REG Respiratory Effectiveness Group

ÖGP Österreichische Gesellschaft für Pneumologie

Wissenschaftliche Tagung mit Anerkennung der ÖGP

Scientific Meeting endorsed by the Austrian Society of Pneumology

CELEBRATING 10 YEARS OF REG & RESPIRATORY REAL-LIFE RESEARCH

THE RESPIRATORY EFFECTIVENESS GROUP

REG SUMMIT 2024

www.regsummit2024.org

14 -16 March 2024

Vienna • AUSTRIA

NH Danube City Hotel

Supported by:

MEETING DESTINATION VIENNA NOW • TOGETHER

FINAL PROGRAMME

REG Respiratory Effectiveness Group

Mobile application

The REG Summit 2024 Programme is available for viewing through the Mobile Application. By scanning the QR code available on this page (using iPhone or Android smartphone), delegates can navigate easily through the programme.

When you are prompted for a code upon launching the App, enter **REG2024**

Get it on Google play

Available on the App Store

THE RESPIRATORY EFFECTIVENESS GROUP

REG SUMMIT 2024

March 14-16, 2024

Vienna • **AUSTRIA**

CONTENTS

04 | Word of Welcome

05 | Organization

06 | General Information

08 | Faculty Members

09 | Scientific Programme

15 | Poster Presentations Catalogue

24 | Sponsors

WORD OF WELCOME

Dear Colleagues and Friends,

Respiratory Effectiveness Group (REG) welcomes you with great pleasure to the **9th REG Summit** on **March 14th -16th, 2024** in **Vienna, Austria**.

This year's Summit celebrates 10 years of REG and its annual scientific meeting is the key event supporting REG's purpose to promote real-life research in respiratory diseases and the improvement of patient care through the influence of guidelines with real-world evidence.

The Scientific Programme Committee has developed a rich scientific programme, focusing on hot topics, cutting-edge developments, and controversial issues that can be meaningfully informed by real-life research.

By bringing together top experts in respiratory medicine, and structuring the meeting around debate and think-tank sessions, this event aims to provide the ideal ground for intellectual exchange and production of breakthrough ideas, among those passionate about understanding and treating respiratory diseases. It will be a highly educational experience complemented by ample networking and best-practice exchange opportunities.

Your active participation in the REG Summit 2024 will undoubtedly ensure a successful and productive meeting.

Looking forward to welcoming you in Vienna!

With warm regards,

Walter Giorgio Canonica
REG President

Alan Kaplan
Scientific Programme Chair

ORGANIZATION

The REG Board of Directors

Walter Giorgio Canonica
Marc Miravitlles
Sinthia Bosnic-Anticevich
Nikos Papadopoulos
Dermot Ryan
Nicolas Roche
Antonio Anzueto
Omar Usmani
Alan Kaplan
Joan B. Soriano

COMMITTEES

Oversight Committee

Nick May
Trevor Lambert
Keith Allan

Scientific Programme Committee

Alan Kaplan
Sinthia Bosnic-Anticevich
Nikos Papadopoulos
Walter Giorgio Canonica
Antonio Anzueto
George Christoff
Marc Miravitlles

REG SECRETARIAT

CEO & Supporter Liaison

Michael Walker

Scientific Researchers

Graham Lough
Valeria Perugini

GENERAL INFORMATION

Meeting Venue

NH Danube City Hotel
Address: Wagramer Str. 21, 1220 Wien, Austria
Telephone: +43 1 260200, Website: https://www.nh-hotels.com

Organizer

REG Respiratory Effectiveness Group

ESpace North, 181 Wisbech Road, Littleport, Ely, Cambridgeshire, CB6 1RA, UK
Website: www.regresearchnetwork.org
Email: enquiries@regresearchnetwork.org

Organizing Bureau

ERASMUS Conferences & Events

Tel.: +30 210 7414700 (call centre)
Email: info@regsummit2024.org
Website: www.regsummit2024.org

Secretariat Desk Operating Hours

Thursday, March 14th, 2024	12:00 - 17:30
Friday, March 15th, 2024	08:00 - 17:15
Saturday, March 16th, 2024	08:30 - 13:00

On-Site Registration fees

REG Collaborator	350 €
Non-REG Collaborator	450 €
Trainees / Nurses / Students	125 €
REG Supporter Company	695 €
Non-Supporter Company	775 €

Language

The official language of the meeting is English. No simultaneous translation will be provided.

Internet

Complimentary Wi-Fi will be offered in all meeting areas throughout the duration of the event.

