**Supplementary Material**

**Table S1.** Description of anticholinergic agents

|  |  |
| --- | --- |
| **International Non-proprietary Name (INN)** | **Frequency (%)** |
| **ADS Score 1** |  |
|  Furosemide  | 194 (28.95) |
|  Oxazepam  | 68 (10.15) |
|  Tramadol  | 49 (7.31) |
|  Paroxetine  | 43 (6.42) |
|  Alprazolam  | 35 (5.22) |
|  Clonazepam  | 25 (3.73) |
|  Lorazepam  | 24 (3.59) |
|  Warfarin  | 22 (3.28) |
|  Fentanyl  | 19 (2.84) |
|  Diltiazem  | 17 (2.54) |
|  Valproate  | 17 (2.54) |
|  Fluoxetine  | 14 (2.09) |
|  Clorazepate  | 12 (1.79) |
|  Olanzapine  | 11 (1.64) |
|  Prednisone  | 10 (1.49) |
|  Sertraline  | 9 (1.34) |
|  Diazepam  | 5 (0.75) |
|  Loperamide  | 5 (0.75) |
|  Prednisolone  | 3 (0.45) |
|  Hydrocortisone  | 2 (0.30) |
|  Nifedipine  | 2 (0.30) |
|  Oxycodone  | 2 (0.30) |
|  Dexamethasone | 2 (0.30) |
|  Azathioprine  | 1 (0.15) |
|  Bromocriptine  | 1 (0.15) |
|  Captopril  | 1 (0.15) |
|  Triamcinolone  | 1 (0.15) |
| **ADS Score 2** |  |
|  Carbamazepine  | 8 (1.19) |
|  Loxapine  | 2 (0.30) |
|  Ranitidine  | 1 (0.15) |
| **ADS Score 3** |  |
|  Hydroxyzine | 24 (3.58) |
|  Amitriptyline | 16 (2.39) |
|  Oxybutynine  | 9 (1.34) |
|  Clomipramine  | 8 (1.19) |
|  Trihexyphenidyl  | 6 (0.90) |
|  Clozapine  | 1 (0.15) |
|  Imipramine  | 1 (0.15) |

Abbreviation: ADS: Anticholinergic Drug Scale

**Table S2.** Tolerance – Final model (N=499)

|  |  |
| --- | --- |
| **Patients characteristics** | **Tolerance** |
| **ADS (ref=0)**1–2 ≥ 3 | 0.730.73 |
| **Women vs men** | 0.92 |
| **Charlson score (ref=0)** **1–2** **≥ 3** **unavailable** | 0.550.530.65 |
| **History of fracture (yes vs no)** | 0.94 |
| **MMSE score (1 point of increase)** | 0.84 |
| **Abnormal one-leg standing balance test vs normal** | 0.81 |
| **QOL-AD score (1 point of increase)** | 0.88 |
| **GIR score (1 point of increase)** | 0.70 |

Abbreviations: ADS: anticholinergic drug scale; OR: Odds Ratio; CI: Confidence Interval; MMSE: Mini Mental State Examination; QOL-AD: Quality of Life in Alzheimer’s Disease; GIR (Groupe Iso-Ressources)

**Table S3.** Multivariate analysis – Sensitivity Analysis model (N=499) – Variable of interest (ADS score) and variables already associated with malnutrition in the literature

|  |  |  |  |
| --- | --- | --- | --- |
| **Patients characteristics** | **OR** | **95% CI** | **p-value** |
| **ADS (ref=0)**1–2 ≥ 3 | 0.880.93 | [0.54 – 1.43][0.49 – 1.76] | 0.5910.824 |
| **MMSE score (1 point of increase)** | 0.95 | [0.91 – 0.99] | **0.023** |
| **QOL-AD score (1 point of increase)** | 0.90 | [0.86 – 0.94] | **< 0.001** |
| **GIR score (1 point of increase)** | 0.60 | [0.50 – 0.72] | **< 0.001** |

Abbreviations: ADS: anticholinergic drug scale; OR: Odds Ratio; CI: Confidence Interval; MMSE: Mini Mental State Examination; QOL-AD: Quality of Life in Alzheimer’s Disease; GIR (Groupe Iso-Ressources)

**Figure S1.** Number of residents according to Mini Nutritional Assessment scores (N=585)



Abbreviation: MNA: Mini Nutritional Assessment