

accommodation/meeting expenses from Aerocrine, AZ, BI, Mund, Napp, Nov, and Teva; funding for patient enrolment or completion of research from Chiesi, Nov, Teva, and Zentiva; stock/stock options from AKL Ltd which produces phytopharmaceuticals; owns 74% of the social enterprise Optimum Patient Care Ltd, UK and 74% of Observational and Pragmatic Research Institute Pte Ltd, Singapore; and is peer reviewer for grant committees of the Efficacy and Mechanism Evaluation programme, HTA, and Medical Research Council.

HKR: advisory boards for AZ, GSK and Nov; data safety monitoring boards for AZ, GSK, Merck and Nov; independent educational presentations for AZ, BI, GSK, Mund, Nov and Teva; and independent research funding from AZ and GSK.

REGABS18004:

Withdrawn

REGABS18005:

Withdrawn

REGABS18006:

Withdrawn

REGABS18007:

Withdrawn

REGABS18008:

Withdrawn

REGABS18009:

Withdrawn

REGABS18010:

Demographic and clinical characteristics of patients with severe asthma worldwide

UK Severe Asthma Registry, Severe Asthma Network Italy, Severe Asthma Web-based Database, Korean Academy of Asthma, Allergy and Clinical Immunology, National Jewish Health, Trung Tran¹, David Price^{2,3,4}

¹AstraZeneca, Gaithersburg, MD, USA; ²Optimum Patient Care, Cambridge, UK; ³Observational and Pragmatic Research Institute, Singapore, Singapore; ⁴Academic Primary Care, University of Aberdeen, Aberdeen, UK; ⁵UK Severe Asthma Registry, Queen's University Belfast, Belfast, Northern Ireland; ⁶UK Severe Asthma Registry, Barts Health NHS Trust, London, UK; ⁷UK Severe Asthma Registry, Guy's and St Thomas' NHS Trust, London, UK; ⁸UK Severe Asthma Registry, Royal Brompton & Harefield NHS Foundation Trust, London, UK; ⁹Personalized Medicine Asthma & Allergy Clinic, Humanitas University & Research Hospital, Milan, Italy; ¹⁰Severe Asthma Network Italy, Milan, Italy; ¹¹Australasian Severe Asthma Network, Priority Research Centre for Healthy Lungs, University of Newcastle, Newcastle, Australia; ¹²Hunter Medical Research Institute, Department of Respiratory and Sleep Medicine, John Hunter Hospital, Newcastle, New South Wales, Australia; ¹³Catholic University of Korea, Seoul, South Korea; ¹⁴Division of Allergy and Clinical Immunology, Department of Internal Medicine, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea; ¹⁵National Jewish Health, Denver, Colorado, USA

Respiratory Research 2018, 19(Suppl 1):REGABS18010:

Collaborators:

UK Severe Asthma Registry: Liam Heaney⁵, John Busby⁵, Paul Pfeffer⁶, David Jackson⁷, Andrew Menzies-Gow⁸; Severe Asthma Network Italy: G. Walter Canonica⁹, Enrico Heffler⁹, Concetta Sirena¹⁰;

Severe

Asthma Web-based Database: Peter Gibson^{11,12}, Erin Harvey^{11,12}, Heather Powell¹²;

Korean Academy of Asthma, Allergy and Clinical Immunology: Chin Kook Rhee¹³, You Sook Cho¹⁴;

National Jewish Health: Eileen Wang¹⁵, Pearlanne Zelarney¹⁵

Background: The lack of a universally accepted definition for severe asthma hinders the investigation into its exact prevalence and pathology.

The International Severe Asthma Registry (ISAR) was created as a global effort to capture information on severe asthma using a standardized method of data capture. We aimed to examine the global prevalence of severe asthma and its corresponding patient characteristics.

Method: This was a descriptive study utilizing patients with severe asthma data recorded in the ISAR from the UK, USA, Italy, Australia and South Korea from December 2014 to December 2017. Patients were included in the ISAR if they were ≥18 years of age and were on GINA (Global Initiatives for Asthma) Step 5 therapy or Step 4 with uncontrolled symptoms. Descriptive statistics for demographic factors and clinical characteristics were tabulated and summarized.

