**SUPPLEMENTARY DATA**

**Supplementary data table 1** Medications included in each drug category

|  |  |
| --- | --- |
| **Medication class** | **Included drugs** |
| **Antipsychotic** | AmisulprideAripiprazoleAsenapineCariprazineClozapineLurasidoneOlanzapinePaliperidoneQuetiapineRisperidoneSulpirideZiprasidoneBenperidolChlorpromazineDroperidolFlupentixolFluphenazineHaloperidolLevomepromazineMelperonePenfluridolPericyazinePerphenazinePimozidePipotiazinePromazineThioridazineTrifluoperazineZuclopenthixol |
| **Anxiolytic/hypnotic** | AlprazolamBio-melatoninBuspironeChloral HydrateChlordiazepoxideChlorhexidineClomethiazoleClonazepamDiazepamFlurazepamLoprazolamLorazepamLormetazepamMelatoninNitrazepamOxazepamTemazepamZolpidemZopiclone |
| **Anti-depressant** | AgomelatinAmitriptyline Citalopram Clomipramine Dosulepin Doxepin Duloxetine Escitalopram Fluoxetine Flupentixol Fluvoxamine Imipramine Isocarboxazid Lofepramine Maprotiline MianserinMirtazapine Moclobemide Nortriptyline Paroxetine Phenelzine Reboxetine Sertraline Trazodone Trimipramine Tranylcypromine Tryptophan VenlafaxineVortioxetine |
| **Mood stabiliser** | CarbamazepineLamotrigineLithium carbonate Lithium citrateValproate |
| **ADHD medication (stimulant**) | DexamfetamineLisdexamfetamineMethylphenidate |
| **ADHD medication (non-stimulant)** | AtomoxetineGuanfacineModafinilPitolisant |

**Supplementary data table 2** Symptoms related to ADHD in the 12 months prior to the ADHD diagnosis in adults with intellectual disability and ADHD compared to general population controls with ADHD

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Toal sample (*n*=807)** | **Adults with intellectual disability and ADHD (n=159)** | **General population controls with ADHD (n=648)** | **p-value**  |
| **Aggression, n (%)** | **178 (22.1)** | **91 (57.2)** | **87 (13.4)** | **<0.001** |
| **Agitation, n (%)** | **202 (25.0)** | **91 (57.2)** | **111 (17.1)** | **<0.001** |
| Anergia, n (%) | 4 (0.5) | 0 (0.0) | 4 (0.6) | 1.00 |
| Anhedonia, n (%) | 21 (2.6) | 7 (4.4) | 14 (2.2) | 0.158 |
| **Anxiety (symptom), n (%)**  | **280 (34.7)** | **97 (61.0)** | **183 (28.2)** | **<0.001** |
| **Apathy, n (%)** | **10 (1.2)** | **7 (4.4)** | **3 (0.5)** | **0.001** |
| **Arousal, n (%)** | **59 (7.3)** | **33 (20.8)** | **26 (4.0)** | **<0.001** |
| **Disturbed sleep, n (%)** | **182 (22.6)** | **80 (50.3)** | **102 (15.7)** | **<0.001** |
| **Elation, n (%)** | **52 (6.4)** | **30 (18.9)** | **22 (3.4)** | **<0.001** |
| **Hostility, n (%)** | **62 (7.7)** | **39 (24.5)** | **23 (3.5)** | **<0.001** |
| **Insomnia, n (%)** | **46 (5.7)** | **18 (11.3)** | **28 (4.3)** | **0.002** |
| **Irritability, n (%)** | **116 (14.4)** | **53 (33.3)** | **63 (9.7)** | **<0.001** |
| Low energy, n (%) | 29 (3.6) | 9 (5.7) | 20 (3.1) | 0.15 |
| **Mood instability, n (%)** | **131 (16.2)** | **65 (40.9)** | **66 (10.2)** | **<0.001** |
| Poor concentration, n (%) | 185 (22.9) | 47 (29.6) | 138 (21.3) | 0.035 |
| **Poor motivation, n (%)** | **56 (6.9)** | **24 (15.1)** | **32 (4.9)** | **<0.001** |

**Supplementary data table 3** Number of participants prescribed psychotropic medication before and after the diagnosis of ADHD (by drug class)

|  |  |  |  |
| --- | --- | --- | --- |
| **Medication** | **Number prescribed medication prior to ADHD medication**  | **Number prescribed medication post ADHD medication**  | **p-value**  |
| Antipsychotics | 23 | 21 | 0.48 |
| Hypnotics/Anti-anxiety  | 21 | 14 | <0.05 |
| Anti-depressants  | 24 | 17 | <0.05 |
| Mood stabilizers | 11 | 10 | 1.00 |