**Supplementary information**

**Supplementary Table 1:** Definition of variables based on ATC, ICD-8, ICD-10, and procedure codes.

|  |  |
| --- | --- |
|  | ICD-code, procedure, or ATC codes |
| Psychiatric hospital contact | ICD-10: F00-F99 |
| Depressive disorder | ICD-10: F32-F33 |
| Psychotic disorder | ICD-10: F20-29 |
| Anxiety disorder | ICD-10: F40-F41 |
| Substance abuse | ICD-10: F10-F19 |
|  |  |
| Psychopharmacological treatment |  |
| Antidepressants | ATC: N06A |
| *SSRI* | ATC: N06AB03-6, N06AB08, N06AB10 |
| *SNRI* | ATC: N06AX16, N06AX21 |
| *TCA* | ATC: N06AA02, N06AA04, N06AA09-10 |
| *Other*  | ATC: N06AX03, N06AX11, N06AX18 |
| Antipsychotics  | ATC: N05A  |
| Lithium | ATC: N05AN01 |
| Anxiolytics | ATC: N05B |
|  |  |
|  |  |
| Commonly prescribed medication |  |
| Beta-blockers | ATC: C07 |
| Calcium channel blockers | ATC: C08 |
| Renin-angiotensin system acting agents | ATC: C09 |
| Diuretics | ATC: C03 |
| Antithrombotic agents | ATC: B01A |
| Lipid modifying agents | ATC: C10 |
| Corticosteroids | ATC: H02 |
| Anti-inflammatory agents | ATC: M01 |
| Analgesics  | ATC: N02 |
| Glucose lowering drugs | ATC: A10 |
|  |  |
| Diabetes | ICD-8: 249-250, 2515. ICD-10: E10-E15, E160-162, O24, T383A, M142, G590, G632, H280, H334, H450, H360, N083 |
|  |  |
| Microvascular complications | ICD-10: E104, E114, E144, G590, G632,E103, E113, E143, H340-H342, H280, H334, H450, H360, H540, H541, H544, H25, H268, H269, H430, H431, H438C, H439, H334A, H330, H335, KCKC10, KCKC15, KCKD65,E102, E112, E142, I120, N083, N06, N17-N19, R809, H340-H342 |
| Macrovascular complications | ICD-10: KFNA, KFNB, KFNC, KFND, KFNE, KFNF, KFNG, KFNH, KFNW, KFLF, KPAE+F+H+N+P+Q, KPAW99, KPAU74, KPBE+F+H+N+P+Q, KPBW, KPGH10, KPCE+F+H+N+P+Q, KPCW99, KPCW20, KPCU74+82+83+84, KPGE+F+H+N+P+Q, KPGW99, KPGW20, KPEE+F+H+N+P+Q+W, KPFE+H+N+P+Q+W, KPGH20+21+22+23+30+31+40+99, KPDU74+82+83+84, KPEU74+82+83+84, KPFU74+82+83+84, KPGU74+83+84+99, KPGW, KPWG, KAAL10, KAAL11, KNBQ, KNCQ, KNDQ, KNEQ, KNFQ, KNGQ, KNHQKPDE+F+H+N+P+QKPGW99, KPGW20KPEWI20-I25, T822A, T823I61, I63-I66, I672, I678-I679, I691, I693-I698I702, I742-I745, I739A, I739B, I739C, E105, E115, I700, I708, I709, I740-I741, I748-I749, N280, I701, K550-K551, K558-559 |
| Obesity | ICD-10: E65, E66, E68 |
| Charlson Comorbidity indexMyocardial infarctionCongestive Heart failurePeripheral vascular diseaseCerebrovascular diseaseDementiaChronic pulmonary diseaseConnective tissue diseaseUlcer diseaseMild liver diseaseHemiplegiaModerate to severe renal diseaseAny tumorLeukemiaLymphomaModerate to severe liver diseaseMetastatic solid tumorAIDS | ICD-10: I21-I23ICD-10: I50, I11.0, I13.0, I13.2ICD-10: I70-I74, I77ICD-10: I60-I69, G45, G46ICD-10: G30ICD-10: J40-J47, J60-J67, J68.4, J70.1, J70.3, J84.1, J92.0, J96.1, J98.2, J98.3ICD-10: M05, M06, M08, M09, M30-M36, D86ICD-10: K22.1, K25-K28ICD-10: B18; K70.0-K70.3; K70.9; K71; K73; K74; K76.0ICD-10: G81, G82ICD-10: I12, I13, N00-N05, N07, N11, N14, N17-N19, Q61ICD-10: C00-C75ICD-10: C91-C95ICD-10: C81-C85, C88, C90, C96ICD-10: B15.0, B16.0, B16.2, B19.0, K70.4, K72, K76.6, I85ICD-10: C76-C80ICD-10: B21-B24 |
| Alcohol-related disorders | ICD-10: F10, G312, G621, G721, I426, K70, K292, R780, T51, E244, L278A. |
| Smoking-related disorders | ATC: R03ICD-10: Z587, Z720, J40, J41, J42, J43, J44,  |
| Atrial fibrillation | ICD-10: I48 |
| Hyper/hypothyroidism | ICD-10: E03, E06, E05 |
| Hypertension | ICD-10: I10-I15 |
| Osteoporosis | ICD-10: M80-M82 |
| Neurological disease | ICD-10: G04-G99 |

