**Appendix 2**

*Definitions of comorbidities*

1. Acute coronary syndrome: EKG findings of new left bundle branch block; ST segment elevation of 2 mm in precordial or 1 mm in limb leads; coronary artery revascularization by percutaneous coronary intervention or bypass grafting; admission and treatment for acute coronary syndrome. (1)

2. Acute heart failure: documented findings on physical examination (S3 gallop, lung crackles, jugular vein distension, positive abdominojugular test) or documented new findings on chest radiography (cardiomegaly or pulmonary edema) or brain natiuretic peptic levels > 400 picograms / mL; or diuretic use in the ED; or admission and treatment for heart failure. (2,3)

3. Hypothermia: Documented body temperature < 32 C in the ED.

4. Sepsis: Meeting at least two of SIRS criteria (T < 34 C or T > 38 C; white blood cell count < 4 000 or > 12 000 / mL; heart rate > 90 beats / minute; respiratory rate > 20 breaths / minutes or PCO2 < 32 mm Hg) with evidence of new infection (new infiltrate on chest radiograph; positive blood, urine, or wound cultures; white blood cells in the cerebrospinal fluid) (4)

5. Exacerbation of chronic obstructive pulmonary disease: documented increase in cough, dyspnea, and sputum production, or documented improvement in respiratory function after administration of bronchodilators, or admission and treatment for COPD. (5)

5. Thyrotoxicosis: TSH < 0.02 ng / mL or admission and treatment for thyrotoxicosis

6. Overdose of medicinal agents: documented overdose of medicinal agents and treatment for overdose of medicinal agents

7. Pulmonary embolism: proven on CT or pulmonary angiography

8. Acute valve disease: Echocardiographic evidence of acute valve injury

9. Hypertensive emergency: Blood pressure > 220 / 100 with evidence of new end-organ injury (acutely altered vision with documented grade III / IV papilledema; documented acute aortic dissection; documented new neurologic deficit; acute renal failure; or blood smear demonstrating microangiopathic hemolytic anemia) (6)

10. Stroke or TIA: acute neurologic deficit, whether reversible or not

**CHADS2Vasc Score**

1. Congestive heart failure 1 point
2. Hypertension 1 point
3. Age > 75 yrs 2 points
4. Diabetes mellitus 1 point
5. Stroke/TIA/TE 2 points
6. Vascular disease 1 point

(prior myocardial infarction, peripheral artery disease, or aortic plaque)

1. Age 65-74 yrs 1 point
2. Sex category (i.e. female gender) 1 point

Conditions were identified as per the definitions in the original derivation paper.[7]

**HAS-BLED Score**

1. Hypertension (Systolic BP > 160mm Hg) 1 point
2. Abnormal liver function 1 point
3. Abnormal renal function 1 point
4. Stroke 1 point
5. Prior Major Bleeding 1 point
6. Labile INRs 1 point
7. Elderly (Age > 65 yrs) 1 point
8. Antiplatelet Agent (aspirin or clopidogrel) 1 point
9. Alcohol use ( > 8 units/week) 1 point

Conditions were identified as per the definitions in the original derivation paper.[8]

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