

Supplementary Material

Supplementary Table 1. Number of B-lines by randomisation group

Number of B-lines by costal space	LUS blind	LUS open	P-value
N.	70	69	
Anterior axillary line 3rd costal space (left)			0.67
0	63 (93%)	61 (90%)	
1	2 (3%)	1 (1%)	
2	2 (3%)	2 (3%)	
3	1 (1%)	3 (4%)	
Pleural effusion	0 (0%)	1 (1%)	
Mid axillary line 3rd costal space (left)			0.82
0	61 (87%)	60 (87%)	
1	4 (6%)	3 (4%)	
2	3 (4%)	2 (3%)	
3	2 (3%)	3 (4%)	
Pleural effusion	0 (0%)	1 (1%)	
Anterior axillary line 5th costal space (left)			0.070
0	65 (96%)	57 (84%)	
1	2 (3%)	1 (1%)	
2	1 (1%)	4 (6%)	
3	0 (0%)	3 (4%)	
Pleural effusion	0 (0%)	3 (4%)	
Mid axillary line 5th costal space (left)			0.36
0	59 (86%)	52 (75%)	
1	4 (6%)	5 (7%)	
2	1 (1%)	1 (1%)	
3	4 (6%)	9 (13%)	
4	1 (1%)	0 (0%)	
Pleural effusion	0 (0%)	2 (3%)	
Anterior axillary line 3rd costal space (right)			0.72
0	65 (93%)	62 (90%)	
1	2 (3%)	4 (6%)	
2	1 (1%)	1 (1%)	
3	1 (1%)	2 (3%)	
4	1 (1%)	0 (0%)	
Mid axillary line 3rd costal space (right)			0.28
0	63 (90%)	62 (90%)	
1	3 (4%)	5 (7%)	
2	3 (4%)	0 (0%)	
3	1 (1%)	2 (3%)	
Anterior axillary line 5th costal space (right)			0.21
0	64 (91%)	59 (86%)	
1	1 (1%)	4 (6%)	
2	2 (3%)	0 (0%)	
3	1 (1%)	4 (6%)	
Pleural effusion	2 (3%)	2 (3%)	
Mid axillary line 5th costal space (right)			0.56
0	52 (74%)	50 (72%)	
1	7 (10%)	11 (16%)	

2	2 (3%)	0 (0%)	
3	6 (9%)	6 (9%)	
4	1 (1%)	0 (0%)	
Pleural effusion	2 (3%)	2 (3%)	

Legend: LUS, lung ultrasound.

Note: Only 1 patient, in LUS blind group, presented pleural effusion without the presence of pulmonary B-lines.

Supplementary Table 2. Change in furosemide dose number of B-lines (bilaterally) and randomisation group

Furosemide dose change	<3 B-lines	≥3 B-lines
LUS blind	52	18
No change	45 (86.5%)	12 (66.7%)
Decrease	1 (1.9%)	3 (16.7%)
Increase	6 (11.5%)	3 (16.7%)
LUS open	50	19
No change	37 (74.0%)	10 (52.6%)
Decrease	10 (20.0%)	0
Increase	3 (6.0%)	9 (47.4%)

Legend: LUS, lung ultrasound.

LUS blind correlation between B-lines and diuretic changes: Spearman Rho =0.19, P =0.13.

LUS open correlation between B-lines and diuretic changes: Spearman Rho =0.30, P =0.014.

Supplementary Table 3. Heart failure medications by treatment group after LUS

HF medication	LUS blind	LUS open	P-value
N.	70	69	
ACEi/ARB			0.82
0	27 (39%)	29 (42%)	
<50%	15 (21%)	16 (23%)	
≥50%	28 (40%)	24 (35%)	
ARNi			0.93
0	55 (79%)	55 (80%)	
<50%	4 (6%)	3 (4%)	
≥50%	11 (16%)	11 (16%)	
Beta-blocker			0.63
0	6 (9%)	8 (12%)	
<50%	22 (31%)	25 (36%)	
≥50%	42 (60%)	36 (52%)	
Spironolactone	28 (40%)	38 (55%)	0.075
SGLT2i	28 (40%)	23 (33%)	0.41
Furosemide			0.34
0	30 (43%)	28 (41%)	
≤40 mg/d	23 (33%)	17 (25%)	
>40 mg/d	17 (24%)	24 (35%)	
Dose, mg/d	40 (0, 40)	40 (0, 80)	0.45
Thiazide	3 (4%)	1 (1%)	0.32

Legend: LUS, lung ultrasound; ACEi/ARB, angiotensin converting enzyme inhibitor/angiotensin receptor blocker; ARNi, angiotensin-receptor neprilysin inhibitor; SGLT2i, sodium glucose co-transporter 2 inhibitor.

Supplementary Table 4. Correlation of LUS B-lines with clinical variables

Variable	B-lines Spearman Rho *	P-value
Edema (yes)	0.42	<0.001
Rales (yes)	0.39	<0.001
Age per 1 year older	0.34	<0.001
NYHA per 1 class	0.22	0.011
eGFR per 1 ml/min lower	0.20	0.018
BNP per 1 pg/mL higher	0.13	0.14
LVEF per 1 % lower	0.06	0.53
Male sex	0.06	0.51
Weight per 1 Kg higher	0.02	0.81

Legend: LUS, lung ultrasound; eGFR, estimated glomerular filtration rate; BNP, brain natriuretic peptide; LVEF, left ventricular ejection fraction.

*Correlation Rho per each B-line increase.

