| Psychiatric  | $N_1^*$ | Concordant mental disorders |      |         |         | Discordant mental disorders   |                      |                |   |                      |      |
|--|---------|-----------------------------|------|---------|---------|---|----------------------|----------------|---|----------------------|------|
|  | IN1.    | $N_2$                       | %†   | κ       | p value |   | N <sub>3</sub> (1st) | % <sup>‡</sup> |   | N <sub>4</sub> (2nd) | %§   |
| Dementias  | 283     | 118                         | 8.9  | 0.2762  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 201                  | 15.2           | Major depressive disorder                               | 133                  | 10.0 |
| Alcohol-induced mental disorders                                   | 151     | 22                          | 1.7  | 0.0943  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 121                  | 9.1            | Bipolar disorder  | 91                   | 6.9  |
| Drug-induced mental disorders                                      | 97      | 20                          | 1.5  | 0.1443  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 80                   | 6              | Major depressive disorder                               | 55                   | 4.   |
| Fransient mental disorders due to conditions classified elsewhere  | 159     | 32                          | 2.4  | 0.1068  | 0.003   | Anxiety, dissociative, and somatoform disorders   | 123                  | 9.3            | Major depressive disorder                               | 76                   | 5.2  |
| Persistent mental disorders due to conditions classified elsewhere | 333     | 126                         | 9.5  | 0.1898  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 264                  | 19.9           | Major depressive disorder                               | 163                  | 12.  |
| Schizophrenic disorders  | 628     | 376                         | 28.4 | 0.2456  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 470                  | 35.5           | Bipolar disorder  | 313                  | 23.  |
| Episodic mood disorders  | 892     | 654                         | 49.4 | 0.1909  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 704                  | 53.2           | Schizophrenic disorders                                 | 415                  | 31.  |
| Bipolar disorder   | 634     | 394                         | 29.8 | 0.2836  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 511                  | 38.6           | Major depressive disorder                               | 349                  | 26.  |
| Major depressive disorder  | 648     | 374                         | 28.2 | 0.1765  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 520                  | 39.3           | Bipolar disorder  | 349                  | 26.4 |
| Delusional disorders   | 126     | 22                          | 1.7  | 0.0879  | 0.024   | Anxiety, dissociative, and somatoform disorders   | 103                  | 7.8            | Major depressive disorder                               | 68                   | 5.   |
| Other nonorganic psychoses   | 302     | 86                          | 6.5  | 0.0735  | 0.059   | Anxiety, dissociative, and somatoform disorders   | 241                  | 18.2           | Bipolar disorder  | 164                  | 12.4 |
| Pervasive developmental disorders                                  | 8       | 0                           | 0    | -0.0046 | 0.892   | Schizophrenic disorders   | 7                    | 0.5            | Special symptoms or syndromes, not elsewhere classified | 6                    | 0    |
| anxiety, dissociative, and somatoform disorders                    | 1005    | 820                         | 61.9 | 0.2368  | < 0.001 | Major depressive disorder   | 520                  | 39.3           | Bipolar disorder  | 511                  | 38   |
| ersonality disorders   | 138     | 20                          | 1.5  | 0.0529  | 0.155   | Anxiety, dissociative, and somatoform disorders   | 123                  | 9.3            | Bipolar disorder  | 88                   | 6    |
| exual and gender identity disorders                                | 32      | 4                           | 0.3  | 0.1119  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 28                   | 2.1            | Major depressive disorder                               | 21                   | 1    |
| Alcohol dependence syndrome  | 198     | 36                          | 2.7  | 0.1038  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 160                  | 12.1           | Bipolar disorder  | 118                  | 8    |
| Drug dependence  | 90      | 32                          | 2.4  | 0.3094  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 80                   | 6.0            | Bipolar disorder  | 61                   | 4    |
| Nondependent abuse of drugs  | 239     | 74                          | 5.6  | 0.1794  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 204                  | 15.4           | Bipolar disorder  | 148                  | 11   |
| Physiological malfunction arising from mental factors              | 219     | 56                          | 4.2  | 0.1098  | 0.004   | Anxiety, dissociative, and somatoform disorders   | 179                  | 13.5           | Major depressive disorder                               | 119                  | 9    |
| Special symptoms or syndromes, not elsewhere classified            | 542     | 292                         | 22.1 | 0.2220  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 447                  | 33.8           | Major depressive disorder                               | 294                  | 22   |
| Acute reaction to stress   | 67      | 16                          | 1.2  | 0.1982  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 56                   | 4.2            | Bipolar disorder/Schizophrenic                          | 41                   | 3.   |
| Adjustment reaction  | 191     | 42                          | 3.2  | 0.0976  | 0.009   | Anxiety, dissociative, and somatoform disorders   | 155                  | 11.7           | Major depressive disorder                               | 122                  | 9    |
| pecific nonpsychotic mental disorders due to brain damage          | 78      | 8                           | 0.6  | 0.0465  | 0.230   | Anxiety, dissociative, and somatoform disorders   | 63                   | 4.8            | Bipolar disorder  | 45                   | 3    |
| Depressive disorder, not elsewhere classified                      | 528     | 252                         | 19   | 0.1349  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 427                  | 32.3           | Major depressive disorder                               | 292                  | 22   |
| Disturbance of conduct, not elsewhere classified                   | 17      | 0                           | 0    | -0.0130 | 0.738   | Major depressive disorder/anxiety, dissociative, and somatoform disorders                     | 12                   | 0.9            | Bipolar disorder  | 11                   | 0    |
| Disturbance of emotions specific to childhood and adolescence      | 10      | 2                           | 0.2  | 0.1942  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 9                    | 0              | Bipolar disorder  | 8                    | 0    |
| lyperkinetic syndrome of childhood                                 | 6       | 0                           | 0    | -0.0040 | 0.912   | Anxiety, dissociative, and somatoform disorders/major depressive disorder                     | 6                    | 0.7            | Special symptoms or syndromes, not elsewhere classified | 4                    | C    |
| pecific delays in development                                      | 6       | 0                           | 0    | -0.0046 | 0.907   | Anxiety, dissociative, and somatoform disorders/depressive disorder, not elsewhere classified | 6                    | 0.5            | Bipolar disorder/major depressive disorder              | 5                    | C    |
| sychic factors associated with diseases classified elsewhere       | 24      | 6                           | 0.5  | 0.2362  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 19                   | 1.4            | Major Depressive disorder                               | 18                   | 1    |
| /ild mental retardation  | 19      | 2                           | 0.2  | 0.0940  | 0.009   | Schizophrenic disorders/anxiety, dissociative, and somatoform disorders                       | 16                   | 1.2            | Bipolar disorder  | 11                   | 0    |
| Other specified mental retardation                                 | 15      | 0                           | 0    | -0.0073 | 0.814   | Anxiety, dissociative, and somatoform disorders   | 12                   | 0.9            | Special symptoms or syndromes, not elsewhere classified | 10                   | 0    |
| Unspecified mental retardation                                     | 32      | 4                           | 0.3  | 0.1137  | < 0.001 | Anxiety, dissociative, and somatoform disorders   | 23                   | 1.7            | Schizophrenic disorders                                 | 21                   | 1.   |

Supplementary Table 4. Concordance and discordance of mental disorders among married couples by ICD-9-CM code (Cohen's kappa coefficient, N=1,324 psychiatric patients)

\*total number of patients across couples=N1+N2 in Supplementary Table 3; †concordance in couples=N2 (both spouses)/1,324; ‡first discordance=N3/1,324; \$second discordance=N4/1,324