

**Supplementary Figure 3.** Parametric empirical Bayes (PEB) marker levels by time before diagnosis or reference date. **A)** Composite marker 1 (defined for each observation on each woman as the sum of her CA125, human epididymis protein 4 [HE4], and mesothelin levels). **B)** Composite marker 2 (similarly defined as the sum of all markers). Two cancer patients had values for composite markers 1 and 2 that were greater than 12 and were excluded from the graphs in **A** and **B. C)** Composite marker 3 (defined for each observation on each woman as the maximum of her CA125, HE4, and mesothelin levels). **D)** Composite marker 4 (similarly defined as the maximum of all markers). Three cancer patients and one control subject had values for composite markers 3 and 4 that were greater than 6 and so were excluded from the graphs in **C** and **D**.