Accreditation

The REG Summit 2024, Vienna, Austria, 14/03/2024 - 16/03/2024 has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with **9,5 European CME credits** (ECMEC®s). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

Through an agreement between the Union Européenne des Médecins Spécialistes and the American Medical Association, physicians may convert EACCME® credits to an equivalent number of AMA PRA Category 1 Credits™. Information on the process to convert EACCME® credit to AMA credit can be found at www.ama-assn.org/education/earn-credit-participation-international-activities. "Live educational activities, occurring outside of Canada, recognised by the UEMS-EACCME® for ECMEC®s are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada.

Following the evaluation of the European Board for Accreditation in Pneumonology (EBAP), the 9th REG Summit has been found worthy of accreditation by EBAP for **14.5 CME credits** covering the whole program.

We are pleased to inform you that, after evaluation, the 9th REG Summit has been deemed COMPLIANT with the provisions of the MedTech Europe Code.

Name Badges

Registration badges will be used during the meeting. For identification purposes and admission to the session hall, participants are requested to always wear their badges. If you lose your badge, a new one can be purchased for EUR 20 at the Registration Desk. Please have your badge scanned at the Registration Desk, to obtain CME credits.

FACULTY MEMBERS

Ignacio Ansotegui, Spain
Surinder S. Birring, United Kingdom
Sinthia Bosnic-Anticevich, Australia
Fulvio Braido, Italy
Arnaud Bourdin, France
G. Walter Canonica, Italy
Philippe Gevaert, Belgium
David Halpin, United Kingdom
Alan Kaplan, Canada
Therese Lapperre, Belgium
Federico Lavorini, Italy
Marc Miravitlles, Spain
Nikolaos Papadopoulos, Greece
Alberto Papi, Italy
Celeste Porsbjerg, Denmark
David Price, Singapore
Chin Kook Rhee, South Korea
Luca Richeldi, Italy
Pilar Rivera - Ortega, United Kingdom
Nicolas Roche, France
Dermot Ryan, United Kingdom
Jane Scullion, United Kingdom
Joan Soriano, Spain
Job Van Boven, The Netherlands
Johann Christian Virchow, Switzerland
Michael E. Wechsler, United States

SCIENTIFIC PROGRAMME

Thursday, March 14th, 2024

REG Working Group Meetings

Sigmund Freud Hall	
12:00-17:30	**REG Working Group Research Ideas Brainstorming** Facilitators: **Prof. G. Walter Canonica – Dr. Marc Miravitlles**
12:00-13:00	Lunch Break
13:00-14:30	Discussion topics: Asthma (Mild/Moderate, Severe, Pediatrics), Allergy and Rhinitis, Environment
14:30-15:00	Coffee Break
15:00-17:30	Discussion topics: COPD, IPF/ILD, Cough, Vaccines, Adherence & Technologies

Friday, March 15th, 2024

Plenary Sessions

Sigmund Freud Hall	
08:50-09:00	**Welcome Address** **Prof. G. Walter Canonica**
09:00-09:55	**Vaccines Session** Chair: **Dr. Dermot Ryan** *Epidemiologic Perspective of Vaccination in Respiratory Diseases* **Prof. Joan Soriano** *Vaccinations & the Respiratory Patient – Recommendations vs Real-World Use* **Dr. Alan Kaplan**
09:55-10:30	**ILD/IPF Session** Chair: **Dr. Pilar Rivera-Ortega** *Update on Emerging Drugs for the Treatment of Idiopathic Pulmonary Fibrosis: A Look Towards 2023 and Beyond* **Prof. Luca Richeldi**
10:30-11:00	Coffee Break

Friday, March 15th, 2024

11:00-12:30	**Asthma Session** Chair: **Prof. Arnaud Bourdin** *Mild Asthma, an Update on Anti-Inflammatory Reliever* **Prof. Alberto Papi** *When to Institute Triple Therapy – Should All Patients go Through Triple Therapy and Azithromycin Before Biologics?* **Prof. Michael Wechsler**
12:30-13:30	Lunch Break
13:30-14:30	**COPD Session** Chair: **Prof. Therese Lapperre** *New Definitions of Exacerbation of COPD: Are They Ready for Clinical Practice?* **Dr. Marc Miravitlles** *What's Next After Triple Therapy in COPD?* **Prof. David Halpin**
14:30-15:15	**Rhinitis Session** Chair: **Dr. Ignacio Ansotegui** *Novel Therapies in Rhinitis* **Dr. Ignacio Ansotegui** *Rhinitis & Asthma – What does the RWE tell Us?* **Prof. Philippe Gevaert** *AIT & Biologics: A New Opportunity of Combination Treatment* **Prof. G. Walter Canonica**
15:15-15:45	Coffee Break
15:45-17:15	**In the Respiratory Hot Seat** 15:45-16:30 **PRO/CON** Chair: **Prof. Celeste Porsbjerg** *Remission in Severe Asthma is Attainable in Most Patients* PRO: **Prof. Michael Wechsler** CON: **Dr. Alan Kaplan** 16:30-17:15 **PRO/CON** Chair: **Prof. Job van Boven** *DPIs are the Devices of Choice in COPD or Asthma* PRO: **Prof. Federico Lavorini** CON: **Jane Scullion**

