

## *Supplementary material*

### 1.0 Supplementary tables

To analyze the socioeconomic status (SES) by maternal years of education as an indicator (Table S1), the categorization used was: (0–9 years (low SES), 9.1–12.9 years [reference category],  $\geq 13$  years of education (high SES)).

Two-sided Fisher’s exact test was used, and a  $p$ -value  $< 0.05$  was considered statistically significant. Calculations were performed with the SPSS software package, SPSS v21 (Chicago, IL, USA).

**Table S1.** Analysis of the socioeconomic status in the study population. In (A) was compared the 3 SES levels with  $CEBPA^{POS}$  and  $CEBPA^{NEG}$  patients, and the results of association were not statistically significant ( $p=0.99$ ). In (B) were compared the 3 SES levels with the death variable (yes or not), and the results of association were not statistically significant ( $p=0.76$ ).

(A)

			CEBPA status		Total
			negative	positive	
Socioeconomic status by maternal education	9.1 - 12.9 years of study	Recuento	18	2	20
		% dentro de CEBPA status	25.0%	28.6%	25.3%
	0 - 9 years of study	Recuento	35	3	38
		% dentro de CEBPA status	48.6%	42.9%	48.1%
	more than 13 years of study	Recuento	19	2	21
		% dentro de CEBPA status	26.4%	28.6%	26.6%
Total	Recuento	72	7	79	
	% dentro de CEBPA status	100.0%	100.0%	100.0%	

**Fisher’s exact test: 0.99**

**(B)**

			Death		Total
			no	yes	
Socioeconomic status by maternal education	9.1 - 12.9 years of study	Recuento	13	7	20
		% dentro de Death	28.3%	21.2%	25.3%
	0 - 9 years of study	Recuento	22	16	38
		% dentro de Death	47.8%	48.5%	48.1%
	more than 13 years of study	Recuento	11	10	21
		% dentro de Death	23.9%	30.3%	26.6%
Total		Recuento	46	33	79
		% dentro de Death	100.0%	100.0%	100.0%

**Fisher's exact test: 0.76**

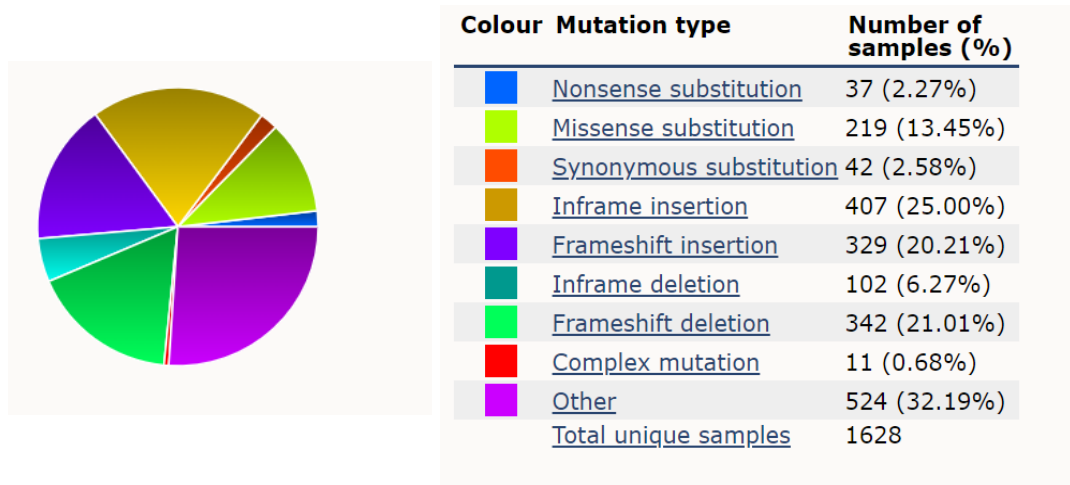
**Chi-square test: 0.71**

**Table S2.** Novel mutations of the CEBPA gene and their classification according to the ACMG criteria, in Mexican patients with pediatric AML.

Patient ID	Coding consequence	cDNA ( NM_004364)	Protein consequence	VF(%)	COSMIC ID	ACMG Varsome
M160	inframe_24	c.918_919ins24	p.Arg306_Asn307ins8	42.8	novel	Likely Pathogenic ( PM2, PM4, PM1, PP3)
M138	inframe_3	c.946_947insGGA	p.Glu316delinsGlyLys	48.2	novel	Pathogenic ( PM1, PM2, PM4, PP3)
M173	frameshift	c.180_183delGTCC	p.Ile62Thrfs*97	44.8	novel	Pathogenic (PVS1, PM2)
M173	inframe_6	c.926_932delAGACGCAinsT	p.Glu309_Gln311delinsVal	42.7	novel	Pathogenic ( PM1, PM2, PM4, PP3)
M162	frameshift	c.292delA	p.Thr98Argfs*62	94.4	novel	Likely Pathogenic (PVS1, PM2)
M132	frameshift	c.426delG	p.Arg142Serfs*18	48.7	novel	Likely Pathogenic (PVS1, PM2)
M168	inframe_3	c.334_336delCCC	p.Pro112del	1.3	novel	VUS (PM2, PM4)
M183	inframe_3	c.564_566dupGCC	p.Pro189dup	1.2	novel	VUS (PM2, PP3)

Abbreviations: VF: Variant Fraction. COSMIC: Catalogue Of Somatic Mutations In Cancer. ACMG: American College of Medical Genetics and Genomics. NM\_004364 was used for variant annotation

## 2.0 Supplementary figures



**Figure S1.** Summary of somatic mutations identified in the *CEBPA* gene across different cancers according to the COSMIC database (as of June 2022). Frameshift deletions and inframe insertions, are the most frequent mutations type, representing 46% of all kinds of mutations in *CEBPA* across different tumors. COSMIC (Catalogue Of Somatic Mutations In Cancer), (<https://cancer.sanger.ac.uk/cosmic/gene/analysis?ln=CEBPA#variants>).