



Experience Of Thrombolysis In Patients With Mild Stroke (NIHSS 0-4): Sentinel Stroke National Audit Programme (SSNAP) Registry Data In England And Wales

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INTRODUCTION

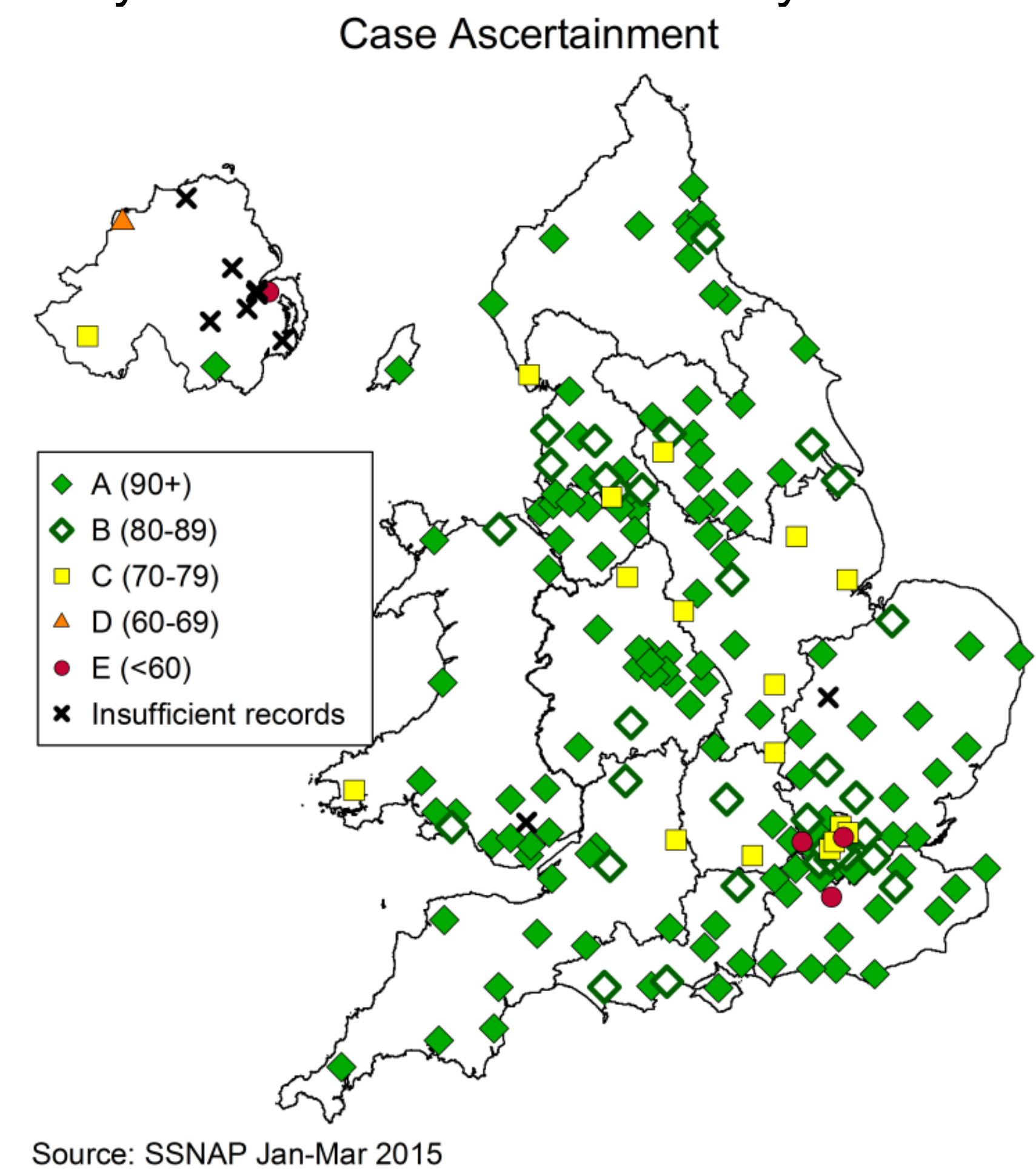
Mild stroke patients are often considered 'too good to thrombolysed'. National stroke register data was analysed to describe the safety and outcomes of thrombolysis in patients with mild stroke (NIHSS 0-4).

METHODS

Data were extracted from the national stroke register (SSNAP) of adults with acute stroke treated in all hospitals in England and Wales from April 2013-March 2015. SSNAP is estimated to collect data on over 95% of patients. Patients with ischaemic stroke were included in the analysis (N=127975 admitted to 197 hospitals).

