IPCRG 2020: Weekly Series of Hot Topic
Clinical Practice Webinars & Abstract Presentations

Welcome to the 4th IPCRG Hot Topic Webinar

Breathing and feeling well through universal access to right care

Agenda

1200hrs BST	**Welcome and Introductions** Ioanna Tsiligianni, President IPCRG
1205hrs	**COVID-19** & the Primary Care Management of Asthma ***Presenters:*** *Dermot Nolan, Ireland & Alan Kaplan, Canada*
1235hrs	**Panel Discussion / Q&A Session**
1250hrs	**Video & Comfort Break**
1300hrs	**Oral Abstract Presentations**
1405hrs	**Closing Remarks**

Oral Abstract Presentations

1. **Patient selected goals in asthma: The relationship between physician and patient desired outcomes, the evidence behind them and how to apply them** *Christopher Mulvey, Ireland*
2. **Alliance against Asthma Project** *Javier Plaza Zamora, Spain*
3. **Overreliance in SABAs is Associated with Higher Exacerbation Frequency. Results from the Dutch Realise Study** *Anna Jetske Baron, The Netherlands*
4. **Adding GINA step 5 therapies to ICS/LABA in a real-life moderate to severe asthma population: Is inhaler adherence a treatable trait?** *Job Van Boven, The Netherlands*
5. **Primary care management of asthma in Malaysia – preliminary findings from the Klang Asthma Cohort Study** *Norita Hussein, Malaysia*
6. **Identifying and addressing patient beliefs driving short-acting beta-agonist use and over-reliance using an online digital intervention** *Rob Horne, UK*

Presentation 1

Dermot Nolan, Ireland

COVID-19 and Asthma

DR DERMOT NOLAN. FRCGP MICGP

NATIONAL CLINICAL LEAD ASTHMA

COIs

National Clinical Lead for Asthma (Irish College of General Practitioners)

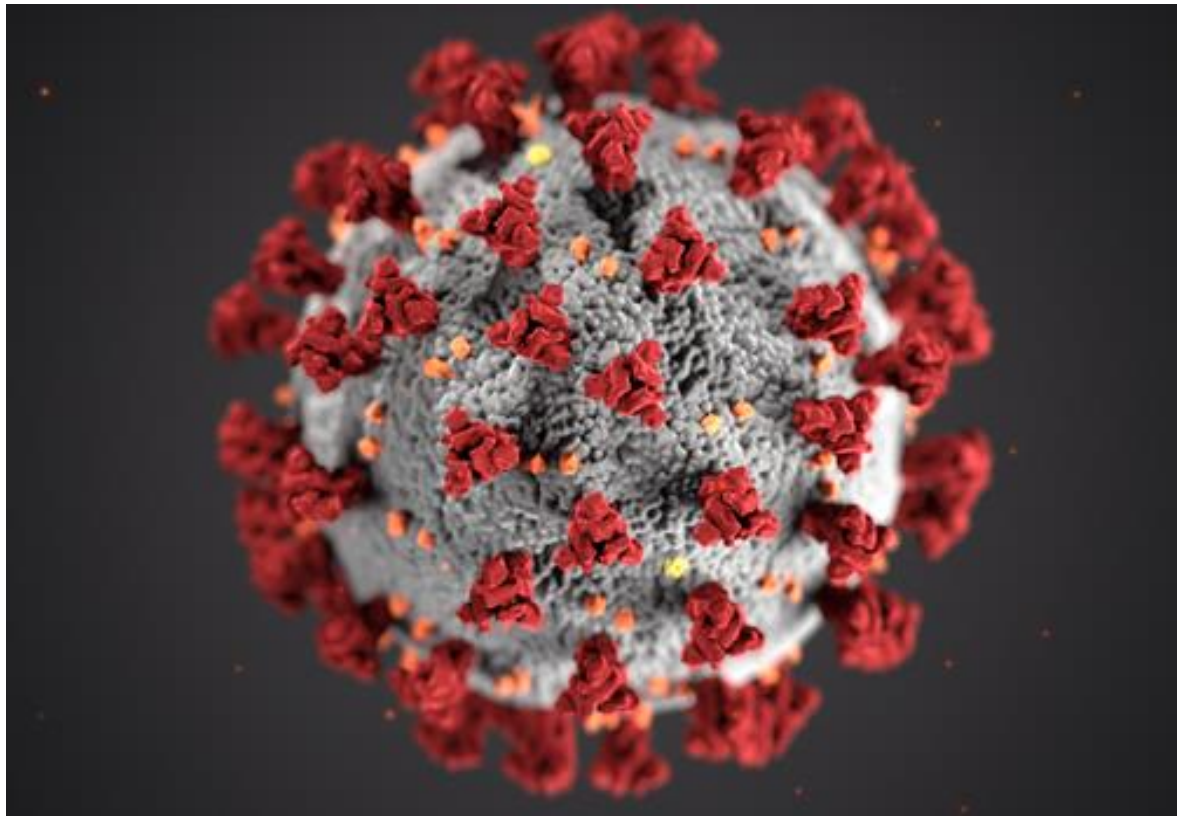
I have travelled to meetings/given talks/ attended advisory board meetings (No shares or commercial interests)

