

SUPPLEMENTARY MATERIALS

Table S1. General management of PE in the centres in which the respondents practice.

	Cardiology (n = 50)	Respiratory Medicine (n = 50)	Haematology (n = 25)	Internal Medicine (n = 50)	Overall (N = 175)
Local guidelines on PE management at the centre (work setting), n (%)					
Yes	(88)	(92)	(92)	(86)	(89)
No	(12)	(6)	(4)	(12)	(9)
Not sure	(0)	(2)	(4)	(2)	(2)
PERT at the centre (work setting), n (%)					
Yes	(40)	(54)	(48)	(14)	(38)
No	(54)	(40)	(36)	(70)	(52)
Not sure	(6)	(6)	(16)	(16)	(10)
Hospital runs a dedicated clinic for the follow-up of acute PE, n (%) [†]					
Yes, for all patients*	(44)	(66)	(52)	(42)	(51)
Yes, for hospital-admitted patients only	(22)	(10)	(16)	(10)	(14)
No	(26)	(22)	(24)	(36)	(27)
Not sure	(8)	(2)	(8)	(12)	(7)

* Including low-risk, outpatient-managed patients. [†] Of those managed as outpatients at the physician's centre.

PE = pulmonary embolism; PERT = pulmonary embolism response team.

Table S2. Respondents' access to imaging modalities.

	Cardiology	Respiratory	Haematology	Internal	Overall
		Medicine		Medicine	
	(n = 50)	(n = 50)	(n = 25)	(n = 50)	(N = 175)
Computed tomography, n	(n = 50)	(n = 50)	(n = 25)	(n = 50)	(n = 175)
CTPA only	41	31	22	45	139
CTPA plus DECT	9	18	2	3	32
CTPA plus LSIM	3	11	1	1	16
Not sure which CT modalities, if any, are available	0	0	0	2	2
Magnetic resonance imaging	(n = 41)	(n = 40)	(n = 21)	(n = 34)	(n = 136)
Pulmonary angiography	26	30	14	20	90
Lung perfusion mapping	18	22	7	5	52
Not sure which MRI modalities, if any, are available	11	7	5	13	36
Nuclear medicine	(n = 49)	(n = 47)	(n = 23)	(n = 48)	(n = 167)
Q scan only	7	4	0	6	17
V/Q scanning	38	39	22	36	135
SPECT	14	15	3	6	38

Not sure which nuclear medicine modalities, if any, are available	1	2	1	5	9
Other	(n = 15)	(n = 10)	(n = 4)	(n = 11)	(n = 40)
Conventional pulmonary angiography/DSA	14	10	4	11	39
Other	2	0	0	0	2

CT = computed tomography; CTPA = computed tomography pulmonary angiography; DECT = dual-energy computed tomography; DSA = digital subtraction angiography; LSIM = lung subtraction iodine mapping; MRI = magnetic resonance imaging; Q = perfusion; SPECT = single-photon emission computed tomography; V/Q = ventilation/perfusion.

Table S3. Experience in evaluating suspected CTEPD after PE by specialty.

	Cardiologists	Respiratory Medicine	Haematologists	Internal Medicine Specialists	Overall
	(n = 50)	(n = 50)	(n = 25)	(n = 50)	(N = 175)
Do you know where your regional PH centre is to refer your CTEPD patients? (%)					
Yes	92	78	72	74	80
No	8	22	28	26	20
Do you consider your centre to have a protocol for the investigation of CTEPD following acute PE? (%)					
Yes	52	58	44	32	47
No	30	30	24	30	29
Not sure	18	12	32	38	24

CTEPD = chronic thromboembolic pulmonary disease; PE = pulmonary embolism; PH = pulmonary hypertension.

Table S4. Experience in evaluating suspected CTEPD after PE by region.

