**Table S1.** The number of patients in each group

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Trial | Treatment | Sample size | Stroke and systemic embolism | | Major bleeding and procedure related complicationa) | | Cardiovascular death | | All-cause death | |
| Responder | Exposureb) | Responder | Exposure | Responder | Exposure | Responder | Exposure |
| RE-LYc) | Dabigatran | 6,076 | 134 | 12,072 | 375 | 12,058 | 274 | 12,017 | 438 | 12,033 |
| Warfarin | 6,022 | 199 | 11,775 | 397 | 11,815 | 317 | 11,784 | 487 | 11,792 |
| ROCKET-AF | Rivaroxaban | 7,131 | 269 | 12,810 | 395 | 10,972 | 170 | 11,111 | 208 | 12,933 |
| Warfarin | 7,133 | 306 | 12,750 | 386 | 11,353 | 193 | 11,286 | 250 | 12,898 |
| ARISTOTLE | Apixaban | 9,120 | 212 | 16,693 | 327 | 15,352 | 309 | 17,166 | 603 | 17,131 |
| Warfarin | 9,081 | 265 | 16,563 | 462 | 14,951 | 343 | 16,980 | 669 | 16,980 |
| PROTECT AF | LAAO | 463 | 24 | 1,026 | 54 | 980 | 11 | 1,050 | 34 | 1,050 |
| Warfarin | 244 | 15 | 563 | 20 | 555 | 16 | 573 | 26 | 573 |

RE-LY, randomized evaluation of long-term anticoagulation therapy; ROCKET-AF, rivaroxaban once daily oral direct factor Xa inhibition compared with vitamin K antagonism for prevention of stroke and embolism trial in atrial fibrillation; ARISTOTLE, apixaban for reduction in stroke and other thromboembolic events in atrial fibrillation; PROTECT AF, Watchman left atrial appendage system for embolic protection in patients with atrial fibrillation; LAAO, left atrial appendage occlusion.

a)Procedure-related complicationsconsisted of serious pericardial effusion, device embolization, and procedure-related stroke. b)Exposure was calculated as responders divided by the event rate. c)Patients who received 110 mg of dabigatran were excluded.