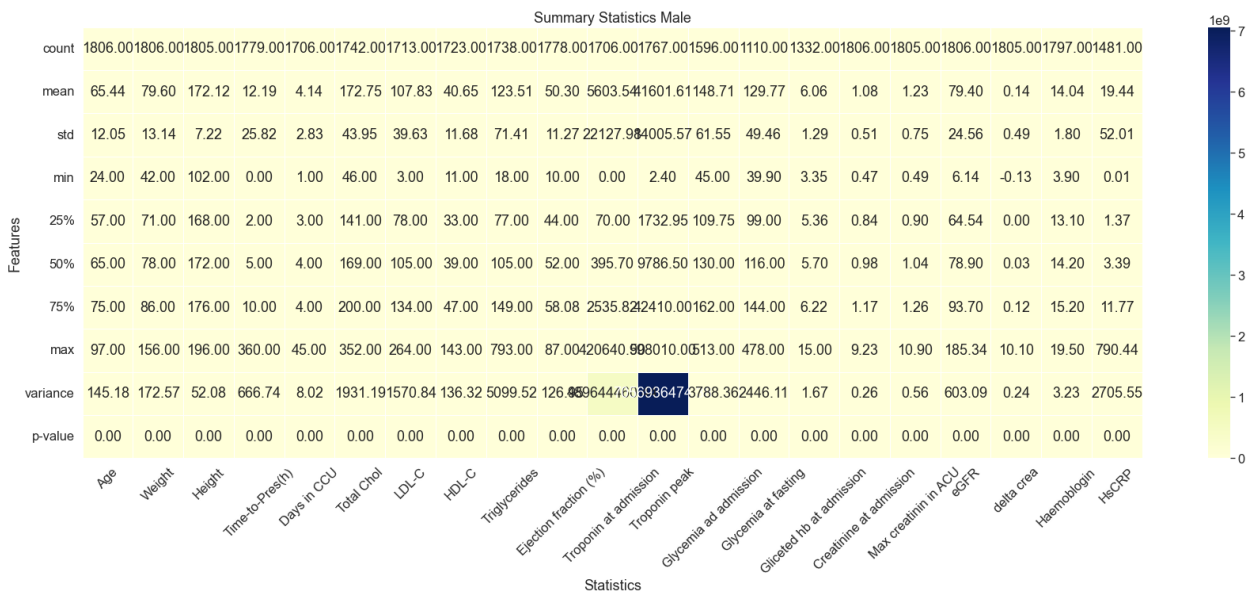
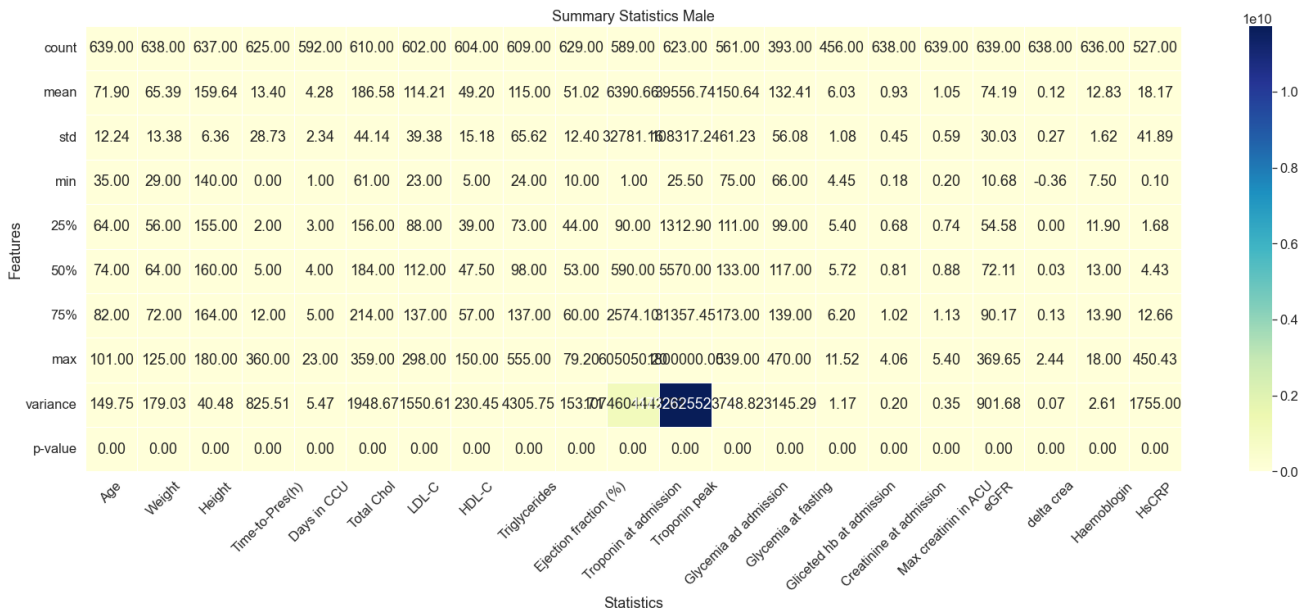


