CanRisk Tool

The CanRisk tool is a web interface to BOADICEA, the **B**reast and **O**varian **A**nalysis of **D**isease **I**ncidence and **C**arrier **E**stimation **A**lgorithm, risk prediction model used to calculate future breast and ovarian cancer risks in women. This is the first comprehensive model that allows for reliable breast cancer risk prediction in unaffected women on the basis of mutation screening information for rare (high risk and moderate risk) breast cancer genetic susceptibility variants, common cancer genetic susceptibility variants (using polygenic risk scores), explicit family history, personal lifestyle, hormonal and reproductive risk factors, and mammographic density. This model is described in Lee et al. 2019.

The ovarian cancer risks are calculated using a separate prediction model that is based on the BOADICEA methodology, and extensions of the ovarian cancer risk model described by Jervis et al. The model includes the effects of rare pathogenic variants BRCA1, BRCA2, RAD51D, RAD51C and BRIP1. It also can use polygenic risk scores, explicit family history, personal lifestyle/hormonal/reproductive risk factors. For details see 'What information do the breast and ovarian cancer models use to determine risks?'

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The CanRisk Tool carries the CE marking and has been created and maintained by the University of Cambridge.

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Publications

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