

## Supplementary Materials

**Supplementary Table 1.** Comorbidities and cardiovascular therapy along the three waves.

	FIRST wave [58]	SECOND wave [94]	THIRD wave [64]	p-value
<b>Comorbidities</b>				
Arterial hypertension [% (n)]	53.4 (31)	45.7 (43)	57.8 (37)	0.31
Dyslipidemia [% (n)]	27.6 (16)	21.3 (20)	28.1 (18)	0.54
Obesity [% (n)]	17.2 (10)	19.1 (18)	39.1 (25)	<b>0.01</b>
Diabetes mellitus [% (n)]	20.7 (12)	26.6 (25)	17.2 (11)	0.36
Coronary artery disease [% (n)]	13.8 (8)	9.6 (9)	9.4 (6)	0.66
Chronic heart failure [% (n)]	15.5 (9)	3.2 (3)	10.9 (7)	<b>0.03</b>
Atrial fibrillation [% (n)]	8.6 (5)	5.3 (5)	3.1 (2)	0.41
Chronic kidney disease [% (n)]	8.6 (5)	6.4 (6)	4.7 (3)	0.68
Chronic lung disease [% (n)]	15.5 (9)	12.8 (12)	18.8 (12)	0.59
Active cancer [% (n)]	17.2 (10)	3.2 (3)	3.1 (2)	< <b>0.01</b>
<b>Number of Comorbidities</b>				
None [% (n)]	24.1 (14)	33 (31)	18.8 (12)	0.11
One [% (n)]	19 (11)	28.7 (27)	20.3 (13)	
Two [% (n)]	22.4 (13)	12.8 (12)	26.6 (17)	
Three or more [% (n)]	34.5 (20)	25.5 (24)	34.4 (22)	
<b>Cardiovascular Therapy</b>				
Antihypertensive therapy [% (n)]	50 (29)	41.5 (39)	53.1 (34)	0.31
Antiplatelets therapy [% (n)]	15.5 (9)	19.1 (18)	14.1 (9)	0.68
Warfarin [% (n)]	1.7 (1)	2.1 (2)	3.1 (2)	0.87
Direct Oral Anticoagulants [% (n)]	5.2 (3)	1.1 (1)	0 (0)	0.08

**Supplementary Table 2.** Comorbidities and cardiovascular therapy of survived and deceased patients along the three waves.

