AUDIT, RESEARCH AND GUIDELINE UPDATE

European hospital adherence to GOLD recommendations for chronic obstructive pulmonary disease (COPD) exacerbation admissions

C Michael Roberts,1 Jose Luis Lopez-Campos,2,3 Francisco Pozo-Rodriguez,3,4 Sylvia Hartl,5 on behalf of the European COPD Audit team

ABSTRACT
Understanding how European care of chronic obstructive pulmonary disease (COPD) admissions vary against guideline standards provides an opportunity to target appropriate quality improvement interventions. In 2010–2011 an audit of care against the 2010 ‘Global initiative for chronic Obstructive Lung Disease’ (GOLD) standards was performed in 16 018 patients from 384 hospitals in 13 countries. Clinicians prospectively identified consecutive COPD admissions over a period of 8 weeks, recording clinical care measures on a web-based data tool. Data were analysed comparing adherence to 10 key management recommendations. Adherence varied between hospitals and across countries. The lack of available spirometry results and variable use of oxygen and non-invasive ventilation (NIV) are high impact areas identified for improvement.

INTRODUCTION
Chronic obstructive pulmonary disease (COPD) is common throughout Europe and is an important cause of morbidity, mortality and consumes significant healthcare resources.1 Life-threatening exacerbations of COPD are best treated in hospital, and by far the greatest proportion of the healthcare budget expenditure relates to hospital care. It makes sense to ensure hospital care of COPD exacerbations is managed optimally according to best practice guidelines. In 2010 the ‘Global initiative for chronic Obstructive Lung Disease’ (GOLD) strategy document with management guidelines for COPD exacerbation were updated.2 There are no existing data on the adherence to guideline recommendations across Europe for patients admitted to hospital with an exacerbation. Understanding practice at a European level provides an opportunity for targeted quality improvement interventions that could make a significant difference to patient care. In 2010/2011 a European audit of the care of patients admitted to hospital was completed across 13 countries. We present data from that audit measured against key recommendations from the then GOLD strategy document.

AUDIT METHODOLOGY
This is described elsewhere in detail.3 In summary, a prospective case ascertainment with retrospective case note audit was performed between September 2010 and April 2011 on all consecutive COPD exacerbation admissions over a collection period of 8 weeks in each self-selected hospital from 13 European countries that volunteered to participate via their national respiratory society. The dataset was agreed between the national respiratory leads and constituent societies via a modified Delphi process with two rounds. From this dataset, 10 process measures were identified which mapped to key recommendations from the 2010 GOLD strategy document.

Clinical data were entered by clinicians onto a bespoke multilingual web tool held by the European Respiratory Society. Data accuracy was improved by inbuilt data limits within the software. Data cleaning was undertaken by identifying outlying values and requesting contributing clinicians to re-examine their data sources to confirm or amend the data uploaded to the system. Compliance with the guideline recommendations was calculated from the dataset and further sub set analyses were then performed to explore the findings in detail. The software used was SAS 9.3 (SAS Institute, Cary, North Carolina, USA).

AUDIT FINDINGS
A total of 384 hospitals from Austria, Belgium, Croatia, Greece, Malta, Poland, Republic of Ireland, Romania, Spain, Switzerland, Turkey and the UK provided complete clinical datasets. A total of 16 018 patients were included in the subsequent analysis. The subjects comprised 67.8% (10 865/16 018) men, mean age 70.8 (SD 10.8) years, mean forced expiratory volume in 1 s (FEV1)%) predicted 44.04 (SD 17.4)%, with a median of 1 prior COPD admission in the previous 12 months and a median of 1 comorbidity. Table 1 provides a summary of the median and interquartile range GOLD management recommendation adherence for cases, hospitals and by country. Altogether, 15.3% fulfilled all 10 recommendations.

Recommendation 1
For the diagnosis of COPD, spirometry is the gold standard: it is the most reproducible standardised and objective way of measuring airflow limitation. While spirometry is not advised during an admission, the results of previously performed tests and their accurate interpretation are vital in confirming the diagnosis at admission and in understanding the COPD severity. Clinical diagnosis without spirometry or poor interpretation of spirometry results may be incorrect leading to an inappropriate...
management plan. In all, 59.4% (9513/16 018) of admitted patients had a spirometry record available. For patients with a previous admission for COPD exacerbation 37.4% (2890/7734) still had no available spirometry results. When spirometry was available 12.9% (1226/9513) had non-obstructive FEV1/forced vital capacity (FVC) ratios but were still entered into the audit and treated for exacerbation of COPD.

**Recommendation 2**
For patients that require hospitalisation, measurement of arterial blood gases is important to assess the severity of an exacerbation A total of 82.4% (13 191/16 018) had an arterial blood gas (ABG) result recorded. Of these, 51.6% (6804/13 191) had oxygen partial pressure (PaO2) below 8 kPa, 45% (5933/13 191) had PaCO2 above 6 kPa and 18.6% (2452/13 191) presented with acidosis.

**Recommendation 3**
Chest radiographs (posterior/anterior plus lateral) are useful in identifying alternative diagnoses that can mimic the symptoms of an exacerbation
In all, 98.6% (15 790/16 018) admissions had a recorded chest radiograph. Of these, 22.5% (3555/15 790) were classified as a normal chest x-ray, 18.5% (2968/15 790) consolidation and 2.5% (399/15 790) showed lung cancer.

**Recommendation 4**
Oxygen therapy is the cornerstone of hospital treatment of COPD exacerbations
A total of 84.9% (13 602/16 018) received oxygen of whom 9.7% (1321/13 602) received high flow oxygen. Of the 2167 who did not receive oxygen 13.9% (302/2167) were significantly hypoxic with a PaO2 of <8 kPa, while overall 95.5% (6433/6735) of all patients with PaO2 <8 kPa did receive oxygen of some kind. In addition 60.9% (1480/2432) of patients not having an ABG test documented also received oxygen.

**Recommendation 5**
Short-acting inhaled β2 agonists are usually the preferred bronchodilators for treatment of exacerbations of COPD. If a prompt response to these drugs does not occur, the addition of an anticholinergic is recommended.
A total of 91.1% (14 594/16 018) were treated with a short-acting bronchodilator during the admission, 84.6% (13 555/18 016) with a β2 agonist and 12 406 (77.5%) with an anticholinergic.

**Recommendation 6**
Despite its widespread clinical use, the role of methylxanthines in the treatment of exacerbations of COPD remains controversial
A total of 14.2% (2276/16 018) received intravenous methylxanthines during the admission.

**Recommendation 7**
Oral or intravenous glucocorticosteroids are recommended as an addition to other therapies in the hospital management of exacerbations of COPD
Overall, 82.3% (13 187/16 018) patients received systemic steroids. Those with radiographic consolidation were less likely to receive steroids than those without consolidation (77.6% vs 83.4%).

**Recommendation 8**
Antibiotics should be given to: (a) patients with the following three cardinal symptoms: increased dyspnoea, increased sputum volume and increased sputum purulence; (b) patients with two of the cardinal symptoms, if increased purulence of sputum is one of the two symptoms; and (c) patients that requires mechanical ventilation (invasive or non-invasive)
In the audit 90.5% (8457/9347) patients with sputum purulence or mechanical ventilation received antibiotics, however 79.7% (5262/6606) without any of these also received antibiotics. Overall, 61.2% (9801/16 018) of patients were appropriately managed according to these guidelines.

**Recommendation 9**
Indications for non-invasive ventilation (NIV) include moderate to severe acidosis (pH <7.35) and hypercapnia (PaCO2>6.0 kPa) without contraindications
Of patients with an ABG recorded, 16.8% (2222/13 191) fulfilled these criteria. Of these, 51.0% (1133/2222) received NIV, however a further 825 patients also received NIV but did not meet the ABG criteria, in effect 28.6% (825/2890) of all patients receiving NIV. Of those fulfilling the criteria but who did not receive NIV the main reasons recorded were: declined by the patient 4.3%, medical staff deemed patient unsuitable 28.3%, patient responded to conservative medical treatment 42.6%, ‘other’ reasons 10.1%.

---

**Table 1** Summary of compliance with key audit standards

<table>
<thead>
<tr>
<th>Audit standard</th>
<th>Compliance at case level (%)</th>
<th>Absolute case numbers</th>
<th>Median by hospital (%)</th>
<th>IQR by hospital (%)</th>
<th>Median by country (%)</th>
<th>IQR by country (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirometry result available at admission</td>
<td>59.4</td>
<td>9513/16 018</td>
<td>63.1</td>
<td>43.4–83.3</td>
<td>64.7</td>
<td>49.3–69.9</td>
</tr>
<tr>
<td>Arterial Blood Gas performed at admission</td>
<td>82.4</td>
<td>13 191/16 018</td>
<td>91.5</td>
<td>78.4–98.7</td>
<td>88.1</td>
<td>81.9–93.5</td>
</tr>
<tr>
<td>Chest radiograph performed at admission</td>
<td>98.6</td>
<td>15 790/16 018</td>
<td>100</td>
<td>98.6–100</td>
<td>99.0</td>
<td>98.0–99.4</td>
</tr>
<tr>
<td>Controlled oxygen therapy used</td>
<td>84.9</td>
<td>13 602/16 018</td>
<td>89.7</td>
<td>76.9–97.9</td>
<td>85.7</td>
<td>79.8–88.5</td>
</tr>
<tr>
<td>Short-acting bronchodilator use</td>
<td>91.1</td>
<td>14 594/16 018</td>
<td>95.9</td>
<td>89.1–100</td>
<td>91.4</td>
<td>80.3–94.7</td>
</tr>
<tr>
<td>Non-use of intravenous methylxanthines</td>
<td>85.7</td>
<td>13 742/16 018</td>
<td>96.8</td>
<td>83.3–96</td>
<td>79.9</td>
<td>54.7–97.4</td>
</tr>
<tr>
<td>Systemic corticosteroids given</td>
<td>82.3</td>
<td>13 187/16 018</td>
<td>87.9</td>
<td>77.3–95.0</td>
<td>76.9</td>
<td>62.7–88.3</td>
</tr>
<tr>
<td>Antibiotics given if sputum purulence or IMV</td>
<td>90.5</td>
<td>8457/9347</td>
<td>93.5</td>
<td>85.7–100</td>
<td>89.5</td>
<td>86.3–93.6</td>
</tr>
<tr>
<td>NIV given if pH &lt;7.35 and PaCO2 &gt;6 kPa</td>
<td>51.0</td>
<td>1133/2222</td>
<td>58.6</td>
<td>40–77.8</td>
<td>47.0</td>
<td>40.9–66.6</td>
</tr>
<tr>
<td>IMV given if pH &lt;7.25 and PaCO2 &gt;8 kpa</td>
<td>15.4</td>
<td>73/473</td>
<td>50.0</td>
<td>33.3–100</td>
<td>31.6</td>
<td>22.2–44.4</td>
</tr>
</tbody>
</table>

IMV, invasive mechanical ventilation; NIV, non-invasive ventilation.
Recommendation 10
Indications for invasive mechanical ventilation (IMV) include severe acidosis (pH <7.25) and/or hypercapnia (PaCO₂ >8.0 kPa). In the audit population 15.4% (73/473) of patients with a pH <7.25 and a PaCO₂ >8 kPa received IMV. Of the 239 patients who died and who received NIV only 13 were escalated to IMV before death while for the other cases NIV was the ceiling of treatment.

