

## Supplementary Material.

TABLE 1. Comorbidities.

Comorbidities	Total	65-74	75-85	>85	Sig
		84	83	39	
<b>NO</b>	29	17(20.2%)	9(10.8%)	3(7.7%)	0.097
<b>Hypertension</b>	123	44(52.4%)	52(62.7%)	27(69.2%)	0.162
<b>Dyslipidemia</b>	77	29(34.5%)	37(44.6%)	11(28.2%)	0.171
<b>Diabetes_ Mellitus</b>	37	7(8.3%)	19(22.9%)	11(28.2%)	0.009
<b>Ischemic heart disease</b>	28	6(7.1%)	15(18.1%)	7(17.9%)	0.081
<b>Chronic Heart failure</b>	25	12(14.3%)	10(12%)	3(7.7%)	0.581
<b>Chronic respiratory failure</b>	65	33(39.3%)	33(27.7%)	9(23.1%)	0.123
<b>Non-hematological cancer</b>	18	11(13.1%)	6(7.2%)	1(2.6%)	0.129
<b>Hematological cancer</b>	16	5(6%)	5(6%)	6(15.4%)	0.142
<b>Chronic renal failure</b>	10	6(7.1%)	1(1.2%)	3(7.7%)	0,134
<b>Immunosuppression</b>	2	1(1.2%)	1(1.2%)	0(0%)	0.790
<b>Cerebrovascular disease</b>	7	3(3.0%)	3(3.6%)	1(2.6%)	0.950
<b>Peripheral vascular disease</b>	6	0(0%)	4(4.8%)	2(5.1%)	0.119
<b>Chronic Enolism</b>	4	2(2.4%)	2(2.4%)	0(0%)	0.621
<b>Peripheral neuropathy</b>	7	5(6%)	2(2.4%)	0(0%)	0.193
<b>Central neuropathy</b>	0	0(0%)	0(0%)	0(05)	

**TABLE 2. Sepsis and Septic shock mortality by age group.**

	65-74 yrs.			75-85 yrs.			> 85 yrs.		
	SEPSIS	SEPTIC SHOCK	Chi Square	SEPSIS	SEPTIC SHOCK	Chi Square	SEPSIS	SEPTIC SHOCK	Chi Square
<b>28 days.</b>	9 (33%)	15 (26,3%)	p 0.51	7 (46,7%)	21 (31,3%)	p 0.35	4 (25,0%)	12 (52,2%)	p 0.09
<b>90 days.</b>	10 (37%)	17 (29,8%)	p 0.61	9 (60%)	23 (34,3%)	p 0.13	7 (43,8%)	12 (52,2%)	p 0.60
<b>1 year.</b>	14 (51,9%)	24 (42,1%)	p 0.40	9 (60%)	29 (43,3%)	p 0.37	9 (56,3%)	13 (56,5%)	p 0.98
<b>TOTAL PATIENTS</b>	<b>27</b>	<b>57</b>		<b>15</b>	<b>67</b>		<b>16</b>	<b>23</b>	

