**Table S1.** Severity distributions (%) for stroke events by treatment.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Mild** | **Moderate** | **Severe** | **Fatal** | **Reference** |
| **Ischemic stroke** |  |  |  |  |  |
| Apixaban | 53 | 21 | 8 | 18 | Secondary analysis of ARISTOTLE |
| Warfarin | 45 | 30 | 10 | 15 | Secondary analysis of ARISTOTLE |
| Dabigatran | 35 | 26 | 9 | 30 | Weighted average of 110/150mg dosesa |
| Dabigatran 110a  | 35 | 28 | 10 | 27 | RELY (Connolly et al. 2009) |
| Dabigatran 150a  | 35 | 22 | 8 | 35 | RELY (Connolly et al. 2009) |
| Rivaroxaban  | 49 | 18 | 6 | 27 | ROCKET-AF (Patel et al. 2011) |
| Recurrent strokeb, all  | 53 | 21 | 8 | 18 | Assumed equal to apixaban. |
| **Haemorrhagic stroke (HS)**  |  |  |  |  |  |
| Apixaban  | 23 | 32 | 10 | 35 | Secondary analysis of ARISTOTLE |
| Warfarin | 20 | 15 | 12 | 53 | Secondary analysis of ARISTOTLE |
| Dabigatran | 35 | 26 | 9 | 30 | Weighted average of 110/150mg dosesa |
| Dabigatran 110 | 35 | 28 | 10 | 27 | RELY (Connolly et al. 2009) |
| Dabigatran 150  | 35 | 22 | 8 | 35 | RELY (Connolly et al. 2009) |
| Rivaroxaban  | 49 | 18 | 6 | 27 | ROCKET-AF (Patel et al. 2011) |
| Recurrent HSb, all  | 23 | 32 | 10 | 35 | Assumed equal to apixaban. |

a57.6% and 42.4% of the patients in NAXOS study used dabigatran at a dose of 110mg and 150mg, respectively. bRate 2.72 per 100 py (Easton et al. 2012)

**Table S2.** Event type distributions (%) within intracranial haemorrhages and other major bleeds for compared treatments.

|  |  |  |  |
| --- | --- | --- | --- |
| **Intracranial haemorrhages** | **HS** | **Other ICH** | **Reference** |
| Apixaban  | 32 | 68 | Lip et al. 2018 |
| Warfarin | 37 | 63 | Lip et al. 2018 |
| Dabigatran  | 29 | 71 | Lip et al. 2018 |
| Rivaroxaban  | 35 | 65 | Lip et al. 2018 |
| **Other major bleeds** | **GI** | **Non-GI** | **Reference** |
| Apixaban | 53 | 47 | Lip et al. 2018 |
| Warfarin | 53 | 47 | Lip et al. 2018 |
| Dabigatran  | 56 | 44 | Lip et al. 2018 |
| Rivaroxaban | 53 | 47 | Lip et al. 2018 |

GI, gastrointestinal; HS, hemorrhagic stroke; ICH, intracranial hemorrhage

**Table S3.** Applied case fatality rates and mortality adjustment factors.

|  |  |  |
| --- | --- | --- |
| **Case fatality** | **%** | **Reference** |
| Other ICH  | 13.0 | ARISTOTLE |
| Other major bleed  | 2.0 | ARISTOTLE |
| MI, female | 16.9 | Hallinen et al. 2016 |
| MI, male | 14.2 | Hallinen et al. 2016 |
| Systemic embolism | 10.5 | Hallinen et al. 2016 |
| **Risk-adjustment factor per decade of life** |  |  |
| Stroke | 1.46 | Pisters et al. 2012 |
| Bleeding events  | 1.97 | Ariesen et al. 2003, as in Hallinen et al. 2016 |
| MI | 1.30 | Expert Panel on Detection… 2001, as in Hallinen et al. 2016 |
| **Mortality adjustment factors**  | **HR** |  |
| **Atrial fibrillation** | 1.300 | Weighted average, as in Hallinen 2016 |
| **Stroke (IS and HS)** |  |  |
| mild | 1.386 | Hallinen et al. 2016 |
| moderate | 2.440 | Hallinen et al. 2016 |
| severe | 6.384 | Hallinen et al. 2016 |
| **Myocardial infarction** |  |  |
| Females | 1.740 | Hallinen et al. 2016 |
| Males | 2.330 | Hallinen et al. 2016 |
| **Systemic embolism** | 1.300 | Hallinen et al. 2016 |

HR, hazard ratio; HS, hemorrhagic stroke; ICH, intracranial hemorrhage; IS, ischemic stroke; MI, myocardial infarction.

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