Saturday, March 16th, 2024

Plenary Sessions

Sigmund Freud Hall

09:00-09:45	**Cough Session** Chair: **Dr. Alan Kaplan** *Specific Cough-Targeting Drugs: Past, Present, and Future* **Prof. Surinder S. Birring**
09:45-10:30	**Mild – Moderate Disease Management Session** Chair: **Prof. Nikos Papadopoulos** *Identifying Which Patients Progress to Severe Asthma – New Evidence from MANI Registry* **Prof. Fulvio Braido** *Disease-Modifying Drugs in Asthma* **Prof. Christian Virchow**
10:30-11:00	Coffee Break
11:00-12:15	**Improving the Patient Journey in Severe Asthma- Lessons from ISAR and Future Research** Chair: **Prof. David Price** & **Dr. Eileen Wang** *Why is Quality Improvement Needed (Patient and Specialist Perspectives)* **Prof. Celeste Porsbjerg** *What has ISAR Achieved to Date in Improving Severe Asthma Care Globally (Standardized Data Collection)* **Prof. Chin Kook Rhee** *What Remains to be Achieved by ISAR (Practice Change Goals Based on Prior Research)* **Dr. Celine Bergeron** *What are the Future Research Needs for ISAR as a Network?* **Prof. Matthew Peters**
12:15-13:00	**Keynote** Chair: **Prof. Sinthia Bosnic – Anticevich** *What Registries have Taught Us in the Last Decade?* Panel: **Prof. David Price, Prof. Nicolas Roche, Prof. Fulvio Braido Prof. Chin Kook Rhee**
13:00	**Summit Close**

COMPANY SPONSORED SESSIONS

Friday, March 15, 2024 09:00 – 09:55 Sigmund Freud Hall sanofi	**Vaccines Session** Chair: **Dr. Dermot Ryan** *Epidemiologic Perspective of Vaccination in Respiratory Diseases* **Prof. Joan Soriano** *Vaccinations & the Respiratory Patient – Recommendations vs Real-World Use* **Dr. Alan Kaplan**
Friday, March 15, 2024 11:00 – 12:30 Sigmund Freud Hall Chiesi	**Asthma Session** Chair: **Prof. Arnaud Bourdin** *Mild Asthma, an Update on Anti-Inflammatory Reliever* **Prof. Alberto Papi** *When to Institute Triple Therapy – Should All Patients go Through Triple Therapy and Azithromycin Before Biologics?* **Prof. Michael Wechsler**
Friday, March 15, 2024 13:30 – 14:30 Sigmund Freud Hall Roche	**COPD Session** Chair: **Prof. Therese Lapperre** *New Definitions of Exacerbation of COPD: Are They Ready for Clinical Practice?* **Dr. Marc Miravitlles** *What's Next After Triple Therapy in COPD?* **Prof. David Halpin**
Friday, March 15, 2024 14:30 – 15:15 Sigmund Freud Hall MENARINI group	**Rhinitis Session** Chair: **Dr. Ignacio Ansotegui** *Novel Therapies in Rhinitis* **Dr. Ignacio Ansotegui** *Rhinitis & Asthma – What does the RWE tell Us?* **Prof. Philippe Gevaert** *AIT & Biologics: A New Opportunity of Combination Treatment* **Prof. G. Walter Canonica**
Saturday, March 16, 2024 09:00 – 09:45 Sigmund Freud Hall sanofi	**Cough Session** Chair: **Dr. Alan Kaplan** *Specific Cough-Targeting Drugs: Past, Present, and Future* **Prof. Surinder S. Birring**

MENARINI
group
MC-RESP-1-2024 January 2024
EMPOWERING THEM
TO BREATHE DEEPLY
We are committed to improving the lives
of people suffering from respiratory diseases.
IntoTheBreath

POSTER PRESENTATIONS

PP01 | Non-Allergist Physician Algorithm for Prescribing Allergen Immunotherapy

Alan Kaplan[1], Susan Waserman[2], Lauren Mack, Robert Hauptman[1], Anne Ellis[3], Doug Mack[2], Spiro Photopolous[1], Juan Ruiz[4], Phillipe Begin[5], Taft Micks[1], Harold Kim[6]

[1]Family Physician Airways Group of Canada, Stouffville, Canada, [2]McMaster University, Hamilton, Canada, [3]Queens University, Kingston, Canada, [4]Vancouver General Hospital, Vancouver, Canada, [5]Université de Montréal, Montreal, Canada, [6]University of Western Ontario, London, Canada