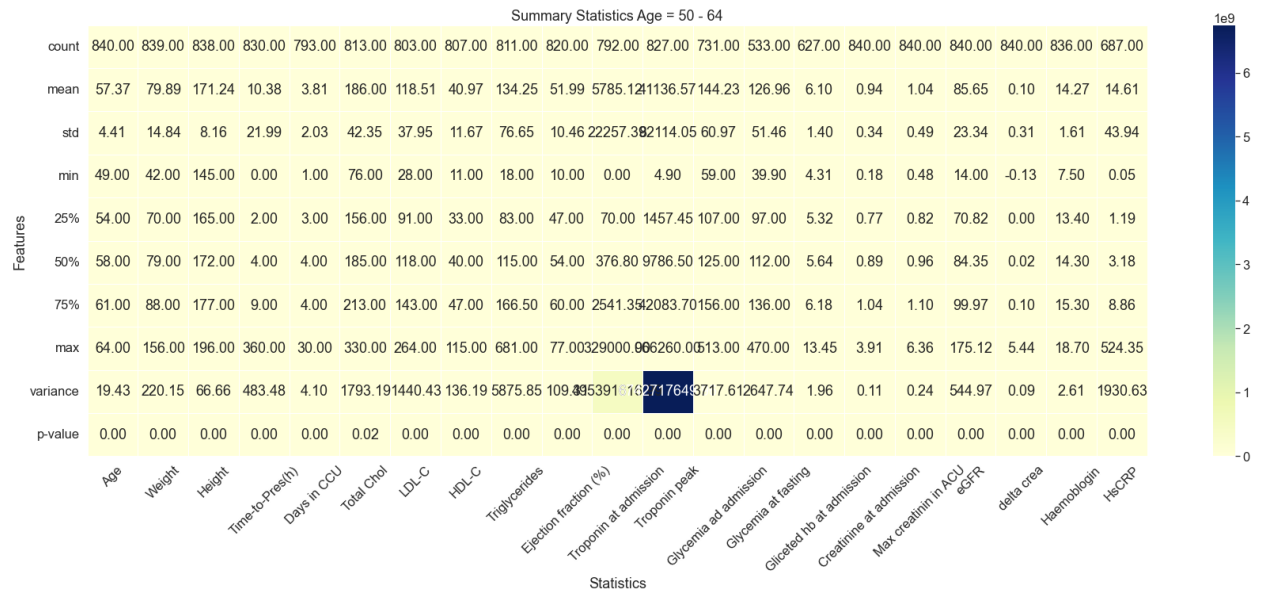
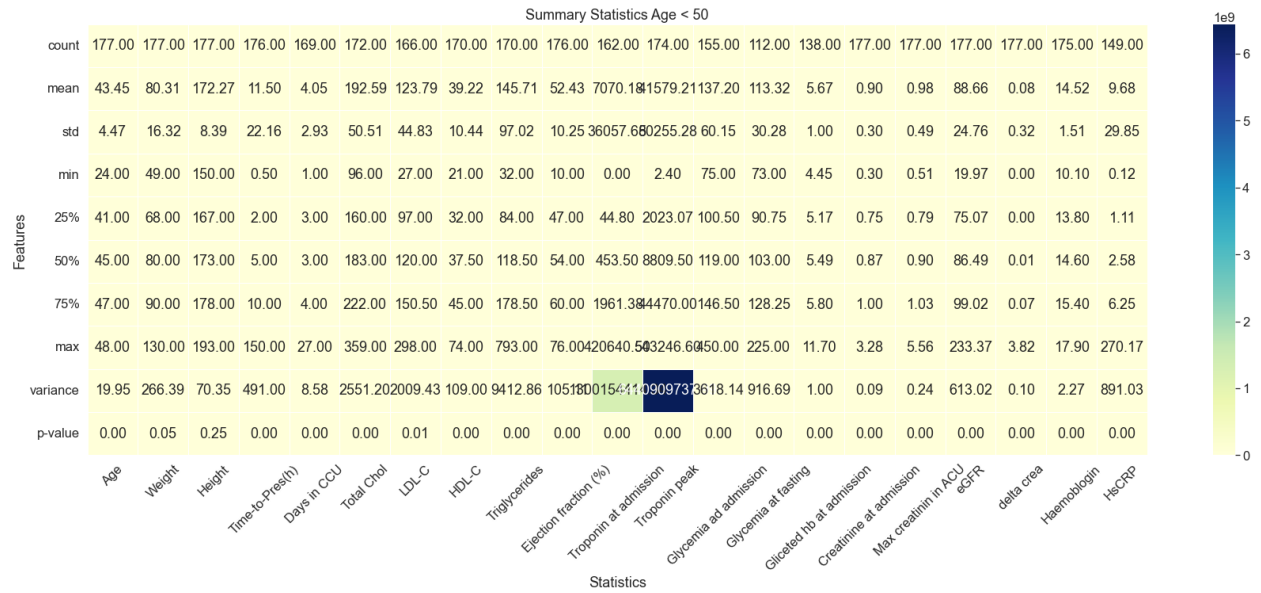
# Cohort 1 – Results

