Online supplement

Online supplement DS1

Unique data identifier (UDI) codes

Features of bipolar disorder (type I)
Either: 4642 Ever manic/hyper for at least 2 days or 4653 Ever irritable/argumentative for at least 2 days, plus
At least 3 from 6156.01 (more active), 6156.02 (more talkative), 6156.03 (needed less sleep), and 6156.04 (more creative/more ideas), plus
5663 Duration of a week or more, plus
5674 Needed treatment or caused problems at work

Features of bipolar disorder (type II)
Either: 4642 Ever manic/hyper for at least 2 days or 4653 Ever irritable/argumentative for at least 2 days, plus
At least 3 from 6156.01 (more active), 6156.02 (more talkative), 6156.03 (needed less sleep), and 6156.04 (more creative/more ideas), plus
5663 Duration of a week or more

Single (probable) episode of major depression
EITHER:
4598 Ever depressed/down for a whole week, plus
4609 At least 2 weeks duration, plus
4620 Only one episode, plus
2090 Ever seen a GP or 2100 a psychiatrist for nerves, anxiety, depression

OR:
4631 Ever anhedonic (unenthusiasm/uninterest) for a whole week, plus
5375 At least 2 weeks, plus
5386 At least one episode, plus

Probable recurrent major depression (moderate)
EITHER:
4598 Ever depressed/down for a whole week, plus
4609 At least 2 weeks duration, plus
4620 At least two episodes, plus
2090 Ever seen a GP (but not a psychiatrist) for nerves, anxiety, depression

OR:
4631 Ever anhedonic (unenthusiasm/uninterest) for a whole week, plus
5375 At least 2 weeks, plus
5386 At least two episodes, plus
2090 Ever seen a GP (but not a psychiatrist) for nerves, anxiety, depression

Probable recurrent major depression (severe)
EITHER:
4598 Ever depressed/down for a whole week, plus
4609 At least 2 weeks duration, plus
4620 At least two episodes, plus
2100 Ever seen a psychiatrist for nerves, anxiety, depression

OR:
4631 Ever anhedonic (unenthusiasm/uninterest) for a whole week, plus
5375 At least 2 weeks, plus
5386 At least two episodes, plus
2100 Ever seen a psychiatrist for nerves, anxiety, depression
Online supplement DS2

Questions and answers used to assess mood disorder features

Bipolar features questions

(a) Have you ever had a period of time lasting at least 2 days when you were feeling so good, ‘high’, excited or ‘hyper’ that other people thought you were not your normal self or you were so ‘hyper that you got into trouble?’ (4642) or ‘Have you ever had a period of time lasting at least 2 days when you were so irritable that you found yourself shouting at people or starting fights or arguments?’ (4653)’
Select: Yes, No, Don’t know, Prefer not to answer

(b) Please try to remember a period when you were in a ‘high’ or ‘irritable’ state and select which of the following apply
Select:
- I was more active than usual (6156.01)
- I was more talkative than usual (6156.02)
- I needed less sleep than usual (6156.03)
- I was more creative or had more ideas than usual (6156.04)
- All of the above
- None of the above

(c) What is the longest time period that these ‘high’ or ‘irritable’ periods have lasted? (5663) Select:
- At least 2 days, but less than a week
- Less than a week
- A week or more
- Do not know
- Prefer not to answer

(d) How much of a problem have these ‘high’ or ‘irritable’ periods caused you? (5674) Select:
- Needed treatment or caused problems with work, relationships, finances, the law or other aspects of life
- No problems
- Do not know
- Prefer not to answer

Depressive features questions

(a) Looking back over your life, have you ever had a time when you were feeling depressed or down for at least a whole week? (4598) Select: Yes, No, Don’t know, Prefer not to answer

(b) How many weeks was the longest period when you were feeling depressed or down? (4609) Participants asked to enter the number of weeks on the touchscreen.

(c) How many periods have you had when you were feeling depressed or down for at least a whole week? Participants asked to enter the number of periods on the touchscreen.

(d) Have you ever seen a general practitioner (GP) for nerves, anxiety, tension or depression? (2090) or Have you ever seen a psychiatrist for nerves, anxiety, tension or depression? (2100) Select: Yes, No, Don’t know, Prefer not to answer

Anhedonia

(a) Have you ever had a time when you were uninterested in things or unable to enjoy the things you used to for at least a whole week? (4631) Select: Yes, No, Don’t know, Prefer not to answer

(b) How many weeks was the longest period when you were uninterested in things or unable to enjoy the things you used to? Participants asked to enter the number of weeks on the touchscreen.