RESULTS

- 44.3% (56663) of ischaemic stroke patients arrived at hospital within 4h of onset.
- Of these, 80.0% (45310) had a fully completed arrival NIHSS recorded
- **18248 (40.3%)** had mild stroke with an NIHSS of 0-4.
- Also, of the 14895 patients thrombolysed with a fully complete NIHSS, **12% (1825)** had a mild stroke



Thrombolysis outcomes in those with mild stroke vs with an NIHSS of 5-42

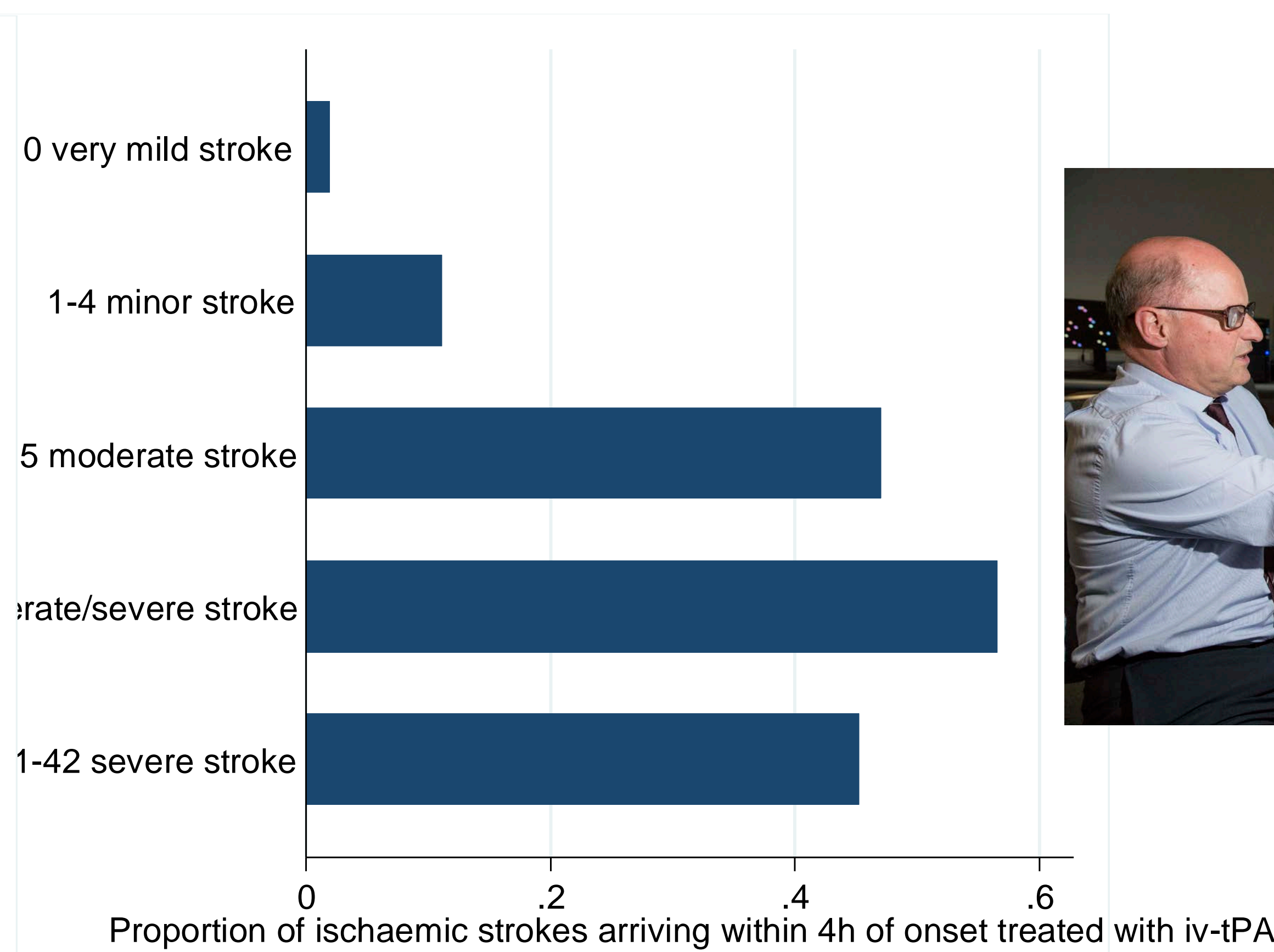
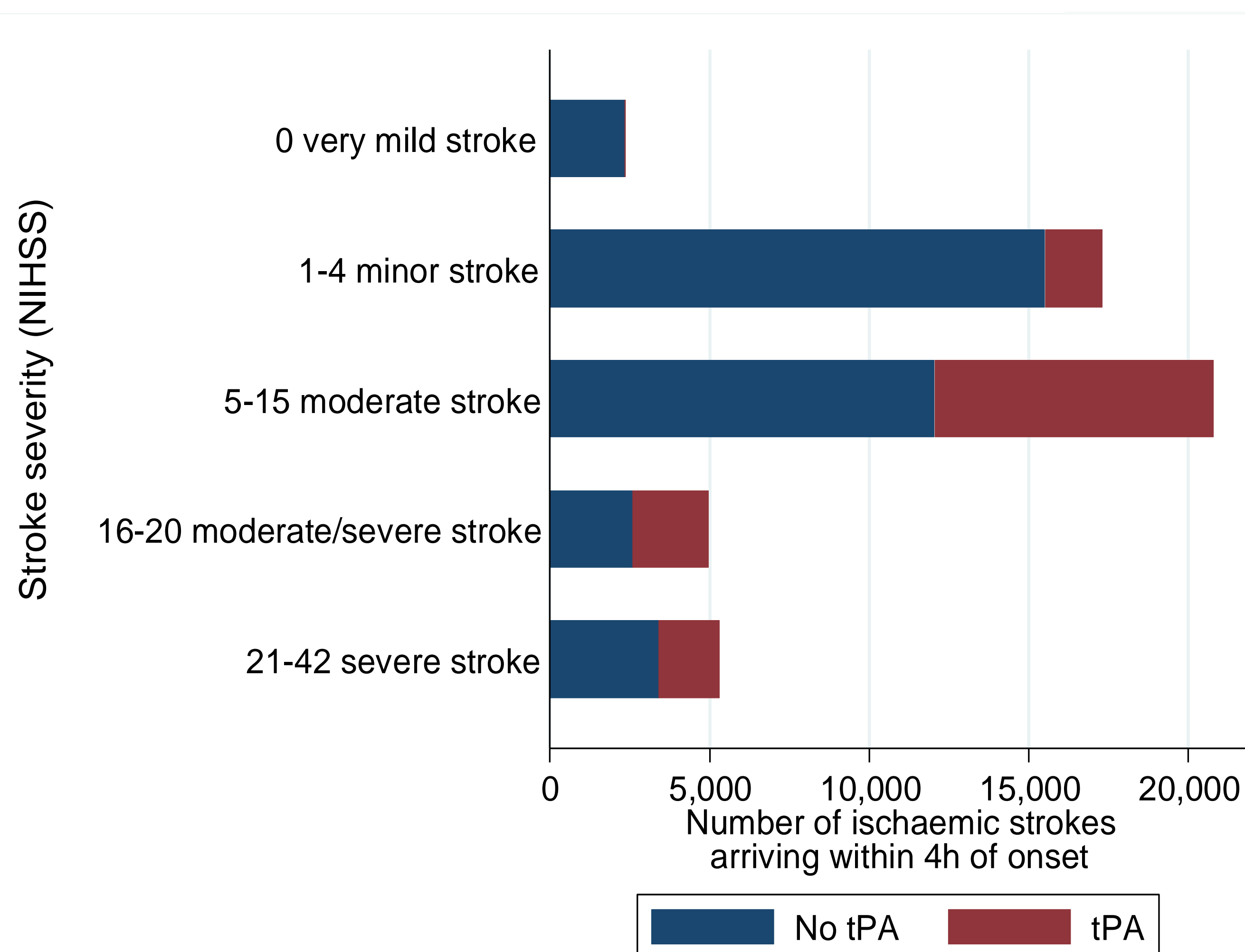
Thrombolysis outcomes in mild strokes:

- 10.0% of mild strokes treated with iv-tPA
- Fewer clinician-reported complications (5.4%)
 - Fewer symptomatic intracranial haemorrhage (1.9%)
- Median improvement of 2 points on the NIHSS scale
- no significant difference in rates of deteriorating NIHSS over the first 24h



Thrombolysis outcomes in NIHSS 5-42 strokes:

- 48.3% of NIHSS 5-42 strokes treated with iv-tPA
- More clinician-reported complications (9.3%, p<0.001)
 - Fewer symptomatic intracranial haemorrhage (4.2%, p<0.001)
- Median improvement of 4 points on the NIHSS scale
- no significant difference in rates of deteriorating NIHSS over the first 24h (p=0.481)



Mild stroke outcomes in those thrombolysed vs those not thrombolysed

Mild stroke patients receiving thrombolysis:

- Inpatient mortality of 2.2%
- 83.4% of survivors independent upon discharge
 - 0.8% newly institutionalised



Mild stroke patient arriving within 4h of onset not receiving thrombolysis:

- Inpatient mortality of 3.0% (p=0.067)
- 75.1% of survivors independent upon discharge (p<0.001)
 - 3.0% newly institutionalised (p<0.001)

CONCLUSIONS

Mild strokes arriving within 4h of onset are less likely to receive iv-tPA than moderate/severe strokes, but are less likely to have thrombolysis complications. Outcomes are better for mild strokes receiving thrombolysis than those not receiving it.