## Descriptive data

### Gender



### Age groups

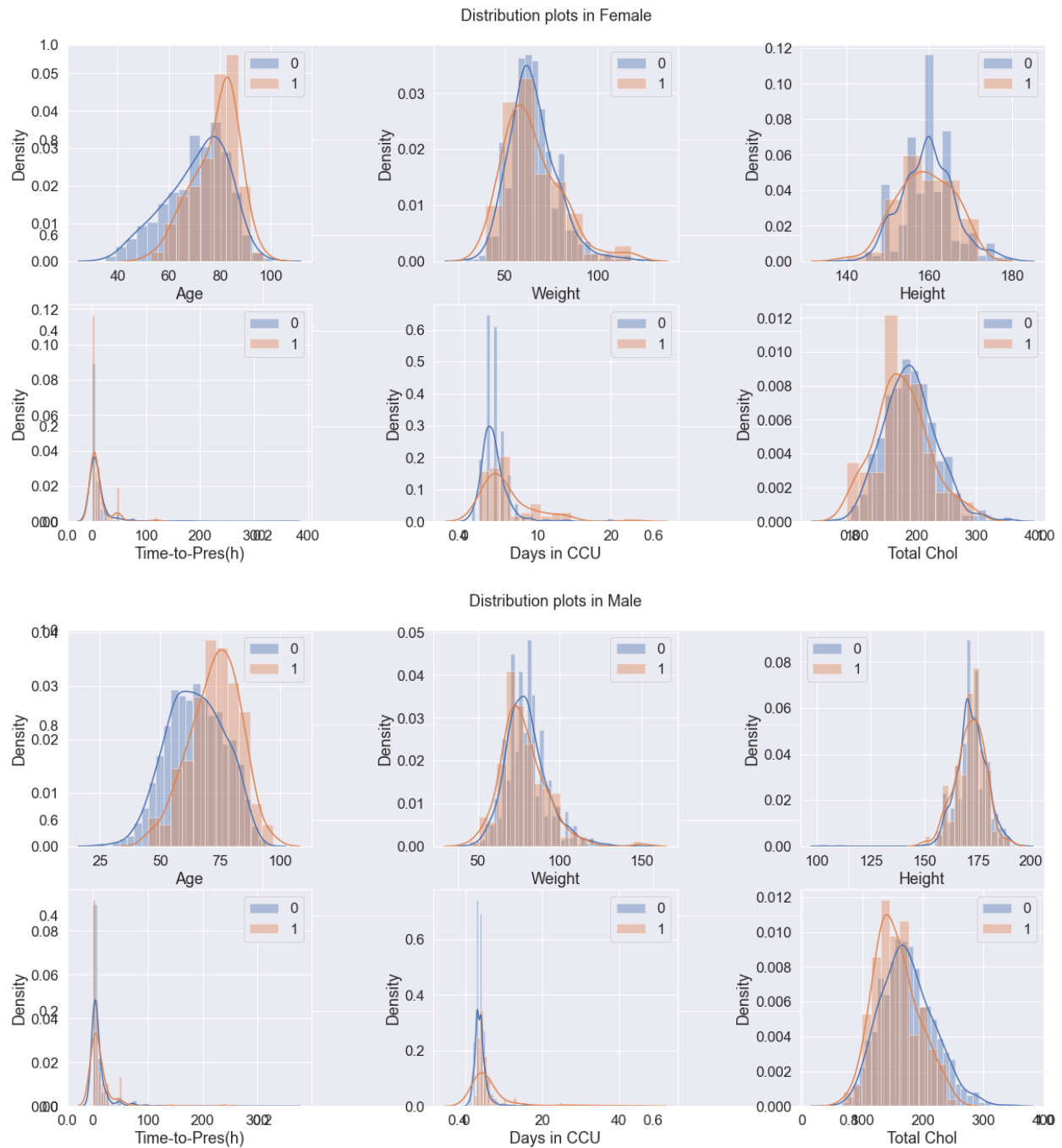




## Numerical features

### Distribution plots:

#### Gender



*Age groups*

## Box plots

*Gender*

*Figure 1: Female population*

*Figure 2: Male population*

## Age group

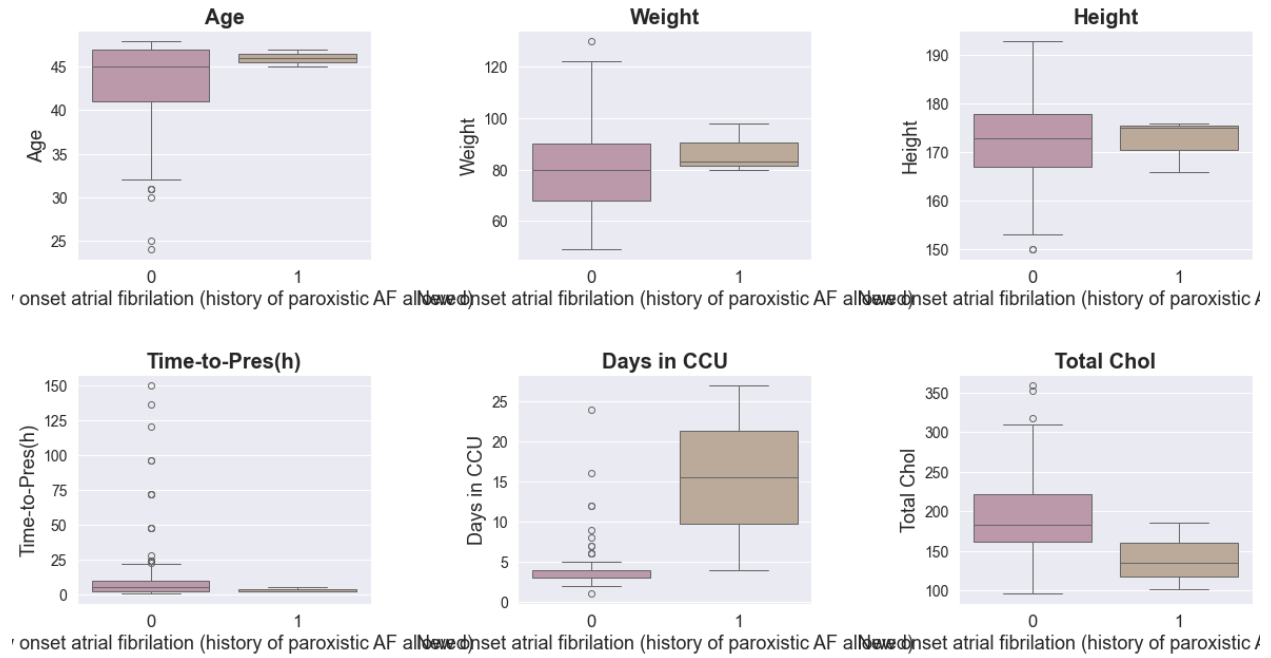


Figure 3: Age < 50

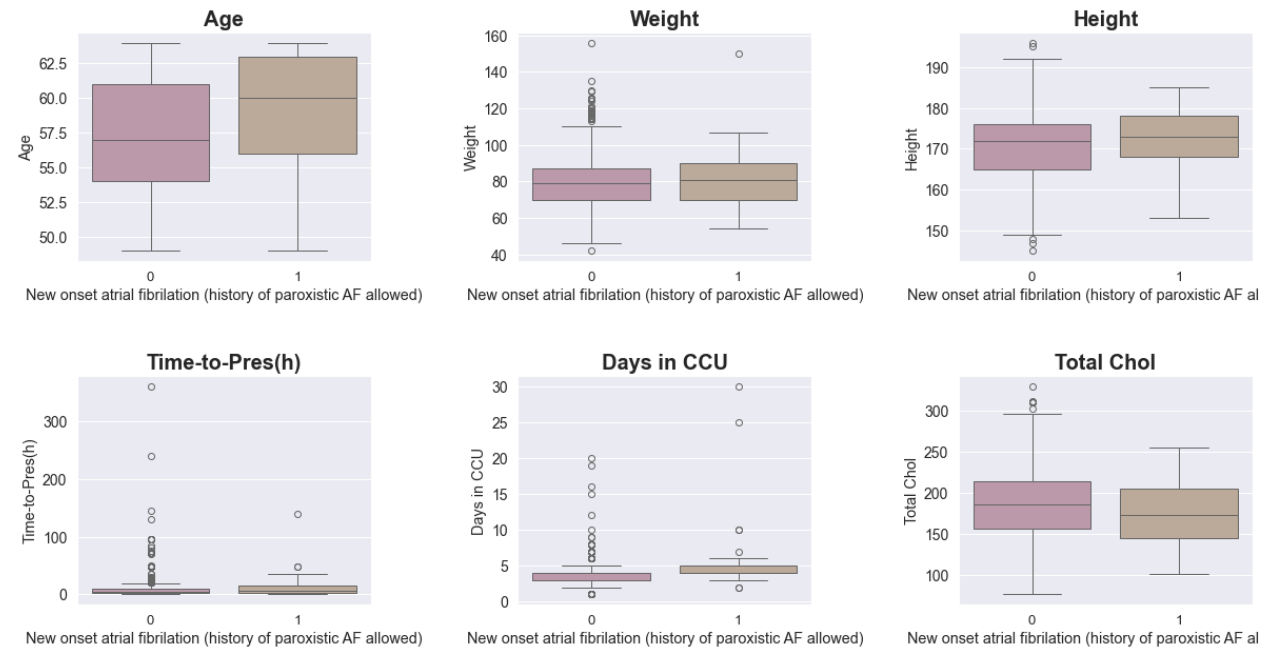


Figure 4: Age - 50-64

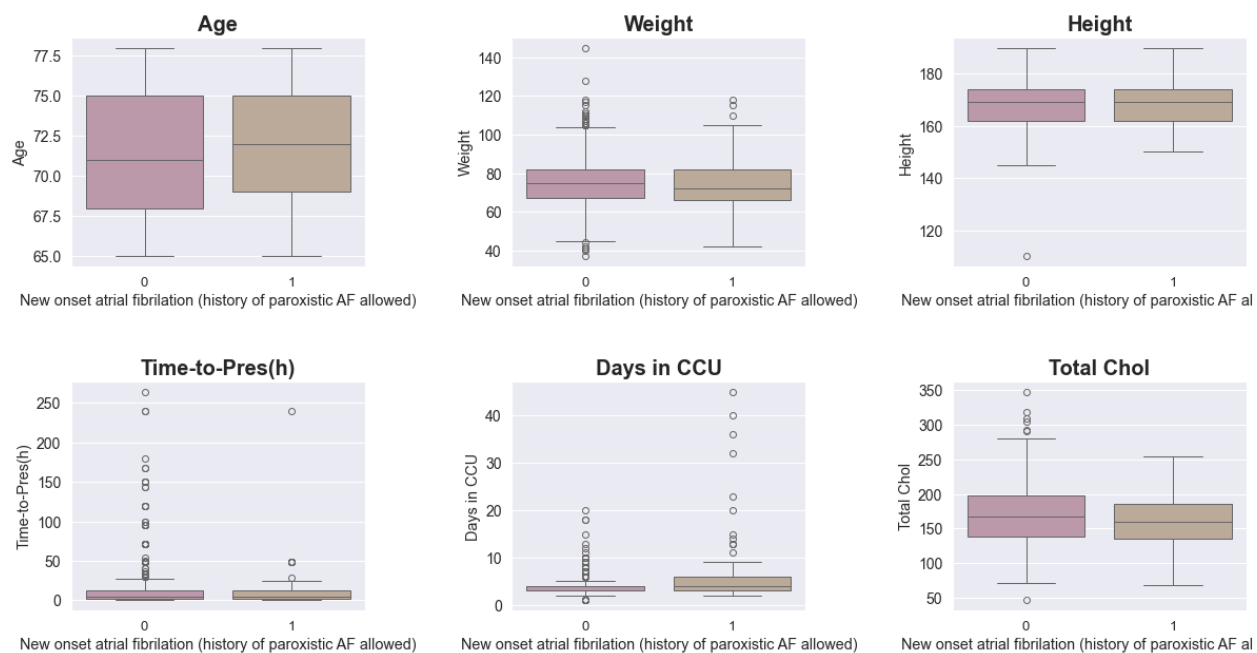


Figure 5: Age 65-79

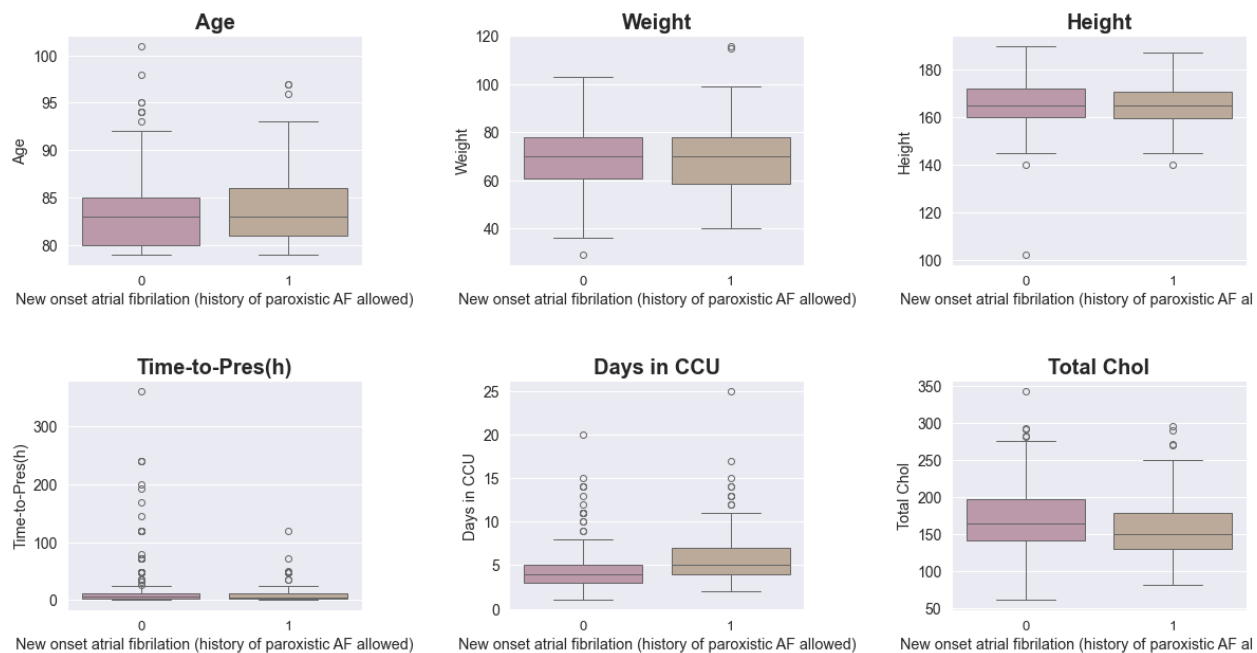


Figure 6: Age  $\geq 80$



## Correlation

*Gender*

*Age group*

## Categorical Features:

### Gender



Figure 7: Female

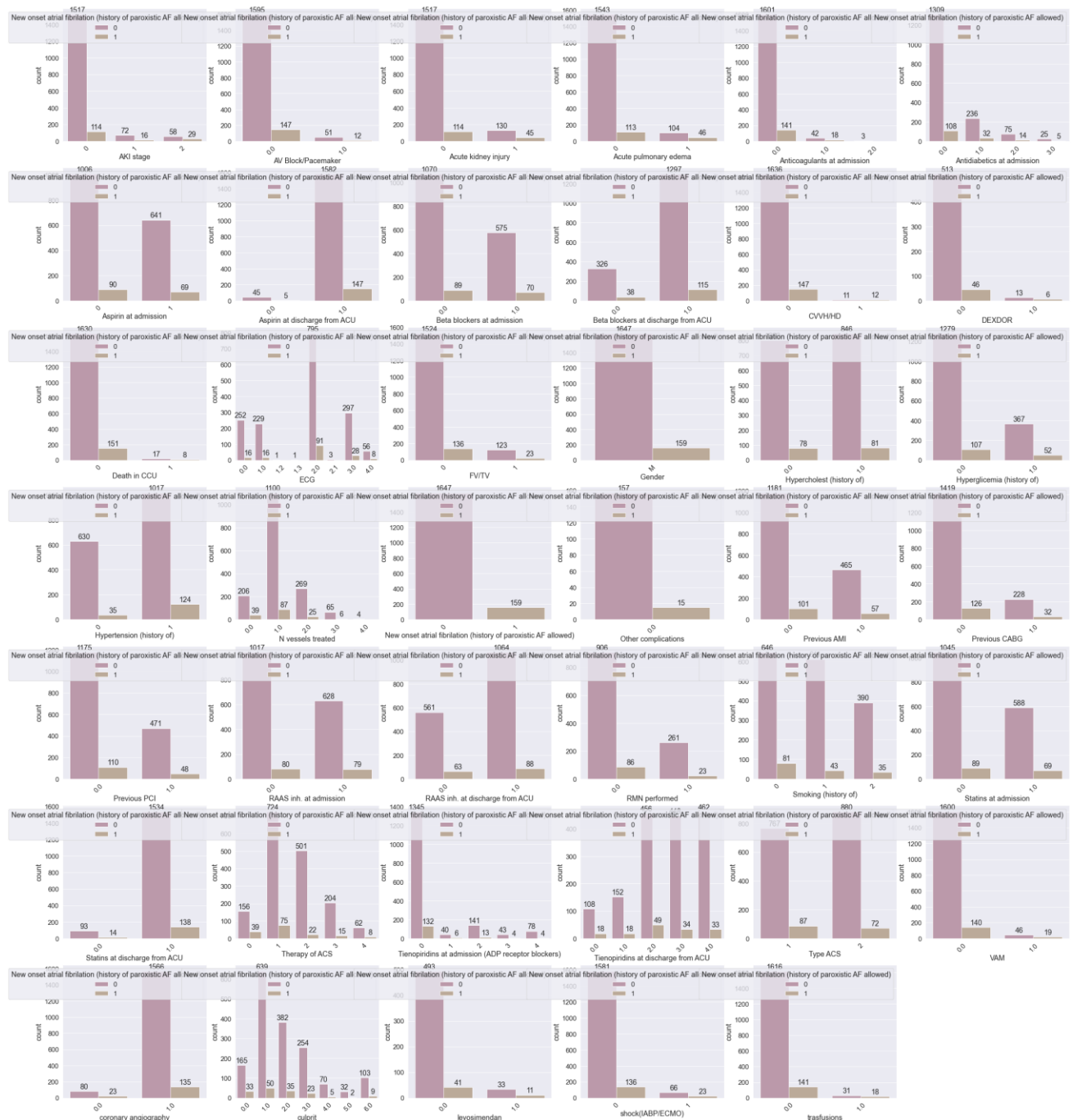


