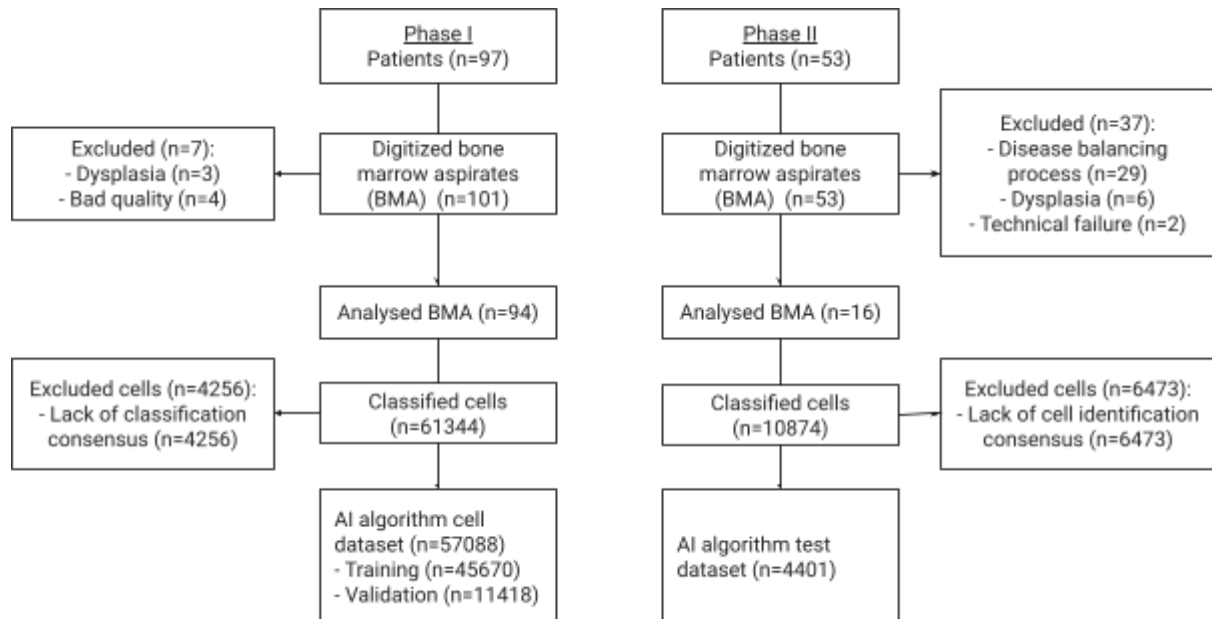


Participant Flow:



Baseline Characteristics:

		Phase I	Phase II
Age	(mean \pm std) (y)	57.56 \pm 15.71	55.5 \pm 19.89
Gender	Female	57 (60.64%)	9 (56.25%)
	Male	37 (39.36%)	7 (43.75%)
Diagnosis	Acute lymphoblastic leukaemia	6 (6.38%)	2 (12.5%)
	Acute myeloid leukaemia	20 (21.28%)	4 (25%)
	Chronic lymphocytic leukaemia	2 (2.13%)	1 (6.25%)
	Chronic myeloid leukaemia	5 (5.32%)	1 (6.25%)
	Diffuse large B cell lymphoma	4 (4.26%)	1 (6.25%)
	Follicular lymphoma	5 (5.32%)	-
	Multiple myeloma and other plasma cells dyscrasias	33 (35.11%)	5 (31.25%)
	Other lymphomas	7 (7.45%)	1 (6.25%)
	Reactive bone marrow	5 (5.32%)	-
	Other diseases	7 (7.45%)	1 (6.25%)

Table 1. Patient characteristics of both Phase I and Phase II cohorts. Note: data are numbers with percentages in parentheses or means \pm standard deviation.

Outcome Measures:

	Number of analysed samples	Number of analysed images
Phase I	94	1337
Phase II	16	249
Total	110	1586

Table 2. Number of BMA samples analysed by web platform (TeleSpot) and number of digitised bone marrow aspirate images correctly marked and tagged. In phase II, each sample was analysed by 4 haematologists: 3 of them assisted by the AI algorithm and the other performed a blind analysis.

Time/cell, (s)			Time/BMA sample (500 cells), (mm:ss)		
	Blinded	AI-assisted		Blinded	AI-assisted
Obs 1	3.0	2.7	Obs 1	25:15	22:47
Obs 2	4.0	2.8	Obs 2	33:18	23:18
Obs 3	2.8	2.5	Obs 3	23:24	20:40
Obs 4	2.9	2.5	Obs 4	23:49	20:40
Mean	3.2	2.6	Mean	26:26	21:52

Table 3. Concerning the samples analysed digitally in the web platform (TeleSpot): Comparison of the time needed to complete an analysis of a single cell (left) and a whole BMA sample (right) when the user used the AI assistance and when the analysis was performed in a blinded fashion.

Tasks	SUS score
Digitization using AdaptaSpot system (Phase I)	70
Digitization using AdaptaSpot system (Phase II)	88.425
Blind analysis using Telespot	89.375
AI assisted analysis using Telespot	81.25
Mean	82.26

Table 4. SUS scores of the different digitization and remote analysis processes. The usability of the task “Digitization using AdaptaSpot system” was measured twice (phase I and phase II), while the usability of “Blind analysis using Telespot” and “AI assisted analysis using Telespot” were measured at the end of phase I and II respectively.

	Accuracy [95% CI]	N
Blasts	82.60 [79.66, 85.54]	638
Plasma cells	58.00 [44.32, 71.68]	50
Erythroid	92.43 [90.81, 94.04]	1,030
Lymphoid	86.82 [82.69, 90.95]	258
Myeloid	98.25 [97.71, 98.79]	2,286
Monocytic	67.63 [59.85, 75.40]	139
Average	92.52 [91.75, 93.30]	4,401

Table 5. Performance of the AI algorithm for detecting and classifying cells in BMA samples when compared to the AI predictions and the consensus label among 4 experts for each cell. N: number of cells used for evaluating the performance.

Adverse Events:

There were no adverse events associated with this trial.