Results Of the 42 reports included, only fourteen of these (33%) provided any guidance on follow-up. Of these, nine (21% of reports) complied with BTS or Fleischner Society recommendations. The reasons for non-compliance with guidelines when advice was provided were no timescales or follow-up modalities suggested (four of five) and incorrect follow-up time (one of five). Results are summarised in Figure 1.

Conclusions From our results it is evident that no or incorrect follow-up advice is being given, based on radiological appearances, for the majority (79%) of pulmonary nodules seen on CT imaging. Clearly the potential consequences of this may include malignancy not being detected and managed in a timely fashion. It is therefore fundamental that each unit has a system, based on existing guidelines, to ensure correct advice is provided based on radiological findings.

Abstract P23 Figure 1 Guidance given for lung nodules reported on CT imaging

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Clinical Aspects of Pulmonary Vascular Disease

P24 SHORT TERM OUTCOME OF PATIENTS WITH ACUTE PULMONARY EMBOLISM AND HIGH LACTATE AT A DISTRICT GENERAL HOSPITAL

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Introduction The risk stratification of haemodynamically stable patients presenting with pulmonary embolism (PE) is currently focussed on evidence of right ventricular (RV) dysfunction and myocardial necrosis (elevated Troponin). However these single markers have insufficient evidence to definitively guide treatment decision making. Plasma lactate has been shown to be potentially useful in identifying normotensive PE patients at high risk of PE related adverse events. The aim of this retrospective cross sectional study is to assess the role of serum lactate in the risk assessment of patients presenting with acute PE in a “real world” setting.

Methods We reviewed the cases of all patients with a radiologically confirmed PE on CTPA from Royal Wolverhampton Hospital between June 2014 and June 2015. The primary outcome was PE related complications within 7 days of diagnosis. This comprised of shock (systolic blood pressure <90 mmHg or pressure drop of ≥40 mmHg for ≥15 min), RV dysfunction, or need for cardiopulmonary resuscitation/mechanical ventilation.

Results 172 patients were diagnosed with acute PE during this time. 169 cases were analysed (insufficient information recorded in 3). Serum lactate was recorded in 92 (54.4%). Out of the 92 patients, 38 (41.3%) had a PE related complication with a higher average lactate (2.40 mmol/L) than the 54 (58.7%) who did not (lactate of 1.73 mmol/L) ($p < 0.018$ using the unpaired t test). PE related complications occurred in 33 (38.8%) of the 85 normotensive patients that had a lactate recorded. These patients also had a higher average lactate (2.24 mmol/L) than the 52 (61.2%) patients without complications (lactate 1.72 mmol/L) ($p < 0.05$). The positive predictive value of lactate as a single marker for a PE related complication is 53.1%. However the combination of a lactate ≥2, evidence of RV dysfunction and positive Troponin had a positive predictive value of 100%.

Conclusions This study adds to the evidence that a high serum lactate used in combination with a positive troponin and RV dysfunction can be a useful predictor of early adverse PE related events and may aid treatment decision making.

P25 RETROSPECTIVE ANALYSIS OF PATIENTS PRESENTING WITH ACUTE PULMONARY EMBOLISM (PE) AS THE FIRST MANIFESTATION OF MALIGNANCY

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Introduction A link between development of PE and presence of malignancy has long been established. NICE recommends patients presenting with PE should be offered: history, examination, chest x-ray and urinalysis. Further investigation for cancer with abdomino-pelvic CT (CT A/P) scan in patients over 40 with a first unprovoked PE should be considered.¹ CT screening has not been shown to improve occult cancer diagnosis or mortality from cancer.²

	Total presenting with PE	Total with established cancer (all cancers) prior to diagnosis of PE	Total with new cancer (all cancer) diagnosis	Total with cancer diagnosis on CT A/P	1 year mortality in cancer diagnosed on CT A/P
Number of Patients	177	47	10	5	4

Abstract P25 Figure 1 Number of patients presenting with PE depending on cancer diagnosis