

Children's Mercy Kansas City

SHARE @ Children's Mercy

Manuscripts, Articles, Book Chapters and Other Papers

1-1-2017

Erratum to: Scaling up strategies of the chronic respiratory disease programme of the European Innovation Partnership on Active and Healthy Ageing (Action Plan B3: Area 5).

J Bousquet

J Farrell

G Crooks

P Hellings

E H. Bel

See next page for additional authors

Follow this and additional works at: <https://scholarlyexchange.childrensmercy.org/papers>



Part of the [Allergy and Immunology Commons](#), and the [Respiratory Tract Diseases Commons](#)

Recommended Citation

Bousquet J, Farrell J, Crooks G, et al. Erratum to: Scaling up strategies of the chronic respiratory disease programme of the European Innovation Partnership on Active and Healthy Ageing (Action Plan B3: Area 5). *Clin Transl Allergy*. 2017;7:5. Published 2017 Feb 20. doi:10.1186/s13601-016-0135-6

This Article is brought to you for free and open access by SHARE @ Children's Mercy. It has been accepted for inclusion in Manuscripts, Articles, Book Chapters and Other Papers by an authorized administrator of SHARE @ Children's Mercy. For more information, please contact hlsteel@cmh.edu.

Creator(s)

J Bousquet, J Farrell, G Crooks, P Hellings, E H. Bel, M Bewick, N H. Chavannes, J Correia de Sousa, A A. Cruz, T Haahtela, G Joos, N Khaltaev, J Malva, A Muraro, M Nogues, S Palkonen, S Pedersen, C Robalo-Cordeiro, B Samolinski, T Strandberg, A Valiulis, A Yorgancioglu, T Zuberbier, A Bedbrook, W Aberer, M Adachi, A Agusti, C A Akdis, M Akdis, J Ankri, A Alonso, I Annesi-Maesano, I J. Ansotegui, J M. Anto, S Arnavielhe, H Arshad, C Bai, I Baiardini, C Bachert, A K. Baigenzhin, C Barbara, E D. Bateman, B Beghé, A Ben Kheder, K S. Bennoor, M Benson, K C. Bergmann, T Bieber, C Bindslev-Jensen, L Bjermer, H Blain, F Blasi, A L. Boner, M Bonini, S Bonini, S Bosnic-Anticevitch, L P. Boulet, R Bourret, P J. Bousquet, F Braido, A H. Briggs, C E. Brightling, J Brozek, R Buhl, P G. Burney, A Bush, F Caballero-Fonseca, D Caimmi, M A. Calderon, P M. Calverley, P A M Camargos, G W. Canonica, T Camuzat, K H. Carlsen, W Carr, A Carriazo, T Casale, A M. Cepeda Sarabia, L Chatzi, Y Z. Chen, R Chiron, E Chkhartishvili, A G. Chuchalin, K F. Chung, G Ciprandi, I Cirule, L Cox, D J. Costa, A Custovic, R Dahl, S E. Dahlen, U Darsow, G De Carlo, F De Blay, T Dedeu, D Deleanu, E De Manuel Keenoy, P Demoly, J A. Denburg, P Devillier, A Didier, A T. Dinh-Xuan, R Djukanovic, D Dokic, H Douagui, G Dray, R Dubakiene, S R. Durham, M S. Dykewicz, Y El-Gamal, R Emuzyte, L M. Fabbri, M Fletcher, A Fiocchi, A Fink Wagner, J Fonseca, W J. Fokkens, F Forastiere, P Frith, M Gaga, A Gamkrelidze, J Garces, J Garcia-Aymerich, B Gemicioğlu, J E. Gereda, S González Diaz, M Gotua, I Grisle, L Grouse, Z Gutter, M A. Guzmán, L G. Heaney, B Hellquist-Dahl, D Henderson, A Hendry, J Heinrich, D Heve, F Horak, J O' B Hourihane, P Howarth, M Humbert, M E. Hyland, M Illario, J C. Ivancevich, J R. Jardim, E J. Jares, C Jeandel, C Jenkins, S L. Johnston, O Jonquet, K Julge, K S. Jung, J Just, I Kaidashev, M R. Khaitov, O Kalayci, A F. Kalyoncu, T Keil, P K. Keith, L Klimek, B Koffi N'Goran, V Kolek, G H. Koppelman, M L. Kowalski, I Kull, P Kuna, V Kvedariene, B Lambrecht, S Lau, D Larenas-Linnemann, D Laune, L T T Le, P Lieberman, B Lipworth, J Li, K Lodrup Carlsen, R Louis, W MacNee, Y Magard, A Magnan, B Mahboub, A Mair, I Majer, M J. Makela, P Manning, S Mara, G D. Marshall, M R. Masjedi, P Matignon, M Maurer, S Mavale-Manuel, E Melén, E Melo-Gomes, E O. Meltzer, A Menzies-Gow, H Merk, J P. Michel, N Miculinic, F Mihaltan, B Milenkovic, G M Y Mohammad, M Molimard, I Momas, A Montilla-Santana, M Morais-Almeida, M Morgan, R Mösges, J Mullol, S Nafti, L Namazova-Baranova, R Naclerio, A Neou, H Neffen, K Nekam, B Niggemann, G Ninot, T D. Nyembue, R E. O'Hehir, K Ohta, Y Okamoto, K Okubo, S Ouedraogo, P Paggiaro, I Pali-Schöll, P Panzner, N Papadopoulos, A Papi, H S. Park, G Passalacqua, I Pavord, R Pawankar, R Pengelly, O Pfaar, R Picard, B Pigearias, I Pin, D Plavec, D Poethig, W Pohl, T A. Popov, F Portejoie, P Potter, D Postma, D Price, K F. Rabe, F Raciborski, F Radier Pontal, S Repka-Ramirez, S Reitamo, S Rennard, F Rodenas, J Roberts, J Roca, L Rodriguez Mañas, C Rolland, M Roman Rodriguez, A Romano, J Rosado-Pinto, N Rosario, L Rosenwasser, M Rottem, D Ryan, M Sanchez-Borges, G K. Scadding, H J. Schunemann, E Serrano, P Schmid-Grendelmeier, H Schulz, A Sheikh, M Shields, N Siafakas, Y Sibille, T Similowski, F E R Simons, J C. Sisul, I Skrindo, H A. Smit, D Solé, T Sooronbaev, O Spranger, R Stelmach, P J. Sterk, J Sunyer, C Thijs, T To, A Todo-Bom, M Triggiani, R Valenta, A L. Valero, E Valia, E Valovirta, E Van Ganse, M van Hage, O Vandenplas, T Vasankari, B Vellas, J Vestbo, G Vezzani, P Vichyanond, G Viegi, C Vogelmeier, T Vontetsianos, M Wagenmann, B Wallaert, S Walker, D Y. Wang, U Wahn, M Wickman, D M. Williams, S Williams, J Wright, B P. Yawn, P K. Yiallourous, O M. Yusuf, A Zaidi, H J. Zar, M E. Zernotti, L Zhang, N Zhong, M Zidarn, and J Mercier

ERRATUM

Open Access



Erratum to: Scaling up strategies of the chronic respiratory disease programme of the European Innovation Partnership on Active and Healthy Ageing (Action Plan B3: Area 5)