Figure 8: Male

## Age groups

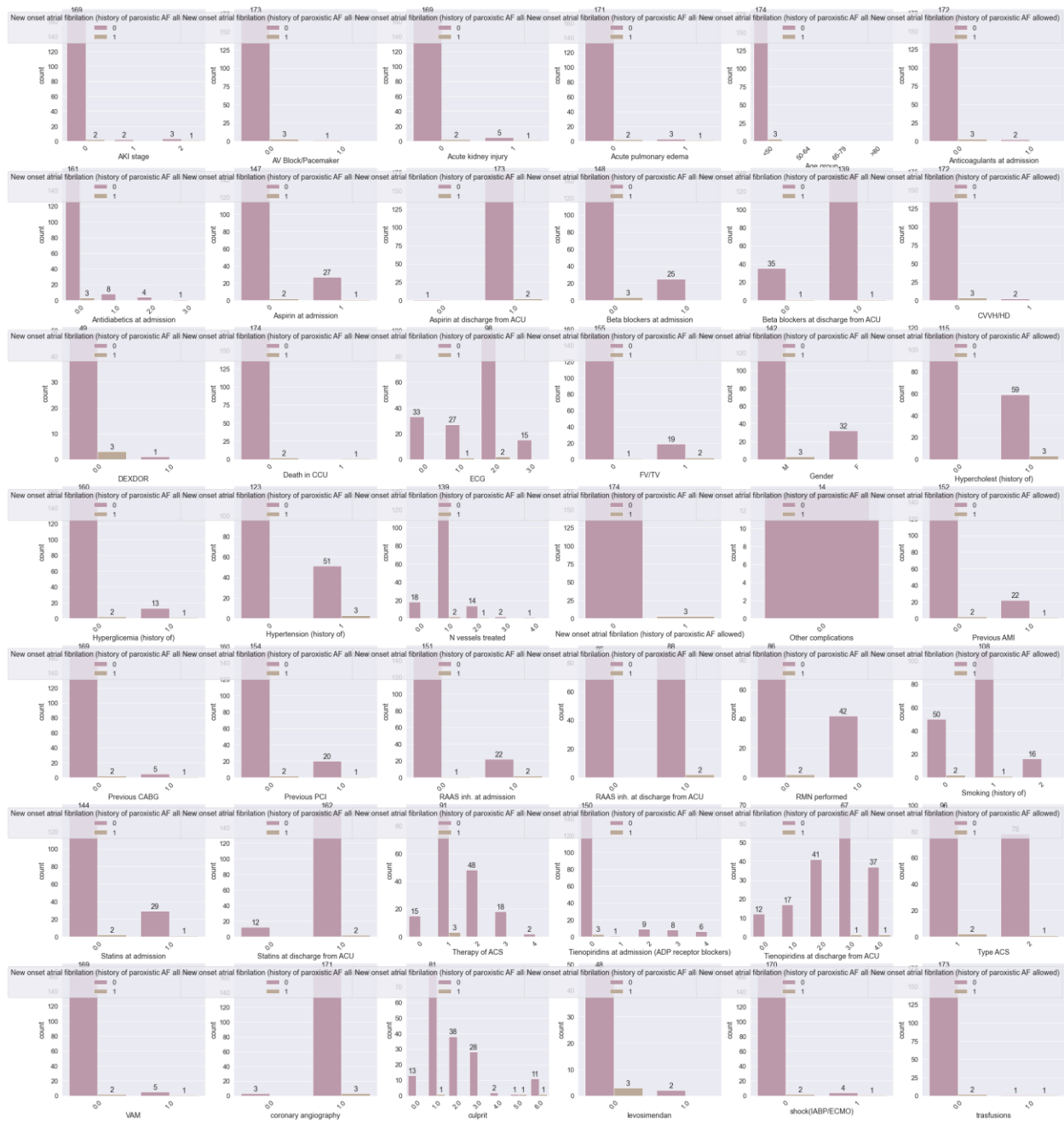


Figure 9: Age < 50

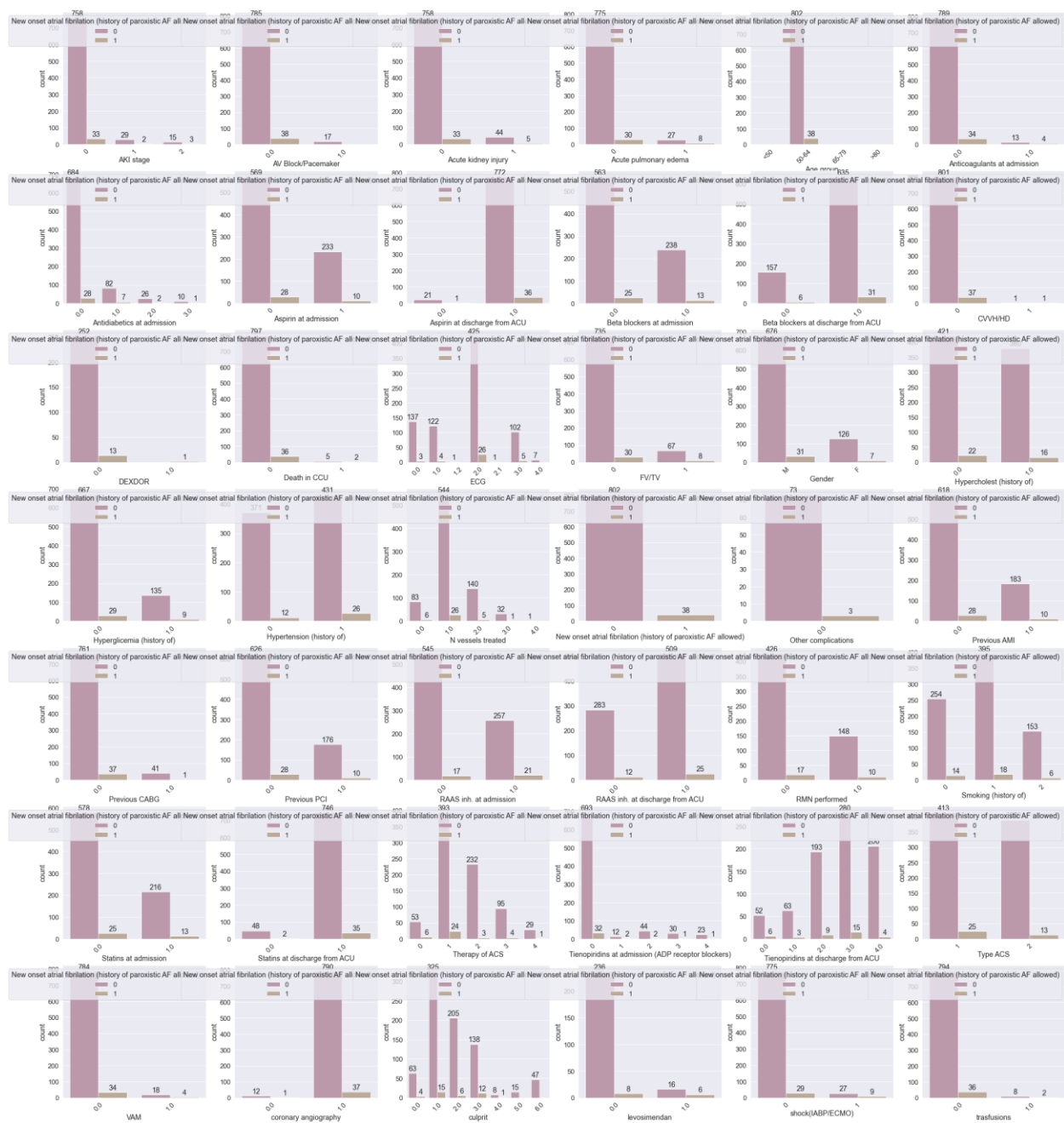


Figure 10: Age - 50-64



Figure 11: Age - 65-79



Figure 12 - Age > 80

Statistical test results (chi2 test)

results\_female - DataFrame

	Index	Variable	Chi2	P-value
	0	AKI stage	12.8313	0.00163579
	2	Acute kidney injury	6.99912	0.00815496
	3	Acute pulmonary edema	52.0625	5.3761e-13
	4	Age group	27.5523	4.50909e-06
	5	Anticoagulants at admission	28.7743	5.64609e-07
	6	Antidiabetics at admission	11.3649	0.0227547
	11	CVVH/HD	6.92311	0.00850887
	13	Death in CCU	4.77155	0.0289337
	15	FV/TV	5.19682	0.0226283