TABLE 3. Mortality associated to comorbidities

Comorbidities		N	28	p	90	p	Año	p
None	Yes	29	10(34.5%)	0.809	11(37.9%)	0.960	12(41.4%)	0.477
	No	117	57(32.2%)		68(38.4%)		86(48.6%)	
Hypertension	Yes	123	45(36.6%)	0.125	52(42.3%)	0.156	61(49.6%)	0.482
	No	83	22(26.5%)		27(32.5%)		37(44.6%)	
Dyslipidemia	Yes	77	18(24.7%)	0.057	<b>23(29.9%)</b>	<b>0.049</b>	31(40.3%)	0.104
	No	129	48(37.2%)		<b>56(43.4%)</b>		67(51.9%)	
Diabetes_Mellitus	Yes	37	13(35.1%)	0.710	14(37.8%)	0.944	18(48.6%)	0.886
	No	169	54(32%)		65(38.5%)		80(47.3%)	
Ischemic heart disease	Yes	28	10(35.7%)	0.700	12(42.9%)	0.600	15(53.6%)	0.497
	No	178	57(32%)		67(37.6%)		83(46.6%)	
Chronic Heart failure	Yes	25	<b>14(56%)</b>	<b>0.018</b>	14(56%)	0.053	<b>18(72%)</b>	<b>0.008</b>
	No	181	<b>53(29.3%)</b>		65(35.9%)		<b>80(44.2%)</b>	
Chronic respiratory failure	Yes	65	26(40%)	0.133	27(41.5%)	0.525	34(52.3%)	0.358
	No	141	41(29.1%)		52(36.9%)		64(45.5%)	
Non-hematological cancer	Yes	18	9(50%)	0.099	<b>12(66.7%)</b>	<b>0.010</b>	<b>14(77.8%)</b>	<b>0.005</b>
	No	188	58(30.9%)		<b>67(35.6%)</b>		<b>84(44.7%)</b>	
Hematological cancer	Yes	16	6(37.5%)	0.660	7(43.8%)	0.646	7(43.8%)	0.751
	No	190	61(32.1%)		72(37.9%)		91(47.9%)	
Chronic renal failure	Yes	10	4(40%)	0.607	5(50%)	0.440	7(70%)	0.164
	No	196	63(32.1%)		74(37.8%)		91(46.4%)	
Immunosuppression	Yes	2	1(50%)	0.598	1(50%)	0.735	2(100%)	0.137
	No	204	66(32.2%)		78(38.2%)		96(47.1%)	
Cerebrovascular disease	Yes	7	<b>5(71.4%)</b>	<b>0.025</b>	5(71.4%)	0.068	5(71.4%)	0.233
	No	199	<b>62(31.2%)</b>		74(37.2%)		93(46.7%)	
Peripheral vascular disease	Yes	6	2(33.3%)	0.966	3(50%)	0.554	4(66.7%)	0.398
	No	200	65(32.5%)		76(38%)		94(47%)	
Chronic Enolism	Yes	4	0(0%)	0.162	0(0%)	0.112	0(0%)	0.055
	No	202	67(33.2%)		79(39.1%)		98(48.5%)	
Peripheral neuropathy	Yes	7	2(28.6%)	0.821	2(28.6%)	0.590	2(28.6%)	0.333
	No	199	65(32.7%)		77(38.7%)		96(48.2%)	
Central neuropathy	Yes	0						
	No	206	67(32.5%)		79(38.3%)		98(47.6%)	

**Table 4. Mortality associated by organ dysfunction**

Dysfunction		N	28 days	p	90 days	p	1 year	p
Respiratory	Yes No	188 18	65(34.6%) 2(11.1%)	0.077	77(41%) 2(11.1%)	0.025	93(49.5%) 5(27.8%)	0.130
Coagulation	Yes No	112 94	46(41.1%) 21(22.3%)	0.007	51(45.5%) 28(29.8%)	0.030	58(51.8%) 40(42.6%)	0.237
Liver	Yes No	103 103	45(43.7%) 22(21.4%)	0.001	52(50.5%) 27(26.2%)	0.001	64(62.1%) 34(33%)	0.000
Cardiovascular	Yes No	202 4	65(32.2%) 2(50%)	0.830	75(37.1%) 4(100%)	0.041	94(46.5%) 4(100%)	0.106
Central Nervous System.	Yes No	56 150	33(58.9%) 34(22.7%)	0.000	37(66.1%) 42(28%)	0.000	38(67.9%) 60(40%)	0.001
Renal	Yes No	113 93	46(40.7%) 21(22.6%)	0.009	52(46%) 27(29%)	0.019	62(54.9%) 36(38.7%)	0.030

**Table 4.1. Mortality associated by organ dysfunction 65-74 yrs.**

Dysfunction 65-74 yrs.	N	28 days	p	90 days	p	1 year	p
Respiratory	76	24 (31,6%)	0.98	27 (35.5%)	0.5	37 (48.7%)	<b>0.05</b>
Coagulation	44	13 (29.5%)	0.86	15 (34.1%)	0.69	20 (45.5%)	0.97
Liver	42	11 (26.2%)	0.63	13 (31.0%)	0.81	17 (40.5%)	0.39
Cardiovascular	84	24 (28.6%)		27 (32.1%)		38 (45.2%)	
Central Nervous System.	33	10 (30.3%)	0.77	10 (30.3%)	0.77	14 (42.4%)	0.67
Renal	45	9 (20.0%)	0.06	12 (26.7%)	0.25	18 (40%)	0.3

