## **Supplementary Material**

## "T cell phenotype and T cell receptor repertoire in patients with major depressive disorder"

by Patas et al.

## Table S1.

Clinical characteristics of MDD patients and non-depressed controls, matched for age, sex, body mass index and smoking status (n = 40).

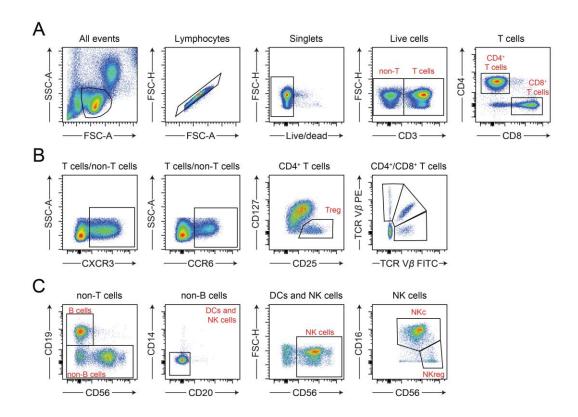
## Figure S1.

Gating strategy.

**Table S1:** Clinical characteristics of MDD patients and non-depressed controls, matched for age, sex, body mass index and smoking status (n = 40)

| Case<br>Control | Age  | Sex | BMI   | Smoking | Previous episodes | QIDS-<br>SR | HRSD | Medication                   | TCR<br>Seq |
|-----------------|------|-----|-------|---------|-------------------|-------------|------|------------------------------|------------|
| ARP2-MDD        | 29   | M   | 25.95 | No      | 0                 | 15          | 20   |                              | -          |
| ARP2-CTR        | 27   | M   | 25.53 | No      | N/A               | 1           | N/A  |                              |            |
| ARP3-MDD        | 41   | F   | 17.93 | Yes     | 0                 | 18          | 22   |                              |            |
| ARP3-CTR        | 41   | F   | 17.01 | Yes     | N/A               | 4           | N/A  |                              |            |
| ARP4-MDD        | 32   | M   | 24.17 | No      | 1                 | 17          | 20   |                              |            |
| ARP4-CTR        | 31   | M   | 22.86 | No      | N/A               | 1           | N/A  |                              |            |
| ARP5-MDD        | 49   | M   | 23.99 | No      | 0                 | 21          | 23   | Ramipril                     |            |
| ARP5-CTR        | 47   | M   | 25.99 | No      | N/A               | 5           | N/A  |                              |            |
| ARP6-MDD        | 24   | M   | 24.11 | No      | 1                 | 19          | 24   |                              |            |
| ARP6-CTR        | 24   | M   | 24.81 | No      | N/A               | 3           | N/A  |                              |            |
| ARP7-MDD        | 20   | M   | 19.75 | Yes     | 1                 | 9           | 21   |                              |            |
| ARP7-CTR        | 21   | M   | 21.06 | Yes     | N/A               | 2           | N/A  |                              |            |
| ARP8-MDD        | 52   | F   | 20.70 | Yes     | 1                 | 17          | 30   |                              |            |
| ARP8-CTR        | 53   | F   | 25.47 | Yes     | N/A               | 4           | N/A  |                              |            |
| ARP9-MDD        | 53   | F   | 20.83 | Yes     | 1                 | 21          | 18   |                              |            |
| ARP9-CTR        | 55   | F   | 20.20 | Yes     | N/A               | 2           | N/A  | Bisoprolol, Potassium iodide |            |
| ARP10-MDD       | 42   | F   | 32.87 | No      | 1                 | 15          | 20   | Ramipril                     |            |
| ARP10-CTR       | 49   | F   | 30.71 | No      | N/A               | 1           | N/A  |                              |            |
| ARP11-MDD       | 34   | F   | 30.85 | No      | 3                 | 14          | 20   |                              | X          |
| ARP11-CTR       | 32   | F   | 33.06 | No      | N/A               | 1           | N/A  | Oral contraception           | X          |
| ARP12-MDD       | 27   | F   | 26.26 | No      | 0                 | 23          | 19   |                              |            |
| ARP12-CTR       | 30   | F   | 27.40 | No      | N/A               | 5           | N/A  |                              |            |
| ARP13-MDD       | 30   | F   | 23.33 | No      | 1                 | 16          | 19   |                              |            |
| ARP13-CTR       | 33   | F   | 23.05 | No      | N/A               | 4           | N/A  | L-Thyroxine                  |            |
| ARP14-MDD       | 41.5 | F   | 22.49 | No      | 0                 | 19          | 18   |                              | X          |
| ARP14-CTR       | 42   | F   | 22.86 | No      | N/A               | 1           | N/A  |                              | X          |
| ARP15-MDD       | 37   | M   | 20.67 | Yes     | 2                 | 17          | 23   | Zopiclone                    |            |
| ARP15-CTR       | 43   | M   | 22.83 | Yes     | N/A               | 0           | N/A  |                              |            |
| ARP16-MDD       | 61   | M   | 28.07 | No      | 0                 | 20          | 22   |                              |            |
| ARP16-CTR       | 65   | M   | 24.16 | No      | N/A               | 1           | N/A  |                              |            |
| ARP17-MDD       | 36   | F   | 26.23 | No      | 1                 | 23          | 28   |                              |            |
| ARP17-CTR       | 35   | F   | 24.09 | No      | N/A               | 3           | N/A  |                              |            |
| ARP18-MDD       | 32   | F   | 17.58 | Yes     | 3                 | 19          | 24   |                              | X          |
| ARP18-CTR       | 36   | F   | 22.49 | Yes     | N/A               | 0           | N/A  |                              | X          |
| ARP19-MDD       | 35   | F   | 32.79 | No      | 3                 | 18          | 19   |                              | X          |
| ARP19-CTR       | 33   | F   | 39.06 | No      | N/A               | 1           | N/A  |                              | X          |
| ARP20-MDD       | 46   | M   | 28.03 | Yes     | 0                 | 26          | 24   |                              |            |
| ARP20-CTR       | 41   | M   | 24.57 | Yes     | N/A               | 3           | N/A  |                              |            |
| ARP21-MDD       | 38.5 | M   | 27.16 | No      | 0                 | 24          | 26   |                              | X          |
| ARP21-CTR       | 38   | M   | 28.63 | No      | N/A               | 3           | N/A  |                              | X          |

