

## APPENDIX 2: VTE risk assessment– User guide 2022

- ✓ **START** a VTE risk assessment on BADGER.
- ✓ **COMPLETE** all risk factors and comorbidities—for those not relevant you must tick NO.
- ✓ **VERIFY** and date the assessment.
- ✓ **ACTION** with appropriate **ADVICE; PRESCRIPTION; ADMINISTRATION**.

<b>Major risk factors</b>		Any previous VTE except a single event related to major surgery	VTE = deep vein thrombosis or pulmonary embolism
		High-risk thrombophilia	Antiphospholipid syndrome; Antithrombin, protein C or protein S deficiency; or with more than one thrombophilic defect (including homozygous factor V Leiden, homozygous prothrombin gene mutation and compound heterozygotes)
		Hospital admission ( <i>transient risk factor</i> )	All pregnant women require a VTE risk assessment on admission to hospital – INCLUDING admission to other specialties, (eg surgery).  <b>Consider thromboprophylaxis for all pregnant women during a hospital admission, unless admitted in suspected labour, for induction of labour, or with bleeding.</b>
		Previous VTE related to major surgery	VTE = deep vein thrombosis or pulmonary embolism
	PN only	Caesarean section in labour	<b>GGC recommends thromboprophylaxis after <u>all</u> caesarean sections.</b>
		BMI 30-39.9	
		BMI ≥ 40	
	PN only	Readmission or prolonged admission (≥3 days) in the puerperium	<b>VTE risk assessment should be regularly reviewed in the postnatal period to reflect any changes to a woman’s VTE risk profile.</b>  At a minimum, it should be repeated at 72hrs postnatal if there is an ongoing inpatient admission. It should be repeated at a postnatal readmission.
	PN only	Any surgical procedure in the puerperium except immediate repair of the perineum	E.g. appendicectomy, postpartum sterilisation, bone fracture, extensive 2 <sup>nd</sup> degree tears needing repair in theatre, 3 <sup>rd</sup> and 4 <sup>th</sup> degree tears, manual removal of placenta, postpartum evac , EUA

<b>Medical co-morbidities</b>		Heart Failure	
		Active Systemic Lupus Erythematosus (SLE)	Established diagnosis of SLE with active symptoms but not cutaneous lupus.
		Cancer	Current cancer
		Inflammatory Bowel Disease (IBD)	Ulcerative colitis or Crohn's disease NOT Irritable Bowel Syndrome (IBS)
		Inflammatory Polyarthropathy	Active joint pains with h/o SLE or Rheumatoid arthritis
		Nephrotic Syndrome	
		Sickle cell disease	NOT sickle cell trait or carrier
		Current Intravenous Drug User	
		Type 1 DM with nephropathy	This relates to a pre-pregnancy diagnosis of nephropathy. DM = Diabetes Mellitus
		Additional information/considerations (eg Prolonged admission)	<b>This list of co-morbidities is not prescriptive, and other issues/conditions may be contributory. Seek advice from a senior obstetrician.</b>  Note that women with these highlighted conditions should be assessed by an obstetrician – ideally an obstetric physician – to assess disease severity and activity.
<b>Pregnancy related risk factors</b>	AN only	Ovarian hyperstimulation syndrome (OHSS)	First trimester only – inpatient and outpatient management
		Age >35	Women aged from 35 years + 1 day <b>at the time of the risk assessment</b>
		Parity ≥ 3	Antenatal risk assessment - exclude current pregnancy.  Postnatal risk assessment - include current delivery and consider as para 3 (VTE risk increases at para 3 or more).
		Smoker	If a woman stops smoking then the risk can be removed. There are very few studies of any quality looking at vaping and VTE risk. Always explore if vaping is in conjunction with smoking, and if so should be considered as risk factor.
	PN only	Elective caesarean section	<b>GGC recommends thromboprophylaxis after <u>all</u> caesarean sections.</b>
		Gross varicose veins	If symptomatic, above knee or associated with phlebitis/oedema/skin changes.

\*\*This list of co-morbidities is not prescriptive, and other issues may be contributory.

<b>Pregnancy related risk factors (continued)</b>		Current pre-eclampsia	Pre-eclampsia is known as a significant risk factor for VTE, with evidence suggesting this is of importance both antenatally and postnatally.  Please discuss with a Senior Obstetrician and consider the possibility of imminent delivery.
		Current systemic infection	Requiring IV antibiotics or admission to hospital
		Immobility	E.g. paraplegia, PGP (pelvic girdle pain restricting mobility), long distance travel, leg fracture
		Family history of unprovoked or oestrogen-related VTE in 1 <sup>st</sup> degree relative	VTE = deep vein thrombosis or pulmonary embolism NOT stroke
		Low-risk thrombophilia	Heterozygous for Factor V Leiden or prothrombin gene mutation or Antiphospholipid antibodies
		Multiple pregnancy	
	AN only	IVF/ART – First trimester only	In vitro fertilisation or assisted reproductive technology
	PN only	Preterm birth in this pregnancy (<37+0 weeks)	
	PN only	Stillbirth in this pregnancy	
	PN only	Mid-cavity rotational or operative birth	Any instrumental vaginal birth, and/or any vaginal birth with a manual or instrumental rotation
	PN only	Prolonged labour (>24 hours)	From start of 1 <sup>st</sup> stage of labour or ARM if induction
	PN only	PPH > 1 litre or blood transfusion	
	AN only	Hyperemesis ( <i>transient risk factor</i> )	Requiring inpatient management
		Dehydration ( <i>transient risk factor</i> )	Requiring hospital admission and intravenous fluid replacement
		Identified Bleeding Risk	Active antenatal or postnatal bleeding
	COVID-19 ( <i>transient risk factor</i> )	Current infection	

<b>Contraindications to / cautions for low molecular weight heparin (LMWH)</b>	Known bleeding disorder (haemophilia, von Willibrands disease or acquired coagulopathy)
	Thrombocytopenia (platelets <75)
	Active antenatal or postnatal bleeding
	Women considered at increased risk of major PPH eg : placenta praevia
	Acute stroke in previous 4 weeks (haemorrhagic or ischemic)
	Severe renal disease (eGFR<30ml/min)
	Severe liver disease (prothrombin time above normal range or varices)
	Uncontrolled hypertension (>200 systolic BP or >120 diastolic BP)