Astra-Zeneca, Boehringer-Ingelheim, Mundi Pharma, A Menarini, TEVA, GSK, Novartis

COVID-19

Originated in Wuhan – China
Announced as **new virus** WHO 31.12.19
Sequenced 12.1.20
70% similar to SARS.

Betacorona virus
-2 strains L 70% of Wuhan cases
S 70% outside China



Where it originated ????

5G Mst???

Stats

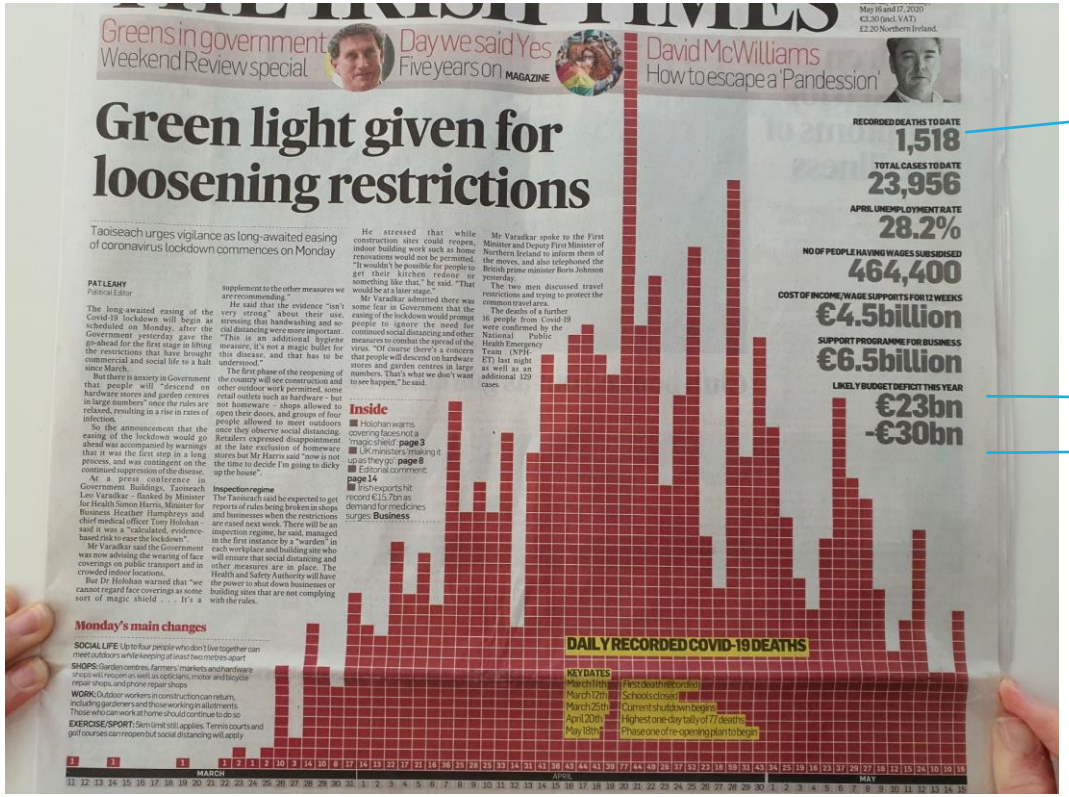
World cases 5.59 million

Italy – 31K died. (60 GPs)

UK – HCW >100 (Black, Asian, Minority Ethnic >>>, Why??)

Dr El Harwani

Ireland



1518 Deaths

Economic impact!!!

How is it spread?

COVID-19 is primarily transmitted from symptomatic people to others who are in close contact through respiratory droplets, by direct contact with infected persons, or by contact with contaminated objects and surfaces.

Droplet spread.

