Supplementary Table S1. List of ICUs included in the Polish cohort of the VIP2 study

Szpital Wojewódzki w Bełchatowie	Bełchatów	Oddział Intensywnej Terapii
Heliodor Swiecicki Clinical Hospital at the Karol Marcinkowski Medical University in Poznan	Poznań	Anaesthesiology intensive care and pain treatment Department
University Hospital in Zielona Góra	Zielona Góra	Clinical Department od Anaesthesiology and Intensive Care
Regional Teaching Hospital	Bielsko-Biała	Department of Anaesthesiology and Intensive Care
St. John Grande Hospital	Kraków	Oddział Anestezjologii i Intensywnej Terapii
The John Paul II Hospital	Krakow	Department of Anaesthesiology and Intensive Care
Uniwersyteckie Centrum Kliniczne w Gdańsku	Gdańsk	Klinika Anestezjologii i Intensywnej Terapii
Pomeranian Medical University	Szczecin	Department of Anaesthesiology and Intensive Care
University Hospital in Cracow	Kraków	Anaesthesiology and Intensive Care Unit No. 1
Regionalne Centrum Zdrowia w Lubinie	Lubin	Oddział Anestezjologii i Intensywnej Terapii
University Clinical Centre Katowice	Katowice	Department of Anaesthesiology and Intensive Care – School of Medicine in Katowice, Medical University of Silesia
Teching Hospital No 2	Szczecin	Department Anaesthesiology Intensive Therapy and Acute Poisoning
4th Military Hospital in Wrocław	Wrocław	Anaesthesia and Intensive Care Unit
Centrum Chorób Płuc	Łódź	Oddział Anestezjologii i Intensywnej Terapii
The Dr Wł. Biegański Regional Specialist Hospital in Łódź	Łódź	Department of Anaesthesiology and Intensive Therapy – Centre for Artificial Extracorporeal Kidney and Liver Support
Central Clinical Hospital CKD - University Medical College in Lodz	Lodz	Anaesthesia and Intensive Care Clinic
First Independent Teaching Hospital No. 1	Lublin	II Department of Anaesthesiology and Intensive Care
Krakowski Szpital Specjalistyczny im. Jana Pawła II	Kraków	Thoracic Anaesthesia and Respiratory ICU
Wroclaw Medical University	Wroclaw	Department of Anaesthesiology and Intensive Therapy
Szpital św.Anny W Miechowie	Miechów	Oddział Anestezjologii i Intensywnej Terapii
University Hospital in Krakow	Krakow	ICU Skawinska
Infant Jesus Teaching Hospital	Warsaw	I Department of Anaesthesiology and Intensive Care
Regional Hospital in Bialystok	Bialystok	Department of Anaesthesiology and Intensive Care
Opole University Hospital	Opole	Department of Anaesthesiology and Intensive Care
University Hospital in Bialystok	Bialystok	Department of Anaesthesiology and Intensive Therapy
Dr Antoni Jurasz University Hospital in Bydgoszcz	Bydgoszcz	Department of Anaesthesia and Critical Care
Saint Lucas Hospital, Konskie	Konskie	Intensive Care Department

Supplementary Table S2. Summary of missing data for the outcomes and analysed predictors. There were no missing values for admission reasons, Clinical Frailty Scale, SOFA score, and length of stay.

Variable	No. (%) of missing data
ICU mortality	7 (1.8)
30-day mortality	25 (6.7)
Chronic comorbidities	2 (0.5)
Number of drugs taken daily	2 (0.5)
ADL score	102 (27.5)
IQCODE score	122 (32.9)

ADL – Activities of Daily Living, IQCODE – Informant Questionnaire on the Cognitive Decline of the Elderly

Supplementary Table S3. The multivariable logistic regression model for 30-day mortality including CFS. Number of observations $N = 345$