J. Bousquet^{1,2,3,4*}, J. Farrell⁵, G. Crooks⁶, P. Hellings^{7,8}, E. H. Bel^{9,10}, M. Bewick¹¹, N. H. Chavannes^{12,13,14}, J. Correia de Sousa¹⁵, A. A. Cruz^{13,16,17}, T. Haahtela^{18,19}, G. Joos²⁰, N. Khaltaev¹³, J. Malva^{21,22}, A. Muraro^{8,23}, M. Nogues²⁴, S. Palkonen²⁵, S. Pedersen²⁶, C. Robalo-Cordeiro²⁷, B. Samolinski²⁸, T. Strandberg^{29,30,31}, A. Valiulis^{32,33}, A. Yorgancioglu^{13,18,34,35}, T. Zuberbier^{36,37}, A. Bedbrook², W. Aberer³⁸, M. Adachi³⁹, A. Agusti^{40,41}, C. A. Akdis⁴², M. Akdis⁴², J. Ankeri^{3,4}, A. Alonso^{40,41}, I. Annesi-Maesano^{43,33,1}, I. J. Ansotegui⁴⁴, J. M. Anto^{45,46,47,48}, S. Arnavielhe⁴⁹, H. Arshad⁵⁰, C. Bai⁵¹, I. Baiardini⁵², C. Bachert⁵³, A. K. Baigenzhin⁵⁴, C. Barbara⁵⁵, E. D. Bateman⁵⁶, B. Beghé⁵⁷, A. Ben Kheder⁵⁸, K. S. Bennoor⁵⁹, M. Benson⁶⁰, K. C. Bergmann^{36,37}, T. Bieber⁶¹, C. Bindslev-Jensen⁶², L. Bjermer⁶³, H. Blain^{64,65}, F. Blasi⁶⁶, A. L. Boner⁶⁷, M. Bonini⁶⁸, S. Bonini⁶⁹, S. Bosnic-Anticevitch⁷⁰, L. P. Boulet⁷¹, R. Bourret⁷², P. J. Bousquet⁴³, F. Braido⁵², A. H. Briggs⁷³, C. E. Brightling^{74,75}, J. Brozek⁷⁶, R. Buhl⁷⁷, P. G. Burney^{78,79,80}, A. Bush⁸¹, F. Caballero-Fonseca⁸², D. Caimmi⁸³, M. A. Calderon⁸⁴, P. M. Calverley⁸⁵, P. A. M. Camargos⁸⁶, G. W. Canonica⁵², T. Camuzat⁸⁷, K. H. Carlsen⁸⁸, W. Carr⁸⁹, A. Carriazo⁹⁰, T. Casale⁹¹, A. M. Cepeda Sarabia^{92,93}, L. Chatzi⁹⁴, Y. Z. Chen⁹⁵, R. Chiron⁸³, E. Chkhartishvili⁹⁶, A. G. Chuchalin^{17,97}, K. F. Chung⁹⁸, G. Ciprandi⁹⁹, I. Cirule¹⁰⁰, L. Cox¹⁰¹, D. J. Costa^{2,12}, A. Custovic¹⁰², R. Dahl⁶², S. E. Dahlen¹⁰³, U. Darsow^{104,105}, G. De Carlo²⁵, F. De Blay¹⁰⁶, T. Dedeu^{107,108}, D. Deleanu¹⁰⁹, E. De Manuel Keenoy¹¹⁰, P. Demoly^{43,83}, J. A. Denburg¹¹¹, P. Devillier¹¹², A. Didier¹¹³, A. T. Dinh-Xuan¹¹⁴, R. Djukanovic¹¹⁵, D. Dokic¹¹⁶, H. Douagui¹¹⁷, G. Dray¹¹⁸, R. Dubakiene¹¹⁹, S. R. Durham¹²⁰, M. S. Dykewicz¹²¹, Y. El-Gamal¹²², R. Emuzyte¹²³, L. M. Fabbri¹²⁴, M. Fletcher¹²⁵, A. Fiocchi¹²⁶, A. Fink Wagner¹²⁷, J. Fonseca^{128,129}, W. J. Fokkens¹³⁰, F. Forastiere¹³¹, P. Frith¹³², M. Gaga¹³³, A. Gamkrelidze¹³⁴, J. Garces¹³⁵, J. Garcia-Aymerich^{45,46,47,48}, B. Gemicioğlu¹³⁶, J. E. Gereda¹³⁷, S. González Díaz¹³⁸, M. Gotua¹³⁹, I. Grisle¹⁴⁰, L. Grouse¹⁴¹, Z. Gutter¹⁴², M. A. Guzmán¹⁴³, L. G. Heaney¹⁴⁴, B. Hellquist-Dahl¹⁴⁵, D. Henderson⁶, A. Hendry¹⁴⁶, J. Heinrich¹⁴⁷, D. Heve^{2,148}, F. Horak¹⁴⁹, J. O' B. Hourihane¹⁵⁰, P. Howarth¹⁵¹, M. Humbert¹⁵², M. E. Hyland¹⁵³, M. Illario¹⁵⁴, J. C. Ivancevich¹⁵⁵, J. R. Jardim¹⁵⁶, E. J. Jares¹⁵⁷, C. Jeandel^{2,64}, C. Jenkins¹⁵⁸, S. L. Johnston^{159,160}, O. Jonquet¹⁶¹, K. Julge¹⁶², K. S. Jung¹⁶³, J. Just^{164,165}, I. Kaidashev¹⁶⁶, M. R. Khativov¹⁶⁷, O. Kalayci¹⁶⁸, A. F. Kalyoncu¹⁶⁹, T. Keil^{170,171}, P. K. Keith¹⁷², L. Klimek¹⁷³, B. Koffi N'Goran¹⁷⁴, V. Kolek¹⁷⁵, G. H. Koppelman¹⁷⁶, M. L. Kowalski¹⁷⁷, I. Kull^{178,179}, P. Kuna¹⁸⁰, V. Kvedariene¹⁸¹, B. Lambrecht¹⁸², S. Lau¹⁸³, D. Larenas-Linnemann¹⁸⁴, D. Laune⁴⁹, L. T. T. Le¹⁸⁵, P. Lieberman¹⁸⁶, B. Lipworth¹⁸⁷, J. Li¹⁸⁸, K. Lodrup Carlsen^{189,190}, R. Louis¹⁹¹, W. MacNee¹⁹², Y. Magard¹⁹³, A. Magnan¹⁹⁴, B. Mahboub¹⁹⁵, A. Mair¹⁹⁶, I. Majer¹⁹⁷, M. J. Makela¹⁹, P. Manning¹⁹⁸, S. Mara¹⁹⁹,

*Correspondence: jean.bousquet@orange.fr

¹ CHRU, University Hospital, 371 Avenue du Doyen Gaston Giraud, 34295 Montpellier Cedex 5, France

