**Supplementary data**

*Enrolled : n=160 patients*

*Excluded :*

*COPD (n=12)*

*Pneumonia(n=8)*

*ARDS(n=5)*

*Pulmonary embolism (n=4 )*

*Other ( n=15)*

*Included : n= 116*

*Main analyses*

*6 month outcome events  : n= 72*

***Figure : Diagram illustrating the study protocol .***

*ARDS :Acute Respiratory Distress Syndrome . COPD : Chronic Obstructive Pulmonary Disease*

**Table 1 : Classification of Heat Failure according to Ejection Fraction**

|  |  |
| --- | --- |
| Types of Heart Failure | *n*=116 |
| HFREF | 53 (45,7%) |
| HFPEF | 47 (40,5%) |
| Midly-Reduced | 16 (13,8%) |

**Table 2: Patient Mean Characteristics:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | All (*n*=116) | B-Lines ≥3  *N61* = (52.6%) | B-Lines <3  *N55* =(47.4%) | *P* value |
| Age (years) | 68.99+/- 12.06 | 71.49 +/-10 | 66.15 +/-13,5 | **0,019** |
| Male | 62(53.4%) | 31(50.8%) | 31(56.4 %) | 0,580 |
| Age CRF | 101(87,1%) | 57(93,4%) | 44(80 %) | **0,029** |
| Diabetes mellitus | 48 (41.4%) | 25(41%) | 23(41.8%) | 1 |
| Dyslipidemia | 47 (40.5%) | 28(45.9%) | 19(34.5%) | 0,257 |
| Hypertension | 68(58.6%) | 33(54.1%) | 35(63.6%) | 0,347 |
| Smoking | 27(23.3%) | 14(23%) | 13(23.6%) | 1 |
| Coronary artery disease | 28(24.1%) | 14(23%) | 14(25.5%) | 0.829 |
| Heart Failure | 55(47.4%) | 36(59%) | 19(34,5%) | **0.010** |
| Arrhythmia | 53(45.7%) | 31(50.8%) | 21(38.2%) | 0.184 |
| Valvular Heart Disease | 41(35.3%) | 29(47.5%) | 12(21.8%) | **0,006** |
| Chronic Renal Failure | 31(26.7%) | 23(37.7%) | 8(14.5%) | **0,006** |
| Heart Disease Etiology | All (*n*=116 ) | B-Lines ≥3  *n*=64(55,2%) | B-Lines<3  *n*=52(44,8%) |  |
| Valvular | 39 (33,6%) | 30(46,9%) | 9(17,3%) |  |
| Post-ischemic | 31(26,7%) | 17 (26,6%) | 14 (26,9%) |  |
| Hypertension | 17(14,7%) | 9(14,1%) | 8(15,4%) |  |
| Arrhythmia | 16(13,8%) | 5(7,8%) | 11(21,8%) |  |
| Dilated Cardiomyopathy | 7(6%) | 2(3,1%) | 5(9,6%) |  |
| Myocarditis | 1(0,9%) | 0(0%) | 1(1,9%) |  |
| Restrictive Cardiomyopathy | 3(2,6%) | 0(0%) | 3(5,8%) |  |
| Hypertrophic Cardiomyopathy | 2(1,7%) | 1(1,6%) | 1(1,9%) |  |
|  | All (*n*=) | B-Lines ≥3  *n*= (% ) | B-Lines <3  *n*= (%) | *P* value |
| SBP (mmHg ) | 130,5+/-29,2 | 130,56+/-28 | 130,31+/-30,9 | 0,95 |
| DBP ( mmHg ) | 74,8+/-14,6 | 74,87+/-14,9 | 74,9+/-14,37 | 0,9 |
| HR ( per min ) | 92+/-25 | 90,89+/-23 | 93,35+/-28,9 | 0,6 |
| SpO2 ( % ) | 92,6+/-5,2 | 92,67+/-5,2 | 92,7+/-5,26 | 0,9 |
| RR ( per min ) | 23+/-5,6 | 24+/-5,7 | 22,9+/-5,4 | 0,25 |
| Electrocardiogram |  |  |  |  |
