Supplementary Figure 1: Flow-chart of study cohort.


Supplementary Table 1: List of antidepressants drugs coded in the US Centricity Electronic Medical Records that was used to identify people with depression.

| Drug class | Generic name | Brand name | Indications |
| :--- | :--- | :--- | :--- |
| Tricyclic <br> antidepressants <br> (TCAs) | amitriptyline | ALAVIL(Elavil), SENTRAVIL, <br> LIMBITROL, TRIAVIL, <br> VANATRIP, ETRAFON | major depressive disorder (MDD), anxiety disorders, and less <br> commonly attention deficit hyperactivity disorder (ADHD) and <br> bipolar disorder, |
|  | amoxapine | ASENDIN | anxiety, depression |
|  | depression, anxiety, panic disorder |  |  |
|  | domepramine | ANAFRANIL | insomnia (low dose of doxepin), depression, anxiety |
|  | trimipramine, <br> desipramine, <br> imipramine | SILENOR, SINEQUAN <br> TOFRONTIL, NORPRAMIN, | depression |
|  | nortriptyline | PAMELOR, AVENTYL | depression, ADHD |
|  | protriptyline | VIVACTIL | depression, ADHD |
| Monoamine -oxidase <br> inhibitors (MAOIs) | isocarboxazid | MARPLAN | depression |


| Serotonin- <br> noradrenaline reuptake <br> inhibitors (SNRIs) | Venlafaxine, <br> desvenlafaxine | EFFEXOR, PRISTIQ, KHEDEZLA | anxiety, depression |
| :--- | :--- | :--- | :--- |
|  | duloxetine | CYMBALTA, IRENKA | depression, anxiety |
|  | levomilnacipran | FETZIMA | depression |
| Other antidepressants | buproprion | BUDEPRION, BUPROBAN, <br> WELLBUTRIN, APLENZIN, <br> APPBUTAMONE, FORFIVO, <br> APLENZIN | depression |
|  |  | OLEPTRO, DESYREL | depression |
|  | trazodone | REMERON | depression |
|  | mirtazapine | SERZONE | depression |
|  | nefazodone | LUDIOMIL | depression, anxiety |
|  | maprotiline | VIIBRYD, TIANEPTINE |  |
|  | vilazodone |  |  |

Supplementary Table 2: By age groups at the time of type 2 diabetes diagnosis, crude rate ( $95 \% \mathrm{CI}$ ) per 1000 persons years of follow-up for atherosclerotic cardiovascular disease (ASCVD), Heart Failure (HF) and MACE-3 (HF, myocardial infarction, stroke) in White Caucasian (WC) and African American (AA).

| Age group | ASCVD rates in <br> AA | ASCVD rates in <br> WC | HF rates in AA | HF rates in WC | MACE-3 rates in <br> AA | MACE-3 rates in <br> WC |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 8 - 3 9}$ years | $7.1(6.5,7.8)$ | $6.3(6.0,6.6)$ | $3.1(2.7,3.6)$ | $1.5(1.4,1.7)$ | $4.6(4.1,5.2)$ | $2.9(2.7,3.1)$ |
| 40-49 years | $15.3(14.5,16.2)$ | $15.7(15.3,16.1)$ | $5.6(5.2,6.1)$ | $3.3(3.1,3.5)$ | $9.1(8.5,9.7)$ | $6.5(6.2,6.7)$ |
| $\mathbf{5 0 - 5 9}$ years | $23.1(22.3,23.9)$ | $25.3(24.9,25.7)$ | $8.9(8.4,9.4)$ | $6.0(5.9,6.2)$ | $13.7(13.2,14.3)$ | $10.6(10.4,10.8)$ |
| $\mathbf{6 0 - 6 9}$ years | $36.0(34.9,37.2)$ | $40.6(40.1,41.0)$ | $12.2(11.6,12.8)$ | $12.0(11.8,12.2)$ | $19.4(18.6,20.1)$ | $18.6(18.3,18.8)$ |