(c) How many periods have you had when you were uninterested in things or unable to enjoy the things you used to for at least a whole week? Participants asked to enter the number of periods on the touchscreen.

(d) Have you ever seen a general practitioner (GP) for nerves, anxiety, tension or depression? (2090) or Have you ever seen a psychiatrist for nerves, anxiety, tension or depression? (2100) Select: Yes, No, Don’t know, Prefer not to answer
### List of psychotropic medications

#### 1 Mood stabilisers
- Lithium product
- Priadel (lithium)
- Camcolt (lithium)
- Sodium valproate
- Epilim (sodium valproate)
- Depakote (semisodium valproate)
- Valproic acid
- Carbamazepine product
- Carbamazepine
- Tegretol (carbamazepine)
- Teril (carbamazepine)
- Teril retard (carbamazepine)
- Timonil retard (carbamazepine)
- Epimav (carbamazepine)

#### 2 Antidepressant – selective serotonin reuptake inhibitors
- Paroxetine
- Seroxat (paroxetine)
- Fluoxetine
- Prozac (fluoxetine)
- Citalopram (citalopram)
- Escitalopram
- Cipralex (escitalopram)
- Sertraline
- Lustral (sertraline)
- Fluvoxamine

#### 3 Antidepressant – other
- Mirtazapine
- Zispin (mirtazapine)
- Duloxetine
- Cymbalta (duloxetine)
- Yentreve (duloxetine)
- Venlafaxine
- Efexor (venlafaxine)
- Amitriptyline
- Elavil (amitriptyline)
- Tryptizol (amitriptyline)
- Lentizol (amitriptyline)
- Amitriptyline+perphenazine
- Triptafen (amitriptyline+perphenazine)
- Amitriptyline+chloridiazepoxide
- Limbitrol 10 (amitriptyline+chloridiazepoxide)
- Phenelzine
- Monoamine oxidase inhibitor – phenelzine
- Nardil (phenelzine)
- moclobemide
- Manerix (moclobemide)
- Imipramine
- Tofranil (imipramine)
- Trimipramine
- Surmontil (trimipramine)
- Dithiepin
dosulepin
- Prothiaden (dosulepin)
- Thaden (dosulepin)
- Clomipramine
- Anafranil (clomipramine)
- Lofepramine
- Gamani (lofepramine)
- Lomont (lofepramine)
- Mianserin
- BoVidon (mianserin)
- Norval (mianserin)

#### 4 Antipsychotic – traditional
- Chlorpromazine
- Largactil (chlorpromazine)
- Haloperidol
- Halodol (haloperidol)
- Serenace (haloperidol)
- Fluphenazine decanoate
- Fluphenazine
- Mecolate (fluphenazine)
- Moditen tablet (fluphenazine)
- Moditen enanthate (fluphenazine)
- Flupentixol
- Flupenthixol (flupentixol)
- Depoxil (flupentixol)
- Fluoxil (flupentixol)
- Zuclopenthixol
- Clopoxil (zuclopenthixol)
- Loxapine
- Loxapac (loxapine)
- Droperidol
- Droleptan (droperidol)
- Trifluoperazine
- Stelazine (trifluoperazine)
- Thoridazine
- Mellaril (thioridazine)

#### 5 Antipsychotic – second generation
- Quetiapine
- Seroquel (quetiapine)
- Risperdal (risperidone)
- Risperdal (risperidone)
- Olanzapine
- Zyprexa (olanzapine)
- Aripiprazole
- Abilify (aripiprazole)
- Olanzapine
- Clozapine
- Chlorpromazine
- Clozaril (clozapine)

#### 6 Sedatives and hypnotics
- Diazepam
- Dazepam product
- Valium tablet (diazepam)
- Valium syrup (diazepam)
- Valium supp (diazepam)
- Temazepam
- Normison (temazepam)
- Euthypnos (temazepam)
- Zopiclone
- Zimovane (zopiclone)
- Zaleplon
- Sonata (zaleplon)
- Zolpidem
- Stilnoct (zolpidem)
- Nitraepam
- Mogadon (nitraepam)
- Nitrazepam (nitraepam)
- Remnos (nitraepam)
- Sonnite (nitraepam)
- Noctesed (nitraepam)
- Surem (nitraepam)
- Unisomina (nitraepam)
- FluNitraepam
- Rohypnol (Flunitrazepam)
- Triazolam
- Halcion (triazolam)
### Table DS1 Logistic regression analysis of cardiometabolic disease associated with mood disorder

