Introduction/Background Mass effect from a pelvic mass predisposes to venous thrombosis in the lower limbs, increasing the risk of deep vein thrombosis and pulmonary embolus. Additionally, malignancy creates a hypercoagulable state and vulnerability to venous thromboembolism (VTE).

Gynaecological malignancy is closely associated with VTE with a prevalence of 27% of women with ovarian cancer prior to treatment. We investigate the proportion of women presenting with venous thromboembolism with an associated pelvic mass found on imaging. Current guidance from the National Institute for Health and Care Excellence (NG158) does not advise investigation for cancer in patients who present with VTE in the absence of other clinical signs. However, by nature pelvic masses present with subtle symptoms.

Methodology A retrospective review identified all women diagnosed with VTE between 01/03/2016 and 31/10/2021 across two hospital sites at one NHS trust. Notes were reviewed to elucidate how many patients had a pelvic mass at the time of diagnosis and what the final pathological outcome for this pelvic mass was.

Results 2007 cases were examined and of these 18.4% (n=369) had a pelvic mass of any origin identified on CT or MRI around the time of VTE diagnosis. 29.3% (n=108/369) required referral to the Gynaecological Oncology multidisciplinary team meeting for assessment of this mass. Of these women, 56.5% (n=61) had a gynaecological malignancy with the remaining 43.5% (n=47) having benign gynaecological pathology. Co-existing risk factors for VTE for each case were examined.

Conclusion VTE diagnosis in women is associated with a high prevalence of pelvic masses, with more than a quarter of these requiring referral to Gynaecological Oncology for evaluation. Consideration of routine radiological imaging at the time of VTE diagnosis is warranted to identify these masses earlier.