Abbreviations: ICD=international classification of diseases. ATC=anatomical theurapeutic chemical

**Supplementary Table 2:** Use of psychopharmacological treatment (at least two prescriptions redeemeda) within the first two years after incident T2D or matched datea

|  |  |  |
| --- | --- | --- |
|  | Individuals with T2D N=56,640 (%) | Individuals without T2D (controls)N=315,694 (%) |
|  | Number of individuals (%) |  Incidence rate per 1000 years follow-up, (95% CI) | Number of individuals (%) | Incidence rate per 1000 years follow-up,(95% CI) |
| **Any psychopharmacological agent** | 2,830 (5.0%) | 26.38 (25.43-27.37) | 7,835 (2.5%) | 12.65 (12.37-12.93) |
|  |  |  |  |  |
| **Antidepressants** |  |  |  |  |
|  Any antidepressant | 2,155 (3.8%) | 20.09 (19.26-20.96) | 5,553 (1.8%) | 8.96 (8.73-9.20) |
|  SSRI | 1,222 (2.2%) | 11.39 (10.77-12.05) | 3,091 (1.0%) | 4.99 (4.82-5.17) |
|  SNRI | 174 (0.3%) | 1.62 (1.40-1.88) | 302 (0.1%) | 0.49 (0.44-0.55) |
|  TCA | 351 (0.6%) | 3.27 (2.95-3.63) | 729 (0.2%) | 1.18 (1.09-1.27) |
|  Other | 459 (0.8%) | 4.28 (3.90-4.69) | 1,389 (0.4%) | 2.13 (2.13-2.36) |
|  |  |  |  |  |
| **Antipsychotics** |  |  |  |  |
|  Any antipsychotic | 381 (0.7%) | 3.55 (3.21-3.93) | 902 (0.3%) | 1.46 (1.36-1.55) |
|  |  |  |  |  |
| **Anxiolytics** |  |  |  |  |
|  Any anxiolytic |  615 (1.1%) | 5.73 (5.30-6.20) | 2,236 (0.7%) | 3.61 (3.46-3.76) |
|  |  |  |  |  |

a Redefining the outcome to require redemption of at least two prescriptions for psychopharmacological drugs within the two years following onset of T2D/matched data

Abbreviations: T2D=type 2 diabetes, SSRI=selective serotonin reuptake inhibitor, SNRI=serotonin–norepinephrine reuptake inhibitor, TCA=tricyclic antidepressant

**Supplementary Table 3:** Propensity score matched analysis of the association between T2D and psychopharmacological treatment (at least two prescriptions redeemeda) within the first two years after incident T2D or matched date

