

## Female:

Adjusted p-value <0.05: n = 0 CpGs P-value <0.05: n= 4288 CpGs P-value <0.05 &  $\Delta\beta$ > 0.1:n = 23 CpGs P-value <0.05 &  $\Delta\beta$ <-0.1: n = 55 CpGs Adjusted p-value <0.05: n = 0 CpGs P-value <0.05: n= 4186 CpGs P-value <0.05 &  $\Delta\beta$ > 0.1:n = 20 CpGs P-value <0.05 &  $\Delta\beta$ <-0.1: n = 31 CpGs DMP.P-value <0.05: n= 5 DMRs DMP.P-value <0.05 & p.value < : n= 2 DMRs DMP.P-value <0.05: n= 2 DMRs DMP.P-value <0.05 & p.value < : n=0 DMRs

## Male:

Adjusted p-value <0.05: n = 0 CpGs P-value <0.05: n= 1472 CpGs P-value <0.05 &  $\Delta\beta$ > 0.1:n = 12 CpGs P-value <0.05 &  $\Delta\beta$ <-0.1: n = 12 CpGs Adjusted p-value <0.05: n = 0 CpGs P-value <0.05: n= 1567 CpGs P-value <0.05 &  $\Delta\beta$ > 0.1:n = 11 CpGs P-value <0.05 &  $\Delta\beta$ <-0.1: n = 2 CpGs DMP.P-value <0.05: n= 2 DMRs DMP.P-value <0.05 & p.value < : n= 0 DMRs DMP.P-value <0.05: n= 1 DMRs DMP.P-value <0.05 & p.value < : n= 0 DMRs