Full list of author information is available at the end of the article



G. D. Marshall²⁰⁰, M. R. Masjedi²⁰¹, P. Matignon²⁰², M. Maurer²⁰³, S. Mavale-Manuel²⁰⁴, E. Melén²⁰⁵, E. Melo-Gomes²⁰⁶, E. O. Meltzer²⁰⁷, A. Menzies-Gow²⁰⁸, H. Merk²⁰⁹, J. P. Michel³¹, N. Miculinic²¹⁰, F. Mihaltan²¹¹, B. Milenkovic^{212,213}, G. M. Y. Mohammad²¹⁴, M. Molimard²¹⁵, I. Momas^{216,217}, A. Montilla-Santana²¹⁸, M. Morais-Almeida²¹⁹, M. Morgan²²⁰, R. Mösges²²¹, J. Mullo^{178,179,222}, S. Nafti²²³, L. Namazova-Baranova²²⁴, R. Naclerio²²⁵, A. Neou^{36,37}, H. Neffen²²⁶, K. Nekam²²⁷, B. Niggemann²²⁸, G. Ninot²²⁹, T. D. Nyembue²³⁰, R. E. O'Hehir^{231,232}, K. Ohta²³³, Y. Okamoto²³⁴, K. Okubo²³⁵, S. Ouedraogo²³⁶, P. Paggiaro²³⁷, I. Pali-Schöll²³⁸, P. Panzner²³⁹, N. Papadopoulos^{240,241}, A. Papi²⁴², H. S. Park²⁴³, G. Passalacqua⁵², I. Pavord²⁴⁴, R. Pawankar²⁴⁵, R. Pengelly²⁴⁶, O. Pfaar^{247,248}, R. Picard²⁴⁹, B. Pigearias¹⁷⁴, I. Pin²⁵⁰, D. Plavec²⁵¹, D. Poethig²⁵², W. Pohl²⁵³, T. A. Popov²⁵⁴, F. Portejoie², P. Potter²⁵⁵, D. Postma²⁵⁶, D. Price^{257,258}, K. F. Rabe^{259,260}, F. Raciborski²⁸, F. Radier Pontal²⁶¹, S. Repka-Ramirez²⁶², S. Reitamo¹⁹, S. Rennard²⁶³, F. Rodenas¹³⁵, J. Roberts²⁶⁴, J. Roca⁴⁰, L. Rodriguez Mañas²⁶⁵, C. Rolland²⁶⁶, M. Roman Rodriguez²⁶⁷, A. Romano²⁶⁸, J. Rosado-Pinto²⁶⁹, N. Rosario²⁷⁰, L. Rosenwasser²⁷¹, M. Rottem²⁷², D. Ryan^{273,274}, M. Sanchez-Borges²⁷⁵, G. K. Scadding²⁷⁶, H. J. Schunemann⁷⁶, E. Serrano²⁷⁷, P. Schmid-Grendelmeier²⁷⁸, H. Schulz²⁷⁹, A. Sheikh²⁸⁰, M. Shields²⁸¹, N. Siafakas²⁸², Y. Sibille²⁸³, T. Similowski^{284,285,286}, F. E. R. Simons²⁸⁷, J. C. Sisul²⁸⁸, I. Skrindo^{189,190}, H. A. Smit²⁸⁹, D. Solé²⁹⁰, T. Sooronbaev²⁹¹, O. Spranger¹²⁷, R. Stelmach²⁹², P. J. Sterk²⁹³, J. Sunyer^{45,46,47,48}, C. Thijs²⁹⁴, T. To²⁹⁵, A. Todo-Bom²⁹⁶, M. Triggiani²⁹⁷, R. Valenta²⁹⁸, A. L. Valero²⁹⁹, E. Valia¹³⁵, E. Valovirta³⁰⁰, E. Van Ganse³⁰¹, M. van Hage³⁰², O. Vandenplas³⁰³, T. Vasankari³⁰⁴, B. Vellas³⁰⁵, J. Vestbo^{306,307}, G. Vezzani^{308,309}, P. Vichyanond³¹⁰, G. Viegi^{311,312}, C. Vogelmeier³¹³, T. Vontetsianos³¹⁴, M. Wagenmann³¹⁵, B. Wallaert³¹⁶, S. Walker³¹⁷, D. Y. Wang³¹⁸, U. Wahn²²⁸, M. Wickman²⁰⁵, D. M. Williams³¹⁹, S. Williams¹⁴, J. Wright³²⁰, B. P. Yawn³²¹, P. K. Yiallourous^{322,323}, O. M. Yusuf³²⁴, A. Zaidi³²⁵, H. J. Zar³²⁶, M. E. Zernotti³²⁷, L. Zhang³²⁸, N. Zhong¹⁸⁸, M. Zidarn³²⁹ and J. Mercier³³⁰

Erratum to: *Clin Transl Allergy* (2016) 6:29 DOI 10.1186/s13601-016-0116-9

In this version of this article that was originally published [1], the name M. R. Khaitov was misspelled as M. R. Kaitov.

Author details

¹ CHRU, University Hospital, 371 Avenue du Doyen Gaston Giraud, 34295 Montpellier Cedex 5, France. ² MACVIA-LR, Contre les MALadies Chroniques pour un Vieillessement Actif en Languedoc Roussillon, European Innovation Partnership on Active and Healthy Ageing Reference Site, Montpellier, France. ³ INSERM, VIMA: Ageing and Chronic Diseases, Epidemiological and Public Health Approaches, U1168, Paris, France. ⁴ UVSQ, UMR-S 1168, Université Versailles St-Quentin-en-Yvelines, Paris, France. ⁵ Department of Health, Social Services and Public Safety, Belfast, Northern Ireland, UK. ⁶ EIP on AHA, European Innovation Partnership on Active and Healthy Ageing, Reference Site, Scottish Centre for Telehealth and Telecare, NHS 24, Glasgow, UK. ⁷ Laboratory of Clinical Immunology, Department of Microbiology and Immunology, KU Leuven, Louvain, Belgium. ⁸ European Academy of Allergy and Clinical Immunology, Zurich, Switzerland. ⁹ Department of Respiratory Medicine, Academic Medical Center (AMC), University of Amsterdam, Amsterdam, The Netherlands. ¹⁰ European Respiratory Society, Lausanne, Switzerland. ¹¹ iQ4U Consultants Ltd, London, UK. ¹² Department of Public Health and Primary Care, Leiden University Medical Center, Leiden, The Netherlands. ¹³ Global Alliance Against Chronic Respiratory Diseases (GARD), Cape Town, South Africa. ¹⁴ International Primary Care Respiratory Group, Westhill, UK. ¹⁵ Life and Health Sciences Research Institute, ICVS, School of Health Sciences, University of Minho, Braga, Portugal. ¹⁶ ProAR – Nucleo de Excelencia em Asma, Federal University of Bahia, Bahia, Brazil. ¹⁷ GARD Executive Committee, Bahia, Brazil. ¹⁸ EIP on AHA Commitment for Action, Lisbon, Portugal. ¹⁹ Skin and Allergy Hospital, Helsinki University Hospital, Helsinki, Finland. ²⁰ Department of Respiratory Medicine, Ghent University Hospital, Ghent, Belgium. ²¹ Faculty of Medicine, University of Coimbra, Coimbra, Portugal. ²² Ageing@Coimbra Reference Site, Coimbra, Portugal.

