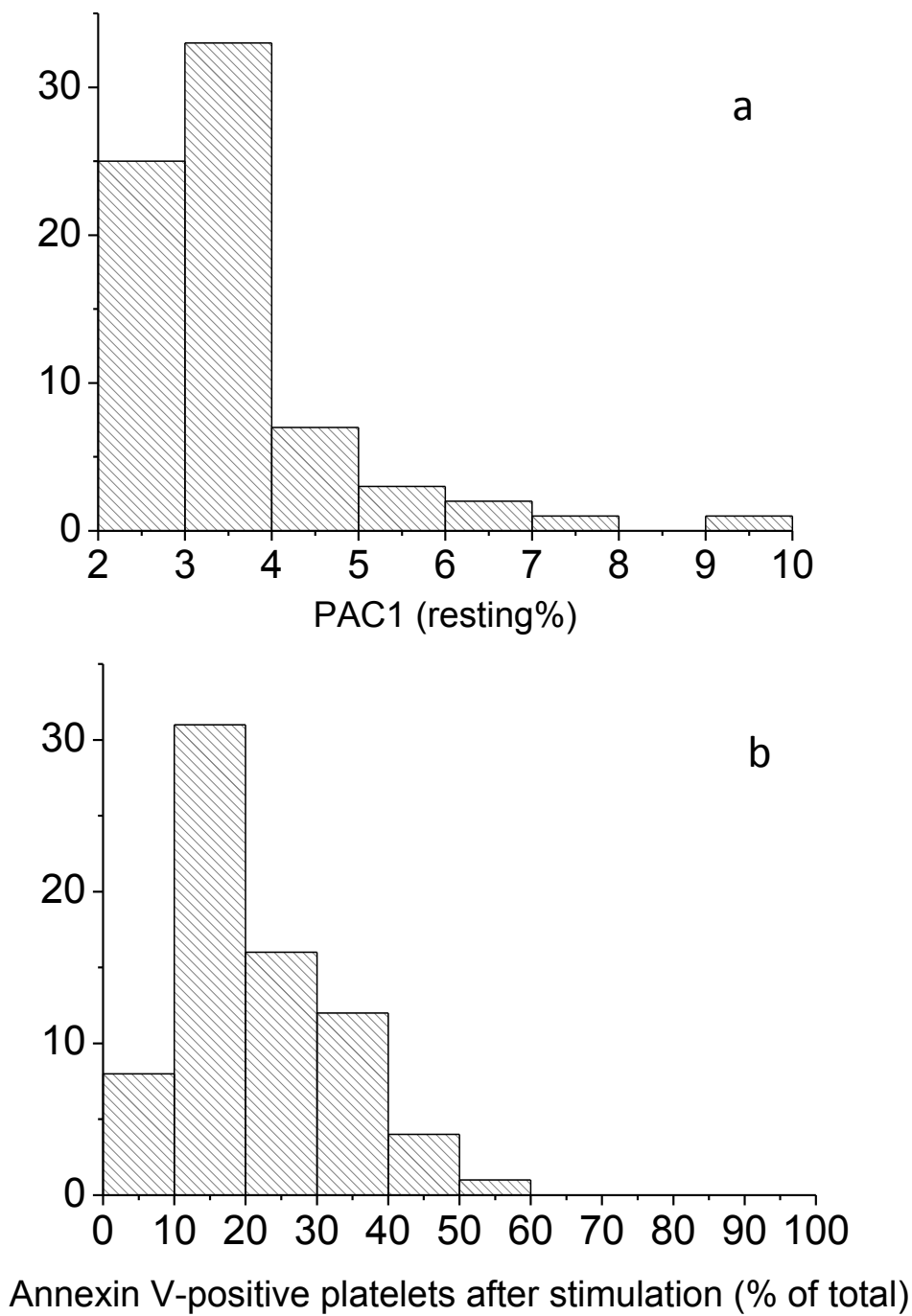


Supplementary Figure S1



Distribution of the parameters for non-activated platelets of healthy volunteers. All conditions are as in Figure 1b-i.

