

Predictive model of in-hospital mortality in left-sided infective endocarditis

SUPPLEMENTARY DATA

Table 1 of the supplementary data

Comparative analysis of main features between derivation and validation samples from left-sided IE cohort 1

	Cohort 1 (n = 1002)	Derivation sample (n = 688)	Internal validation sample (n = 314)	P
Epidemiological features				
Age, y	65.1 ± 14.3	64.7 ± 14.5	66.1 ± 14	.154
Male sex	666 (67)	461 (67)	205 (65)	.593
Referred	478 (49)	320 (47)	158 (53)	.230
Origin				
Nosocomial IE	253 (25)	181 (26)	72 (23)	.248
Community IE	682 (68)	562 (67)	220 (70)	
Health care related IE	67 (7)	45 (7)	22 (7)	
Previous heart disease				
None	168 (17)	115 (17)	53 (17)	.949
Degenerative	193 (19)	119 (17)	74 (24)	.020
Prosthesis	404 (40)	278 (40)	126 (40)	.933
Late	277 (69)	190 (68)	87 (69)	.968
Early	127 (31)	88 (32)	39 (31)	
Rheumatic	91 (9)	67 (10)	24 (8)	.284
Predisposing conditions				
Unknown	499 (50)	339 (49)	160 (51)	.621
Genitourinary manipulation	32 (3)	27 (4)	5 (2)	.051
Indwelling catheter	131 (13)	96 (14)	35 (11)	.221
Previous noncardiac surgery	50 (5)	38 (6)	12 (4)	.251
Previous cardiac surgery	82 (8)	53 (8)	29 (9)	.412
Local infection	112 (11)	81 (12)	31 (10)	.376
IDUs	18 (2)	14 (2)	4 (1)	.403
HIV	13 (1)	10 (2)	3 (1)	.764
Underlying disease				
Comorbidity*	259 (26)	179 (26)	80 (26)	.856
Charlson index	4.2 ± 5.9	4.4 ± 6.9	3.9 ± 2.9	.749
Alcoholism	73 (7)	51 (8)	22 (7)	.810
Chronic anemia	221 (22)	151 (22)	70 (22)	.921
Chronic kidney disease	148 (15)	106 (15)	42 (13)	.396
Diabetes mellitus	256 (26)	182 (27)	74 (24)	.331
Cancer	115 (12)	83 (12)	32 (10)	.384
Immunosuppression	61 (6)	42 (6)	19 (6)	.969
COPD	84 (8)	57 (8)	27 (9)	.873
Connective tissue disease	39 (4)	26 (4)	13 (4)	.887
Clinical evolution				
Acute onset (< 5 d)	490 (49)	342 (50)	148 (47)	.505
Fever	811 (81)	564 (82)	247 (79)	.215
Heart failure	571 (57)	380 (55)	191 (61)	.097

