

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Overview and characteristics of the 61 DNMs from the 60 family trios enrolled in the PREGCARE study (with individual details for each step of the three-tier approach: primer locations, regions and results)

File Name: Supplementary Data 2

Description: Targeted deep-sequencing (Deep-NGS) data for the families enrolled in the PREGCARE study

File Name: Supplementary Data 3A

Description: Overview of the phasing strategy for each of the individual PREGCARE families

File Name: Supplementary Data 3B

Description: Description of the informative SNP and read count tables supporting the phasing of DNMs and parent-of-origin determination for individual PREGCARE families

File Name: Supplementary Data 4A

Description: Details of the common single nucleotide polymorphisms (SNPs) used for genotyping the members of family trios and verifying the family relationship (single-molecule Molecular Inversion Probe (smMIP) assay)

File Name: Supplementary Data 4B

Description: Sequence information of the single-molecule Molecular Inversion Probes (smMIP assay)