## S3 Table. Eligibility criteria

|  |  |
| --- | --- |
| Population | (1) People with signs or symptoms that may indicate underlying AF and who have an irregular pulse; (2) Asymptomatic population\* if no evidence for (1) is available |
| Setting | Primary care (ideal), secondary or tertiary care |
| Index tests | Lead-I ECG using one of the following technologies:* imPulse
* Kardia Mobile
* MyDiagnostick
* RhythmPad GP
* Zenicor-ECG
 |
|  | **Clinical impact** | **Diagnostic test accuracy** |
| Comparator | Manual pulse palpation followed by a 12-lead ECG in primary or secondary care prior to initiation of anticoagulation therapy or other lead-I ECG devices as specified above | Other lead-I ECG devices as specified above, or no comparator |
| Reference standard | Not applicable | 12-lead ECG performed and interpreted by a trained healthcare professional |
| Outcomes (at least one) | Intermediate outcomes* Time to diagnosis of AF
* Time to initiation of preventative treatment (such as interventions to prevent stroke)
* Concordance between lead-I ECG devices
* Test failure rate
* Time to complete testing and store produced ECG trace
* Ease of use of devices (for patients and healthcare professionals), including training requirements
* Impact of test results on clinical decision making
* Number of 12-lead ECGs carried out
* Diagnostic yield (number of AF diagnoses)
 | Diagnostic test accuracy* Numbers of true positive, false negative, false positive and true negative test results
 |
| Clinical outcomes* Mortality
* Morbidity (including stroke, other thromboembolisms and heart failure, and any complications arising from preventative treatments, such as adverse effects of anti-arrhythmic, rate control or anticoagulation treatment)
 |
| Patient-reported outcomes* Health-related quality of life
* Acceptability of the devices
 |
| Study design | RCTs, cross-sectional, case-control, cohort studies and uncontrolled single arm studies. Qualitative studies were considered to evaluate the ease of use of the devices | Diagnostic cross-sectional and case-control studies |

AF=atrial fibrillation; ECG=electrocardiogram; RCT=randomised controlled trial

\* Asymptomatic population defined as people presenting with no symptoms of AF, with or without previously diagnosed AF