**Table 4.2. Mortality associated by organ dysfunction 75-85 yrs.**

Dysfunction 75-85 yrs.	N	28 days	p	90 days	p	1 year	p
Respiratory	78	25 (32.1%)	0.71	30 (38.5%)	0.94	36 (46.2%)	0.79
Coagulation	46	16 (34.8%)	0.62	18 (39.1%)	0.90	22 (47.8%)	0.67
Liver	39	13 (33.3%)	0.88	16 (41%)	0.66	19 (48.7%)	0.61
Cardiovascular	83	27 (32.5%)		32 (38.6%)		38 (45.8%)	
Central Nervous System.	17	6 (35.3%)	0.78	6 (35.3%)	0.75	7 (47.0%)	0.67
Renal	48	15 (31.3%)	0.77	19 (39.6%)	0.82	23 (47.9%)	0.64

**Table 4.3. Mortality associated by organ dysfunction > 85 yrs**

<b>Dysfunction &gt; 85 yrs.</b>	<b>N</b>	<b>28 days</b>	<b>p</b>	<b>90 days</b>	<b>p</b>	<b>1 year</b>	<b>p</b>
<b>Respiratory</b>	34	14 (41.2%)	0.96	16 (47.1%)	0.59	18 (52.9%)	0.25
<b>Coagulation</b>	21	9 (42.9%)	0.80	10 (47.6%)	0.88	12 (57.1%)	0.92
<b>Liver</b>	21	10 (47.6%)	0.36	12 (57.1%)	0.25	13 (61.9%)	0.45
<b>Cardiovascular</b>	35	15 (42.9%)		18 (51.4%)		21 (60%)	
<b>Central Nervous System.</b>	6	3 (50%)	0.63	3 (50%)	0.94	4 (66.7%)	0.58
<b>Renal</b>	21	7 (33.3%)	0.29	9 (42.9%)	0.43	10 (47.6%)	0.23

**TABLE 5. Binomial regression of significant variables**

Variables	univariate				multivariate			
	OR	ICL	ICU	sig	OR	ICL	ICU	sig
Chronic Heart failure	3.25	1.29	8.15	0.012	4.35	1.46	12.94	0.008
Non- hematological cancer	4.33	1.38	13.66	0.012	4.98	1.30	19.04	0.019
APACHE	1.07	1.02	1.12	0.002	1.03	0.82	1.28	0.810
APACHE - AGE	1.07	1.02	1.12	0.003	0.97	0.77	1.22	0.793
SOFA	1.12	1.01	1.24	0.025	0.88	0.74	1.05	0.150
SOFA 48 Hours	1.22	1.10	1.35	0.000	1.09	0.90	1.32	0.390
Acute Kidney Injury	0.34	0.19	0.60	0.000	0.48	0.19	1.18	0.108
Septic Shock	2.72	1.43	5.17	0.002	1.50	0.62	3.64	0.372
Chronic respiratory failure	1.97	1.02	3.80	0.044	1.22	0.51	2.94	0.658
Mechanical ventilation	0.33	0.17	0.62	0.001	0.72	0.29	1.75	0.464
Hours of mechanical ventilation	1.00	1.00	1.01	0.001	1.00	1.00	1.00	0.972
Renal replacement therapy	0.31	0.159	0.60	0.000	0.65	0.19	2.26	0.500
Days of Renal replacement therapy	1.12	1.02	1.23	0.019	0.94	0.81	1.10	0.441
Number of organ dysfunction	1.53	1.24	1.89	0.000	0.67	0.34	1.32	0.246
Days of dysfunction	1.06	1.01	1.10	0.012	1.02	0.95	1.09	0.589
Liver dysfunction	3.33	1.88	5.90	0.000	3.70	1.15	11.88	0.028
Central Nervous System dysfunction	3.17	1.66	6.06	0.000	3.65	1.07	12.48	0.039
Kidney dysfunction	1.93	1.10	3.36	0.021	1.15	0.38	3.47	0.801