Results: From a total of 2,244 patients with severe asthma, 1,502 (66.9%) patients were classified as GINA Step 5 patients and 742 (33.1%) as GINA Step 4 patients with uncontrolled symptoms. From the total study population, 1,250 (55.7%) were females and 1,120 (49.9%) were of Caucasian origin. Most of the patients were between the ages 55 and 79 (1107 (49.3%)) and were non-smokers (1,468 (66.2%)). A significant proportion (602 (49.9%)) of the patients had poorly controlled asthma. The asthma age of onset for Step 4 patients fell predominantly within the ">40" age category (291 (41.9%)), whereas the majority of Step 5 patients' asthma age of onset fell within the "12-40" age category (268, (46.4%)). The most prevalent comorbidity was allergic rhinitis for Step 4 (317 (52.7%)) and Step 5 patients (329 (27.3%)). Blood eosinophil count was greater than 0.3 10⁹/L for 319 (48.9%) Step 4 and 911 (63.8%) Step 5 patients. Intermediate (25-50 parts per billion) or high (>50 parts per billion) Fractional Exhaled Nitric Oxide (FeNO) results were recorded for 1,107 (78.6%) patients while 1,307 (69.3%) patients had serum IgE levels within 150-400 IU/ml or above 400 IU/ml, indicative of pulmonary inflammation. At least one exacerbation was reported for 962 (78.4%) patients and 472 (49.1%) of these patients had a minimum of four or more exacerbations.

Conclusion: The demographic and clinical characteristics of patients with severe asthma from five geographically diverse countries support previously reported characteristics of severe asthma patients. To decipher informative trends in asthma phenotypes and clinical management, country-specific distributions should be compared next.

Disclosures: Liam Heaney has taken part in advisory boards and given lectures at meetings supported by GlaxoSmithKline, Respiervet, Merck Sharpe & Dohme, Nycomed, Boehringer Ingelheim, Teva, Vectura, Novartis and AstraZeneca. He declares sponsorship for attending international scientific meetings from AstraZeneca, Boehringer Ingelheim, GlaxoSmithKline and Napp Pharmaceuticals; and speaker fees from AstraZeneca, Aerocrine, Hoffman la Roche and Teva.

Paul Pfeffer has taken part in advisory boards and given lectures at meetings supported by Novartis, GlaxoSmithKline, Boehringer Ingelheim, and AstraZeneca.

Andrew Menzies-Gow declares grants from AstraZeneca, Boehringer Ingelheim, GlaxoSmithKline and Hoffman La Roche; consultancy agreements with AstraZeneca; personal fees from AstraZeneca, Boehringer Ingelheim, GlaxoSmithKline, Hoffman La Roche, Napp Pharmaceuticals, Novartis, Teva and Vectura; non-financial support from AstraZeneca, Boehringer Ingelheim and Napp Pharmaceuticals; and payment for travel expenses to international conferences from AstraZeneca, Boehringer Ingelheim and Napp Pharmaceuticals.

Peter Gibson declares grants from AstraZeneca, GlaxoSmithKline and Novartis; and personal fees from AstraZeneca and GlaxoSmithKline.

Chin Kook Rhee declares consultancy and lecture fees from AstraZeneca, Boehringer Ingelheim, GlaxoSmithKline, MSD, Mundipharma, Novartis, Sandoz, Takeda and Teva-Handok.

Trung Tran is an employee of AstraZeneca.

David Price declares board membership with Aerocrine, Amgen, AstraZeneca, Boehringer Ingelheim, Chiesi, Mylan, Mundipharma, Napp Pharmaceuticals, Novartis and Teva; consultancy agreements with Almirall, Amgen, AstraZeneca, Boehringer Ingelheim, Chiesi, GlaxoSmithKline, Mylan, Mundipharma, Napp Pharmaceuticals, Novartis, Pfizer, Teva and Theravance; grants and unrestricted funding for investigator-initiated studies (conducted through Observational and Pragmatic Research Institute Pte Ltd) from Aerocrine, AKL Research and Development Ltd, AstraZeneca, Boehringer Ingelheim, British Lung Foundation, Chiesi, Mylan, Mundipharma, Napp Pharmaceuticals, Novartis, Pfizer, Respiratory Effectiveness Group, Teva, Theravance, UK National Health Service and Zentiva; payment for