MDD: major depressive disorder; CTR: non-depressed control; BMI: body mass index; QIDS-SR: 16-item Quick Inventory of Depressive Symptoms-Self Report; HRSD: 17-item Hamilton Rating Scale for Depression; TCRseq: T cell receptor sequencing; N/A: not applicable



**Figure S1:** Gating strategy. (**A**) A common gating was applied across panels allowing for the identification of lymphocytes by forward (FSC) and side scatter (SSC), followed by exclusion of doublets and dead cells. Singlet live lymphocytes were selected on either CD3 positivity (T cells) or negativity (non-T cells). T cells were discriminated into CD4<sup>+</sup>CD8<sup>-</sup> and CD8<sup>+</sup>CD4<sup>-</sup> subsets. (**B**) T cells and non-T cells were further distinguished based on surface expression of CXCR3 and CCR6. Within CD4<sup>+</sup> T cells, regulatory T cells (Treg) were identified as CD127<sup>low/-</sup> while expressing high levels of CD25. The distribution of 24 Vβ families (3 Vβ specificities per tube) was assessed among CD8<sup>+</sup> and CD4<sup>+</sup> T cells. (**C**) Among non-T cells, B cells were defined as CD56<sup>-</sup>CD19<sup>+</sup> and natural killer (NK) cells as CD19<sup>-</sup>CD20<sup>-</sup>CD14<sup>-</sup>CD56<sup>+</sup>. Within NK cells, CD56<sup>low</sup>CD16<sup>+</sup> cytotoxic (NKc) and CD56<sup>high</sup>CD16<sup>-</sup> regulatory (NKreg) subsets were identified as well. CXCR3: CXC-chemokine receptor type 3; CCR6: CC-chemokine receptor type 6; TCR: T cell receptor; DCs: dendritic cells