Standardising European imaging practice: European Cystic Fibrosis Society Clinical Trial Network & European Respiratory Society


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There is marked heterogeneity in the practice of CT and MR imaging across European cystic fibrosis centres.

CT Monitoring Strategies Sub-Group Survey Results:
- Survey: n=65 (n=43 paediatric, n=22 adult centre specialists)
- Assessed irradiation dose, early structural lung disease, indications, timing and frequency of CT imaging, harmonisation of imaging protocols, reporting of scan results, special indications, treatment response and how these centres/individuals see the future of CT in CF treatment and research

Low Dose CT Sub-Group Survey Results:
- Survey: n=54 assessed current low dose CT protocols used across centres, including indications for chest CT in CF, dose reduction strategies used and perspectives/attitudes on dose optimisation
- 84% of radiologists questioned used dose reduction strategies at their centre
- Routine surveillance, investigation of complications and symptom assessment were the 3 most common indications for both adult and paediatric CT

MRI Core Sets Sub-Group Survey Results:
- Survey: n=61 assessed current MRI practice across centres, including indications for chest MRI in CF, dose reduction strategies used and perspectives/attitudes on dose optimisation
- 84% of radiologists questioned used dose reduction strategies at their centre
- Routine surveillance, investigation of complications and symptom assessment were the 3 most common indications for both adult and paediatric MRI

WHAT?
- In 2022 we surveyed European CF centres & ERS colleagues to assess current European practice of thoracic CT and MR Imaging in CF

WHY?
- To promote standardisation of practice and sharing of knowledge in CT and MRI practice in CF, to improve the standard of care provided to people with CF

WHO?
- The European Cystic Fibrosis Society – Clinical Trial Network (ECFS-CTN) are the pan-European network of 57 CF centres across 17 different European countries
- One specialist group within the CTN is the Imaging Standardisation Group: comprised of radiologists, medical physicists, pulmonologists (paediatric & adult), statisticians from CF centres across Europe & CTN & CF Europe representatives
- 3 specialist sub-groups are completing international guidance to promote standardisation of CT and MR imaging in CF, including harmonisation of existing protocols and key recommendations for practice

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Background

WHAT?
- The European Cystic Fibrosis Society – Clinical Trial Network (ECFS-CTN) are the pan-European network of 57 CF centres across 17 different European countries
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WHERE?
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Abbreviations
- ABPA: allergic bronchopulmonary aspergillosis
- CF: cystic fibrosis
- CT: computed tomography
- MRI: magnetic resonance imaging
- NTM: non-tuberculous mycobacteria
- PwCF: people with cystic fibrosis
- TAB: thoracic aortic aneurysm
- TBA: thoracic aortic bifurcation
- TBC: tuberculous bronchiectasis
- TBM: tuberculous meningitis
- TBX: thoracic aortic dissection
- WBC: white blood cells

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Standardising European Imaging Practice: European Cystic Fibrosis Society – Clinical Trial Network Imaging Special Interest Groups

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- To all ECFS-CTN sites & ERS colleagues who participated in the surveys and all members of the ECFS-CTN Imaging Special Interest Groups.

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