

**Table S1. PCERS patients characteristics segregated by gender**

| Characteristic  | Median or %†  |               | P-value           |
|---|---------------|---------------|-------------------|
|   | Males         | Females       |                   |
| <b>Age, n=912 (years)</b>   | 65 (18-100)   | 82 (19-101)   | <b>p&lt;0.001</b> |
| <b>Age category, n=912</b>  |               |               |                   |
| ≥18-44 years  | 17.4          | 6.6           |                   |
| ≥45-64 years  | 32.0          | 14.0          |                   |
| ≥65   | 50.6          | 79.4          | <b>p&lt;0.001</b> |
| <b>Patient Dublin area, n=912</b>                                   |               |               |                   |
| South/South East  | 13.1          | 18.3          |                   |
| West/South West   | 44.8          | 38.8          |                   |
| North/North West  | 42.1          | 42.9          | p=0.058           |
| <b>Number of ONS products in 2018, n=912</b>                        | 1 (1-4)       | 1 (1-4)       | P=0.81            |
| <b>Number of ONS units in 2018, n=912</b>                           | 684 (24-3250) | 576 (12-2760) | <b>p=0.017</b>    |
| <b>Patients on more than 1 ONS, n= 912</b>                          | 9.8           | 10.3          | p=0.91            |
| <b>Patients on ONS previous year</b>                                | 97.5          | 95.1          | p=0.082           |
| <b>Number of medications</b>  | 5 (0-18)      | 7 (0-18)      | <b>p&lt;0.001</b> |
| <b>Polypharmacy</b>   |               |               |                   |
| No polypharmacy (< 5 drugs)   | 41.3          | 26.4          |                   |
| Polypharmacy (≥ 5 drugs)  | 40.8          | 49.3          |                   |
| Excessive Polypharmacy (≥10)  | 17.9          | 24.3          | <b>p&lt;0.001</b> |
| <b>Patient CNS drug dispensed<sup>&amp;</sup></b>                   |               |               |                   |
| No CNS drug   | 25.2          | 24.5          |                   |
| CNS drug (< 5 drugs)  | 65.5          | 66.2          |                   |
| CNS Polypharmacy or Excessive Polypharmacy (≥ 5 drugs)              | 9.3           | 9.3           | p=0.97            |
| <b>Patient Circulatory drug dispensed<sup>§</sup></b>               |               |               |                   |
| No circulatory drug   | 45.3          | 33.0          |                   |
| Circulatory drug (< 5 drugs)  | 37.5          | 46.6          |                   |
| Circulatory drug Polypharmacy or Excessive Polypharmacy (≥ 5 drugs) | 17.1          | 20.4          | <b>p=0.001</b>    |

<sup>&</sup> Central Nervous System (CNS) medication include drugs to treat anxiety; Insomnia; psychoses; Mood disorders; Obsessive Compulsive Disorder; Nausea; vomiting; vertigo; epilepsy and seizures; Parkinson's; Alzheimer's; Multiple Sclerosis; Attention Deficit Hyperactivity Disorder, and narcolepsy. <sup>§</sup> Circulatory medication include drugs to treat hypertension; oedema; heart failure; arrhythmias; angina; prevent MI, stroke, and vascular events; hypercholesterolaemia; vascular diseases such as Raynaud's and pulmonary arterial hypertension; haemorrhage; anaemia and neutropenia.

**Table S2.** Category and nutritional content of Oral Nutritional Supplements.

| <b>ONS category name</b>                       | <b>Range of energy (kcal/mL)</b> | <b>Range of protein (g) per serving</b> |
|--|----------------------------------|---|
| High energy shot/sachet <sup>a</sup> (per ml)  | 3.3-5.0                          | 0.0-2.0                                 |
| High energy, standard protein <sup>b,c</sup>   | 1.5-1.6                          | 7.8-20.0                                |
| Very high energy sip feed <sup>c</sup>         | 2.0-2.4                          | 11.8-20.0                               |
| High energy semi-solid                         | 1.4-2.0                          | 7.1-12.5                                |
| High protein sip feed                          | 1.25-1.6                         | 15.8-20.0                               |
| Textured modified high energy high protein ONS | 1.5-2.4                          | 12.0-20.0                               |

<sup>a</sup>Includes fat and/or carbohydrate formulations

<sup>b</sup>Includes milk or juice-based products and powdered milkshakes that contain 1.9kcal/ml

