

**Table 1 - Quantitative**

| variables   | Corticoid | n   | Mean $\pm$ standard deviation | Median (IQR)         | Mann & Whitney p | Student's t test p |
|-------------|-----------|-----|-------------------------------|----------------------|------------------|--------------------|
| Age (years) | Dexa      | 194 | 50.8 $\pm$ 12.8               | 51 (42 - 57)         | ---              | 0.309              |
|             | Methyl    | 131 | 49.3 $\pm$ 12.8               | 47 (40 - 57)         |                  |                    |
| VG D0       | Dexa      | 194 | 40.0 $\pm$ 5.3                | 40.6 (36.8 - 43.7)   | ---              | 0.029              |
|             | Methyl    | 131 | 41.2 $\pm$ 4.3                | 41.7 (38.7 - 44.2)   |                  |                    |
| Hb DI       | Dexa      | 194 | 13.7 $\pm$ 1.8                | 13.9 (12.5 - 15)     | ---              | 0.051              |
|             | Methyl    | 131 | 14.1 $\pm$ 1.5                | 14.4 (13.3 - 15)     |                  |                    |
| Leuc DI     | Dexa      | 194 | 9445 $\pm$ 4298               | 8850 (6500 - 12000)  | 0.015            | ---                |
|             | Methyl    | 131 | 11147 $\pm$ 7024              | 10100 (7000 - 13800) |                  |                    |
| Bast DI     | Dexa      | 194 | 7.9 $\pm$ 3.7                 | 7 (5 - 11)           | 0.029            | ---                |
|             | Methyl    | 131 | 8.7 $\pm$ 3.4                 | 8 (6 - 11)           |                  |                    |
| PCR DI      | Dexa      | 194 | 95.8 $\pm$ 67.2               | 93.2 (32.9 - 137.3)  | 0.729            | ---                |
|             | Methyl    | 131 | 97.9 $\pm$ 66.1               | 93.4 (45.2 - 139.2)  |                  |                    |
| VG DF       | Dexa      | 194 | 39.8 $\pm$ 5.5                | 40.3 (36.7 - 43.5)   | ---              | 0.008              |
|             | Methyl    | 131 | 41.3 $\pm$ 4.4                | 41.5 (38.7 - 44.1)   |                  |                    |
| Hb DF       | Dexa      | 194 | 13.5 $\pm$ 1.7                | 13.8 (12.4 - 14.8)   | ---              | 0.013              |
|             | Methyl    | 131 | 14.0 $\pm$ 1.5                | 14 (13 - 15)         |                  |                    |
| Leuc DF     | Dexa      | 194 | 9129 $\pm$ 3831               | 8300 (6500 - 11000)  | 0.405            | ---                |
|             | Methyl    | 131 | 9235 $\pm$ 3323               | 8700 (6800 - 11600)  |                  |                    |
| Bast DF     | Dexa      | 194 | 7.1 $\pm$ 3.2                 | 6 (5 - 10)           | 0.149            | ---                |
|             | Methyl    | 131 | 7.6 $\pm$ 3.1                 | 7 (5 - 9)            |                  |                    |
| PCR DF      | Dexa      | 194 | 52.6 $\pm$ 53.0               | 29.8 (15.1 - 80)     | 0.451            | ---                |
|             | Methyl    | 131 | 51.1 $\pm$ 57.3               | 26.3 (11.5 - 72.7)   |                  |                    |

**Legend.** IIQ: interquartile range (Quartile 1 – Quartile 3). DI: date of admission. DF: end date. GV: packed cell volume. Hb: hemoglobin. Leuc: leukocytes. Bast: rods. CRP: C-Reactive Protein. Dexa: dexamethasone. Methyl: methylprednisolone.

\* Non-parametric Mann-Whitney test, used to analyze Leuc, Bast and PCR variables.

\*\* Student's t test for independent samples, used to analyze the variables Age, VG and Hb.

