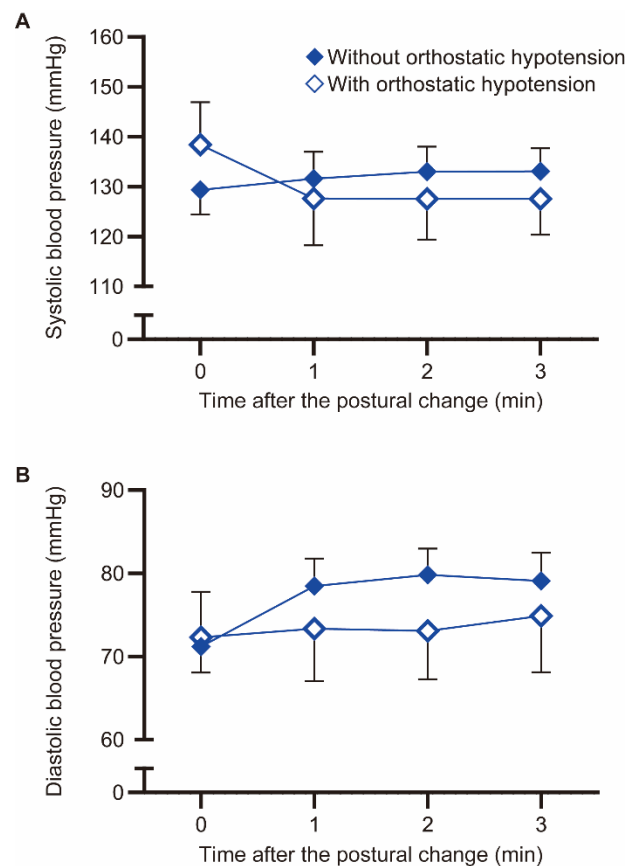
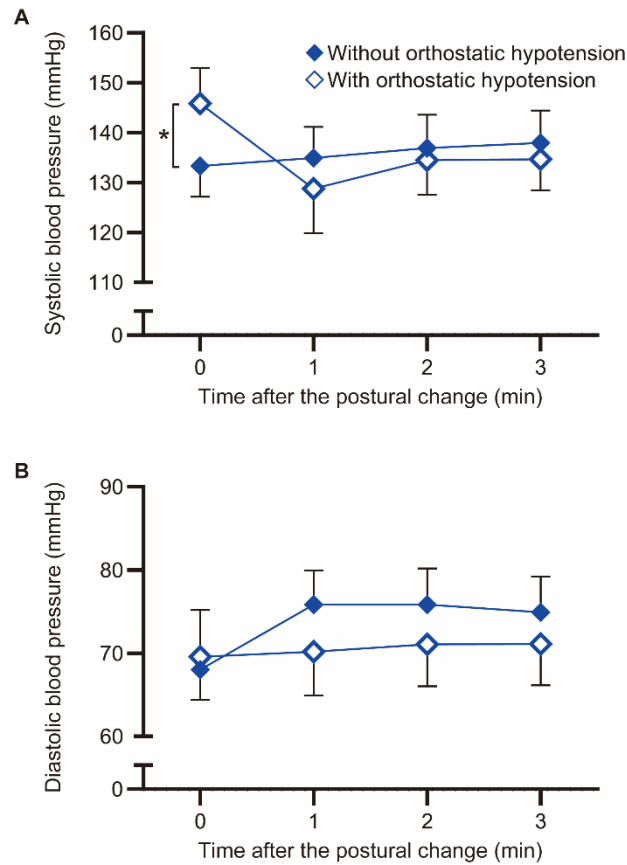


