

# ML\_COVID\_Memoria

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12-01-2023

## Resumen

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## Anexo - Tablas Estadísticas 1

	negative (N=5086)	positive (N=558)	Total (N=5644)
hematocrit			
- Mean (SD)	-0.040 (1.025)	0.248 (0.797)	-0.000 (1.001)
- Median (Q1, Q3)	0.019 (-0.587, 0.694)	0.351 (-0.416, 0.935)	0.053 (-0.519, 0.717)
- Min - Max	-4.501 - 2.663	-1.778 - 1.656	-4.501 - 2.663
- Missing	4566	475	5041
hemoglobin			
- Mean (SD)	-0.042 (1.020)	0.262 (0.828)	-0.000 (1.001)
- Median (Q1, Q3)	-0.022 (-0.586, 0.667)	0.416 (-0.367, 0.886)	0.040 (-0.586, 0.730)
- Min - Max	-4.346 - 2.672	-1.651 - 1.920	-4.346 - 2.672
- Missing	4566	475	5041
platelets			
- Mean (SD)	0.113 (1.002)	-0.706 (0.648)	-0.000 (1.001)
- Median (Q1, Q3)	0.023 (-0.505, 0.645)	-0.718 (-1.095, -0.335)	-0.122 (-0.605, 0.531)
- Min - Max	-2.552 - 9.532	-2.063 - 1.756	-2.552 - 9.532
- Missing	4567	475	5042
mean_platelet_volume			
- Mean (SD)	-0.043 (1.010)	0.275 (0.897)	0.000 (1.001)
- Median (Q1, Q3)	-0.102 (-0.775, 0.684)	0.235 (-0.326, 0.796)	-0.102 (-0.662, 0.684)
- Min - Max	-2.458 - 3.713	-1.897 - 2.703	-2.458 - 3.713
- Missing	4568	477	5045
red_blood_cells			
- Mean (SD)	-0.049 (1.000)	0.303 (0.960)	0.000 (1.001)
- Median (Q1, Q3)	-0.004 (-0.603, 0.622)	0.278 (-0.400, 0.931)	0.014 (-0.568, 0.666)
- Min - Max	-3.971 - 3.646	-1.661 - 2.976	-3.971 - 3.646
- Missing	4567	475	5042
Lymphocytes			
- Mean (SD)	0.006 (1.020)	-0.038 (0.873)	-0.000 (1.001)
- Median (Q1, Q3)	0.003 (-0.744, 0.608)	-0.074 (-0.680, 0.557)	-0.014 (-0.731, 0.598)
- Min - Max	-1.865 - 3.764	-1.694 - 2.152	-1.865 - 3.764
- Missing	4567	475	5042
mean_corpuscular_hemo_conc			
- Mean (SD)	-0.018 (1.015)	0.115 (0.906)	0.000 (1.001)
- Median (Q1, Q3)	-0.055 (-0.652, 0.642)	0.145 (-0.453, 0.742)	-0.055 (-0.552, 0.642)
- Min - Max	-5.432 - 3.331	-3.440 - 1.937	-5.432 - 3.331
- Missing	4567	475	5042
leukocytes			
- Mean (SD)	0.115 (0.998)	-0.721 (0.664)	0.000 (1.001)
- Median (Q1, Q3)	-0.081 (-0.545, 0.552)	-0.835 (-1.120, -0.548)	-0.213 (-0.637, 0.454)
- Min - Max	-2.020 - 4.522	-1.478 - 3.609	-2.020 - 4.522
- Missing	4567	475	5042
basophils			
- Mean (SD)	0.025 (1.035)	-0.158 (0.738)	-0.000 (1.001)
- Median (Q1, Q3)	-0.224 (-0.529, 0.693)	-0.224 (-0.529, 0.082)	-0.224 (-0.529, 0.387)
- Min - Max	-1.140 - 11.078	-1.140 - 2.220	-1.140 - 11.078
- Missing	4567	475	5042
mean_corpuscular_hemoglobin			
- Mean (SD)	0.011 (0.991)	-0.071 (1.064)	-0.000 (1.001)
- Median (Q1, Q3)	0.126 (-0.501, 0.596)	0.126 (-0.423, 0.440)	0.126 (-0.501, 0.596)
- Min - Max	-5.938 - 4.099	-5.519 - 1.590	-5.938 - 4.099
- Missing	4567	475	5042