|  |  |
| --- | --- |
|  | Propensity score model  |
|  | Individuals with T2D(n=44,742) | Propensity score matched controls without T2D(n=44,742) | Hazard ratio (HR) |
| **Any psychopharmacological agent** | 2,105 (4.7%) | 1,335 (3.0%) | 1.63 (1.52-1.74) |
|  |  |  |  |
| **Antidepressants** |  |  |  |
|  Any antidepressant | 1,598 (3.6%) | 992 (2.2%) | 1.66 (1.54-1.80) |
|  SSRI | 891 (2.0%) | 504 (1.1%) | 1.82 (1.63-2.03) |
|  SNRI | 127 (0.3%) | 63 (0.1%) | 2.07 (1.53-2.80) |
|  TCA | 269 (0.6%) | 148 (0.3%) | 1.87 (1.53-2.28) |
|  Other | 350 (0.8%) | 268 (0.6%) | 1.34 (1.14-1.57) |
|  |  |  |  |
| **Antipsychotics** |  |  |  |
|  Any antipsychotic | 273 (0.6%) | 144 (0.3%) | 1.94 (1.59-2.38) |
|  |  |  |  |
| **Anxiolytics** |  |  |  |
|  Any anxiolytic | 472 (1.1%) | 340 (0.8%) | 1.42 (1.24-1.64) |
|  |  |  |  |

a Redefining the outcome to require redemption of at least two prescriptions for psychopharmacological drugs within the two years following onset of T2D/matched data

Abbreviations: T2D=type 2 diabetes, SSRI=selective serotonin reuptake inhibitor, SNRI=serotonin–norepinephrine reuptake inhibitor, TCA=tricyclic antidepressant

**Supplementary Table 4:** Use of psychopharmacological treatment and psychiatric hospital contact within the first two years after incident T2D or matched date - without exclusion of individuals with psychopharmacological/psychiatric hospital treatment leading up to the date of the T2D diagnosis

|  |  |  |
| --- | --- | --- |
|  | Individuals with T2D N=81,975 (%) | Individuals without T2D (controls)N=404,713 (%) |
|  | Number of individuals (%) |  Incidence rate per 1000 years follow-up, (95% CI) | Number of individuals (%) | Incidence rate per 1000 years follow-up,(95% CI) |
| **Any psychopharmacological agent** | 21,748 (26.5%) | 169.91 (167.60-172.24) | 69,060 (17.1%) | 98.33 (97.59-99.07) |
|  |  |  |  |  |
| **Antidepressants** |  |  |  |  |
|  Any antidepressant | 15,643 (19.1%) | 115.31 (113.48-117.17) | 44,288 (10.9%) | 60.04 (59.48-60.61) |
|  SSRI | 8,745 (10.7%) | 59.94 (58.67-61.23) | 25,897 (6.4%) | 33.52 (33.52-34.35) |
|  SNRI | 2,476 (3.0%) | 16.15 (15.53-16.80) | 5,003 (1.2%) | 6.35 (6.18-6.53) |
|  TCA | 2,880 (3.5%) | 18.71 (18.03-19.42) | 7,020 (1.7%) | 8.87 (8.66-9.08) |
|  Other | 4,374 (5.3%) | 28.73 (27.88-29.61) | 12,665 (3.1%) | 16.14 (15.86-16.43) |
|  |  |  |  |  |
| **Antipsychotics** |  |  |  |  |
|  Any antipsychotic | 4,852 (5.9%) | 31.92 (31.02-32.85) | 11,686 (2.9%) | 14.80 (14.53-15.07) |
|  Olanzapine | 804 (1.0%) | 5.07 (4.73-5.45) | 1,751 (0.4%) | 2.17 (2.07-2.28) |
|  Quetiapine | 1,034 (1.3%) | 6.61 (6.21-7.03) | 2,082 (0.5%) | 2.61 (2.50-2.73) |
|  Risperidone | 890 (1.1%) | 5.80 (5.43-6.19) | 2,251 (0.6%) | 2.86 (2.74-2.98) |
|  Haloperidol | 500 (0.6%) | 3.26 (2.98-3.55) | 1,067 (0.3%) | 1.35 (1.28-1.44) |
|  |  |  |  |  |
| **Anxiolytics** |  |  |  |  |
|  Any anxiolytic | 8,482 (10.3%) | 56.92 (55.92-58.18) | 31,175 (7.7%) | 41.17 (40.72-41.64) |
|  Benzodiazepines | 8,153 (9.9%) | 54.53 (53.33-55.75) | 30,197 (7.5%) | 39.82 (39.37-40.27) |
|  |  |  |  |  |
|  |  |  |  |  |
| **Psychiatric hospital contact:** |  |  |  |  |
|  Any contacta | 2,611 (3.2%) | 17.22 (16.57-17.90) | 8,071 (2.0%) | 10.32 (10.09-10.54) |
|  Depressive disorder | 848 (1.0%) | 5.52 (5.16-5.91) | 2,444 (0.6%) | 3.10 (2.98-3.23) |
|  Anxiety disorder | 174 (0.2%) | 1.14 (0.98-1.32) | 472 (0.1%) | 0.60 (0.55-0.65) |
|  Psychotic disorder | 569 (0.7%) | 3.68 (3.39-4.00) | 1,101 (0.3%) | 1.39 (1.31-1.48) |
|  Substance use disorder | 50 (0.1%) | 0.33 (0.25-0.44) | 210 (0.1%) | 0.28 (0.25-0.32) |

