**Table 1. The mean QSM values in ROIs in HC, RBD and PD groups.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | HC(mean ± SD)n=62 | RBD(mean ± SD)n=35 | PD(mean ± SD)n=101 | ancovaP | P (post hoc) |
|  | HC vs RBD | RBD vs PD | HC vs PD |
| VTA\_mean | 0.0195±0.003 | 0.0206±0.002 | 0.0214±0.002 | **0.001** | 0.112 | 0.182 | **<0.001** |

HC, healthy control; RBD, rapid eye movement sleep behavior disorder; PD, Parkinson’s disease; VTA, ventral tegmental area; SNc, substantia nigra pars compacta; ppm, parts per million; L, left; R, right.

**Table 2. The mean QSM values of HC and PD patients with different H&Y stage in ROIs**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | HC | PD-H&Y1 | PD-H&Y2 | PD-H&Y3 | ancovaP | P (post hoc) |
|  | (mean ± SD) | (mean ± SD) | (mean ± SD) | (mean ± SD) | HC vs PD-H&Y1 | HC vs PD-H&Y2 | HC vs PD-H&Y3 | PD-H&Y1 vs H&Y2 | PD-H&Y2 vs H&Y3 | PD-H&Y1 vs H&Y3 |
| n=62 | n=26 | n=43 | n=32 |
| VTA\_mean | 0.0195±0.003 | 0.0200±0.002 | 0.0213±0.001 | 0.0226±0.002 | **<0.001** | 1 | **<0.001** | **<0.001** | 0.068 | **0.038** | **<0.001** |

HC, healthy control; PD, Parkinson’s disease; VTA, ventral tegmental area; SNc, substantia nigra pars compacta; L, left; R, right.