DISCUSSION
This is the first ever audit of European hospital care of COPD admissions. There is a wide variation in management between hospitals and between countries. While many of the audit standards should be interpreted in the context of a guideline rather than a protocol the variation against some standards is of concern. Key areas of practice deserve further comment.

Accurate diagnosis is essential if the correct care pathway is to be followed. Spirometric results were not available in over 40% cases and in more than a third who had a prior admission, while in over 13% of cases where it was available the clinical interpretation was incorrect. Whether spirometry has or has not been previously performed, and whether the data may be held in primary or secondary care is not the issue, it is simply that it is not available to the responsible clinical team at a critical moment for the patient. The use of high flow oxygen, particularly in the absence of blood gas measurements, is poor practice as is the management of patients who are hypoxic without oxygen. Thirdly the use of ventilatory support in relation to ABG results is concerning. While it is not possible to state if this were correct practice at case level, overuse and underuse of NIV are suggested by the data. This view is reinforced by the IMV use in severe hypercapnic acidosis where only 15.4% of eligible patients received support and few patients managed using NIV who subsequently died, received IMV.

While it is encouraging that a chest radiograph investigation was performed on admission in nearly all patients, blood gas tests in particular were not performed in a small but significant proportion. Critical care and oxygen therapy are guided by arterial pH, PaCO₂ and PaO₂ measurement. Antibiotic use is appropriately high in patients meeting all three Anthonisen criteria but given to most patients regardless. This was a pilot study with data limitations³ common to other audits collected from hospitals that volunteered to participate without purposeful sampling. Some cases entered did not meet the spirometric criteria for COPD and some major countries did not participate. This remains, however, the most comprehensive dataset to date collected from Europe and reflects ‘real life’ clinical practice with all its inaccuracies. The data raise concerns similar to the comprehensive previous UK and Spanish COPD audits.⁴ ⁵ Practice between European countries varies as does practice between hospitals within countries. Understanding care quality and deficiencies provides opportunities for targeted interventions that could produce significant patient benefits.

Acknowledgements With thanks to all the contributing clinicians across Europe and to the statistical team of Ady Castro-Acosta, Victor Abraira-Santos, Antonio Lopez-Quilez and Juan Donado.


Contributors CMR: initial idea of the paper and was the principal writer. IJC-C: made significant contributions to the writing, to the themes of the paper and to the statistical analysis. FPR: was the principal statistical input into the paper. SH made significant contributions to the themes of the paper.

Funding European Respiratory Society. Central funding of the project was entirely granted by the ERS covering all costs at European level.

Competing interests None.

Ethics approval The European Audit followed the European ethical requirements for scientific studies. All partners of the project accepted the general ethical rules of the ERS, particularly the rules on Competing interests and relationships with the Tobacco Industry, which was an exclusion criterion for individual participation as a national representative. Since there is no European Ethics Committee for audits, national societies ensured compliance with European and National ethical requirements. Some countries needed complex ethics agreements. Grants at the national level to support the audit had to be given as unrestricted grants to the national society without any further influence or interference of the sponsor on future results. An informed consent for the patients was created by the SC and an outline ethics committee protocol for those countries needing them. In the case of ethical dilemmas the Ethics Committee of the ERS was consulted.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES
Online Annex 1

EUROPEAN COPD AUDIT
List of investigators

Steering Committee
- C. Michael Roberts. Barts and The London School of Medicine and Dentistry Queen Mary University of London, London, UK
- Sylvia Hartl. Ludwig Boltzmann Institute of COPD and Respiratory Epidemiology, Vienna, Austria
- Jose Luis Lopez-Campos. Hospital Universitario Virgen del Rocio, Instituto de Biomedicina de Sevilla (IBiS), Sevilla. CIBER de Enfermedades Respiratorias (CIBERES). Instituto de Salud Carlos III, Madrid.

Data analysis team
- Francisco Pozo-Rodríguez. Hospital 12 de Octubre, Instituto de Investigación i+12, Madrid, Spain
- Jose Luis López-Campos. Hospital Universitario Virgen del Rocio, Instituto de Biomedicina de Sevilla (IBiS), Sevilla. CIBER de Enfermedades Respiratorias (CIBERES). Instituto de Salud Carlos III, Madrid.
- Ady Castro-Acosta. Hospital 12 de Octubre, Instituto de Investigación i+12, Madrid, Spain
- Víctor Abraira-Santos. Hospital Universitario Ramón y Cajal, IRYCIS, Madrid, Spain, Centre for Biomedical Research on Epidemiology and Public Health (CIBERESP). Instituto de Salud Carlos III. Madrid, Spain.
- Antonio López-Quilez. Department of Statistics and Operational Research. Universidad de Castellón, Castellón, Spain
- Juan Dorado. Consultoría estadística y de investigación clínica PERTICA

National experts (by alphabetical order of the country)

<table>
<thead>
<tr>
<th>Country</th>
<th>Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Otto Burghuber</td>
<td>Otto-Wagner Hospital, Vienna, Austria.</td>
</tr>
<tr>
<td></td>
<td>Robab Kohansal</td>
<td>Otto-Wagner Hospital, Vienna, Austria.</td>
</tr>
<tr>
<td>Belgium</td>
<td>Wim Janssens</td>
<td>Universitaire Ziekenhuizen, Leuven</td>
</tr>
<tr>
<td></td>
<td>Vincent Heinen</td>
<td>Centre Hospitalier Universitaire de Liège, Liège</td>
</tr>
<tr>
<td>Croatia</td>
<td>Neven Miculinic</td>
<td>Clinic for Respiratory Diseases, University Hospital “Zagreb”</td>
</tr>
<tr>
<td></td>
<td>Hrvoje Puretic</td>
<td>Clinic for Respiratory Diseases, University Hospital “Zagreb”</td>
</tr>
<tr>
<td>Country</td>
<td>Name</td>
<td>Affiliation</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------</td>
<td>----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Greece</td>
<td>Nikos Tzanakis</td>
<td>University Hospital of Heraklion, Dept of Thoracic Medicine, Medical School, University of Crete</td>
</tr>
<tr>
<td></td>
<td>Epameinondas Nontas Kosmas</td>
<td>Respiratory Division PNOI Metropolitan Hospital Neo Faliro, Greece</td>
</tr>
<tr>
<td>Ireland</td>
<td>Suzanne McCormack</td>
<td>Irish thoracic society</td>
</tr>
<tr>
<td></td>
<td>Tim McDonell</td>
<td>St Vincent’s University Hospital, Dublin</td>
</tr>
<tr>
<td>Malta</td>
<td>Cynthia Farrugia -Jones</td>
<td>Mater Dei Hospital, Malta</td>
</tr>
<tr>
<td>Poland</td>
<td>Joanna Chorostowska-Wynimko</td>
<td>Institute of Tuberculosis and Lung Diseases in Warsaw</td>
</tr>
<tr>
<td>Romania</td>
<td>Florin Mihaltan</td>
<td>Institutul De Pneumofoziologie &quot;Marius Nasta&quot;, Bucharest</td>
</tr>
<tr>
<td></td>
<td>Miron Alexandru Bogdan</td>
<td>&quot;Carol Davila&quot; University of Medicine and Pharmacy, Bucharest.</td>
</tr>
<tr>
<td></td>
<td>Ioana Munteanu</td>
<td>Institutul De Pneumofoziologie &quot;Marius Nasta&quot;, Bucharest</td>
</tr>
<tr>
<td>Slovakia</td>
<td>Ivan Solovic</td>
<td>National Institute for TB, Lung Diseases and Thoracic Surgery</td>
</tr>
<tr>
<td></td>
<td>Ruzena Tkacova</td>
<td>University Hospital Kosice Pneumolog. Clinic</td>
</tr>
<tr>
<td>Spain</td>
<td>Francisco Pozo-Rodríguez</td>
<td>Hospital 12 de Octubre, Instituto de Investigación i+12, Madrid, Spain</td>
</tr>
<tr>
<td></td>
<td>Julio Ancochea</td>
<td>Hospital Univeristario de La Princesa, Madrid</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Daiana Stolz</td>
<td>Universitätsspital Basel, Basel</td>
</tr>
<tr>
<td>Turkey</td>
<td>Mehmet Polatli</td>
<td>Adnan Menderes Üniversitesi Tip Fakültesi Göğüs Hastalıkları AD, Aydın</td>
</tr>
<tr>
<td></td>
<td>Elif Şen</td>
<td>Ankara Üniversitesi Tip Fakültesi Göğüs Hastalıkları AD, Ankara</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Christine Bucknall</td>
<td>Stobhill General Hospital, Glasgow</td>
</tr>
<tr>
<td></td>
<td>Sally Welham</td>
<td>British Thoracic Society</td>
</tr>
<tr>
<td></td>
<td>Christopher Routh</td>
<td>British Thoracic Society</td>
</tr>
</tbody>
</table>

**Project managers**
Monieek Haan. European Respiratory Society.
Marta Zarelli. European Respiratory Society.
Elmira Lechat.
Rhona J. Buckingham
ERS COPD Audit Liaison Officer
Guy Joos.

