**TABLE S1** Characterisation of B-ALL patients according to *CRLF2* expression

	CRLF2-low	CRLF2-high	p value	
	n (%)	n (%)	-	
Paediatric (<18 years-old)				
Median age (range)	6.2 (0.2-17)	6.1 (2-16)		
Adult (≥18 years-old)				
Median age (range)	31 (18-67)	40.5 (18-82)		
Sex			0.887	
Female	36 (36.7)	11 (33.3)		
Male	62 (63.3)	22 (66.7)		
WBC count (x10 <sup>9</sup> /L)			0.846	
Median (range)	16.5 (0.9-335.4)	16.7 (1.1-493.5)		
< 50	72 (73.5)	23 (69.7)		
≥50	26 (26.5)	10 (30.3)		
<b>CNS</b> involvement			0.503	
Yes	9 (9.6)	4 (13.8)		
No	85 (90.4)	25 (86.2)		
Glucocorticoid response*			0.333	
Good	47 (73.4)	14 (87.5)		
Poor	17 (26.6)	2 (12.5)		
Total	98 (100)	33 (100)		

CNS, Central Nervous System; WBC, white blood cell count;

Paediatric patients were treated with BFM (n=50), EsPhALL (n=2) or RELLA05 (n=32) protocols. Adult patients were treated with BFM (n=20), Hyper-CVAD (n=13), GMALL (n=2), CALB (n=1) or EWALL (n=1) protocols (n=20).

<sup>\*</sup>Prednisone or dexamethasone response, however 45 cases were excluded from this analysis due to treatment strategy (Hyper-CVAD and RELLA05); Good: <1,000 leukaemic blasts/ $\mu$ L on treatment day 7/8; Poor:  $\geq$ 1,000 leukaemic blasts/ $\mu$ L on treatment day 7/8. Statistical significance was accessed with Fisher's exact test using the RStudio software version 1.2. p values<0.05 were interpreted as significant.

**TABLE S2** Overall survival analysis of paediatric B-ALL patients.

		RELLA	05 cohort			Paedia	tric cohort		
	Univariate an	alysis	Multivariate a	nalysis		Univariate an	alysis	Multivariate a	nalysis
Variable	OS (95% CI)*	$m{p}$ value $^{\dagger}$	HR (95% CI)	$m{p}$ value $^{\dagger}$	Variable	OS (95% CI)*	$m{p}$ valu $m{e}^{\dagger}$	HR (95% CI)	$m{p}$ valu $m{e}^{\dagger}$
KMT2A-rearranged		0.064	1.0 (0.0-128.5)	1.000	Glucocorticoid response		0.015	1.8 (0.8-4.3)	0.163
Negative	67.3 (60.9-73.6)				Poor	53.0 (41.1-64.9)			
Positive	39.6 (0.0-84.5)				Good	68.2 (63.1-73.3)			
CRLF2 status		0.067	1.0 (0.0-352.4)	1.000	WBC count (x10 <sup>9</sup> /L)		<0.001	2.7 (1.2-6.2)	0.017
Low	69.3 (64.1-74.5)				< 50	67.7 (63.0-72.3)			
High	54.9 (34.3-75.5)				≥50	42.3 (25.6-59.0)			
Short isoform		<0.001	1.0 (0.0-22391.3)	1.000	BCR-ABL1		0.065	0.8 (0.3-2.0)	0.619
Low load	6.7 (6.7-6.7)				Negative	64.0 (58.1-69.9)			
High load	69.0 (63.4-74.7)				Positive	45.8 (36.4-55.3)			
CRLF2/IKZF1 status		0.067	1.0 (0.0-128.6)	1.000					
CRLF2-low/IKZF1wt	68.9 (63.0-74.8)								
$CRLF2$ -low/ $IKZF1$ del $^{4}$	-								
CRLF2-high/IKZF1wt	61.1 (41.7-80.6)								
CRLF2-high/IKZF1del	36.1 (0.0-85.9)								

CI, confidence interval. del, deleted, HR, hazard ratio; OS, overall survival, wt, wild-type.

<sup>\*</sup>Mean for survival time. †Log-rank test.

<sup>\*</sup>No statistics are computed for this group because all cases are censored.

**TABLE S3** Overall survival analysis of adult B-ALL patients.

	Univariate an	alysis	Multivariate analysis		
Variable	OS (95% CI)*	$m{p}$ valu $m{e}^{\dagger}$	HR (95% CI)	p value <sup>†</sup>	
KMT2A-rearranged		0.007	61.3 (2.1-1778.8)	0.017	
Negative	38.1 (27.2-49.1)				
Positive	4.2 (0.0-8.5)				
CRLF2 status		0.072	0.1 (0.0-5.0)	0.266	
Low	40.8 (27.9-53.7)				
High	26.5 (11.5-41.6)				
IKZF1 status		0.042	34.6 (1.7-724.6)	0.022	
Wild-type	52.0 (35.7-68.4)				
Deleted	29.6 (16.4-42.7)				
IKZF1 plus		0.007	1.2 (0.1-9.7)	0.858	
Wild-type	52.0 (35.7-68.4)				
Non-plus	8.9 (1.9-16.0)				
Plus	30.5 (12.4-48.5)				
CRLF2/IKZF1 status		0.094	0.7 (0.1-4.9)	0.724	
CRLF2-low/IKZF1wt	47.6 (32.4-62.7)				
CRLF2-low/IKZF1del	18.6 (9.9-27.3)				
CRLF2-high/IKZF1wt	9.7 (0.0-20.7)				
CRLF2-high/IKZF1del	29.7 (11.8-47.5)				
Short isoform		0.006	0.9 (0.0-33.1)	0.960	
Low load	21.0 (9.0-33.1)				
High load	49.3 (35.6-63.1)				
CRLF2/Short isoform		0.009	68.1 (0.4-11176.7)	0.105	
CRLF2-low/Low load	24.8 (9.1-40.5)				
CRLF2-low/High load	50.6 (31.6-69.7)				
CRLF2-high/Low load	8.6 (1.2-15.9)				
CRLF2-high/High load	46.9 (26.8-67.1)				

CI, confidence interval. del, deleted, HR, hazard ratio; OS, overall survival, wt, wild-type. \*Mean for survival time. †Log-rank test