Abbreviations: T2D=type 2 diabetes, SSRI=selective serotonin reuptake inhibitor, SNRI=serotonin–norepinephrine reuptake inhibitor, TCA=tricyclic antidepressant

**Supplementary Table 5:** Incident psychopharmacological treatment and psychiatric hospital contact in the first five years after incident T2D or matched date (for the controls)

|  |  |  |
| --- | --- | --- |
|  | Individuals with T2D N=44,911 (%) | Individuals without T2D (controls)N=249,583 (%) |
|  | Number of individuals (%) |  Incidence rate per 1000 years follow-up, (95% CI) | Number of individuals (%) | Incidence rate per 1000 years follow-up,(95% CI) |
| **Any psychopharmacological agent** | 7,231 (16.1%) | 38.76 (37.88-39.66) | 27,127 (10.9%) | 24.16 (23.88-24.45) |
|  |  |  |  |  |
| **Antidepressants** |  |  |  |  |
|  Any antidepressant | 5,098 (11.4%) | 26.76 (26.04-27.51) | 16,606 (6.7%) | 14.51 (14.29-14.72) |
|  SSRI | 2,852 (6.4%) | 14.57 (14.04-15.11) | 9,230 (3.7%) | 7.95 (7.79-8.12) |
|  SNRI | 442 (1.0%) | 2.19 (1.99-2.40) | 1,071 (0.4%) | 0.91 (0.85-0.96) |
|  TCA | 1,115 (2.5%) | 5.58 (5.27-5.92) | 3,148 (1.3%) | 2.68 (2.59-2.78) |
|  Other | 1,408 (3.1%) | 7.06 (6.71-7.44) | 4,946 (2.0%) | 4.23 (4.11-4.35) |
|  |  |  |  |  |
| **Antipsychotics** |  |  |  |  |
|  Any antipsychotic | 1,101 (2.5%) | 5.49 (5.17-5.82) | 3,861 (1.5%) | 3.29 (3.19-3.39) |
|  Olanzapine | 131 (0.3%) | 0.65 (0.55-0.77) | 457 (0.2%) | 0.39 (0.35-0.42) |
|  Quetiapine | 167 (0.4%) | 0.83 (0.71-0.96) | 610 (0.2%) | 0.52 (0.48-0.56) |
|  Risperidone | 263 (0.6%) | 1.30 (1.15-1.47) | 935 (0.4%) | 0.79 (0.74-0.85) |
|  Haloperidol | 314 (0.7%) | 1.55 (1.39-1.73) | 1,011 (0.4%) | 0.86 (0.81-0.91) |
|  |  |  |  |  |
| **Anxiolytics** |  |  |  |  |
|  Any anxiolytic | 2,635 (5.9%) | 13.35 (12.85-13.89) | 12,208 (4.9%) | 10.57 (10.38-10.76) |
|  Benzodiazepines | 2,443 (5.4%) | 12.35 (11.87-12.85) | 11,516 (4.6%) | 9.96 (9.78-10.14) |
|  |  |  |  |  |
|  |  |  |  |  |
| **Psychiatric hospital contact:** |  |  |  |  |
|  Any contacta | 885 (2.0%) | 4.42 (4.14-4.72) | 4,919 (2.0%) | 4.21 (4.09-4.33) |
|  Depressive disorder | 237 (0.5%) | 1.18 (1.03-1.33) | 1,284 (0.5%) | 1.09 (1.03-1.15) |
|  Anxiety disorder | 36 (0.1%) | 0.18 (0.13-0.25) | 205 (0.1%) | 0.17 (0.15-0.20) |
|  Psychotic disorder | 48 (0.1%) | 0.24 (0.18-0.32) | 279 (0.1%) | 0.24 (0.21-0.27) |
|  Substance use disorder | 22 (0.0%) | 0.11 (0.07-0.17) | 179 (0.1%) | 0.15 (0.13-0.18) |