Local investigators
AUSTRIA
Dr Sascha Nassri, Landesklinikum Mostviertel Amstetten, Amstetten
Dr Nina Mitrovits, Krankenhaus der Barmherzigen Brüder Eisenstadt, Eisenstadt
Dr Otmar Schindler, Landeskrankenhaus Hörgas, Gratwein
Dr Christina Stöckl, Landeskrankenhaus Universitätsklinikum Graz, Graz
Dr Wolfgang Auer, Krankenhaus der Elisabethiner, Graz
Dr Johannes Bilek, Landesklinikum Thermenregion Hochepp, Grimmenstein
Dr Lorena Koch, Landeskrankenhaus Hohenems, Hohenems
Dr Thomas Jaritz, Landeskrankenhaus Klagenfurt, Klagenfurt
Dr Monika Kössler, Landesklinikum Krems, Krems/Donau
Dr Eva Kaufmann, Landeskrankenhaus Leoben Eisenerz, Leoben
Dr Michael Riedler, Allgemeines Krankenhaus der Stadt Linz, Linz
Dr. Elmar Brehm, Allgemeines Krankenhaus der Stadt Linz, Linz
Dr Sebastian Zillinger, Krankenhaus der Elisabethinen, Linz
Dr Franz Wimberger, Krankenhaus der Elisabethinen, Linz
Dr Daniel Krejci, Landeskrankenhaus Natters, Natters
Dr Jolande Schmid, Krankenhaus der Barmherzigen Schwestern, Ried/Innkreis
Mag. Gertraud Weiß, Landeskrankenhaus Salzburg, Salzburg
Dr. Lea Schirnhofer, Landeskrankenhaus Salzburg, Salzburg
Dr Bernd Lamprecht, Landeskrankenhaus Salzburg, Salzburg
Dr Gunther Schuller, Landeskrankenhaus Steyr, Steyr
Dr Heidrun Stetina-Zauner, Krankenhaus Vöcklabruck, Vöcklabruck
Dr Carolin Großruck, Klinikum Wels-Grieskirchen, Wels
Dr Bettina Heindl, Wilhelminenspital, 2. Med. Abt., Vienna
Dr. Irene Werner, Krankenhaus Hietzing, Abt. für Atmungs- und Lungenerk., Vienna
Dr. Irene Firlinger, Otto Wagner Spital, Vienna
Dr. Alexander Feist, Otto Wagner Spital, Vienna
Dr. Irina Steiner, Otto Wagner Spital, Vienna
Dr. Irene Firlinger, Otto Wagner Spital, 1. Intern. Lungenabt., Vienna
Dr. Leyla Ay, Rudolstiftung, Vienna
Prof. Felix Stockenhuber, Landeskrankenhaus, Oberpullendorf
Dr WHR Kiss Heinrich, Landeskrankenhaus, Oberwart
Prim. Luschning, Landeskrankenhaus, Bruck an der Mur
Dr Hannes Hoffmann, Landeskrankenhaus, Feldbach
Prof. Martin Mähring, Unfallkrankenhaus, Graz
Prof. Gerhard Schneider, Krankenhaus der Barmherzigen Brüder Graz-Eggenberg, Graz
Dr Wolfgang Thausing, Johannes von Gott-Pflegezentrum der Barmherzigen Brüder Graz-Kainbach, Graz-Ragnitz
Dr Erich Schaflinger, Krankenanstaltenverbund Müritzschlag-Mariazell, Müritzschlag
Dr. Heinz Stadler, Spitalsverbund Landeskrankenhaus Judenburg-Knittelfeld, Judenburg
Dr Heribert Walch, Landeskrankenhaus Graz-West, Graz
Dr Manfred Kuschnig, Krankenhaus der Elisabethinen, Klagenfurt
Dr Gerald Bruckmann, Krankenhaus, Spittal an der Drau
Dr Ralph Spernol, Landeskrankenhaus, Villach
Dr Albert Lingg, Landeskrankenhaus, Rankweil
Prof. Reinhard Haller, Krankenhaus Stiftung Maria-Ebene, Frastanz
Prof. Heinz Drexel, Landeskrankenhaus, Feldkirch-Tisis
Prof. Wolfgang Buchberger, Landeskrankenhaus Universitätsklinik, Innsbruck
Prof. Peter Lechleitner, Bezirkskrankenhaus, Lienz
Dr Josef Bazzanella, Bezirkskrankenhaus, Schwaz
Prof. Peter Sandbichler, Krankenhaus St Vinzenz, Zams
Prof. Klaus Gattringer, Bezirkskrankenhaus, Kufstein
Dr Werner Aufmesser, Krankenanstalt Radstadt Dr. Aufmesser, Radstadt
Dr Klaus Schwamberger, Aö Krankenhaus der Barmherzigen Brüder, Salzburg
Dr Gunther Ladurner, Christian Doppler-Klinik Salzburg - Universitätsklinikum der PMU, Salzburg
Prof. Reinhard Lenzhofer, Kardinal Schwarzenberg’sches Krankenhaus, Schwarzach im Pongau
Dr Werner Betzler, Allgemein öffentliches Krankenhaus Tamsweg des Landes Salzburg, Tamsweg
Dr Andreas Krauter, Krankenhaus der Barmherzigen Schwestern vom Hl. Vinzenz von Paul Linz, Linz
Dr Franz Thalhammer, Landeskrankenhaus, Bad Ischl
Dr Johann Schöpfl, Krankenhaus St Josef Braunau, Braunau am Inn
Dr Johann Ecker, Landeskrankenhaus, Gmunden
Dr Florian Marberger, Landeskrankenhaus, Kirchdorf an der Krems
Dr Josef Macher, Diakonissen-Krankenhaus Linz, Linz
Dr Ekkehard Oberhammer, Landeskrankenhaus, Schärding
Dr Michael Berger, Öffentliche Sonderkrankenanstalt für Innere Medizin, Sierning
Dr Gustav Bartl, Krankenhaus der Barmherzigen Brüder Wien, Vienna
Dr Johannes Thoma, Krankenhaus der Barmherzigen Schwestern, Vienna
Prof. Klaus Klaushofer, Hanusch-Krankenhaus Wien, Vienna
Prof. Fellinger Erich, Sanatorium Hera, Vienna
Prof. Johannes Bonelli, Krankenhaus St Elisabeth, Vienna
Prof. Franz Böhmer, Sozialmedizinisches Zentrum Sophienstital der Stadt Wien, Vienna
Prof. Paul Bratusch-Marrain, Landesklinikum Waldviertel Horn-Allensteig, Horn
Dr Wolfgang Hintringer, Landesklinikum Weinviertel Korneuburg-Stockerau, Korneuburg
Dr Gerd Eichberger, Landesklinikum Donauregion Tulln, Tulln an der Donau
Dr Andreas Schneider, Landesklinikum St Pölten-Lilienfeld, St Pölten
Prof. Manfred Weissinger, Landesklinikum Waldviertel Zwettl-Gmünd-Waidhofen/Thaya, Zwettl
Dr Rupert Strasser, Landesklinikum Mostviertel Melk, Melk
Prof. Gerhard Lunglmayr, Landesklinikum Weinviertel Mistelbach, Mistelbach an der Zaya
Dr Johann Pidlich, Landesklinikum Thermenregion Baden-Mödling, Mödling

BELGIUM
Wim Janssens, Universitaire Ziekenhuizen, Leuven
Vincent Heinen, Centre Hospitalier Universitaire de Liège, Liège
Antoine Fremault, Grand Hôpital de Charleroi/Site St Joseph, Charleroi
Benoît Colinet, Grand Hôpital de Charleroi/Site St Joseph, Charleroi
Eric Derom, Universitair Ziekenhuis, Ghent
Marc Daenen, Ziekenhuis Oost-Limburg, Genk
Geert Tits, Sint-Andriesziekenhuis, Tielt
Valérie Van Damme, Sint-Andriesziekenhuis, Tielt
Vincent Ninane, CHU Saint-Pierre, Brussels
Giuseppe Liistro, Cliniques universitaires Saint-Luc, Brussels
Dominique Butenda, Centre Hospitalier du Bois de l'Abbaye et de Hesbaye, Seraing
Pierre Duchatelet, Réseau Hospitalier de Médecine Sociale, Baudour
Stéphane Kleis, Centre Hospitalier Peltzer - La Tourrelle, Verviers
Michèle Ramaut, Centre Hospitalier Chrétien, Liège
Frédéric Fievet, Centre Hospitalier Chrétien, Liège
Jan Lamont, Algemeen Ziekenhuis Maria Middelares, Ghent
Ingel Demedts, Heilig-Hart Ziekenhuis, Roeselare/Menen
Kris Carron, Heilig-Hart Ziekenhuis, Roeselare/Menen
Philippe Bertrand, Heilig-Hart Ziekenhuis, Roeselare/Menen
Bart De Saedeleer, Algemeen Stedelijk Ziekenhuis, Geraardsbergen
Christian Quaden, Centre Hospitalier de Mouscron, Mouscron
Karine Laurent, Clinique Saint-Jean, Brussels
Rob Schildermans, Algemeen Ziekenhuis Sint-Lucas, Bruges
Philippe Rogiers, Algemeen Ziekenhuis Sint-Lucas, Bruges
Rudi Peché, CHU de Charleroi, Charleroi
Dominique Lauwers, CHU de Charleroi, Charleroi
Valérie Dufresne, CHU de Charleroi, Charleroi
Pierre Brancaleone, Centre Hospitalier Jolimont-Lobbes, La Louvière
Michel Vander Stappen, CHR Haute Senne, Soignies
Eric Marchand, Cliniques universitaires UCL de Mont-Godinne, Yvoir
Brigitte Janssens, AZ Sint-Lucas, Ghent
Peter Bogaerts, AZ Klina, Brasschaat