- Cough
- Sneeze
- Talk?

Asymptomatic spread?

Lives on surfaces – how long ? (Cruise ship up to 17 day, generally 3 day)

Aerosol Spread?

How deadly is it?

CAVEAT – TESTING

Different around the world.

- About 6%
- 5.8% Wuhan (Yet 1.8-4.2% rest of China)
- Lombardy Italy 7.2%

Risk factors

Age (Italy 80% > 70yr) (Ireland – mean age 84yr)

Male

Co – Morbidities (DM, IHD, Obesity, Chronic lung disease, Renal failure)

Poor!

Nursing home/Residential care

63% of deaths in Ireland

(Similar around the world)

(ICGP – set up GP advise for NH, all residents and staff tested)

Clinical picture

Fever 85%

Tired

Dry cough 59%

SOB

Myalgia 35%

Diarrhoea – 5-10%

Other Loss of taste/smell, Conjunctivitis, Thromboembolic, Guillian Barre etc

How to differentiate COVID vs Asthma

No higher risk of developing or a more severe form of it

Difficult!!!

?Asymptomatic patients

Asthma- Pt “know their cough”. Wheeze. PEF drops, Relief with inhalers

COVID – Exposure, Temp >37.8 (Elderly, I Suppressed??), Aches and pains, Cough – can be wet. Loss of smell/taste, GI symptoms

Best way to protect is to have asthma well controlled

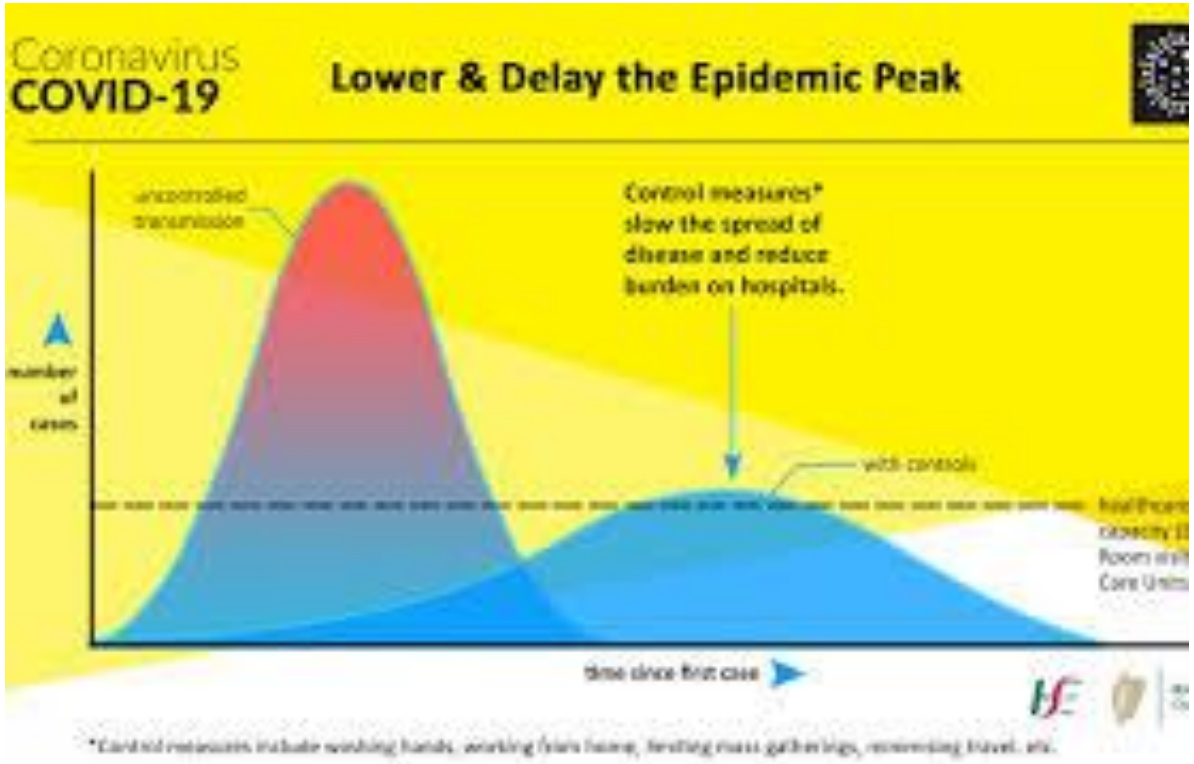
Skin

Urticaria

Any viral rash

?COVID toes

Flatten the curve – reduce transmission.



