Long-term outcome after COVID-19 convalescent plasma treatment in patients with severe COVID-19: One year follow up of the randomized clinical trial CAPSID

Supplement

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Supplemental Figure 1. Post-COVID-19 Scale

Can you live alone without any assistance from another person? (e.g. independently being able to eat, walk, use the toilet and manage routine daily hygiene)

- yes
- no

Are there any duties/activities at home or at work which you are no longer able to perform yourself?

- no
- yes

Do you suffer from symptoms, pain, depression or anxiety?

- no
- yes

Do you need to avoid or reduce duties/activities or spread these over time?

- no
- yes

Grade 0: no functional limitations

Grade 1: negligible functional limitations

Grade 2: slight functional limitations

Grade 3: moderate functional limitations

Grade 4: severe functional limitations
Supplemental Figure 2: Course of Anti-SARS-CoV2 antibodies by ELISA

Data are given as median and interquartile ranges. Blue dots represent baseline values und blue lines follow up data. Ratios are shown for IgG and IgA antibodies.

(A) All available follow up data and baseline data for participants are included. Donors IgG baseline vs. patients IgG baseline: p=0.5327. Donors IgG follow up vs. patients IgG follow up: P=0.036. Donors IgA baseline vs. patients IgA baseline: p<0.0001. Donors IgA follow up vs. patients IgA follow up: p=0.7209.

(B) Only vaccinated patients and donors with available baseline and follow up data are included.

(C) Only vaccinated patients with available baseline and follow up data are included. IgG (p=0.0156) and IgA (p=0.010) increased significantly after vaccination. No tests were performed for pairs with n < 7.

Comparisons were performed using Mann Whitney test.
Table 1: Symptoms and health care resources during follow up

| Symptom               | CCP-Donor (n=113) | Patients (CCP + Control) (n=50) | p-value | CCP group High titer + Low titer (n=30) | Control Group (n=20) | p-value |
|-----------------------|-------------------|---------------------------------|---------|----------------------------------------|----------------------|---------|
| GI-Symptoms, n (%)    |                   |                                 | <0.01   |                                        |                      | 0.77    |
| Multiple answers possible |                 |                                  |         |                                        |                      |         |
| Without Event         | 104 (92.0)        | 30 (60.0)                       | <0.01   | 17 (56.7)                              | 13 (65.0)            | 0.77    |
| Grade 1               | 8 (7.1)           | 19 (38.0)                       |         | 12 (40.0)                              | 7 (35.0)             |         |
| Grade 2               | 1 (0.9)           | 3 (6.0)                         |         | 3 (10.0)                               | 0 (0.0)              |         |
| Grade 3               | 1 (0.9)           | 1 (2.0)                         |         | 1 (3.3)                                | 0 (0.0)              |         |
| GI-Symptoms, n (%)    |                   |                                 | <0.01   |                                        |                      | 0.56    |
| Worst grade           |                   |                                  |         |                                        |                      |         |
| Without Event         | 104 (92.0)        | 30 (60.0)                       | <0.01   | 17 (56.7)                              | 13 (65.0)            | 0.56    |
| Grade 1               | 7 (6.2)           | 16 (32.0)                       |         | 9 (30.0)                               | 7 (35.0)             |         |
| Grade 2               | 1 (0.9)           | 3 (6.0)                         |         | 3 (10.0)                               | 0 (0.0)              |         |
| Grade 3               | 1 (0.9)           | 1 (2.0)                         |         | 1 (3.3)                                | 0 (0.0)              |         |
| Abdominal pain, n (%) |                   |                                 | <0.01   |                                        |                      | 0.38    |
| Without Event         | 112 (99.1)        | 44 (88.0)                       | <0.01   | 25 (83.3)                              | 19 (95.0)            | 0.38    |
| Grade 1               | 1 (0.9)           | 3 (6.0)                         |         | 3 (10.0)                               | 0 (0.0)              |         |
| Grade 2               | 0 (0.0)           | 2 (4.0)                         |         | 1 (3.3)                                | 1 (5.0)              |         |
| Grade 3               | 0 (0.0)           | 1 (2.0)                         |         | 1 (3.3)                                | 0 (0.0)              |         |
| Diarrhea, n (%)       |                   |                                 | <0.01   |                                        |                      | 0.22    |
| Without Event         | 110 (97.4)        | 43 (86.00)                      | <0.01   | 24 (80.0)                              | 19 (95.0)            | 0.22    |
| Grade 1               | 3 (2.65)          | 7 (14.00)                       |         | 6 (20.0)                               | 1 (5.0)              |         |
| Nausea, n (%)         |                   |                                 | <0.01   |                                        |                      | 0.07    |
| Without Event         | 112 (99.1)        | 44 (88.0)                       | <0.01   | 24 (80.0)                              | 20 (100.0)           | 0.07    |
| Grade 1               | 0 (0.0)           | 5 (10.0)                        |         | 5 (16.7)                               | 0 (0.0)              |         |
| Grade 2               | 1 (0.9)           | 1 (2.0)                         |         | 1 (3.3)                                | 0 (0.0)              |         |
| Weight loss, n (%)    |                   |                                 | <0.01   |                                        |                      | 0.18    |
| Without Event         | 110 (97.4)        | 38 (76.0)                       | <0.01   | 25 (83.3)                              | 13 (65.0)            | 0.18    |
| Grade 1               | 3 (2.7)           | 9 (18.0)                        |         | 2 (6.7)                                | 7 (35.0)             |         |
| Grade 2               | 0 (0.0)           | 2 (4.0)                         |         | 2 (6.7)                                | 0 (0.0)              |         |
| Symptom                          | CCP-Donor (n=113) | Patients (CCP + Control) (n=50) | p-value | CCP group (High titer + Low titer) (n=30) | Control Group (n=20) | p-value |
|---------------------------------|-------------------|--------------------------------|---------|------------------------------------------|----------------------|---------|
| **Grade 3**                     | 0 (0.0)           | 1 (2.0)                        |         | 1 (3.3)                                  | 0 (0.0)              |         |
| **Neurologic-Symptoms, n (%)** |                   |                                | 0.49    |                                          |                      | 0.37    |
| Without Event                   | 48 (42.5)         | 18 (36.0)                      |         | 9 (30.0)                                 | 9 (45.0)             |         |
| Grade 1                         | 61 (54.0)         | 24 (48.0)                      |         | 18 (60.0)                                | 6 (30.0)             |         |
| Grade 2                         | 20 (17.7)         | 14 (28.0)                      |         | 7 (23.3)                                 | 7 (35.0)             |         |
| Grade 3                         | 4 (3.4)           | 3 (6.0)                        |         | 1 (3.3)                                  | 2 (10.0)             |         |
| **Neurologic-Symptoms, n (%)** |                   |                                | 0.61    |                                          |                      | 0.25    |
| Without Event                   | 48 (42.5)         | 18 (36.0)                      |         | 9 (30.0)                                 | 9 (45.0)             |         |
| Grade 1                         | 43 (38.1)         | 18 (36.0)                      |         | 14 (46.7)                                | 4 (20.0)             |         |
| Grade 2                         | 18 (15.9)         | 11 (22.0)                      |         | 6 (20.0)                                 | 5 (25.0)             |         |
| Grade 3                         | 4 (3.5)           | 3 (6.0)                        |         | 1 (3.3)                                  | 2 (10.0)             |         |
| **Confusion, n (%)**            |                   |                                | 0.01    |                                          |                      | 1.00    |
| Without Event                   | 111 (98.2)        | 44 (88.0)                      |         | 26 (86.7)                                | 18 (90.0)            |         |
| Grade 1                         | 2 (1.8)           | 3 (6.0)                        |         | 3 (10.0)                                 | 0 (0.0)              |         |
| Grade 2                         | 0 (0.0)           | 2 (4.0)                        |         | 1 (3.3)                                  | 1 (5.0)              |         |
| Grade 3                         | 0 (0.0)           | 1 (2.0)                        |         | 0 (0.0)                                  | 1 (5.0)              |         |
| **Dizziness, n (%)**            |                   |                                | 0.03    |                                          |                      | 0.28    |
| Without Event                   | 104 (92.0)        | 40 (80.0)                      |         | 22 (73.3)                                | 18 (90.0)            |         |
| Grade 1                         | 7 (6.2)           | 9 (18.0)                       |         | 8 (26.7)                                 | 1 (5.0)              |         |
| Grade 2                         | 1 (0.9)           | 1 (2.0)                        |         | 0 (0.0)                                  | 1 (5.0)              |         |
| Grade 3                         | 1 (0.9)           | 0 (0.0)                        |         | 0 (0.0)                                  | 0 (0.0)              |         |
| **Hypersomnia, n (%)**          |                   |                                | 0.03    |                                          |                      | 0.51    |
| Without Event                   | 101 (89.4)        | 38 (76.0)                      |         | 24 (80.0)                                | 14 (70.0)            |         |
| Grade 1                         | 8 (7.1)           | 4 (8.0)                        |         | 3 (10.0)                                 | 1 (5.0)              |         |
| Grade 2                         | 4 (3.5)           | 7 (14.0)                       |         | 3 (10.0)                                 | 4 (20.0)             |         |
| Grade 3                         | 0 (0.0)           | 1 (2.0)                        |         | 0 (0.0)                                  | 1 (5.0)              |         |
| **Insomnia, n (%)**             |                   |                                | 0.03    |                                          |                      | 1.00    |
| Without Event                   | 113 (100.0)       | 47 (94.0)                      |         | 28 (93.3)                                | 19 (95.0)            |         |
| Symptom                  | CCP-Donor (n=113) | Patients (CCP + Control) (n=50) | p-value | CCP group High titer + Low titer (n=30) | Control Group (n=20) | p-value |
|--------------------------|-------------------|---------------------------------|---------|----------------------------------------|----------------------|---------|
| Grade 1                  | 0 (0.0)           | 1 (2.0)                         |         | 1 (3.3)                                | 0 (0.0)              |         |
| Grade 2                  | 0 (0.0)           | 2 (4.0)                         |         | 1 (3.3)                                | 1 (5.0)              |         |
| Pain-Symptoms, n (%)     |                   |                                 | <0.01   |                                        |                      | 0.77    |
| Multiple answers possible|                   |                                 |         |                                        |                      |         |
| Without Event            | 95 (84.1)         | 30 (60.0)                       |         | 17 (56.7)                              | 13 (65.0)            |         |
| Grade 1                  | 12 (10.6)         | 14 (28.0)                       |         | 8 (26.7)                               | 6 (30.0)             |         |
| Grade 2                  | 6 (5.3)           | 8 (16.0)                        |         | 6 (20.0)                               | 2 (10.0)             |         |
| Grade 3                  | 1 (0.9)           | 2 (4.0)                         |         | 2 (6.7)                                | 0 (0.0)              |         |
| Pain-Symptoms, n (%)     |                   |                                 | <0.01   |                                        |                      | 0.73    |
| Worst grade              |                   |                                 |         |                                        |                      |         |
| Without Event            | 95 (84.1)         | 30 (60.0)                       |         | 17 (56.7)                              | 13 (65.0)            |         |
| Grade 1                  | 11 (9.7)          | 11 (22.0)                       |         | 6 (20.0)                               | 5 (25.0)             |         |
| Grade 2                  | 6 (5.3)           | 7 (14.0)                        |         | 5 (16.7)                               | 2 (10.0)             |         |
| Grade 3                  | 1 (0.9)           | 2 (4.0)                         |         | 2 (6.7)                                | 0 (0.0)              |         |
| Pulmonal Symptoms, n (%) |                   |                                 | 0.03    |                                        |                      | 0.15    |
| Multiple answers possible|                   |                                 |         |                                        |                      |         |
| Without Event            | 71 (62.8)*        | 22 (44.0)                       |         | 16 (53.3)                              | 6 (30.0)             |         |
| Grade 1                  | 36 (31.9)         | 16 (32.0)                       |         | 10 (33.3)                              | 6 (30.0)             |         |
| Grade 2                  | 8 (7.1)           | 15 (30.0)                       |         | 7 (23.3)                               | 8 (40.0)             |         |
| Grade 3                  | 1 (0.9)           | 4 (8.0)                         |         | 2 (6.7)                                | 2 (10.0)             |         |
| Pulmonal Symptoms, n (%) |                   |                                 | <0.01   |                                        |                      | 0.44    |
| Worst grade              |                   |                                 |         |                                        |                      |         |
| Without Event            | 71 (62.8)         | 22 (44.0)                       |         | 16 (53.3)                              | 6 (30.0)             |         |
| Grade 1                  | 33 (29.2)         | 12 (24.0)                       |         | 6 (20.0)                               | 6 (30.0)             |         |
| Grade 2                  | 8 (7.1)           | 12 (24.0)                       |         | 6 (20.0)                               | 6 (30.0)             |         |
| Grade 3                  | 1 (0.9)           | 4 (8.0)                         |         | 2 (6.7)                                | 2 (10.0)             |         |
| Dyspnea, n (%)           |                   |                                 | <0.01   |                                        |                      | 0.25    |
| Without Event            | 84 (74.3)         | 23 (46.0)                       |         | 16 (53.3)                              | 7 (35.0)             |         |
| Grade 1                  | 22 (19.5)         | 12 (24.0)                       |         | 7 (23.3)                               | 5 (25.0)             |         |
| Grade 2                  | 6 (5.3)           | 12 (24.0)                       |         | 5 (16.7)                               | 7 (35.0)             |         |
| Symptoms                  | CCP-Donor (n=113) | Patients (CCP + Control) (n=50) | p-value | CCP group High titer + Low titer (n=30) | Control Group (n=20) | p-value |
|--------------------------|-------------------|---------------------------------|---------|----------------------------------------|----------------------|---------|
| Grade 3                  |                   |                                 |         |                                        |                      |         |
| Alopecia, n (%)          |                   |                                 |         |                                        |                      |         |
| Without Event            | 105 (92.9)        | 39 (78.0)                       | 0.02    | 22 (73.3)                              | 17 (85.0)            | 0.49    |
| Grade 1                  | 6 (5.3)           | 9 (18.0)                        |         | 6 (20.0)                               | 3 (15.0)             |         |
| Grade 2                  | 2 (1.8)           | 2 (4.0)                         |         | 2 (6.7)                                | 0 (0.0)              |         |
| Conjunctivitis, n (%)    |                   |                                 | 0.01    |                                        |                      |         |
| Without Event            | 111 (98.2)        | 44 (88.0)                       |         | 28 (93.3)                              | 16 (80.0)            | 0.21    |
| Grade 1                  | 2 (1.8)           | 4 (8.0)                         |         | 2 (6.7)                                | 2 (10.0)             |         |
| Grade 2                  | 0 (0.0)           | 1 (2.0)                         |         | 0 (0.0)                                | 1 (5.0)              |         |
| Grade 3                  | 0 (0.0)           | 1 (2.0)                         |         | 0 (0.0)                                | 1 (5.0)              |         |
| Medication, n (%)        |                   |                                 | <0.01   |                                        |                      |         |
|                          | 7 (6.2)           | 19 (38.0)                       |         | 10 (33.3)                              | 9 (45.0)             | 0.71    |
| Supplemental Oxygen/Ventilation, n (%) |            |                                 |         |                                        |                      |         |
| Supplemental oxygen?     | 3 (2.7)           | 9 (18.0)                        | <0.01   | 3 (10.0)                               | 6 (30.0)             | 0.13    |
| Invasive ventilation     | 0 (0.0)           | 2 (4.0)                         | 1.00    | 1 (3.3)                                | 1 (5.0)              | 1.00    |
| Non-invasive ventilation | 2 (1.8)           | 7 (14.0)                        | 1.00    | 2 (6.7)                                | 5 (25.0)             | 1.00    |
| Number of Hospitalisations, n (%) |                   |                                 | 0.053   |                                        |                      | 1.0     |
| 0                        | 105 (92.9)        | 41 (82.0)                       |         | 24 (80.0)                              | 17 (85.0)            |         |
| 1                        | 7 (6.2)           | 8 (16.0)                        |         | 5 (16.7)                               | 3 (15.0)             |         |
| 2                        | 0 (0.0)           | 1 (2.0)                         |         | 1 (3.3)                                | 0 (0.0)              |         |
| 3                        | 1 (0.9)           | 0 (0.0)                         |         | 0 (0.0)                                | 0 (0.0)              |         |
| Duration of Hospitalisations, days (IQR) |                   |                                 | 1.00    |                                        |                      | 0.09    |
|                          | 2 (2-2)           | 6 (4-14)                        |         | 5 (3-6)                                | 15 (6-27)            |         |
| Number of Hospitalisations, n (%) |                   |                                 |         |                                        |                      |         |
| 1                        |                    |                                 |         |                                        |                      |         |
| 2                        |                    |                                 |         |                                        |                      |         |
| Duration of Hospitalisations, days (IQR) |                   |                                 |         |                                        |                      | 0.01    |
|                          |                    |                                 |         |                                        |                      |         |
Symptom | CCP-Donor (n=113) | Patients (CCP + Control) (n=50) | p-value | CCP group High titer + Low titer (n=30) | Control Group (n=20) | p-value
--- | --- | --- | --- | --- | --- | ---
Radiology, n (%) | | | | | | |
X-Ray | 18 (15.9) | 6 (12.0) | 0.63 | 3 (10.0) | 3 (15.0) | 0.67 |
CT | 6 (5.3) | 9 (18.0) | 0.02 | 4 (13.3) | 5 (25.0) | 0.45 |