Background: Allergic rhinitis (AR) affects the health and well-being of 20-25% of Canadians, with detrimental effects on sleep quality, cognition, mood, mental health, and learning. However, with approximately 1 allergist per 133,000 people, some treatments are inaccessible to allergic Canadians. Current management approaches include avoidance and pharmacotherapy including nasal corticosteroids and nasal or oral antihistamines, while allergen immunotherapy (AIT) offers an effective long-term solution. Sublingual (SLIT) immunotherapy can significantly improve AR and asthma symptoms, reduce allergen sensitivity, modify long-term tolerance, and potentially prevent the development of other allergic diseases. Despite clinical efficacy, safety, and cost-effectiveness, SLIT is underutilized, partly related to the limited number of allergists in Canada. Given the home administration and safety of SLIT, non-allergists can play a vital role in the delivery of SLIT to the allergic population.

Methods: AK conceptualized and developed the initial draft of a treatment algorithm for non-allergists. This algorithm and treatment set were reviewed at an in-person meeting of an expert panel of four family physicians with a special interest in allergic disease and seven allergists. Consensus agreement resolved discrepancies.

Results: A focused algorithm with treatment recommendations was developed for non-allergists to diagnose and implement SLIT in the allergic population. This protocol requires accurate diagnosis based on the history of the timing of clinical symptoms, and selected and focused investigations, including skin testing and serum-specific IgE. Patient selection was prioritized with relevant cautions highlighted. With an allergic history and investigations consistent with allergy to dust mites, trees, grass, or ragweed pollen, the initiation of SLIT by non-allergists was encouraged/recommended. An annual review of clinical effectiveness was highlighted; complicated patients or non-responders should be referred for allergist assessment. Future validation and implementation are pending.

Conclusion: Safe and effective SLIT treatment for AR can be implemented by non-allergists with a focused algorithm.

PP02 | Semaglutide, a Treatment for Asthma?

Alan Kaplan

Family Physician Airways Group of Canada, Stouffville, Canada

Obese patients with Asthma are well known to have poorer control, more frequent exacerbations, and resistance to inhaled corticosteroids. Obesity can be multifactorial, with a quick division being those with T2 elevated asthma who are not controlled, do not exercise, and secondarily gain weight, or those who have obesity as a primary problem and can then present with either T2 elevated or T2 low disease. The common phenotype for the latter is a younger female with obesity and an older onset of asthma. Due to the ICS resistance, therapeutic options are somewhat limited, but evidence clearly has shown that weight loss from behavioral interventions or bariatric surgery can improve asthma outcomes. Diabetes is in itself a proinflammatory condition that increases the risk of lung complications as well. As such, treatment with Semaglutide can lead to weight loss and has been shown in diabetic patients to reduce exacerbations better than other diabetic medications (1). Weight loss can mechanistically improve asthma outcomes due to mechanical factors or changing inflammation levels (2). The hypothesis, as shown in previous case series (3) for these cases is that Semaglutide can lead to weight loss, and potentially change the inflammatory milieu with different inflammatory mediators in obesity such as IL6, TNF alpha, adipokine leptin, adiponectin and improve asthma outcomes. I describe five patients, in four of whom the addition of Semaglutide for weight loss also significantly improved asthma control and allowed titration down of asthma medications as well as proton pump inhibitors. Unfortunately, in the fifth case, in a patient with concomitant binge eating disorder, there was no weight loss, and the benefits were not seen. Semaglutide improves weight loss, and in obese asthmatic patients may control Asthma through a number of mechanisms and should be considered as a therapeutic asthma treatment.

Patient no.	Age	Stepped up therapy	FEV1 pre	Weight loss	Fev1 post	Asthma drug stepped down to	PPI	Patient satisfaction	T2?
1	54 F	High dose triple	60%	75 lb	90%	Low dose ICS/LABA	Discontinued Symptoms free	High	BEC 300, FENO 13 Allergy to dog
2	29 F	High dose triple	100%	50 lb	120%	Medium dose ICS/ LABA	Decreased to prn	High	BEC 400 IgE 174 FENO 42
3	32F	High dose triple	65%	15 lb	80%	Medium dose ICS/ LABA	continued	Moderate	BEC 100
4	40F	High dose triple	55%	65 lb	100%	Low dose ICS	Decreased from BID to OD	High	FENO 11
5	39	High dose triple	75%	0	72%	High dose ICS/LABA. Application for biologic pending	BID	Low	FENO 50 BEC 400

PP03 | Current and Optimal Practices in Childhood Asthma Monitoring: the Perspective of Caregivers