Additional File 3



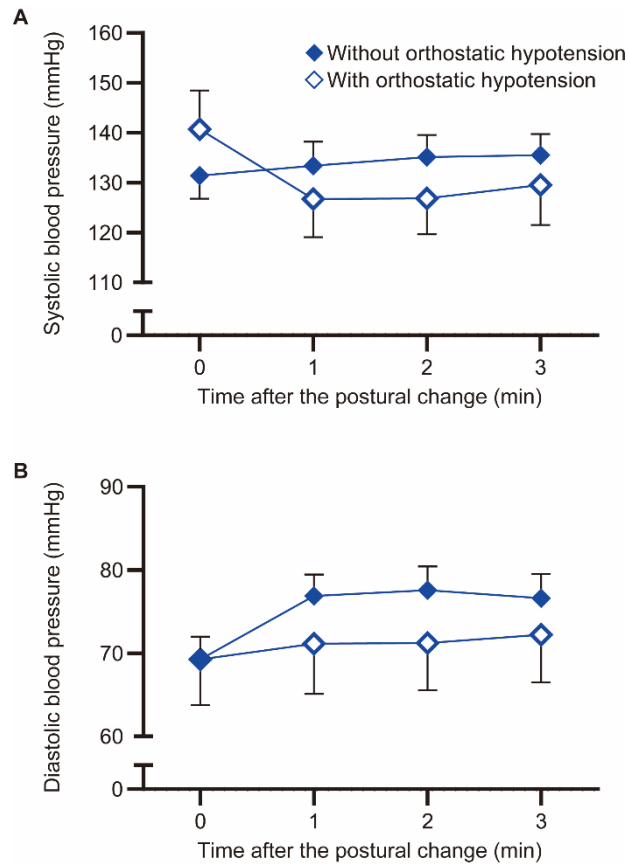
Supplementary Figure 1. Blood pressure variables during the sit-up test in participants aged 65–74 years with and without orthostatic hypotension

(A) Systolic and (B) diastolic blood pressure changes during the sit-up test. The white and blue diamonds represent the mean blood pressure values in the groups with and without orthostatic hypotension, respectively, at each time point. The error bars indicate 95% confidence intervals. The x-axis represents time in minutes. Data at $x = 0$ corresponds to the mean of two baseline blood pressure measurements taken in the supine position after 5 minutes of rest. Data at $x = 1, 2$, and 3 correspond to measurements taken at the first, second, and third minute, respectively, after participants were passively moved to the sitting position. For systolic blood pressure (A), we found a significant interaction between condition and time ($F_{(3, 168)} = 23.1, p < 0.001$) and a significant main effect of time ($F_{(2.703, 151.4)} = 6.9, p < 0.001$), but not a significant main effect of condition ($F_{(1, 56)} = 0.1, p = 0.736$). For diastolic blood pressure (B), there were a significant interaction between condition and time ($F_{(3, 168)} = 12.5, p < 0.001$) and a significant main effect of time ($F_{(2.497, 139.8)} = 24.5, p < 0.001$), but not a significant main effect of condition ($F_{(1, 56)} = 1.6, p = 0.209$).



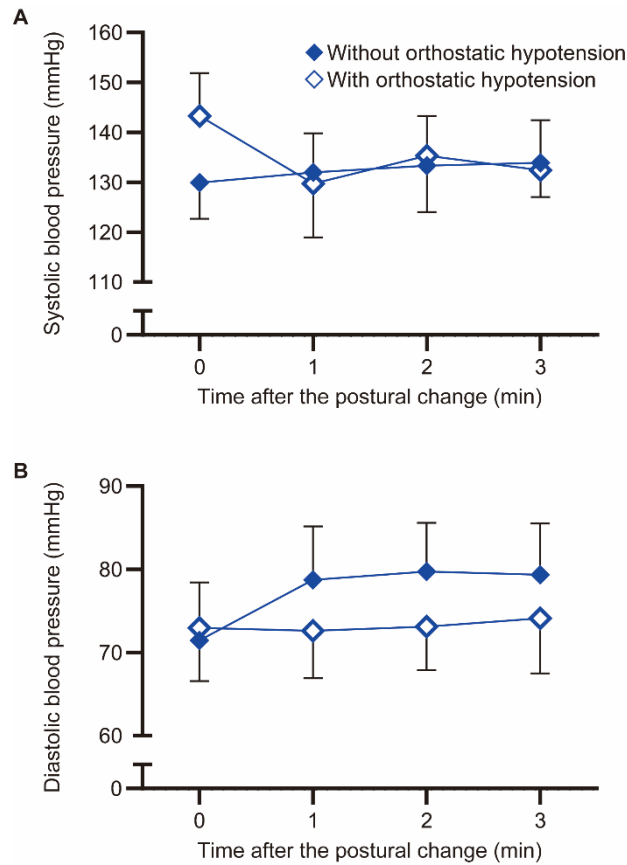
Supplementary Figure 2. Blood pressure variables during the sit-up test in participants aged 75 years or older with and without orthostatic hypotension