1. **Pain-Symptoms**: Abdominal Pain + Arthralgia + Myalgia + Pain + Pain in extremity + Back pain + Bone pain + Myalgia

2. **Neurologic**: Confusion + Dizziness + Hypersomnia + Insomnia + Concentration impairment + Dysesthesia + Dysgeusia + Fatigue + Headache + Nervous system disorders - Other, specify + Restlessness + Vision decreased + Memory impairment + Amnesia + Generalized muscle weakness

3. **GI-Symptoms**: Weight loss + Vomiting + Nausea + Diarrhea + Constipation + Anorexia

4. **Pulmonal Symptoms**: Productive cough + Non-cardiac chest pain + Dyspnea

*Symptoms without significant differences: allergic rhinitis, amnesia, anorexia, anosmia, arthralgia, atrial fibrillation, back pain, bone pain, bronchial infection, chest pain – cardiac, concentration impairment, constipation, cough, depression, dry eye, dysaesthesia, dysgeusia, eczema, eye infection, fatigue, fever, fracture, generalized muscle weakness, headache, hypertension, impairment, meningismus, muscle cramp, myalgia, myocardial infarction, Non-cardiac chest pain, palpitations, productive cough, rash maculo-papular, rhinitis infective, sinus tachycardia, sleep apnea, surgical and medical procedures, tinnitus, upper respiratory infection, vaginal infection, Ventricular arrhythmia, vision decreased, vomiting*
| EQ-5D-5L                          | Donors  | Patients | p-Value |
|----------------------------------|---------|----------|---------|
| Number of patients               | 113 (100.00) | 50 (100.00) |         |
| Mobility                         |         |          | <.0001  |
| I have no problems in walking about | 97 (85.84) | 27 (54.00) |         |
| I have slight problems in walking about | 6 (5.31) | 10 (20.00) |         |
| I have moderate problems in walking about | 3 (2.65) | 6 (12.00) |         |
| I have severe problems in walking about | 0 (0.00) | 4 (8.00) |         |
| Not answered                     | 1 (0.88) | 0 (0.00) |         |
| Missing                          | 6 (5.31) | 3 (6.00) |         |
| Self Care                        |         |          | <.0001  |
| I have no problems washing or dressing myself | 103 (91.15) | 34 (68.00) |         |
| I have slight problems washing or dressing myself | 3 (2.65) | 7 (14.00) |         |
| I have moderate problems washing or dressing myself | 0 (0.00) | 4 (8.00) |         |
| I have severe problems washing or dressing myself | 0 (0.00) | 1 (2.00) |         |
| I am unable to wash or dress myself | 0 (0.00) | 1 (2.00) |         |
| Not answered                     | 1 (0.88) | 0 (0.00) |         |
| Missing                          | 6 (5.31) | 3 (6.00) |         |
| Usual Activities                 |         |          | <.0001  |
| I have no problems doing my usual activities | 85 (75.22) | 25 (50.00) |         |
| I have slight problems doing my usual activities | 16 (14.16) | 8 (16.00) |         |
| I have moderate problems doing my usual activities | 4 (3.54) | 9 (18.00) |         |
| I have severe problems doing my usual activities | 0 (0.00) | 4 (8.00) |         |
| I am unable to do my usual activities | 0 (0.00) | 1 (2.00) |         |
| Not answered                     | 2 (1.77) | 0 (0.00) |         |
| Missing                          | 6 (5.31) | 3 (6.00) |         |
| Pain/Discomfort                  |         |          | 0.0007  |
| I have no pain or discomfort     | 74 (65.49) | 18 (36.00) |         |
| I have slight pain or discomfort | 21 (18.58) | 16 (32.00) |         |
| I have moderate pain or discomfort | 9 (7.96) | 6 (12.00) |         |
| I have severe pain or discomfort | 2 (1.77) | 6 (12.00) |         |
| I have extreme pain or discomfort | 0 (0.00) | 1 (2.00) |         |
| Not answered                     | 1 (0.88) | 0 (0.00) |         |
| Missing                          | 6 (5.31) | 3 (6.00) |         |
| Anxiety                                      | Donors       | Patients     | p-Value |
|---------------------------------------------|--------------|--------------|---------|
| I am not anxious or depressed               | 76 (67.26)   | 28 (56.00)   | 0.0300  |
| I am slightly anxious or depressed          | 23 (20.35)   | 9 (18.00)    |         |
| I am moderately anxious or depressed        | 6 (5.31)     | 4 (8.00)     |         |
| I am severely anxious or depressed          | 1 (0.88)     | 4 (8.00)     |         |
| I am extremely anxious or depressed         | 0 (0.00)     | 2 (4.00)     |         |
| Not answered                                | 1 (0.88)     | 0 (0.00)     |         |
| Missing                                     | 6 (5.31)     | 3 (6.00)     |         |

### 'Your health today' (VAS Score)

|                        | N       | Mean | STD | Min | Q1 | Median | Q3 | Max  | NMiss |
|------------------------|---------|------|-----|-----|----|--------|----|------|-------|
| EQ-5D-5L index score   |         |      |     |     |    |        |    |      |       |
| N                      | 107     | 107  | 107 | 107 | 107| 107    | 107| 107  | 107   |
| Mean                   | 86.06   | 86.06| 86  | 86  | 86 | 86     | 86 | 86   | 86    |
| STD                    | 10.92   | 10.92| 10.92| 10.92| 10.92| 10.92 | 10.92| 10.92| 10.92 |
| Min                    | 40.00   | 40.00| 40  | 40  | 40 | 40     | 40 | 40   | 40    |
| Q1                     | 80.00   | 80.00| 80  | 80  | 80 | 80     | 80 | 80   | 80    |
| Median                 | 90.00   | 90.00| 90  | 90  | 90 | 90     | 90 | 90   | 90    |
| Q3                     | 95.00   | 95.00| 95  | 95  | 95 | 95     | 95 | 95   | 95    |
| Max                    | 100.00  | 100.00| 100 | 100 | 100| 100    | 100| 100  | 100   |
| NMiss                  | 6       | 6    | 6   | 6   | 6  | 6      | 6  | 6    | 6     |

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Table 3: EQ-5D-5L by randomization group

| EQ-5D-5L                              | CCP          | Control       | p-Value |
|---------------------------------------|--------------|---------------|---------|
| **Number of patients in EFAS**        | 30 (100.00)  | 20 (100.00)   |         |
| **Mobility**                          |              |               | 0.0395  |
| I have no problems in walking about   | 19 (63.33)   | 8 (40.00)     |         |
| I have slight problems in walking about| 3 (10.00)   | 7 (35.00)     |         |
| I have moderate problems in walking about| 5 (16.67) | 1 (5.00)     |         |
| I have severe problems in walking about | 1 (3.33)  | 3 (15.00)     |         |
| Missing                               | 2 (6.67)     | 1 (5.00)      |         |
| **Self Care**                         |              |               | 0.2345  |
| I have no problems washing or dressing myself | 23 (76.67) | 11 (55.00)   |         |
| I have slight problems washing or dressing myself | 3 (10.00) | 4 (20.00)    |         |
| I have moderate problems washing or dressing myself | 2 (6.67) | 2 (10.00)    |         |
| I have severe problems washing or dressing myself | 0 (0.00) | 1 (5.00)     |         |
| I am unable to wash or dress myself   | 0 (0.00)     | 1 (5.00)      |         |
| Missing                               | 2 (6.67)     | 1 (5.00)      |         |
| **Usual Activities**                  |              |               | 0.3854  |
| I have no problems doing my usual activities | 17 (56.67) | 8 (40.00)     |         |
| I have slight problems doing my usual activities | 5 (16.67) | 3 (15.00)    |         |
| I have moderate problems doing my usual activities | 5 (16.67) | 4 (20.00)    |         |
| I have severe problems doing my usual activities | 1 (3.33)  | 3 (15.00)    |         |
| I am unable to do my usual activities | 0 (0.00)     | 1 (5.00)      |         |
| Missing                               | 2 (6.67)     | 1 (5.00)      |         |
| **Pain/Discomfort**                   |              |               | 0.5729  |
| I have no pain or discomfort          | 13 (43.33)   | 5 (25.00)     |         |
| I have slight pain or discomfort      | 8 (26.67)    | 8 (40.00)     |         |
| I have moderate pain or discomfort    | 3 (10.00)    | 3 (15.00)     |         |
| I have severe pain or discomfort      | 3 (10.00)    | 3 (15.00)     |         |
| I have extreme pain or discomfort     | 1 (3.33)     | 0 (0.00)      |         |
| Missing                               | 2 (6.67)     | 1 (5.00)      |         |
| Anxiety                        | CCP  | Control | p-Value |
|-------------------------------|------|---------|---------|
| I am not anxious or depressed | 17 (56.67) | 11 (55.00) | 1.0000 |
| I am slightly anxious or depressed | 5 (16.67) | 4 (20.00) |
| I am moderately anxious or depressed | 2 (6.67) | 2 (10.00) |
| I am severely anxious or depressed | 3 (10.00) | 1 (5.00) |
| I am extremely anxious or depressed | 1 (3.33) | 1 (5.00) |
| Missing                       | 2 (6.67) | 1 (5.00) |

| 'Your health today' (VAS Score) |         |
|--------------------------------|---------|
| N                          | 27      | 19     |
| Mean                       | 71.37   | 63.68  |
| STD                        | 21.97   | 25.43  |
| Min                        | 10.00   | 10.00  |
| Q1                         | 50.00   | 50.00  |
| Median                     | 75.00   | 65.00  |
| Q3                         | 90.00   | 90.00  |
| Max                        | 100.00  | 100.00 |
| NMiss                      | 3       | 1      |

| EQ-5D-5L index score |         |
|---------------------|---------|
| N                   | 28      | 19     |
| Mean                | 0.83    | 0.76   |
| STD                 | 0.23    | 0.25   |
| Min                 | 0.28    | 0.19   |
| Q1                  | 0.66    | 0.72   |
| Median              | 0.91    | 0.83   |
| Q3                  | 1.00    | 0.91   |
| Max                 | 1.00    | 1.00   |
| NMiss               | 2       | 1      |
**Table 4: EQ-5D-5L by transfused titer**