<i>Renal failure</i>	415 (41)	286 (42)	129 (41)	.885
<i>Septic shock</i>	158 (16)	110 (16)	48 (15)	.777
<i>Ischemic stroke</i>	180 (18)	123 (18)	57 (18)	.916
<i>Brain hemorrhage</i>	67 (7)	43 (6)	24 (8)	.413
<i>In-hospital death</i>	301 (30)	207 (30)	94 (30)	.961
Microbiology				
<i>Positive blood cultures at admission</i>	733 (80)	495 (78)	238 (82)	.172
<i>Positive blood cultures at 48-72 h</i>	167/562 (30)	126/386 (33)	41/176 (23)	.025
<i>Streptococcus spp</i>	271 (27)	181 (26)	90 (29)	.436
<i>Streptococcus bovis</i>	55 (6)	32 (5)	23 (7)	.085
<i>Streptococci viridans</i>	159 (16)	105 (15)	54 (17)	.437
<i>Other Streptococcus</i>	58 (6)	44 (6)	14 (5)	.223
<i>Enterococcus spp</i>	130 (13)	87 (13)	43 (14)	.647
<i>Staphylococcus</i>	381 (38)	268 (39)	113 (36)	.370
Methicillin sensitive	219/355 (62)	161 (64)	58 (57)	.235
<i>Staphylococcus aureus</i>	210 (21)	148 (22)	62 (20)	.524
Coagulase-negative <i>Staphylococcus</i>	172 (17)	121 (18)	51 (16)	.600
<i>Gram-negative non HACEK bacillus</i>	48 (5)	30 (4)	18 (6)	.346
<i>Fungi</i>	16 (2)	11 (2)	5 (2)	.994
<i>HACEK group</i>	7 (1)	4 (1)	3 (1)	.684
<i>Anaerobes</i>	32 (3)	20 (3)	12 (4)	.445
<i>Polymicrobial IE</i>	49 (5)	24 (4)	25 (8)	.002
<i>Other microorganisms</i>	41 (4)	26 (4)	15 (5)	.459
<i>Negative blood cultures</i>	118 (12)	79 (12)	39 (12)	.669
Findings of imaging techniques				
<i>Vegetation</i>	870 (87)	598 (87)	272 (87)	.898
<i>Periannular complications</i>	302 (30)	208 (30)	94 (30)	.924
<i>Abscess</i>	184 (18)	126 (18)	58 (19)	.952
<i>Pseudoaneurysm</i>	165 (17)	111 (16)	54 (17)	.674
<i>Fistula</i>	34 (3)	24 (4)	10 (3)	.805
<i>Left ventricular ejection fraction < 45%</i>	78 (8)	56 (8)	22 (7)	.535
<i>Pulmonary hypertension</i>	136 (14)	90 (13)	46 (15)	.501
<i>Severe valvular/prosthesis dysfunction</i>	619 (62)	412 (60)	207 (66)	.068
Location				
<i>Native aortic valve</i>	359 (36)	234 (34)	125 (40)	.076
<i>Native mitral valve</i>	381 (38)	269 (39)	112 (36)	.300
<i>Mechanical aortic prosthesis</i>	118 (12)	83 (12)	35 (11)	.676
<i>Mechanical mitral prosthesis</i>	192 (19)	129 (19)	63 (20)	.624
<i>Biological aortic prosthesis</i>	108 (11)	71 (10)	37 (12)	.488
<i>Biological mitral prosthesis</i>	21 (2)	16 (2)	5 (2)	.452
<i>Concomitant right-sided involvement</i>	23 (2)	10 (2)	13 (4)	.021
<i>Multivalvular</i>	215 (22)	140 (20)	75 (24)	.206
Treatment				
Cardiac surgery				
<i>Urgent</i>	367 (60)	239 (59)	128 (62)	.433
<i>Elective</i>	247 (40)	169 (41)	78 (38)	
Indications				
<i>Heart failure</i>	428 (72)	274 (69)	154 (79)	.130
<i>Uncontrolled infection</i>	335 (56)	228 (57)	107 (55)	.533
<i>Prevention of embolism</i>	139 (23)	97 (24)	42 (21)	.426

Surgical risk				
<i>Logistic EuroSCORE</i>	31 [19-50]	30 [19-50]	32 [23-52]	.864
<i>EuroSCORE 2</i>	12 [5-21]	13 [5-27]	11 [5-20]	.383
Antibiotic treatment				
<i>Weeks of treatment</i>	5 [3-7]	5 [3-7]	5 [4-7]	.805
<i>Correct antibiotic treatment</i>	879 (95)	597 (94)	282 (97)	.036

COPD, chronic obstructive pulmonary disease; HACEK, *Haemophilus spp*, *Aggregatibacter spp*, *Cardiobacterium spp*, *Eikenella spp*, *Kingella spp*; HIV, human immunodeficiency virus; IDU, intravenous drug user; IE, infective endocarditis.

*Comorbidity: defined by European guidelines.

Data are expressed as No. (%), mean \pm standard deviation or median [interquartile range].