Supplementary Table S1. Patients.

	Diagnosis	Gender	Age, years	Platelet count, 10 ⁹ /L	Medication	
1	Glanzmann's thrombasthenia type I	f	5	321	No relevant	
2		f	2	363	No relevant	
3		f	2	229	No relevant	
4	Bernard Soulier syndrome	m	0.9	36	No relevant	
5		m	0.9	38	No relevant	
6		f	12	30	No relevant	
7	Hermansky-Pudlak syndrome	f	30	233	No relevant	
8		f	17	211	No relevant	
9	MYH-9	m	5	5	No relevant	
10		m	1	58	No relevant	
11		m	11	23	No relevant	
12	Wiskott-Aldrich syndrome	m	2	38	No relevant	
13		m	4	38	No relevant	
14		m	7	11	No relevant	
15	Term newborn (39 week of gestation)		1 day	301	No relevant	
16			1 day	420	No relevant	
17			1 day	303	No relevant	
18	Pre-term newborn (33 week of gestation)		1 day	269	No relevant	
19			1 day	283	No relevant	
20	Acute ITP	m	14	13	No relevant	
21		m	9	23	No relevant	
22		f	13	14	immunoglobulin, dexamethasone	
23	Chronic ITP children	f	3	10	glukokortikoids, immunoglobulin, rituximab	
				571	Romiplostim	
				44	Prednisolone	
24		f	14	49	Romiplostim, glukokortikoids, immunoglobulin	
				9	glukokortikoids, immunoglobulin	
25		f	14	54	Romiplostim, glukokortikoids, immunoglobulin	
26	Chronic ITP adults	f	71	34	Glucocorticoids	
				197	Romiplostim	
27		f	60	15	Prednisolone	
				32	Romiplostim	
28		f	80	15	Prednisolone	
				120	Romiplostim	
29		CLL	f	70	53	No relevant
					88	Ibrutinib (2 weeks)
30	f		53	124	No relevant	
				121	Ibrutinib (2 weeks)	
31	f		68	248	No relevant	
				118	Ibrutinib (2 weeks)	

Supplementary Table S2. Ranges and Assay Parameter Variability.

Parameter	Unit	Adult reference range (5- 95% confidence) ^a	Pediatric reference range (5-95% confidence) ^a	Coefficient of variability (CV), %	
				Inter-operator variability ^b	Intra- operator variability ^c
FSC rest	unit	77-123	64-115	0.5	0.9
FSC act	unit	43-83	37-82	4.6	1.4
SSC rest	unit	76-124	56-92	1.4	1.2
SSC act	unit	57-119	41-84	1.7	0.8
PAC-1 rest	unit	<6.0	<6.0	3.2	6.7
PAC-1 act	unit	58-142	25-92	9.6	6.7
CD42b rest	unit	74-126	74-140	5.3	0.8
CD42b act	unit	37-80	41-101	9.0	3.4
Annexin V rest	%	< 2.2	< 2,4	0.5	8.5
Annexin V act	%	6-38	4-56	1.1	7.3
Mepacrine rest	unit	73-127	44-108	5.9	4.0
Mepacrine act	unit	14-34	9-45	2.5	8.0
Dense granule index	fold	2.6-5.9	1.0-5.2		
Dense granule release	unit	50-100	10-89		
CD61 rest	unit	66-134	67-134	5.2	2.9
CD61 act	unit	189-335	139-337	6.5	1.8
CD62P rest	unit	< 6.4	< 9	8.9	5.2
CD62P act	unit	72-128	41-107	0.3	2.4

^a Reference range was determined in-house using blood from 72 healthy adult volunteers and 17 children.

^b CV values for inter-operator variability were obtained by reproducing the assay by n=3 different operators.

^c CV values for intrinsic variability were obtained by reproducing the assay in n=5 replicates using the same sample.