²³ Food Allergy Referral Centre Veneto Region, Department of Women and Child Health, Padua General University Hospital, Padua, Italy. ²⁴ Caisse Assurance Retraite et Santé Au Travail Languedoc-Roussillon (CARSAT-LR), 34000 Montpellier, France. ²⁵ EFA European Federation of Allergy and Airways Diseases Patients' Associations, Brussels, Belgium. ²⁶ University of Southern Denmark, Kolding, Denmark. ²⁷ Centre of Pneumology, Coimbra University Hospital, Coimbra, Portugal. ²⁸ Department of Prevention of Environmental Hazards and Allergology, Medical University of Warsaw, Warsaw, Poland. ²⁹ Helsinki University, Helsinki University Hospital, Helsinki, Finland. ³⁰ Center for Life Course Health Research, University of Oulu, Oulu, Finland. ³¹ European Union Geriatric Medicine Society, EUGMS, Oslo, Norway. ³² Center of Quality of Life Research, Vilnius University Clinic of Children's Diseases, Vilnius University Public Health Institute, Vilnius, Lithuania. ³³ European Association of Pediatrics (EAP/UEMS-SP), Brussels, Belgium. ³⁴ Department of Pulmonology, Celal Bayar University, Manisa, Turkey. ³⁵ Turkish Thoracic Society, Antalya, Turkey. ³⁶ Allergy-Centre-Charité at the Department of Dermatology, Charité - Universitätsmedizin Berlin, Berlin, Germany. ³⁷ Secretary General of the Global Allergy and Asthma European Network (GA²LEN), Berlin, Germany. ³⁸ Department of Dermatology, Medical University of Graz, Graz, Austria. ³⁹ Department of Clinical Research Center, International University of Health and Welfare/Sanno Hospital, Tokyo, Japan. ⁴⁰ Thorax Institute, Hospital Clinic, IDIBAPS, University of Barcelona, Barcelona, Spain. ⁴¹ CIBER Enfermedades Respiratorias, Barcelona, Spain. ⁴² Swiss Institute of Allergy and Asthma Research (SIAF), University of Zurich, Davos, Switzerland. ⁴³ EPAR U707 INSERM, Paris, France. ⁴⁴ Department of Allergy and Immunology, Hospital Quirón Bizkaia, Erandio, Spain. ⁴⁵ Centre for Research in Environmental Epidemiology (CREAL), Barcelona, Spain. ⁴⁶ Hospital del Mar Research Institute (IMIM), Barcelona, Spain. ⁴⁷ CIBER Epidemiología y Salud Pública (CIBERESP), Barcelona, Spain. ⁴⁸ Department of Experimental and Health Sciences, University of Pompeu Fabra (UPF), Barcelona, Spain. ⁴⁹ Digi Health, Montpellier, France. ⁵⁰ David Hide Asthma and Allergy Research Centre, Isle of Wight, UK. ⁵¹ Shanghai Respiratory Research Institute, Vice President of Respiratory Society, Chinese Medical Association, China and Chinese Alliance Against Lung Cancer, Shanghai, China. ⁵² Allergy and Respiratory Diseases Clinic, DIMI, IRCCS AOU San Martino-IST, University of Genoa, Genoa, Italy. ⁵³ Upper Airways Research Laboratory, ENT Department, Ghent University Hospital, Ghent, Belgium. ⁵⁴ EuroAsian Respiratory Society, Astana City, Kazakhstan. ⁵⁵ Faculdade de Medicina de