	FIRST wave [58]			SECOND wave [94]			THIRD wave [64]			OVERALL		
	Survived [39]	Deceased [19]	p-value	Survived [61]	Deceased [33]	p-value	Survived [47]	Deceased [17]	p-value	Survived [147]	Deceased [69]	p-value
<b>Comorbidities</b>												
Arterial hypertension [% (n)]	46.2 (18)	68.4 (13)	0.11	42.6 (26)	51.5 (17)	0.41	59.6 (28)	52.9 (9)	0.64	49 (72)	56.5 (39)	0.30
Dyslipidemia [% (n)]	20.5 (8)	42.1 (8)	0.08	16.4 (10)	30.3 (10)	0.12	21.3 (10)	47.1 (8)	<b>0.04</b>	19 (28)	37.7 (26)	<b>&lt;0.01</b>
Obesity [% (n)]	15.4 (6)	21.1 (4)	0.59	16.4 (10)	24.2 (8)	0.36	42.6 (20)	29.4 (5)	0.34	24.5 (36)	24.6 (17)	0.98
Diabetes mellitus [% (n)]	17.9 (7)	26.3 (5)	0.46	23 (14)	33.3 (11)	0.28	19.1 (9)	11.8 (2)	0.49	20.4 (30)	26.1 (18)	0.35
Coronary artery disease [% (n)]	7.7 (3)	26.3 (5)	<b>0.04</b>	8.2 (5)	12.1 (4)	0.54	6.4 (3)	17.6 (3)	0.17	7.5 (11)	17.4 (12)	<b>0.03</b>
Chronic heart failure [% (n)]	7.7 (3)	31.6 (6)	<b>0.02</b>	1.6 (1)	6.1 (2)	0.24	8.5 (4)	17.6 (3)	0.30	5.4 (8)	15.9 (11)	<b>0.01</b>
Atrial fibrillation [% (n)]	7.7 (3)	10.5 (2)	0.72	8.2 (5)	0 (0)	0.09	4.3 (2)	5.9 (1)	0.79	5.4 (8)	8.7 (6)	0.37
Chronic kidney disease [% (n)]	7.7 (3)	10.5 (2)	0.72	4.9 (3)	9.1 (3)	0.43	4.3 (2)	0 (0)	0.39	6.8 (10)	2.9 (2)	0.24
Chronic lung disease [% (n)]	12.8 (5)	21.1 (4)	0.42	16.4 (10)	6.1 (2)	0.15	19.1 (9)	17.6 (3)	0.89	16.3 (24)	13 (9)	0.53
Active cancer [% (n)]	17.9 (7)	15.8 (3)	0.84	3.3 (2)	3 (1)	0.95	4.3 (2)	0 (0)	0.39	7.5 (11)	5.8 (4)	0.65
<b>Number of Comorbidities</b>												
None [% (n)]	33.3 (13)	5.3 (1)		36.1 (22)	27.3 (9)		19.1 (9)	17.6 (3)		29.9 (44)	18.8 (13)	
One [% (n)]	20.5 (8)	15.8 (3)		29.5 (18)	27.3 (9)		19.1 (9)	23.5 (4)		23.8 (35)	23.2 (16)	
Two [% (n)]	17.9 (7)	31.6 (6)		9.8 (6)	18.2 (6)		31.9 (15)	11.8 (2)		19 (28)	20.3 (14)	
Three or more [% (n)]	28.2 (11)	47.4 (9)		24.6 (15)	27.3 (9)		29.8 (14)	47.1 (8)		27.2 (40)	37.7 (26)	
<b>Cardiovascular Therapy</b>												
Antihypertensive therapy [% (n)]	43.6 (17)	63.2 (12)	0.16	37.7 (23)	48.5 (16)	0.31	51.1 (24)	58.8 (10)	0.58	43.5 (64)	55.1 (38)	0.11
Antiplatelets therapy [% (n)]	15.4 (6)	15.8 (3)	0.97	14.8 (9)	27.3 (9)	0.14	8.5 (4)	29.4 (5)	<b>0.03</b>	12.9 (19)	24.6 (17)	<b>0.03</b>
Warfarin [% (n)]	0 (0)	5.3 (1)	0.15	3.3 (2)	0 (0)	0.29	2.1 (1)	5.9 (1)	0.45	2 (3)	2.9 (2)	0.70
Direct Oral Anticoagulants [% (n)]	5.1 (2)	5.3 (1)	0.98	1.6 (1)	0 (0)	0.46	0 (0)	0 (0)	0.99	2 (3)	1.4 (1)	0.76