lectures/speaking engagements from Almirall, AstraZeneca, Boehringer Ingelheim, Chiesi, Cipla, GlaxoSmithKline, Kyorin, Mylan, Merck, Mundipharma, Novartis, Pfizer, Skyepharma and Teva; payment for manuscript preparation from Mundipharma and Teva; payment for the development of educational materials from Mundipharma and Novartis; payment for travel/accommodation/meeting expenses from Aerocrine, AstraZeneca, Boehringer Ingelheim, Mundipharma, Napp Pharmaceuticals, Novartis and Teva; funding for patient enrolment or completion of research from Chiesi, Novartis, Teva and Zentiva; stock/stock options from AKL Research and Development Ltd which produces phytopharmaceuticals; owns 74% of the social enterprise Optimum Patient Care Ltd (Australia, Singapore, and UK) and 74% of Observational and Pragmatic Research Institute Pte Ltd (Singapore); and is a peer reviewer for grant committees of the Efficacy and Mechanism Evaluation programme and Health Technology Assessment. Erin Harvey, David Jackson, Eileen Wang, Enrico Heffler, G. Walter Canonica, John Busby, Pearlanne Zelamey, Sirena Concetta and You Sook Cho declare no relevant conflicts of interest concerning this paper.

REGABS18011: Withdrawn

REGABS18012: Understanding the reasons behind self-selecting medications for allergic rhinitis in the community pharmacy

Sinthia Bosnic-Anticevich^{1,2}, Rachel Tan¹, Biljana Cvetkovski¹, Vicky Kritikos¹, David Price^{3,4}, Kwok Yan^{1,5} and Peter Smith⁶.

¹Quality Use of Respiratory Medicine Group, Woolcock Institute of Medical Research, University of Sydney, Sydney, Australia; ²Sydney Local Health District, Sydney, Australia; ³Academic Primary Care, University of Aberdeen, Aberdeen, United Kingdom; ⁴Observational and Pragmatic Research Institute Pte Ltd, Singapore, Singapore; ⁵Royal Prince Alfred Hospital, Sydney, Australia; ⁶Clinical Medicine, Griffith University, Southport, Queensland, Australia

Respiratory Research 2018, **19**(Suppl 1):REGABS18012:

Background: Allergic rhinitis (AR) is highly prevalent and more than 50% of people with AR self-medicate with over-the-counter medications in the community pharmacy, without seeking professional advice. Many patients select suboptimal treatments for their condition, and this increases incidence of developing complications and/or comorbidities. It is unclear what influences a patient's decision to self-select medications for AR rather than seek professional advice. This study aims to (i) compare the demographics, clinical characteristics and medication selected, between pharmacy customers who choose to self-select and those who interact with a pharmacist when purchasing medication for AR, and (ii) identify the key factors associated with AR patients' medication self-selection behaviour.

Method: A cross-sectional observational study was conducted in a convenience sample of community pharmacies from the Sydney metropolitan area. Data were collected using a researcher administered survey that included: demographics, pattern of AR symptoms, their impact on quality of life (QOL), triggering factors and medication(s) selected. Univariate and multivariate logistic regression was used to identify factors associated with participants' medication self-selection behaviour.

Of the 296 recruited participants, 202 were identified with AR, of which 67.8% were female, 54.5% were aged > 40 years, 64.9% had a doctor's diagnosis of AR, and 69.3% self-selected medication(s). Significant differences were noted in AR symptoms, impact of AR on QOL and medication(s) selected between the two groups. Participants who experienced moderate-severe wheeze were more likely (OR 4.047, 95% CI 1.1555-14.188) to self-select medication(s), and those with AR symptoms impacting on their QOL were less likely (OR 0.369, 95% CI 0.188-0.727) to self-select medication(s).

Conclusion: Although people with AR who reported an impact on their QOL were more likely to consult a pharmacist, however the high incidence of self-selection of OTC treatments for AR symptoms in community pharmacy does not reflect the severity of the condition experienced by patients. This indicate that there are also people with AR underestimate the severity of their symptoms and subsequently do not see the need to consult a pharmacist. Nonetheless,

on top of having AR, participants who were also experiencing wheeze, were less likely to consult a pharmacist. Pharmacists must be aware of this finding especially in light of the recent "Thunderstorm Asthma" event resulting in serious exacerbations and even death. Pharmacists should alert them regarding these co-existing conditions and provide them with proper education.

