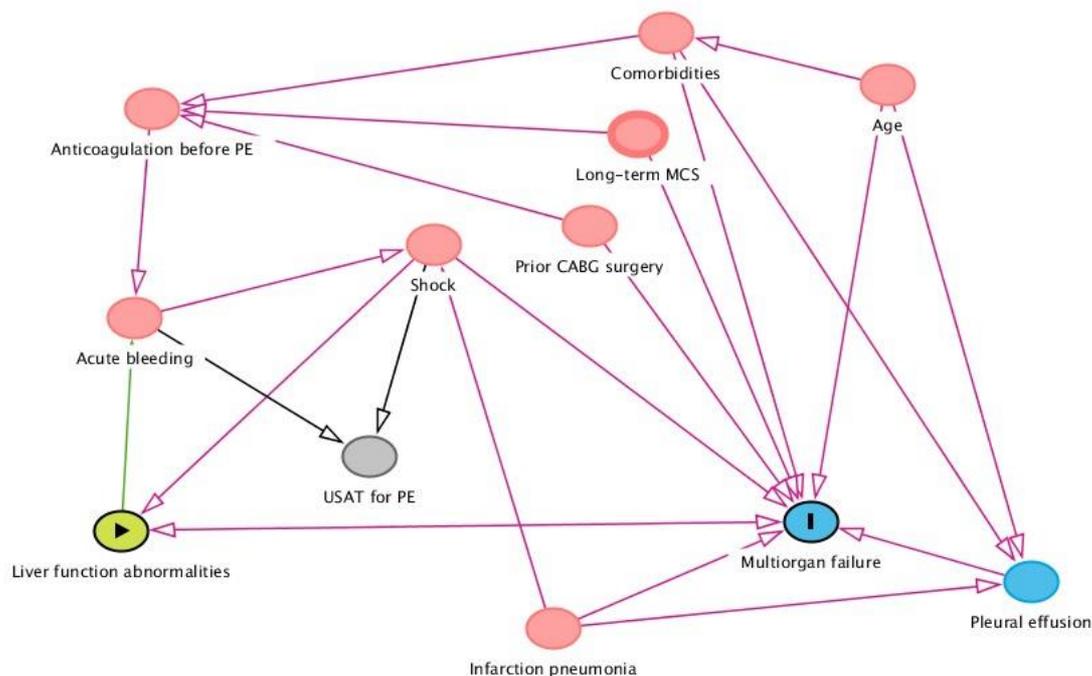


Table S1 Missing data

Variable	Number missing	Percentage missing
BNP	48	20.8
Troponin	25	9.2

Abbreviations: BNP—B-type natriuretic peptide; CVP—central venous pressure; RVSP—right ventricular systolic pressure.

Figure S1 Directed acyclic graph of covariates



Directed acyclic graph (DAG) based on the influence of liver function abnormalities on multiorgan failure. Gray consists of other outcomes, green consists of (ancestor of) exposure, blue of (ancestor of) outcome and pink of ancestor of exposure and outcome, and thus as confounder.

Comorbidities include arterial hypertension, coronary artery disease, chronic left heart failure, precerebral stenosis, chronic obstructive pulmonary disease, diabetes mellitus type 2, obesity, and chronic kidney disease.

Abbreviations: CABG—coronary artery bypass graft; MCS—Mechanical circulatory support; PE—pulmonary embolism; USAT—ultrasound assisted thrombolysis.