## 6.5 Complication definitions

- Peritonitis:
  - Complicated intra-abdominal infections extend beyond the hollow viscus of origin into the peritoneal space (secondary or tertiary/ nosocomial or postoperative))
- Abcess
  - Presence of an abcess formation in a image diagnostic test
- Haemorrhaghe
  - Acute haemorrhaghe that results in transfusion of more than 2 units or surgery
  - Massive haemorrhaghe defined for a blood lost superior at 150 ml in less than 10 minutes or a lost superior to 50% of the blood volume in less than 3 hours
- Respiratory Failure defined as:
  - Postoperative hypoxemia: Defined as SpO<sub>2</sub> <92% at FiO<sub>2</sub> 0.21. and Requirements for rescue measures: increase in FiO<sub>2</sub>, CPAP or the need for non-invasive mechanical ventilation (NIMV) or invasive ventilation (IMV).
  - Respiratory distress syndrome, for the diagnosis the gasometric and radiological criteria of the Berlin definition will be used: Mild: PaO<sub>2</sub> / FiO<sub>2</sub> <300 mmHg with CPAP of 5 cmH<sub>2</sub>O and FiO<sub>2</sub> 0.5. Moderate: PaO<sub>2</sub> / FiO<sub>2</sub> <200 mmHg with PEEP of 5 cmH<sub>2</sub>O and FiO<sub>2</sub> 0.5. Severe: PaO<sub>2</sub> / FiO<sub>2</sub> <100 mmHg with PEEP of 5 cmH<sub>2</sub>O and FiO<sub>2</sub> 0.5. With bilateral interstitial alveolar infiltrate in the chest radiography of recent appearance.
- Pneumonia: Presence of a new pulmonary infiltrate and / or progression of previous pulmonary infiltrates on the chest radiograph plus at least two of the following criteria: - Leukocytosis > 12,000 WBC / mm<sup>3</sup> or leukopenia <4000 WBC / mm<sup>3</sup>. - Fever > 38.5°C or hypothermia <36°C. - Increased secretions with purulent sputum. - Positive bronchial aspirate.
- Cardiovascular Complications: Cardiac failure (CI <2.5 mL / min / m<sup>2</sup> or > 2.5 with dobutamine requirements ≥ 5 µg / kg / min). Arrhythmias (Atrial fibrillation, Supraventricular tachycardia, Premature ectopics beats, Ventricular Tachycardia, others)
- Surgical Site Infection: For the diagnosis of the will be followed the criteria of the CDC.



Infection that occurs within the first 30 days and that includes only skin and subcutaneous tissue and the patient has at least one of the following signs:

- Purulent drainage of the superficial incision
- Isolation of microorganisms from the superficial incision
- Surface incision deliberately opened by the surgeon with positive culture or without culture but with at least one of the following signs: pain, heat, swelling, inflammation, redness.
- Diagnosis by the surgeon of surgical wound infection.

- Leakage, Suture dehiscence, defined as: Intraluminal leakage of a surgical connection between two viscera. The luminal content can go well through wound or drainage, or a collection can appear (diagnosed with imaging techniques) causing fever, septicemia, shock
- Other Complications:  
Pleural effusion: Chest x-ray with the presence of costophrenic sinus impingement, displacement of adjacent anatomical structures, erasure of the hemidiaphragmatic silhouette in supine decubitus position.

Bronchospasm: Presence of expiratory wheeze treated with bronchodilators.

Pneumothorax: Presence of air in the pleural space without a vascular bed around the pleura. (the thorax Rx will be performed due to the suspicion of aponia on auscultation)

Cognitive Dysfunction / Postoperative Delirium:

Delirium is an acute and fluctuating condition of the mental state with reduced consciousness and impaired attention following the clinical criteria (DSM-5, ICD 10) and that may appear up to 5 days postoperatively

Cognitive dysfunction defined as memory alteration and postoperative concentration that delays the recovery of the patient and their return to their daily tasks

Acute renal failure (ADQUI):

Stage I: Diuresis < 0,5 mg/Kg (6h) or Cr increase > 0,3 mg/dl. Or GRF decrease >25%

Stage II: Diuresis < 0,5 mg/Kg (12h) o Cr basal x 2 mg/dL or GRF decrease >50%

Stage III: Diuresis < 0,3 mg/Kg (24h) o anuria (12h) o Cr basal x 3 mg/dL, Cr plasma levels > 4 mg/dL or Renal Replacement Therapy., or GRF decrease 75%