### Supplementary Data

Appendix 1. Characteristics of study population

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age, years (SD)</td>
<td>76.9 (5.5)</td>
</tr>
<tr>
<td>Country of birth</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>849 (49.8)</td>
</tr>
<tr>
<td>Italy</td>
<td>335 (19.6)</td>
</tr>
<tr>
<td>Other</td>
<td>332 (19.5)</td>
</tr>
<tr>
<td>Great Britain</td>
<td>79 (4.6)</td>
</tr>
<tr>
<td>Greece</td>
<td>65 (3.8)</td>
</tr>
<tr>
<td>China</td>
<td>46 (2.7)</td>
</tr>
<tr>
<td>Level of education*</td>
<td></td>
</tr>
<tr>
<td>Qualification after leaving school</td>
<td>946 (56.3)</td>
</tr>
<tr>
<td>Prostate cancer†</td>
<td>180 (10.8)</td>
</tr>
<tr>
<td>Benign prostate hyperplasia‡</td>
<td>621 (37.6)</td>
</tr>
<tr>
<td>Number of co-morbid diseases (≥ 2) §</td>
<td>1123 (66.6)</td>
</tr>
<tr>
<td>Mean ICIQ summed score a</td>
<td>1.9</td>
</tr>
<tr>
<td>Self rated health †</td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>268 (16.0)</td>
</tr>
<tr>
<td>Good</td>
<td>907 (54.0)</td>
</tr>
<tr>
<td>Fair</td>
<td>425 (25.3)</td>
</tr>
<tr>
<td>Poor</td>
<td>59 (3.5)</td>
</tr>
<tr>
<td>Very poor</td>
<td>21 (1.3)</td>
</tr>
<tr>
<td>Mean PCS score (SD)</td>
<td>45.6 (10.5)</td>
</tr>
<tr>
<td>Mean MCS score (SD)</td>
<td>54.2 (8.5)</td>
</tr>
</tbody>
</table>

*Total =1679, missing =26  
†Total =1673, missing =24  
‡Total =1654, missing =43  
§Total =1687, missing =12  
‖Total =1680, missing =8
Appendix 2. Type of urinary incontinence and the usage of incontinence aids

<table>
<thead>
<tr>
<th>Occasions when leakage occur†‡*</th>
<th>Number (%) in each category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before get to toilet (urge)</td>
<td>339 (20.4)</td>
</tr>
<tr>
<td>Cough/sneeze (stress)</td>
<td>65 (3.9)</td>
</tr>
<tr>
<td>When asleep (nocturnal)</td>
<td>32 (1.9)</td>
</tr>
<tr>
<td>Physically active/exercising (stress)</td>
<td>46 (2.8)</td>
</tr>
<tr>
<td>When finished urinate and dressed (post-micturition dribbling)</td>
<td>151 (9.1)</td>
</tr>
<tr>
<td>No obvious reason</td>
<td>81 (4.9)</td>
</tr>
<tr>
<td>Leaks all the time</td>
<td>9 (0.5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No of pads/incontinence aids used when leak‡</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No pads</td>
<td>1607 (96.8)</td>
</tr>
<tr>
<td>1 pads per day</td>
<td>39 (2.4)</td>
</tr>
<tr>
<td>2 pads per day</td>
<td>8 (0.5)</td>
</tr>
<tr>
<td>3 or more pads per day</td>
<td>6 (0.4)</td>
</tr>
</tbody>
</table>

*Total for each items =1665, missing =32
†Columns do not add up to 100% as more than one response could be given
‡Total =1660, missing =37