CROATIA
Dr Tatjana Tokić, General Hospital “Karlovac”
Dr Marijana Zadro-Bahnik, General Hospital “Karlovac”
Dr Tajana Jalulić-Glinčić, Special Hospital for Lung Diseases “Rockefellerova”
Dr Ljerka Glad, Special Hospital for Lung Diseases “Rockefellerova”
Prof. Kornelija Miše, Dept of Respiratory Medicine, University Hospital “Split”
Dr Jasmina Svalina-Grmuša, Dept of Respiratory Medicine, University Hospital “Split”
Dr Gordana Štepanović, Dept of Pulmonology Petrinja, General Hospital “Sisak”
Dr Vesna Trkėš, Dept of Pulmonology Petrinja, General Hospital “Sisak”
Dr Suzana Sinović-Kolanović, General Hospital “Zadar”
Dr Željko Čulina, General Hospital “Zadar”
Dr Gordana Petrović, Dept of Pulmonology, Clinical Hospital “Osijek”
Dr Sandra Škrinjar-Cinčar, Dept of Pulmonology, Clinical Hospital “Osijek”
Dr Martina Hajduh, Hospital for Lung Diseases and Tuberculosis “Klenovnik”
Dr Ljubica Radmilović Hospital for Lung Diseases and Tuberculosis “Klenovnik”
Dr. Ljilajna Bulat-Kardum, Dept for Respiratory Medicine, University Hospital “Rijeka”
Dr Igor Barković, Dept for Respiratory Medicine, University Hospital “Rijeka”
Dr Miroslav Horvat, General Hospital “Čakovec”
Dr Ingrid Škvorc General Hospital “Čakovec”
Dr Neven Miculinić, Clinic for Respiratory Diseases, University Hospital “Zagreb”
Dr Hrvoje Puretić, Clinic for Respiratory Diseases, University Hospital “Zagreb”

GREECE
Nikos Tzanakis, University Hospital of Heraklion, Dept of Thoracic Medicine, Medical School, University of Crete
Giannis Giannarakis, University Hospital of Heraklion, Dept of Thoracic Medicine, Medical School, University of Crete
Giorgos Papadogiannis, University Hospital of Heraklion, Dept of Thoracic Medicine, Medical School, University of Crete
N.M. Siafakas, University Hospital of Heraklion, Dept of Thoracic Medicine, Medical School, University of Crete
Nikoletta Robina, Chest Diseases Hospital Sotiria–Athens, Dept of Respiratory Medicine, University of Athens
Petros Bakakos, Chest Diseases Hospital Sotiria–Athens, Dept of Respiratory Medicine, University of Athens
Sofianna Gennimata, Chest Diseases Hospital Sotiria–Athens, Dept of Respiratory Medicine, University of Athens
Tasos Palamidas, Chest Diseases Hospital Sotiria–Athens, Dept of Respiratory Medicine, University of Athens
Filippos Emmanouil, Chest Diseases Hospital Sotiria–Athens, Dept of Respiratory Medicine, University of Athens
Georgios Kaltsakas, Chest Diseases Hospital Sotiria–Athens, Dept of Respiratory Medicine, University of Athens
Manos Alchanatis, Chest Diseases Hospital Sotiria–Athens, Dept of Respiratory Medicine, University of Athens
Valantis Papageorgiou, Chest Diseases Hospital Sotiria–Athens, 1st Dept of Respiratory Medicine
Nikos Poulakis, Chest Diseases Hospital Sotiria–Athens, 1st Dept of Respiratory Medicine
Haris Lamprakis, Chest Diseases Hospital Sotiria–Athens, 2nd Dept of Respiratory Medicine
Fragiskos Vlastos, Chest Diseases Hospital Sotiria–Athens, 2nd Dept of Respiratory Medicine
Martha Andritsou, Chest Diseases Hospital Sotiria–Athens, 3rd Dept of Respiratory Medicine
Sylvia Dumitrou, Chest Diseases Hospital Sotiria–Athens, 3rd Dept of Respiratory Medicine
Nontas Kosmas, Chest Diseases Hospital Sotiria–Athens, 4th Dept of Respiratory Medicine
Antonis Bastas, Chest Diseases Hospital Sotiria–Athens, 4th Dept of Respiratory Medicine
Georgios Tsoukalas, Chest Diseases Hospital Sotiria–Athens, 4th Dept of Respiratory Medicine
George Hillas, Chest Diseases Hospital Sotiria–Athens, Dept of Respiratory and Critical Care Medicine
Kostas Sagris, Chest Diseases Hospital Sotiria–Athens, Dept of Respiratory and Critical Care Medicine
Demitris Veldekis, Chest Diseases Hospital Sotiria–Athens, Dept of Respiratory and Critical Care Medicine
Mixalis Toumbis, Chest Diseases Hospital Sotiria–Athens, 6th Dept of Respiratory Medicine
Eleftherios Zervas, Chest Diseases Hospital Sotiria–Athens, 7th Dept of Respiratory Medicine
Mina Gaga, Chest Diseases Hospital Sotiria–Athens, 7th Dept of Respiratory Medicine
Vasillis Kouranos, Chest Diseases Hospital Sotiria–Athens, 8th Dept of Respiratory Medicine
Nina Anagnostopoulou, Chest Diseases Hospital Sotiria–Athens, 8th Dept of Respiratory Medicine
Fotis Perlikos, Chest Diseases Hospital Sotiria–Athens, 12th Department of Respiratory Medicine
Nikos Vasilopoulos, Chest Diseases Hospital Sotiria–Athens, 12th Department of Respiratory Medicine
Mata Tsikrika, Sismanogleio General Hospital, Athens, 3rd Dept of Respiratory Medicine
Filia Diamantea, Sismanogleio General Hospital, Athens, 3rd Dept of Respiratory Medicine
Vlasis Polychronopoulos, Sismanogleio General Hospital, Athens, 3rd Dept of Respiratory Medicine
Olga Vartzioti, Sismanogleio General Hospital, Athens, 2nd Dept of Respiratory Medicine
Stelios Michailidis, Sismanogleio General Hospital, Athens, 2nd Dept of Respiratory Medicine
Isabella Skekensleger, Attikon General Hospital, 2nd Respiratory Medicine Dept, University of Athens Medical School
Stelios Loukidis, Attikon General Hospital, 2nd Respiratory Medicine Dept, University of Athens Medical School
Spyros Papiris, Attikon General Hospital, 2nd Respiratory Medicine Dept, University of Athens Medical School
Stavroula Kolokytha, Evangelismos Hospital, University of Athens Medical School, Dept of Pulmonary and Critical Care Medicine Ilias Siempos, Evangelismos Hospital, University of Athens Medical School, Dept of Pulmonary and Critical Care Medicine
Thoedoros Vasilakopoulos, Evangelismos Hospital, University of Athens Medical School, Dept of Pulmonary and Critical Care Medicine
Alexis Papadopoulos, Fleming General Hospital, Athens
Kostas Bartziotkas, Fleming General Hospital, Athens
Katerina Haniotou, Fleming General Hospital, Athens
Eleni Karetsi, University Hospital of Larissa, Medical School, University Of Thessaly
Kostas Gourgoulianis, University Hospital of Larissa, Medical School, University Of Thessaly
Marios Froudarakis, University Hospital of Alexandroupolis, Dept of Respiratory Medicine, Thrace
Argyris Tzouvelekis, University Hospital of Alexandroupolis, Dept of Respiratory Medicine, Thrace
Paul Zaragoulidis, University Hospital of Alexandroupolis, Dept of Respiratory Medicine, Thrace
Demosthenes Bouros, University Hospital of Alexandroupolis, Dept of Respiratory Medicine, Thrace
Giorgos Crisofakis, Rethymno General Hospital, Rethymno, Crete, Dept of Respiratory Medicine
Kostas Kallergis, Rethymno General Hospital, Rethymno, Crete, Dept of Respiratory Medicine
Voula Mpousmpoukilia, General Hospital Of Kavala, Macedonia, Dept of Respiratory Medicine
Anastasia Patakà, Papanikoalaou General Hospital, University Respiratory Failure Unit, Aristotle University, Thessaloniki
Paraskevi Argyropoulou-Paraka, Papanikoalaou General Hospital, University Respiratory Failure Unit, Aristotle University, Thessaloniki
Dionisis Spyrotopoulos, G. Papanikoalaou General Hospital, Pulmonary Dept, General Hospital, Aristotle University of Thessaloniki
Kostas Zarogoulidis, G. Papanikoalaou General Hospital, Pulmonary Dept, General Hospital, Aristotle University of Thessaloniki
Maria Konoglou, G. Papanikoalaou General Hospital, 1st Dept of Respiratory Medicine, Thessaloniki
Eva Fouka, G. Papanikoalaou General Hospital, 1st Dept of Respiratory Medicine, Thessaloniki
Nikos Galanis, G. Papanikoalaou General Hospital, 2nd Dept of Respiratory Medicine, Thessaloniki
George Spyropoulos, G. Papanikoalaou General Hospital, 2nd Dept of Respiratory Medicine, Thessaloniki
Venetia Tsara, G. Papanikoalaou General Hospital, 2nd Dept of Respiratory Medicine, Thessaloniki
Kyriakos Karkoylis, University Hospital of Patras, Patra, Dept of Respiratory Medicine
Kostas Spiropoulos, University Hospital of Patras, Patra, Dept of Respiratory Medicine
Thanasis Konstantinidis, University Hospital of Ioannina, Ioannina, Dept of Respiratory Medicine
Stavros Konstantopoulos, University Hospital of Ioannina, Ioannina, Dept of Respiratory Medicine
Anna Gavriilidou, Papageorgiou General Hospital, Thessaloniki, Dept of Respiratory Medicine
Mariana Kakoura, Papageorgiou General Hospital, Thessaloniki, Dept of Respiratory Medicine
Elefteria Hainis, Corfu General Hospital, Corfu, Dept of Respiratory Medicine
Kyriakos Hainis, Corfu General Hospital, Corfu, Dept of Respiratory Medicine
Stavroula Amanetopoulou, General Hospital of Nikaia, Athens, Dept of Respiratory Medicine
Georgios Mathioudakis, General Hospital of Nikaia, Athens, Dept of Respiratory Medicine
Petros Oikonomidis, Filiates General Hospital, Thesprotia, Dept of Respiratory Medicine
Kostas Papas, Venizeleio General Hospital Heraklion, Crete, Dept of Respiratory Medicine
Nikos Mpachlitzanakis, Hania General Hospital, Crete, Dept of Respiratory Medicine
Vikki Krietepe, Hania General Hospital, Crete, Dept of Respiratory Medicine
Manolis Daouakakis, 401 General Army Hospital, Athens, Dept of Pneumonology
Kostas Psathakis, 401 General Army Hospital, Athens, Dept of Pneumonology
Vikki Krietepe, Hania General Hospital, Crete, Dept of Respiratory Medicine
Evi Argiana, Asklepieion Hospital Heraklion, Crete
Tina Lamprini, General Hospital Of Sparta, Lakonia, Peloponissos