| EQ-5D-5L                        | Low titer Plasma | High titer Plasma | p-Value |
|---------------------------------|------------------|-------------------|---------|
| **Number of patients in EFAS**  | 14 (100.00)      | 16 (100.00)       |         |
| **Mobility**                    |                  |                   | 0.6853  |
| I have no problems in walking about | 7 (50.00)        | 12 (75.00)        |         |
| I have slight problems in walking about | 2 (14.29)        | 1 (6.25)          |         |
| I have moderate problems in walking about | 3 (21.43)        | 2 (12.50)         |         |
| I have severe problems in walking about | 0 (0.00)         | 1 (6.25)          |         |
| Missing                         | 2 (14.29)        | 0 (0.00)          |         |
| **Self Care**                   | 1.0000           |                   |         |
| I have no problems washing or dressing myself | 10 (71.43)       | 13 (81.25)        |         |
| I have slight problems washing or dressing myself | 1 (7.14)         | 2 (12.50)         |         |
| I have moderate problems washing or dressing myself | 1 (7.14)         | 1 (6.25)          |         |
| Missing                         | 2 (14.29)        | 0 (0.00)          |         |
| **Usual Activities**            | 0.3026           |                   |         |
| I have no problems doing my usual activities | 6 (42.86)        | 11 (68.75)        |         |
| I have slight problems doing my usual activities | 2 (14.29)        | 3 (18.75)         |         |
| I have moderate problems doing my usual activities | 4 (28.57)        | 1 (6.25)          |         |
| I have severe problems doing my usual activities | 0 (0.00)         | 1 (6.25)          |         |
| Missing                         | 2 (14.29)        | 0 (0.00)          |         |
| **Pain/Discomfort**             | 0.6411           |                   |         |
| I have no pain or discomfort    | 6 (42.86)        | 7 (43.75)         |         |
| I have slight pain or discomfort | 2 (14.29)        | 6 (37.50)         |         |
| I have moderate pain or discomfort | 2 (14.29)        | 1 (6.25)          |         |
| I have severe pain or discomfort | 1 (7.14)         | 2 (12.50)         |         |
| I have extreme pain or discomfort | 1 (7.14)         | 0 (0.00)          |         |
| Missing                         | 2 (14.29)        | 0 (0.00)          |         |
| **Anxiety**                     | 0.9521           |                   |         |
| I am not anxious or depressed   | 7 (50.00)        | 10 (62.50)        |         |
| I am slightly anxious or depressed | 2 (14.29)        | 3 (18.75)         |         |
| I am moderately anxious or depressed | 1 (7.14)         | 1 (6.25)          |         |
| I am severely anxious or depressed | 2 (14.29)        | 1 (6.25)          |         |
| I am extremely anxious or depressed | 0 (0.00)         | 1 (6.25)          |         |
| Missing                         | 2 (14.29)        | 0 (0.00)          |         |
| EQ-5D-5L                  | Low titer Plasma | High titer Plasma | p-Value |
|---------------------------|------------------|-------------------|---------|
| 'Your health today' (VAS Score) |                  |                   | 0.7020  |
| N                         | 11               | 16                |         |
| Mean                      | 69.36            | 72.75             |         |
| STD                       | 26.14            | 19.40             |         |
| Min                       | 10.00            | 40.00             |         |
| Q1                        | 50.00            | 56.00             |         |
| Median                    | 75.00            | 75.00             |         |
| Q3                        | 90.00            | 90.00             |         |
| Max                       | 100.00           | 99.00             |         |
| NMiss                     | 3                | 0                 |         |
| EQ-5D-5L index score      |                  |                   | 0.7297  |
| N                         | 12               | 16                |         |
| Mean                      | 0.81             | 0.84              |         |
| STD                       | 0.26             | 0.20              |         |
| Min                       | 0.28             | 0.40              |         |
| Q1                        | 0.66             | 0.71              |         |
| Median                    | 0.91             | 0.91              |         |
| Q3                        | 1.00             | 1.00              |         |
| Max                       | 1.00             | 1.00              |         |
| NMiss                     | 2                | 0                 |         |
| FACIT Dyspnea 10 | Donor | Patients | p-Value |
|------------------|-------|----------|---------|
| Number of patients | 113 (100.00) | 50 (100.00) | <.0001 |
| **Dressing yourself without help** | | | |
| No shortness of breath | 102 (90.27) | 30 (60.00) | <.0001 |
| Mildly short of breath | 5 (4.42) | 11 (22.00) | |
| Moderately short of breath | 0 (0.00) | 6 (12.00) | |
| I did not do this in the past 7 days | 0 (0.00) | 1 (2.00) | |
| Missing | 6 (5.31) | 2 (4.00) | |
| **Walking 50 steps on flat ground at a normal speed without stopping** | | | <.0001 |
| No shortness of breath | 101 (89.38) | 31 (62.00) | |
| Mildly short of breath | 5 (4.42) | 5 (10.00) | |
| Moderately short of breath | 1 (0.88) | 7 (14.00) | |
| Severely short of breath | 0 (0.00) | 3 (6.00) | |
| I did not do this in the past 7 days | 0 (0.00) | 2 (4.00) | |
| Missing | 6 (5.31) | 2 (4.00) | |
| **Walking 20 stairs without stopping** | | | 0.0003 |
| No shortness of breath | 78 (69.03) | 19 (38.00) | |
| Mildly short of breath | 21 (18.58) | 16 (32.00) | |
| Moderately short of breath | 5 (4.42) | 5 (10.00) | |
| Severely short of breath | 2 (1.77) | 5 (10.00) | |
| I did not do this in the past 7 days | 0 (0.00) | 2 (4.00) | |
| Missing | 7 (6.19) | 3 (6.00) | |
| **Preparing meals** | | | 0.0005 |
| No shortness of breath | 105 (92.92) | 41 (82.00) | |
| Mildly short of breath | 0 (0.00) | 5 (10.00) | |
| Moderately short of breath | 1 (0.88) | 1 (2.00) | |
| I did not do this in the past 7 days | 0 (0.00) | 1 (2.00) | |
| Missing | 7 (6.19) | 2 (4.00) | |
| **Washing dishes** | | | 0.0001 |
| No shortness of breath | 103 (91.15) | 35 (70.00) | |
| Mildly short of breath | 2 (1.77) | 7 (14.00) | |
| Moderately short of breath | 0 (0.00) | 2 (4.00) | |
| I did not do this in the past 7 days | 2 (1.77) | 4 (8.00) | |
| Missing | 6 (5.31) | 2 (4.00) | |
| FACIT Dyspnea 10 | Donor | Patients | p-Value |
|------------------|-------|----------|---------|
| Sweeping or mopping | | | <.0001 |
| No shortness of breath | 95 (84.07) | 25 (50.00) | |
| Mildly short of breath | 7 (6.19) | 12 (24.00) | |
| Moderately short of breath | 1 (0.88) | 6 (12.00) | |
| Severely short of breath | 1 (0.88) | 1 (2.00) | |
| I did not do this in the past 7 days | 3 (2.65) | 4 (8.00) | |
| Missing | 6 (5.31) | 2 (4.00) | |
| Making a bed | | | <.0001 |
| No shortness of breath | 96 (84.96) | 27 (54.00) | |
| Mildly short of breath | 4 (3.54) | 9 (18.00) | |
| Moderately short of breath | 2 (1.77) | 7 (14.00) | |
| I did not do this in the past 7 days | 4 (3.54) | 4 (8.00) | |
| Missing | 7 (6.19) | 3 (6.00) | |
| Lifting something weighing 10-20 lbs | | | <.0001 |
| No shortness of breath | 93 (82.30) | 21 (42.00) | |
| Mildly short of breath | 8 (7.08) | 16 (32.00) | |
| Moderately short of breath | 3 (2.65) | 5 (10.00) | |
| Severely short of breath | 2 (1.77) | 3 (6.00) | |
| I did not do this in the past 7 days | 1 (0.88) | 3 (6.00) | |
| Missing | 6 (5.31) | 2 (4.00) | |
| Carrying something weighing 10-20 lbs from one room to another | | | <.0001 |
| No shortness of breath | 94 (83.19) | 21 (42.00) | |
| Mildly short of breath | 10 (8.85) | 18 (36.00) | |
| Moderately short of breath | 2 (1.77) | 2 (4.00) | |
| Severely short of breath | 1 (0.88) | 3 (6.00) | |
| I did not do this in the past 7 days | 0 (0.00) | 4 (8.00) | |
| Missing | 6 (5.31) | 2 (4.00) | |
| Walking for 1/2 a mile without stopping | | | <.0001 |
| No shortness of breath | 72 (63.72) | 15 (30.00) | |
| Mildly short of breath | 25 (22.12) | 11 (22.00) | |
| Moderately short of breath | 7 (6.19) | 10 (20.00) | |
| Severely short of breath | 3 (2.65) | 4 (8.00) | |
| I did not do this in the past 7 days | 0 (0.00) | 8 (16.00) | |
| Missing | 6 (5.31) | 2 (4.00) | |
| FACIT Dyspnea 10 | Donor | Patients | p-Value |
|------------------|-------|----------|---------|
| Raw dyspnea score |       |          | <.0001  |
| N                | 107   | 48       |         |
| Mean             | 1.50  | 6.51     |         |
| STD              | 3.32  | 7.50     |         |
| Min              | 0.00  | 0.00     |         |
| Q1               | 0.00  | 0.00     |         |
| Median           | 0.00  | 4.00     |         |
| Q3               | 2.00  | 9.50     |         |
| Max              | 23.00 | 26.67    |         |
| NMiss            | 6     | 2        |         |
| FACIT Dyspnea 10                  | CCP       | Control   | p-Value |
|----------------------------------|-----------|-----------|---------|
| Number of patients in EFAS       | 30 (100.00) | 20 (100.00) |         |
| Dressing yourself without help   |           |           | 0.1678  |
| No shortness of breath           | 21 (70.00) | 9 (45.00) |         |
| Mildly short of breath           | 6 (20.00)  | 5 (25.00) |         |
| Moderately short of breath       | 2 (6.67)   | 4 (20.00) |         |
| I did not do this in the past 7 days | 0 (0.00) | 1 (5.00) |         |
| Missing                          | 1 (3.33)   | 1 (5.00)  |         |
| Walking 50 steps on flat ground at a normal speed without stopping | | | 0.1540 |
| No shortness of breath           | 22 (73.33) | 9 (45.00) |         |
| Mildly short of breath           | 2 (6.67)   | 3 (15.00) |         |
| Moderately short of breath       | 4 (13.33)  | 3 (15.00) |         |
| Severely short of breath         | 1 (3.33)   | 2 (10.00) |         |
| I did not do this in the past 7 days | 0 (0.00) | 2 (10.00) |         |
| Missing                          | 1 (3.33)   | 1 (5.00)  |         |
| Walking 20 stairs without stopping |         |           | 0.4885  |
| No shortness of breath           | 14 (46.67) | 5 (25.00) |         |
| Mildly short of breath           | 8 (26.67)  | 8 (40.00) |         |
| Moderately short of breath       | 3 (10.00)  | 2 (10.00) |         |
| Severely short of breath         | 2 (6.67)   | 3 (15.00) |         |
| I did not do this in the past 7 days | 1 (3.33) | 1 (5.00) |         |
| Missing                          | 2 (6.67)   | 1 (5.00)  |         |
| Preparing meals                  |           |           | 0.1723  |
| No shortness of breath           | 27 (90.00) | 14 (70.00)|         |
| Mildly short of breath           | 2 (6.67)   | 3 (15.00) |         |
| Moderately short of breath       | 0 (0.00)   | 1 (5.00)  |         |
| I did not do this in the past 7 days | 0 (0.00) | 1 (5.00) |         |
| Missing                          | 1 (3.33)   | 1 (5.00)  |         |
| Washing dishes                   |           |           | 0.0892  |
| No shortness of breath           | 24 (80.00) | 11 (55.00)|         |
| Mildly short of breath           | 4 (13.33)  | 3 (15.00) |         |
| Moderately short of breath       | 0 (0.00)   | 2 (10.00) |         |
| I did not do this in the past 7 days | 1 (3.33) | 3 (15.00) |         |
| Missing                          | 1 (3.33)   | 1 (5.00)  |         |
| FACIT Dyspnea 10 | CCP          | Control     | p-Value |
|------------------|--------------|-------------|---------|
| Sweeping or mopping |              |             | 0.0381  |
| No shortness of breath | 17 (56.67)  | 8 (40.00)   |         |
| Mildly short of breath | 7 (23.33)   | 5 (25.00)   |         |
| Moderately short of breath | 5 (16.67)  | 1 (5.00)    |         |
| Severely short of breath | 0 (0.00)   | 1 (5.00)    |         |
| I did not do this in the past 7 days | 0 (0.00) | 4 (20.00)   |         |
| Missing          | 1 (3.33)    | 1 (5.00)    |         |
| Making a bed     |              |             | 0.5760  |
| No shortness of breath | 17 (56.67)  | 10 (50.00)  |         |
| Mildly short of breath | 6 (20.00)   | 3 (15.00)   |         |
| Moderately short of breath | 4 (13.33)  | 3 (15.00)   |         |
| I did not do this in the past 7 days | 1 (3.33) | 3 (15.00)   |         |
| Missing          | 2 (6.67)    | 1 (5.00)    |         |
| Lifting something weighing 10-20 lbs |              |             | 0.4514  |
| No shortness of breath | 14 (46.67)  | 7 (35.00)   |         |
| Mildly short of breath | 11 (36.67)  | 5 (25.00)   |         |
| Moderately short of breath | 2 (6.67)   | 3 (15.00)   |         |
| Severely short of breath | 1 (3.33)   | 2 (10.00)   |         |
| I did not do this in the past 7 days | 1 (3.33) | 2 (10.00)   |         |
| Missing          | 1 (3.33)    | 1 (5.00)    |         |
| Carrying something weighing 10-20 lbs from one room to another |              |             | 0.5457  |
| No shortness of breath | 13 (43.33)  | 8 (40.00)   |         |
| Mildly short of breath | 12 (40.00)  | 6 (30.00)   |         |
| Moderately short of breath | 0 (0.00)   | 2 (10.00)   |         |
| Severely short of breath | 2 (6.67)   | 1 (5.00)    |         |
| I did not do this in the past 7 days | 2 (6.67) | 2 (10.00)   |         |
| Missing          | 1 (3.33)    | 1 (5.00)    |         |
| Walking for 1/2 a mile without stopping |              |             | 0.7210  |
| No shortness of breath | 10 (33.33)  | 5 (25.00)   |         |
| Mildly short of breath | 7 (23.33)   | 4 (20.00)   |         |
| Moderately short of breath | 6 (20.00)  | 4 (20.00)   |         |
| Severely short of breath | 1 (3.33)   | 3 (15.00)   |         |
| I did not do this in the past 7 days | 5 (16.67) | 3 (15.00)   |         |
| Missing          | 1 (3.33)    | 1 (5.00)    |         |
| FACIT Dyspnea 10 | CCP  | Control | p-Value |
|------------------|------|---------|---------|
| Raw dyspnea score|      |         | 0.1959  |
| N                | 29   | 19      |         |
| Mean             | 5.36 | 8.25    |         |
| STD              | 6.32 | 8.91    |         |
| Min              | 0.00 | 0.00    |         |
| Q1               | 0.00 | 0.00    |         |
| Median           | 3.33 | 6.00    |         |
| Q3               | 7.50 | 13.00   |         |
| Max              | 20.00| 26.67   |         |
| NMiss            | 1    | 1       |         |
Table 7: FACIT Dyspnea 10 Item Short Form – Part 1 by transfused titer