<table>
<thead>
<tr>
<th>Disease</th>
<th>Overall</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Partially adjusted(^a)</td>
<td>Fully adjusted(^b)</td>
<td>Partially adjusted(^a)</td>
</tr>
<tr>
<td></td>
<td>OR (95% CI) P</td>
<td>OR (95% CI) P</td>
<td>OR (95% CI) P</td>
</tr>
<tr>
<td>Cardiovascular disease any</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
</tr>
<tr>
<td>Depression</td>
<td>1.29 (1.25–1.33) &lt;0.001</td>
<td>1.15 (1.12–1.19) &lt;0.001</td>
<td>1.21 (1.17–1.26) &lt;0.001</td>
</tr>
<tr>
<td>Bipolar</td>
<td>1.50 (1.34–1.68) &lt;0.001</td>
<td>1.28 (1.14–1.43) &lt;0.001</td>
<td>1.55 (1.32–1.83) &lt;0.001</td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
</tr>
<tr>
<td>Depression</td>
<td>1.29 (1.22–1.37) &lt;0.001</td>
<td>1.07 (1.03–1.13) 0.038</td>
<td>1.25 (1.15–1.36) &lt;0.001</td>
</tr>
<tr>
<td>Bipolar</td>
<td>1.37 (1.15–1.67) 0.002</td>
<td>1.01 (0.81–1.24) 0.960</td>
<td>1.17 (0.82–1.66) 0.399</td>
</tr>
<tr>
<td>Hypertension</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
</tr>
<tr>
<td>Depression</td>
<td>1.27 (1.23–1.31) &lt;0.001</td>
<td>1.15 (1.13–1.18) &lt;0.001</td>
<td>1.19 (1.14–1.24) &lt;0.001</td>
</tr>
<tr>
<td>Bipolar</td>
<td>1.44 (1.29–1.61) &lt;0.001</td>
<td>1.26 (1.12–1.42) &lt;0.001</td>
<td>1.46 (1.24–1.73) &lt;0.001</td>
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<tr>
<td>Myocardial infarction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
</tr>
<tr>
<td>Depression</td>
<td>1.38 (1.26–1.51) &lt;0.001</td>
<td>1.18 (1.08–1.30) &lt;0.001</td>
<td>1.29 (1.08–1.55) 0.005</td>
</tr>
<tr>
<td>Bipolar</td>
<td>1.90 (1.44–2.51) &lt;0.001</td>
<td>1.45 (1.09–1.92) 0.011</td>
<td>1.37 (0.65–2.92) 0.409</td>
</tr>
<tr>
<td>Angina</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
</tr>
<tr>
<td>Depression</td>
<td>1.49 (1.39–1.61) &lt;0.001</td>
<td>1.23 (1.14–1.33) &lt;0.001</td>
<td>1.43 (1.27–1.61) &lt;0.001</td>
</tr>
<tr>
<td>Bipolar</td>
<td>1.69 (1.30–2.20) &lt;0.001</td>
<td>1.21 (0.93–1.58) 0.154</td>
<td>1.17 (1.30–2.90) 0.008</td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
<td>1 (Reference)</td>
</tr>
<tr>
<td>Depression</td>
<td>1.61 (1.46–1.78) &lt;0.001</td>
<td>1.26 (1.13–1.40) &lt;0.001</td>
<td>1.70 (1.47–1.97) &lt;0.001</td>
</tr>
<tr>
<td>Bipolar</td>
<td>1.80 (1.27–2.54) 0.001</td>
<td>1.17 (0.82–1.67) 0.373</td>
<td>2.73 (1.69–4.41) &lt;0.001</td>
</tr>
</tbody>
</table>

\(^a\) Partially adjusted for age, gender, deprivation and ethnicity.

\(^b\) Fully adjusted for age, gender, deprivation, ethnicity, body mass index, smoking status, alcohol consumption and psychotropic medication.