IRELAND
Dr Michael Henry, Cork University Hospital
Ms Bernadette Bowen, Cork University Hospital
Dr Edward Mc Swiney, Cork University Hospital
Dr Liam Cormican, Connolly Hospital Dublin
Dr Kenneth Bolger, Connolly Hospital Dublin
Dr Mazan Al Alawi, Connolly Hospital Dublin
Dr Sophie Kerr, Connolly Hospital Dublin
Ms Michele Cuddihy, Connolly Hospital Dublin
Ms Pamela Quinn, Connolly Hospital Dublin
Dr Joan Power, Naas General Hospital
Dr Caroline O Connell, Naas General Hospital
Dr Ijad Kamal, Naas General Hospital
Dr Shabhaz Sheikh, AMNCH, Tallaght, Dublin
Dr Eddie Moloney, AMNCH, Tallaght, Dublin
Dr Terry O’Connor, Mercy University Hospital, Cork
Ms Bernie O’Connor, Mercy University Hospital, Cork
Prof. Tim McDonnell, St Vincent’s University Hospital, Dublin
Dr Patrick Mitchell, St Vincent’s University Hospital, Dublin
Ms Mary Frances O’Driscoll, St Michael’s Hospital, Dublin
Dr Silke Ryan, St Michael’s Hospital, Dublin
Dr Vera Keatings, Letterkenny General Hospital
Mrs Sonya Murray, Letterkenny General Hospital
Dr Navid Valizadeh, Letterkenny General Hospital
Dr Liam Doherty, Bon Secours Hospital, Cork
Dr Notradamus Medina, Bon Secours Hospital, Cork
Dr Rory O’Donnell, St James’s Hospital, Dublin
Dr Parthiban Nadarajan, St James’s Hospital, Dublin
Ms Bettina Korn, St James’s Hospital, Dublin
Mr Stephen Shelly, St James’s Hospital, Dublin
Dr Seamus Linnane, Blackrock Clinic, Dublin

MALTA
Dr Cynthia Farrugia Jones
Dr Eleonor Gerada
Dr Josephine Bigeni

POLAND
Paweł Kuca, Instytut Gruźlicy i Chorób Płuc w Warszawie
Monika Targowska, Instytut Gruźlicy i Chorób Płuc w Warszawie
Małgorzata Czajkowska-Malinowska, Kujawsko-Pomorskie Centrum Pulmonologii w Bydgoszczy
Piotr Dąbrowiecki, CSK MON Wojskowy Instytut Medyczny w Warszawie
Andrzej Chciałowski, CSK MON Wojskowy Instytut Medyczny w Warszawie
Beata Mokwa, Szpital Specjalistyczny im. J. K. Łukowicza w Chojnicach
Małgorzata Kaczmarek, Szpital Specjalistyczny im. J. K. Łukowicza w Chojnicach
Joanna Chamera-Janicka, SPZOZ w Proszowicach
Edyta Kowalska, SPZOZ w Proszowicach
Wojciech Skucha, SPZOZ w Proszowicach
Mariola Gacek, Specjalistyczny Zespół Chórów Płuc i Gruźlicy w Bystrej
Małgorzata Konior, Specjalistyczny Zespół Chórów Płuc i Gruźlicy w Bystrej
Agnieszka Sadzikowska, Szpital Powiatowy w Chrzanowie
Jolanta Serafiñ-Bromblik, Szpital Powiatowy w Chrzanowie
Karolina Adamiczyn-Bąk, Uniwersyteckie Centrum Kliniczne, Gdańsk Uniwersytet Medyczny
Karolina Kita, Uniwersyteckie Centrum Kliniczne, Gdańsk Uniwersytet Medyczny
Joanna Aplio, Regionalny Szpital Specjalistyczny im dr. Władysława Bięgańskiego w Grudziądzu
Lechósław Jaszczółt, SP ZOZ Szpital Wojewódzki w Jeleniej Górze
Bożena Ziółkowska-Grača, Szpital Uniwersytecki w Krakowie
Aleksander Kania, Szpital Uniwersytecki w Krakowie
Dorota Daniel, Krakowski Szpital Specjalistyczny im. Jana Pawła II
Renata Bunk, Krakowski Szpital Specjalistyczny im. Jana Pawła II
Sebastian Majewski, Uniwersytecki Szpital Kliniczny nr 1 w Łodzi
Maciej Ciebiada, Uniwersytecki Szpital Kliniczny nr 1 w Łodzi
Magdalena Kostrzewska, Szpital Kliniczny Przemienienia Pańskiego Uniwersytetu Medycznego w Poznaniu
Mariusz Torus, Szpital Kliniczny Przemienienia Pańskiego Uniwersytetu Medycznego w Poznaniu
Marek Kamiński, Specjalistyczny Szpital im. prof. Alfreda Sokołowskiego w Szczecinie
Renata Bonikowska, Specjalistyczny Szpital im. prof. Alfreda Sokołowskiego w Szczecinie
Joanna Neuman, Specjalistyczny Szpital im. prof. Alfreda Sokołowskiego w Szczecinie
Beata Chmielowicz, Akademicki Szpital Kliniczny we Wrocławiu
Robert Pawłowicz, Akademicki Szpital Kliniczny we Wrocławiu
Aneta Kowal, Dolnośląskie Centrum Gruźlicy i Chorób Płuc
Monika Kosacka, Dolnośląskie Centrum Gruźlicy i Chorób Płuc
Anna Gostkowska-Malec, Dolnośląskie Centrum Gruźlicy i Chorób Płuc
Małgorzata Maksymiak, Samodzielny Publiczny Szpital Kliniczny nr 3 w Zabru
Justyna Wyrował, Samodzielny Publiczny Szpital Kliniczny nr 3 w Zabru
Roksana Małota, Samodzielny Publiczny Szpital Kliniczny nr 3 w Zabru
Wanda Łotogniewska, Samodzielny Publiczny Szpital Kliniczny nr 3 w Zabru
Jarosław Sokołowski, Szpital Wojewódzki we Włocławku
Jolanta Helińska, Szpital Wojewódzki we Włocławku
Paweł Wudarski, Wojewódzki Szpital Zespolony im. L. Rydygiera w Toruniu
Ewa Trawińska, Wojewódzki Szpital Zespolony im. L. Rydygiera w Toruniu
Tadeusz Zienkowiak, Szpital Czerniakowski w Warszawie
Jan Lesiński, Szpital Czerniakowski w Warszawie
Zygmunt Konieczny, Samodzielny Publiczny Zakład Opieki Zdrowotnej ZOZ w Głuchołazach
Anna Piskorowska-Pliś, Szpital Wojewódzki w Opolu

ROMANIA
Traian Mihăescu, Spital Clinic Pneumologie, Iasi
Cojocar Cristian, Spital Clinic Pneumologie, Iasi
Monica Carmen Pop, Spitalul Clinic De Pneumoftiziologie "Leon Danielio" Cluj-Napoca, Cluj-Napoca
Mihaela Pop, Spitalul Clinic De Pneumoftiziologie "Leon Danielio" Cluj-Napoca, Cluj-Napoca
Gabriela Jimborean, Spitalul Clinic Judeţean Mureş, Mures
Corina Budin, Spitalul Clinic Judeţean Mureş, Mures
Voicu Tudorache, Spitalul Clinic De Boli Infecţioase şi Pneumoftiziologie "Dr. Victor Babes", Timisoara
Zeno-Ioan Frâţila, Spitalul Clinic De Boli Infecţioase şi Pneumoftiziologie "Dr. Victor Babes", Timisoara
Mimi Floarea Nițu, Spitalul Clinic De Boli Infecţioase şi Pneumoftiziologie „Dr. Victor Babeș“, Craiova
Mihai Olteanu, Spitalul Clinic De Boli Infecţioase şi Pneumoftiziologie „Dr. Victor Babeș“, Craiova
Cristina Oana Arghir, Spitalul Clinic De Pneumoftiziologie, Constanta
Mihaela Trenchea, Spitalul Clinic De Pneumoftiziologie, Constanta
Ovidiu Frâncu, Spitalul De Pneumoftiziologie, Sibiu
Elena Maria Scridon, Spitalul De Pneumoftiziologie, Sibiu
Gheorghe Nini, Spitalul TBC Arad, Arad
Ioan Stelian Morariu, Spitalul TBC Arad, Arad
Sorina Oana Alexandrescu, Spitalul De Pneumoftiziologie Brasov, Brasov
Mureșan Alina, Spitalul De Pneumoftiziologie Brasov, Brasov
Florin Mihațan, Institutul De Pneumoftiziologie "Marius Nasta", București
Miron Bogdan, Institutul De Pneumoftiziologie "Marius Nasta", București
Alina Croitoru, Institutul De Pneumoftiziologie "Marius Nasta", București
Ioana Munteanu, Institutul De Pneumoftiziologie "Marius Nasta", București

SLOVAKIA
Ivan Solovic, National Institute for TB, Lung Diseases and Thoracic Surgery
Ruzena Tkacova, University Hospital Kosice Pneumolog. Clinica
Ivan Skyba, University Hospital Kosice Pneumolog. Clinica
Ivan Kocan, University Hospital Martin Pneumolog. Clinica