| Sinus Rhythm | 59(50,9%) | 30(46,9%) | 29(55,8%) | 0,35 |
| Atrial Fibrillation | 43(37,1%) | 28(43,8%) | 15(28,8%) | 0,12 |
| QRS ≥ 120ms | 38(32,8%) | 21(32,8%) | 17(32,7%) | 1 |
|  | All (*n*=) | B-Lines ≥3  *n*= (% ) | B-Lines <3  *n*= (%) | *P* value |
| Echocardiography |  |  |  |  |
| LVEDD | 54,4+/-9,3 | 54,8+/-10 | 53,9+/-8,2 | 0,6 |
| LVESD | 40,8+/-11,3 | 40,6+/-12,4 | 41+/-9,8 | 0,8 |
| IVS | 11,03+/-2,1 | 11+/-2 | 11,08+/-2 | 0,8 |
| PW | 10,7+/-2 | 10,7+/-2 | 10,7+/-2 | 0,9 |
| LVEF | 40,4+/-14,4 | 42,2+/-15,5 | 38,3+/-12,7 | 0,15 |
| LAA | 30,9+/-16,5 | 32,1+/-17,4 | 29,4+/-15,5 | 0,38 |
| E’ | 8,3+/-2 | 8+/-2,1 | 8,6+/-1,9 | 0,14 |
| E/E’ | 12,3+/-3 | 12,8+/-2,9 | 11,9+/-3,1 | 0,2 |
| SPAP | 59,1+/-13,3 | 61,9+/-11,5 | 55,4+/-14,6 | 0,01 |
| Dilated Inferior Vena Cava | 71(61,2%) | 45(70,3%) | 26(50%) | 0,03 |
|  | All (*n*=160) | B-Lines ≥3  *n*=(% ) | B-Lines <3  *n=* (%) | *P* value |
| NT-Pro-BNP | 15694+/-9703 | 18063+/-9919 | 12780+/-8664 | 0,003 |
| Troponine | 1503+/-5220 | 1293+/-4848 | 1762+/-5683 | 0,6 |
| Hb | 11,7+/-2,2 | 11,2+/-2,3 | 12,2+/-1,8 | 0,008 |
| WC | 9028+/-3813 | 9299+/-4006 | 8694+/-3573 | 0,39 |
| CRP | 49,8+/-78 | 57,7+/-89,2 | 40,2+/-61 | 0,23 |
| Urea | 11,7+/-8 | 13,3+/-9,5 | 9,8+/-5,3 | 0,02 |
| Creat | 135,4+/-114,8 | 155+/-145 | 110+/-51 | 0,036 |
| Clearance | 56,3+/-26,3 | 50,6+/-25,3 | 63,7+/-25,9 | 0,008 |
| Na+ | 133,6+/-6,2 | 131,7+/-6,6 | 135,9+/-4,8 | 0 |
| K+ | 4,4+/-0,6 | 4,5+/-0,6 | 4,3+/-0,5 | 0,03 |
| Glycaemia | 7,8+/-4,2 | 8+/-4,8 | 7,5+/-3,3 | 0,5 |
|  | All (*n*=) | B-Lines ≥3  *n*= (% ) | B-Lines <3  *n*=(%) | *P* value |
| Beta-Blockers | 86(74,1%) | 51(79,7%) | 35(67,3%) | 0,14 |
| ACE-Inhibitors | 55(47,4%) | 30(46,9%) | 25(48,1%) | 1 |
| ARBs | 11(9,5%) | 3(4,7%) | 8(15,4%) | 0,06 |
| Aldosterone Antagonist | 41(35,3%) | 23(35,9%) | 18(34,6%) | 1 |
| Diuretics | 87(75%) | 53(82,8%) | 34(65,4%) | 0,051 |
| SGLT2 Inhibitors | 19(16,4%) | 13(20,3%) | 6(11,5%) | 0,3 |
| Sacubutril/Valsartan | 1(0,9%) | 1(1,6%) | 0 | 1 |
| VKA | 55(47,4%) | 36(56,3%) | 19(36,5%) | 0,04 |
| DOACs | 3(2,6%) | 2(3,1%) | 1(1,9%) | 1 |
| Aspirin | 34(29,8%) | 17(27,4%) | 17(32,7%) | 0,54 |
| Statins | 68(58,6%) | 43(67,2%) | 25(48,1%) | 0,0058 |
| Digoxins | 9(7,8%) | 6(9,4%) | 3(5,8%) | 0,7 |
| CAAA | 12(10,3%) | 10(15,6%) | 2(3,8%) | 0,06 |
| Calcium Antagonists | 51(44%) | 27(42,2%) | 24(46,2%) | 0,7 |
| Nitrates | 20(17,2%) | 10(15,6%) | 10(19,2%) | 0,6 |
| Ivabradine | 3(2,6%) | 2(3,1%) | 1(1,9%) | 1 |
| Pacemaker | 8(6,9%) | 6(9,4%) | 2(3,8%) | 0,29 |