	negative (N=5086)	positive (N=558)	Total (N=5644)
eosinophils			
- Mean (SD)	0.077 (1.043)	-0.482 (0.450)	0.000 (1.001)
- Median (Q1, Q3)	-0.246 (-0.625, 0.429)	-0.667 (-0.772, -0.330)	-0.330 (-0.667, 0.344)
- Min - Max	-0.836 - 8.351	-0.836 - 1.061	-0.836 - 8.351
- Missing	4567	475	5042
mean_corpuscular_volume			
- Mean (SD)	0.022 (0.991)	-0.138 (1.057)	-0.000 (1.001)
- Median (Q1, Q3)	0.086 (-0.535, 0.647)	-0.054 (-0.455, 0.417)	0.066 (-0.515, 0.627)
- Min - Max	-4.581 - 3.411	-5.102 - 2.109	-5.102 - 3.411
- Missing	4567	475	5042
monocytes			
- Mean (SD)	-0.079 (0.953)	0.493 (1.146)	-0.000 (1.001)
- Median (Q1, Q3)	-0.220 (-0.640, 0.384)	0.515 (-0.260, 1.159)	-0.115 (-0.614, 0.489)
- Min - Max	-2.164 - 4.533	-2.059 - 3.640	-2.164 - 4.533
- Missing	4568	475	5043
RDW			
- Mean (SD)	0.016 (1.009)	-0.100 (0.950)	0.000 (1.001)
- Median (Q1, Q3)	-0.183 (-0.625, 0.348)	-0.271 (-0.758, 0.259)	-0.183 (-0.625, 0.348)
- Min - Max	-1.598 - 6.982	-1.333 - 4.948	-1.598 - 6.982
- Missing	4567	475	5042
respiratory_syncytial_virus			
- detected	52 (4.2%)	0 (0.0%)	52 (3.8%)
- not_detected	1190 (95.8%)	112 (100.0%)	1302 (96.2%)
- Missing	3844	446	4290
influenza_A			
- detected	18 (1.4%)	0 (0.0%)	18 (1.3%)
- not_detected	1224 (98.6%)	112 (100.0%)	1336 (98.7%)
- Missing	3844	446	4290
influenza_B			
- detected	74 (6.0%)	3 (2.7%)	77 (5.7%)
- not_detected	1168 (94.0%)	109 (97.3%)	1277 (94.3%)
- Missing	3844	446	4290
parainfluenza_1			
- detected	3 (0.2%)	0 (0.0%)	3 (0.2%)
- not_detected	1237 (99.8%)	112 (100.0%)	1349 (99.8%)
- Missing	3846	446	4292
coronavirusNL63			
- detected	42 (3.4%)	3 (2.7%)	45 (3.3%)
- not_detected	1198 (96.6%)	109 (97.3%)	1307 (96.7%)
- Missing	3846	446	4292
rhinovirus_enterovirus			
- detected	373 (30.1%)	6 (5.4%)	379 (28.0%)
- not_detected	867 (69.9%)	106 (94.6%)	973 (72.0%)
- Missing	3846	446	4292
coronavirus_HKU1			
- detected	20 (1.6%)	0 (0.0%)	20 (1.5%)
- not_detected	1220 (98.4%)	112 (100.0%)	1332 (98.5%)
- Missing	3846	446	4292
parainfluenza_3			
- detected	10 (0.8%)	0 (0.0%)	10 (0.7%)
- not_detected	1230 (99.2%)	112 (100.0%)	1342 (99.3%)
- Missing	3846	446	4292