- Lisboa, Portuguese National Programme for Respiratory Diseases (PNDR), Lisbon, Portugal. ⁵⁶ Department of Medicine, University of Cape Town, Cape Town, South Africa. ⁵⁷ Section of Respiratory Disease, Department of Oncology, Haematology and Respiratory Diseases, University of Modena and Reggio Emilia, Modena, Italy. ⁵⁸ Service de pneumologie IV, hôpital Abderrahman Mami, Ariana, 2080 Tunis, Tunisia. ⁵⁹ Department of Respiratory Medicine, National Institute of Diseases of the Chest and Hospital, Dhaka, Bangladesh. ⁶⁰ Centre for Individualized Medicine, Department of Pediatrics, Faculty of Medicine, Linköping University, Linköping, Sweden. ⁶¹ Department of Dermatology and Allergy, Rheinische Friedrich-Wilhelms-University Bonn, Bonn, Germany. ⁶² Department of Dermatology and Allergy Centre, Odense University Hospital, Odense, Denmark. ⁶³ Department of Respiratory Medicine and Allergology, University Hospital, Lund, Sweden. ⁶⁴ Department of Geriatrics, Montpellier University Hospital, Montpellier, France. ⁶⁵ EA 2991, Euromov, University Montpellier, Montpellier, France. ⁶⁶ Department of Pathophysiology and Transplantation, IRCCS Fondazione Ca'Granda Ospedale Maggiore Policlinico, University of Milan, Via F. Sforza 35, Milan, Italy. ⁶⁷ Pediatric Department, University of Verona Hospital, Verona, Italy. ⁶⁸ Department of Public Health and Infectious Diseases, Sapienza University of Rome, Rome, Italy. ⁶⁹ Second University of Naples and Institute of Translational Medicine, Italian National Research Council, Naples, Italy. ⁷⁰ Woolcock Institute of Medical Research, University of Sydney and Sydney Local Health District, Glebe, NSW, Australia. ⁷¹ Quebec Heart and Lung Institute, Laval University, Québec City, QC, Canada. ⁷² Directeur Général Adjoint, Montpellier University Hospital, Montpellier, France. ⁷³ Health Economics and Health Technology Assessment, Institute of Health and Wellbeing, University of Glasgow, Glasgow, UK. ⁷⁴ Respiratory Biomedical Unit, Institute of Lung Health, University Hospitals of Leicester NHS Trust, Leicestershire, UK. ⁷⁵ Department of Infection, Immunity and Inflammation, University of Leicester, Leicester, UK. ⁷⁶ Department of Clinical Epidemiology and Biostatistics, McMaster University, HSC Room 2C16, 1280 Main Street West Hamilton, Hamilton, Canada. ⁷⁷ Universitätsmedizin der Johannes Gutenberg-Universität Mainz, Mainz, Germany. ⁷⁸ National Heart and Lung Institute, Imperial College, London, London, UK. ⁷⁹ Wellcome Centre for Global Health, Imperial College, London, London, UK. ⁸⁰ MRC-PHE Centre for Environment and Health, Imperial College, London, London, UK. ⁸¹ Imperial College and Royal Brompton Hospital, London, UK. ⁸² Centro Medico Docente La Trinidad, Caracas, Venezuela. ⁸³ Department of Respiratory Diseases, Montpellier University Hospital, Montpellier, France. ⁸⁴ National Heart and Lung Institute, Imperial College London, Royal Brompton Hospital NHS, London, UK. ⁸⁵ Institute of Ageing and Chronic Disease, University of Liverpool and University Hospital Aintree, Liverpool, UK. ⁸⁶ Department of Pediatrics, Medical School, Federal University of Minas Gerais, Belo Horizonte, Brazil. ⁸⁷ Région Languedoc Roussillon, Montpellier, France. ⁸⁸ Department of Paediatrics, Oslo University Hospital and University of Oslo, Oslo, Norway. ⁸⁹ Allergy and Asthma Associates of Southern California, Mission Viejo, CA, USA. ⁹⁰ Regional Ministry of Equality, Health and Social Policies of Andalusia, Seville, Spain. ⁹¹ Division of Allergy/Immunology, University of South Florida, Tampa, FL, USA. ⁹² Allergy and Immunology Laboratory, Metropolitan University, Simon Bolivar University, Barranquilla, Colombia. ⁹³ Asma e Immunologia, SLaii, Sociedad Latinoamericana de Alergia, Barranquilla, Colombia. ⁹⁴ Department of Social Medicine, Faculty of Medicine, University of Crete, PO Box 2208, Heraklion 71003, Crete, Greece. ⁹⁵ National Cooperative Group of Paediatric Research on Asthma, Asthma Clinic and Education Center of the Capital Institute of Pediatrics, Peking and Center for Asthma Research and Education, Beijing, China. ⁹⁶ Chachava Clinic, David Tvildiani Medical University-AIETI Medical School, Grigol Robakidze University, Tbilisi, Georgia. ⁹⁷ Pulmonary Research Institute FMBA, Moscow, Russia. ⁹⁸ National Heart and Lung Institute, Imperial College, London, London, UK. ⁹⁹ Medicine Department, IRCCS-Azienda Ospedaliera Universitaria San Martino, Genoa, Italy. ¹⁰⁰ Latvian Allergy Association, Riga, Latvia. ¹⁰¹ Department of Medicine, Nova Southeastern University, Davie, FL, USA. ¹⁰² Department of Paediatrics, Imperial College London, London, UK. ¹⁰³ The Centre for Allergy Research, The Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden. ¹⁰⁴ Department of Dermatology and Allergy, Technische Universität München, Munich, Germany. ¹⁰⁵ ZAUM-Center for Allergy and Environment, Helmholtz Center Munich, Technische Universität München, Munich, Germany. ¹⁰⁶ Allergy Division, Chest Disease Department, University Hospital of Strasbourg, Strasbourg, France. ¹⁰⁷ EUREGHA, European Regional and Local Health Association, Brussels, Belgium. ¹⁰⁸ University of Edinburgh, Edinburgh, UK. ¹⁰⁹ Allergology and Immunology Discipline, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania. ¹¹⁰ Kronikgune, Bilbao, Basque Region, Spain. ¹¹¹ Department of Medicine, Division of Clinical Immunology and Allergy, McMaster University, Hamilton, ON, Canada. ¹¹² Laboratoire de Pharmacologie Respiratoire UPRES EA220, Hôpital Foch, Suresnes Université Versailles Saint-Quentin, Suresnes, France. ¹¹³ Respiratory Diseases Department, Rangueil-Larrey Hospital, Toulouse, France. ¹¹⁴ Service de physiologie respiratoire, Hôpital Cochin, Université Paris-Descartes, Assistance publique-Hôpitaux de Paris, Paris, France. ¹¹⁵ NIHR Southampton Respiratory Biomedical Research Unit, Faculty of Medicine, University Southampton, Southampton, UK. ¹¹⁶ Medical Faculty Skopje, University Clinic of Pulmonology and Allergy, Skopje, Republic of Macedonia. ¹¹⁷ Service de Pneumo-Allergologie, Centre Hospitalo-Universitaire de Béni-Messous, Algiers, Algeria. ¹¹⁸ Ecole des Mines, Alès, France. ¹¹⁹ Medical Faculty, Vilnius University, Vilnius, Lithuania. ¹²⁰ Allergy and Clinical Immunology Section, National Heart and Lung Institute, Imperial College London, London, UK. ¹²¹ Section of Allergy and Immunology, Saint Louis University School of Medicine, Saint Louis, MO, USA. ¹²² Pediatric Allergy and Immunology Unit, Ain Shams University, Cairo, Egypt. ¹²³ Clinic of Children's Diseases, Faculty of Medicine, Vilnius University, Vilnius, Lithuania. ¹²⁴ Modena University, Modena, Italy. ¹²⁵ Education for Health, Warwick, UK. ¹²⁶ Division of Allergy, Department of Pediatric Medicine, The Bambino Gesù Children's Research Hospital Holy See, Rome, Italy. ¹²⁷ Global Allergy and Asthma Platform (GAAPP), Altgasse 8-10, 1130 Vienna, Austria. ¹²⁸ Center for Health Technology and Services Research - CINTESIS, Faculdade de Medicina, Universidade do Porto, Porto, Portugal. ¹²⁹ Allergy Unit, CUF Porto Instituto & Hospital, Porto, Portugal. ¹³⁰ Department of Otorhinolaryngology, Academic Medical Centre, Amsterdam, The Netherlands. ¹³¹ Department of Epidemiology, Regional Health Service Lazio Region, Rome, Italy. ¹³² Repatriation General Hospital, Adelaide, SOUTH AUSTRALIA, Australia. ¹³³ Athens Chest Hospital, Athens, Greece. ¹³⁴ National Center for Disease Control and Public Health of Georgia, Tbilisi, Georgia. ¹³⁵ Polibiobienestar Research Institute, University of Valencia, Valencia, Spain. ¹³⁶ Department of Pulmonary Diseases, Cerrahpasa Faculty of Medicine, Istanbul University, Istanbul, Turkey. ¹³⁷ Allergy and Immunology Division, Clinica Ricardo Palma, Lima, Peru. ¹³⁸ Universidad Autónoma de Nuevo León, San Nicolás De La Garza, Mexico. ¹³⁹ Center of Allergy and Immunology, Georgian Association of Allergology and Clinical Immunology, Tbilisi, Georgia. ¹⁴⁰ Latvian Association of Allergists, Center of Tuberculosis and Lung Diseases, Riga, Latvia. ¹⁴¹ Faculty of the Department of Neurology, University of Washington School of Medicine, St. Louis, MO, USA. ¹⁴² University Hospital Olomouc - National eHealth Centre, Olomouc, Czech Republic. ¹⁴³ Immunology and Allergy Division, Clinical Hospital, University of Chile, Santiago, Chile. ¹⁴⁴ Centre for Infection and Immunity, School of Medicine, Dentistry and Biomedical Sciences, Queen's University Belfast, Belfast, UK. ¹⁴⁵ Department of Respiratory Diseases, Odense University Hospital, Odense, Denmark. ¹⁴⁶ NHS Scotland, Edinburgh, Scotland, UK. ¹⁴⁷ Institute of Epidemiology I, German Research Centre for Environmental Health, Helmholtz Zentrum München, Neuherberg, Germany. ¹⁴⁸ Agence Régionale de Santé, 34067 Montpellier Cedex 2, France. ¹⁴⁹ Vienna Challenge Chamber, Vienna, Austria. ¹⁵⁰ Department of Paediatrics and Child Health, University College Cork, Cork, Ireland. ¹⁵¹ University of Southampton Faculty of Medicine, University Hospital Southampton, Southampton, UK. ¹⁵² Service de Pneumologie, Hôpital Bicêtre, Inserm UMR_S999, Université Paris-Sud, Le Kremlin Bicêtre, France. ¹⁵³ School of Psychology, Plymouth University, Plymouth, UK. ¹⁵⁴ Federico II University Hospital/Campania RS, Naples, Italy. ¹⁵⁵ Servicio de Alergia e Immunologia, Clinica Santa Isabel, Buenos Aires, Argentina. ¹⁵⁶ Universidade Federal de Sao Paulo, São Paulo, Brazil. ¹⁵⁷ Libra Foundation, Buenos Aires, Argentina. ¹⁵⁸ The George Institute for Global Health, The University of Sydney, Camperdown, Australia. ¹⁵⁹ Airway Disease Infection Section, National Heart and Lung Institute, Imperial College, London, London, UK. ¹⁶⁰ MRC and Asthma UK Centre in Allergic Mechanisms of Asthma, London, UK. ¹⁶¹ Medical Commission, Montpellier University Hospital, Montpellier, France. ¹⁶² Children's Clinic of Tartu University Hospital, Tartu, Estonia. ¹⁶³ Hallym University College of Medicine, Hallym University Sacred Heart Hospital, Gyeonggi-Do, South Korea. ¹⁶⁴ Allergology Department, Centre de l'Asthme et des Allergies, Hôpital d'Enfants Armand-Trousseau (APHP), Paris, France. ¹⁶⁵ Sorbonne Universités, UPMC Univ Paris 06, UMR_S 1136, Institut Pierre Louis d'Epidémiologie et de Santé Publique, Equipe EPAR, 75013 Paris, France. ¹⁶⁶ Ukrainian Medical Stomatological Academy, Poltava, Ukraine. ¹⁶⁷ Federal Medicobiological Agency, Laboratory of Molecular Immunology, Institute of Immunology, National Research Center, Moscow, Russian Federation. ¹⁶⁸ Pediatric Allergy and Asthma Unit, Hacettepe University School of Medicine, Ankara, Turkey. ¹⁶⁹ Immunology and Allergy Division, Department of Chest Diseases, School

