

## SUPPLEMENTAL MATERIAL

**Supplemental Table I.** Baseline characteristics of the study population stratified by IVT treatment status (n=337,201). APR-DRG: all patient refined diagnosis-related group; IVT: intravenous thrombolysis. \*The HCUP data user agreement precludes reporting individual cell counts  $\leq 10$ .

| Characteristics   | IVT use<br>(n=15,838) | No IVT use<br>(n=321,363) | p-value |
|---|-----------------------|---------------------------|---------|
| Age – years: median (IQR)                                       | 72 (59-82)            | 73 (61-83)                | <0.001  |
| Female – n (%)  | 7,969 (50.3)          | 171,695 (53.4)            | <0.001  |
| Race – n (%)  |                       |                           | <0.001  |
| White   | 11,506 (72.7)         | 223,872 (69.7)            |         |
| Black   | 2,294 (14.5)          | 55,241 (17.2)             |         |
| Hispanic  | 1,073 (6.8)           | 23,779 (7.4)              |         |
| Asian or Pacific Islander                                       | 428 (2.7)             | 8,693 (2.7)               |         |
| Other   | 537 (3.4)             | 9,778 (3.0)               |         |
| Primary expected payer – n (%)                                  |                       |                           | <0.001  |
| Private Insurance   | 3,853 (24.3)          | 61,180 (19.0)             |         |
| Medicare  | 9,640 (60.9)          | 213,528 (66.4)            |         |
| Medicaid  | 1,106 (7.0)           | 21,619 (6.7)              |         |
| Self-pay  | 788 (5.0)             | 15,679 (4.9)              |         |
| No charge/other   | 436 (2.8)             | 8,711 (2.7)               |         |
| Missing information   | 15 (0.1)              | 646 (0.2)                 |         |
| Median household income for patient ZIP code: quartiles – n (%) |                       |                           | <0.001  |
| Quartile 1  | 3,708 (23.4)          | 91,915 (28.6)             |         |
| Quartile 2  | 3,626 (22.9)          | 79,771 (24.8)             |         |
| Quartile 3  | 3,945 (24.9)          | 74,192 (23.1)             |         |
| Quartile 4  | 4,208 (26.6)          | 68,636 (21.4)             |         |
| Missing information   | 351 (2.2)             | 6,849 (2.1)               |         |
| Weekend admission   | 4,352 (27.5)          | 83,212 (25.9)             | <0.001  |
| Missing information*  | <10 (0.0)             | <10 (0.0)                 |         |
| Hospital region – n (%)   |                       |                           | <0.001  |
| Northeast   | 3,664 (23.1)          | 67,083 (20.9)             |         |
| Midwest   | 2,435 (15.4)          | 50,860 (15.8)             |         |
| South   | 6,074 (38.4)          | 138,207 (43.0)            |         |
| West  | 3,665 (23.1)          | 65,213 (20.3)             |         |
| Hospital location – n (%)                                       |                       |                           | <0.001  |