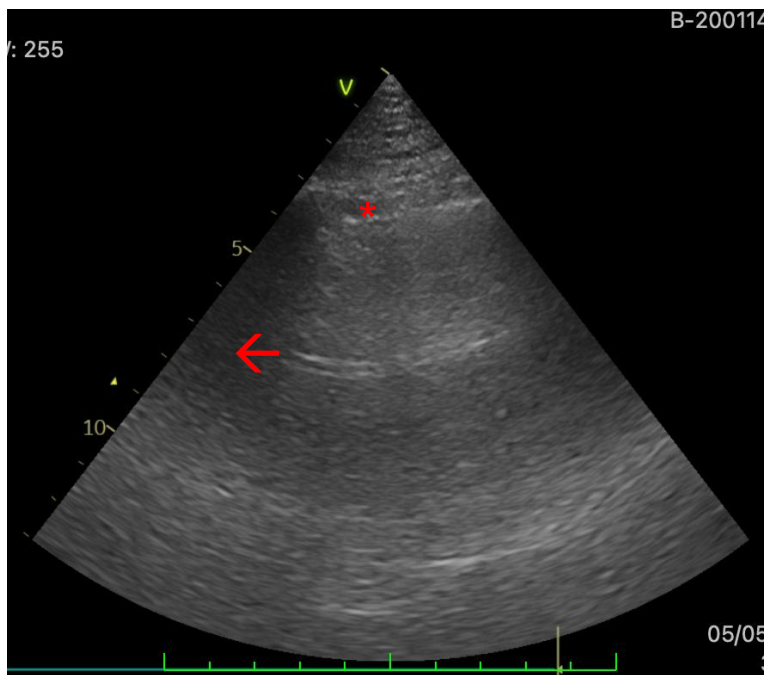
Supplementary Table 5. Association of LUS B-lines with the composite outcome*

Variable	HR (95%CI) *	P-value
B-lines ≥ 3 (vs. <3) ¹	3.03 (1.04-8.81)	0.041

*Composite outcome of time-to-first of emergency room visit or hospitalisation for worsening heart failure or death from cardiovascular causes analyzed by means of a Cox model over a median follow-up time of 161 (92-268) days.

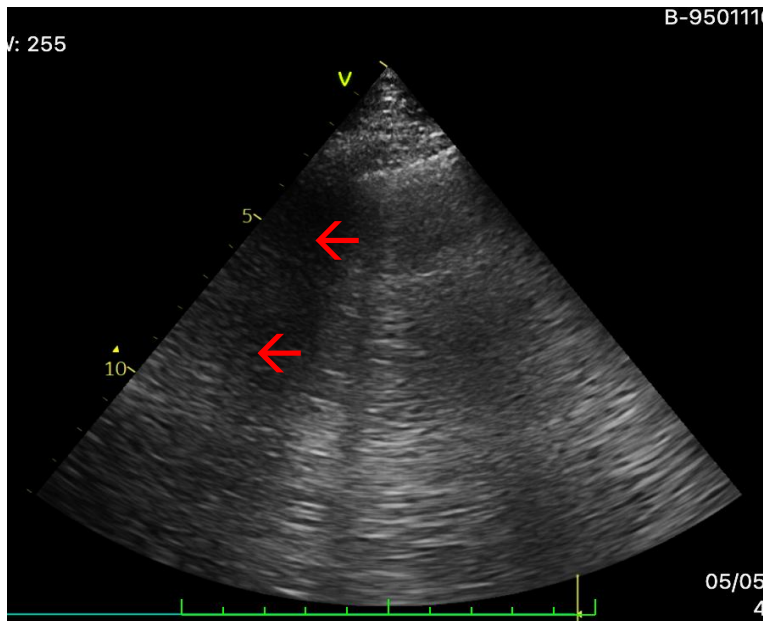
¹ Patients with <3 B-lines bilaterally (n =96) experienced 8 (8.3%) events and patients with ≥ 3 B-lines (n =37) experienced 8 (21.6%) events.

Supplementary Figure 1a. LUS normal pattern.



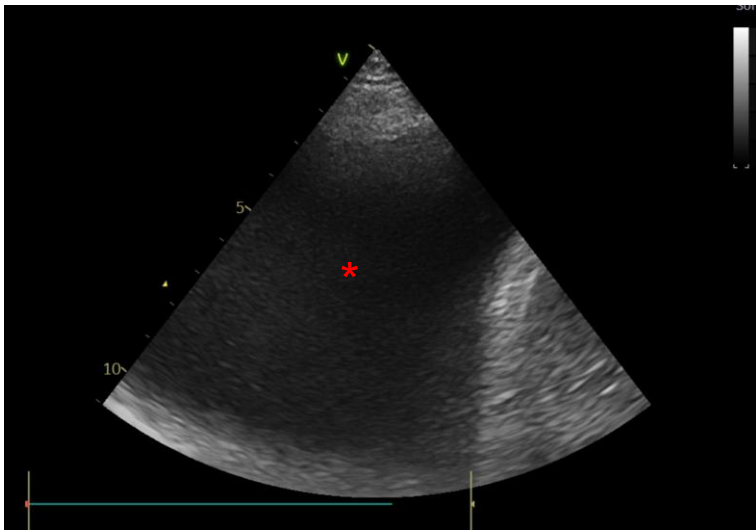
Legend: pleural line identified by a red asterisk (*) and A-lines (i.e. horizontal artifactual repetitions of the pleural line displayed at regular intervals) identified by a red arrow (→).

Supplementary Figure 2b. LUS B-lines.



Legend: B-lines (i.e. vertical hyperechoic reverberation artifacts that arise from the pleural line) identified by a red arrow (→).

Supplementary Figure 3c. LUS – pleural effusion.



Legend: pleural effusion (i.e. the anechoic space between the parietal and visceral pleura) identified by a red asterisk (*).