	Yes (%)	No (%)
Do you know where your regional PH centre is to refer your CTEPD patients? (%)		
Northeast (n = 7)	86	14
Northwest (n = 20)	80	20
East Midlands (n = 17)	59	41
West Midlands (n = 18)	89	11
Yorkshire and the Humber (n = 11)	100	0
Southeast England (n = 15)	53	47
Southwest (n = 12)	83	17
East of England (n = 14)	79	21
London (n = 47)	83	17
Scotland (n = 9)	89	11
Wales (n = 4)	100	0
Northern Ireland (n = 1)	100	0

CTEPD = chronic thromboembolic pulmonary disease; PE = pulmonary embolism; PH = pulmonary hypertension.

Table S5. Criteria for referring patients to a specialist PH service in the centres in which the respondents practice.

	Cardiology (n = 50)	Respiratory Medicine (n = 50)	Haematology (n = 25)	Internal Medicine (n = 50)	Overall (N = 175)
Persistent symptoms after 3 months of anticoagulation, before conducting further tests	44%	48%	32%	38%	42%
Persistent symptoms after a PE even if echocardiogram and other tests are normal	42%	38%	44%	30%	38%
Persistent symptoms and abnormal investigations, such as Q scan, CTPA and CPET, but with a normal echocardiogram	56%	66%	36%	40%	51%
If the echocardiogram shows PH or right heart dilatation	50%	78%	80%	62%	66%
Only patients without significant comorbid conditions	2%	10%	0%	4%	5%
I don't refer the patient to a specialist PH service	6%	0%	4%	14%	6%

CPET = cardiopulmonary exercise test; CTPA = computed tomography pulmonary angiogram; PE = pulmonary embolism; PH = pulmonary hypertension; Q = perfusion.

Table S6. Relative strengths and weaknesses of imaging modalities in the context of PH

Variable	Chest Radiography	V/Q Scan	SPECT/CT V/Q	Single-Energy CT	Dual-Energy CT	MRI	Pulmonary
				Angiography [#]	Angiography		Angiography
PH detection	+	–	–	+	+	+	–
Evaluation of anatomic compartments							
Lung	+	—	+	+++	+++	–	–
Cardiac chambers	+	–	–	++	++	+++	–
Pulmonary vessels	+	+	+	+++	++++	++	++
Mediastinum	–	–	–	+++	+++	+++	–
Assessment of PH aetiology	++	++	++	+++	++++	++	++
General strengths	Readily available	Screening for CTEPH; SPECT currently replacing planar V/Q	Combined evaluation of lung	Excellent evaluation of aetiologies of PH	Assessment of anatomy and lung perfusion (iodine)	No radiation; excellent evaluation of cardiac function	Planning of endovascular