Abbreviations: T2D=type 2 diabetes, SSRI=selective serotonin reuptake inhibitor, SNRI=serotonin–norepinephrine reuptake inhibitor, TCA=tricyclic antidepressant

**Supplementary Table 6:** Incident psychopharmacological treatment and psychiatric hospital contact in the first five years after incident T2D or matched date (for the propensity score matched controls)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Individuals with T2D(n=35,165) | Propensity score matched controls without T2D(n=35,165) | Hazard ratio (HR) |
| **Any psychopharmacological agent** | 5,531 (15.7%) | 4,462 (12.7%) | 1.29 (1.24-1.35) |
|  |  |  |  |
| **Antidepressants** |  |  |  |
|  Any antidepressant | 3,767 (10.7%) | 2,801 (8.0%) | 1.42 (1.35-1.49) |
|  SSRI | 2,057 (5.8%) | 1,500 (4.3%) | 1.44 (1.34-1.54) |
|  SNRI | 280 (0.8%) | 163 (0.5%) | 1.79 (1.48-2.17) |
|  TCA | 846 (2.4%) | 568 (1.6%) | 1.55 (1.40-1.73) |
|  Other | 1,010 (2.9%) | 877 (2.5%) | 1.20 (1.10-1.32) |
|  |  |  |  |
| **Antipsychotics** |  |  |  |
|  Any antipsychotic | 767 (2.2%) | 629 (1.8%) | 1.27 (1.14-1.41) |
|  |  |  |  |
| **Anxiolytics** |  |  |  |
|  Any anxiolytic | 1,988 (5.7%) | 1,813 (5.2%) | 1.14 (1.07-1.22) |
|  Benzodiazepines | 1,841 (5.2%) | 1,701 (4.8%) | 1.13 (1.05-1.20) |
|  |  |  |  |
| **Psychiatric hospital contact** |  |  |  |
|  Any contacta | 265 (0.8%) | 244 (0.7%) | 1.11 (0.94-1.32) |
|  |  |  |  |
|  |  |  |  |

a Admission, outpatient contact, psychiatric emergency room contact.

Abbreviations: T2D=type 2 diabetes, SSRI=selective serotonin reuptake inhibitor, SNRI=serotonin–norepinephrine reuptake inhibitor, TCA=tricyclic antidepressant

**Supplementary Table 7:** Association between baseline characteristics and initiation of psychopharmacological treatment/psychiatric hospital contact during the 5-year follow-up.