Maria Kritikou[1], **Michael Miligkos**[1], Valeria Ramiconi[2], Tonya Winders[3], Nikolaos G Papadopoulos[1]

[1]Department of Allergy, 2nd Pediatric Clinic, National & Kapodistrian University of Athens, Athens, Greece, [2]European Federation of Allergy and Airways Diseases Patients' Associations, Brussels, Belgium, [3]Global Allergy & Airways Patient Platform, Vienna, Austria

Introduction: Childhood asthma control largely depends on rigorous and regular monitoring. A recent international multistakeholder survey study showed that in most cases evidence-based standards are followed across the globe, however, it also unveiled differences between actual and optimal monitoring practices. Therefore, the objective of this study was to assess current and optimal monitoring practices according to caregivers of children with asthma.

Methods: We surveyed parents or guardians of children with asthma between May and August 2021, regarding actual and optimal monitoring practices concerning various aspects of asthma management during and between office visits. The survey was disseminated globally through the European Federation of Allergy and Airways Diseases Patients' Associations (EFA), the Global Allergy and Airways Patient Platform (GAAPP), and Pediatric Asthma in Real Life (PeARL) members.

Results: Forty-nine participants, from across Europe, North America, Asia, and Africa, provided complete responses. More than 80% of the respondents had direct experience with children with mild/moderate asthma. Two-thirds of the participants reported regular monitoring visits at 2-6 months with an approximate duration of 10-30 minutes. Symptoms control, overall health, and lung function assessment were deemed as high or very high priority during office visits by more than 80% of the respondents, whereas medication adherence was additionally considered for self-monitoring. Different patterns emerged when assessing differences between actual and perceived optimal use of monitoring tools. Of note, the actual frequency of comorbidities assessment, various lifestyle parameters evaluation, and lung function measurements fell short of the perceived optimal ones. Less than 25% of the respondents were recommended any self-monitoring tool, the majority of whom found them useful.

Conclusion: The current survey suggests that patients' needs and expectations are only partly served by the existing monitoring practices. The advent and wide implementation of new digital technologies may assist in the optimization of the monitoring process, hopefully resulting in improved asthma-related outcomes.

PP04 | Clinical Profile of 457 Latin-American Severe Asthma Patients in Mexico: Differences Between Those Who Are And Those Who Are Not On Biologics (OMA, DUPI, Anti-IL5)

Désirée Larenas-Linnemann[1], Ricardo Campos-Cerda[2], Angélica Contreras-Contreras[3], Ulises Noel García-Ramírez[4], María de la Luz García-Cruz[5], Saraid Cerda[6], Nidia Castillón-Benavides[6], Nadia Aguilar-Hinojosa[7], Lilia Borboa[8], Yair Humberto González Tuyub[9], Hugo Alberto Azuara Trujillo[13], Elsy Maureen Navarrete-Rodríguez[10], Victor González-Uribe[10], Karen Lilian Rivera[11], Itzel Vianney Ochoa García[12]

[1]Centro de Excelencia en Asma y Alergia Larenas S.C., Mexico City, Mexico, [2]Centro de Atención de Enfermedades Cardiopulmonares, Guadalajara, Mexico, [3]ISSSTE 'Lic. Adolfo López Mateos', Mexico city, Mexico, [4]IMSS, Centro Médico Nacional del Bajio UMAE T1, León, Mexico, [5]Private practice, Mexico city, Mexico, [6]SEDENA, Mexico city, Mexico, [7]IMSS Hospital general regional no 1 Ignacio Téllez, Mérida, Mexico, [8]ISSSTE Puebla, Puebla, Mexico, [9]ISSSTE Zaragoza, Mexico city, Mexico, [10]Hospital Infantil de México, 'Federico Gómez', Mexico city, Mexico, [11]IMSS UMAE14 Veracruz, Veracruz, Mexico, [12]IMSS Centro Médico Nacional del Occidente , Guadalajara, Mexico, [13]Hospital General de Zona Nr2 IMSS, Hermosillo, Mexico

Background: Mexico has participated in the International Severe Asthma (SA) Registry (ISAR), a global registry of SA patients. We search to describe the baseline clinical profile of the Mexican SA patients in the ISAR database: those on omalizumab (OMA), dupilumab (DUPI) and anti-interleukin 5 agents (antiIL5) and those not on any biologic (NoBx).

Method: clinical data from SA patients 4-85 years old were uploaded into the ISAR online platform in 13 establishments throughout the country, including social security and private clinics. After data curation patients were divided into four groups according to their actual therapy: NoBx OMA, DUPI, and antiIL5.

