶²Department of Urology, Herlev and Gentofte Hospital, Copenhagen University Hospital, Herlev, 2200 Copenhagen, Denmark. ¹⁶³Copenhagen Prostate Cancer Center, Department of Urology, Rigshospitalet, Copenhagen University Hospital, DK-2730 Herlev, Denmark. ¹⁶⁴Saarland Cancer Registry, 66119 Saarbrücken, Germany. ¹⁶⁵Department of Urology, University Hospital Ulm, 89075 Ulm, Germany. ¹⁶⁶Cancer Prevention Institute of California, Fremont, CA 94538, USA. ¹⁶⁷Department of Health Research and Policy (Epidemiology) and Stanford Cancer Institute, Stanford University School of Medicine, Stanford, CA 94305-5101, USA. ¹⁶⁸Department of Radiotherapy, Ghent University Hospital, B-9000 Gent, Belgium. ¹⁶⁹Cancer Research Malaysia (CRM), Outpatient Centre, Subang Jaya Medical Centre, 47500 Subang Jaya, Selangor, Malaysia. ¹⁷⁰Division of Medical Oncology, Urogenital Unit, Department of Oncology at the University Hospital Centre Zagreb, Šalata 2, 10000 Zagreb, Croatia. ¹⁷¹Department of Urology, University Hospital Center Zagreb, University of Zagreb School of Medicine, Šalata 2, 10000 Zagreb, Croatia. ¹⁷²Department of Urology and Alexandrovska University Hospital, Medical University of Sofia, 1431 Sofia, Bulgaria. ¹⁷³Department of Urology, University Hospitals Leuven, BE-, 3000 Leuven, Belgium. ¹⁷⁴Southampton General Hospital, The University of Southampton, Southampton SO16 6YD, UK. ¹⁷⁵Genetic Oncology Unit, CHUVI Hospital, Complejo Hospitalario Universitario de Vigo, Instituto de Investigación Biomédica Galicia Sur (IISGS), 36204 Vigo (Pontevedra), Spain. ¹⁷⁶Moore's Cancer Center, Department of Family Medicine and Public Health, University of California San Diego, La Jolla, CA 92093-0012, USA. ¹⁷⁷Department of Clinical Chemistry, Erasmus University Medical Center, 3015 CE Rotterdam, The Netherlands. ¹⁷⁸Program for Personalized Cancer Care, NorthShore University Health System, Evanston, IL 60201, USA. ¹⁷⁹Department of Epidemiology, University of Washington, Seattle, WA 98195, USA. ¹⁸⁰Department of Epidemiology and Biostatistics, School of Public Health, Imperial College, London SW7 2AZ, UK. ¹⁸¹Genomics England, Queen Mary University of London, Dawson Hall, Charterhouse Square, London EC1M 6BQ, UK. ¹⁸²Genomic Epidemiology Group, German Cancer Research Center (DKFZ), D-69120 Heidelberg, Germany. ¹⁸³Epidemiology Program, University of Hawaii Cancer Center, Honolulu, HI 96813, USA. ¹⁸⁴Dana-Farber Cancer Institute, Boston, MA 02215, USA. ¹⁸⁵Paris-Sud University, UMRS 1018, Cedex 94807 Villejuif, France