**Supplemental Table 1: Sensitivity: Demographic characteristics\* of study population Based upon Having Gait Speed Measured at Baseline**

|  |  |  |  |
| --- | --- | --- | --- |
| **Characteristics** | **No measure of baseline gait speed****(n=17)** | **Baseline gait speed measured****(n=166)** | **P-value** |
| Age at baseline, years | 61.4 ± 14.2 | 54.0 ± 12.5 | 0.024 |
| Gender, male (%) | 9 (52.9%) | 87 (52.4%) | 1.0 |
| Race (n=17/163): |  |  |  |
|  African-American (%) | 12 (70.6%) | 121 (74.2%) | 0.828 |
|  Caucasian (%) | 5 (29.4%) | 39 (23.9%) |  |
|  Other (%) | 0 | 3 (1.8%) |  |
| Ethnicity, Hispanic (%) | 0 (0.0%) | 10 (6.0%) | 0.602 |
| Body Mass Index kg/m2 (n=17/160) | 29.5 ± 8.5 | 28.6 ± 7.1 | 0.645 |
| Dialysis related: |  |  |  |
| Days since first outpatient dialysis treatment (n=17/161) | 102.6 ± 46.0 | 99.8 ± 47.2 | 0.813 |
| Presence of residual kidney function (n=16/164) | 15 (93.8%) | 155 (94.5%) | 1.0 |
| Diabetic nephropathy as the cause of ESRD | 8 (47.1%) | 63 (38.0%) | 0.602 |
| Gait speed measured before dialysis n (%) | 5 (31.3%) | 61 (37.2%) | 0.788 |
| Health utility and muscle related  |  |  |  |
| Overall Health Utility Index – Multi-attribute Function (n=13/161) | 0.4 ± 0.3 | 0.8 ± 0.2 | 0.0006 |
| HUI3 Ambulation (n=13/163) | 0.4 ± 0.3 | 0.9 ± 0.2 | <.0001 |
| Hand grip-maximum of all trials & hands (n=13/166) | 18.8 ± 6.9 | 27.6 ± 11.6 | 0.0005 |
| Co-morbidities |  |  |  |
| Diabetes mellitus (%) | 13 (76.5%) | 81 (48.8%) | 0.403 |
| Cardiovascular disease (%, n=16/166) | 11 (68.8%) | 69 (41.6%) | 0.062 |
| Hypertension (%, n=16/166) | 14 (87.5%) | 146 (88.0%) | 1.0 |
| Cerebrovascular disease (%) | 7 (41.2%) | 25 (15.1%) | 0.014 |
| Peripheral vascular disease (%, n=15/159) | 4 (26.7%) | 25 (15.7%) | 0.282 |
| Smoking history, current or prior | 8 (47.1%) | 79 (47.6%) | 1.0 |

\*mean±SD or number (percent) of total

**Supplemental table 2**: Sensitivity: Multivariate linear fixed effects model of gait speed over time dropping the 23 subjects with walking aid changes over time

| Effect | Parameter estimate | Standard Error | P-value |
| --- | --- | --- | --- |
| Time (years) | -0.013 | 0.01 | 0.21 |
| Male | 0.009 | 0.04 | 0.81 |
| Black or African American race | -0.05 | 0.04 | 0.16 |
| Age at baseline, years | -0.002 | 0.001 | 0.15 |
| Walking aid used-Walker/Cane/Other vs. No Assistance | -0.287 | 0.05 | <.0001 |
| Overall Health Utility Index - Multiattribute Function (per 0.1 increment) | 0.022 | 0.007 | 0.004 |
| Hand grip-maximum of all trials & hands | 0.008 | 0.002 | <.0001 |
|  |  |  |  |

Supplemental Table 3: Updated final multiple linear regression model on baseline gait speed from Table 3 including random effect for dialysis shift\*

| Effect | Parameter estimate | Standard Error | P-value |
| --- | --- | --- | --- |
| Age | -0.001 | 0.001 | 0. |
| Male | -0.03 | 0.04 | 0.44 |
| Black or African American race | -0.02 | 0.04 | 0.52 |
| Diabetic nephropathy as cause of ESRD | -0.07 | 0.03 | 0.035 |
| Overall Health Utility Index - Multiattribute Function (per 0.1 increment) | 0.03 | 0.008 | <.001 |
| Walking aid used- Walker/Cane/Other vs. No Assistance  | -0.22 | 0.043 | <.0001 |
| Hand grip-maximum of all trials & hands | 0.008 | 0.002 | <.0001 |
|  |  |  |  |

 \*Gait speed was measured after dialysis for subjects in first shift and prior to dialysis in subjects in other shifts

Supplemental Table 4: Updated final linear mixed effects model of gait speed modeled over time from Table 4 with random effect for dialysis shift and subject nested within shift\*

| Effect | Parameter estimate | Standard Error | P-value |
| --- | --- | --- | --- |
| Time (years) | -0.02 | 0.009 | 0.12 |
| Male | 0.007 | 0.03 | 0.84 |
| Black or African American race | -0.03 | 0.03 | 0.42 |
| Age at baseline, years | -0.003 | 0.001 | 0.005 |
| Walking aid used-Walker/Cane/Other vs. No Assistance  | -0.14 | 0.03 | <.0001 |
| Overall Health Utility Index - Multiattribute Function (per 0.1 increment) | 0.031 | 0.007 | <.0001 |
| Hand grip-maximum of all trials & hands | 0.007 | 0.002 | <.0001 |
|  |  |  |  |

 \*Gait speed was measured after dialysis for subjects in first shift and prior to dialysis in subjects in other shifts