**SUPPORTIVE/SUPPLEMENTARY MATERIAL**

**Table S1.** Patient characteristics with reference to gender.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Males (N=49)** | **Females (N=9)** | ***P* value§ (α =0.05)** |
| **Age [years]** | 62.84±8.38 | 63.33±7.68 | 0.86 |
| **Weight [kg]** | 86.93±13.44 | 70.00±13.05 | 0.001 |
| **Height [m]** | 1.73±0.07 | 1.60±0.07 | <0.001 |
| **BMI [kg/m2]** | 28.92±3.51 | 27.45±5.13 | 0.30 |

**Abbreviations**: BMI - Body Mass Index.

Data are presented as mean ± SD.

§ - Student’s t-test (unpaired)

**Table S2.** 25(OH)D3 and 25(OH)D2 plasma concentrations (ng/mL) in males and females in each season.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **Males** | **Females** | ***P* value§ (α =0.05)** |
| **N (Males/Females)** | **25(OH)D3** |
| **34/8** | **spring – summer** | 14.96 (10.98-27.49) | 14.46 (10.00-22.83) | 0.96 |
| **39/7** | **Autumn-winter** | 9.43 (3.22-21.77) | 6.22 (2.33-14.73) | 0.31 |
| **73/15** | **Total** | 13.67 (4.28-23.18) | 12.35 (6.22-20.05) | 0.62 |
|  | **25(OH)D2** |
| **19/4** | **spring – summer** | 1.34 (0.45-1.88) | 1.41 (0.62-1.73) | 0.65 |
| **27/3** | **Autumn-winter** | 2.06 (1.15-3.05) | 0.25 (0.14-6.69) | 0.30 |
| **46/7** | **Total**  | 1.68 (1.00-2.78) | 1.09 (0.144-1.74) | 0.20 |

Data are presented as mean ± SD.

§ - Student’s t-test (unpaired)

¶ - Mann-Whitney *U* test

β - Data are presented as median(IQR)

