

Supplementary material: Table 1

Variable	PESI score
Age	Age in years
Male	10
Malignancy	30
Chronic heart failure	10
Chronic Obstructive Pulmonary disease	10
Heart rate \geq 110/min	20
Systolic blood pressure < 100 mm Hg	30
Breathing frequency > 30/min	20
Temperature < 36 °C	20
Alteration of the level of consciousness	60
Arterial oxygen saturation < 90 %	20

Supplementary table 2: clinical characteristics of patients included

Variable	Global cohort (n=684)
Clinical manifestations	
- Dyspnea	582 (85.09%)
- Palpitations	77 (11.26%)
- Angina	61 (8.92%)
- Pleuritic pain	100 (14.62%)
- Unilateral lower limb pain / edema	135 (19.74%)
- Tachycardia (> 100 bpm)	254 (37.35%)
- Arterial hypotension	79 (11.55%)
- Tachypnea (> 20 cpm)	309 (46.96%)
- Desaturation (SaO ₂ <90%)	167/667 (25.04%)
Electrocardiography	
- Sinus tachycardia	354 (51.75%)
- Negative T wave in V1-V4	110 (16.08%)
- Atrial fibrillation / flutter	59 (8.63%)
- Complete right bundle branch block	68 (9.94%)
- S1Q3T3 pattern	138 (20.18%)
Laboratory	
- Hematocrit (%)	37.4 (±6.6)
- Creatinine (mg / dL)	0.91 (0.72-1.2)
- Arterial oxygen saturation	95 (RIC 91-97)

<ul style="list-style-type: none"> - positive Troponin - positive D-dimer - positive BNP - positive NT-proBNP 	<p>312/477 (65.41%)</p> <p>207/215 (96.28%)</p> <p>41/56 (73.21%)</p> <p>126/152 (82.89%)</p>
<p>Stratification</p> <p>PESI score</p> <ul style="list-style-type: none"> - PESI Class I - PESI Class II - PESI Class III - PESI Class IV - PESI Class V <p>PESIs score \geq 1</p> <p>ESC stratification:</p> <ul style="list-style-type: none"> - Low risk - Low-risk intermediate - High-risk intermediate - High risk 	<p>107 (15.64%)</p> <p>173 (25.29%)</p> <p>178 (26.02%)</p> <p>106 (15.5%)</p> <p>120 (17.54%)</p> <p>505 (73.83%)</p> <p>164 (24.26%)</p> <p>232 (34.32%)</p> <p>178 (26.33%)</p> <p>102 (15.09%)</p>
<p>Treatment</p> <ul style="list-style-type: none"> - In hospital Anticoagulation <ul style="list-style-type: none"> Low molecular weight heparins first Unfractionated heparins first - Inferior vena cava filter - Pulmonary reperfusion <ul style="list-style-type: none"> Time to reperfusion (day) High risk reperfused Intermediate-high risk reperfused Pharmacological reperfusion Endovascular reperfusion - Hemodynamic Support <ul style="list-style-type: none"> Inotropics use Vasopressors use Ventricular assistance use - Respiratory Support <ul style="list-style-type: none"> Non-invasive ventilation Mechanical respiratory assistance 	<p>664 (97%)</p> <p>372 (56%)</p> <p>146 (22%)</p> <p>43 (6.2%)</p> <p>91 (13%)</p> <p>2 (RIC 1-5)</p> <p>50/102 (49%)</p> <p>29/178 (16%)</p> <p>76/91 (85%)</p> <p>14/91 (15%)</p> <p>73 (10.67%)</p> <p>58 (8.48%)</p> <p>17 (2.49%)</p> <p>42 (6.46%)</p> <p>75 (11.54%)</p>
<p>In hospital events</p> <ul style="list-style-type: none"> - Recurrence of PE - Heart failure - Atrial fibrillation - Infection - BARC bleeding 	<p>14 (2.05%)</p> <p>51 (7.46%)</p> <p>24 (3.51%)</p> <p>79 (11.55%)</p>

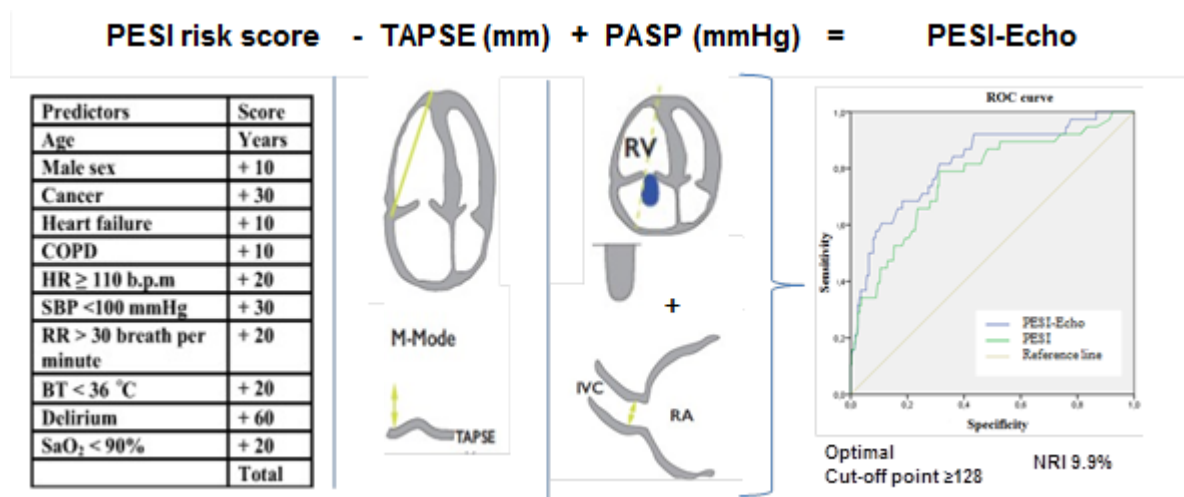
Type I – II	22 (3.22%)
Type III	25 (3.65%)
Type IV	1 (0.15%)
Type V	1 (0.15%)
- Kidney dysfunction	101 (15%)
- Death	83 (12.13%)
PE related	42/83 (50.6%)
Other non-cardiovascular causes	25/83 (30.12%)
Cardiovascular cause	13/83 (15.66%)
Bleeding	3/83 (3.62%)

PE: Pulmonary embolism; PESI: pulmonary embolism severity index; BNP: brain natriuretic peptide

Supplementary table 3. Causes of death stratified by PESI-Echo Score

Cause of death	PESI-Echo score ≥ 128	PESI-Echo score < 128
PE related	16 (51.6%)	4 (50%)
Other non-cardiovascular	5 (16.1%)	4 (50%)
Other cardiovascular	9 (29%)	0 (0%)
Bleeding	1 (3.2%)	0 (0%)
Total	31	8

Supplementary Figure 1: PESI-Echo Score



COPD: Chronic obstructive pulmonary disease. HR: Heart rate. SBP: Systolic blood pressure. RR: Respiratory rate. BT: Body temperature. PASP: pulmonary artery systolic pressure. TAPSE: tricuspid annular plane systolic excursion. RA: Right atrium. RV: Right ventricle. IVC: Inferior vena cava.