**Table 2 - Categorical**

| variables | Variable | Classification | Dexamethasone | Methylprednisolone | p*    |
|-----------|----------|----------------|---------------|--------------------|-------|
| Gender    | Female   |                | 83 (42.8%)    | 53 (40.5%)         | 0.731 |
|           | Male     |                | 111 (57.2%)   | 78 (59.5%)         |       |
| DM        | No       |                | 184 (94.8 %)  | 120 (91.6%)        | 0.258 |
|           | Yes      |                | 10 (5.2%)     | 11 (8.4%)          |       |
| Smoking   | No       |                | 191 (98.5%)   | 130 (99.2%)        | 0.651 |
|           | Yes      |                | 3 (1.5%)      | 1 (0.8%)           |       |
| SAH       | No       |                | 161 (83%)     | 111 (84.7%)        | 0.760 |
|           | Yes      |                | 33 (17%)      | 20 (15.3%)         |       |
| COPD      | No       |                | 191 (98.5%)   | 127 (96.9% )       | 0.446 |
|           | Yes      |                | 3 (1.5%)      | 4 (3.1%)           |       |

**Caption.** DM: diabetes mellitus. SAH: systemic arterial hypertension. COPD: chronic obstructive pulmonary disease.

\* Fischer's exact test.

**Table 3 - Assessment of the association between the type of corticosteroid and death within 28 days**

| Variable         | Classification    | n<br>total | Death within 28 days |                     | OR (95%CI)                |
|------------------|-------------------|------------|----------------------|---------------------|---------------------------|
|                  |                   |            | No                   | Yes                 |                           |
| Age (years)      | (mean ± SD)       |            | 49.7 ± 12.7          | 56.3 ± 13.4         | 1.04 (1.01 - 1.07)        |
| Gender           | (ref)             | 136        | 127 (93.4%)          | 9 (6.6%)            |                           |
|                  | Male              | 189        | 175 (92.6%)          | 14 (7.4 %)          | 1.13 (0.47 - 2.69)        |
| DM               | No (ref)          | 304        | 281 (92.4%)          | 23 (7.6%)           |                           |
|                  | Yes               | 21         | 21 (100%)            | 0 (0%)              | -                         |
| Tab              | No ( ref)         | 321        | 298 (92.8%)          | 23 (7.2%)           |                           |
|                  | Yes               | 4          | 4 (100%)             | 0 (0%)              | -                         |
| SAH              | No (ref)          | 272        | 251 (92.3%)          | 21 (7.7%)           |                           |
|                  | Yes               | 53         | 51 (96.2%)           | 2 (3.8%)            | 0.47 (0.11 - 2.06)        |
| COPD             | No (ref)          | 318        | 296 (93.1%)          | 22 (6.9%)           |                           |
|                  | Yes               | 7          | 6 (85.7%)            | 1 (14.3%)           | 2.24 (0.26 - 19.5)        |
| VG DI            | (mean ± SD)       |            | 40.5 ± 4.9           | 39.6 ± 5.9          | 0.97 (0.89 - 1.04)        |
| Hb DI            | (mean ± SD)       |            | 13.9 ± 1.6           | 13.4 ± 2.3          | 0.87 (0.69 - 1.09)        |
| Leuc DI          | (median, IQ)      |            | 9600 (6700 - 12400)  | 8200 (6100 - 14700) | 1.01 (0.95 - 1.08)*       |
| Bast DI          | (median, IQ)      |            | 7 (5 - 11)           | 7 (6 - 12)          | 1.04 (0.93 - 1.17)        |
| PCR DI           | (median, IQR)     |            | 91.6 (35.8 - 136)    | 125.1 (61.2 - 153)  | 1.004 (0.998 - 1.010)     |
| VG FD            | (mean ± SD)       |            | 40.5 ± 5.2           | 38.7 ± 5.1          | 0.94 (0.88 - 1.01)        |
| Hb DF            | (mean ± SD)       |            | 13.8 ± 1.6           | 13 ± 1.8            | 0.77 (0.61 - 0.99)        |
| Leuc DF          | ( median, IIQ)    |            | 8600 (6700 - 11100)  | 8700 (6400 - 14000) | 1.06 (0.96 - 1.18)*       |
| Bast DF          | (median, IIQ)     |            | 7 (5 - 10)           | 8 (5 - 9)           | 1, 00 (0.87 - 1.14)       |
| PCR DF           | (median, IQR)     |            | 26.2 (12.4 - 71.7)   | 133.4 (50 - 185)    | 1.017 (1.010 - 1.023)     |
| <b>Corticoid</b> | <b>Dexa (ref)</b> | <b>194</b> | <b>178 (91.8%)</b>   | <b>16 (8.2%)</b>    |                           |
|                  | <b>Methyl</b>     | <b>131</b> | <b>124 (94.7%)</b>   | <b>7 (5.3%)</b>     | <b>0.63 (0.25 - 1.57)</b> |

