

**Metabolomics reveals novel blood plasma biomarkers associated to the BRCA1-mutated phenotype of human breast cancer**

Barbara Roig<sup>1+</sup>, Marta Rodríguez-Balada<sup>1+</sup>, Sara Samino<sup>2,3</sup>, Eric W.-F. Lam<sup>4</sup>, Sandra Guaita-Esteruelas<sup>1</sup>, Ana R. Gomes<sup>4</sup>, Xavier Correig<sup>2,3</sup>, Joan Borràs<sup>1</sup>, Oscar Yanes<sup>2,3</sup>, Josep Gumà<sup>1\*</sup>

**Supplementary Table 1. BRCA1 and BRCA2 promoter hypermethylation percentages of the breast cancer cell lines analysed by methylation MS-MILPA**

Breast cancer cell line	ME001-C2 assay		ME002-C1 assay		ME053-X1 assay							
	BRCA1	BRCA2	BRCA1	BRCA2	BRCA1.1	BRCA1.2	BRCA1.3	BRCA2.1	BRCA2.2	BRCA2.3	BRCA2.4	
MCF7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MDA-MB-231	2%	0%	3%	0%	0%	2%	2%	4%	3%	0%	0%	0%
MDA-MB-436	2%	0%	0%	0%	1%	2%	1%	6%	2%	0%	0%	0%
MDA-MB-468	3%	0%	0%	0%	0%	2%	0%	4%	0%	0%	0%	0%
HCC70	1%	0%	0%	6%	0%	3%	0%	4%	4%	1%	0%	0%

ND: No DNA available

**Supplementary Table 2.** Clinicopathological characteristics of the human breast cancer cell lines analyzed

Cell Line Name	BRCA1 Genotype	TP53 Status	Immunoprofile	Subtype	Tumour type
MCF-7	WT	WT	ER+, PgR+/-, HER2-	Luminal	Metastatic adenocarcinoma
HCC70	WT	c.743G>A	ER-, PgR-, HER2-	Basal	Ductal carcinoma
MDA-MB-231	WT	c.839G>A	ER-, PgR-, HER2-	Basal	Metastatic adenocarcinoma
MDA-MB-436	c.5396+1G>A	c.? *	ER-, PgR-, HER2-	Basal	Adenocarcinoma
MDA-MB-468	Deletion exon 12	c.818G>A	ER-, PgR-, HER2-	Basal	Metastatic Adenocarcinoma

WT, wild-type; ER, estrogen receptor; PgR, progesterone receptor, HER2, human epidermal growth factor receptor 2; \*Breast Cancer Cell line with controversial TP53 status (<http://p53.free.fr/index.html>; <http://cancer.sanger.ac.uk/cosmic>)