	negative (N=5086)	positive (N=558)	Total (N=5644)
chlamydomphila_pneumoniae			
- detected	9 (0.7%)	0 (0.0%)	9 (0.7%)
- not_detected	1231 (99.3%)	112 (100.0%)	1343 (99.3%)
- Missing	3846	446	4292
adenovirus			
- detected	13 (1.0%)	0 (0.0%)	13 (1.0%)
- not_detected	1227 (99.0%)	112 (100.0%)	1339 (99.0%)
- Missing	3846	446	4292
parainfluenza_4			
- detected	19 (1.5%)	0 (0.0%)	19 (1.4%)
- not_detected	1221 (98.5%)	112 (100.0%)	1333 (98.6%)
- Missing	3846	446	4292
coronavirus229E			
- detected	8 (0.6%)	1 (0.9%)	9 (0.7%)
- not_detected	1232 (99.4%)	111 (99.1%)	1343 (99.3%)
- Missing	3846	446	4292
coronavirusOC43			
- detected	8 (0.6%)	0 (0.0%)	8 (0.6%)
- not_detected	1232 (99.4%)	112 (100.0%)	1344 (99.4%)
- Missing	3846	446	4292
inf_A_H1N1_2009			
- detected	98 (7.9%)	0 (0.0%)	98 (7.2%)
- not_detected	1142 (92.1%)	112 (100.0%)	1254 (92.8%)
- Missing	3846	446	4292
bordetella_pertussis			
- detected	2 (0.2%)	0 (0.0%)	2 (0.1%)
- not_detected	1238 (99.8%)	112 (100.0%)	1350 (99.9%)
- Missing	3846	446	4292
metapneumovirus			
- detected	14 (1.1%)	0 (0.0%)	14 (1.0%)
- not_detected	1226 (98.9%)	112 (100.0%)	1338 (99.0%)
- Missing	3846	446	4292
parainfluenza_2			
- not_detected	1240 (100.0%)	112 (100.0%)	1352 (100.0%)
- Missing	3846	446	4292
neutrophils			
- Mean (SD)	0.016 (1.015)	-0.092 (0.918)	0.000 (1.001)
- Median (Q1, Q3)	-0.062 (-0.650, 0.715)	-0.029 (-0.701, 0.520)	-0.054 (-0.652, 0.684)
- Min - Max	-3.340 - 2.536	-2.233 - 1.889	-3.340 - 2.536
- Missing	4648	483	5131
urea			
- Mean (SD)	0.029 (1.046)	-0.166 (0.675)	-0.000 (1.001)
- Median (Q1, Q3)	-0.142 (-0.588, 0.454)	-0.291 (-0.663, 0.342)	-0.142 (-0.588, 0.454)
- Min - Max	-1.630 - 11.247	-1.407 - 1.942	-1.630 - 11.247
- Missing	4748	499	5247
C_reactive_protein			
- Mean (SD)	-0.029 (1.008)	0.180 (0.942)	0.000 (1.001)
- Median (Q1, Q3)	-0.415 (-0.519, -0.054)	-0.230 (-0.460, 0.339)	-0.394 (-0.514, 0.032)
- Min - Max	-0.535 - 8.027	-0.533 - 3.510	-0.535 - 8.027
- Missing	4650	488	5138
creatinine			
- Mean (SD)	-0.034 (1.035)	0.197 (0.750)	-0.000 (1.001)

	negative (N=5086)	positive (N=558)	Total (N=5644)
- Median (Q1, Q3)	-0.133 (-0.667, 0.496)	0.108 (-0.322, 0.668)	-0.081 (-0.632, 0.513)
- Min - Max	-2.390 - 5.054	-1.666 - 1.952	-2.390 - 5.054
- Missing	4724	496	5220
potassium			
- Mean (SD)	0.038 (1.022)	-0.204 (0.862)	0.000 (1.001)
- Median (Q1, Q3)	-0.059 (-0.800, 0.683)	-0.306 (-0.800, 0.436)	-0.059 (-0.800, 0.683)
- Min - Max	-2.283 - 3.402	-2.036 - 1.672	-2.283 - 3.402
- Missing	4773	500	5273
sodium			
- Mean (SD)	0.040 (1.012)	-0.216 (0.923)	0.000 (1.001)
- Median (Q1, Q3)	0.144 (-0.575, 0.863)	-0.216 (-0.934, 0.503)	0.144 (-0.575, 0.503)
- Min - Max	-5.247 - 4.097	-2.372 - 1.941	-5.247 - 4.097
- Missing	4774	500	5274
Influenza_B_rapid_test			
- negative	711 (93.8%)	60 (96.8%)	771 (94.0%)
- positive	47 (6.2%)	2 (3.2%)	49 (6.0%)
- Missing	4328	496	4824
Influenza_A_rapid_test			
- negative	706 (93.1%)	62 (100.0%)	768 (93.7%)
- positive	52 (6.9%)	0 (0.0%)	52 (6.3%)
- Missing	4328	496	4824
Strepto_A			
- negative	283 (89.3%)	14 (100.0%)	297 (89.7%)
- positive	34 (10.7%)	0 (0.0%)	34 (10.3%)
- Missing	4769	544	5313
care			
- discharged	4968 (97.7%)	506 (90.7%)	5474 (97.0%)
- regular_ward	43 (0.8%)	36 (6.5%)	79 (1.4%)
- semi_intensive	42 (0.8%)	8 (1.4%)	50 (0.9%)
- intensive_care_unit	33 (0.6%)	8 (1.4%)	41 (0.7%)