| FACIT Dyspnea 10                  | Low titer Plasma | High titer Plasma | p-Value |
|-----------------------------------|------------------|-------------------|---------|
| **Number of patients in EFAS**    |                  |                   |         |
| Dressing yourself without help    |                  |                   | 0.3990  |
| No shortness of breath            | 9 (64.29)        | 12 (75.00)        |         |
| Mildly short of breath            | 2 (14.29)        | 4 (25.00)         |         |
| Moderately short of breath        | 2 (14.29)        | 0 (0.00)          |         |
| Missing                            | 1 (7.14)         | 0 (0.00)          |         |
| Walking 50 steps on flat ground at a normal speed without stopping | | | 0.3746 |
| No shortness of breath            | 10 (71.43)       | 12 (75.00)        |         |
| Mildly short of breath            | 0 (0.00)         | 2 (12.50)         |         |
| Moderately short of breath        | 3 (21.43)        | 1 (6.25)          |         |
| Severely short of breath          | 0 (0.00)         | 1 (6.25)          |         |
| Missing                            | 1 (7.14)         | 0 (0.00)          |         |
| Walking 20 stairs without stopping |                  |                   | 0.8543  |
| No shortness of breath            | 5 (35.71)        | 9 (56.25)         |         |
| Mildly short of breath            | 4 (28.57)        | 4 (25.00)         |         |
| Moderately short of breath        | 2 (14.29)        | 1 (6.25)          |         |
| Severely short of breath          | 1 (7.14)         | 1 (6.25)          |         |
| I did not do this in the past 7 days | 0 (0.00)       | 1 (6.25)          |         |
| Missing                            | 2 (14.29)        | 0 (0.00)          |         |
| Preparing meals                   |                  |                   | 0.1921  |
| No shortness of breath            | 11 (78.57)       | 16 (100.00)       |         |
| Mildly short of breath            | 2 (14.29)        | 0 (0.00)          |         |
| Missing                            | 1 (7.14)         | 0 (0.00)          |         |
| Washing dishes                    |                  |                   | 0.2994  |
| No shortness of breath            | 10 (71.43)       | 14 (87.50)        |         |
| Mildly short of breath            | 3 (21.43)        | 1 (6.25)          |         |
| I did not do this in the past 7 days | 0 (0.00)       | 1 (6.25)          |         |
| Missing                            | 1 (7.14)         | 0 (0.00)          |         |
| Sweeping or mopping               |                  |                   | 0.8746  |
| No shortness of breath            | 7 (50.00)        | 10 (62.50)        |         |
| Mildly short of breath            | 3 (21.43)        | 4 (25.00)         |         |
| Moderately short of breath        | 3 (21.43)        | 2 (12.50)         |         |
| Missing                            | 1 (7.14)         | 0 (0.00)          |         |
# Dyspnea Scores

| FACIT Dyspnea 10                              | Low titer Plasma | High titer Plasma | p-Value |
|-----------------------------------------------|------------------|-------------------|---------|
| Making a bed                                  |                  |                   | 0.7874  |
| No shortness of breath                        | 7 (50.00)        | 10 (62.50)        |         |
| Mildly short of breath                        | 2 (14.29)        | 4 (25.00)         |         |
| Moderately short of breath                    | 2 (14.29)        | 2 (12.50)         |         |
| I did not do this in the past 7 days          | 1 (7.14)         | 0 (0.00)          |         |
| Missing                                       | 2 (14.29)        | 0 (0.00)          |         |
| Lifting something weighing 10-20 lbs          |                  |                   | 0.7639  |
| No shortness of breath                        | 6 (42.86)        | 8 (50.00)         |         |
| Mildly short of breath                        | 4 (28.57)        | 7 (43.75)         |         |
| Moderately short of breath                    | 1 (7.14)         | 1 (6.25)          |         |
| Severely short of breath                      | 1 (7.14)         | 0 (0.00)          |         |
| I did not do this in the past 7 days          | 1 (7.14)         | 0 (0.00)          |         |
| Missing                                       | 1 (7.14)         | 0 (0.00)          |         |
| Carrying something weighing 10-20 lbs from one room to another |               |                   | 0.5928  |
| No shortness of breath                        | 5 (35.71)        | 8 (50.00)         |         |
| Mildly short of breath                        | 5 (35.71)        | 7 (43.75)         |         |
| Severely short of breath                      | 2 (14.29)        | 0 (0.00)          |         |
| I did not do this in the past 7 days          | 1 (7.14)         | 1 (6.25)          |         |
| Missing                                       | 1 (7.14)         | 0 (0.00)          |         |
| Walking for 1/2 a mile without stopping        |                  |                   | 0.8505  |
| No shortness of breath                        | 4 (28.57)        | 6 (37.50)         |         |
| Mildly short of breath                        | 4 (28.57)        | 3 (18.75)         |         |
| Moderately short of breath                    | 2 (14.29)        | 4 (25.00)         |         |
| Severely short of breath                      | 1 (7.14)         | 0 (0.00)          |         |
| I did not do this in the past 7 days          | 2 (14.29)        | 3 (18.75)         |         |
| Missing                                       | 1 (7.14)         | 0 (0.00)          |         |

| Raw dyspnea score                             |                  |                   | 0.5176  |
| N                                             | 13               | 16                |         |
| Mean                                           | 6.23             | 4.66              |         |
| STD                                            | 7.18             | 5.68              |         |
| Min                                            | 0.00             | 0.00              |         |
| Q1                                             | 1.11             | 0.00              |         |
| Median                                         | 3.33             | 3.00              |         |
| Q3                                             | 9.00             | 7.25              |         |
| Max                                            | 20.00            | 20.00             |         |
| NMiss                                          | 1                | 0                 |         |
### Table 8: FACIT Dyspnea 10 Item Short Form – Part 2 donors and patients

| FACIT Dyspnea 10 | Donors | Patients | p-Value |
|------------------|--------|----------|---------|
| **Number of patients** | 113 (100.00) | 50 (100.00) |  |
| **Dressing yourself without help** |  |  | <.0001 |
| No difficulty | 105 (92.92) | 34 (68.00) |  |
| A little difficulty | 1 (0.88) | 7 (14.00) |  |
| Some difficulty | 1 (0.88) | 3 (6.00) |  |
| Much difficulty | 0 (0.00) | 2 (4.00) |  |
| Missing | 6 (5.31) | 4 (8.00) |  |
| **Walking 50 steps on flat ground at a normal speed without stopping** |  |  | <.0001 |
| No difficulty | 105 (92.92) | 32 (64.00) |  |
| A little difficulty | 1 (0.88) | 4 (8.00) |  |
| Some difficulty | 0 (0.00) | 7 (14.00) |  |
| Much difficulty | 1 (0.88) | 2 (4.00) |  |
| Missing | 6 (5.31) | 5 (10.00) |  |
| **Walking 20 stairs without stopping** |  |  | <.0001 |
| No difficulty | 85 (75.22) | 20 (40.00) |  |
| A little difficulty | 19 (16.81) | 15 (30.00) |  |
| Some difficulty | 2 (1.77) | 8 (16.00) |  |
| Much difficulty | 1 (0.88) | 3 (6.00) |  |
| Missing | 6 (5.31) | 4 (8.00) |  |
| **Preparing meals** |  |  | 0.0042 |
| No difficulty | 106 (93.81) | 40 (80.00) |  |
| A little difficulty | 1 (0.88) | 3 (6.00) |  |
| Some difficulty | 0 (0.00) | 2 (4.00) |  |
| Much difficulty | 0 (0.00) | 1 (2.00) |  |
| Missing | 6 (5.31) | 4 (8.00) |  |
| **Washing dishes** |  |  | 0.0036 |
| No difficulty | 105 (92.92) | 36 (72.00) |  |
| A little difficulty | 2 (1.77) | 5 (10.00) |  |
| Some difficulty | 0 (0.00) | 1 (2.00) |  |
| Much difficulty | 0 (0.00) | 1 (2.00) |  |
| Missing | 6 (5.31) | 7 (14.00) |  |
| FACIT Dyspnea 10                          | Donors       | Patients     | p-Value  |
|------------------------------------------|--------------|--------------|----------|
| Sweeping or mopping                      |              |              | <.0001   |
| No difficulty                            | 99 (87.61)   | 27 (54.00)   |          |
| A little difficulty                      | 6 (5.31)     | 10 (20.00)   |          |
| Some difficulty                          | 0 (0.00)     | 4 (8.00)     |          |
| Much difficulty                          | 1 (0.88)     | 2 (4.00)     |          |
| Missing                                  | 7 (6.19)     | 7 (14.00)    |          |
| Making a bed                             |              |              | <.0001   |
| No difficulty                            | 104 (92.04)  | 30 (60.00)   |          |
| A little difficulty                      | 2 (1.77)     | 10 (20.00)   |          |
| Some difficulty                          | 0 (0.00)     | 4 (8.00)     |          |
| Much difficulty                          | 0 (0.00)     | 1 (2.00)     |          |
| Missing                                  | 7 (6.19)     | 5 (10.00)    |          |
| Lifting something weighing 10-20 lbs     |              |              | <.0001   |
| No difficulty                            | 96 (84.96)   | 24 (48.00)   |          |
| A little difficulty                      | 9 (7.96)     | 11 (22.00)   |          |
| Some difficulty                          | 0 (0.00)     | 8 (16.00)    |          |
| Much difficulty                          | 1 (0.88)     | 3 (6.00)     |          |
| Missing                                  | 7 (6.19)     | 4 (8.00)     |          |
| Carrying something weighing 10-20 lbs    |              |              | <.0001   |
| one room to another                      | 91 (80.53)   | 21 (42.00)   |          |
| No difficulty                            | 12 (10.62)   | 12 (24.00)   |          |
| A little difficulty                      | 2 (1.77)     | 11 (22.00)   |          |
| Some difficulty                          | 1 (0.88)     | 2 (4.00)     |          |
| Much difficulty                          | 7 (6.19)     | 4 (8.00)     |          |
| Walking for 1/2 a mile without stopping  |              |              | <.0001   |
| No difficulty                            | 76 (67.26)   | 17 (34.00)   |          |
| A little difficulty                      | 26 (23.01)   | 10 (20.00)   |          |
| Some difficulty                          | 2 (1.77)     | 9 (18.00)    |          |
| Much difficulty                          | 2 (1.77)     | 7 (14.00)    |          |
| Missing                                  | 7 (6.19)     | 7 (14.00)    |          |
| FACIT Dyspnea 10 | Donors | Patients | p-Value |
|-----------------|--------|----------|---------|
| Raw functional limitation score |        |          | <.0001  |
| N               | 107    | 46       |         |
| Mean            | 1.07   | 6.08     |         |
| STD             | 2.69   | 7.46     |         |
| Min             | 0.00   | 0.00     |         |
| Q1              | 0.00   | 0.00     |         |
| Median          | 0.00   | 3.50     |         |
| Q3              | 1.00   | 9.00     |         |
| Max             | 22.00  | 29.00    |         |
| NMiss           | 6      | 4        |         |
Table 9: FACIT Dyspnea 10 Item Short Form – Part 2 by randomization group

