

Cough Focused Series: progress in understanding and management of chronic cough

Woo-Jung Song¹, Kian Fan Chung²

¹Department of Allergy and Clinical Immunology, University of Ulsan College of Medicine, Asan Medical Center, Seoul, Korea; ²Experimental Studies Unit, National Heart & Lung Institute, Imperial College London, London, UK

Correspondence to: Kian Fan Chung, MD, D.Sc. National Heart & Lung Institute, Imperial College London, Dovehouse Street, London SW3 6LY, UK. Email: f.chung@imperial.ac.uk.

Keywords: Cough; treatment; symposium; abstracts

Submitted Dec 02, 2022. Accepted for publication Dec 15, 2022. doi: 10.21037/jtd-22-1743 View this article at: https://dx.doi.org/10.21037/jtd-22-1743

Chronic cough is a common but medically-challenging condition that occurs worldwide (1). Various diseases are associated with chronic cough, but cough can also be persistent without any identifiable cause (unexplained chronic cough; UCC) or remain refractory to best available treatments (refractory chronic cough; RCC) (2). These patients increasingly seek a diagnosis and treatment but frequently find themselves helpless in their personal healthcare journey (3-5).

In this regard, the year 2022 marks a special turning point in the field of cough because we are witnessing major upcoming changes in the management of chronic cough. Large clinical trials are now demonstrating that cough in patients with RCC or UCC can be effectively controlled by drugs that modulate the cough reflex pathways, in particular P2X3 antagonists (6). Before the introduction of novel antitussives, patient management relied on empirical therapies in the absence of robust clinical evidence, including codeine, antibiotics, or even oral corticosteroids (7,8). The introduction of novel antitussives is expected to reduce the impact of cough, reduce the number of prescriptions, and finally improve long-term health outcomes, including quality of life and drug-related complications.

Further breakthrough in cough management is expected in coming years, which will be driven by multi-disciplinary collaborations between researchers in various fields, including epidemiology, pathophysiology, pharmacology, clinical medicine, and digital technology. The efforts will eventually fill the gaps in our knowledge and solve the puzzle of chronic cough. In this Special Issue on Cough, we will provide an insight into the current advances in cough research and the promotion of academic communications around the world by publishing 12 peer-reviewed original research articles and expert reviews in two forthcoming issues of the Journal.

We also publish the abstracts presented during the 12th London International Cough Symposium (LICS) which was held at Imperial College London (London UK) on July 13 & 14, 2022. The 12th LICS gathered scientists and clinicians who discussed the latest research findings and evolving ideas, including the impact of cough, cough measurement, cough in infectious disease, pathophysiological mechanisms, and novel treatments of cough (9). The John Widdicombe lecture was delivered by Prof. Surinder Birring (King's College London, UK) on "Measuring cough: what really matters". His state-of-the-art review on the topic will be published in this special issue.

We thank the authors and reviewers for their contribution to this Cough Focused Series.

Acknowledgments

Funding: The Twelfth London International Cough Symposium was supported by an educational grant from Merck, with contributions from Bellus Health, Bionorica, NeRRe Therapeutics, Nocion Therapeutics, Reckitt Benckiser, Shionogi, and Trevi Therapeutics.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, *Journal of Thoracic Disease* for the series "Novel Insights into Chronic Cough". The article did not undergo external peer review.

Conflicts of Interest: Both authors have completed the ICMJE uniform disclosure form (available at https://jtd.amegroups. com/article/view/10.21037/jtd-22-1743/coif). The series "Novel Insights into Chronic Cough" was commissioned by the editorial office without any funding or sponsorship. WIS served as the unpaid Guest Editor of the series and serves as an unpaid editorial board member of *Journal of* Thoracic Disease. KFC served as the unpaid Guest Editor of the series and serves as an unpaid Associate Editorin-Chief of Journal of Thoracic Disease. Woo-Jung Song declares academic grants from MSD, consulting fees from MSD, GSK, AstraZeneca, and Novartis, and honoraria from MSD, GSK, AstraZeneca, and Novartis. KFC reports grants from MRC grant on Precision Medicine for severe asthma, EPSRC grant on air pollution and asthma, and GSK grant on mepolizumab and eosinophils in asthma to his institution; speaking engagements for Novartis, AZ and Merck; Advisory Board meeting for GSK, Astra Zeneca, Novartis, Roche, Merck, Rickett- Beckinson, Nocion & Shionogi on asthma, COPD and chronic cough, Scientific Advisory Board of the Clean Breathing Institute supported by Haleon; and Educational support to his institution for the 12th London International Cough Symposium in July 2022 from Merck. The authors have no other conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Open Access Statement: This is an Open Access article distributed in accordance with the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International

Cite this article as: Song WJ, Chung KF. Cough Focused Series: progress in understanding and management of chronic cough. J Thorac Dis 2022;14(12):5073-5074. doi: 10.21037/jtd-22-1743

License (CC BY-NC-ND 4.0), which permits the noncommercial replication and distribution of the article with the strict proviso that no changes or edits are made and the original work is properly cited (including links to both the formal publication through the relevant DOI and the license). See: https://creativecommons.org/licenses/by-nc-nd/4.0/.

References

- Song WJ, Chang YS, Faruqi S, et al. The global epidemiology of chronic cough in adults: a systematic review and meta-analysis. Eur Respir J 2015;45:1479-81.
- Chung KF, McGarvey L, Song WJ, et al. Cough hypersensitivity and chronic cough. Nat Rev Dis Primers 2022;8:45.
- Chamberlain SA, Garrod R, Douiri A, et al. The impact of chronic cough: a cross-sectional European survey. Lung 2015;193:401-8.
- Hulme K, Dogan S, Parker SM, et al. 'Chronic cough, cause unknown': A qualitative study of patient perspectives of chronic refractory cough. J Health Psychol 2019;24:707-16.
- Song WJ, Yu CJ, Kang SH. Cough Characteristics and Healthcare Journeys of Chronic Cough Patients in Community-Based Populations in South Korea and Taiwan. Lung 2022;200:725-36.
- McGarvey LP, Birring SS, Morice AH, et al. Efficacy and safety of gefapixant, a P2X(3) receptor antagonist, in refractory chronic cough and unexplained chronic cough (COUGH-1 and COUGH-2): results from two doubleblind, randomised, parallel-group, placebo-controlled, phase 3 trials. Lancet 2022;399:909-23.
- Zeiger RS, Schatz M, Butler RK, et al. Burden of Specialist-Diagnosed Chronic Cough in Adults. J Allergy Clin Immunol Pract 2020;8:1645-1657.e7.
- An J, Lee JH, Won HK, et al. Cough Presentation and Cough-Related Healthcare Utilization in Tertiary Care: Analysis of Routinely Collected Academic Institutional Database. Lung 2022;200:431-9.
- 9. Mazzone SB, Satia I, McGarvey L, et al. Chronic cough and cough hypersensitivity: from mechanistic insights to novel antitussives. Lancet Respir Med 2022;10:1113-5.