Characteristic	Estimate	Adjusted odds ratio (95% CI)	P-value
Intercept	–1.9	–	–
Sex:			
Male		Reference	
Female	0.01	1.01 (0.62–1.65)	0.96
Age	0.00	0.99 (0.94–1.06)	0.88
Admission reason			
Respiratory failure		Reference	
Circulatory failure	0.01	1.01 (0.43–2.38)	0.99
Respiratory/circulatory	0.60	1.83 (0.88–3.86)	0.11
failure	0.95	2.19 (0.98–5.04)	0.06
Sepsis	0.73	2.23 (0.70–7.65)	0.19
Trauma	–0.57	0.60 (0.14–2.33)	0.47
Cerebral pathology	0.23	1.51 (0.65–3.59)	0.34
Emergency surgery	–0.58	0.43 (0.14–1.26)	0.13
Other			
SOFA score	**0.18**	**1.19 (1.11–1.29)**	**< 0.01**
CFS	0.13	1.14 (0.99–1.32)	0.08
Chronic comorbidities	0.00	1.00 (0.88–1.13)	0.96
Number of drugs taken daily	0.0`	1.01 (0.93–1.10)	0.87

SOFA – Sequential Organ Failure Assessment, CFS – Clinical Frailty Scale

Supplementary Table S4. The multivariable logistic regression model for 30-day mortality including IQCODE Score. Number of observations $N = 236$

Characteristic	Estimate	Adjusted odds ratio (95% CI)	*P*-value
Intercept	−11.8	–	–
Sex			
Male		Reference	
Female	0.29	1.34 (0.72-2.51)	0.36
Age	**0.10**	**1.11 (1.02-1.21)**	**0.01**
Admission reason			
Respiratory failure		Reference	
Circulatory failure	−0.16	0.85 (0.26–2.75)	0.79
Respiratory/circulatory	0.80	2.22 (0.83–6.07)	0.11
failure	0.84	2.31 (0.85–6.43)	0.10
Sepsis	0.63	1.87 (0.48–7.61)	0.37
Trauma	−0.76	0.47 (5.59–2.71)	0.42
Cerebral pathology	0.14	1.15 (5.06–3.29)	0.79
Emergency surgery	−1.17	3.10 (6.67–1.20)	0.11
Other			
SOFA score	**0.23**	**1.26 (1.14–1.40)**	**< 0.01**
IQCODE	0.13	1.13 (0.71–1.80)	0.59
Chronic comorbidities	−0.05	0.95 (0.82–1.10)	0.53
Number of drugs taken daily	0.05	1.05 (0.94–1.10)	0.39

SOFA – Sequential Organ Failure Assessment, IQCODE – Informant Questionnaire on Cognitive Decline in the Elderly.

Supplementary Table 5. The multivariable logistic regression model for 30-day mortality including ADL Score. Number of observations $N = 253$

Characteristic	Estimate	Adjusted odds ratio (95% CI)	*P*-value
Intercept	–7.6	–	–
Sex			
Male		Reference	
Female	0.24	1.27 (0.69–2.33)	0.44
Age	0.07	1.08 (1.00–1.16)	0.06
Admission reason			
Respiratory failure	–0.61	Reference	0.30
Circulatory failure	0.51	0.54 (0.17–1.70)	0.29
Respiratory/circulatory failure	0.60	1.67 (0.65–4.31)	0.23
Sepsis	0.42	1.82 (0.69–4.93)	0.54
Trauma	–0.95	1.52 (0.40–6.02)	0.35
Cerebral pathology	0.11	0.39 (0.04–2.53)	0.83
Emergency surgery	–1.26	1.11 (0.42–3.00)	0.08
Other		0.28 (0.06–1.09)	
SOFA score	**0.23**	**1.25 (1.13–1.39)**	**< 0.01**
ADL score	–0.17	**0.84 (0.73–0.97)**	**0.02**
Chronic comorbidities	–0.08	0.93 (8.05-1.07)	0.29
Number of drugs taken daily	0.06	1.07 (9.65-1.19)	0.22

SOFA – Sequential Organ Failure Assessment, ADL – Activities of Daily Living