

Supplementary information 1 (Table S1). Hematological parameters analyzed and reference normal values.

| Hematological parameters | Reference values |
|---|--|
| Red series parameters * | |
| Total erythrocyte count | |
| Males | 4.5 to 6.5 million/mm ³ |
| Females | 3.9 to 5.6 million/mm ³ |
| Hemoglobin (Hb) | |
| Males | 13.5 to 17.5 g/dL |
| Females | 11.5 to 15.5 g/dL |
| Hematocrit (Hct) | |
| Males | 40 to 52% |
| Females | 36 to 48% |
| Mean hemoglobin corpuscular volume (MCV) | 80 to 95 fL |
| Mean hemoglobin concentration (MCH) | 27 to 34 pg |
| Mean cell hemoglobin concentration (MCHM) | 30 to 35 g/dL |
| White series parameters * | |
| Total leukocyte count | 4,000 to 11,000/mm ³ |
| Neutrophils | 1,800 to 7,500/mm ³ |
| Lymphocytes | 1,500 to 3,500/mm ³ |
| Monocytes | 200 to 880/mm ³ |
| Eosinophils | 40 to 440/mm ³ |
| Basophils | 10 to 100/mm ³ |
| Platelet parameter | 150 to 400 x10 ³ /mm ³ |
| Cell immaturity parameters # | |
| Immature granulocytes (IG)%; (IG) | 0 to 0.6%; 0 to 0.06 x10 ³ /µL |
| Reticulocytes (Ret)% | 0.5 to 2.5% |
| Reticulocyte hemoglobin content (Ret-He) | 28 to 36 pg |
| Fraction of immature reticulocytes (IRF) | 1.6 to 10.5% |

Source: *[19]Hoffbrand and Steensma. 2020 # [20] Pekelharing et al., 2010

Supplementary information 2 (Table S2). Evaluation of the blood red cells, white blood cells count (in number per cubic millimeter) and platelets count before treatment and its progress after introduction of the antifungal treatment.

| Variable | Patients (number) | S0 Median [Q1;Q3] | S1 Median [Q1;Q3] | S2 Median [Q1;Q3] | S3 Median [Q1;Q3] | p value |
|-------------------------|-------------------|------------------------------------|------------------------------------|------------------------------------|-----------------------------------|------------------|
| Red blood series | | | | | | |
| Erythrocytes | 55 | 4.7 [4.3; 5.1] | ... | 4.8 [4.5; 5.4] | ... | 0.001 |
| Erythrocytes | 29 | 4.7 [4.4; 5.1] | 4.7 [4.4; 5.2] | 4.8 [4.5; 5.1] | 4.8 [4.4; 5.3] | 0.196 |
| Hemoglobin | 55 | 13.7 [12.1; 14.9] | ... | 14.6 [13.6; 15.6] | ... | <0.001 |
| Hemoglobin | 29 | 13.9 [13.2; 14.8] ^{cd} | 14.1 [13.5; 15.3] ^{bc} | 14.6 [13.9; 15.2] ^b | 15.1 [14.0; 16.1] ^a | <0.001 |
| Hematocrit | 55 | 42.1 [36.8; 45.6] | ... | 44.2 [40.5; 47.2] | ... | <0.001 |
| Hematocrit | 29 | 42.2 [38.6; 45.0] ^{bc} | 42.5 [40.7; 44.7] ^b | 44.3 [41.4; 45.7] ^{ab} | 44.8 [41.5; 48.1] ^a | 0.009 |
| MCV | 55 | 89.9 [86.7; 91.9] | ... | 90.0 [88.3; 94.1] | ... | 0.004 |
| MCV | 29 | 89.3 [87.0; 91.3] ^c | 89.4 [86.6; 93.3] ^c | 90.4 [88.8; 94.2] ^{ab} | 90.9 [89.4; 94.5] ^a | <0.001 |
| MHC | 55 | 29.6 [28.0; 30.8] | ... | 30.3 [29.2; 31.6] | ... | <0.001 |
| MHC | 29 | 29.6 [27.8; 31.3] ^{cb} | 29.4 [28.5; 31.4] ^{bc} | 30.3 [29.2; 31.7] ^{ab} | 31.2 [29.7; 32.5] ^a | 0.003 |

| | | | | | | |
|---------------------------|----|-----------------------|----------------------|----------------------|-----------------------|--------------|
| CMHC | 55 | 33.1 [32.0; 33.8] | ... | 33.5 [32.6; 34.2] | ... | 0.006 |
| CMHC | 29 | 33.1 [32.2; 34.0] | 33.4 [32.5; 33.8] | 33.3 [32.7; 33.9] | 33.8 [32.6; 34.4] | 0.313 |
| RDWsd | 22 | 47.0 [44.0; 49.8] | ... | 46.3 [45.0; 48.0] | ... | 0.984 |
| RDWsd | 07 | 46.0 [44.0; 48.6] | 49.0 [46.0; 53.0] | 47.0 [45.8; 51.0] | 46.0 [44.0; 50.5] | 0.398 |
| RDWcv | 22 | 14.2 [13.6; 15.5] | ... | 14.0 [13.1; 14.8] | ... | 0.465 |
| RDWcv | 07 | 13.7 [13.3; 14.3] | 14.2 [14.1; 15.1] | 13.4 [13.1; 14.9] | 13.7 [12.6; 14.3] | 0.239 |
| White blood series | | | | | | |
| Leukocytes | 55 | 8200 [7000; 10230] | ... | 7460 [6380; 8885] | ... | 0.007 |
| Leukocytes | 29 | 8150 [6910; 10260] | 7970 [5930; 9820] | 7640 [6410; 8700] | 7570 [6480; 10080] | 0.113 |
| Neutrophils | 55 | 5062 [4199; 6337] | ... | 4422 [3350; 5491] | ... | 0.002 |
| Neutrophils | 29 | 4821 [4215; 6102] | 4303 [3683; 5355] | 4422 [3305; 5366] | 4350 [3318; 5734] | 0.161 |
| Eosinophils | 55 | 222 [79.5; 448] | ... | 224 [130; 430] | ... | 0.897 |
| Eosinophils | 29 | 229 [72.7; 681] | 357 [143; 565] | 196 [147; 622] | 234 [102; 455] | 0.661 |
| Basophils | 55 | 0.00 [0.0; 59.1] | ... | 0.00 [0.0; 72.3] | ... | 0.071 |