SPAIN
José Calvo Bonachera, Complejo Hospitalario Torrecárdenas
Maria Paz Martínez Cortes, Complejo Hospitalario Torrecárdenas
Bernardino Alcázar Navarrete, Complejo Hospitalario de Jaén
Armando Falces Sierra, Hospital de La Línea de la Concepción
Marisol Arenas de la Riva, Hospital Universitario Reina Sofía
Rosa Vázquez Oliva, Hospital Infantil de Cartagena
Fernando Hernández Utrera, Hospital Infantil de Cartagena
Juan Manuel Bravo Santiveris, E.P.H.A.G. Alto Guadalquivir (Andújar)
Francisco Canales Cid, E.P.H.A.G. Alto Guadalquivir (Andújar)
Jose Luis López Campos, Hospital Universitario Virgen del Rocío
Pablo Pérez Navarro, Hospital Universitario Virgen del Rocío
Inmaculada Alfageme Michavila, Hospital Universitario Valme
Zulema Palacios Hidalgo, Hospital Universitario Valme
Fernando Romero, Hospital Puerta del Mar
Isidro Blanco, Hospital Puerta del Mar
Gregorio Soto Campos, Hospital General de Jeréz de la Frontera
Aída García Cuesta, Hospital General de Jeréz de la Frontera
Carlos Rueda, Hospital Comarcal de Vélez Málaga
Alicia Conde, Hospital Universitario San Cecilio
Joaquín Carlos Costan Galicia, Hospital Clínico Universitario Lozano Blesa
Laura Anoro Abenoza, Hospital Clínico Universitario Lozano Blesa
Salvador Bello Dronda, Hospital Miguel Servet
Andrés Sánchez Barón, Hospital Miguel Servet
Luis Borderías, Hospital San Jorge de Huesca
Helena Briz Muñoz, Hospital San Jorge de Huesca
Cristina Martínez, I.N. Silicosis de Asturias
Marta García Clemente, I.N. Silicosis de Asturias
Ana Pando Sandoval, I.N. Silicosis de Asturias
Francisco Julián López González, I.N. Silicosis de Asturias
Aida Quero Martínez, I.N. Silicosis de Asturias
Fernando Álvarez Navascues, Hospital San Agustín de Avilés
Manuel Villanueva Montes, Hospital San Agustín de Avilés
Teresa Pascual Pascual, Hospital de Cabueñes Gijón
Antonio Cascales García, Hospital Can Misses, Ibiza
Álvaro de Astorza, Hospital Can Misses, Ibiza
Salvador Pons, Hospital Son Llàtzer
Maria Rosa Irigaray, Hospital de Manacor
Maria José Cons, Hospital de Manacor
Borja García-Cosío Piqueras, Hospital Son Dureta
Rocío Córdova Díaz, Hospital Son Dureta
Magdalena Alonso, Hospital Nuestra Señora de la Candelaria, Tenerife
Ruth Pitti, Hospital Nuestra Señora de la Candelaria, Tenerife
Luisa Eiroa González, Hospital Nuestra Señora de la Candelaria, Tenerife
Ana Velázquez, Hospital Nuestra Señora de la Candelaria, Tenerife
Ramón Agüero Balbín, Hospital Marqués de Valdecilla
Carlos Amado Diago, Hospital Marqués de Valdecilla
Beatriz Abascal Bolado, Hospital Marqués de Valdecilla
Miguel Zabaleta Murguiondo, Hospital de Laredo
Mar García Pérez, Hospital de Sierrallana
Néstor Soler Porcar, Hospital Clinic Barcelona
Silvia Valls, Hospital Clinic Barcelona
Nuria Rodríguez Lázaro, Hospital Comarcal de L´alt Penedés, Vilefrance de Penedés
Joaquín Gea Giral, Hospital del Mar
Roser Pedreny, Hospital del Mar
Sergi Pascual, Hospital del Mar
Ignasi García Olivé, Hospital Universitari Germans Trias i Pujol
Carlos Martínez, Hospital Universitari Germans Trias i Pujol
Ramona Hervas, Hospital Universitari Germans Trias i Pujol
Esther Rodríguez González, Hospital Vall d’Hebron
Eva Tapia Melechon, Hospital Vall d’Hebron
Ángeles Barrio Guirado, Hospital Vall d’Hebron
Milagros Gándara Sanz, Hospital Vall d’Hebron
David Lobillo Lopez, Hospital Vall d’Hebron
Eugenia Bueno Portela, Hospital Vall d’Hebron
Luis Lores Obradors, Hospital General Par Sanitari Sant Joan de Déu
Eduard Monso, Hospital Parc Taulí de Sabadell
Laia Seto Gort, Hospital Parc Taulí de Sabadell
Leonardo Esteban, Hospital Joan XXIII de Tarragona
Manel Haro Estarriol, Hospital Doctor Josep Trueta de Girona
Mª José Peiró Puyal, Hospital Virgen de la Luz (Cuenca)
José María Peñas Herrero, Hospital Virgen de la Luz (Cuenca)
Maria Eugenia Casado López, Hospital Virgen de la Luz (Cuenca)
Rosario Vargas Gonzalez, Hospital Virgen de la Luz (Cuenca)
Julio Hernández Vázquez, Hospital Infanta Leonor
Yunelsey Anta Mejías, Hospital Infanta Leonor
Soledad Alonso Viteri, Hospital Príncipe de Asturias Alcalá Henares
Alicia Ferreira, Hospital Príncipe de Asturias Alcalá Henares
Antonio Ruiz, Hospital Príncipe de Asturias Alcalá Henares
Concepción Losada, Hospital Príncipe de Asturias Alcalá Henares
Esther Alonso Peces, Hospital Príncipe de Asturias Alcalá Henares
Gerardo Vázquez, Hospital Príncipe de Asturias Alcalá Henares
Julio Flores, Hospital Príncipe de Asturias Alcalá Henares
Dolores Álvaro, Hospital de Móstoles
Natividad Quílez Ruíz-Rico, Hospital de Móstoles
Raquel Pérez Rojo, Hospital de Móstoles
María Vázquez Mezquita, Hospital de Móstoles
Olg Navarrete, Hospital de Móstoles
Silvia Sánchez, Hospital de Móstoles
Asunción Perpina, Hospital Severo Ochoa (Leganés)
Pilar Alba, Hospital Severo Ochoa (Leganés)
Damián Malia Alvarado, Hospital de los Arcos
Nuria Castejón Pina, Hospital de los Arcos
Jose Antonio Ros Lucas, Hospital de los Arcos
Ada Luz Andreu Rodríguez, Hospital de los Arcos
Juan Miguel Sánchez Nieto, Hospital General Universitario Morales Meseguer
Roberto Bernabeu Mora, Hospital General Universitario Morales Meseguer
Manuel Castilla Martínez, Hospital General Universitario Morales Meseguer
Olga Meca Birlanga, Hospital General Universitario Morales Meseguer
Pilar Berlinches, Hospital Santa Lucía
Inés Bernal, Hospital Santa Lucía
Javier Hueto Pérez de Heredia, Complejo Hospitalario de Navarra
Joan Boldu Mitgans, Complejo Hospitalario de Navarra
Pilar Cebollero Rivas, Complejo Hospitalario de Navarra
José Antonio Cascante Rodrígido, Complejo Hospitalario de Navarra
Víctor Manuel Eguía Astibia, Complejo Hospitalario de Navarra
Idoya Pascal Martínez, Complejo Hospitalario de Navarra
Pablo Catalán Serra, Hospital de Requena
Eva Martínez Moragon, Hospital de Sagunto
Jose Manuel Querol, Hospital de Orihuela
Concha Pellicer, Hospital Frances de Borja, Gandia
Eusebi Chiner Vives, Hospital San Joan de Alicante
Cristina Senent Español, Hospital San Joan de Alicante
José Norberto Sancho Chust, Hospital San Joan de Alicante
Ángela Cervera Juan, Hospital Dr. Peset
Estrella Fernández-Fabrellas, Hospital Dr. Peset
Anna Santabasilisa, Hospital Dr. Peset
Susana Herrera, Hospital Dr. Peset
Ruben Lera, Hospital Dr. Peset
Cristina Miralles, Hospital Dr. Peset
Belen Orosa, Hospital Dr. Peset
Elsa Naval Sendra, Hospital de la Ribera
Inmaculada Lluch Tortajada, Hospital de la Ribera
Maria Cruz González, Hospital Clínico de Valencia
Paola Lisseth Ordoñez Gómez, Hospital Clínico de Valencia
Erick Leonardo Monclou Garzón, Hospital Clínico de Valencia
Maria Dolores Martínez Pitarch, Hospital Clínico de Valencia
Lucia Gil Maneu, Hospital Clínico de Valencia
Margarita Marín Royo, Hospital General de Castellón
German Llavador, Hospital General de Castellón
Alfonso Martinez, Hospital General de Castellón
Juliana Rissi, Hospital General de Castellón
Maria Jose Bueso, Hospital General de Castellón

SWITZERLAND
Dr Jürg Barandun, Lungenzentrum Hirslanden, Zürich
Dr Heinz Borer, Bürgerspital Solothurn, Solothurn
Dr Albrecht Breitenbücher, Kantonsspital Bruderholz, Bruderholz
Dr Kathleen Jahn, Kantonsspital Bruderholz, Bruderholz
Prof. Martin Brutsche, Kantonsspital St Gallen, St Gallen
Dr Jochen Rüdiger, Kantonsspital St Gallen, St Gallen
Dr René Fiechter, GZO Spital Wetzikon, Wetzikon
Prof. Thomas Geiser, Inselspital, Berne
Dr Michael Grob, Spitalzentrum Biel, Biel
Dr Erich Helfenstein, Lungenpraxis Hirslanden – Klinik St Anna, Lucerne
Dr Lilian Junker, Spital Thun, Thun
Dr Werner Karrer, Luzerner Höhenklinik, Crans-Montana
Dr Patrick Brun, Luzerner Höhenklinik, Crans-Montana
Dr Erich Köhler, Kantonsspital Liestal, Liestal
Dr Eva Koltai, Spital Laufenburg, Laufenburg
Dr Marc Maurer, Kantonsspital Aarau, Aarau
Dr Daniel Schilter, Spital Bern-Tiefenau, Berne
Dr Tino Schneider, Kantonsspital Chur, Chur
Dr Thomas Sigrist, Zuger Kantonsspital AG, Baar
Prof. Markus Solèr, St Claraspital, Basel
Prof. Robert Thurnheer, Thurgauer Kantonsspital, Münsterlingen
Prof. Daiana Stolz, Universitätsspital Basel, Basel

