**Supplementary Materials**

1. **Results**

A statistically significant difference was observed between patients with Marfan syndrome and healthy reference values regarding the Mental Component Summary in both women and men, as shown in Supplementary Table S1. SF-36 subscales and summary measures are displayed in Supplementary Table S2. The percentage difference between women and men with Marfan syndrome and healthy reference values is shown in Supplementary Figure S1. The cumulative distribution of the Vitality subscale for women and men in relation to healthy reference values is shown in Supplementary Figure S2.

**Supplementary Table S1.** Percentage of healthy reference values for women and men with MFS concerning summary measures

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SF-36**  | **Women**  | **% of ref.** | **p-value** | **Men** | **% of ref.** | **p-value** |
|   | With MFS  | Ref.  |  |  | With MFS | Ref. |  |  |
| **PCS**  | 50.1  | 52.7  | 95.1 | 0.110 | 53.2 | 53.9 | 98.7 | 0.158 |
| **MCS**  | 48.1  | 53.1  | 90.5 | **0.008** | 48.1 | 53.8 | 89.4 | **<0.001** |

 Data are median. MFS, Marfan syndrome; SF-36, 36-item Short-Form Health Survey; ref., reference value; PCS, Physical Component Summary; MCS, Mental Component Summary**.**

**Bold p-value,** statistically significant with one-sample Wilcoxon signed-rank test.

**Supplementary Table S2.** SF-36 subscales and summary measures for patients with MFS in age groups ≤ median or > median

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SF-36** | **Women****18–32****n=6** | **Women****33–63****n=5** | **p-****value** | **Men****18–32****n=11** | **Men****33–63****n=11** | **p-****value** |
| **PF** | 95 (83.8–100.0) | 75 (52.5–85.0) | **0.030** | 95 (90.0–100.0) | 95 (55.0–95.0) | 0.151 |
| **RP** | 100 (68.8–100.0) | 75 (0.0–87.5) | 0.177 | 100 (100.0–100.0) | 75 (0.0–100.0) | **0.040** |
| **BP** | 84 (71.0–88.0) | 62 (36.5–87.0) | 0.177 | 84 (72.0–100.0) | 74 (41.0–84.0) | 0.133 |
| **GH** | 74.8 (18.8–84.5) | 45 (27.5–76.0) | 0.662 | 82 (72.0–90.0) | 52 (37.5–62.0) | **0.002** |
| **VT** | 55 (7.5–75.0) | 20.0 (7.5–42.5) | 0.329 | 70 (50.0–80.0) | 55 (40.0–65.0) | 0.065 |
| **SF** | 87.5 (71.9–100.0) | 75 (62.5–100.0) | 0.792 | 100 (62.5–100.0) | 87.5 (50.0–100.0) | 0.401 |
| **RE** | 100 (66.7–100.0) | 100 (33.3–100.0) | 0.662 | 100 (33.3–100.0) | 100 (66.7–100.0) | 1.000 |
| **MH** | 78 (63.5–83.0) | 64 (60.0–80.0) | 0.537 | 80 (56.0–92.0) | 72 (68.0–88.0) | 0.217 |
| **PCS** | 53.3 (45.5–55.8) | 41 (29.7–47.4) | 0.082 | 55.2 (54.0–57.0) | 46.9 (31.7–52.5) | **0.007** |
| **MCS** | 48.8 (36.9–51.8) | 48.1 (31.8–52.1) | 0.931 | 45.6 (39.4–54.6) | 48.7 (36.4–53.0) | 0.898 |

Data are median (interquartile range, 25th-75th percentile). MFS, Marfan syndrome; SF-36, 36-item Short-form Health Survey; PF, Physical Functioning; RP, Role-Physical; BP, Bodily Pain; GH, General Health; VT, Vitality; SF, Social Functioning; RE, Role-Emotional; M, Mental Health; PCS, Physical Component Summary; MCS, Mental Component Summary.

**Bold p-value,** statistically significant with Mann-Whitney U-test

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**Supplementary Figure S1.** Bar chart of percentage difference between women and men with MFS and healthy reference values

SF-36, 36-item Short-form Health Survey; PF, Physical Functioning; RP, Role-Physical; BP, Bodily Pain; GH, General Health; VT, Vitality; SF, Social Functioning; RE, Role-Emotional; MH, Mental Health.



**Supplementary Figure S2.**Cumulative distribution of VT subscale (1.0=reference value) for women and men versus healthy reference values

VT, Vitality.