## Anexo - Tablas Estadísticas 2

	negative (N=517)	positive (N=81)	Total (N=598)
hematocrit			
- Mean (SD)	-0.038 (1.025)	0.262 (0.802)	0.003 (1.002)
- Median (Q1, Q3)	0.031 (-0.587, 0.694)	0.397 (-0.427, 0.946)	0.053 (-0.519, 0.717)
- Min - Max	-4.501 - 2.663	-1.778 - 1.656	-4.501 - 2.663
hemoglobin			
- Mean (SD)	-0.039 (1.020)	0.289 (0.818)	0.006 (1.001)
- Median (Q1, Q3)	-0.022 (-0.586, 0.667)	0.416 (-0.336, 0.917)	0.040 (-0.524, 0.730)
- Min - Max	-4.346 - 2.672	-1.651 - 1.920	-4.346 - 2.672
platelets			
- Mean (SD)	0.115 (0.998)	-0.685 (0.637)	0.007 (0.995)
- Median (Q1, Q3)	0.023 (-0.505, 0.638)	-0.693 (-1.083, -0.329)	-0.109 (-0.605, 0.531)
- Min - Max	-2.552 - 9.532	-1.937 - 1.756	-2.552 - 9.532
mean_platelet_volume			
- Mean (SD)	-0.043 (1.011)	0.275 (0.897)	-0.000 (1.002)
- Median (Q1, Q3)	-0.102 (-0.775, 0.684)	0.235 (-0.326, 0.796)	-0.102 (-0.662, 0.684)
- Min - Max	-2.458 - 3.713	-1.897 - 2.703	-2.458 - 3.713
red_blood_cells			
- Mean (SD)	-0.048 (1.000)	0.238 (0.875)	-0.009 (0.988)
- Median (Q1, Q3)	-0.004 (-0.603, 0.613)	0.208 (-0.409, 0.931)	0.014 (-0.568, 0.662)
- Min - Max	-3.971 - 3.646	-1.661 - 2.182	-3.971 - 3.646
Lymphocytes			
- Mean (SD)	0.004 (1.021)	-0.030 (0.882)	-0.001 (1.003)
- Median (Q1, Q3)	0.003 (-0.748, 0.600)	-0.048 (-0.680, 0.574)	-0.014 (-0.737, 0.598)
- Min - Max	-1.865 - 3.764	-1.694 - 2.152	-1.865 - 3.764
mean_corpuscular_hemo_conc			
- Mean (SD)	-0.015 (1.015)	0.170 (0.818)	0.010 (0.992)
- Median (Q1, Q3)	-0.055 (-0.652, 0.642)	0.145 (-0.453, 0.742)	-0.055 (-0.552, 0.642)
- Min - Max	-5.432 - 3.331	-1.648 - 1.937	-5.432 - 3.331
leukocytes			
- Mean (SD)	0.118 (0.998)	-0.706 (0.665)	0.007 (1.000)
- Median (Q1, Q3)	-0.081 (-0.545, 0.554)	-0.824 (-1.085, -0.540)	-0.209 (-0.636, 0.458)
- Min - Max	-2.020 - 4.522	-1.478 - 3.609	-2.020 - 4.522
basophils			
- Mean (SD)	0.027 (1.036)	-0.167 (0.744)	0.001 (1.003)
- Median (Q1, Q3)	-0.224 (-0.529, 0.693)	-0.224 (-0.529, 0.082)	-0.224 (-0.529, 0.387)
- Min - Max	-1.140 - 11.078	-1.140 - 2.220	-1.140 - 11.078
mean_corpuscular_hemoglobin			
- Mean (SD)	0.018 (0.985)	0.055 (0.699)	0.023 (0.951)
- Median (Q1, Q3)	0.126 (-0.501, 0.596)	0.178 (-0.292, 0.440)	0.126 (-0.501, 0.596)
- Min - Max	-5.938 - 4.099	-1.756 - 1.590	-5.938 - 4.099
eosinophils			
- Mean (SD)	0.080 (1.044)	-0.480 (0.453)	0.004 (1.003)
- Median (Q1, Q3)	-0.246 (-0.625, 0.429)	-0.667 (-0.751, -0.372)	-0.330 (-0.667, 0.344)
- Min - Max	-0.836 - 8.351	-0.836 - 1.061	-0.836 - 8.351
mean_corpuscular_volume			
- Mean (SD)	0.028 (0.986)	-0.018 (0.732)	0.022 (0.955)
- Median (Q1, Q3)	0.086 (-0.535, 0.647)	-0.034 (-0.435, 0.427)	0.076 (-0.515, 0.627)
- Min - Max	-4.581 - 3.411	-1.636 - 2.109	-4.581 - 3.411
monocytes			
- Mean (SD)	-0.080 (0.954)	0.485 (1.133)	-0.004 (0.998)