| FACIT Dyspnea 10 | CCP | Control | p-Value |
|------------------|-----|---------|---------|
| **Number of patients in EFAS** | 30 (100.00) | 20 (100.00) | |
| **Dressing yourself without help** | | | 0.1886 |
| No difficulty | 23 (76.67) | 11 (55.00) | |
| A little difficulty | 4 (13.33) | 3 (15.00) | |
| Some difficulty | 1 (3.33) | 2 (10.00) | |
| Much difficulty | 0 (0.00) | 2 (10.00) | |
| Missing | 2 (6.67) | 2 (10.00) | |
| **Walking 50 steps on flat ground at a normal speed without stopping** | | | 0.3318 |
| No difficulty | 21 (70.00) | 11 (55.00) | |
| A little difficulty | 2 (6.67) | 2 (10.00) | |
| Some difficulty | 4 (13.33) | 3 (15.00) | |
| Much difficulty | 0 (0.00) | 2 (10.00) | |
| Missing | 3 (10.00) | 2 (10.00) | |
| **Walking 20 stairs without stopping** | | | 0.5838 |
| No difficulty | 14 (46.67) | 6 (30.00) | |
| A little difficulty | 8 (26.67) | 7 (35.00) | |
| Some difficulty | 5 (16.67) | 3 (15.00) | |
| Much difficulty | 1 (3.33) | 2 (10.00) | |
| Missing | 2 (6.67) | 2 (10.00) | |
| **Preparing meals** | | | 0.1525 |
| No difficulty | 26 (86.67) | 14 (70.00) | |
| A little difficulty | 2 (6.67) | 1 (5.00) | |
| Some difficulty | 0 (0.00) | 2 (10.00) | |
| Much difficulty | 0 (0.00) | 1 (5.00) | |
| Missing | 2 (6.67) | 2 (10.00) | |
| **Washing dishes** | | | 0.1688 |
| No difficulty | 24 (80.00) | 12 (60.00) | |
| A little difficulty | 2 (6.67) | 3 (15.00) | |
| Some difficulty | 0 (0.00) | 1 (5.00) | |
| Much difficulty | 0 (0.00) | 1 (5.00) | |
| Missing | 4 (13.33) | 3 (15.00) | |
| FACIT Dyspnea 10                          | CCP       | Control   | p-Value |
|------------------------------------------|-----------|-----------|---------|
| Sweeping or mopping                      |           |           | 0.0670  |
| No difficulty                            | 19 (63.33)| 8 (40.00) |         |
| A little difficulty                      | 5 (16.67) | 5 (25.00) |         |
| Some difficulty                          | 4 (13.33) | 0 (0.00)  |         |
| Much difficulty                          | 0 (0.00)  | 2 (10.00) |         |
| Missing                                  | 2 (6.67)  | 5 (25.00) |         |
| Making a bed                             |           |           | 0.5572  |
| No difficulty                            | 20 (66.67)| 10 (50.00)|         |
| A little difficulty                      | 6 (20.00) | 4 (20.00) |         |
| Some difficulty                          | 2 (6.67)  | 2 (10.00) |         |
| Much difficulty                          | 0 (0.00)  | 1 (5.00)  |         |
| Missing                                  | 2 (6.67)  | 3 (15.00) |         |
| Lifting something weighing 10-20 lbs     |           |           | 0.2545  |
| No difficulty                            | 17 (56.67)| 7 (35.00) |         |
| A little difficulty                      | 7 (23.33) | 4 (20.00) |         |
| Some difficulty                          | 3 (10.00) | 5 (25.00) |         |
| Much difficulty                          | 1 (3.33)  | 2 (10.00) |         |
| Missing                                  | 2 (6.67)  | 2 (10.00) |         |
| Carrying something weighing 10-20 lbs    |           |           | 0.4526  |
| No difficulty                            | 13 (43.33)| 8 (40.00) |         |
| A little difficulty                      | 8 (26.67) | 4 (20.00) |         |
| Some difficulty                          | 7 (23.33) | 4 (20.00) |         |
| Much difficulty                          | 0 (0.00)  | 2 (10.00) |         |
| Missing                                  | 2 (6.67)  | 2 (10.00) |         |
| Walking for 1/2 a mile without stopping  |           |           | 0.7051  |
| No difficulty                            | 11 (36.67)| 6 (30.00) |         |
| A little difficulty                      | 7 (23.33) | 3 (15.00) |         |
| Some difficulty                          | 5 (16.67) | 4 (20.00) |         |
| Much difficulty                          | 3 (10.00) | 4 (20.00) |         |
| Missing                                  | 4 (13.33) | 3 (15.00) |         |
| FACIT Dyspnea 10 | CCP | Control | p-Value |
|------------------|-----|---------|---------|
| Raw functional limitation score |  |  | 0.1496 |
| N                | 28  | 18      |         |
| Mean             | 4.65| 8.30    |         |
| STD              | 5.66| 9.37    |         |
| Min              | 0.00| 0.00    |         |
| Q1               | 0.00| 0.00    |         |
| Median           | 2.00| 5.57    |         |
| Q3               | 6.33| 12.00   |         |
| Max              | 18.00| 29.00  |         |
| NMiss            | 2   | 2       |         |
Table 10: FACIT Dyspnea 10 Item Short Form – Part 2 by transfused titer

| FACIT Dyspnea 10                      | CCP          | Control        | p-Value |
|---------------------------------------|--------------|----------------|---------|
| Number of patients in EFAS            | 14 (100.00)  | 16 (100.00)    |         |
| Dressing yourself without help        |              |                | 0.7833  |
| No difficulty                         | 10 (71.43)   | 13 (81.25)     |         |
| A little difficulty                   | 2 (14.29)    | 2 (12.50)      |         |
| Some difficulty                       | 1 (7.14)     | 0 (0.00)       |         |
| Missing                               | 1 (7.14)     | 1 (6.25)       |         |
| Walking 50 steps on flat ground at a normal speed without stopping | | | 0.3376 |
| No difficulty                         | 10 (71.43)   | 11 (68.75)     |         |
| A little difficulty                   | 0 (0.00)     | 2 (12.50)      |         |
| Some difficulty                       | 3 (21.43)    | 1 (6.25)       |         |
| Missing                               | 1 (7.14)     | 2 (12.50)      |         |
| Walking 20 stairs without stopping    |              |                | 0.5166  |
| No difficulty                         | 5 (35.71)    | 9 (56.25)      |         |
| A little difficulty                   | 5 (35.71)    | 3 (18.75)      |         |
| Some difficulty                       | 2 (14.29)    | 3 (18.75)      |         |
| Much difficulty                       | 1 (7.14)     | 0 (0.00)       |         |
| Missing                               | 1 (7.14)     | 1 (6.25)       |         |
| Preparing meals                       |              |                | 0.2063  |
| No difficulty                         | 11 (78.57)   | 15 (93.75)     |         |
| A little difficulty                   | 2 (14.29)    | 0 (0.00)       |         |
| Missing                               | 1 (7.14)     | 1 (6.25)       |         |
| Washing dishes                        |              |                | 0.2031  |
| No difficulty                         | 10 (71.43)   | 14 (87.50)     |         |
| A little difficulty                   | 2 (14.29)    | 0 (0.00)       |         |
| Missing                               | 2 (14.29)    | 2 (12.50)      |         |
| Sweeping or mopping                   |              |                | 0.3787  |
| No difficulty                         | 7 (50.00)    | 12 (75.00)     |         |
| A little difficulty                   | 3 (21.43)    | 2 (12.50)      |         |
| Some difficulty                       | 3 (21.43)    | 1 (6.25)       |         |
| Missing                               | 1 (7.14)     | 1 (6.25)       |         |
| Making a bed                          |              |                | 1.0000  |
| No difficulty                         | 9 (64.29)    | 11 (68.75)     |         |
| A little difficulty                   | 3 (21.43)    | 3 (18.75)      |         |
| Some difficulty                       | 1 (7.14)     | 1 (6.25)       |         |
| Missing                               | 1 (7.14)     | 1 (6.25)       |         |
| FACIT Dyspnea 10                                      | CCP     | Control    | p-Value |
|------------------------------------------------------|---------|------------|---------|
| Lifting something weighing 10-20 lbs                 |         |            |         |
| No difficulty                                        | 8 (57.14) | 9 (56.25)  | 0.1946  |
| A little difficulty                                  | 2 (14.29) | 5 (31.25)  |         |
| Some difficulty                                      | 3 (21.43) | 0 (0.00)   |         |
| Much difficulty                                      | 0 (0.00)  | 1 (6.25)   |         |
| Missing                                              | 1 (7.14)  | 1 (6.25)   |         |
| Carrying something weighing 10-20 lbs from one room to another |         |            | 0.7081  |
| No difficulty                                        | 5 (35.71) | 8 (50.00)  |         |
| A little difficulty                                  | 4 (28.57) | 4 (25.00)  |         |
| Some difficulty                                      | 4 (28.57) | 3 (18.75)  |         |
| Missing                                              | 1 (7.14)  | 1 (6.25)   |         |
| Walking for 1/2 a mile without stopping              |         |            | 0.5257  |
| No difficulty                                        | 4 (28.57) | 7 (43.75)  |         |
| A little difficulty                                  | 5 (35.71) | 2 (12.50)  |         |
| Some difficulty                                      | 2 (14.29) | 3 (18.75)  |         |
| Much difficulty                                      | 1 (7.14)  | 2 (12.50)  |         |
| Missing                                              | 2 (14.29) | 2 (12.50)  |         |
| Raw functional limitation score                      |         |            | 0.4460  |
| N                                                    | 13      | 15         |         |
| Mean                                                 | 5.55    | 3.87       |         |
| STD                                                  | 6.62    | 4.78       |         |
| Min                                                  | 0.00    | 0.00       |         |
| Q1                                                   | 1.11    | 0.00       |         |
| Median                                               | 2.00    | 2.00       |         |
| Q3                                                   | 6.00    | 6.67       |         |
| Max                                                  | 18.00   | 15.00      |         |
| NMiss                                                | 1       | 1          |         |
| FACIT Fatigue Scale                      | Donors       | Patient       | p-Value |
|-----------------------------------------|--------------|---------------|---------|
| Number of patients                      | 113 (100.00) | 50 (100.00)   |         |
| I feel fatigued                         |              |               | 0.2590  |
| Not at all                              | 45 (39.82)   | 15 (30.00)    |         |
| A little bit                            | 36 (31.86)   | 17 (34.00)    |         |
| Somewhat                                | 9 (7.96)     | 5 (10.00)     |         |
| Quite a bit                             | 11 (9.73)    | 7 (14.00)     |         |
| Very much                               | 1 (0.88)     | 3 (6.00)      |         |
| Missing                                 | 11 (9.73)    | 3 (6.00)      |         |
| I feel weak all over                    |              |               | 0.0466  |
| Not at all                              | 61 (53.98)   | 20 (40.00)    |         |
| A little bit                            | 27 (23.89)   | 13 (26.00)    |         |
| Somewhat                                | 11 (9.73)    | 5 (10.00)     |         |
| Quite a bit                             | 5 (4.42)     | 5 (10.00)     |         |
| Very much                               | 0 (0.00)     | 3 (6.00)      |         |
| Missing                                 | 9 (7.96)     | 4 (8.00)      |         |
| I feel listless                         |              |               | 0.0359  |
| Not at all                              | 53 (46.90)   | 24 (48.00)    |         |
| A little bit                            | 34 (30.09)   | 7 (14.00)     |         |
| Somewhat                                | 9 (7.96)     | 8 (16.00)     |         |
| Quite a bit                             | 6 (5.31)     | 4 (8.00)      |         |
| Very much                               | 2 (1.77)     | 4 (8.00)      |         |
| Missing                                 | 9 (7.96)     | 3 (6.00)      |         |
| I feel tired                            |              |               | 0.0428  |
| Not at all                              | 33 (29.20)   | 18 (36.00)    |         |
| A little bit                            | 41 (36.28)   | 13 (26.00)    |         |
| Somewhat                                | 21 (18.58)   | 5 (10.00)     |         |
| Quite a bit                             | 7 (6.19)     | 6 (12.00)     |         |
| Very much                               | 2 (1.77)     | 5 (10.00)     |         |
| Missing                                 | 9 (7.96)     | 3 (6.00)      |         |
| I have trouble starting thing because I am tired |          |               | 0.1306  |
| Not at all                              | 60 (53.10)   | 25 (50.00)    |         |
| A little bit                            | 30 (26.55)   | 9 (18.00)     |         |
| Somewhat                                | 10 (8.85)    | 4 (8.00)      |         |
| Quite a bit                             | 4 (3.54)     | 6 (12.00)     |         |
| Very much                               | 1 (0.88)     | 2 (4.00)      |         |
| FACIT Fatigue Scale | Donors | Patient | p-Value |
|---------------------|--------|---------|---------|
| Missing             | 8 (7.08) | 4 (8.00) |         |

I have trouble finishing things because I am tired

|                     | Donors | Patient | p-Value |
|---------------------|--------|---------|---------|
| Not at all          | 65 (57.52) | 22 (44.00) | 0.0541  |
| A little bit        | 24 (21.24) | 13 (26.00) |         |
| Somewhat            | 9 (7.96)  | 3 (6.00)  |         |
| Quite a bit         | 4 (3.54)  | 6 (12.00) |         |
| Very much           | 1 (0.88)  | 3 (6.00)  |         |
| Missing             | 10 (8.85) | 3 (6.00)  |         |

I have energy

|                     | Donors | Patient | p-Value |
|---------------------|--------|---------|---------|
| Not at all          | 1 (0.88) | 5 (10.00) | 0.0025  |
| A little bit        | 5 (4.42) | 7 (14.00) |         |
| Somewhat            | 24 (21.24) | 13 (26.00) |         |
| Quite a bit         | 57 (50.44) | 14 (28.00) |         |
| Very much           | 18 (15.93) | 7 (14.00)  |         |
| Missing             | 8 (7.08)  | 4 (8.00)  |         |

I am able to do my usual activities

|                     | Donors | Patient | p-Value |
|---------------------|--------|---------|---------|
| Not at all          | 1 (0.88) | 8 (16.00) | <.0001  |
| A little bit        | 2 (1.77) | 7 (14.00) |         |
| Somewhat            | 7 (6.19)  | 8 (16.00) |         |
| Quite a bit         | 32 (28.32) | 10 (20.00) |         |
| Very much           | 63 (55.75) | 13 (26.00) |         |
| Missing             | 8 (7.08)  | 4 (8.00)  |         |

I need sleep during the day

|                     | Donors | Patient | p-Value |
|---------------------|--------|---------|---------|
| Not at all          | 37 (32.74) | 17 (34.00) | 0.0824  |
| A little bit        | 42 (37.17) | 10 (20.00) |         |
| Somewhat            | 15 (13.27) | 7 (14.00)  |         |
| Quite a bit         | 8 (7.08)  | 6 (12.00) |         |
| Very much           | 3 (2.65)  | 5 (10.00) |         |
| Missing             | 8 (7.08)  | 5 (10.00) |         |