|  |               |                |        |
|--|---------------|----------------|--------|
| Rural                                  | 673 (4.3)     | 39,658 (12.3)  |        |
| Urban                                  | 14,888 (94.0) | 278,771 (86.8) |        |
| Missing information                    | 277 (1.8)     | 2,934 (0.9)    |        |
| Teaching Hospital – n (%)              | 8,857 (55.9)  | 134,686 (41.9) | <0.001 |
| Missing information                    | 277 (1.8)     | 2,934 (0.9)    |        |
| Hospital bed size – n (%)              |               |                | <0.001 |
| Small                                  | 904 (5.7)     | 37,732 (11.7)  |        |
| Medium                                 | 3,410 (21.5)  | 78,589 (24.5)  |        |
| Large                                  | 11,247 (71.0) | 202,108 (62.9) |        |
| Missing information                    | 277 (1.8)     | 2,934 (0.9)    |        |
| Hospital stroke case volume (cases/yr) |               |                | <0.001 |
| Quartile 1                             | 1,618 (10.2)  | 83,052 (25.8)  |        |
| Quartile 2                             | 3,668 (23.2)  | 81,783 (25.5)  |        |
| Quartile 3                             | 4,723 (29.8)  | 78,546 (24.4)  |        |
| Quartile 4                             | 5,829 (36.8)  | 77,982 (24.3)  |        |
| Charlson comorbidity index             |               |                | <0.001 |
| 1                                      | 3,192 (20.2)  | 90,247 (28.1)  |        |
| 2                                      | 2,153 (13.6)  | 75,022 (23.3)  |        |
| 3                                      | 4,819 (30.4)  | 66,231 (20.6)  |        |
| ≥4                                     | 5,674 (35.8)  | 89,863 (28.0)  |        |
| Hypertension – n (%)                   | 12,383 (78.2) | 257,871 (80.2) | <0.001 |
| Diabetes Mellitus – n (%)              | 4,260 (26.9)  | 110,169 (34.3) | <0.001 |
| Dyslipidemia – n (%)                   | 7,772 (49.1)  | 153,642 (47.8) | 0.002  |
| Coronary artery disease – n (%)        | 2,601 (16.4)  | 49,962 (15.6)  | 0.003  |
| Atrial fibrillation – n (%)            | 5,260 (33.2)  | 70,393 (21.9)  | <0.001 |
| Valvular disease – n (%)               | 1,757 (11.1)  | 32,706 (10.2)  | <0.001 |
| Peripheral vascular disease – n (%)    | 1,324 (8.4)   | 28,703 (8.9)   | 0.014  |
| Chronic kidney disease – n (%)         | 1,626 (10.3)  | 41,167 (12.8)  | <0.001 |
| Thrombocytopenia – n (%)               | 330 (2.1)     | 5,901 (1.8)    | 0.024  |
| Alcohol abuse – n (%)                  | 633 (4.0)     | 12,365 (3.9)   | 0.342  |
| Drug abuse – n (%)                     | 339 (2.1)     | 6,729 (2.1)    | 0.690  |
| APR-DRG: loss of function              |               |                | <0.001 |
| Minor                                  | 891 (5.6)     | 31,148 (9.7)   |        |
| Moderate                               | 6,186 (39.1)  | 157,986 (49.2) |        |
| Major                                  | 6,089 (38.5)  | 105,910 (33.0) |        |
| Extreme                                | 2,669 (16.9)  | 26,301 (8.2)   |        |
| Missing information*                   | <10 (0.0)     | 18 (0.0)       |        |

**Supplemental Table II.** Multivariable analysis of IVT use after stroke for race, sex, and race-sex interaction; sensitivity analysis after imputation of missing values for race.

| <b>Variable</b> | <b>OR</b> | <b>95% CI</b> | <b>p-value</b> | <b>p for interaction</b> |
|-----------------|-----------|---------------|----------------|--------------------------|
| <b>Race</b>     |           |               |                |                          |
| White           | 1 (ref)   |               |                |                          |
| All Minorities  | 0.80      | 0.75-0.85     | <0.001         |                          |
| <b>Sex</b>      |           |               |                |                          |
| Men             | 1 (ref)   |               |                |                          |
| Women           | 0.91      | 0.88-0.94     | <0.001         |                          |
| <b>Race/Sex</b> |           |               |                | <0.001                   |
| White Men       | 1 (ref)   |               |                |                          |
| Minority Men    | 0.75      | 0.69-0.80     | <0.001         |                          |
| White Women     | 0.89      | 0.85-0.93     | <0.001         |                          |
| Minority Women  | 0.77      | 0.71-0.83     | <0.001         |                          |

**Supplemental Table III.** IVT utilization by race and sex, stratified by hospital; sensitivity analysis after imputation of missing values for race.

| <b>Variable</b>                                    | <b>Adjusted OR<br/>(95% CI)<br/>of IVT</b> |
|--|--|
| <b>White hospitals<br/>(&lt;25% minorities)</b>    |  |
| White Men  | 1 (ref)                                    |
| White Women  | 0.93 (0.88-0.98)                           |
| Minority Men                                       | 0.83 (0.75-0.92)                           |
| Minority Women                                     | 0.82 (0.73-0.92)                           |
|  |  |
| <b>Mixed hospitals<br/>(25-50% minorities)</b>     |  |
| White Men  | 1 (ref)                                    |
| White Women  | 0.88 (0.81-0.95)                           |
| Minority Men                                       | 0.74 (0.67-0.83)                           |
| Minority Women                                     | 0.75 (0.69-0.83)                           |
|  |  |
| <b>Minority hospitals<br/>(&gt;50% minorities)</b> |  |
| White Men  | 1 (ref)                                    |
| White Women  | 0.82 (0.73-0.92)                           |
| Minority Men                                       | 0.74 (0.65-0.85)                           |
| Minority Women                                     | 0.78 (0.69-0.89)                           |