(A) Systolic and (B) diastolic blood pressure changes during the sit-up test. The white and blue diamonds represent the mean blood pressure values in the groups with and without orthostatic hypotension, respectively, at each time point. The error bars indicate 95% confidence intervals. The x-axis represents time in minutes. Data at $x = 0$ corresponds to the mean of two baseline blood pressure measurements taken in the supine position after 5 minutes of rest. Data at $x = 1, 2$, and 3 correspond to measurements taken at the first, second, and third minute, respectively, after participants were passively moved to the sitting position. For systolic blood pressure (A), we found a significant interaction between group and time ($F_{(3, 126)} = 24.2, p < 0.001$) and a significant main effect of time ($F_{(2.751, 115.5)} = 13.8, p < 0.001$), but not a significant main effect of group ($F_{(1, 42)} = 0.0, p = 0.972$). The asterisks indicate significant differences between the groups with and without orthostatic hypotension ($p < 0.05$, Bonferroni multiple comparison test). For diastolic blood pressure (B), there were a significant interaction between group and time ($F_{(3, 126)} = 15.2, p < 0.001$) and a significant main effect of time ($F_{(2.207, 92.70)} = 28.0, p < 0.001$), but not a significant main effect of group ($F_{(1, 42)} = 1.0, p = 0.319$). The asterisks indicate significant differences between the groups with and without orthostatic hypotension ($p < 0.05$, Bonferroni multiple comparison test).



Supplementary Figure 3. Blood pressure variables during the sit-up test in female participants with and without orthostatic hypotension

(A) Systolic and (B) diastolic blood pressure changes during the sit-up test. The white and blue diamonds represent the mean blood pressure values in the groups with and without orthostatic hypotension, respectively, at each time point. The error bars indicate 95% confidence intervals. The x-axis represents time in minutes. Data at $x = 0$ corresponds to the mean of two baseline blood pressure measurements taken in the supine position after 5 minutes of rest. Data at $x = 1, 2$, and 3 correspond to measurements taken at the first, second, and third minute, respectively, after participants were passively moved to the sitting position. For systolic blood pressure (A), we found a significant interaction between condition and time ($F_{(3, 195)} = 33.2, p < 0.001$) and a significant main effect of time ($F_{(2.705, 175.8)} = 13.7, p < 0.001$), but not a significant main effect of condition ($F_{(1, 65)} = 0.5, p = 0.485$). For diastolic blood pressure (B), there were a significant interaction between condition and time ($F_{(3, 195)} = 12.1, p < 0.001$) and a significant main effect of time ($F_{(2.372, 154.2)} = 37.0, p < 0.001$), but not a significant main effect of condition ($F_{(1, 65)} = 2.3, p = 0.134$).



Supplementary Figure 4. Blood pressure variables during the sit-up test in male participants with and without orthostatic hypotension

(A) Systolic and (B) diastolic blood pressure changes during the sit-up test. The white and blue diamonds represent the mean blood pressure values in the groups with and without orthostatic hypotension, respectively, at each time point. The error bars indicate 95% confidence intervals. The x-axis represents time in minutes. Data at $x = 0$ corresponds to the mean of two baseline blood pressure measurements taken in the supine position after 5 minutes of rest. Data at $x = 1, 2$, and 3 correspond to measurements taken at the first, second, and third minute, respectively, after participants were passively moved to the sitting position. For systolic blood pressure (A), we found a significant interaction between condition and time ($F_{(3, 99)} = 14.5, p < 0.001$) and a significant main effect of time ($F_{(2.418, 79.80)} = 6.4, p = 0.001$), but not a significant main effect of condition ($F_{(1, 33)} = 0.3, p = 0.592$). For diastolic blood pressure (B), there were a significant interaction between condition and time ($F_{(3, 99)} = 11.3, p < 0.001$) and a significant main effect of time ($F_{(2.593, 85.57)} = 13.7, p < 0.001$), but not a significant main effect of condition ($F_{(1, 33)} = 1.2, p = 0.288$).