of Medicine, Hacettepe University, Ankara, Turkey. ¹⁷⁰ Institute of Social Medicine, Epidemiology and Health Economics, Charité - Universitätsmedizin Berlin, Berlin, Germany. ¹⁷¹ Institute for Clinical Epidemiology and Biometry, University of Würzburg, Würzburg, Germany. ¹⁷² Department of Medicine, McMaster University, Health Sciences Centre 3V47, 1280 Main Street West, Hamilton, Canada. ¹⁷³ Center for Rhinology and Allergology, Wiesbaden, Germany. ¹⁷⁴ Société de Pneumologie de Langue Française, Espace francophone de Pneumologie, Paris, France. ¹⁷⁵ Department of Respiratory Medicine, Faculty of Medicine and Dentistry, University Hospital Olomouc, Olomouc, Czech Republic. ¹⁷⁶ GRIAC Research Institute, Department of Pediatric Pulmonology and Pediatric Allergology, Beatrix Children's Hospital, University Medical Center Groningen, University of Groningen, Groningen, The Netherlands. ¹⁷⁷ Department of Immunology, Rheumatology and Allergy, Medical University of Lodz, and HARC, Lodz, Poland. ¹⁷⁸ Sachs' Children's Hospital, Stockholm, Sweden. ¹⁷⁹ Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden. ¹⁸⁰ Division of Internal Medicine, Asthma and Allergy, Barlicki University Hospital, Medical University of Lodz, Lodz, Poland. ¹⁸¹ Clinic of Infectious, Chest Diseases, Dermatology and Allergology, Vilnius University, Vilnius, Lithuania. ¹⁸² VIB Inflammation Research Center, Ghent University, Ghent, Belgium. ¹⁸³ Department for Pediatric Pneumology and Immunology, Charité Medical University, Berlin, Germany. ¹⁸⁴ Clínica de Alergia, Asma y Pediatría, Hospital Médica Sur, Ciudad De México, Mexico. ¹⁸⁵ University of Medicine and Pharmacy, Hochiminh City, Vietnam. ¹⁸⁶ Divisions of Allergy and Immunology, Departments of Internal Medicine and Pediatrics, University of Tennessee College of Medicine, Germantown, TN, USA. ¹⁸⁷ Scottish Centre for Respiratory Research, Cardiovascular and Diabetes Medicine, Medical Research Institute, Ninewells Hospital, University of Dundee, Dundee, UK. ¹⁸⁸ State Key Laboratory of Respiratory Diseases, Guangzhou Institute of Respiratory Disease, The First Affiliated Hospital of Guangzhou Medical University, Guangzhou 510120, China. ¹⁸⁹ Department of Paediatrics, Oslo University Hospital, Oslo, Norway. ¹⁹⁰ Faculty of Medicine, Institute of Clinical Medicine, University of Oslo, Oslo, Norway. ¹⁹¹ Department of Pulmonary Medicine, CHU Sart-Tilman, Liege, Belgium. ¹⁹² Queen's Medical Research Institute, University of Edinburgh, Edinburgh, UK. ¹⁹³ Service de Pneumo-allergologie, Hôpital Saint-Joseph, Paris, France. ¹⁹⁴ Service de Pneumologie, UMR INSERM, UMR1087 and CNR 6291, l'Institut du thorax, University of Nantes, Nantes, France. ¹⁹⁵ Department of Pulmonary Medicine, Rashid Hospital, Dubai, UAE. ¹⁹⁶ Scottish Government Health Department, eHealth and Pharmaceuticals, Edinburgh, UK. ¹⁹⁷ Department of Respiratory Medicine, University of Bratislava, Bratislava, Slovakia. ¹⁹⁸ Department of Medicine (RCSI), Bon Secours Hospital, Glasnevin, Dublin, Ireland. ¹⁹⁹ Cardiovascular and Thoracic Department, AOU Città della Salute e della Scienza di Torino, Turin, Italy. ²⁰⁰ Division of Clinical Immunology and Allergy, Laboratory of Behavioral Immunology Research, The University of Mississippi Medical Center, Jackson, MS, USA. ²⁰¹ Respiratory Medicine Research, Shahid Beheshti University of Medical Sciences, Tehran, Iran. ²⁰² VingCard Elsafe, Moss, Norway. ²⁰³ Allergie-Centrum-Charité at the Department of Dermatology and Allergy, Charité - Universitätsmedizin Berlin, Berlin, Germany. ²⁰⁴ Department of Paediatrics, Maputo Central Hospital, Maputo, Mozambique. ²⁰⁵ Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden. ²⁰⁶ PNDP/Portuguese National Programme for Respiratory Diseases, Lisbon, Portugal. ²⁰⁷ Allergy and Asthma Medical Group and Research Center, San Diego, CA, USA. ²⁰⁸ Royal Brompton Hospital, London, UK. ²⁰⁹ Hautklinik - Klinik für Dermatologie & Allergologie, Universitätsklinikum der RWTH Aachen, Aachen, Germany. ²¹⁰ Croatian Pulmonary Society, Zagreb, Croatia. ²¹¹ National Institute of Pneumology M. Nasta, Bucharest, Romania. ²¹² Faculty of Medicine, University of Belgrade, Belgrade, Serbia. ²¹³ Serbian Association for Asthma and COPD, Belgrade, Serbia. ²¹⁴ National Center for Research in Chronic Respiratory Diseases, Tishreen University School of Medicine, Latakia, Syria. ²¹⁵ Département de Pharmacologie, CHU de Bordeaux, Université Bordeaux, INSERM U657, Bordeaux Cedex, France. ²¹⁶ Department of Public Health and Biostatistics, EA 4064, Paris Descartes University, Paris, France. ²¹⁷ Paris Municipal Department of Social Action, Childhood, and Health, Paris, France. ²¹⁸ Aura Andalucía, Andalucía, Spain. ²¹⁹ Allergy and Clinical Immunology Department, Hospital CUF-Descobertas, Lisbon, Portugal. ²²⁰ National Clinical Director for Respiratory Services, NHS England, Leeds, England, UK. ²²¹ Institute of Medical Statistics, Informatics and Epidemiology, Medical Faculty, University of Cologne, Cologne, Germany. ²²² Unitat de Rinologia i Clínica de l'Olfacte, Servei d'ORL, Hospital Clínic, Clinical and Experimental Respiratory Immunology, IDIBAPS, Barcelona, Spain. ²²³ Mustapha Hospital, Algiers, Algeria. ²²⁴ Scientific Centre of Children's Health Under the Russian Academy of Medical Sciences, Moscow, Russia. ²²⁵ Section of Otolaryngology-Head and Neck Surgery, The University of Chicago Medical Center and The Pritzker School of Medicine, The University of Chicago, Chicago, IL, USA. ²²⁶ Hospital de Niños Orlando Alassia, Santa Fe, Argentina. ²²⁷ Hospital of the Hospitaller Brothers in Buda, Budapest, Hungary. ²²⁸ Pediatric Pneumology and Immunology, Charité Universitätsmedizin Berlin, Berlin, Germany. ²²⁹ EA4556 Epsilon, Université Montpellier 1, Montpellier, France. ²³⁰ ENT Department, University Hospital of Kinshasa, Kinshasa, Congo. ²³¹ Department of Allergy, Immunology and Respiratory Medicine, Alfred Hospital and Central Clinical School, Monash University, Melbourne, VIC, Australia. ²³² Department of Immunology, Monash University, Melbourne, VIC, Australia. ²³³ National Hospital Organization, Tokyo National Hospital, Tokyo, Japan. ²³⁴ Department of Otorhinolaryngology, Chiba University Hospital, Chiba, Japan. ²³⁵ Department of Otolaryngology, Nippon Medical School, Tokyo, Japan. ²³⁶ Centre Hospitalier Universitaire Pédiatrique Charles de Gaulle, Ouagadougou, Burkina Faso. ²³⁷ Cardio-Thoracic and Vascular Department, University Hospital of Pisa, Pisa, Italy. ²³⁸ Department of Comparative Medicine, Messerli, Research Institute of the University of Veterinary Medicine and Medical University, Vienna, Austria. ²³⁹ Department of Immunology and Allergology, Faculty of Medicine and Faculty Hospital in Pilsen, Charles University in Prague, Pilsen, Czech Republic. ²⁴⁰ Center for Pediatrics and Child Health, Institute of Human Development, Royal Manchester Children's Hospital, University of Manchester, Manchester M13 9WL, UK. ²⁴¹ Allergy Department, 2nd Pediatric Clinic, Athens General Children's Hospital "P&A Kyriakou", University of Athens, Athens 11527, Greece. ²⁴² Respiratory Medicine, Department of Medical Sciences, University of Ferrara, Ferrara, Italy. ²⁴³ Department of Allergy and Clinical Immunology, Ajou University School of Medicine, Suwon, South Korea. ²⁴⁴ Nuffield Department of Medicine, University of Oxford, Oxford, UK. ²⁴⁵ Department of Pediatrics, Nippon Medical School, Tokyo, Japan. ²⁴⁶ Department of Health, Social Services and Public Safety, Belfast, Northern Ireland, UK. ²⁴⁷ Center for Rhinology and Allergology, Wiesbaden, Germany. ²⁴⁸ Department of Otorhinolaryngology, Head and Neck Surgery, Universitätsmedizin Mannheim, Medical Faculty Mannheim, Heidelberg University, Mannheim, Germany. ²⁴⁹ Conseil Général de l'Economie. Ministère de l'Economie, de l'Industrie et du Numérique, Paris, France. ²⁵⁰ Département de pédiatrie, CHU de Grenoble, BP 217, 38043 Grenoble Cedex 9, France. ²⁵¹ Children's Hospital Srebrnjak, Zagreb, School of Medicine, University J.J. Strossmayer, Osijek, Croatia. ²⁵² Im GerontoLab Europe - Europäische Vereinigung für Vitalität und Aktives Altern (eVAA) e.V., Leipzig, Germany. ²⁵³ Karl Landsteiner Institute for Clinical and Experimental Pneumology, Hietzing Hospital, Wolkersbergenstraße 1, 1130 Vienna, Austria. ²⁵⁴ Clinic of Allergy and Asthma, Medical University Sofia, 1 Sv. Georgi Sofijski St., 1431 Sofia, Bulgaria. ²⁵⁵ Allergy Diagnostic and Clinical Research Unit, University of Cape Town Lung Institute, Cape Town, South Africa. ²⁵⁶ Department of Pulmonary Medicine and Tuberculosis, GRIAC Research Institute, University Medical Center Groningen, University of Groningen, Groningen, The Netherlands. ²⁵⁷ Academic Centre of Primary Care, University of Aberdeen, Aberdeen, UK. ²⁵⁸ Research in Real-Life, Cambridge, UK. ²⁵⁹ LungenClinic Grosshansdorf, Airway Research Center North, Member of the German Center for Lung Research (DZL), Grosshansdorf, Germany. ²⁶⁰ Department of Medicine, Christian Albrechts University, Airway Research Center North, Member of the German Center for Lung Research (DZL), Kiel, Germany. ²⁶¹ Conseil Départemental de l'Ordre des Pharmaciens, Maison des Professions Libérales, 34000 Montpellier, France. ²⁶² SLAAI, Barranquilla, Colombia. ²⁶³ Division of Pulmonary, Critical Care, Sleep and Allergy, University of Nebraska Medical Center, Omaha, NE, USA. ²⁶⁴ Salford, Royal NHS Foundation Trust and NHS England North, London, UK. ²⁶⁵ Hospital Universitario de Getafe-Servicio Madrileño de Salud, Madrid, Spain. ²⁶⁶ Association Asthme et Allergie, Paris, France. ²⁶⁷ Primary Care Respiratory Research Unit, Instituto de Investigación Sanitaria de Palma IdisPa, Palma De Mallorca, Spain. ²⁶⁸ Allergy Unit, Complesso integrato Columbus, Rome, Italy. ²⁶⁹ Serviço de Imunoalergologia, Hospital da Luz, Lisbon, Portugal. ²⁷⁰ Hospital de Clinicas, University of Parana, Curitiba, PR, Brazil. ²⁷¹ Department of Allergy, Asthma, and Immunology, Children's Mercy Hospitals and Clinics and Pediatrics, Medicine University of Missouri-Kansas City School of Medicine, Kansas City, MO, USA. ²⁷² Division of Allergy Asthma and Clinical Immunology, Emek Medical Center, Afula, Israel. ²⁷³ Woodbrook Medical Centre, Loughborough, UK. ²⁷⁴ Honorary Clinical Research Fellow, Allergy and Respiratory Research Group, The University of Edinburgh, Edinburgh, UK. ²⁷⁵ Allergy and Clinical Immunology Department, Centro Médico-Docente la Trinidad and Clínica El Avila, 6a transversal Urb. Altamira, piso 8, consultorio 803, Caracas 1060, Venezuela. ²⁷⁶ The Royal