**Table 3: Predictors for the combined endpoint of heart failure hospitalisation or decompensation or cardiac death at 180-day follow-up by univariable Cox regression analysis**

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Combien Endpoint* | | |
|  | **HR** | **95%CI** | ***P* value** |
| Age (yrs) | 1.022 | 1.002-1.044 | **0.034** |
| Male | 0.830 | 0.526-1.309 | 0.423 |
| Diabetes mellitus | 1.054 | 0.660-1.681 | 0.826 |
| Dyslipidemia | 0.683 | 0.430-1.083 | 0.105 |
| Hypertension | 1.136 | 0.716-1.800 | 0.589 |
| Smoking | 1.274 | 0.731-2.220 | 0.393 |
| Coronary artery disease | 1.062 | 0.624-1.808 | 0.823 |
| Heart Failure | 0.438 | 0.274-0.699 | **0.001** |
| AF | 0.817 | 0.517-1.291 | 0.386 |
| Chronic Renal Failure | 0.492 | 0.303-0.798 | **0.004** |
| Anemia | 0.626 | 0.383-1.022 | 0.061 |
| Hb | 0.886 | 0.803-0.978 | **0.016** |
| Troponine | 1 | 1-1 | 0.651 |
| CRP | 1.002 | 0.999-1.005 | 0.126 |
| BIS | 0.775 | 0.482-1.247 | 0.294 |
| Na+ | 0.940 | 0.905-0.975 | **0.001** |
| Hyponatremia  (Na+<130mmol/L) | 0.445 | 0.277-0.716 | **0.001** |
| Creatinine | 1.001 | 1-1.003 | 0.077 |
| Clearance < 30 mL /min | 0.605 | 0.361-1.013 | 0.056 |
| Glycemia | 1.004 | 0.954-1.057 | 0.867 |
| QRS≥120ms | 0.704 | 0.438-1.131 | 0.147 |
| LVEF | 1.022 | 1.004-1.039 | **0.014** |
| Clinical congestion | 0.858 | 0.313-2.354 | 0.766 |
| Pulmonary Congestion on CXR | 0.921 | 0.505-1.677 | 0.787 |
| NT-Pro-BNP at admission | 1 | 1-1 | **0.031** |
| Positive NT-Pro-BNP at admission | 3.147 | 0.757-13.077 | 0.115 |
| LA pressure | 20.707 | 0.007-63925.552 | 0.561 |
| LA pressure by E/E’>=15 | 0.947 | 0.530-1.691 | 0.853 |
| IVC | 1.770 | 1.088-2.878 | **0.021** |
| PASP | 1.019 | 1.004-1.035 | **0.016** |
| PASP>=45 mmHg | 0.223 | 0.070-0.709 | **0.011** |
| BB | 0.639 | 0.375-1.089 | 1 |
| Loop diuretics | 0.416 | 0.228-0.760 | **0.004** |
| VKA | 0.747 | 0.473-1.179 | 0.210 |
| Anti Aldosterone | 1.005 | 0.621-1.627 | 0.984 |
| Length of stay | 1.035 | 0.992-1.080 | 0.112 |

**Table 4: Predictors for the combined endpoint of heart failure hospitalisation or decompensation or cardiac death at 180-day follow-up by multivariable Cox regression analysis**

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Combined Endpoint* | | |
|  | **HR** | **95%CI** | ***P* value** |
| Positive Zone Bilaterally >=1 at discharge | 11.024 | 5.542-21.926 | 0.000 |
| Diueretiques | 0.424 | 0.227-0.791 | 0.007 |