## **Description of Additional Supplementary Files**

**Supplementary Data 1-** Proteins measured in KARMA on the Olink Explore I and II panels and % detected above limit of detection

**Supplementary Data 2-** Comparisons with human protein atlas blood data for proteins also measured in the present study

**Supplementary Data 3-** Association between Olink proteins and clinical characteristics of the KARMA women

Supplementary Data 4- cis-pQTL identified in the KARMA study.

Supplementary Data 5- Mendelian randomization results for breast cancer, using BCAC as outcome data

Supplementary Data 6- Mendelian randomization results for breast cancer risk factors