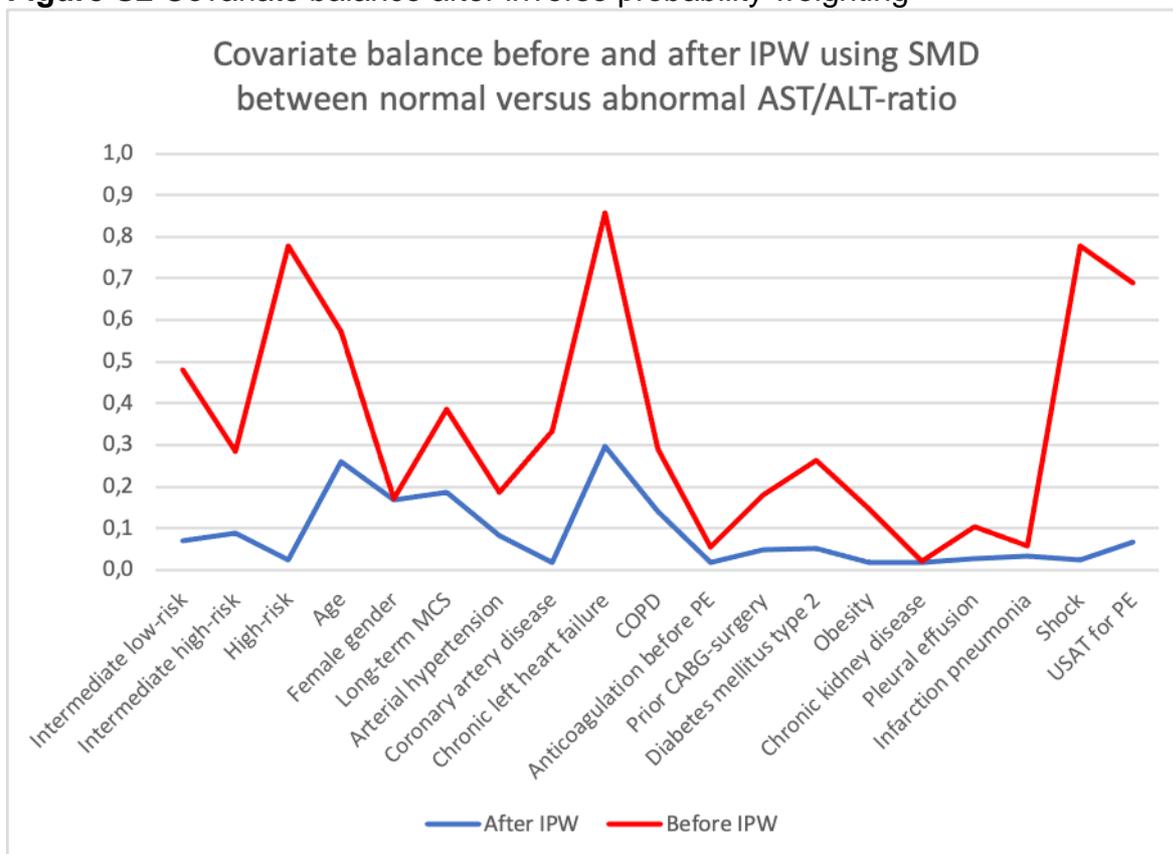
Table S2 Covariate balance after inverse probability weighting

Covariate	Normal vs. Abnormal AST/ALT-ratio	
	Weighted SMD	Unweighted SMD
Intermediate low-risk	0.071	0.411
Intermediate high-risk	0.088	0.196
High-risk	0.024	0.755
Age	0.260	0.314
Female gender	0.167	0.003
Long-term MCS	0.188	0.198
USAT for PE	0.068	0.622
Arterial hypertension	0.081	0.106
Coronary artery disease	0.019	0.316
Chronic left heart failure	0.298	0.561
COPD	0.141	0.151
Pleural effusion	0.028	0.077
Anticoagulation before PE	0.017	0.037
Prior CABG-surgery	0.048	0.132
Diabetes mellitus type 2	0.053	0.211

Obesity	0.019	0.127
Chronic kidney disease	0.019	0.001
Infarction pneumonia	0.032	0.025
Shock	0.024	0.755

Abbreviations: ALT—alanine transaminase; AST—aspartate transaminase; CABG—coronary artery bypass graft; COPD—chronic obstructive pulmonary disease; CVP—central venous pressure; LOS—length of stay; MCS—Mechanical circulatory support; PE—pulmonary embolism; RVSP—right ventricular systolic pressure; SMD—standardized mean difference; USAT—ultrasound assisted thrombolysis.

Figure S2 Covariate balance after inverse probability weighting



Abbreviations: ALT—alanine transaminase; AST—aspartate transaminase; CABG—coronary artery bypass graft; COPD—chronic obstructive pulmonary disease; CVP—central venous pressure; LOS—length of stay; MCS—Mechanical circulatory support; PE—pulmonary embolism; RVSP—right ventricular systolic pressure; SMD—standardized mean difference; USAT—ultrasound-assisted thrombolysis.