Disclosures: Sinthia Bosnic-Anticevich: Conflict of interests: A member of the Teva Pharmaceuticals Devices International Key Experts Panel; received research support from Research in Real Life; payment for lectures/speaking engagements and for developing educational presentations from Teva and Mundipharma; received Honoraria from AstraZeneca, Boehringer Ingelheim, GlaxoSmithKline, for her contribution to advisory boards/key international expert forum. Rachel Tan: Conflict of interests: Nothing to disclose. Biljana Cvetkovski: Conflict of interests: Nothing to disclose. Vicky Kritikos: Conflict of interests: Received honoraria from AstraZeneca, GlaxoSmithKline and Pfizer. Kwok Yan: Conflict of interests: Received honoraria for speaking and consulting from AstraZeneca, Boehringer Ingelheim, GlaxoSmithKline, Meda, Mundipharma and Pfizer. Peter Smith: Conflict of interests: A clinical allergist with research and clinical interest in rhinology and has also been a speaker for Meda, GlaxoSmithKline, Novartis, Mundipharma and AstraZeneca. David Price: Conflict of interests: A board membership with Aerocrine, Amgen, AstraZeneca, Boehringer Ingelheim, Chiesi, Meda, Mundipharma, Napp, Novartis, and Teva Pharmaceuticals; consultancy agreements with Almirall, Amgen, AstraZeneca, Boehringer Ingelheim, Chiesi, GlaxoSmithKline, Meda, Mundipharma, Napp, Novartis, Pfizer, Teva Pharmaceuticals, and Theravance; grants and unrestricted funding for investigator-initiated studies (conducted through Observational and Pragmatic Research Institute Pte Ltd) from UK National Health Service, British Lung Foundation, Aerocrine, AKL Research and Development Ltd, AstraZeneca, Boehringer Ingelheim, Chiesi, Meda, Mundipharma, Napp, Novartis, Pfizer, Respiratory Effectiveness Group, Takeda, Teva Pharmaceuticals, Zentiva, and Theravance; payment for lectures/speaking engagements from Almirall, AstraZeneca, Boehringer Ingelheim, Chiesi, Cipla, GlaxoSmithKline, Kyorin, Meda, Merck, Mundipharma, Novartis, Pfizer, Skyepharma, Takeda, and Teva Pharmaceuticals; payment for manuscript preparation from Mundipharma and Teva Pharmaceuticals; payment for the development of educational materials from Novartis and Mundipharma; payment for travel/accommodation/meeting expenses from Aerocrine, Boehringer Ingelheim, Mundipharma, Napp, Novartis, Teva Pharmaceuticals, and AstraZeneca; funding for patient enrolment or completion of research from Chiesi, Teva Pharmaceuticals, Zentiva, and Novartis; stock/stock options from AKL Research and Development Ltd, which produces phytopharmaceuticals; owns 74% of the social enterprise Optimum Patient Care Ltd, UK, and 74% of Observational and Pragmatic Research Institute Pte Ltd, Singapore; and is peer reviewer for grant committees of the Medical Research Council, Efficacy and Mechanism Evaluation programme, and Health Technology Assessment.

REGABS18013: Withdrawn

REGABS18014: Withdrawn

REGABS18015: Asthma patients perspectives on medication; do they need something more than the blue one?

Alan Kaplan

University of Toronto, Toronto, Canada

Respiratory Research 2018, **19**(Suppl 1):REGABS18015:

Background: To understand patient perspectives on Asthma medications

Method: 20 patients interviewed (first quarter 2016) in seven 90-minute focus groups, four in English(Toronto) and three in French(Montreal). Patient inclusion were those prescribed a regular controller, either ICS monotherapy or combination LABA/ICS.

Results: A number of different themes emerged. Asthma was described as "airway closing" in terms of symptoms and only rarely was there a mention of inflammation. They understood the 'blue one' immediately relieved their symptoms, that the preventer was a