TURKEY
Dr Mehmet Polatlı, Adnan Menderes Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Aydın
Dr Aykut Çilli, Akdeniz Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Antalya
Dr Fulya Danacı, Akdeniz Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Antalya
Dr Nurhan Sarıoğlu, Akyazı Devlet Hastanesi, Sakarya
Dr Elif Şen, Ankara Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Ankara
Dr Leyla Sağlam, Atatürk Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Erzurum
Dr Elif Yılmazel Uçar, Atatürk Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Erzurum
Dr Esra Kunt Uzaslan, Bursa Uludağ Üniversitesi Tıp Fakültesi, Göğüs Hastalıkları AD, Bursa
Dr Ayşin Şahar Coşkun, Celal Bayar Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Manisa
Dr Uğur Gönlügür, Çanakkale Onsekiz Mart Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Çanakkale
Dr İsmail Hanta, Çukurova Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Adana
Dr Abdurrahman Şenyiğit, Dicle Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Diyarbakır
Dr Çetin Tanrikulu, Dicle Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Diyarbakır
Dr Cengizhan Sezgi, Dicle Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Diyarbakır
Dr Abdurrahman Abakay, Dicle Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, Diyarbakır
Dr. Abdullah Sayiner, Ege Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, İzmir
Dr Alev Gürgün, Ege Üniversitesi Tıp Fakültesi Göğüs Hastalıkları AD, İzmir
UNITED KINGDOM

England

Dr Tobenna Onyirioha, Great Western Hospitals NHS Foundation Trust, Swindon
Dr Andrew Stanton, Great Western Hospitals NHS Foundation Trust, Swindon
Dr Alaisdair Stewart, Medway NHS Foundation Trust, Gillingham
Dr Robert Stone, Taunton & Somerset NHS Foundation Trust, Taunton
Ms Tendai Chitakasha, Cambridge University Hosps NHS Foundation Trust, Addenbrookes Hospital, Cambridge
Dr Sian Stinchcombe, Cambridge University Hosps NHS Foundation Trust, Addenbrookes Hospital, Cambridge
Ms Lynn Greatley, Airedale NHS Trust, Airedale General Hospital, Keighley
Dr Vinod Palissery, Airedale NHS Trust, Airedale General Hospital, Keighley
Dr Justin Tuggey, Airedale NHS Trust, Airedale General Hospital, Keighley
Dr Ash Husain, Barnet & Chase Farm Hospitals NHS Trust, Barnet Hospital, Barnet
Dr Rama Vancheeswaran, Barnet & Chase Farm Hospitals NHS Trust, Barnet Hospital, Barnet
Dr Richard Budd, Barnsley Hospital NHS Foundation Trust, Barnsley Hospital, Barnsley
Dr Hazim Mahdi, Barnsley Hospital NHS Foundation Trust, Barnsley Hospital, Barnsley
Dr Nandini Banerjee, Basildon and Thurrock Uni Hsp NHS Foundation Trust, Basildon University Hospital, Basildon
Ms Helen Hill, Basildon and Thurrock Uni Hsp NHS Foundation Trust, Basildon University Hospital, Basildon
Dr Dipak Mukherjee, Basildon and Thurrock Uni Hsp NHS Foundation Trust, Basildon University Hospital, Basildon
Dr Mohammed Azher, Bedford Hospital NHS Trust, Bedford Hospital, Bedford
Ms Lorraine Curtin, Bedford Hospital NHS Trust, Bedford Hospital, Bedford
Dr Enson Thomas, Bedford Hospital NHS Trust, Bedford Hospital, Bedford
Mrs T. Lightowler, Bradford Teaching Hospitals NHS Foundation Trust, Bradford Royal Infirmary, Bradford
Mr Andy O’Dwyer, Bradford Teaching Hospitals NHS Foundation Trust, Bradford Royal Infirmary, Bradford
Dr Katrina Curtis, United Bristol Healthcare NHS Trust, Bristol Royal Infirmary, Bristol
Mr Stuart Metcalfe, United Bristol Healthcare NHS Trust, Bristol Royal Infirmary, Bristol
Dr Jack Kastelik, Hull and East Yorkshire Hospitals NHS Trust, Castle Hill Hospital, Cottingham
Dr David Adeboyeku, The North West London Hospitals NHS Trust, Central Middlesex Hospital, London
Dr Dilys Lai, Chelsea and Westminster Hosp NHS Foundation Trust, Chelsea and Westminster Hospital, London
Dr Martin Allen, University Hospital of North Staffs NHS Trust, City General Hospital, Stoke-on-Trent
Ms Victoria Campbell, University Hospital of North Staffs NHS Trust, City General Hospital, Stoke-on-Trent
Ms Amelia Hilton, Sandwell & West Birmingham Hospitals NHS Trust, City Hospital, Birmingham
Mr George Absi, East Sussex Hospitals NHS Trust, Conquest Hospital, St Leonards-on-Sea
Ms Geraldine Falconer, East Sussex Hospitals NHS Trust, Conquest Hospital, St Leonards-on-Sea
Dr Aravind Ponnuswamy, East Sussex Hospitals NHS Trust, Conquest Hospital, St Leonards-on-Sea
Ms Martina Timon, East Sussex Hospitals NHS Trust, Conquest Hospital, St Leonards-on-Sea
Dr Philip Ryan, Hereford Hospitals NHS Trust, County Hospital, Hereford
Dr Simon Fearby, North Cumbria Acute Hospitals NHS Trust, Cumberland Infirmary, Carlisle
Miss Victoria Lamonby, North Cumbria Acute Hospitals NHS Trust, Cumberland Infirmary, Carlisle
Ms Tendai Zinyengere, Dartford & Gravesham NHS Trust, Darent Valley Hospital, Dartford
Dr Alwyn Foden, County Durham & Darlington NHS Foundation Trust, Darlington Memorial Hospital, Darlington
Dr Kathryn Callaghan, Plymouth Hospitals NHS Trust, Derriford Hospital, Plymouth
Dr Helen Grover, Plymouth Hospitals NHS Trust, Derriford Hospital, Plymouth
Dr Philip Hughes, Plymouth Hospitals NHS Trust, Derriford Hospital, Plymouth
Dr R. Khashkhusha, Mid Yorkshire Hospitals NHS Trust, Dewsbury & District Hospital, Dewsbury
Dr Martin Highcock, Doncaster and Bassetlaw Hosps NHS Foundation Trust, Doncaster Royal Infirmary, Doncaster
Dr Mark Jones, Dorset County Hospital NHS Foundation Trust, Dorset County Hospital, Dorchester
Ms Jayne Manning, Ealing Hospital NHS Trust, Ealing Hospital, Southall
Ms Emma Constantinos, East Sussex Hospitals NHS Trust, Eastbourne District General Hospital, Eastbourne
Dr David Maxwell, East Sussex Hospitals NHS Trust, Eastbourne District General Hospital, Eastbourne
Ms Martina Timon, East Sussex Hospitals NHS Trust, Eastbourne District General Hospital, Eastbourne
Ms Helen Parnell, Epsom & St Helier University Hospitals NHS Trust, Epsom General Hospital, Epsom
Dr Shakil Rahman, Epsom & St Helier University Hospitals NHS Trust, Epsom General Hospital, Epsom
Dr Catherine Houghton, Pennine Acute Hospitals NHS Trust, Fairfield General Hospital, Bury
Dr Tony De Soyza, The Newcastle upon Tyne Hospitals NHSFT, Freeman Hospital, Newcastle Upon Tyne
Mrs Sandra Olive, Norfolk and Norwich University Hospital NHS Trust, Norfolk and Norwich University Hospital, Norwich
Dr George Hands, Northern Devon Healthcare NHS Trust, North Devon District Hospital, Barnstaple
Dr Alison Moody, Northern Devon Healthcare NHS Trust, North Devon District Hospital, Barnstaple
Dr David Weir, The Pennine Acute Hospitals NHS Trust, North Manchester General Hospital, Manchester
Dr Rachel Tennant, The North West London Hospitals NHS Trust, Northwick Park Hospital, Harrow
Dr Seema Brij, Peterborough & Stamford Hosps NHS Foundation Trust, Peterborough District Hospital, Peterborough
Dr Salim Meghjee, Mid Yorkshire Hospitals NHS Trust, Pinderfields General Hospital, Wakefield
Miss Kathryn Rafferty, Mid Yorkshire Hospitals NHS Trust, Pinderfields General Hospital, Wakefield
Dr Owen Johnson, Mid Yorkshire Hospitals NHS Trust, Pontefract General Infirmary, Pontefract
Ms Jacqui Pollington, Mid Yorkshire Hospitals NHS Trust, Pontefract General Infirmary, Pontefract
Ms Jane Rodger, Mid Yorkshire Hospitals NHS Trust, Pontefract General Infirmary, Pontefract
Ms Sandra Courtour, Poole Hospital NHS Foundation Trust, Poole Hospital, Poole
Dr Simon Crowther, Poole Hospital NHS Foundation Trust, Poole Hospital, Poole
Dr Ben Green, Portsmouth Hospitals NHS Trust, Queen Alexandra Hospital, Portsmouth
Dr Simon Gompertz, University Hosp Birmingham NHS Foundation Trust, Queen Elizabeth Hospital, Birmingham
Ms Heather Davies, East and North Hertfordshire NHS Trust, Queen Elizabeth II Hospital, Welwyn Garden City
Dr Richard Dent, East and North Hertfordshire NHS Trust, Queen Elizabeth II Hospital, Welwyn Garden City
Dr Shafick Gareeboo, East and North Hertfordshire NHS Trust, Queen Elizabeth II Hospital, Welwyn Garden City
Ms Karen Moore-Haines, East and North Hertfordshire NHS Trust, Queen Elizabeth II Hospital, Welwyn Garden City
Dr Subir Mukherjee, East Kent Hospitals NHS Trust, Queen Elizabeth The Queen Mother Hospital, Margate
Dr Paul Beckett, Burton Hospitals NHS Trust, Queen’s Hospital, Burton-on-Trent
Dr Jonathan Corne, Nottingham University Hospitals NHS Trust, Queens Medical Centre Nottingham, Nottingham
Dr Philip Bardsley, The Rotherham NHS Foundation Trust, Rotherham General Hospital, Rotherham
Ms Lauren Bowden, The Rotherham NHS Foundation Trust, Rotherham General Hospital, Rotherham England
Ms Vivenne McGlashan Royal Berkshire NHS Foundation Trust Royal Berkshire Hospital Reading
Dr Anne McGown, Royal Berkshire NHS Foundation Trust, Royal Berkshire Hospital, Reading
Dr Rosalind Green, East Lancashire Hospitals NHS Trust, Royal Blackburn Hospital, Blackburn
Dr Yin Chey Ong, East Lancashire Hospitals NHS Trust, Royal Blackburn Hospital, Blackburn
Ms Christine Peacock, East Lancashire Hospitals NHS Trust, Royal Blackburn Hospital, Blackburn
Dr Bervin Teo, Royal Cornwall Hospitals Trust, Royal Cornwall Hospital, Truro
Dr Will Elston, Derby Hospitals NHS Foundation Trust, Royal Derby Hospital, Derby
Dr David Halpin, Royal Devon & Exeter NHS Foundation Trust, Royal Devon & Exeter Hospital - Wonford, Exeter
Dr John Hurst, Royal Free Hampstead NHS Trust, Royal Free Hospital, London
Dr Rod Lawson, Sheffield Teaching Hospitals NHS Foundation Trust, Royal Hallamshire Hospital, Sheffield
Dr Alison Grove, Winchester & Eastleigh Healthcare NHS Trust, Royal Hampshire County Hospital, Winchester
Mr Barrie Somerville, Winchester & Eastleigh Healthcare NHS Trust, Royal Hampshire County Hospital, Winchester
Ms Susan Baxter, Lancashire Teaching Hospitals NHS Foundation Trust, Royal Preston Hospital, Preston
Ms Angela Miers, Royal Surrey County Hospital NHS Trust, Royal Surrey County Hospital, Guildford
Dr Mark Jackson, Brighton and Sussex University Hospitals NHS Trust, Royal Sussex County Hospital, Brighton
Dr Jay Suntharalingam Royal United Hospital Bath NHS Trust Royal United Hospital Bath England
Dr Graham Burns, The Newcastle upon Tyne Hospitals NHSFT, Royal Victoria Infirmary, Newcastle Upon Tyne
Dr Mazhar Chaudri, The Dudley Group of Hospitals NHS Trust, Russells Hall Hospital, Dudley
Dr Catherine Thompson, Salisbury NHS Foundation Trust, Salisbury District Hospital, Salisbury
Ms Amelia Hilton, Sandwell & West Birmingham Hospitals NHS Trust, Sandwell General Hospital, West Bromwich
Dr Michael Bone, South Tyneside NHS Foundation Trust, South Tyneside District Hospital, South Shields
Mrs Katherine Austin, Southampton University Hospitals NHS Trust, Southampton General Hospital, Southampton
Dr Simon Bourne, Southampton University Hospitals NHS Trust, Southampton General Hospital, Southampton
Ms Patricia Norman, Southampton University Hospitals NHS Trust, Southampton General Hospital, Southampton
Mr Jonathan Watson, Southampton University Hospitals NHS Trust, Southampton General Hospital, Southampton
Dr Jane Wilkinson, Southampton University Hospitals NHS Trust, Southampton General Hospital, Southampton
Dr Sohail Ansari, Southend University Hospital NHS Foundation Trust, Southend Hospital, Westcliff-on-Sea
Dr Duncan Powrie, Southend University Hospital NHS Foundation Trust, Southend Hospital, Westcliff-on-Sea
Dr James Calvert, North Bristol NHS Trust, Southmead Hospital, Bristol
Ms Carla Swift, Southport & Ormskirk Hospital NHS Trust, Southport & Formby District General Hospital, Southport
Dr Alexander Youzguin, Southport & Ormskirk Hospital NHS Trust, Southport & Formby District General Hospital, Southport
Dr David Simcock, Barts and The London NHS Trust, St Bartholomews Hospital, London
Dr Shanthi Paramothayan, Epsom & St Helier University Hospitals NHS Trust, St Helier Hospital, Carshalton
Ms Helen Parnell, Epsom & St Helier University Hospitals NHS Trust, St Helier Hospital, Carshalton
Dr Veronica Varney, Epsom & St Helier University Hospitals NHS Trust, St Helier Hospital, Carshalton
Dr Doytchin Dimov, The Leeds Teaching Hospitals NHS Trust, St James University Hospital, Leeds
Dr Sarah Elkin, Imperial College Healthcare NHS Trust, St Mary’s Hospital, London
Ms Sarah Kearney, Isle of Wight NHS Primary Care Trust, St Mary's Hospital, Newport
Ms Hilary Sklar, Imperial College Healthcare NHS Trust, St Mary’s Hospital, London
Dr Michael Wood, Ashford & St Peter’s Hospital NHS Trust, St Peter's Hospital, Chertsey
Dr Devapriya Dev, Stockport NHS Foundation Trust, Stepping Hill Hospital, Stockport
Dr Maxine Hardinge, Oxford Radcliffe Hospitals NHS Trust, The Churchill, Oxford
Dr Ian Benton, Countess of Chester Hospital NHS Foundation Trust, The Countess of Chester Hospital, Chester
Dr Sharjeela Tariq, Hull and East Yorkshire Hospitals NHS Trust, The Hull Royal Infirmary, Hull
Dr Anur Guhan, South Tees Hospitals NHS Trust, The James Cook University Hospital, Middlesbrough
Maria Taylor, South Tees Hospitals NHS Trust, The James Cook University Hospital, Middlesbrough
Dr Gemina Doolub, Oxford Radcliffe Hospitals NHS Trust, The John Radcliffe, Oxford
Dr Victoria Tippett, Oxford Radcliffe Hospitals NHS Trust, The John Radcliffe, Oxford
Ms Katerina Vernicos, Oxford Radcliffe Hospitals NHS Trust, The John Radcliffe, Oxford
Dr David Morgan, Royal Bournemouth and Christchurch Hosps NHSFT, The Royal Bournemouth Hospital, Bournemouth
Ms Rachel Hardcastle-Jones, South Devon Healthcare NHS Foundation Trust, Torbay Hospital, Torquay
Ms Kay Kerrigan, Trafford Healthcare NHS Trust, Trafford General Hospital, Manchester
Dr Bernard Leahy, Trafford Healthcare NHS Trust, Trafford General Hospital, Manchester
Dr Lisa Davies, Aintree University Hospitals NHS Foundation Trust, University Hospital Aintree, Liverpool
Dr Imran Hafidz, Aintree University Hospitals NHS Foundation Trust, University Hospital Aintree, Liverpool
Dr Anil Trivedi, North Tees & Hartlepool NHS Foundation Trust, University Hospital of Hartlepool, Hartlepool
Dr Neil Leitch, North Tees & Hartlepool NHS Foundation Trust, University Hospital of North Tees, Stockton-on-Tees
Dr Stephen Crooks, South Warwickshire General Hospitals NHS Trust, Warwick Hospital, Warwick
Dr Bobby Mann, West Middlesex University Hospital NHS Trust, West Middlesex University Hospital, Isleworth
Dr Clare Laroche, West Suffolk Hospital NHS Trust, West Suffolk Hospital, Bury St Edmunds
Mrs Sally Smith, West Suffolk Hospital NHS Trust, West Suffolk Hospital, Bury St Edmunds
Dr Erum Arshad, Heatherwood and Wexham Park Hospitals NHSFT, Wexham Park Hospital, Slough
Dr Simon Quantrill, Whipps Cross University Hospital NHS Trust, Whipps Cross University Hospital, London
Dr Sarah Crook, Whittington Hospital NHS Trust, Whittington Hospital, London
Dr Louise Restrick, Whittington Hospital NHS Trust, Whittington Hospital, London
Dr Alan Shaw, Whittington Hospital NHS Trust, Whittington Hospital, London
Ms Sarah Johnson, Worcestershire Acute Hospitals NHS Trust, Worcestershire Royal Hospital, Worcester
Dr Stephen O'Hickey, Worcestershire Acute Hospitals NHS Trust, Worcestershire Royal Hospital, Worcester
Dr Jo Congleton, Western Sussex Hospitals NHS Trust, Worthing and Southlands Hospitals, Worthing
Ms Karen Whittingham, Western Sussex Hospitals NHS Trust, Worthing and Southlands Hospitals, Worthing
Dr Caroline Everett, York Hospitals NHS Foundation Trust, York Hospital, York
Ms Rebecca Sherrington, States of Guernsey Health & Social Services, Princess Elizabeth Hospital, St Martin's