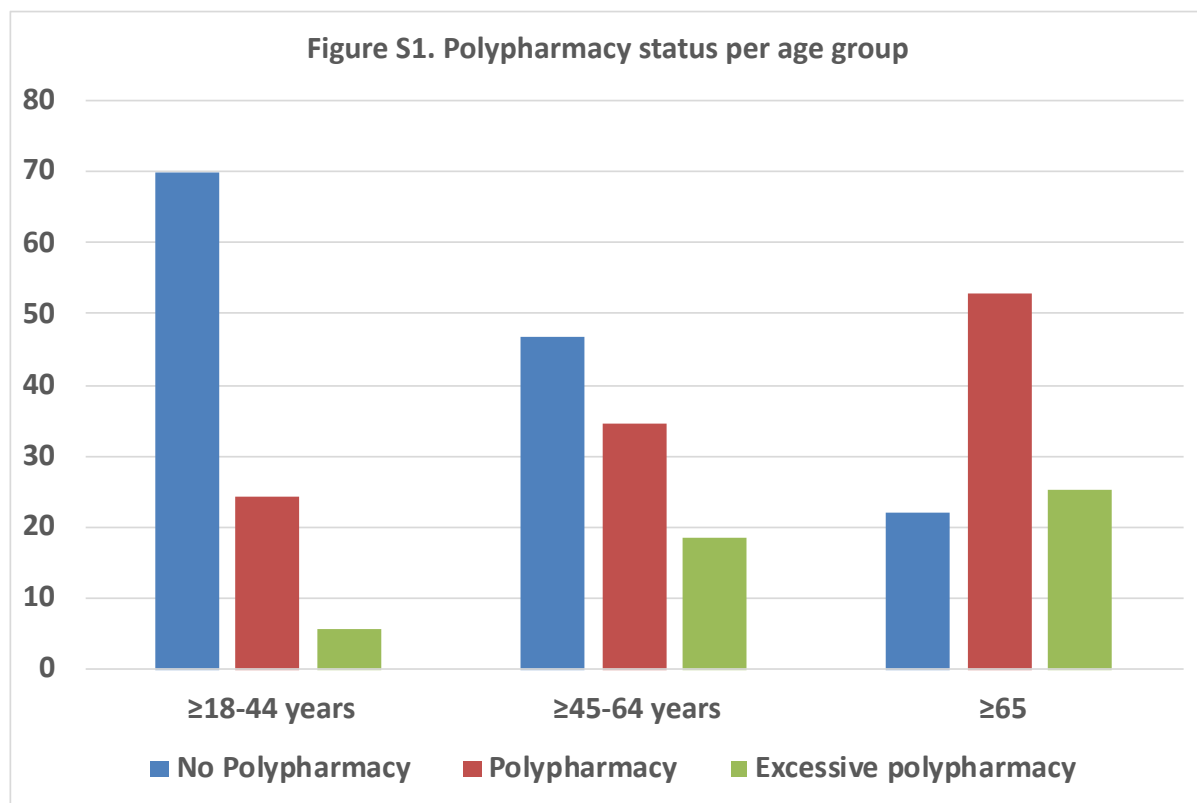
<sup>c</sup>Includes ONS with or without added fibre

**Table S3.** National representation of the study population compared to those eligible for the General Medical Services Scheme.

| Location         | Number of individuals on the<br>GMS Scheme | Study population (n=912)<br>% ( <i>n</i> ) |
|------------------|--|--|
| South/South East | 79,158                                     | 0.18 (146)                                 |
| West/South West  | 204,597                                    | 0.18 (378)                                 |
| North/North West | 171,671                                    | 0.23 (388)                                 |
| National         | 1,565,049                                  | 0.06 (912)                                 |

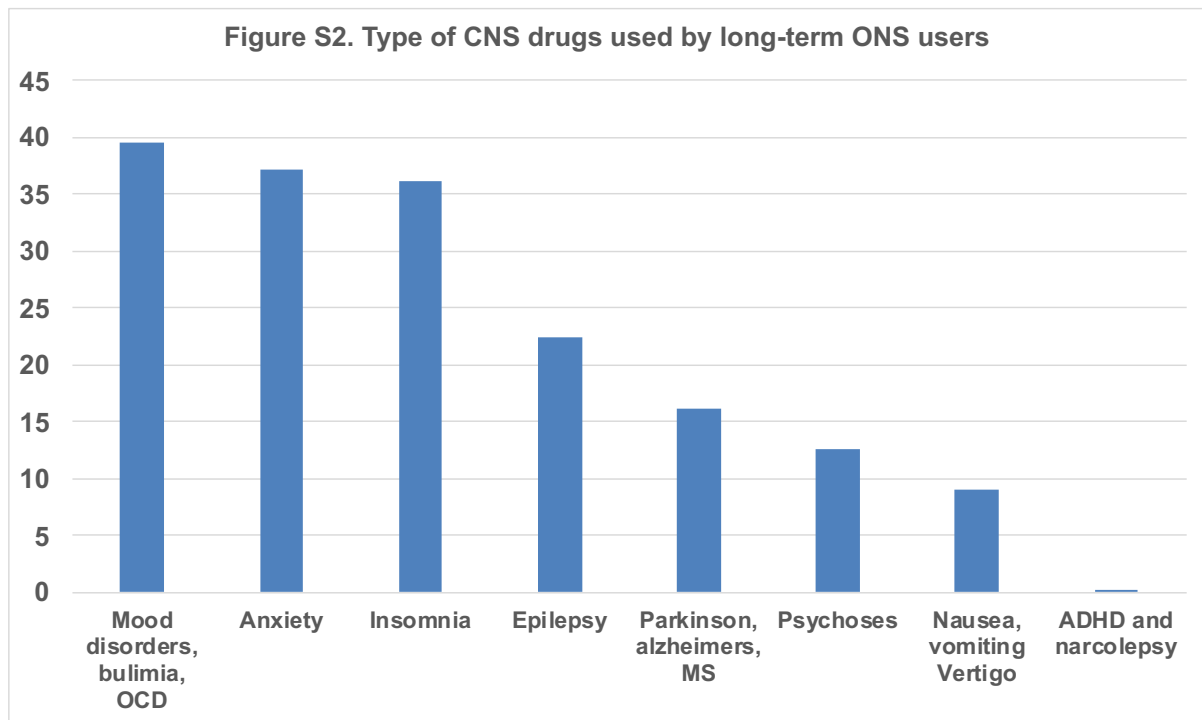
GMS - General Medical Services Scheme

**Figure S1.** Percentage of ONS long-term users on polypharmacy and excessive polypharmacy segregated by age category.



A larger proportion of people in the ≥65 age category was either on polypharmacy or excessive polypharmacy compared to the younger age groups. ( $p < 0.001$ )

**Figure S2.** Types of CNS drugs used by long-term ONS users.



**Figure S3.** Types of circulatory drugs used by long-term ONS users