|  |  |  |
| --- | --- | --- |
|  | Psychopharmacological treatment initiation | Psychiatric hospital contact |
|  | Unadjusted HRR | Fully adjusted HRRa | Unadjusted HRR | Fully adjusted HRRa |
|  |  |  |  |  |
| Age |  |  |  |  |
| <=50  | 1.00 | 1.00  | 1.00 | 1.00 |
| 51-60  | 0.85 (0.79-0.93) | 0.81 (0.74-0.88) | 0.35 (0.27-0.45) | 0.36 (0.28-0.47) |
| 61-70  | 0.88 (0.81-0.94) | 0.78 (0.72-0.85) | 0.29 (0.23-0.37) | 0.30 (0.23-0.39) |
| 71-80  | 1.37 (1.27-1.48) | 1.15 (1.05-1.25) | 0.96 (0.79-1.16) | 1.02 (0.82-1.28) |
| >80  | 1.85 (1.70-2.00) | 1.39 (1.25-1.55) | 2.18 (1.81-2.63) | 2.14 (1.65-2.77) |
|  |  |  |  |  |
| Sex |  |  |  |  |
| Female | 1.00 | 1.00 | 1.00 | 1.00 |
| Male | 0.91 (0.86-0.95) | 0.95 (0.90-1.00) | 0.84 (0.74-0.96) | 0.96 (0.83-1.11) |
|  |  |  |  |  |
| Hba1c |  |  |  |  |
| 6.5-7% | 1.00 | 1.00 | 1.00 | 1.00 |
| 7.1-7.5% | 1.06 (0.98-1.16) | 1.10 (1.02-1.19) | 0.96 (0.77-1.19) | 1.00 (0.80-1.24) |
| 7.6-8.5% | 1.05 (0.98-1.14) | 1.13 (1.05-1.23) | 1.09 (0.88-1.36) | 1.09 (0.86-1.38) |
| 8.6-9.5% | 0.93 (0.83-1.03) | 1.04 (0.93-1.17) | 0.83 (0.61-1.14) | 0.87 (0.62-1.21) |
| 9.6-10.5% | 0.91 (0.81-1.02) | 1.07 (0.95-1.20) | 0.82 (0.58-1.15) | 0.88 (0.62-1.25) |
| >10.5% | 0.84 (0.78-0.91) | 0.98 (0.90-1.06) | 0.80 (0.64-1.01) | 0.78 (0.61-1.01) |
|  |  |  |  |  |
| Charlsons Comorbidity Index |  |  |  |  |
| 0 | 1.00 | 1.00 | 1.00 | 1.00 |
| 1 | 1.34 (1.27-1.41) | 1.16 (1.09-1.24) | 1.32 (1.13-1.54) | 1.18 (0.99-1.42) |
| 2 | 1.92 (1.80-2.04) | 1.43 (1.32-1.56) | 1.68 (1.40-2.03) | 1.42 (1.11-1.81) |
|  |  |  |  |  |
| Macrovascular complications | 1.46 (1.39-1.54) | 1.16 (1.08-1.24) | 1.32 (1.13-1.54) | 1.01 (0.83-1.24) |
| Microvascular complications |  |  |  |  |
| Overall | 1.58 (1.48-1.70) | 1.11 (1.03-1.24) | 1.99 (1.66-2.39) | 1.14 (0.93-1.40) |
| Eye | 1.57 (1.45-1.69) |  | 2.05 (1.69-2.48) |  |
| Renal | 1.55 (1.32-1.81) |  | 1.27 (0.78-2.09) |  |
|  |  |  |  |  |
| Atrial fibrillation | 1.41 (1.30-1.52) | 1.00 (0.92-1.09) | 1.40 (1.13-1.75) | 0.85 (0.67-1.09) |
| Obesity | 0.94 (0.85-1.04) | 0.98 (0.88-1.09) | 1.07 (0.81-1.42) | 1.27 (0.94-1.70) |
| Alcohol-related disorder | 1.66 (1.44-1.92) | 1.60 (1.36-1.87) | 2.09 (1.44-3.03) | 2.31 (1.52-3.53) |
| Smoking-related disorderb | 1.47 (1.39-1.56) | 1.24 (1.16-1.32) | 0.93 (0.76-1.13) | 0.79 (0.64-0.98) |
|  |  |  |  |  |
| Marital status |  |  |  |  |
| Married/partner | 1.00 | 1.00 | 1.00 | 1.00 |
| Unmarried | 0.66 (0.59-0.73) | 0.69 (0.62-0.77) | 1.10 (0.85-1.42) | 1.00 (0.77-1.32) |
| Divorced/ended partnership | 1.26 (1.16-1.37) | 1.22 (1.12-1.33) | 1.29 (1.01-1.66) | 1.36 (1.06-1.75) |
| Widow | 1.75 (1.64-1.87) | 1.23 (1.14-1.33) | 2.85 (2.41-3.37) | 1.39 (1.14-1.70) |
|  |  |  |  |  |
| Commonly prescribed medication usec |  |  |  |  |
| None | 1.00 | 1.00 | 1.00 | 1.00 |
| One | 1.11 (1.03-1.20) | 0.98 (0.90-1.07) | 0.87 (0.70-1.08) | 0.72 (0.57-0.91) |
| Two | 1.16 (1.10-1.22) | 0.89 (0.83-0.96) | 0.95 (0.83-1.10) | 0.68 (0.57-0.82) |

 a Adjusted for age, sex, baseline hba1c, CCI-score, obesity, smoking related disorders, alcohol related diagnoses, marital status, commonly prescribed medication use, macro- and microvascular complications

b Having been registered with a smoking-related diagnosis (see Supplementary Table 1) or having redeemed a prescription for COPD medication and/or asthma inhalers
c Including beta-blockers, calcium channel blockers, renin-angiotensin system acting agents, lipid modifying agents, diuretics, and antithrombotic agents.