National TNE Hospital, University College London, London, UK.²⁷⁷ Otolaryngology and Head and Neck Surgery, CHU Rangueil-Larrey, Toulouse, France.²⁷⁸ Allergy Unit, Department of Dermatology, University Hospital of Zurich, Zurich, Switzerland.²⁷⁹ Helmholtz Zentrum München/Institute of Epidemiology I, Neuherberg, Germany.²⁸⁰ Allergy and Respiratory Research Group, Centre for Population Health Sciences, Medical School, The University of Edinburgh, Edinburgh, UK.²⁸¹ Child Health, Queen's University Belfast and Royal Belfast Hospital for Sick Children, Belfast, UK.²⁸² Department of Thoracic Medicine, University Hospital of Heraklion, Crete, Greece.²⁸³ University Hospital of Mont-Godinne, Catholic University of Louvain, Yvoir, Belgium.²⁸⁴ Sorbonne Universités, UPMC Univ Paris 06, UMR_S 1158 Neurophysiologie Respiratoire Expérimentale et Clinique, Paris, France.²⁸⁵ INSERM, UMR_S 1158 Neurophysiologie Respiratoire Expérimentale et Clinique, Paris, France.²⁸⁶ Department R3S, AP-HP, Groupe, Paris, France.²⁸⁷ Department of Pediatrics and Child Health, Department of Immunology, Faculty of Medicine, University of Manitoba, Winnipeg, MB, Canada.²⁸⁸ Sociedad Paraguaya de Alergia Asma e Inmunología, Asunción, Paraguay.²⁸⁹ Julius Center of Health Sciences and Primary Care, University Medical Center Utrecht, University of Utrecht, Utrecht, The Netherlands.²⁹⁰ Division of Allergy, Clinical Immunology and Rheumatology, Department of Pediatrics, Federal University of São Paulo, São Paulo, Brazil.²⁹¹ Kyrgyzstan National Centre of Cardiology and Internal Medicine, Euro-Asian Respiratory Society, Bishkek, Kyrgyzstan.²⁹² Pulmonary Division, Heart Institute (InCor), Hospital da Clinicas da Faculdade de Medicina da Universidade de Sao Paulo, São Paulo, Brazil.²⁹³ Academic Medical Centre, University of Amsterdam, Amsterdam, The Netherlands.²⁹⁴ Department of Epidemiology, CAPHRI School of Public Health and Primary Care, Maastricht University, Maastricht, The Netherlands.²⁹⁵ Sidkkids hospitala and Institute of Health Policy, Management and Evaluation, Toronto, ON, Canada.²⁹⁶ Centre of Pneumology, Faculty of Medicine, University of Coimbra, Coimbra, Portugal.²⁹⁷ Division of Allergy and Clinical Immunology, University of Salerno, Salerno, Italy.²⁹⁸ Division of Immunopathology, Department of Pathophysiology and Allergy Research, Center for Pathophysiology, Infectiology and Immunology, Medical University of Vienna, Vienna, Austria.²⁹⁹ Pneumology and Allergy Department, Hospital Clínic, Clinical and Experimental Respiratory Immunology, IDIBAPS, Barcelona, Spain.³⁰⁰ Department of Lung Diseases and Clinical Allergology, University of Turku, Turku, Finland.³⁰¹ Unité de Pharmacoépidémiologie, CHU-Lyon - UR 5558 CNRS, Université Claude Bernard, Lyon, Villeurbanne, France.³⁰² Clinical Immunology and Allergy Unit, Department of Medicine Solna, Karolinska Institutet and University Hospital, Stockholm, Sweden.³⁰³ Department of Chest Medicine, Centre Hospitalier Universitaire Dinant-Godinne, Université Catholique de Louvain, Yvoir, Belgium.³⁰⁴ FILHA, Finnish Lung Association, Helsinki, Finland.³⁰⁵ Gérontopôle, CHU Toulouse, Toulouse, France.³⁰⁶ Centre for Respiratory Medicine and Allergy, Institute of Inflammation and Repair, Manchester Academic Health Science Centre, The University of Manchester, Manchester, UK.³⁰⁷ University Hospital of South Manchester, Manchester NHS Foundation Trust, Manchester, UK.³⁰⁸ Pulmonary Unit, Department of Cardiology, Thoracic and Vascular Medicine, Arcispedale S.Maria Nuova/IRCCS, Research Hospital, Reggio Emilia, Italy.³⁰⁹ Regional Agency for Health and Social Care, Reggio Emilia, Italy.³¹⁰ Division of Allergy

