**Table 2 Univariable and multivariable ordered analysis for accuracy of sPAPECHO**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variables | Overestimation (n=79) | Accurate (n=81) | Underestimation (n=58) | Univariable analysis | Multivariable analysis |
| *P* | OR (95% CI) | *P* | OR (95% CI) |
| **Echocardiographic parameters** |
|  RAD (mm) | 49.1±10.2 | 49.9±11.1 | 49.4±10.0 | 0.816 | 0.997(0.974，1.021) |  |  |
|  RVDD (mm) | 45.4±7.3 | 46.2±7.6 | 46.5±6.5 | 0.323 | 0.984(0.952,1.016) |  |  |
|  RV WT (mm) | 5.3±1.5 | 5.4±1.4 | 5.8±1.6 | 0.055 | 0.845(0.712,1.003) |  |  |
| TAPSE(mm) | 16.8±3.9 | 16.3±3.4 | 15.9±3.7 | 0.110 | 1.057(0.988,1.130) |  |  |
| FAC（%） | 30.6±9.3 | 29.8±8.3 | 27.7±7.6 | 0.064 | 1.029(0.998,1.061) |  |  |
| TR severity |  |  |  | 0.546 |  |  |  |
|  mild | 44 (20.2%) | 51 (23.5%) | 36（16.5%） | 0.944 | 1.031(0.441,2.408) |  |  |
|  moderate | 28（12.8%） | 22（10.1%） | 16（7.3%） | 0.480 | 1.386(0.560,3.431) |  |  |
|  severe | 7（3.2%） | 8（3.7%） | 6（2.8%） |  |  |  |  |
| TR spectrum quality |  |  |  | 0.020 |  |  |  |
|  A | 53（24.3%） | 49（22.5%） | 25（11.5%） |  |  |  |  |
|  B | 23（10.6%） | 26（11.9%） | 27 (12.4%) | 0.017 | 0.525(0.309,0.892) | 0.001 | 0.342(0.177,0.663) |
|  C | 3 (1.4%) | 6 (2.8%) | 6 (2.8%) | 0.055 | 0.375(0.138,1.020) | 0.273 | 0.496(0.142,1.736) |
| **Catheterization parameters** |  |  |
| sPAPRHC level |  |  |  | 0.000 |  |  |  |
| mild | 43 (19.7%) | 25 (111.5%) | 2 (0.9%) | 0.000 | 15.574(7.563,31.961) | 0.000 | 66.42(22.667,194.632) |
| moderate | 30 (13.8%) | 27 (12.4%) | 17 (7.9%) | 0.000 | 5.279(2.752.10.125) | 0.000 | 7.100(3.413,14.771) |
| severe | 6 (2.8%) | 29 (13.3%) | 39 (17.9%) |  |  |  |  |
| sPAPRHC(mmHg) | 60.5±19.6 | 74.4±23.1 | 92.4±23.1 | 0.000 | 0.958(0.947,0.970) |  |  |
| RAP (mmHg) | 2.2±4.2 | 3.3±4.7 | 5.2±6.1 | 0.002 | 0.921(0.875,0.970) |  |  |
| PVR(Wood Units) | 8.4±5.9 | 11.2±6.2 | 14.0±8.5 | 0.000 | 0.912(0.878,0.947) |  |  |
| PAWP (mmHg) | 6.9±5.2 | 7.5±5.2 | 10.1±7.0 | 0.003 | 0.932(0.889,0.977) | 0.045 | 0.948(0.899,0.999) |
| mPAP (mmHg) | 38.6±35.6 | 43.3±14.7 | 53.9±15.5 | 0.000 | 0.961(0.944,0.978) |  |  |
| **Clinical parameters** |  |  |
| 6M WT (m) | 370.9±105.7 | 355.9±123.0 | 367.8±84.1 | 0.868 | 1.000(0.996,1.005) |  |  |
| WHO functional class |  |  |  | 0.907 |  |  |  |
| I | 5 (2.3%) | 10 (4.6%) | 5 (2.3%) | 0.805 | 0.858(0.256,2.880) |  |  |
| II | 38 (17.4%) | 29 (13.3%) | 26 (11.9%) | 0.745 | 1.176(0.443,3.127) |  |  |
| III | 30 (13.8%) | 37 (17.0%) | 22 (10.1%) | 0.919 | 1.052(0.395,2.805) |  |  |
| VI | 6 (2.8%) | 5 (2.3%) | 5 (2.3%) |  |  |  |  |

RAD, right atrial diameter; RVDD, right ventricle diastolic diameter; RV WT, right ventricle wall thickness; TAPSE, tricuspid annular plane systolic excursion ; RV FAC, right ventricle fractional area change; RAP, right atrial pressure; PVR, pulmonary vascular resistance; PAWP, pulmonary artery wedge pressure; mPAP, mean pulmonary artery pressure. 6M WT, 6-minute walk test.