**Supplementary Results.**

**COVID-19 Status by diagnostic sub-groups.**

To explore the potential for patient psychopathology to impact risk (for example due to a current depressive episode and limited social interactions in the facility), we further characterized patients by diagnosis and mood symptoms (if present in the chart) and COVID-19 status (Table S1). Those with unspecified bipolar disorder (n=4) and unspecified psychiatric diagnoses (n=4) were excluded. There was no significant difference between infection (Y/N) and diagnosis (p=0.282). There was also no significant association between psychopathology and COVID-19, when stratified by antidepressant use (Y/N, Table S2).

|  |  |  |  |
| --- | --- | --- | --- |
| **Supplementary Table S1. Psychopathology and COVID-19 Infection Status.** | | | |
| **Dx** | **COVID+**  **n=87** | **COVID-**  **n=70** |  |
|  |  |  | p=0.282 |
| Schizophrenia | 40 | 32 |  |
| Schizoaffective Disorder- Bipolar Type | 41 | 27 |  |
| Schizoaffective Disorder- Depressive Type/ Major Depressive Disorder | 3 | 7 |  |
| Bipolar Disorder (current or most recent episode manic) | 3 | 4 |  |
|  |  |  |  |
| Probability of association via Fisher’s exact test | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Supplementary Table S2. Psychopathology and COVID-19 Infection Status, by Antidepressant Use.** | | | |
| **Dx** | **COVID+**  **n=87** | **COVID-**  **n=70** |  |
| ***Antidepressant+ (n=34)*** |  |  | p=0.205 |
| Schizophrenia | 7 | 7 |  |
| Schizoaffective Disorder- Bipolar Type | 4 | 11 |  |
| Schizoaffective Disorder- Depressive Type/ Major Depressive Disorder | 0 | 4 |  |
| Bipolar Disorder (current or most recent episode manic) | 0 | 1 |  |
|  |  |  |  |
| ***Antidepressant- (n=123)*** |  |  | p=0.404 |
| Schizophrenia | 33 | 25 |  |
| Schizoaffective Disorder- Bipolar Type | 37 | 16 |  |
| Schizoaffective Disorder- Depressive Type/ Major Depressive Disorder | 3 | 3 |  |
| Bipolar Disorder (current or most recent episode manic) | 3 | 3 |  |
|  |  |  |  |
| Probability of association via Fisher’s exact test | | | |

**Associations between individual antidepressant and antipsychotic use, and COVID-19 status.**

As shown in Table S3, there was a significant association between COVID-19 infection and use of the SSRI Fluoxetine (p=0.023) and the SARI Trazodone (p=0.001). In both cases, antidepressant use significantly reduced the risk of COVID-19 infection. Conversely, those patients treated with a typical antipsychotic, or those treated with the atypical antipsychotic Olanzapine, had a trend towards a significantly increased risk of COVID-19 infection (p<0.01).

|  |  |  |  |
| --- | --- | --- | --- |
| **Supplementary Table S3. Antidepressant and Antipsychotic Frequency of the RPC Sample by COVID-19 Infection Status.** | | | |
| **Medication (n)** | **COVID+**  **n=91** | **COVID-**  **n=74** | **Proba** |
| ***Antidepressant*** |  |  |  |
| SSRIc (n=19b) | 7 | 12 | p=0.140 |
| Escitalopram | 2 | 3 | p=0.658 |
| **Fluoxetine** | **1** | **7** | **p=0.023** |
| Sertraline | 4 | 1 | p=0.381 |
| SNRId (n=5) | 1 | 4 | p=0.175 |
| **SARIe (Trazodone n=12)** | **1** | **11** | **p=0.001** |
|  |  |  |  |
| ***Antipsychotic*** |  |  |  |
| **Typicalf (n=88b)** | **54** | **34** | **p=0.084** |
| Chlorpromazine | 1 | 4 | p=0.175 |
| Fluphenazine | 10 | 8 | p=1.00 |
| Haloperidol | 43 | 27 | p=0.205 |
|  |  |  |  |
| Atypicalg (n=156b) | 85 | 71 | p=0.733 |
| Aripiprazole | 2 | 5 | p=0.245 |
| Clozapine | 25 | 18 | p=0.723 |
| **Olanzapine** | **46** | **27** | **p=0.084** |
| Paliperidone | 12 | 15 | p=0.290 |
| Quetiapine | 15 | 14 | p=0.687 |
| Risperidone | 13 | 12 | p=0.828 |
| Ziprasidone | 3 | 2 | p=1.00 |
| **a** Probability of association via Fisher’s exact test (unadjusted).  b Some patients were receiving multiple antidepressant and/or antipsychotic medications.  c SSRI: selective serotonin reuptake inhibitors (Escitalopram n=5; Fluoxetine n=8; Paroxetine n=3; Sertraline n=5)  d SNRI: serotonin-norepinephrine reuptake inhibitors (Duloxetine n=2; Venlafaxine n=3)  e SARI: serotonin-2 antagonist reuptake inhibitors (Trazodone n=12)  f Typical (Chlorpromazine n=5; Fluphenazine n=18; Haloperidol n=70; Perphenazine n=2; Prochlorperazine n=1)  g Atypical (Aripiprazole n=7; Clozapine n=43; Olanzapine n=73; Paliperidone n=27; Quetiapine n=29; Risperidone n=25; Ziprasidone n=5)  Significant associations (p<0.05) and trends towards significance (p<0.1) are bolded. | | | |