**Table S3.** Single-factor logistic regression between vitamin D3 levels and medication in three groups according to vitamin D3 levels: deficiency (<12 ng/mL), insufficiency (12-20 ng/mL), sufficiency (>20 ng/mL).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Drug | Frequency | Odds Ratio (OR) | SE (ln) | -95%CI | +95%CI | Z statistic | p-value |
| Vitamin D deficiency |
| Angiotensin converting enzyme inhibitors | 11 | 0.782 | 0.48 | 0.305 | 2.003 | -0.512 | 0.608 |
| Acetylsalicylic acid | 27 | 0.4 | 0.945 | 0.063 | 2.549 | -0.970 | 0.332 |
| Angiotensin II receptor blockers | 8 | 3.909 | 0.666 | 1.060 | 14.420 | 2.047 | 0.041 |
| Antiplatelet | 27 | 0.4 | 0.945 | 0.063 | 2.549 | -0.970 | 0.332 |
| Atorvastatin | 12 | 0.887 | 0.534 | 0.311 | 2.526 | -0.225 | 0.822 |
| Beta blocker | 23 | 1.394 | 0.537 | 0.487 | 3.994 | 0.619 | 0.536 |
| Biguanides | 3 | 0.542 | 0.722 | 0.132 | 2.231 | -0.848 | 0.396 |
| Calcium channel blocker | 6 | 0.729 | 0.566 | 0.240 | 2.211 | -0.558 | 0.577 |
| Cytoprotective anti-ischemic agent | 1 | 0.236 | 1.107 | 0.027 | 2.066 | -1.304 | 0.192 |
| Ezetimibe | 4 | 0.622 | 0.76 | 0.140 | 2.759 | -0.625 | 0.532 |
| Insulin | 6 | 11.5 | 1.109 | 1.308 | 101.084 | 2.202 | 0.028 |
| 0.9% sodium chloride | 4 | 0.248 | 0.615 | 0.074 | 0.828 | -2.267 | 0.023 |
| Proton pump inhibitor | 14 | 1.181 | 0.47 | 0.470 | 2.967 | 0.354 | 0.723 |
| Rosuvastatin | 12 | 1.467 | 0.533 | 0.516 | 4.170 | 0.719 | 0.472 |
| Steroidal antiandrogen | 6 | 5.625 | 0.855 | 1.053 | 30.054 | 2.020 | 0.043 |
| Thiazide diuretic | 3 | 0.215 | 0.682 | 0.056 | 0.818 | -2.254 | 0.024 |
| Vitamin D insufficiency |
| Angiotensin converting enzyme inhibitors | 8 | 0.883 | 0.525 | 0.316 | 2.471 | -0.237 | 0.813 |
| Angiotensin II receptor blockers | 1 | 0.205 | 1.078 | 0.025 | 1.696 | -1.470 | 0.142 |
| Atorvastatin | 9 | 0.692 | 0.562 | 0.230 | 2.082 | -0.655 | 0.512 |
| Beta blocker | 16 | 1.28 | 0.592 | 0.401 | 4.084 | 0.417 | 0.677 |
| Biguanides | 3 | 1 | 0.731 | 0.239 | 4.190 | 0.000 | 1.000 |
| Calcium channel blocker | 6 | 1.467 | 0.583 | 0.468 | 4.599 | 0.657 | 0.511 |
| Cytoprotective anti-ischemic agent | 5 | 8.437 | 0.884 | 1.492 | 47.714 | 2.412 | 0.016 |
| Ezetimibe | 2 | 1.543 | 0.938 | 0.245 | 9.700 | 0.462 | 0.644 |
| Insulin | 1 | 0.417 | 1.112 | 0.047 | 3.687 | -0.787 | 0.432 |
| 0.9% sodium chloride | 9 | 2.481 | 0.543 | 0.856 | 7.192 | 1.673 | 0.094 |
| Proton pump inhibitor | 11 | 1.578 | 0.514 | 0.576 | 4.321 | 0.887 | 0.375 |
| Rosuvastatin | 10 | 1.5 | 0.563 | 0.498 | 4.522 | 0.720 | 0.471 |
| Steroidal antiandrogen | 1 | 0.35 | 1.101 | 0.040 | 3.029 | -0.954 | 0.340 |
| Thiazide diuretic | 7 | 1.833 | 0.566 | 0.604 | 5.558 | 1.071 | 0.284 |
| Vitamin D sufficiency |
| Angiotensin converting enzyme inhibitors | 12 | 1.524 | 0.491 | 0.582 | 3.990 | 0.858 | 0.391 |
| Acetylsalicylic acid | 24 | 0.766 | 0.947 | 0.120 | 4.901 | -0.281 | 0.778 |
| Angiotensin II receptor blockers | 3 | 0.594 | 0.716 | 0.146 | 2.417 | -0.727 | 0.467 |
| Antiplatelet | 24 | 0.766 | 0.947 | 0.120 | 4.901 | -0.281 | 0.778 |
| Atorvastatin | 14 | 1.663 | 0.547 | 0.569 | 4.858 | 0.930 | 0.352 |
| Beta blocker | 17 | 0.596 | 0.529 | 0.211 | 1.681 | -0.978 | 0.328 |
| Biguanides | 5 | 1.746 | 0.661 | 0.478 | 6.378 | 0.843 | 0.399 |
| Calcium channel blocker | 6 | 1.064 | 0.577 | 0.343 | 3.297 | 0.108 | 0.914 |
| Cytoprotective anti-ischemic agent | 1 | 0.293 | 1.109 | 0.033 | 2.575 | -1.107 | 0.268 |
| Ezetimibe | 3 | 1.222 | 0.81 | 0.250 | 5.978 | 0.248 | 0.805 |
| 0.9% sodium chloride | 9 | 1.507 | 0.523 | 0.541 | 4.200 | 0.784 | 0.433 |
| Proton pump inhibitor | 9 | 0.574 | 0.5 | 0.215 | 1.529 | -1.110 | 0.267 |
| Rosuvastatin | 8 | 0.49 | 0.547 | 0.168 | 1.432 | -1.304 | 0.192 |
| Steroidal antiandrogen | 1 | 0.246 | 1.098 | 0.029 | 2.116 | -1.277 | 0.202 |
| Thiazide diuretic | 9 | 2.118 | 0.543 | 0.731 | 6.139 | 1.382 | 0.167 |