and Immunology, Department of Pediatrics, Siriraj Hospital, Mahidol University Faculty of Medicine, Bangkok 10700, Thailand.³¹¹ Pulmonary Environmental Epidemiology Unit, CNR Institute of Clinical Physiology, Pisa, Via Trieste 41, 56126 Pisa, Italy.³¹² CNR Institute of Biomedicine and Molecular Immunology "A. Monroy", Via U. La Malfa 153, 90146 Palermo, Italy.³¹³ Department of Medicine, Pulmonary and Critical Care Medicine, University Medical Center Giessen and Marburg, Philipps-University Marburg, Marburg, Germany.³¹⁴ Sotiria Hospital, Athens, Greece.³¹⁵ Department of Otorhinolaryngology, HNO-Klinik, Universitätsklinikum Düsseldorf, Düsseldorf, Germany.³¹⁶ Hôpital Albert Calmette, CHRU, Lille, France.³¹⁷ Asthma UK, Mansell Street, London, UK.³¹⁸ Department of Otolaryngology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore, Singapore.³¹⁹ Eshelman School of Pharmacy, University of North Carolina, Chapel Hill NC, USA.³²⁰ Bradford Institute for Health Research, Bradford Royal Infirmary, Bradford, UK.³²¹ Department of Research, Olmsted Medical Center, Rochester, MN, USA.³²² Cyprus International Institute for Environmental and Public Health in Association with Harvard School of Public Health, Cyprus University of Technology, Limassol, Cyprus.³²³ Department of Pediatrics, Hospital "Archbishop Makarios III", Nicosia, Cyprus.³²⁴ The Allergy and Asthma Institute, Lahore, Pakistan.³²⁵ Social Sciences, University of Southampton, Southampton, UK.³²⁶ Department of Paediatrics and Child Health, Red Cross Children's Hospital, and MRC Unit on Child and Adolescent Health, University of Cape Town, Cape Town, South Africa.³²⁷ Universidad Católica de Córdoba, Córdoba, Argentina.³²⁸ Department of Otolaryngology, Head and Neck Surgery, Beijing Tongren Hospital, Capital Medical University, Beijing 100730, China.³²⁹ University Clinic of Respiratory and Allergic Diseases, Golnik, Slovenia.³³⁰ Department of Physiology, CHRU and Vice President for Research, University Montpellier, Montpellier, France.³³¹ EPAR UMR-S UPMC, Paris VI, Paris, France.

The online version of the original article can be found under doi:[10.1186/s13601-016-0116-9](https://doi.org/10.1186/s13601-016-0116-9).

Received: 29 November 2016 Accepted: 29 November 2016
Published online: 20 February 2017

Reference

1. Bousquet J, Farrell J, Crooks G, Hellings P, Bel EH, Berwick M, et al. Scaling up strategies of the chronic respiratory disease programme of the European Innovation Partnership on Active and Healthy Ageing (Action Plan B3: Area 5). *Clin Transl Allergy*. 2016;6:29.