**Appendix 1.** List of Adherence Studies on NOACs Agents

|  |  |  |  |
| --- | --- | --- | --- |
| **Study reference** | **Adherence threshold** | | **Excluded (reason)** |
| **PDC ≥ 80%** | **PDC ≥ 90%** |
| **US Studies** |  |  |  |
| Alberts MJ, Peacock WF, Fields LE, et al. Association between once- and twice-daily direct oral anticoagulant adherence in nonvalvular atrial fibrillation patients and rates of ischemic stroke. *Int J Cardiol.* Jul 15 2016;215:11-13 | Riva = 72.8%  Api & Dab = 67.9% |  |  |
| Brown JD, Shewale AR, Talbert JC. Adherence to Rivaroxaban, Dabigatran, and Apixaban for Stroke Prevention in Incident, Treatment-Naive Nonvalvular Atrial Fibrillation. *J Manag Care Spec Pharm.* Nov 2016;22(11):1319-1329. | Riva = 63.5%  Api = 61.9%  Dab = 53.6% |  |  |
| Coleman CI, Tangirala M, Evers T. Medication adherence to rivaroxaban and dabigatran for stroke prevention in patients with non-valvular atrial fibrillation in the United States. *Int J Cardiol.* Jun 01 2016;212:171-173. | Riva = 73.5%  Dab = 65.0% |  |  |
| Coleman C, Yuan Z, Schein J, et al. Importance of balancing follow-up time and impact of oral-anticoagulant users' selection when evaluating medication adherence in atrial fibrillation patients treated with rivaroxaban and apixaban. *Curr Med Res Opin.* Jun 2017;33(6):1033-1043. | IMS RWD database  Riva = 79.6%  Api = 74.6%  Truven database  Riva = 82.4%  Api = 77.9% | Riva = 62.8%  Api = 55.5%  Riva = 66.9%  Api = 60.3% |  |
| McHorney CA, Crivera C, Laliberte F, et al. Adherence to non-vitamin-K-antagonist oral anticoagulant medications based on the Pharmacy Quality Alliance measure. *Curr Med Res Opin.* Dec 2015;31(12):2167-2173. | Riva = 72.7%  Api = 69.5%  Dab = 67.2% |  |  |
| McHorney CA, Ashton V, Laliberte F, et al. Adherence to Rivaroxaban Compared with Other Oral Anticoagulant Agents Among Patients with Nonvalvular Atrial Fibrillation. *J Manag Care Spec Pharm.* Sep 2017;23(9):980-988. | Riva = 79.9%  Api = 74.1%  Dab = 70.4% | Riva = 63.1%  Api = 55.1%  Dab = 51.9% |  |
| Shore S, Carey EP, Turakhia MP, et al. Adherence to dabigatran therapy and longitudinal patient outcomes: insights from the veterans health administration. *Am Heart J.* Jun 2014;167(6):810-817. | Dab = 71.3% |  |  |
| Yao X, Abraham NS, Alexander GC, et al. Effect of Adherence to Oral Anticoagulants on Risk of Stroke and Major Bleeding Among Patients With Atrial Fibrillation. *J Am Heart Assoc.* Feb 23 2016;5(2) | Riva = 47.6%  Api = 52.1%  Dab = 45.9% |  | No fixed period for measuring  adherence and imbalances  in follow-up period |
| **Non-US studies** |  |  |  |
| Forslund T, Wettermark B, Hjemdahl P. Comparison of treatment persistence with different oral anticoagulants in patients with atrial fibrillation. *Eur J Clin Pharmacol.* Mar 2016;72(3):329-338. | Riva = 95.7%  Api = 93.5%  Dab = 92.0% |  |  |
| Maura G, Pariente A, Alla F, Billionnet C. Adherence with direct oral anticoagulants in nonvalvular atrial fibrillation new users and associated factors: a French nationwide cohort study. *Pharmacoepidemiol Drug Saf.* Jul 28 2017. | Riva = 59.9%  Dab= 53.3% |  |  |

**Abbreviations:** Riva = Rivaroxaban, Api = Apixaban, Dab = Dabigatran