**SUPPLEMENT**

**Severe Hypoglycemia and Risk of Falls in Type 2 Diabetes: the Atherosclerosis Risk in Communities (ARIC) Study**

**Lee et al.**

**Supplementary Table S1: ICD-9 and E codes used to identify falls.**

|  |  |  |
| --- | --- | --- |
| **Outcome** | **E codes** | **ICD-9 codes** |
| Falls | E880.x-E886.x, E888.x |  |
| Falls with fracture | E880.x-E886.x, E888.x | 820.x-829.x733.1x, 733.93, 733.94, 733.95, 733.96, 733.97, 733.98905.0x, 905.1x, 905.2x, 905.3x, 905.4x, 905.5x |

**Supplementary Table S2. Hypoglycemia hazard ratios for fall outcomes, adjusting for additional diabetes complications, n=1097**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Falls** | **Hospitalized Fall** | **Fall with Fracture** |
| Model 1 | 3.06 (2.23 - 4.20) | 2.81 (1.81 - 4.37) | 2.17 (1.33 - 3.52) |
| Model 2 | 2.56 (1.84 - 3.56) | 2.47 (1.57 - 3.89) | 1.73 (1.05 - 2.85) |
| Model 3 | 2.22 (1.58 - 3.11) | 2.46 (1.54 - 3.94) | 1.71 (1.02 - 2.86) |
| Model 3 + retinopathy | 2.21 (1.57 - 3.09) | 2.44 (1.52 - 3.91) | 1.68 (1.01 - 2.81) |
| Model 3 + PAD censoring\* | 2.43 (1.68 - 3.52) | 2.86 (1.69 - 4.85) | 1.93 (1.12 - 3.31) |
| Model 3 + retinopathy + PAD censoring\* | 2.40 (1.66 - 3.48) | 2.79 (1.65 - 4.73) | 1.86 (1.08 - 3.19) |
| Model 1: Age, sex, race-center. Model 2: Model 1 + fructosamine (linear spline, knot at 330), diabetes medications, duration. Model 3: Model 2 + any ADL difficulty, anti-depressant use, benzodiazepine use, eGFR, ACR, # comorbidities (0, 1, 2, 3+), BMI (linear spline, knot at 25), global cognitive z-score. Retinopathy was measured at Visit 3 (1993-1995), three years prior to baseline (Visit 4). \*PAD censoring excludes individuals with prevalent PAD at baseline, n=1022. |

|  |
| --- |
| **Supplementary Table S3. Hypoglycemia hazard ratios for fall outcomes, adjusting for HbA1c from Visit 2 (1990-1992), n=1131** |
|  | **Number of events without hypoglycemia** | **Number of events with hypoglycemia** | **Hazard Ratio (95% CI)** |
| **Model 1** | **Model 2** | **Model 3** |
| Any Fall | 273 | 52 | 3.05 (2.24 - 4.14) | 2.65 (1.93 - 3.65) | 2.29 (1.65 - 3.17) |
|  Hospitalized Fall | 124 | 27 | 2.61 (1.69 - 4.02) | 2.27 (1.45 - 3.56) | 2.23 (1.41 - 3.54) |
|  Fall with  Fracture | 126 | 21 | 2.08 (1.29 - 3.35) | 1.65 (1.01 - 2.70) | 1.58 (0.96 - 2.62) |
| Model 1: Age, sex, race-center. Model 2: Model 1 + HbA1c (measured at Visit 2), diabetes medications, duration. Model 3: Model 2 + any ADL difficulty, anti-depressant use, benzodiazepine use, eGFR, ACR, # comorbidities (0, 1, 2, 3+), BMI (linear spline, knot at 25), global cognitive z-score |