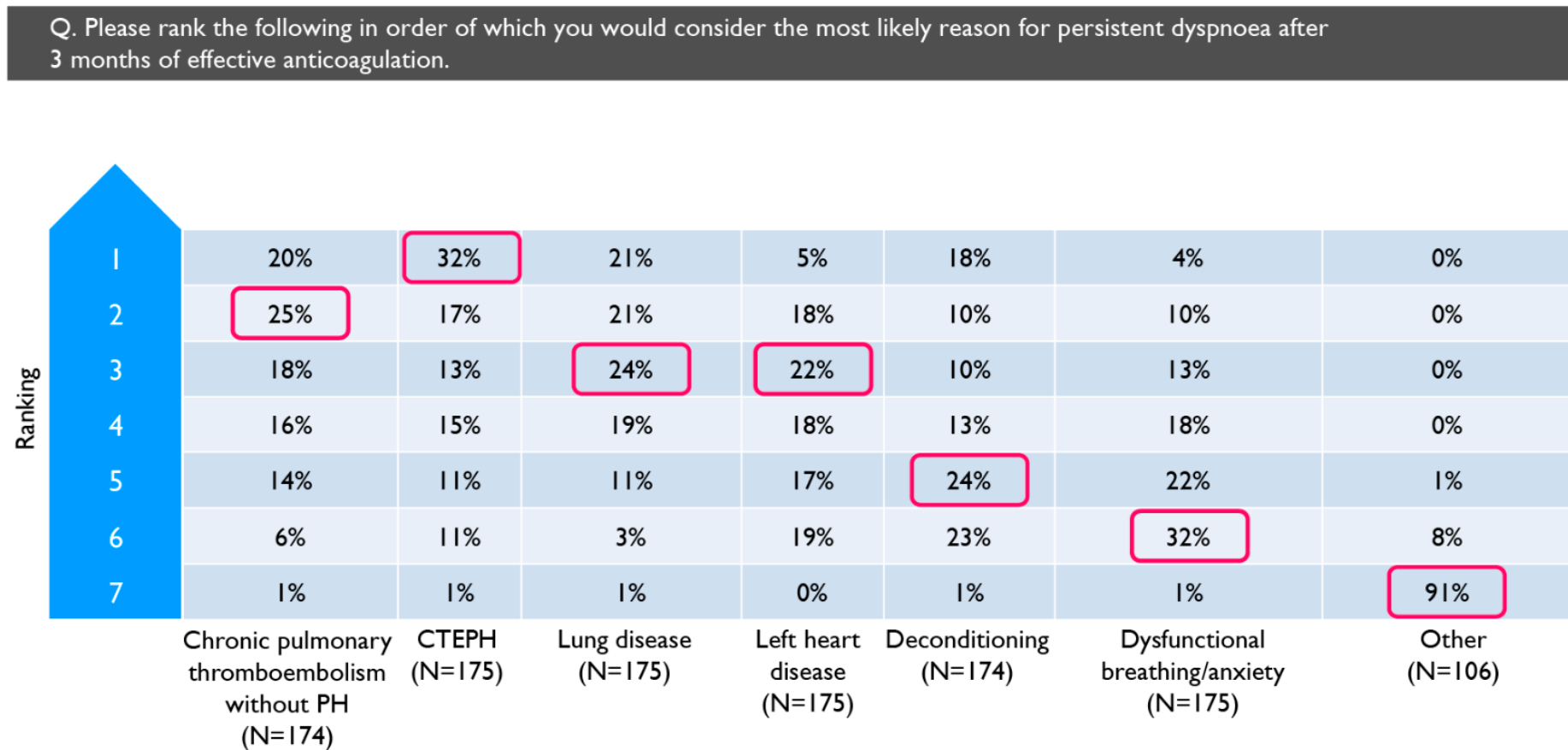
			parenchyma with lung perfusion		maps) in a single test	and pulmonary flow in one examination	treatment (PEA, BPA)
Weaknesses	Limited role in the assessment of aetiology	Need further imaging to assess the cause of PH; interpretive limitations in test patients with comorbid conditions	Lung assessment limited; needs more validation; radiation dose added with use of CT	Limited haemodynamic assessment; limited evaluation of distal pulmonary arteries (beyond subsegmental level)	Needs validation for all dual-energy CT technologies	Limited in the evaluation of lung parenchyma; not widely available; more technical expertise needed	Absence of perivascular structure evaluation; invasive test
Average effective radiation exposure (mSv)	0.05	2.2	2.6–3.5	2–5	3–5	None	10–30

Reproduced from Remy-Jardin et al. [18].

BPA = balloon pulmonary angioplasty; CTEPH = chronic thromboembolic pulmonary hypertension; PEA = pulmonary endarterectomy; PH = pulmonary hypertension; V/Q scan = ventilation–perfusion scintigraphy.