**Supplementary Table 3.** Comorbidities and cardiovascular therapy of patients according to age category.

	Patients ≤ 63 y.o. [96]	Patients > 63 y.o. [120]	p-value
<b>Comorbidities</b>			
Arterial hypertension [% (n)]	33.3 (32)	65.8 (79)	<b>&lt;0.01</b>
Dyslipidemia [% (n)]	10.4 (10)	36.7 (44)	<b>&lt;0.01</b>
Obesity [% (n)]	26 (25)	23.3 (28)	0.65
Diabetes mellitus [% (n)]	11.5 (11)	30.8 (37)	<b>&lt;0.01</b>
Coronary artery disease [% (n)]	1 (1)	18.3 (22)	<b>&lt;0.01</b>
Chronic heart failure [% (n)]	2.1 (2)	14.2 (17)	<b>&lt;0.01</b>
Atrial fibrillation [% (n)]	2.1 (2)	8.3 (10)	<b>0.046</b>
Chronic kidney disease [% (n)]	2.1 (2)	10 (12)	<b>0.02</b>
Chronic lung disease [% (n)]	15.5 (15)	15 (18)	0.89
Active cancer [% (n)]	7.3 (7)	6.7 (8)	0.86
<b>Number of Comorbidities</b>			
None [% (n)]	34.4 (33)	20 (24)	<b>&lt;0.01</b>
One [% (n)]	30.2 (29)	18.3 (22)	
Two [% (n)]	18.8 (18)	20 (24)	
Three or more [% (n)]	16.7 (16)	41.7 (50)	
<b>Cardiovascular Therapy</b>			
Antihypertensive therapy [% (n)]	31.3 (30)	60 (72)	<b>&lt;0.01</b>
Antiplatelets therapy [% (n)]	6.3 (6)	30 (25)	<b>&lt;0.01</b>
Warfarin [% (n)]	1 (1)	3.3 (4)	0.27
Direct Oral Anticoagulants [% (n)]	0 (0)	3.3(4)	0.07

**Supplementary Table 4.** Comorbidities and cardiovascular therapy of survived and deceased patients according to age category.

	Patients ≤ 63 y.o. [96]			Patients > 63 y.o. [120]		
	Survived [84]	Deceased [12]	p-value	Survived [61]	Deceased [33]	p-value
<b>Comorbidities</b>						
Arterial hypertension [% (n)]	32.1 (27)	41.7 (5)	0.51	71.4 (45)	59.6 (34)	0.17
Dyslipidemia [% (n)]	9.5 (8)	16.7 (2)	0.45	31.7 (20)	42.1 (24)	0.24
Obesity [% (n)]	25 (21)	33.3 (4)	0.54	23.8 (15)	22.8 (13)	0.89
Diabetes mellitus [% (n)]	10.7 (9)	16.7 (2)	0.55	33.3 (21)	28.1 (16)	0.53
Coronary artery disease [% (n)]	0 (0)	8.3 (1)	0.06	17.5 (11)	19.3 (11)	0.80
Chronic heart failure [% (n)]	1.2 (1)	8.3 (1)	0.11	11.1 (7)	17.5 (10)	0.31
Atrial fibrillation [% (n)]	2.4 (2)	0 (0)	0.59	12.7 (8)	3.5 (2)	0.07
Chronic kidney disease [% (n)]	1.2 (1)	8.3 (1)	0.11	11.1 (7)	8.8 (5)	0.67
Chronic lung disease [% (n)]	15.5 (13)	16.7 (2)	0.92	17.5 (11)	12.3 (7)	0.43
Active cancer [% (n)]	7.1 (6)	8.3 (1)	0.88	7.9 (5)	5.3 (3)	0.56
<b>Number of Comorbidities</b>						
None [% (n)]	36.9 (31)	16.7 (2)	0.31	20.6 (13)	19.3 (11)	0.86
One [% (n)]	29.8 (25)	33.3 (4)		15.9 (10)	21.1 (12)	
Two [% (n)]	19 (16)	16.7 (2)		19 (12)	21.1 (12)	
Three or more [% (n)]	14.3 (12)	33.3 (4)		44.4 (28)	38.6 (22)	
<b>Cardiovascular Therapy</b>						
Antihypertensive therapy [% (n)]	27.4 (23)	41.7 (5)	0.08	65.1 (41)	54.4 (31)	0.23
Antiplatelets therapy [% (n)]	6 (5)	8.3 (1)	0.75	22.2 (14)	28.1 (16)	0.46
Warfarin [% (n)]	1.2 (1)	0 (0)	0.70	3.2 (2)	3.5 (2)	0.92
Direct Oral Anticoagulants [% (n)]	0 (0)	0 (0)	0.99	4.8 (3)	1.8 (1)	0.36