**Legend.** IIQ: interquartile range (Quartile 1 – Quartile 3). DM: diabetes mellitus. SAH: systemic arterial hypertension. COPD: chronic obstructive pulmonary disease. DI: date of admission. DF: end date. GV: packed cell volume. Hb: hemoglobin. Leuk: leukocytes. Bast: rods. CRP: C-Reactive Protein. Dexa: dexamethasone. Methyl: methylprednisolone.

\* OR corresponding to every 1000 more leukocyte units.

**Table 4 - Assessment of the association between the type of corticosteroid and the need for ICU**

| Variable         | Classif           | n<br>total | Need for ICU         |                      | OR (95%CI)                |
|------------------|-------------------|------------|----------------------|----------------------|---------------------------|
|                  |                   |            | No                   | Yes                  |                           |
| Age (years)      | (mean ± SD)       |            | 50.2 ± 13.0          | 50.0 ± 9.7           | 0.99 (0.97 - 1.03)        |
| Gender           | (ref)             | 136        | 125 (91.9%)          | 11 (8.1%)            |                           |
|                  | Male              | 189        | 175 (92.6%)          | 14 (7.4%)            | 0.91 (0.40 - 2.07)        |
| DM               | No (ref)          | 304        | 281 (92.4%)          | 23 (7.6%)            |                           |
|                  | Yes               | 21         | 19 (90.5%)           | 2 (9.5%)             | 1.29 (0.28 - 5.87)        |
| Tab              | No (ref)          | 321        | 296 (92.2%)          | 25 (7.8%)            |                           |
|                  | Yes               | 4          | 4 (100%)             | 0 (0%)               | -                         |
| SAH              | No (ref)          | 272        | 251 (92.3%)          | 21 (7.7%)            |                           |
|                  | Yes               | 53         | 49 (92.5%)           | 4 (7.5%)             | 0.98 (0.32 - 2.97)        |
| COPD             | No (ref)          | 318        | 293 ( 92.1%)         | 25 (7.9%)            |                           |
|                  | Yes               | 7          | 7 (100%)             | 0 (0%)               | -                         |
| VG DI            | (mean ± SD)       |            | 40.4 ± 4.9           | 40.9 ± 5.6           | 1.02 ( 0.94 - 1.12)       |
| Hb DI            | (mean ± SD)       |            | 13.8 ± 1.6           | 13.9 ± 2.1           | 1.04 (0.81 - 1.33)        |
| Leuc DI          | (median, IQ)      |            | 9350 ( 6700 - 12400) | 10400 (7200 - 14200) | 1.03 (0.98 - 1.09)*       |
| Bast DI          | (median, IQ)      |            | 7 (5 - 11)           | 8 (7 - 10)           | 1.06 (0.95 - 1.18)        |
| PCR DI           | (median, IQR)     |            | 90.7 (34.5 - 135.6)  | 125.1 (85 - 153.8)   | 1.006 (1.001 - 1.012)     |
| VG DF            | (mean ± SD)       |            | 40.5 ± 5.2           | 39 ± 4.6             | 0.96 (0.89 - 1.03)        |
| Hb DF            | (mean ± SD)       |            | 13.8 ± 1.7           | 13.2 ± 1.7           | 0.84 (0.66 - 1.06 )       |
| Leuc DF          | (median, IQ)      |            | 8550 (6600 - 11100)  | 8800 (7500 - 11400)  | 1.08 (0.98 - 1.19)*       |
| Bast DF          | (median, IQ)      |            | 7 (5 - 10)           | 6 (5 - 8)            | 0.93 (0.81 - 1.06)        |
| PCR DF           | (median, IQ)      |            | 25.9 (12.4 - 71.2)   | 101.3 (68.4 - 163.6) | 1.016 (1.010 - 1.023 )    |
| <b>Corticoid</b> | <b>Dexa (ref)</b> | <b>194</b> | <b>178 (91.8%)</b>   | <b>16 (8.2%)</b>     |                           |
|                  | <b>Methyl</b>     | <b>131</b> | <b>122 (93.1%)</b>   | <b>9 (6.9%)</b>      | <b>0.82 (0.35 - 1.92)</b> |

