**Long-term predialysis systolic blood pressure variability and intradialytic cardiac hemodynamics in hemodialysis patients**

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**Table S1. Association of** **Predialysis VIMSBP Analyzed as Tertiles and Intradialytic Cardiac Hemodynamic Instability**

|  |  |  |  |
| --- | --- | --- | --- |
| **Outcomes** | **Events** | **Crudea** | **Fully Adjustedb** |
| **HR (95% CI)** | **P Value** | **HR (95% CI)** | **P Value** |
| **IDH** | 283 |  |  |  |  |
| Lowest  | 58 | Reference |  | Reference |  |
| Middle | 98 | 1.937(1.345-2.789) | <0.001 | 1.846 (1.263-2.697) | 0.002 |
| Highest | 127 | 2.849(1.998-4.064) | <0.001 | 2.566(1.753-3.756) | <0.001 |
| **Great Change in RPP** | 535 |  |  |  |  |
| Lowest  | 113 | Reference |  | Reference |  |
| Middle | 170 | 1.945(1.434-2.637) | <0.001 | 1.772(1.276-2.460) | 0.001 |
| Highest | 252 | 5.211(3.786-7.171) | <0.001 | 4.408(3.104-6.259) | <0.001 |

a Unadjusted model.

b Adjusted for demographic characteristics (age, sex), clinical factors (history of diabetes, hypertension, cardiocerebrovascular events, smoke, and BMI), dialysis-related factors (cause of ESRD, dialysis vintage, Kt/V, dry weight, and the ratio of excess weight at HD start to dry weight), laboratory measurements (serum albumin, calcium, phosphate, hemoglobin, and PTH), and use of antihypertensive medications.

IDH: intradialytic hypotension; RPP: rate-pressure product; CI: confidence interval.

**Table S2. Association of Predialysis VIMSBP with Intradialytic Cardiac Hemodynamic Instability after Stratification by predialysis SBP categories**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Outcomes** | **BP Range** | **Events** | **Crudea** | **Fully Adjustedb** |
| **HR (95% CI)** | **P Value** | **HR (95% CI)** | **P Value** |
| **IDH** |  |  |  |  |  |  |
| T1 | <132 | 48 | 1.093(1.018-1.172) | 0.014 | 1.120(1.026-1.222) | 0.011 |
| T2 | 132-146 | 74 | 1.125(1.051-1.205) | 0.001 | 1.144(1.054-1.242) | 0.001 |
| T3 | >146 | 161 | 1.133(1.067-1.204) | <0.001 | 1.135(1.061-1.214) | <0.001 |
| **Great Change in RPP** |  |  |  |  |  |  |
| T1 | <132 | 169 | 1.265(1.187-1.349) | <0.001 | 1.237(1.151-1.330) | <0.001 |
| T2 | 132-146 | 165 | 1.206(1.128-1.290) | <0.001 | 1.216(1.123-1.317) | <0.001 |
| T3 | >146 | 201 | 1.234(1.152-1.322) | <0.001 | 1.238(1.144-1.340) | <0.001 |

HR per 1 SD increase in the predialysis VIMSBP. T1 to T3 refers to categories of SBP at baseline (Tertiles of SBP)

a Unadjusted model.

b Adjusted for demographic characteristics (age, sex), clinical factors (history of diabetes, hypertension, cardiocerebrovascular events, smoke, and BMI), dialysis-related factors (cause of ESRD, dialysis vintage, Kt/V, dry weight, and the ratio of excess weight at HD start to dry weight), laboratory measurements (serum albumin, calcium, phosphate, hemoglobin, and PTH), and use of antihypertensive medications.

IDH: intradialytic hypotension; RPP: rate-pressure product; CI: confidence interval.

**Table S3. Association of Predialysis VIMDBP and Intradialytic Cardiac Hemodynamic Instability**

|  |  |  |  |
| --- | --- | --- | --- |
| **Outcomes** | **Events** | **Crudea** | **Fully Adjustedb** |
| **HR (95% CI)** | **P Value** | **HR (95% CI)** | **P Value** |
| **IDH** | 283 | 1.129 (1.060-1.201) | <0.001 | 1.100(1.029-1.176) | 0.005 |
| **Great Change in RPP** | 535 | 1.157(1.091-1.227) | <0.001 | 1.154(1.081-1.232) | <0.001 |

a Unadjusted model.

b Adjusted for demographic characteristics (age, sex), clinical factors (history of diabetes, hypertension, cardiocerebrovascular events, smoke, and BMI), dialysis-related factors (cause of ESRD, dialysis vintage, Kt/V, dry weight, and the ratio of excess weight at HD start to dry weight), laboratory measurements (serum albumin, calcium, phosphate, hemoglobin, and PTH), and use of antihypertensive medications.

IDH: intradialytic hypotension; RPP: rate-pressure product; CI: confidence interval.