

**Figure 1-Supplemental 1: Top Functions associated by IPA to the 229 hypermethylated genes in the aggressive cell lines.** Among the 229 genes, 116 were associated to IPA canonical functions. Column 1 indicates the top functions. Column 2 shows the  $-\log(p\text{-value})$  as horizontal histogram relative to the Fisher exact test ( $p < 0.05$  :  $-\log(0.05) = 1.3 = \text{threshold}$ ) used by IPA to classify the most representative functions. The score in column 3 corresponds to the number of genes among the 229 belonging to the associated function.

Functions	$-\log(p\text{-value})$	Score
Cell-to-cell signaling and interaction		27
Cellular assembly and organization		40
Cellular function and maintenance		41
Nervous system development and function		29
Tissue development		42
Cancer		62
Skeletal and muscular disorders		18
Tissue morphology		30
Gastrointestinal disease		50
Endocrine system disorders		26
Hepatic system disease		22
Metabolic disease		23
Cell morphology		27
Cellular development		30
Lipid metabolism		20
Small molecule biochemistry		34
Cellular movement		38