	18	Hyperglycemia (history of)	12.3914	0.000431323
	19	Hypertension (history of)	9.10541	0.00254854
	27	RMN performed	8.17288	0.00425214
	33	Tienopiridins at discharge from ACU	11.5774	0.0207869
	35	VAM	19.5826	9.63423e-06
	36	coronary angiography	4.94063	0.0262324
	39	shock(IABP/ECMO)	16.077	6.08184e-05
	40	trasfusions	5.60701	0.0178888

results\_male - DataFrame

	Index	Variable	Chi2	P-value
	0	AKI stage	81.5249	1.982e-18
	1	AV Block/Pacemaker	7.24954	0.00709191
	2	Acute kidney injury	66.7034	3.15584e-16
	3	Acute pulmonary edema	94.4398	2.52658e-22
	4	Age group	56.2398	3.73404e-12
	5	Anticoagulants at admission	34.9394	2.58822e-08
	6	Antidiabetics at admission	13.3645	0.00391118
	9	Beta blockers at admission	4.80591	0.0283623
	11	CVVH/HD	49.2436	2.26075e-12
	12	DEXDOR	9.5512	0.00199818
	13	Death in CCU	14.1856	0.000165635
	15	FV/TV	8.63599	0.00329586
	18	Hyperglycemia (history of)	8.23738	0.00410363
	19	Hypertension (history of)	15.7458	7.24474e-05
	20	N vessels treated	19.2442	0.000703688
	22	Previous AMI	3.9213	0.0476779
	23	Previous CABG	4.29834	0.0381495
	25	RAAS inh. at admission	7.58303	0.00589202
	28	Smoking (history of)	9.16678	0.0102202

results\_male - DataFrame

	Index	Variable	Chi2	P-value
	11	CVVH/HD	49.2436	2.26075e-12
	12	DEXDOR	9.5512	0.00199818
	13	Death in CCU	14.1856	0.000165635
	15	FV/TV	8.63599	0.00329586
	18	Hyperglycemia (history of)	8.23738	0.00410363
	19	Hypertension (history of)	15.7458	7.24474e-05
	20	N vessels treated	19.2442	0.000703688
	22	Previous AMI	3.9213	0.0476779
	23	Previous CABG	4.29834	0.0381495
	25	RAAS inh. at admission	7.58303	0.00589202
	28	Smoking (history of)	9.16678	0.0102202
	31	Therapy of ACS	46.1935	2.24473e-09
	33	Tienopiridins at discharge from ACU	10.6897	0.0302818
	35	VAM	32.4199	1.24206e-08
	36	coronary angiography	23.4095	1.3093e-06
	37	culprit	18.4995	0.00509799
	38	levosimendan	12.8575	0.000336121
	39	shock(IABP/ECMO)	31.6544	1.84198e-08
	40	trasfusions	45.428	1.58352e-11