Dr Martin Kelly, Western Health & Social Care Trust, Altnagelvin Area Hospital, Londonderry
Ms Anne-Marie Marley, Belfast Health & Social Care Trust, Belfast City Hospital, Belfast
Ms Rosemary McCoubrey, South Eastern Health & Social Care Trust, Downe Hospital, Downpatrick
Dr Terry McManus, Western Health & Social Care Trust, Erne Hospital, Enniskillen
Dr Lawrence Adu-Boateng, Belfast Health & Social Care Trust, Royal Victoria Hospital, Belfast
Mrs Janet Sinerton, South Eastern Health & Social Care Trust, The Ulster Hospital, Belfast
Dr Wendy Anderson, Northern Health & Social Care Trust, Antrim Hospital, Antrim

Dr Hans-Joerg Hartung, Crosshouse Hospital, Kilmarnock
Prof. William MacNee, Royal Infirmary of Edinburgh, Edinburgh
Ms Kim Bracher, St John’s Hospital at Howden, Livingston
Dr Donald Noble, St John’s Hospital at Howden, Livingston
Dr Fraser Wood, Stirling Royal Infirmary, Stirling
Dr Christine Bucknall, Stobhill General Hospital, Glasgow
Dr Alison Falconer, Stobhill General Hospital, Glasgow
Dr David Sword, The Ayr Hospital, Ayr
Dr Sandra Watson, Wishaw General Hospital, Wishaw
Dr Mark Cotton, Glasgow Royal Infirmary, Glasgow
Dr David Anderson, Victoria Infirmary, Glasgow
Dr Peter Reid, Western General Hospital, Edinburgh

Dr Ramsey Sabit, Cardiff and Vale NHS Trust, Llandough Hospital, Penarth
Ms Rhiannon Skilton, Bro Morgannwg NHS Trust, Neath Port Talbot Hospital, Neath Port Talbot
Dr David Vardill, Bro Morgannwg NHS Trust, Neath Port Talbot Hospital, Neath Port Talbot
Dr Martin Sevenoaks, Bro Morgannwg NHS Trust, Princess of Wales Hospital, Bridgend
Dr Ghulam Shabir, North West Wales NHS Trust, Ysbyty Gwynedd, Bangor
Mrs Sharon Ragbetli, Swansea NHS Trust, Morriston Hospital, Swansea
Dr Madhukar Shetty, Swansea NHS Trust, Morriston Hospital, Swansea
Dr Carol Llewellyn-Jones, Carmarthenshire NHS Trust, West Wales General Hospital, Carmarthen