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ERS statement on tracheomalacia and bronchomalacia in children

Colin Wallis[1], Efthymia Alexopoulou[2], Juan L. Antón-Pacheco[3], Jayesh M. Bhatt[4], Andrew Bush[5], Anne B. Chang[6,7,8], Anne-Marie Charatsi[9], Courtney Coleman[10], Julie Depiazzi[11], Konstantinos Douros[12], Ernst Eber[13], Mark Everard[14], Ahmed Kantar[15], Ian B. Masters[6,7], Fabio Midulla[16], Raffaella Nenna[16,17], Derek Roebuck[18], Deborah Snijders[19] and Kostas Priftis[12]

Affiliations: [1]Respiratory Medicine Unit, Great Ormond Street Hospital for Children, London, UK. [2]2nd Radiology Dept, National and Kapodistrian University of Athens, Attikon University Hospital, Athens, Greece. [3]Pediatric Airway Unit and Pediatric Surgery Division, Universidad Complutense de Madrid, Madrid, Spain. [4]Nottingham University Hospitals NHS Trust, Queen's Medical Centre, Nottingham, UK. [5]Imperial College London and Royal Brompton and Harefield NHS Foundation Trust, London, UK. [6]Dept of Respiratory and Sleep Medicine, Queensland Children's Hospital, Brisbane, Australia. [7]Centre for Children's Health Research, Institute of Health and Biomedical Innovation, Queensland University of Technology, Brisbane, Australia. [8]Child Health Division, Menzies School of Health Research, Charles Darwin University, Casuarina, Australia. [9]Pediatric Dept, Centre Hospitalier de Luxembourg, Luxembourg, Luxembourg. [10]European Lung Foundation, Sheffield, UK. [11]Physiotherapy Dept, Perth Children's Hospital, Perth, Australia. [12]Allergology and Pulmonology Unit, 3rd Paediatric Dept, National and Kapodistrian University of Athens, Athens, Greece. [13]Division of Paediatric Pulmonology and Allergology, Dept of Paediatrics and Adolescent Medicine, Medical University of Graz, Graz, Austria. [14]Division of Paediatrics, University of Western Australia, Perth Children's Hospital, Perth, Australia. [15]Pediatric Asthma and Cough Centre, Istituti Ospedalieri Bergamaschi, University and Research Hospitals, Bergamo, Italy. [16]Dept of Paediatrics, "Sapienza" University of Rome, Rome, Italy. [17]Asthma and Airway Disease Research Center, University of Arizona, Tucson, AZ, USA. [18]Interventional Radiology Dept, Great Ormond Street Hospital, London, UK. [19]Dipartimento Salute della Donna e del Bambino, Università degli Studi di Padova, Padova, Italy.

Correspondence: Colin Wallis, Respiratory Medicine Unit, Great Ormond Street Hospital for Children, Great Ormond Street, London, WC1N 3JH, UK. E-mail: colin.wallis@gosh.nhs.uk

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This statement provides a comprehensive review of the causes, presentation, recognition and management of children with tracheobronchomalacia written by a multidisciplinary Task Force in keeping with ERS methodology http://bit.ly/2LPTQCk

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ABSTRACT Tracheomalacia and tracheobronchomalacia may be primary abnormalities of the large airways or associated with a wide variety of congenital and acquired conditions. The evidence on diagnosis, classification and management is scant. There is no universally accepted classification of severity. Clinical presentation includes early-onset stridor or fixed wheeze, recurrent infections, brassy cough and even near-death attacks, depending on the site and severity of the lesion. Diagnosis is usually made by flexible bronchoscopy in a free-breathing child but may also be shown by other dynamic imaging techniques such as low-contrast volume bronchography, computed tomography or magnetic resonance imaging. Lung function testing can provide supportive evidence but is not diagnostic. Management may be medical or surgical, depending on the nature and severity of the lesions, but the evidence base for any therapy is limited. While medical options that include bronchodilators, anti-muscarinic agents, mucolytics and antibiotics (as well as treatment of comorbidities and associated conditions) are used, there is

currently little evidence for benefit. Chest physiotherapy is commonly prescribed, but the evidence base is poor. When symptoms are severe, surgical options include aortopexy or posterior tracheopexy, tracheal resection of short affected segments, internal stents and external airway splinting. If respiratory support is needed, continuous positive airway pressure is the most commonly used modality either *via* a face mask or tracheostomy. Parents of children with tracheobronchomalacia report diagnostic delays and anxieties about how to manage their child's condition, and want more information. There is a need for more research to establish an evidence base for malacia. This European Respiratory Society statement provides a review of the current literature to inform future study.