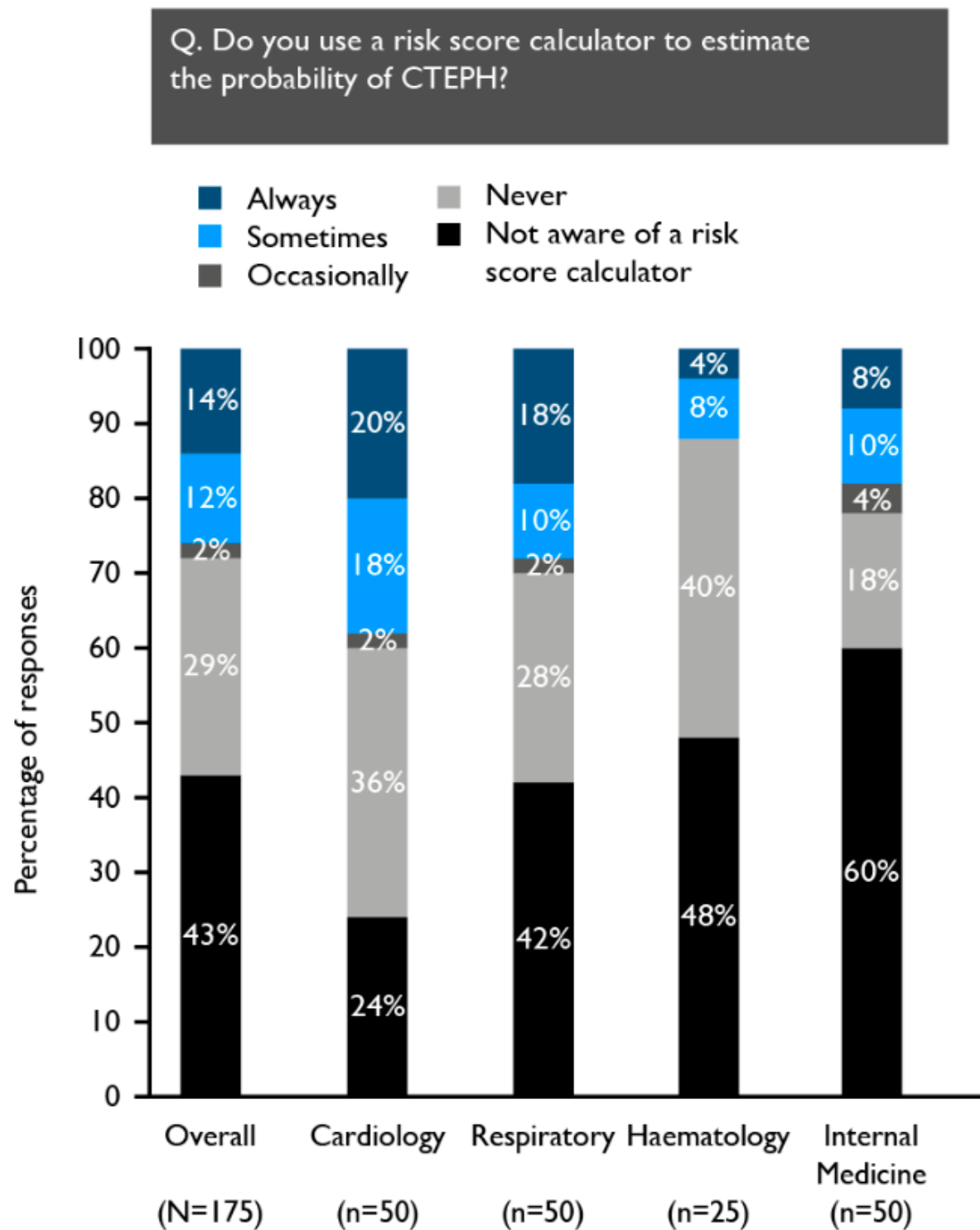
– = no utility, + = limited utility, ++ = moderately useful, +++ = useful, and ++++ = very useful. # Non-electrocardiogram-gated CT.

Figure S1. Possible reasons for persistent dyspnoea following PE ranked in order of likelihood by respondents.



CTEPH = chronic thromboembolic pulmonary hypertension; PE = pulmonary embolism; PH = pulmonary hypertension.

Figure S2. Use of risk score calculators for estimating probability of CTEPH by respondents.



CTEPH = chronic thromboembolic pulmonary hypertension.