

An e-Delphi exercise to reach consensus on risk of drug-induced pneumotoxicity in patients with rheumatological disease

Section	on 1						
Tier 1 About	you. All respon	ses are anonym	ous.				
1. Ple	ase enter th	e email addı	ress that this in	rvitatio i	n was sen	t to: (for subse	equent
engage	ements if you	would prefer to	o use a different e	mail plea	ise contact		
loth.de	elphipneumoto	xicity@nhslot	hian.scot.nhs.uk)				
Enter y	our answer						
2. W ł	nat is your p Rheumatolog	orimary spec y□ Pt	cialty? ulmonology□				
3 V 09	rs of evneri	ence in vour	specialty (in y	zearc)			
J. I Ca	1-4 □	5-9 □	10-20 □	> 20 [
	_						
DMA		ics and und	about assessing erlying rheum 7= extreme 4	atologic	al condit	=	ults with 7□
5. PA	TIENT FA	CTOR DOM	IAINS				
We w		compile a li	st of relevant p	oatient f	actors fo	r Tier 2 of th	is Delphi
	h of the follooping pneur		nt factors do yo	ou consi	der wher	n assessing ris	sk of
Age	Yes□	No□	Don't know □]			
6. Ge	nder Yes□	No□	Don't know□	I			

7. Ethnicity Yes □	No 🗆	Don't know □	
8. Smoking Yes □	No 🗆	Don't know □	
9. BMI Yes□	No 🗆	Don't know□	
10. Underlying rl Yes□	heumatologica No □	al diagnosis Don't know□	
11. Activity of un Yes □	nderlying rheu No □	ımatic disease Don't know □	
"yes" please spe of pneumotoxicit	cify which me y (tick all that	a't know" to Q11, please go to Q1 easure of activity you consider wl t apply) S28, BASDAI, PsARC, SLEDAI or other)	hen assessing risk
Imaging score	e (MRI, US etc)	□ ESR □ CRP□	Ferritin
		serological titre (RhF, CCP, Jo-1 etc) □	Serum ACE □
			_
	☐ Autoimmune s	serological titre (RhF, CCP, Jo-1 etc) □	_
Complement	☐ Autoimmune s	serological titre (RhF, CCP, Jo-1 etc) □	_
Complement 13. Pre-existing is Yes 14. If you responses responded "yes" assessing risk of particular to the complement	nterstitial lun No ded "no" or " , please indica pneumotoxici	serological titre (RhF, CCP, Jo-1 etc) ag disease (ILD) Don't know 'I don't know'' to Q13, please go ate which features on HRCT you ty	Serum ACE to Q20. If you
Complement 13. Pre-existing is Yes 14. If you responses responded "yes" assessing risk of particular to the complement	nterstitial lun No ded "no" or " , please indica pneumotoxici	serological titre (RhF, CCP, Jo-1 etc) ag disease (ILD) Don't know 'I don't know'' to Q13, please go eate which features on HRCT you	Serum ACE to Q20. If you
Complement 13. Pre-existing is Yes 14. If you responses responded "yes" assessing risk of pattern of disease Yes Pattern of disease	□ Autoimmune s nterstitial lun No □ ded ''no'' or '' , please indica pneumotoxici e (for example	serological titre (RhF, CCP, Jo-1 etc) ag disease (ILD) Don't know 'I don't know'' to Q13, please go ate which features on HRCT you ty e UIP, NSIP, etc.)	Serum ACE to Q20. If you consider when
Complement 13. Pre-existing is Yes 14. If you responses responded "yes" assessing risk of Pattern of disease Yes 15. Presence of fis Yes	nterstitial lun No □ ded "no" or " , please indica pneumotoxici e (for example No □ brosis (honey	serological titre (RhF, CCP, Jo-1 etc) ag disease (ILD) Don't know 'I don't know'' to Q13, please go tate which features on HRCT you ty e UIP, NSIP, etc.) Don't know combing, traction bronchiectasis	Serum ACE to Q20. If you consider when

18. Volume of lung	gaffected by l	LD on HRCT
Yes 🗆	No 🗆	Don't know □
19. Progression of	ILD between	serial HRCT scans
Yes□	No 🗆	Don't know □
20. COPD and/or e	emphysema	
Yes□	No □	Don't know □
21. Asthma Yes□	No 🗆	Don't know□
22. Bronchiectasis Yes □	No 🗆	Don't know □
23. Other respirato Enter your answe	•	lities - please specify
24. Static Lung fun Yes□	ction measur No □	ements (spirometry, gas transfer) Don't know□
responded "yes", p	olease indicat	on't know" to Q24, please go to Q30. If you e which features on static lung function would k of pneumotoxicity
Yes	No 🗆	Don't know □
26. FVC Yes □	No 🗆	Don't know □
27. FEV1/FVC rati Yes□	0 No □	Don't know□
28. TLCO Yes □	No 🗆	Don't know □
29. KCO (= TLCO o	corrected for	alveolar volume) Don't know□
	c lung functio	n between historical serial measurements (if
available) Yes □	No 🗆	Don't know □
"yes" , please indic	cate which fea	know" to Q30, please go to Q35. If answered atures of serial static lung function measurement hen assessing risk of pneumotoxicity.

