**SUPPLEMENTAL CONTENT**

**Increase of HIV infection in patients with stroke in Spain. A national population-based study over 16 years.**

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| **Supplemental Table I. International Classification of Diseases 9th revision, clinical modification codes used to identify primary and secondary diagnoses** | |
| **Primary or Secondary Diagnoses** | **ICD-9-CM Diagnostic code** |
| Ischemic stroke | 433.01, 433.11, 433.21, 433.81, 433.91, 434.0, 434.1 and 434.91 |
| Hemorrhagic stroke | 431 |
| Asymptomatic HIV infection | V08 |
| AIDS | 042 |
| Arterial hypertension | 401.0, 401.1, 401.9, 405.0, 405.01, 405.09, 405.1, 405.11, 405.19, 405.9, 405.91, 405.99 |
| Diabetes mellitus | 249.00, 249.01, 250.00, 250.01, 250.02, 250.03 |
| Dyslipidemia | 272.0, 272.1, 272.2, 272.3, 272.4, 272.9 |
| Cardioembolic sources | 434.11 |
| Chronic alcohol drinking | 305.00, 305.01, 305.02, 305.03, 303.90, 303.91, 303.92, 303.93 |
| Smoking |  |
| Former | V15.82 |
| Active | 305.1 |
| Stimulating drugs intake | 305.60, 305.61, 305.62, 305.63, 305.70, 305.71, 305.72, 305.73, 304.20, 304.21, 304.22, 304.23, 304.40, 304.41, 304.42, 304.43 |
| HCV infection | 070.44, 070.54, 070.70, 070.71, V02.69 |

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| **Supplement table II. Factors associated with a comorbid HIV diagnosis in patients hospitalized with a hemorrhagic stroke** | | | | | | |
|  | **Unadjusted** | | | **Multivariate model** | | |
| **Variable** | **OR** | **CI 95%** | **p value** | **OR** | **CI 95%** | **p value** |
| Age (per year) | 0.94 | (0.94 – 0.95) | p<0.0001 | 0.95 | (0.94 – 0.95) | p<0.0001 |
| Sex (female vs. male) | 0.27 | (0.22 – 0.32) | p<0.0001 | 0.34 | (0.28 – 0.41) | p<0.0001 |
| Hypertension | 0.19 | (0.15 – 0.22) | p<0.0001 | 0.40 | (0.36 – 0.48) | p<0.0001 |
| Diabetes Mellitus | 0.29 | (0.21 – 0.39) | p<0.0001 | 0.67 | (0.48 – 0.92) | p=0.015 |
| Dyslipidemia | 0.28 | (0.20 – 0.39) | p<0.0001 | 0.71 | (0.51 – 0.99) | p=0.048 |
| Smoking |  |  |  |  |  |  |
| Active | 2.54 | (2.13 – 3.03) | p<0.0001 | 1.35 | (1.10 – 1.66) | p=0.005 |
| Former | 0.66 | (0.45 – 0.96) | p=0.03 | 1.14 | (0.77 – 1.69) | p=0.007 |
| Cardioembolic sources\* | 0.66 | (0.33 – 0.50) | p=0.24 | 1.08 | (0.51 – 2.32) | p=0.836 |
| Chronic alcohol drinking | 2.37 | (1.92 – 2.92) | p<0.0001 | 0.95 | (0.74 – 1.22) | p=0.693 |
| Stimulating drugs intake | 31.2 | (23.8 – 41.0) | p<0.0001 | 4.11 | (2.94 – 5.75) | p<0.0001 |
| HCV infection | 42.1 | (35.8 – 49.6) | p<0.0001 | 34.6 | (28.8 – 41.7) | p<0.0001 |

**Table 2.** Factors associated with a comorbid HIV diagnosis in patients hospitalized with an incident hemorrhagic stroke in the Spain population between 1997 and 2012 in a model of logistic regression. CI: confidence interval. HCV: hepatitis C virus. OR: odds ratio. \*Cardioembolic sources: atrial fibrillation / flutter, acute myocardial infarction, dilated cardiomyopathy, mitral estenosis, mechanical valve replacement, infectious and non-infectious endocarditis, left ventricular thrombus, atrial myxoma.

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| **Supplemental Table III. Accuracy values for International Classification of Diseases 9th revision, clinical modification codes** | |
| **Diagnosis** | **Accuracy value % (95% CI)** |
| Ischemic stroke1 | Sensitivity 86% (73-94)  Specificity 95% (88-98)  Positive predictive value (PPV) 90% (77-97) |
| Hemorrhagic stroke1 | Sensitivity 82% (66-92)  Specificity 93% (86-97)  PPV 80% (64-91) |
| AIDS/HIV infection2 | Sensitivity 25%  Specificity 100%  PPV 100%  NPV 99.6% |

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