| | | | | | | |
|------------------------|----|-----------------------------------|------------------------------------|-----------------------------------|------------------------------------|------------------|
| Basophils | 29 | 0.0 [0.0; 63.7] | 0.0 [0.0; 63.0] | 44.4 [0.0; 76.0] | 0.0 [0.0; 64.0] | 0.761 |
| Lymphocytes | 55 | 1997 [1493; 2664] | ... | 2197 [1665; 2640] | ... | 0.158 |
| Lymphocytes | 29 | 1956 [1582; 2548] | 2135 [1648; 2630] | 2113 [1654; 2653] | 1995 [1544; 2554] | 0.338 |
| Monocytes | 55 | 718 [525; 990] | ... | 548 [423; 787] | ... | <0.001 |
| Monocytes | 29 | 718 [565; 953] ^a | 717 [367; 829] ^{ac} | 549 [420; 771] ^{bc} | 550 [515; 813] ^c | 0.004 |
| NRL | 55 | 2.6 [1.8; 3.5] | ... | 2.0 [1.5; 3.2] | ... | 0.004 |
| NRL | 29 | 2.5 [1.6; 3.2] | 2.1 [1.6; 2.6] | 2.1 [1.5; 3.2] | 2.1 [1.5; 3.0] | 0.392 |
| MLR | 55 | 0.4 [0.2; 0.5] | ... | 0.3 [0.2; 0.4] | ... | <0.001 |
| MLR | 29 | 0.39 [0.26; 0.48] ^a | 0.31 [0.22; 0.41] ^{ab} | 0.28 [0.21; 0.41] ^b | 0.31 [0.25; 0.40] ^{ab} | 0.042 |
| Platelet series | | | | | | |
| Platelets | 55 | 322 [259; 403] | ... | 263 [220; 303] | ... | <0.001 |
| PLR | 55 | 0.2 [0.1; 0.3] | ... | 0.1 [0.1; 0.2] | ... | <0.001 |
| Platelets | 29 | 304 [256; 402] ^a | 268 [228; 306] ^{bcd} | 242 [211; 298] ^{cd} | 258 [209; 295] ^d | <0.001 |
| PLR | 29 | 0.2 [0.1-0.2] ^a | 0.1 [0.1-0.2] ^{bcd} | 0.1 [0.1-0.1] ^{cd} | 0.1 [0.1-0.1] ^d | 0.002 |

Results presented as; median [Q1: first quartile; Q3: third quartile]; MCV: mean hemoglobin corpuscular volume; MCH: mean hemoglobin concentration; CHCM: mean corpuscular hemoglobin concentration; RDWsd: range of distribution of erythrocytes - expressed as standard deviation; RDWcv: range of distribution of erythrocytes - expressed as coefficient of variation; NLR: neutrophil/lymphocyte ratio; MLR: monocyte/lymphocyte ratio; PLR: platelet/lymphocyte ratio; Platelet count: number x10³/cubic millimeter; **S0** – before treatment; **S1** - between the beginning of treatment and after clinical improvement; **S2** - clinical cure; **S3** - serological cure.

Statistical tests: Wilcoxon W test or paired Student's T test; Friedman test – post hoc (Durbin-Conover). Lower-case letters compare medians in the same row; medians followed by different letters are statistically different ($p \leq 0.05$), while followed by the same letter or not followed by any letter do not differ ($p > 0.05$).

Supplementary information 3 (Table S3). Differences in values in hematological parameters between clinical cure (S2) and pre-treatment (S0), according to the antifungal used, in 55 patients with the chronic form of paracoccidioidomycosis.

| Parameters (cell/mm ³) | Cotrimoxazole n=20 | Itraconazole n= 35 | p value † |
|---------------------------------------|------------------------|--------------------------|-----------|
| | Median [Q1; Q3] | Median [Q1; Q3] | |
| Erithrocytes* | 0.015 [0.15; 0.63] | 0.3 [-0.1; 0.46] | 0.479 |
| RetHe | 2 [0.9; 4.4] | 1 [0; -30.6] | 0.569 |
| Leukocytes | -2490 [-1080; -2940] | -340 [-1680; 590] | 0.478 |
| Neutrophils | -2262.2 [67.25; 25.95] | -3534.8 [-2270; -5667.2] | 0.902 |
| IG | 0.05 [0.04; -0.05] | 0.04 [-0.01-0.28] | 0.870 |
| Platelets ** | -35 [-174; -54] | -36 [-21; -61] | 0.700 |

*Erythrocytes: million/mm³; Platelet count: number x10³/mm³.

Statistical tests: Wilcoxon signed rank test.