Supplement files

Preventing VTE following total hip and knee arthroplasty: is prediction the future

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Supplement Table 1:

Risk prediction model characteristics						Performance measures		
Publication	**Population**	**Name risk model**	**Outcome**	**Sample size**	**Number of events**	**Discrimination**	**Calibration**	**Validation**
Dauty et al, 2012	TKA	RAPT	Symptomatic DVT	272	17	NR	NR	-
Predictors (n=6)	Age, gender, average walking distance, use of gait aid, use of community support and care, and social support at discharge							
Parvizi et al, 2014	THA & TKA (primary and revision)	-	Symptomatic PE at 90 days	26.391	281	NR	NR	Internal by bootstrapping, *no performance measures*
Predictors (n=8)	Knee surgery, CCI, atrial fibrillation, postoperative DVT, COPD, anaemia, depression, BMI							
Parvizi et al, 2016	THA & TKA	-	Symptomatic VTE	1.721.806	15.775	NR	Good concordance between observerved and predicted risk up to 4%, thereafter overestimation of actual risk.	External in single cohort, *no performance measures*
Predictors (n=26)	Bilateral joints, not primary THA, age, anaemia, CHF, lymphoma, fluid and electrolyte disorders, metastatic cancer, peripheral vascular disease, non-metastatic solid tumours, weight loss, chronic pulmonary heart disease, blood transfusion, history of VTE, myeloproliferative disorders, hypercoagulability state, myocardial infarction, varicose veins, fracture, inflammatory bowel disease, sepsis, periprosthetic joint infection, atrial fibrillation, stroke, apnoea							
Bohl et al, 2016	THA & TKA (primary)	ACS-NSQIP-derived risk stratification system	Symptomatic PE at 30 days	118.473	592	NR	NR	External in single cohort, *no performance measures*
Predictors (n=5)	Age, sex, BMI, preoperative haematocrit, and procedure type							
Bateman et al, 2017	THA & TKA	Caprini	Symptomatic VTE at 90 days	376	10	NR	NR	External in single cohort, *no performance measures*
Predictors (n=20)	Age, planned operation > 2 h, history of DVT or PE, leg oedema/ulcers/stasis, sepsis, varicose veins, hormone treatment, malignancy, previous immobilisation, CVD, trauma, fracture, obesity, stroke, major surgery, pregnancy, protein C/antithrombin III/protein S deficiency, plasminogen disorders, nephrotic syndrome, paroxysmal nocturnal haemoglobinuria, lupus, polycythaemia vera, inflammatory bowel disease, and other							

Table 1: overview of risk prediction models for VTE following THA or TKA, THA: total hip replacement, TKA: total knee replacement, NR: not reported
Adapted from Kunutsor, S.K., et al., Thromb Res, 2018. 168: p. 148-155.

Supplement Figure 1

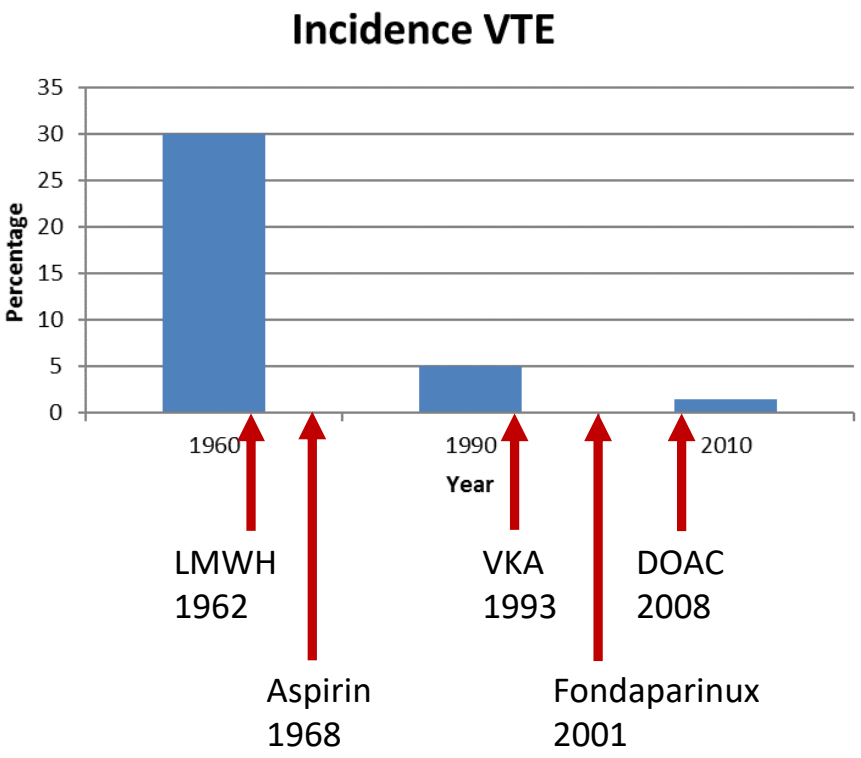

Figure 1: Incidence of VTE following total hip and knee arthroplasty including a timeline showing the year of introduction for various classes of anticoagulants.