I am too tired to eat

|                     | Donors | Patient | p-Value |
|---------------------|--------|---------|---------|
| Not at all          | 99 (87.61) | 35 (70.00) | 0.0065  |
| A little bit        | 3 (2.65)  | 4 (8.00)  |         |
| Somewhat            | 2 (1.77)  | 5 (10.00) |         |
| Quite a bit         | 1 (0.88)  | 2 (4.00) |         |
| Missing             | 8 (7.08)  | 4 (8.00) |         |
| FACIT Fatigue Scale                                      | Donors          | Patient         | p-Value |
|---------------------------------------------------------|-----------------|-----------------|---------|
| I need help doing my usual activities                   |                 |                 | 0.0003  |
| Not at all                                              | 95 (84.07)      | 30 (60.00)      |         |
| A little bit                                            | 7 (6.19)        | 4 (8.00)        |         |
| Somewhat                                                | 1 (0.88)        | 4 (8.00)        |         |
| Quite a bit                                             | 2 (1.77)        | 6 (12.00)       |         |
| Very much                                               | 0 (0.00)        | 2 (4.00)        |         |
| Missing                                                 | 8 (7.08)        | 4 (8.00)        |         |
| I am frustrated by being too tired to do the things I want to do |     |                 | 0.0214  |
| Not at all                                              | 74 (65.49)      | 25 (50.00)      |         |
| A little bit                                            | 19 (16.81)      | 7 (14.00)       |         |
| Somewhat                                                | 4 (3.54)        | 5 (10.00)       |         |
| Quite a bit                                             | 2 (1.77)        | 6 (12.00)       |         |
| Very much                                               | 6 (5.31)        | 3 (6.00)        |         |
| Missing                                                 | 8 (7.08)        | 4 (8.00)        |         |
| I have to limit my social activity because I am tired    |                 |                 | 0.0066  |
| Not at all                                              | 82 (72.57)      | 25 (50.00)      |         |
| A little bit                                            | 17 (15.04)      | 11 (22.00)      |         |
| Somewhat                                                | 1 (0.88)        | 0 (0.00)        |         |
| Quite a bit                                             | 5 (4.42)        | 7 (14.00)       |         |
| Very much                                               | 0 (0.00)        | 2 (4.00)        |         |
| Missing                                                 | 8 (7.08)        | 5 (10.00)       |         |
| Fatigue scale score                                     |                 |                 | 0.0038  |
| N                                                       | 105             | 47              |         |
| Mean                                                    | 43.65           | 37.17           |         |
| STD                                                     | 8.46            | 13.63           |         |
| Min                                                     | 16.00           | 3.00            |         |
| Q1                                                      | 41.00           | 30.00           |         |
| Median                                                  | 46.00           | 40.00           |         |
| Q3                                                      | 50.00           | 49.00           |         |
| Max                                                     | 52.00           | 52.00           |         |
| NMiss                                                   | 8               | 3               |         |
Table 12: FACIT Fatigue Scale by randomization group

| FACIT Fatigue Scale | CCP       | Control   | p-Value  |
|---------------------|-----------|-----------|----------|
| Number of patients in EFAS | 30 (100.00) | 20 (100.00) |          |
| I feel fatigued     |           |           | 0.8935   |
| Not at all          | 9 (30.00) | 6 (30.00) |          |
| A little bit        | 10 (33.33)| 7 (35.00) |          |
| Somewhat            | 3 (10.00) | 2 (10.00) |          |
| Quite a bit         | 5 (16.67) | 2 (10.00) |          |
| Very much           | 1 (3.33)  | 2 (10.00) |          |
| Missing             | 2 (6.67)  | 1 (5.00)  |          |
| I feel weak all over|           |           | 1.0000   |
| Not at all          | 12 (40.00)| 8 (40.00) |          |
| A little bit        | 8 (26.67) | 5 (25.00) |          |
| Somewhat            | 3 (10.00) | 2 (10.00) |          |
| Quite a bit         | 3 (10.00) | 2 (10.00) |          |
| Very much           | 2 (6.67)  | 1 (5.00)  |          |
| Missing             | 2 (6.67)  | 2 (10.00) |          |
| I feel listless     |           |           | 0.8839   |
| Not at all          | 15 (50.00)| 9 (45.00) |          |
| A little bit        | 5 (16.67) | 2 (10.00) |          |
| Somewhat            | 4 (13.33) | 4 (20.00) |          |
| Quite a bit         | 2 (6.67)  | 2 (10.00) |          |
| Very much           | 2 (6.67)  | 2 (10.00) |          |
| Missing             | 2 (6.67)  | 1 (5.00)  |          |
| I feel tired        |           |           | 0.7344   |
| Not at all          | 12 (40.00)| 6 (30.00) |          |
| A little bit        | 8 (26.67) | 5 (25.00) |          |
| Somewhat            | 2 (6.67)  | 3 (15.00) |          |
| Quite a bit         | 4 (13.33) | 2 (10.00) |          |
| Very much           | 2 (6.67)  | 3 (15.00) |          |
| Missing             | 2 (6.67)  | 1 (5.00)  |          |
| I have trouble starting thing because I am tired | 0.6046 |
| Not at all          | 15 (50.00)| 10 (50.00)|          |
| A little bit        | 6 (20.00) | 3 (15.00) |          |
| Somewhat            | 3 (10.00) | 1 (5.00)  |          |
| Quite a bit         | 2 (6.67)  | 4 (20.00) |          |
| Very much           | 2 (6.67)  | 0 (0.00)  |          |
| Missing             | 2 (6.67)  | 2 (10.00) |          |
| FACIT Fatigue Scale                                      | CCP                  | Control              | p-Value   |
|---------------------------------------------------------|----------------------|----------------------|-----------|
| I have trouble finishing things because I am tired      |                      |                      | 0.7922    |
| Not at all                                              | 14 (46.67)           | 8 (40.00)            |           |
| A little bit                                            | 8 (26.67)            | 5 (25.00)            |           |
| Somewhat                                                | 2 (6.67)             | 1 (5.00)             |           |
| Quite a bit                                             | 2 (6.67)             | 4 (20.00)            |           |
| Very much                                               | 2 (6.67)             | 1 (5.00)             |           |
| Missing                                                 | 2 (6.67)             | 1 (5.00)             |           |
| I have energy                                           |                      |                      | 0.9070    |
| Not at all                                              | 2 (6.67)             | 3 (15.00)            |           |
| A little bit                                            | 4 (13.33)            | 3 (15.00)            |           |
| Somewhat                                                | 8 (26.67)            | 5 (25.00)            |           |
| Quite a bit                                             | 8 (26.67)            | 6 (30.00)            |           |
| Very much                                               | 5 (16.67)            | 2 (10.00)            |           |
| Missing                                                 | 3 (10.00)            | 1 (5.00)             |           |
| I am able to do my usual activities                     |                      |                      | 0.2348    |
| Not at all                                              | 4 (13.33)            | 4 (20.00)            |           |
| A little bit                                            | 4 (13.33)            | 3 (15.00)            |           |
| Somewhat                                                | 3 (10.00)            | 5 (25.00)            |           |
| Quite a bit                                             | 6 (20.00)            | 4 (20.00)            |           |
| Very much                                               | 11 (36.67)           | 2 (10.00)            |           |
| Missing                                                 | 2 (6.67)             | 2 (10.00)            |           |
| I need sleep during the day                             |                      |                      | 0.9574    |
| Not at all                                              | 10 (33.33)           | 7 (35.00)            |           |
| A little bit                                            | 7 (23.33)            | 3 (15.00)            |           |
| Somewhat                                                | 4 (13.33)            | 3 (15.00)            |           |
| Quite a bit                                             | 3 (10.00)            | 3 (15.00)            |           |
| Very much                                               | 3 (10.00)            | 2 (10.00)            |           |
| Missing                                                 | 3 (10.00)            | 2 (10.00)            |           |
| I am too tired to eat                                   |                      |                      | 0.0947    |
| Not at all                                              | 24 (80.00)           | 11 (55.00)           |           |
| A little bit                                            | 1 (3.33)             | 3 (15.00)            |           |
| Somewhat                                                | 3 (10.00)            | 2 (10.00)            |           |
| Quite a bit                                             | 0 (0.00)             | 2 (10.00)            |           |
| Missing                                                 | 2 (6.67)             | 2 (10.00)            |           |
| FACIT Fatigue Scale | CCP | Control | p-Value |
|---------------------|-----|---------|---------|
| I need help doing my usual activities | | | 0.1883 |
| Not at all | 21 (70.00) | 9 (45.00) | |
| A little bit | 1 (3.33) | 3 (15.00) | |
| Somewhat | 1 (3.33) | 3 (15.00) | |
| Quite a bit | 4 (13.33) | 2 (10.00) | |
| Very much | 1 (3.33) | 1 (5.00) | |
| Missing | 2 (6.67) | 2 (10.00) | |
| I am frustrated by being too tired to do the things I want to do | | | 0.3712 |
| Not at all | 18 (60.00) | 7 (35.00) | |
| A little bit | 3 (10.00) | 4 (20.00) | |
| Somewhat | 3 (10.00) | 2 (10.00) | |
| Quite a bit | 2 (6.67) | 4 (20.00) | |
| Very much | 2 (6.67) | 1 (5.00) | |
| Missing | 2 (6.67) | 2 (10.00) | |
| I have to limit my social activity because I am tired | | | 0.5919 |
| Not at all | 17 (56.67) | 8 (40.00) | |
| A little bit | 5 (16.67) | 6 (30.00) | |
| Quite a bit | 4 (13.33) | 3 (15.00) | |
| Very much | 1 (3.33) | 1 (5.00) | |
| Missing | 3 (10.00) | 2 (10.00) | |
| Fatigue scale score | | | 0.3061 |
| N | 28 | 19 | |
| Mean | 38.87 | 34.68 | |
| STD | 13.05 | 14.43 | |
| Min | 8.00 | 3.00 | |
| Q1 | 31.50 | 26.00 | |
| Median | 43.13 | 38.00 | |
| Q3 | 49.00 | 47.00 | |
| Max | 52.00 | 51.00 | |
| NMiss | 2 | 1 | |
Table 13: FACIT Fatigue Scale by transfused titer

| FACIT Fatigue Scale | Low titer Plasma | High titer Plasma | p-Value |
|---------------------|------------------|-------------------|---------|
| Number of patients in EFAS | 14 (100.00)      | 16 (100.00)       |         |
| I feel fatigued     |                  |                   | 0.8982  |
| Not at all          | 4 (28.57)        | 5 (31.25)         |         |
| A little bit        | 4 (28.57)        | 6 (37.50)         |         |
| Somewhat            | 1 (7.14)         | 2 (12.50)         |         |
| Quite a bit         | 3 (21.43)        | 2 (12.50)         |         |
| Very much           | 1 (7.14)         | 0 (0.00)          |         |
| Missing             | 1 (7.14)         | 1 (6.25)          |         |
| I feel weak all over|                  |                   | 0.6378  |
| Not at all          | 5 (35.71)        | 7 (43.75)         |         |
| A little bit        | 3 (21.43)        | 5 (31.25)         |         |
| Somewhat            | 2 (14.29)        | 1 (6.25)          |         |
| Quite a bit         | 1 (7.14)         | 2 (12.50)         |         |
| Very much           | 2 (14.29)        | 0 (0.00)          |         |
| Missing             | 1 (7.14)         | 1 (6.25)          |         |
| I feel listless     |                  |                   | 0.6060  |
| Not at all          | 6 (42.86)        | 9 (56.25)         |         |
| A little bit        | 3 (21.43)        | 2 (12.50)         |         |
| Somewhat            | 1 (7.14)         | 3 (18.75)         |         |
| Quite a bit         | 2 (14.29)        | 0 (0.00)          |         |
| Very much           | 1 (7.14)         | 1 (6.25)          |         |
| Missing             | 1 (7.14)         | 1 (6.25)          |         |
| I feel tired        |                  |                   | 0.2525  |
| Not at all          | 4 (28.57)        | 8 (50.00)         |         |
| A little bit        | 6 (42.86)        | 2 (12.50)         |         |
| Somewhat            | 0 (0.00)         | 2 (12.50)         |         |
| Quite a bit         | 2 (14.29)        | 2 (12.50)         |         |
| Very much           | 1 (7.14)         | 1 (6.25)          |         |
| Missing             | 1 (7.14)         | 1 (6.25)          |         |
| I have trouble starting thing because I am tired |                  |                   | 0.7582  |
| Not at all          | 6 (42.86)        | 9 (56.25)         |         |
| A little bit        | 3 (21.43)        | 3 (18.75)         |         |
| Somewhat            | 1 (7.14)         | 2 (12.50)         |         |
| Quite a bit         | 1 (7.14)         | 1 (6.25)          |         |
| Very much           | 2 (14.29)        | 0 (0.00)          |         |
| Missing             | 1 (7.14)         | 1 (6.25)          |         |
| FACIT Fatigue Scale                                               | Low titer Plasma | High titer Plasma | p-Value |
|----------------------------------------------------------------|------------------|-------------------|---------|
| I have trouble finishing things because I am tired              |                  |                   | 0.6334  |
| Not at all                                                      | 5 (35.71)        | 9 (56.25)         |         |
| A little bit                                                    | 4 (28.57)        | 4 (25.00)         |         |
| Somewhat                                                       | 1 (7.14)         | 1 (6.25)          |         |
| Quite a bit                                                    | 1 (7.14)         | 1 (6.25)          |         |
| Very much                                                      | 2 (14.29)        | 0 (0.00)          |         |
| Missing                                                        | 1 (7.14)         | 1 (6.25)          |         |
| I have energy                                                  |                  |                   | 0.8318  |
| Not at all                                                      | 1 (7.14)         | 1 (6.25)          |         |
| A little bit                                                    | 1 (7.14)         | 3 (18.75)         |         |
| Somewhat                                                       | 3 (21.43)        | 5 (31.25)         |         |
| Quite a bit                                                    | 5 (35.71)        | 3 (18.75)         |         |
| Very much                                                      | 2 (14.29)        | 3 (18.75)         |         |
| Missing                                                        | 2 (14.29)        | 1 (6.25)          |         |
| I am able to do my usual activities                            |                  |                   | 0.2163  |
| Not at all                                                      | 1 (7.14)         | 3 (18.75)         |         |
| A little bit                                                    | 1 (7.14)         | 3 (18.75)         |         |
| Somewhat                                                       | 3 (21.43)        | 0 (0.00)          |         |
| Quite a bit                                                    | 4 (28.57)        | 2 (12.50)         |         |
| Very much                                                      | 4 (28.57)        | 7 (43.75)         |         |
| Missing                                                        | 1 (7.14)         | 1 (6.25)          |         |
| I need sleep during the day                                    |                  |                   | 0.0531  |
| Not at all                                                      | 2 (14.29)        | 8 (50.00)         |         |
| A little bit                                                    | 5 (35.71)        | 2 (12.50)         |         |
| Somewhat                                                       | 3 (21.43)        | 1 (6.25)          |         |
| Quite a bit                                                    | 0 (0.00)         | 3 (18.75)         |         |
| Very much                                                      | 2 (14.29)        | 1 (6.25)          |         |
| Missing                                                        | 2 (14.29)        | 1 (6.25)          |         |
| I am too tired to eat                                           |                  |                   | 0.7833  |
| Not at all                                                      | 11 (78.57)       | 13 (81.25)        |         |
| A little bit                                                    | 0 (0.00)         | 1 (6.25)          |         |
| Somewhat                                                       | 2 (14.29)        | 1 (6.25)          |         |
| Missing                                                        | 1 (7.14)         | 1 (6.25)          |         |
| FACIT Fatigue Scale | Low titer Plasma | High titer Plasma | p-Value |
|---------------------|------------------|-------------------|---------|
| I need help doing my usual activities | | | 0.3362 |
| Not at all | 9 (64.29) | 12 (75.00) | |
| A little bit | 1 (7.14) | 0 (0.00) | |
| Somewhat | 0 (0.00) | 1 (6.25) | |
| Quite a bit | 3 (21.43) | 1 (6.25) | |
| Very much | 0 (0.00) | 1 (6.25) | |
| Missing | 1 (7.14) | 1 (6.25) | |
| I am frustrated by being too tired to do the things I want to do | | | 0.5876 |
| Not at all | 7 (50.00) | 11 (68.75) | |
| A little bit | 2 (14.29) | 1 (6.25) | |
| Somewhat | 1 (7.14) | 2 (12.50) | |
| Quite a bit | 2 (14.29) | 0 (0.00) | |
| Very much | 1 (7.14) | 1 (6.25) | |
| Missing | 1 (7.14) | 1 (6.25) | |
| I have to limit my social activity because I am tired | | | 1.0000 |
| Not at all | 8 (57.14) | 9 (56.25) | |
| A little bit | 2 (14.29) | 3 (18.75) | |
| Quite a bit | 2 (14.29) | 2 (12.50) | |
| Very much | 1 (7.14) | 0 (0.00) | |
| Missing | 1 (7.14) | 2 (12.50) | |
| Fatigue scale score | | | 0.4916 |
| N | 13 | 15 | |
| Mean | 37.00 | 40.48 | |
| STD | 15.61 | 10.66 | |
| Min | 8.00 | 16.00 | |
| Q1 | 30.00 | 33.00 | |
| Median | 42.00 | 44.00 | |
| Q3 | 49.00 | 49.00 | |
| Max | 52.00 | 52.00 | |
| NMiss | 1 | 1 | |
Table 14: Laboratory parameters CCP donors and trial patients