* Definition of type of UI: Urgency incontinence was defined as urinary leakage before getting to the toilet. Stress incontinence was leakage which occurred while coughing or sneezing or exercising. Nocturnal incontinence was defined as leakage of urine during sleep. Post-micturition dribbling was leakage of urine after completion of urination and being fully dressed.
<table>
<thead>
<tr>
<th>Authors</th>
<th>Number of older men</th>
<th>Country</th>
<th>Age</th>
<th>Response rate</th>
<th>Definition/ Question of UI</th>
<th>Prevalence of UI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andersson et al. (2004)</td>
<td>1920</td>
<td>Sweden</td>
<td>65-79</td>
<td>72.2%†</td>
<td>Any leakage of urine.</td>
<td>21.0%</td>
</tr>
<tr>
<td>Anger et al. (2006)</td>
<td>898\‡</td>
<td>USA</td>
<td>≥ 60</td>
<td>75.5%‡</td>
<td>In the past 12 months, have you had difficulty controlling your bladder, including leaking small amounts of urine when you cough or sneeze?</td>
<td>17.0%</td>
</tr>
<tr>
<td>Brocklehurst (1993)</td>
<td>701</td>
<td>UK</td>
<td>≥ 60</td>
<td>Unclear</td>
<td>Have you ever suffered from bladder problems, e.g. leaking, wet pants, damp pants?</td>
<td>12.8%</td>
</tr>
<tr>
<td>Ko et al. (2005)</td>
<td>58510</td>
<td>USA</td>
<td>≥ 65</td>
<td>60.0%§</td>
<td>Do you have difficulty in controlling urination?</td>
<td>20.9%‡</td>
</tr>
<tr>
<td>Langa et al. (2002)</td>
<td>7443\†</td>
<td>USA</td>
<td>≥ 70</td>
<td>80.4%§</td>
<td>During the past 12 months, have you lost any amount of urine beyond your control?</td>
<td>13.0%</td>
</tr>
<tr>
<td>Study</td>
<td>Sample Size</td>
<td>Country</td>
<td>Age Range</td>
<td>Prevalence</td>
<td>Question</td>
<td>Subgroup</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------</td>
<td>----------</td>
<td>------------</td>
<td>------------</td>
<td>----------------------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Maggi et al. (2001) [20]</td>
<td>867</td>
<td>Italy</td>
<td>≥ 65</td>
<td>88.8%†</td>
<td>Do you have urinary incontinence problems?</td>
<td>11.5%</td>
</tr>
<tr>
<td>Mardon et al. (2006) [21]</td>
<td>58470</td>
<td>USA</td>
<td>≥65</td>
<td>67.0%‡</td>
<td>Experience UI in the past 6 months</td>
<td>27.9%</td>
</tr>
<tr>
<td>Mariappan and Chong (2006)</td>
<td>107</td>
<td>Malaysia</td>
<td>≥ 60</td>
<td>78.9%§</td>
<td>Have you involuntarily leaked urine in the last 2 months during any one or a combination of (a) coughing, sneezing or with effort (b) after a sense of urgency, continuous urinary leakage or bed-wetting?</td>
<td>10.6% 60-69 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.3% ≥ 70 years</td>
</tr>
<tr>
<td>Ostbye et al. (2004) [23]</td>
<td>3624</td>
<td>Canada</td>
<td>≥65</td>
<td>Unclear</td>
<td>Do you ever lose control of your bladder? (By that I mean, do you ever pass water when you don’t intend to?)</td>
<td>8.7%§</td>
</tr>
<tr>
<td>Tennstedt et al. (2008) [24]</td>
<td>517</td>
<td>USA</td>
<td>60-79</td>
<td>57.3%§</td>
<td>In the past 12 months, have you leaked even a small amount of urine?</td>
<td>10.6%b</td>
</tr>
<tr>
<td>Tseng et al. (2000) [25]</td>
<td>248</td>
<td>Taiwan</td>
<td>≥65</td>
<td>80.0%†</td>
<td>Have you ever experienced inappropriate leakage of urine?</td>
<td>14.9%</td>
</tr>
</tbody>
</table>

† This is an overall response rate included male and female participants
‡ Calculated from existing figures
a This is an overall response rate included men aged 40 years old and over
b Prevalence of weekly UI