results\_age1 - DataFrame

	Index	Variable	Chi2	P-value
	0	AKI stage	13.3565	0.00125798
	13	Death in CCU	14.0839	0.000174836
	15	FV/TV	4.24433	0.0393817
	19	Hypertension (history of)	4.0167	0.0450517
	37	culprit	32.6903	1.20273e-05
	40	trasfusions	6.5939	0.0102329



results\_age2 - DataFrame

Index	Variable	Chi2	P-value
0	AKI stage	6.63839	0.0361819
3	Acute pulmonary edema	24.1641	8.84672e-07
5	Anticoagulants at admission	10.3672	0.00128277
12	DEXDOR	4.02904	0.0447235
13	Death in CCU	4.67037	0.0306874
15	FV/TV	5.7179	0.0167928
25	RAAS inh. at admission	7.81568	0.00517948
31	Therapy of ACS	11.7075	0.0196645
35	VAM	6.78011	0.00921792
38	levosimendan	18.7372	1.50028e-05
39	shock(IABP/ECMO)	31.726	1.77529e-08

results\_age3 - DataFrame

Index	Variable	Chi2	P-value
0	AKI stage	25.6596	2.67971e-06
2	Acute kidney injury	15.0794	0.000103083
3	Acute pulmonary edema	25.8836	3.62637e-07
5	Anticoagulants at admission	10.7382	0.00465827
11	CVVH/HD	42.0542	8.87774e-11
15	FV/TV	5.04087	0.024756
31	Therapy of ACS	14.5983	0.00561118
35	VAM	14.1839	0.000165781
36	coronary angiography	4.67912	0.0305313
39	shock(IABP/ECMO)	8.44493	0.00366062
40	trasfusions	17.8561	2.38249e-05

results\_age4 - DataFrame

Index	Variable	Chi2	P-value
0	AKI stage	19.8878	4.80189e-05
1	AV Block/Pacemaker	9.28871	0.0023057
2	Acute kidney injury	15.7625	7.18108e-05
3	Acute pulmonary edema	46.4123	9.58098e-12
5	Anticoagulants at admission	23.3307	8.58605e-06
13	Death in CCU	7.42789	0.00642205
14	ECG	11.2547	0.0465571
15	FV/TV	5.4377	0.0197066
19	Hypertension (history of)	5.72032	0.0167696
26	RAAS inh. at discharge from ACU	5.70599	0.0169071
34	Type ACS	10.9244	0.000949042
35	VAM	14.914	0.000112527
38	levosimendan	8.88636	0.00287309
39	shock(IABP/ECMO)	8.87005	0.00289887
40	trasfusions	5.1592	0.0231236

## Statistical test (mann whitney u test – all non-normal data)

results\_numfem - DataFrame

Index	Variable	U Statistic	P-value
0	Age	14578	1.20025e-07
1	Days in CCU	13056	6.68999e-07
2	Total Chol	25266.5	0.00929897
3	LDL-C	24335	0.0170866
4	Ejection fraction (%)	31444.5	4.07253e-10
5	Troponin at admission	16398	0.0366692
6	Troponin peak	17330	0.00222776
7	Glycemia ad admission	12869	0.00039176
8	Glycemia at fasting	8296	0.0365188
9	Creatinine at admission	16438	4.48933e-05
10	Max creatinin in ACU	14954	4.39577e-07
11	eGFR	28686.5	0.000178566
12	delta crea	18343.5	0.0029553
13	Haemoglobin	26379.5	0.0115308
14	HsCRP	12633	0.00290022

results\_nummale - DataFrame

Index	Variable	U Statistic	P-value
0	Age	80794.5	1.38063e-15
1	Weight	144196	0.034625
2	Days in CCU	78627.5	1.64712e-13
3	Total Chol	154952	3.81018e-07
4	LDL-C	147210	6.60132e-06
5	Triglycerides	144861	0.0003316
6	Ejection fraction (%)	170598	1.61816e-12
7	Troponin at admission	94682	0.000132774
8	Troponin peak	101186	9.0999e-05
9	Glycemia ad admission	81982	0.000320169
10	Glycemia at fasting	39269	0.00173472
11	Creatinine at admission	101350	2.45438e-06
12	Max creatinin in ACU	84822	2.20599e-13
13	eGFR	159296	6.29847e-06
14	delta crea	89947	1.02879e-11
15	Haemoglobin	146899	0.00227038
16	HsCRP	72255	1.98623e-05

results\_numage1 - DataFrame

Index	Variable	U Statistic	P-value
0	Creatinine at admission	56	0.0200936
1	Max creatinin in ACU	69	0.0294913
2	eGFR	462	0.0226931

results\_numage2 - DataFrame

Index	Variable	U Statistic	P-value
0	Age	11446	0.00931671
1	Days in CCU	8919.5	0.000102093
2	Ejection fraction (%)	20769.5	3.32104e-05
3	Troponin at admission	10580.5	0.0126825
4	Troponin peak	9867.5	0.000368303
5	Glycemia ad admission	7604	0.000963678
6	Max creatinin in ACU	11453	0.00960145
7	delta crea	11893.5	0.0165087

results\_numage3 - DataFrame

Index	Variable	U Statistic	P-value
0	Days in CCU	28997.5	0.000197645
1	Triglycerides	44058	0.0187289
2	Ejection fraction (%)	49176.5	0.000132088
3	Troponin at admission	27482	0.000750001
4	Max creatinin in ACU	32806.5	0.00138244
5	delta crea	31793	0.00018172
6	HsCRP	23469	0.00498509