| Lab parameter     | Donors       | Patients     | p-value |
|-------------------|--------------|--------------|---------|
| D-Dimers (mg/l)   | 0.27 (0.19-0.37) | 0.43 (0.25-0.85) | 0.02    |
| Fibrinogen (mg/dl)| 290 (240-350)  | 330 (295-400)  | 0.03    |
| CRP (mg/l)        | 1.8 (0.8-4.0)  | 5.6 (1.5-9.3)  | 0.002   |
| Ferritin (µg/l)   | 62 (37-126)    | 120 (82-213)   | 0.03    |
| IL-6 (pg/ml)      | 1.6 (1.4-2.2)  | 3.1 (1.8-4.7)  | 0.004   |
| Pro-NT BNP (pg/ml)| 45 (29-67)     | 95 (29-223)    | 0.03    |
Table 15: Classification to assess disease severity of CCP donors.

| Severity    | Symptoms                                                                 |
|-------------|---------------------------------------------------------------------------|
| asymptomatic| No symptoms                                                               |
| mild        | The virus affects mainly the upper respiratory tract. Key symptoms are    |
|             | temperature with or without cough                                          |
| moderate    | Inflammation lower down in the lungs. Key symptoms are breathless,       |
|             | increased heart rate, temperature and cough                               |
| severe      | At least one of the following:                                            |
|             |   - Respiratory rate $\geq 30$ breaths / min under ambient air           |
|             |   - Requirement of any type of ventilation support                        |
|             |   - Needs ICU treatment                                                   |
Methods: Propensity score matching

To better control the donor and patient population a subset was created with a 1:1 matching of patients and donors according to the following baseline criteria:

- age at extended follow up visit (continuous variable)
- BMI (categories <30 kg/m², 30-<35 kg/m², 35-<40 kg/m², ≥40 kg/m²)
- sex (male; female)

Propensity score matching was performed by using the SAS procedure PROC PSMATCH with default settings using greedy nearest neighbor matching to identify matched patients.

Table 16: Propensity Score matching: Donor / Patients

| Demographics | Donor          | Patient         | p-Value |
|--------------|----------------|-----------------|---------|
| Number       | 26 (100.00)    | 26 (100.00)     |         |
| Gender       |                |                 | 1.0000  |
| Male         | 22 (84.62)     | 21 (80.77)      |         |
| Female       | 4 (15.38)      | 5 (19.23)       |         |
| Age [years]  |                |                 | 0.2856  |
| N            | 26             | 26              |         |
| Min          | 31.00          | 30.00           |         |
| Q1           | 46.00          | 47.00           |         |
| Median       | 51.50          | 54.00           |         |
| Q3           | 55.00          | 56.00           |         |
| Max          | 61.00          | 70.00           |         |
| NMiss        | 0              | 0               |         |
| BMI (kg/m²)  |                |                 | 0.6247  |
| N            | 22             | 23              |         |
| Min          | 21.31          | 20.60           |         |
| Q1           | 25.69          | 26.56           |         |
| Median       | 29.46          | 29.74           |         |
| Q3           | 31.15          | 33.90           |         |
| Max          | 38.82          | 41.21           |         |
| NMiss        | 4              | 3               |         |
Table 17: Medical events and symptoms in propensity score matched cohort