Change in FEV1 Yes □	No 🗆	Don't know □	1	
32. Change in FV	C			
Yes □	No 🗆	Don't know □]	
33. Change in TL	CO			
Yes □	No 🗆	Don't know □	3	
34. Change in K C	No □	I don't know[٦	
_	_		_	-4-)
Yes □	No □	Don't know	(e.g. 6MWT, shuttle	etc)
36. Walking dista Yes□	nce on form No □	nal exercise tes Don't know	ting (e.g. 6MWT, sh	uttle etc)
37. Please indicate assessing the risk Cardiac □ Neurological Haematologic	of pneumot Live □ Diak	oxicity (tick a	o-morbidities you co ll that apply) act □ Renal Metabolic/end None of the above □	
38. DRUG FACT	OR DOMA	INS		
We would like to this Delphi exerci	-	st of relevant 1	rheumatological dru	gs for Tier 2 of
Please identify who pneumotoxicity. Counsel the patient	se. nich drugs ye Consider 'sig nt that there	ou consider to gnificantly' to is a risk of pn	be significantly asso be such that you wo eumotoxicity.	ociated with
this Delphi exercises Please identify who pneumotoxicity.	se. nich drugs ye Consider 'sig at that there [ARDs (tick	ou consider to gnificantly' to is a risk of pn	be significantly asso be such that you wo eumotoxicity.	ociated with
Please identify who pneumotoxicity. Counsel the patient Conventional DM	se. nich drugs ye Consider 'sig at that there [ARDs (tick Metl	ou consider to gnificantly' to is a risk of pn all that apply	be significantly asso be such that you wo eumotoxicity.	ociated with uld actively
Please identify who pneumotoxicity. Counsel the patient Conventional DM Azathioprine Hydroxychloromych	se. ich drugs yellonsider 'signt that there [ARDs (tick	ou consider to gnificantly' to is a risk of pn all that apply hotrexate □ MMF □	be significantly asso be such that you wo leumotoxicity.) Leflunomide None of the above	ociated with uld actively
Please identify who pneumotoxicity. Counsel the patient Conventional DM Azathioprine Hydroxychloromych	se. ich drugs yellensider 'signt that there [ARDs (tick Methoder Methode	ou consider to gnificantly' to is a risk of pn all that apply hotrexate □ MMF □	be significantly assobe such that you wo teumotoxicity. Leflunomide None of the above Etanercept	ociated with uld actively
Please identify who pneumotoxicity. Counsel the patient Conventional DM Azathioprine Hydroxychloromych	se. ich drugs yellensider 'signt that there [ARDs (tick Methoder Methode	ou consider to gnificantly' to is a risk of pn all that apply hotrexate □ MMF □	be significantly asso be such that you wo leumotoxicity.) Leflunomide None of the above	ociated with uld actively
Please identify who pneumotoxicity. Counsel the patient Conventional DM Azathioprine Hydroxychloromych	se. nich drugs yellonsider 'signt that there [ARDs (tick Methoder Methoder ARDs Methoder ARDs Methoder Inflient ARDs Methoder ARDs Me	ou consider to gnificantly' to is a risk of pn all that apply hotrexate \(\Box\) MMF \(\Data\) olizumab \(\Data\) ximab \(\Data\)	be significantly assorbe such that you wo teumotoxicity. Leflunomide \Boxeq None of the above \Boxeq None of the above \Boxep within the anti-TNF of	ociated with uld actively Sulfasalazine
Please identify when pneumotoxicity. Counsel the patient Conventional DM Azathioprine Hydroxychloromyc	se. ich drugs yellonsider 'signet that there [ARDs (tick	ou consider to gnificantly' to is a risk of pn all that apply hotrexate \(_ MMF \(_ oply \) colizumab \(_ ximab \(_ vidual drugs v city?	be significantly assorbe such that you wo teumotoxicity. Leflunomide \Boxeq None of the above \Boxeq None of the above \Boxep within the anti-TNF of	ociated with uld actively Sulfasalazine

42. Do you consider that individual drugs within the anti-IL1 class have different
risks of pneumotoxicity? Yes □ No □ Don't know □
Tes
43. Anti-IL6, (tick all that apply) Sarilumab □ Tocilizumab □ None of the above □
Samunao 🗀 Toenizuniao 🗀 None of the above 🗀
44. Do you consider that individual drugs within the anti-IL6 class have different
risks of pneumotoxicity? Yes □ No □ Don't know or not applicable □
45.Anti IL12/23
Ustekinumab ☐ None of the above ☐
16 Do way consider that individual damag within the anti-II 12/22 class have
46. Do you consider that individual drugs within the anti-IL12/23 class have different risks of pneumotoxicity?
Yes ☐ No ☐ Don't know or not applicable ☐
47. Anti-IL17 (tick all that apply) Ixekizumab □ Secukinumab □ None of the above □
48. Do you consider that individual drugs within the anti-IL17 class have
different risks of pneumotoxicity? Yes □ No □ Don't know or not applicable □
49. JAK-STAT inhibitors (tick all that apply)
Baricitinib ☐ Upadacitinib ☐ Upadacitinib ☐
Filgotininb ☐ None of the above ☐
50. Do you consider that individual drugs within the JAK-STAT inhibitor class
have different risks of pneumotoxicity?
Yes ☐ No ☐ Don't know or not applicable ☐
51. T-cell modulator Abatacept None of the above None of the above □
52. B-cell depleter or modulator (tick all that apply)
Belimumab ☐ Rituximab ☐ None of the above ☐

class have differ Yes □	No □	Don't know or 1	not applicable		
54. Other drugs. In the free text box please indicate any other licensed drugs that you currently use in CTD <u>and</u> you associate with pneumotoxicity					
you currently use in CTD and you associate with pheumotoxicity					