Results: 458 patients total. 174 (38%) OMA: of those 140 were already on the Bx before study-start, 32 started OMA during the study, 2 stopped. 54 (12%) on DUPI: 38 started the Bx before study-start, 14 were switched from OMA, 1 from antiIL5 and one was on DUPI+OMA. 111 (24%) antiIL5; of those 77 started the Bx before study-start, 9 with study-start, 22 were switched from OMA and 3 were on antiIL5+OMA. 58/111 were on mepolizumab, 45/111 on benralizumab. There were 119 noBx. In all 4 groups 20-35% was male and over 94% of Latin-American ethnicity. Median age 47-53y at study-entry was similar, except for DUPI, where more children were recruited (21y). Median age-of-asthma-onset was 28-32y (DUPI 9y), with most having a lapse between asthma and Bx start of 15-20 years. Median height 1.56-162cm, and BMI 23.6-29.1, which trended to be higher in No-Bx: 29.1 (Q1-Q3: 25.15-34.3kg/m2). As for asthma severity the anti-IL5 group tended to be slightly more severe with mean/median asthma control test 13.5/13 (others 14-15), more exacerbations needing systemic CS (2.8/3 per yr), emergency room visits (2.33/2 per yr) and hospitalizations (0.67/0 per yr), see table. Meanwhile, DUPI patients used more systemic CS, but less emergency department treatment. In each group there were 1-2 patients with a history of bronchial thermoplasty. At baseline long-term CS were documented in 46% of no-Bx, 9.8% of OMA, 7.8 of antiIL4 and 18% of antiIL5 patients.

Conclusion: We only observed some differences between yes-NoBx groups. The high % of LT-CS in no-Bx is striking. The height of our ISAR patients is 2cm lower than the general Mexican population. Median BMI of NoBx is close to obesity (>30). Among the Bx the anti-IL5 group trended to be more severe.

Table: Asthma severity clinical data at BL per Bx

	N	Mean	SD	Min	Max	Median	Q1	Q3
Exacerbations needing systemic CS								
No Bx	113	1.59	1.14	0	5	2	1	2
OMA	162	1.81	1.68	0	7	1	0	3
antiIL4	45	3.02	2.08	1	12	3	2	3
antiIL5	98	2.79	1.32	1	6	3	2	3
Emergency room								
No Bx	109	1.19	0.833	0	4	1	1	2
OMA	113	1.88	2.741	0	10	0	0	3
antiIL4	46	0.57	1.48	0	7	0	0	2
antiIL5	99	2.33	1.97	0	12	2	0.5	3
Hospital								
No Bx	86	0.53	0.52	0	2	0	0	1
OMA	93	0.49	0.98	0	4	0	0	1
antiIL4	41	0.29	0.60	0	2	0	0	0
antiIL5	81	0.67	1.18	0	5	0	0	1

PP05 | Comorbidities And T2 Inflammatory Profile Of 457 Latin-American Severe Asthma Patients In Mexico: Differences Between Those Who Did and Did Not Start Biologics (OMA, DUPI, Anti-IL5)

Désirée Larenas-Linnemann[1], Saraid Cerda Reyes[2], Nidia Karen Castillón Benavides[2], Angélica Contreras-Contreras[3], Ulises García Ramírez[4], Lilia Barboa[5], Nadia Aguilar Hinojosa[6], Karen Rivera Alvarado[7], Itzel Ochoa García[8], María dela Luz García-Cruz[9], Ricardo Campos-Cerda[10], Yair González Tuyub[11], Victor González[12], Hugo Alberto Azuara[13], Elsy Navarrete[12], Laura Dafne Mendoza Reyna[14]

[1]Centro de Excelencia en Asma y Alergia Larenas S.C., Mexico City, Mexico, [2]SEDENA, Mexico City, Mexico, [3]ISSSTE 'Lic. Adolfo López Mateos', Mexico city, Mexico, [4]IMSS, Centro Médico Nacional del Bajio UMAE T1, León, Mexico, [5]ISSSTE Puebla, Puebla, Mexico, [6]IMSS Hospital general regional no 1 Ignacio Téllez , Mérida, Mexico, [7]IMSS, UMAE14 Veracruz, Veracruz, Mexico, [8]IMSS Centro Médico Nacional Occidente, Guadalajara, Mexico, [9]Private practice, Mexico city, Mexico, [10]Centro de Atención de Enfermedades Cardiopulmonare, Guadalajara, Mexico, [11]ISSSTE Zaragoza, Mexico city, Mexico, [12]Hospital Infantil de México, 'Federico Gómez', Mexico city, Mexico, [13]Hospital General de Zona Nr2 IMSS, Hermosillo, Mexico, [14]Hospital Lázaro Cárdenas ISSSTE, Chihuahua, Mexico

Background: Mexico has participated in the International Severe Asthma (SA) Registry (ISAR), a global registry of SA patients. We search to describe the T2 biomarker profile of the Mexican SA patients in the ISAR database: those on omalizumab (OMA), dupilumab (DUPI) and anti-interleukin 5 agents (including mepolizumab and benralizumab, antiIL5), as well as those who are not on any biological treatment (NoBx), to compare between groups and later be able to compare them also to the global ISAR patients.