**Legend .** IIQ: interquartile range (Quartile 1 – Quartile 3). DM: diabetes mellitus. SAH: systemic arterial hypertension. COPD: chronic obstructive pulmonary disease. DI: date of admission. DF: end date. GV: packed cell volume. Hb: hemoglobin. Leuc: leukocytes. Bast: rods. CRP: C-Reactive Protein. Dexa: dexamethasone. Methyl: methylprednisolone.

\* OR corresponding to every 1000 more leukocyte units.

**Table 5 - Assessment of the association between the type of corticosteroid and the need for MV**

| Variable         | Classif           | n<br>total | Need for MV         |                      | p*          | OR (95%CI)             |
|------------------|-------------------|------------|---------------------|----------------------|-------------|------------------------|
|                  |                   |            | No                  | Yes                  |             |                        |
| Age (years)      | (mean ± SD)       |            | 50.1 ± 12.9         | 51, 5 ± 8.2          | 0.767       | 1.01 (0.96 - 1.06)     |
| Gender           | (ref)             | 136        | 133 (97.8%)         | 3 (2.2%)             | 0.801       | 1.20 (0.28 - 5.13)     |
|                  | Male              | 189        | 184 (97.4%)         | 5 (2%)               |             |                        |
| DM               | No (ref)          | 304        | 296 (97.4%)         | 8 (2.6%)             | 1 **        | -                      |
|                  | Yes               | 21         | 21 (100%)           | 0 (0%)               |             |                        |
| Tab              | No (ref)          | 321        | 313 (97.5%)         | 8 (2.5%)             | 1**         | -                      |
|                  | Yes               | 4          | 4 (100%)            | 0 (0%)               |             |                        |
| SAH              | No (ref)          | 272        | 264 (97.1 %)        | 8 (2.9%)             | 0.362*<br>* | -                      |
|                  | Yes               | 53         | 53 (100%)           | 0 (0%)               |             |                        |
| COPD             | No (ref)          | 318        | 310 (97.5%)         | 8 (2.5%)             | 1**         |                        |
|                  | Yes               | 7          | 7 (100 %)           | 0 (0%)               |             |                        |
| VG D0            | (mean ± SD)       |            | 40.5 ± 4.9          | 38.3 ± 7.3           | 0.204       | 0.93 (0.83 - 1.04)     |
| Hb D0            | (mean ± SD )      |            | 13.9 ± 1.6          | 13 ± 2.9             | 0.149       | 0.77 (0.54 - 1.10)     |
| Leuc D0          | (median, IQ)      |            | 9400 (6700 - 12400) | 10450 (6300 - 13200) | 0.850       | 1.01 ( 0.91 - 1.13)*** |
| Bast D0          | (median, IQR)     |            | 7 (5 - 11)          | 10 (9 - 13)          | 0.049       | 1.20 (1.00 - 1.43)     |
| PCR D0           | (median, IQR)     |            | 93.2 (37.5 - 135.8) | 124.6 (82.3 - 162)   | 0.205       | 1.006 (0.997 - 1.016)  |
| VG D4            | (mean ± D P)      |            | 40.5 ± 5.1          | 36.1 ± 4.4           | 0.026       | 0.90 (0.82 - 0.99)     |
| Hb D4            | (mean ± SD)       |            | 13.7 ± 1.6          | 12.3 ± 1.7           | 0.020       | 0.63 (0.43 - 0.93)     |
| Leuc D4          | (median, IQ)      |            | 8600 (6700 - 11200) | 8150 (3950 - 9400)   | 0.185       | 0.84 (0.65 - 1.09)***  |
| Bast D4          | (median, IQ)      |            | 7 (5 - 10)          | 8 (6 - 9)            | 0.765       | 1.03 (0.83 - 1.28)     |
| D4 PCR           | (median, IQ)      |            | 27.8 (12.7 - 73)    | 135.9 (69.9 - 222)   | <0.001      | 1.018 (1.009 - 1.027)  |
| <b>Corticoid</b> | <b>Dexa (ref)</b> | <b>194</b> | 188 (96.9%)         | 6 (3.1%)             | 0.381       | 0.49 (0.10 - 2.44)     |
|                  | <b>Methyl</b>     | <b>131</b> | 129 (98.5%)         | 2 (1.5% )            |             |                        |

