NHS WALES GIG CYMRU

All Wales Medicines Strategy Group
Grŵp Strategaeth Meddyginiaethau Cymru Gyfan

ALL WALES RISK/BENEFIT ASSESSMENT TOOL FOR ORAL ANTICOAGULATION TREATMENT IN PEOPLE WITH ATRIAL FIBRILLATION

To be completed and documented prior to initiating treatment with oral anticoagulant and as an annual review for patients taking oral anticoagulants.

Patient addressograph	**Consultant:** **Directorate:** **Date:**	**Logo/practice**

Refer to the All Wales Advice on the Role of Oral Anticoagulants[1].

The focus of atrial fibrillation (AF) management should be to identify affected people and undertake stroke risk assessment using the $CHADS_2$, or the more recently introduced CHA_2DS_2-VASc, risk assessment tool.

Assessment of bleeding risk should be carried out using an appropriate tool, such as HAS-BLED.

CHADS2 scoring system (stroke risk stratification scheme)

Risk factor		Points	Score
None		0	
C	Heart failure	1	
H	Hypertension	1	
A	Age ≥ 75	1	
D	Diabetes mellitus	1	
S_2	Stroke/transient ischaemic attack	2	
		Total	

CHA_2DS_2-VASc scoring system (alternative stroke risk stratification scheme)

Risk factor		Points	Score
None		0	
C	Heart failure/left ventricular dysfunction	1	
H	Hypertension	1	
A_2	Age ≥ 75	2	
D	Diabetes mellitus	1	
S_2	Stroke/transient ischaemic attack/thromboembolism	2	
V	Vascular disease	1	
A	Age 65–74	1	
Sc	Female	1	
		Total	

For people with a $CHADS_2$ score ≥ 2, chronic oral anticoagulation (OAC) therapy is recommended, unless contraindicated.

People with a $CHADS_2$ score < 2 require further assessment, and the CHA_2DS_2-VASc risk assessment tool can aid the decision.

HAS-BLED scoring system (risk assessment for bleeding in AF patients on anticoagulation)[2]

Letter	HAS-BLED bleeding score: Clinical characteristics	Points	Score
H	Hypertension defined as systolic blood pressure > 160 mmHg	1	
A	Abnormal renal function (chronic dialysis, renal transplantation or serum creatinine ≥ 200 micromoles/l)	1	
	Abnormal liver function (chronic hepatic disease e.g. cirrhosis, or biochemical evidence of significant hepatic derangement e.g. bilirubin more than twice upper limit of normal in association with aspartate aminotransferase/alanine aminotransferase/alkaline phosphate more than three time upper limit normal etc.)	1	
S	Previous history of stroke, especially deep brain stroke	1	
B	Previous history of bleeding, anaemia or predisposition to bleeding	1	
L	Unstable INRs or poor time (< 60%) in therapeutic range	1	
E	Elderly – Is the patient ≥ 65 years?	1	
D	Drugs predisposing to bleeding such as antiplatelets and non-steroidal anti-inflammatory drugs (NSAIDs)	1	
	Is there evidence of alcohol excess?	1	
		Total*	

Use of the HAS-BLED score should be used to identify modifiable bleeding risks that need to be addressed, but should not be used on its own to exclude patients from OAC therapy[3].

The HAS-BLED score per se should not be used to exclude patients from OAC therapy, but allows clinicians to make an informed assessment of bleeding risk (rather than relying on guesswork) and, importantly, makes them think of the correctable risk factors for bleeding, e.g. uncontrolled blood pressure, concomitant use of aspirin/NSAIDs, labile INRs, etc.

Other clinical/social factors to be considered†

Other clinical and social factors for consideration	Yes	No	Action/Date
Does the patient have a registered GP?			
Is the patient being investigated for or receiving treatment for cancer? Active venous thromboembolism + cancer: low molecular weight heparin not warfarin AF + cancer: given the heterogeneous nature of patients with cancer, the risks and benefits for continued anticoagulation should be assessed individually and reviewed periodically[4,5].			
Is the patient taking over the counter medications or frequent antibiotics?			
Is there evidence of trips or falls?			
Does the patient have any sensory, visual or literacy deficits without carer support?			
Is there any evidence of Alzheimer's or possible problems with mental capacity?			
Is the patient of child bearing age?			

Review this form at least annually, in addition to:

1. Compliance (check time in therapeutic INR range if on warfarin)
2. Thromboembolic events
3. Bleeding events
4. Other side effects
5. Co-medications and over the counter drugs
6. Check renal function: impaired renal function may constitute a contraindication or recommendation not to use the anticoagulant medicine, or may require a dose reduction; recommendations differ for warfarin, dabigatran, apixaban and rivaroxaban.

---

*NB: In patients with a HAS-BLED score ≥ 3, caution and regular review are appropriate[3]

HAS-BLED Score	n	Bleeds, n	Bleeds/100 patients*
0	798	9	1.13
1	1286	13	1.02
2	744	14	1.88
3	187	7	3.74
4	46	4	8.70
5	8	1	12.50

*p for trend of increasing bleeding risk with increasing score = 0.007

† Adapted from risk/benefit tool produced by Haematology Department, Royal Gwent Hospital.