	negative (N=517)	positive (N=81)	Total (N=598)
- Median (Q1, Q3)	-0.220 (-0.640, 0.384)	0.515 (-0.247, 1.145)	-0.115 (-0.614, 0.489)
- Min - Max	-2.164 - 4.533	-2.059 - 3.640	-2.164 - 4.533
RDW			
- Mean (SD)	0.009 (1.004)	-0.200 (0.690)	-0.019 (0.970)
- Median (Q1, Q3)	-0.183 (-0.625, 0.348)	-0.271 (-0.802, 0.259)	-0.183 (-0.625, 0.326)
- Min - Max	-1.598 - 6.982	-1.333 - 2.382	-1.598 - 6.982
care			
- discharged	431 (83.4%)	39 (48.1%)	470 (78.6%)
- regular_ward	31 (6.0%)	26 (32.1%)	57 (9.5%)
- semi_intensive	34 (6.6%)	8 (9.9%)	42 (7.0%)
- intensive_care_unit	21 (4.1%)	8 (9.9%)	29 (4.8%)

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## **titolo 1**

### **titolo2**

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## Annex - Variables

Columna 1	Columna 2	Columna 3
age_quantile	urea	Urine - Ketone Bodies
cov_result	C_reactive_protein	Urine - Nitrite
hematocrit	creatinine	Urine - Density
hemoglobin	potassium	Urine - Urobilinogen
platelets	sodium	Urine - Protein
mean_platelet_volume	Influenza_B_rapid_test	Urine - Sugar
red_blood_cells	Influenza_A_rapid_test	Urine - Leukocytes
Lymphocytes	alanine_transaminase	Urine - Crystals
mean_corpuscular_hemo_c	aspartate_transaminase	Urine - Red blood cells
leukocytes	gamma_glutamyltransferase	Urine - Hyaline cylinders
basophils	total_bilirubin	Urine - Granular cylinders
mean_corpuscular_hemoglobin	direct_bilirubin	Urine - Yeasts
eosinophils	indirect_bilirubin	Urine - Color
mean_corpuscular_volume	alkaline_phosphatase	Partial thromboplastin time (PTT)
monocytes	Ionize_calcium	Relationship (Patient/Normal)
RDW	Strepto_A	International normalized ratio (INR)
serum_glucose	magnesium	Lactic Dehydrogenase
respiratory_syncytial_virus	pCO2 (venous blood gas analysis)	Prothrombin time (PT), Activity
influenza_A	Hb saturation (venous blood gas analysis)	Vitamin B12
influenza_B	Base excess (venous blood gas analysis)	Creatine phosphokinase (CPK)
parainfluenza_1	pO2 (venous blood gas analysis)	Ferritin
coronavirusNL63	Fio2 (venous blood gas analysis)	Arterial Lactic Acid
rhinovirus_enterovirus	Total CO2 (venous blood gas analysis)	Lipase dosage
mycoplasma_pneumoniae	pH (venous blood gas analysis)	D-Dimer
coronavirus_HKU1	HCO3 (venous blood gas analysis)	Albumin
parainfluenza_3	Rods #	Hb saturation (arterial blood gases)
chlamydomphila_pneumoniae	Segmented	pCO2 (arterial blood gas analysis)
adenovirus	Promyelocytes	Base excess (arterial blood gas analysis)
parainfluenza_4	Metamyelocytes	pH (arterial blood gas analysis)
coronavirus229E	Myelocytes	Total CO2 (arterial blood gas analysis)
coronavirusOC43	Myeloblasts	HCO3 (arterial blood gas analysis)
inf_A_H1N1_2009	Urine - Esterase	pO2 (arterial blood gas analysis)
bordetella_pertussis	Urine - Aspect	Arterial Fio2
metapneumovirus	Urine - pH	Phosphor
parainfluenza_2	Urine - Hemoglobin	ctO2 (arterial blood gas analysis)
neutrophils	Urine - Bile pigments	care

## Referencias Bibliográficas