Method: T2 biomarker data from SA patients 4-85yo were uploaded into the ISAR online platform in 13 establishments throughout the country, both from social security and private clinics. T2 biomarkers included blood eosinophil count (BEC), fractional exhaled nitric oxide (FeNO) and total serum immunoglobulin E (IgE). Apart from the normal data cleaning, data curation included eliminating all post-Bx values. All patients were divided into four groups according to their actual therapy: NoBx OMA, DUPI and antiIL5.

Results: There was a total of 458 patients. Of those, there were 119 noBx, 174 (38%) were on OMA, 54 (12%) on DUPI and 111 (24%) on an antiIL5 (58/111 on mepolizumab, 45/111 on benralizumab). Table 1 shows the frequency of comorbidities in the four different groups. Table 2 the pre-Bx biomarkers. As we only included biomarker values pre-any-biologic starting date, values in Table 2 are lower than the included patient numbers, as not all patients in the registry had pre-Bx biomarker values. Mean and median BEC values were higher in DUPI and anti-IL5 patients (median 500-540 versus 385-390, $p<0.01$), mean and median FeNO higher in the DUPI group, while mean and median total serum IgE was higher in OMA and DUPI patients ($p<0.05$).

Conclusion: In this large registry-based Latin-American SA patient group, anxiety, depression and sleep apnea were more frequent in the no-Bx group. Nasal polyps were much more frequent in the antiIL5 group, partly due to limited access to antiIL4. We also observe several differences in the frequency of biomarkers pre-biologic initiation, related to what the biologic therapy best seems to tackle (e.g. higher pre-Bx IgE in anti-IgE and higher BEC in anti-IL5).

Table 1: COMORBIDITIES (current and past)								
Allergic*	**Allergic rhinitis**		**Chronic rhinosinusitis**		**Atopic dermatitis**		**Nasal polyps**	
	% Yes (current/ past)	n/N	% Yes (current/ past)	n/N	% Yes (current/ past)	n/N	% Yes (current/past)	
No Bx	90%	91/101	60%	71/119	42%	50/119	10%	23/119
OMA	86%	111/128	39%	67/170	6%	10/171	19%	31/170
antiIL4	55%	23/42	19%	10/54	32%	17/54	13%	7/54
antiIL5	78%	69/88	80%	88/111	8%	8/111	55%	8/111
Non-allergic**	**Anxiety**		**Depression**		**Sleep apnea**		**GERD**	
	% Yes (current/ past)	n/N	% Yes (current/ past)	n/N	% Yes (current/ past)	n/N	% Yes (current/past)	
No Bx	22%	26/119	13%	16/119	25%	25/102	4%	4/102
OMA	4%	7/127	2%	4/170	2%	3/129	4%	5/129
antiIL4	0	0/54	2%	1/54	0	0	5%	2/41
antiIL5	11%	12/111	7%	1/89	1%	1/89	18%	16/89

*Atopy in 58% of the no-Bx, 93% of the patients on OMA, 76% of those on DUPI, and 94% of the anti-IL5 patients.

** There were a total of 10 EGPA or HES patients (4 in the no-Bx, 0 in the OMA, 1 in the antiIL4, and 5 in the anti-IL5 groups)

Table 2: BIOMARKERS (pre-biologic initiation)								
	N	**Mean**	**SD**	**Min**	**Max**	**Median**	**Q1**	**Q3**
Blood eosinophil count (BEC)								
No Bx	108	486	472.6	40	3720	385	260.525	580
OMA	89	461	367.3	0	2160	390	230	610
antiIL4	37	559	537.6	1	2660	540	200	650
antiIL5	85	673	651.3	0	4833	500	300	830
FeNO								
No Bx	29	52	35.8	0	137	43	30	64
OMA	85	38	31.2	0	159	29	16	55
antiIL4	36	71	46.0	1	177	73.5	21.75	105.25
antiIL5	60	54	50.5	6	258	38	22.75	67

Total serum immunoglobulin E (IU/mL)								
No Bx	98	421	474.7	0	2520*	247.5	109.75	559.75
OMA	110	772	1625.3	8.5	13200	360	165.5	670
antiIL4	38	619	804.7	9	4134	384.5	115	713
antiIL5	87	363	622.4	7.2	3958.9	152	50.575	472

* Not taking into account a non-certified value of 6900 IU/

ACKNOWLEDGEMENTS

We would like to thank our Sponsors & Contributors
for their dedication and for their significant contributions