| Medical Events/Symptoms | Donor | Patient | p-Value | Total |
|-------------------------|-------|---------|---------|-------|
| Number of patients      | 26 (100.00) | 26 (100.00) | 52 (100.00) |       |
| Abdominal pain          |       |         | 0.3497  |       |
| Without Event           | 25 (96.15) | 22 (84.62) | 47 (90.38) |       |
| With Event              | 1 (3.85) | 4 (15.38) | 5 (9.62) |       |
| Grade 1                 | 1 (3.85) | 3 (11.54) | 4 (7.69) |       |
| Grade 2                 | 0 (0.00) | 1 (3.85) |       |       |
| Allergic rhinitis       |       |         | 1.0000  |       |
| Without Event           | 26 (100.00) | 26 (100.00) | 52 (100.00) |       |
| Alopecia                |       |         | 1.0000  |       |
| Without Event           | 23 (88.46) | 23 (88.46) |       |       |
| With Event              | 3 (11.54) | 3 (11.54) |       |       |
| Grade 1                 | 1 (3.85) | 2 (7.69) |       |       |
| Grade 2                 | 2 (7.69) | 1 (3.85) |       |       |
| Amnesia                 |       |         | 0.4902  |       |
| Without Event           | 26 (100.00) | 24 (92.31) | 50 (96.15) |       |
| With Event              | 0 (0.00) | 2 (7.69) | 2 (3.85) |       |
| Grade 1                 | 0 (0.00) | 2 (7.69) | 2 (3.85) |       |
| Anorexia                |       |         | 0.2353  |       |
| Without Event           | 26 (100.00) | 23 (88.46) | 49 (94.23) |       |
| With Event              | 0 (0.00) | 3 (11.54) | 3 (5.77) |       |
| Grade 1                 | 0 (0.00) | 3 (11.54) | 3 (5.77) |       |
| Anosmia                 |       |         | 0.2203  |       |
| Without Event           | 16 (61.54) | 21 (80.77) | 37 (71.15) |       |
| With Event              | 10 (38.46) | 5 (19.23) | 15 (28.85) |       |
| Grade 1                 | 10 (38.46) | 5 (19.23) | 15 (28.85) |       |
| Arthralgia              |       |         | 0.4902  |       |
| Without Event           | 26 (100.00) | 24 (92.31) | 50 (96.15) |       |
| With Event              | 0 (0.00) | 2 (7.69) | 2 (3.85) |       |
| Grade 1                 | 0 (0.00) | 2 (7.69) | 2 (3.85) |       |
| Atrial fibrillation     |       |         | 1.0000  |       |
| Without Event           | 26 (100.00) | 25 (96.15) | 51 (98.08) |       |
| With Event              | 0 (0.00) | 1 (3.85) | 1 (1.92) |       |
| Grade 1                 | 0 (0.00) | 1 (3.85) | 1 (1.92) |       |
| Medical Events/Symptoms | Donor Without Event | Patient Without Event | p-Value | Total Without Event |
|-------------------------|---------------------|-----------------------|---------|---------------------|
| Back pain               |                     |                       |         |                     |
| Without Event           | 25 (96.15)          | 25 (96.15)            | 1.0000  | 50 (96.15)          |
| With Event              | 1 (3.85)            | 1 (3.85)              | 2 (3.85) |                     |
| Grade 1                 | 0 (0.00)            | 1 (3.85)              | 1 (1.92) |                     |
| Grade 2                 | 1 (3.85)            | 0 (0.00)              | 1 (1.92) |                     |
| Bone pain               |                     |                       | 0.1104  |                     |
| Without Event           | 22 (84.62)          | 26 (100.00)           |         | 48 (92.31)          |
| With Event              | 4 (15.38)           | 0 (0.00)              | 4 (7.69) |                     |
| Grade 1                 | 3 (11.54)           | 0 (0.00)              | 3 (5.77) |                     |
| Grade 2                 | 1 (3.85)            | 0 (0.00)              | 1 (1.92) |                     |
| Bronchial infection     |                     |                       | 0.2353  |                     |
| Without Event           | 26 (100.00)         | 26 (100.00)           |         | 52 (100.00)         |
| Chest pain - cardiac    |                     |                       | 0.2353  |                     |
| Without Event           | 26 (100.00)         | 26 (100.00)           |         | 52 (100.00)         |
| Concentration impairment|                     |                       | 0.2353  |                     |
| Without Event           | 26 (100.00)         | 26 (100.00)           |         | 52 (100.00)         |
| Confusion               |                     |                       | 0.2353  |                     |
| Without Event           | 26 (100.00)         | 23 (88.46)            |         | 49 (94.23)          |
| With Event              | 0 (0.00)            | 3 (11.54)             | 3 (5.77) |                     |
| Grade 1                 | 0 (0.00)            | 1 (3.85)              | 1 (1.92) |                     |
| Grade 2                 | 0 (0.00)            | 2 (7.69)              | 2 (3.85) |                     |
| Conjunctivitis          |                     |                       | 0.2353  |                     |
| Without Event           | 26 (100.00)         | 23 (88.46)            |         | 49 (94.23)          |
| With Event              | 0 (0.00)            | 3 (11.54)             | 3 (5.77) |                     |
| Grade 1                 | 0 (0.00)            | 2 (7.69)              | 2 (3.85) |                     |
| Grade 3                 | 0 (0.00)            | 1 (3.85)              | 1 (1.92) |                     |
| Constipation            |                     |                       | 0.7645  |                     |
| Without Event           | 26 (100.00)         | 26 (100.00)           |         | 52 (100.00)         |
| Cough                   |                     |                       | 0.7645  |                     |
| Without Event           | 17 (65.38)          | 19 (73.08)            |         | 36 (69.23)          |
| With Event              | 9 (34.62)           | 7 (26.92)             | 16 (30.77)|                   |
| Grade 1                 | 7 (26.92)           | 6 (23.08)             | 13 (25.00)|                   |
| Grade 2                 | 2 (7.69)            | 1 (3.85)              | 3 (5.77) |                     |
| Depression              |                     |                       |         | 52 (100.00)         |
| Without Event           | 26 (100.00)         | 26 (100.00)           |         | 52 (100.00)         |
| Medical Events/Symptoms | Donor | Patient | p-Value | Total |
|-------------------------|-------|---------|---------|-------|
| Diarrhea                |       |         | 0.0993  |       |
| Without Event          | 25 (96.15) | 20 (76.92) |         | 45 (86.54) |
| With Event             | 1 (3.85)   | 6 (23.08)   |         | 7 (13.46)  |
| Grade 1                | 1 (3.85)   | 6 (23.08)   |         | 7 (13.46)  |
| Dizziness              |       |         | 0.2485  |       |
| Without Event          | 24 (92.31) | 20 (76.92) |         | 44 (84.62) |
| With Event             | 2 (7.69)   | 6 (23.08)   |         | 8 (15.38)  |
| Grade 1                | 2 (7.69)   | 6 (23.08)   |         | 8 (15.38)  |
| Dry eye                |       |         | 0.3497  |       |
| Without Event          | 25 (96.15) | 22 (84.62) |         | 47 (90.38) |
| With Event             | 1 (3.85)   | 4 (15.38)   |         | 5 (9.62)   |
| Grade 1                | 1 (3.85)   | 3 (11.54)   |         | 4 (7.69)   |
| Grade 2                | 0 (0.00)   | 1 (3.85)    |         | 1 (1.92)   |
| Dysesthesia            |       |         |         |       |
| Without Event          | 26 (100.00) | 26 (100.00) |         | 52 (100.00) |
| Dysgeusia              |       |         | 0.3487  |       |
| Without Event          | 17 (65.38) | 21 (80.77) |         | 38 (73.08) |
| With Event             | 9 (34.62)  | 5 (19.23)   |         | 14 (26.92) |
| Grade 1                | 8 (30.77)  | 4 (15.38)   |         | 12 (23.08) |
| Grade 2                | 1 (3.85)   | 1 (3.85)    |         | 2 (3.85)   |
| Dyspnea                |       |         | 0.4043  |       |
| Without Event          | 16 (61.54) | 12 (46.15) |         | 28 (53.85) |
| With Event             | 10 (38.46) | 14 (53.85) |         | 24 (46.15) |
| Grade 1                | 7 (26.92)  | 7 (26.92)   |         | 14 (26.92) |
| Grade 2                | 2 (7.69)   | 6 (23.08)   |         | 8 (15.38)  |
| Grade 3                | 1 (3.85)   | 1 (3.85)    |         | 2 (3.85)   |
| Eczema                 |       |         | 1.0000  |       |
| Without Event          | 25 (96.15) | 25 (96.15) |         | 50 (96.15) |
| With Event             | 1 (3.85)   | 1 (3.85)    |         | 2 (3.85)   |
| Grade 1                | 1 (3.85)   | 0 (0.00)    |         | 1 (1.92)   |
| Grade 2                | 0 (0.00)   | 1 (3.85)    |         | 1 (1.92)   |
| Eye infection          |       |         | 1.0000  |       |
| Without Event          | 25 (96.15) | 26 (100.00) |         | 51 (98.08) |
| With Event             | 1 (3.85)   | 0 (0.00)    |         | 1 (1.92)   |
| Grade 2                | 1 (3.85)   | 0 (0.00)    |         | 1 (1.92)   |
| Medical Events/Symptoms | Donor     | Patient    | p-Value | Total   |
|-------------------------|-----------|------------|---------|---------|
|                         | Without   | With       |         |         |
|                         | Event     | Event      |         |         |
|                         | Grade 1   | Grade 2    | Grade 3 |         |
| Fatigue                 |           |            |         |         |
| Without Event           | 16 (61.54)| 17 (65.38) |         | 33 (63.46) |
| With Event              | 10 (38.46)| 9 (34.62)  |         | 19 (36.54) |
| Grade 1                 | 5 (19.23) | 5 (19.23)  |         | 10 (19.23) |
| Grade 2                 | 3 (11.54) | 3 (11.54)  |         | 6 (11.54)  |
| Grade 3                 | 2 (7.69)  | 1 (3.85)   |         | 3 (5.77)   |
| p-Value                 | 1.0000    | 0.2485     |         |         |
| Fever                   |           |            |         |         |
| Without Event           | 20 (76.92)| 24 (92.31) |         | 44 (84.62) |
| With Event              | 6 (23.08) | 2 (7.69)   |         | 8 (15.38)  |
| Grade 1                 | 3 (11.54) | 1 (3.85)   |         | 4 (7.69)   |
| Grade 2                 | 3 (11.54) | 0 (0.00)   |         | 3 (5.77)   |
| Grade 3                 | 0 (0.00)  | 1 (3.85)   |         | 1 (1.92)   |
| p-Value                 | 1.0000    | 0.4986     |         |         |
| Fracture                |           |            |         |         |
| Without Event           | 25 (96.15)| 26 (100.00)|         | 51 (98.08) |
| With Event              | 1 (3.85)  | 0 (0.00)   |         | 1 (1.92)   |
| Grade 2                 | 1 (3.85)  | 0 (0.00)   |         | 1 (1.92)   |
| Generalized muscle weakness |       |            |         |         |
| Without Event           | 26 (100.00)| 26 (100.00)|         | 52 (100.00) |
| p-Value                 | 0.4986    | 1.0000     |         |         |
| Headache                |           |            |         |         |
| Without Event           | 19 (73.08)| 22 (84.62) |         | 41 (78.85) |
| With Event              | 7 (26.92) | 4 (15.38)  |         | 11 (21.15) |
| Grade 1                 | 5 (19.23) | 2 (7.69)   |         | 7 (13.46)  |
| Grade 2                 | 0 (0.00)  | 2 (7.69)   |         | 2 (3.85)   |
| Grade 3                 | 2 (7.69)  | 0 (0.00)   |         | 2 (3.85)   |
| Hypersomnia             |           |            |         |         |
| Without Event           | 20 (76.92)| 20 (76.92) |         | 40 (76.92) |
| With Event              | 6 (23.08) | 6 (23.08)  |         | 12 (23.08) |
| Grade 1                 | 3 (11.54) | 2 (7.69)   |         | 5 (9.62)   |
| Grade 2                 | 3 (11.54) | 3 (11.54)  |         | 6 (11.54)  |
| Grade 3                 | 0 (0.00)  | 1 (3.85)   |         | 1 (1.92)   |
| Hypertension            |           |            |         |         |
| Without Event           | 26 (100.00)| 26 (100.00)|         | 52 (100.00) |
| Immune system disorders - Other, specify | | | | |
| Without Event           | 26 (100.00)| 26 (100.00)|         | 52 (100.00) |
| Medical Events/Symptoms | Donor | Patient | p-Value | Total |
|-------------------------|-------|---------|---------|-------|
| Infections and infestations - Other, specify | | | | |
| Without Event | 26 (100.00) | 26 (100.00) | 52 (100.00) |
| **Insomnia** | | | 1.0000 |
| Without Event | 26 (100.00) | 25 (96.15) | 51 (98.08) |
| With Event | 0 (0.00) | 1 (3.85) | 1 (1.92) |
| Grade 1 | 0 (0.00) | 1 (3.85) | 1 (1.92) |
| **Investigations - Other, specify** | | | | |
| Without Event | 26 (100.00) | 26 (100.00) | 52 (100.00) |
| **Memory impairment** | | | 0.5653 |
| Without Event | 18 (69.23) | 15 (57.69) | 33 (63.46) |
| With Event | 8 (30.77) | 11 (42.31) | 19 (36.54) |
| Grade 1 | 7 (26.92) | 7 (26.92) | 14 (26.92) |
| Grade 2 | 1 (3.85) | 3 (11.54) | 4 (7.69) |
| Grade 3 | 0 (0.00) | 1 (3.85) | 1 (1.92) |
| **Meningismus** | | | | |
| Without Event | 26 (100.00) | 26 (100.00) | 52 (100.00) |
| **Muscle cramp** | | | 1.0000 |
| Without Event | 25 (96.15) | 26 (100.00) | 51 (98.08) |
| With Event | 1 (3.85) | 0 (0.00) | 1 (1.92) |
| Grade 2 | 1 (3.85) | 0 (0.00) | 1 (1.92) |
| **Myalgia** | | | 1.0000 |
| Without Event | 24 (92.31) | 25 (96.15) | 49 (94.23) |
| With Event | 2 (7.69) | 1 (3.85) | 3 (5.77) |
| Grade 1 | 1 (3.85) | 1 (3.85) | 2 (3.85) |
| Grade 2 | 1 (3.85) | 0 (0.00) | 1 (1.92) |
| **Myocardial infarction** | | | | |
| Without Event | 26 (100.00) | 26 (100.00) | 52 (100.00) |
| **Nausea** | | | 0.1104 |
| Without Event | 26 (100.00) | 22 (84.62) | 48 (92.31) |
| With Event | 0 (0.00) | 4 (15.38) | 4 (7.69) |
| Grade 1 | 0 (0.00) | 3 (11.54) | 3 (5.77) |
| Grade 2 | 0 (0.00) | 1 (3.85) | 1 (1.92) |
| Medical Events/Symptoms | Donor | Patient | p-Value | Total |
|-------------------------|-------|---------|---------|-------|
| **Nervous system disorders - Other, specify** |       |         |         |       |
| Without Event | 26 (100.00) | 26 (100.00) | 52 (100.00) |       |
| **Non-cardiac chest pain** |       |         | 1.0000  |       |
| Without Event | 22 (84.62) | 21 (80.77) | 43 (82.69) |       |
| With Event | 4 (15.38) | 5 (19.23) | 9 (17.31) |       |
| Grade 1 | 3 (11.54) | 1 (3.85) | 4 (7.69) |       |
| Grade 2 | 1 (3.85) | 3 (11.54) | 4 (7.69) |       |
| Grade 3 | 0 (0.00) | 1 (3.85) | 1 (1.92) |       |
| **Pain** |       |         | 0.1906  |       |
| Without Event | 25 (96.15) | 21 (80.77) | 46 (88.46) |       |
| With Event | 1 (3.85) | 5 (19.23) | 6 (11.54) |       |
| Grade 1 | 0 (0.00) | 3 (11.54) | 3 (5.77) |       |
| Grade 2 | 1 (3.85) | 2 (7.69) | 3 (5.77) |       |
| **Pain in extremity** |       |         | 0.1104  |       |
| Without Event | 26 (100.00) | 22 (84.62) | 48 (92.31) |       |
| With Event | 0 (0.00) | 4 (15.38) | 4 (7.69) |       |
| Grade 1 | 0 (0.00) | 3 (11.54) | 3 (5.77) |       |
| Grade 2 | 0 (0.00) | 1 (3.85) | 1 (1.92) |       |
| **Palpitations** |       |         | 0.7030  |       |
| Without Event | 23 (88.46) | 21 (80.77) | 44 (84.62) |       |
| With Event | 3 (11.54) | 5 (19.23) | 8 (15.38) |       |
| Grade 1 | 3 (11.54) | 4 (15.38) | 7 (13.46) |       |
| Grade 2 | 0 (0.00) | 1 (3.85) | 1 (1.92) |       |
| **Productive cough** |       |         | 1.0000  |       |
| Without Event | 25 (96.15) | 24 (92.31) | 49 (94.23) |       |
| With Event | 1 (3.85) | 2 (7.69) | 3 (5.77) |       |
| Grade 1 | 1 (3.85) | 2 (7.69) | 3 (5.77) |       |
| **Rash maculo-papular** |       |         | 0.4902  |       |
| Without Event | 26 (100.00) | 24 (92.31) | 50 (96.15) |       |
| With Event | 0 (0.00) | 2 (7.69) | 2 (3.85) |       |
| Grade 1 | 0 (0.00) | 1 (3.85) | 1 (1.92) |       |
| Grade 2 | 0 (0.00) | 1 (3.85) | 1 (1.92) |       |
| Medical Events/Symptoms               | Donor       | Patient     | p-Value | Total       |
|--------------------------------------|-------------|-------------|---------|-------------|
| Restlessness                         |             |             |         |             |
| Without Event                        | 26 (100.00) | 26 (100.00) |         | 52 (100.00) |
| Rhinitis infective                   |             |             | 1.0000  |             |
| Without Event                        | 24 (92.31)  | 24 (92.31)  |         | 48 (92.31)  |
| With Event                           | 2 (7.69)    | 2 (7.69)    |         | 4 (7.69)    |
| Grade 2                              | 2 (7.69)    | 2 (7.69)    |         | 4 (7.69)    |
| Sinus tachycardia                    |             |             |         |             |
| Without Event                        | 26 (100.00) | 26 (100.00) |         | 52 (100.00) |
| Sleep apnea                          |             |             | 1.0000  |             |
| Without Event                        | 26 (100.00) | 25 (96.15)  |         | 51 (98.08)  |
| With Event                           | 0 (0.00)    | 1 (3.85)    |         | 1 (1.92)    |
| Grade 2                              | 0 (0.00)    | 1 (3.85)    |         | 1 (1.92)    |
| Surgical and medical procedures      |             |             |         |             |
| Other, specify                       |             |             |         |             |
| Without Event                        | 26 (100.00) | 26 (100.00) |         | 52 (100.00) |
| Tinnitus                             |             |             |         |             |
| Without Event                        | 26 (100.00) | 26 (100.00) |         | 52 (100.00) |
| Upper respiratory infection          |             |             |         |             |
| Without Event                        | 26 (100.00) | 26 (100.00) |         | 52 (100.00) |
| Vaginal infection                    |             |             |         |             |
| Without Event                        | 26 (100.00) | 26 (100.00) |         | 52 (100.00) |
| Ventricular arrhythmia               |             |             | 0.6098  |             |
| Without Event                        | 25 (96.15)  | 23 (88.46)  |         | 48 (92.31)  |
| With Event                           | 1 (3.85)    | 3 (11.54)   |         | 4 (7.69)    |
| Grade 1                              | 1 (3.85)    | 2 (7.69)    |         | 3 (5.77)    |
| Grade 2                              | 0 (0.00)    | 1 (3.85)    |         | 1 (1.92)    |
| Vision decreased                     |             |             |         |             |
| Without Event                        | 26 (100.00) | 26 (100.00) |         | 52 (100.00) |
| Vomiting                             |             |             | 1.0000  |             |
| Without Event                        | 26 (100.00) | 25 (96.15)  |         | 51 (98.08)  |
| With Event                           | 0 (0.00)    | 1 (3.85)    |         | 1 (1.92)    |
| Grade 1                              | 0 (0.00)    | 1 (3.85)    |         | 1 (1.92)    |
### Medical Events/Symptoms

| Medical Events/Symptoms | Donor | Patient | p-Value | Total |
|-------------------------|-------|---------|---------|-------|
| Weight loss             |       |         |         |       |
| Without Event           | 26 (100.00) | 19 (73.08) | 0.0098  | 45 (86.54) |
| With Event              | 0 (0.00)   | 7 (26.92)  |         | 7 (13.46)  |
| Grade 1                 | 0 (0.00)   | 5 (19.23)  |         | 5 (9.62)   |
| Grade 2                 | 0 (0.00)   | 2 (7.69)   |         | 2 (3.85)   |

**Supplemental Figure 3:** Post-COVID-19 Scale and change in socioeconomic status in the propensity score matched cohort

Supplemental Figure 3: Post-COVID-19 Scale (panel A) and change in socioeconomic status (panel B) in the propensity score matched cohort.

The bar section show the relative proportion of individuals with the respective grade or status. (A) Donors showed less impairment than patients did in the Post-COVID-19 scale (p=0.038). (B) Donors remained in better socioeconomic status that patients (p=0.0496).

For the demographic characteristics of the propensity score matched patient and donor cohort see Table 16.
Supplemental Figure 4: QoL Scores of the propensity score matched cohort (patients, n=26 and donors, n=26)

EQ-5D-5L visual scale and cross walk score (panel A), FACIT Dyspnea 1 score 1 and Dyspnea 2 score (panel B) and FACIT Fatigue Score (panel C).

(A) Donors were well than patients in the EQ-ED-5DL visual scale (p=0.0264) and EQ-ED-5DL cross walk score (p=0.0264).

(B) FACIT Dyspnea scores were better in donors than patients (Dyspnea score 1 (p=0.0570) and Dyspnea score 2 (p=0.0132)).

(C) The FACIT Fatigue Scores were not significantly difference between the groups (p=0.2700).

For the demographic characteristics of the propensity score matched patient and donor cohort see Table 16.