**Legend.** IIQ: interquartile range (Quartile 1 – Quartile 3). DM: diabetes mellitus. SAH: systemic arterial hypertension. COPD: chronic obstructive pulmonary disease. DI: date of admission. DF: end date. GV: packed cell volume. Hb: hemoglobin. Leuc: leukocytes. Bast: rods. CRP: C-Reactive Protein. Dexa: dexamethasone. Methyl: methylprednisolone.

\* Wald logistic regression model.

\*\* Fischer's exact test.

\*\*\* OR corresponding to each 1000 more leukocyte units.

**Table 6 - Deaths in 28 days in patients who required ICU or MV.**

| Variable            | Classif  | n<br>total | Death in 28 days |           | p*     |
|---------------------|----------|------------|------------------|-----------|--------|
|                     |          |            | No               | Yes       |        |
| <b>Need for ICU</b> | No (ref) | 300        | 293 (97.7%)      | 7 (2.3%)  | <0.001 |
|                     | Yes      | 25         | 9 (36%)          | 16 (64%)  |        |
| <b>MV</b>           | No (ref) | 317        | 301 (95%)        | 16 (5%)   | <0.001 |
|                     | Yes      | 8          | 1 (12.5%)        | 7 (87.5%) |        |

\* Logistic Regression Model and Wald test, p<0.05

**Table 7 - ICU time considering the cases that required ICU**

| Variable        | n  | Mean $\pm$ standard deviation | Median (IQR)  |
|-----------------|----|-------------------------------|---------------|
| ICU time (days) | 25 | 22.0 $\pm$ 18.5               | 18 (9 – 31.5) |

IIQ: interquartile range

**Table 8 - Assessment of the association between quantitative variables and ICU time**

| Variables          | n  | Spearman correlation coefficient | p     |
|--------------------|----|----------------------------------|-------|
| ICU time x Age     | 25 | -0.11                            | 0.598 |
| ICU time x VG DI   | 25 | -0.19                            | 0.356 |
| ICU time x Hb DI   | 25 | - 0.20                           | 0.337 |
| ICU time x Leuc DI | 25 | -0.15                            | 0.470 |
| ICU time x Bast DI | 25 | -0.27                            | 0.196 |
| ICU time x PCR DI  | 25 | -0.32                            | 0.124 |
| ICU time x VG DF   | 25 | -0, 20                           | 0.330 |
| ICU time x Hb DF   | 25 | -0.28                            | 0.174 |
| ICU time x Leuc DF | 25 | 0.09                             | 0.651 |
| ICU time x Bast DF | 25 | -0.21                            | 0.314 |
| ICU time x PCR DF  | 25 | 0.09                             | 0.679 |

**Legend The.** DI: date of admission. DF: end date. GV: packed cell volume. Hb: hemoglobin. Leuk: leukocytes. Bast: rods. CRP: C-Reactive Protein.

Spearman's correlation coefficient is a measure of association between two quantitative variables and ranges from -1 to +1. A positive coefficient indicates a direct correlation between the variables. Negative coefficients indicate an inverse correlation. Correlation coefficients close to zero indicate a weak association and coefficients closer to -1 or +1 indicate a strong association between the two variables.