PLATINUM SPONSORS

Chiesi

sanofi

GOLD SPONSOR

MENARINI group

SILVER SPONSOR

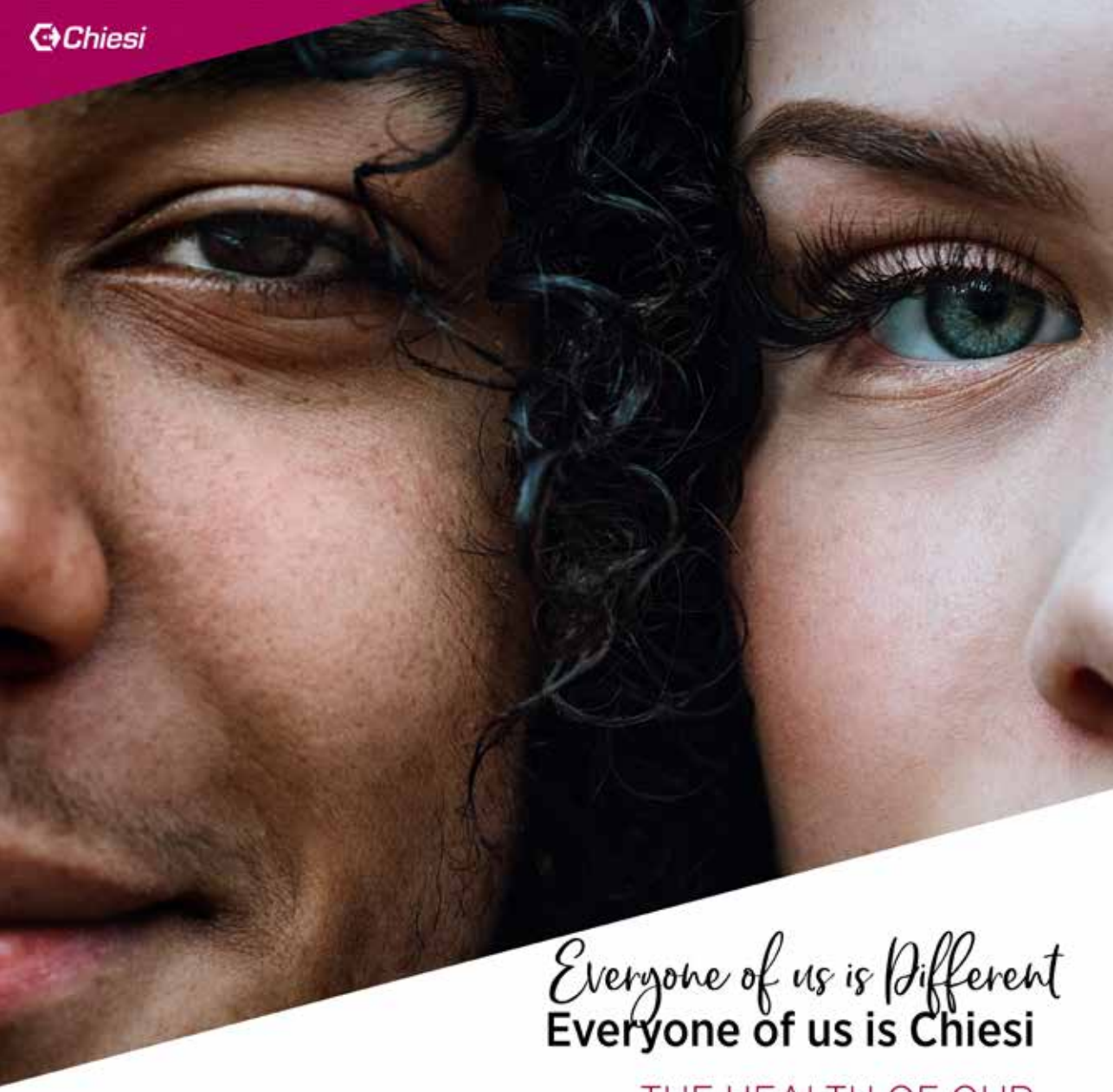
Roche

CONTRIBUTOR

opc UK

REG
Respiratory
Effectiveness
Group

Chiesi



Everyone of us is Different

Everyone of us is Chiesi

THE HEALTH OF OUR PLANET AND ITS INHABITANTS DESERVES OUR BEST EFFORTS

Chiesi *is an* ***international, research-focused Biopharmaceuticals Group*** *that develops and markets innovative therapeutic solutions in respiratory health, rare diseases, and specialty care. The company is present in 31 countries and its mission is to improve people's quality of life and act responsibly towards both the community and the environment.*

Certified B Corporation

WWW.CHIESI.COM