Reduce the R value

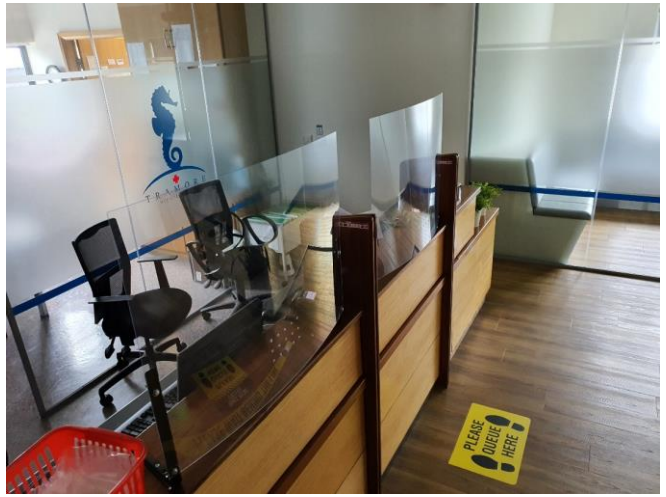
Socially isolate
Hygiene measures
“Cocooning”

STAY AT HOME!!!


I MISS MY OLD JOB!
pharmacy
Mulligans
health & beauty


STOP
STOP
STOP
STOP
NO
ENTRY
without
APPOINTMENT
PHONE OR EMAIL
051-386299


PLEASE QUEUE HERE
PLEASE QUEUE HERE
PLEASE WAIT BEHIND THE LINE
WAIT TO BE CALLED
PLEASE QUEUE HERE
WAIT TO BE CALLED
PLEASE QUEUE HERE


PLEASE QUEUE HERE

PPE

Full PPE

- Gown, Goggles, Mask, Gloves

- Respiratory cases , house calls, uncooperative pts, assessment hubs

Does it reduce risk? – Yes and No (Not used correctly, forget wash hands etc)

Surgical mask Vs FFP2

Is PPE needed for non resp cases??

Triage on phone - “are you coughing/temp/flulike illness?”

Patients wash hands and wear masks. Social distancing in room

Hard to wear mask/PPE when discussing a sudden infant death

Risk of asymptomatic

- Avoid ENT exam, Short F2F time, Remote

Things we need to research

Telemedicine in COVID

New technology – e.g. Apps, Pulse Oximetry, Novel scoring systems – Roth Score etc.

Rapid tests

Who is vulnerable etc

Treatments

Masks for all

Etc etc

Thank you

See you in Dublin in 2021

Presentation 2

Alan Kaplan, Canada

Asthma management in the time of COVID-19

Alan Kaplan MD CCFP(EM) FCFP

Breathing and feeling well through universal access to right care

Dr. Alan G. Kaplan
Chair, Family Physician Airways Group of Canada
Honorary Professor of Primary Care Respiratory Medicine, OPRI
Vice President, Respiratory Effectiveness Group
Family Physician, York Region
Past Chair, CPFM Respiratory Medicine, CFPC
Medical Director, Central LHIN COPD Education Clinic

Perceive no conflict of interest with giving this presentation, but present the following companies that I have worked with or consulted for:
Astra Zeneca, Behring, Boehringer Ingelheim, Covis, Griffols, GSK, Merck Frosst, Novartis, NovoNordisk, Pfizer, Purdue, Sanofi, Teva and Trudel

In addition, I am on the Health Canada committee for Section of Allergy and Respiratory Therapeutics

CMPA

I'd like to provide virtual care to my patients to comply with health policies around social distancing. What do I need to consider in order to practice safely?

Please select one of the topics below.

The Virtual visit

- **A**sthma Diagnosis - confirmed
- **S**ymptoms - ACT Control Test/
  Covid assessment
- **T**riggers
- **H**ealth
- - mood
- - co-morbidities :GERD and rhinitis
- **M**edications - technique and adherence
- **A**ction Plan - AsthmaActionPlan.com

COVID-19 and asthma *(as at April 3, 2020)*

- Advise patients with asthma to continue taking their prescribed asthma medications, particularly *inhaled corticosteroids* (ICS), and oral corticosteroids (OCS) if prescribed
  - Asthma medications should be continued as usual. Stopping ICS often leads to potentially dangerous worsening of asthma
  - For patients with severe asthma: continue biologic therapy, and do not suddenly stop OCS if prescribed
- Make sure that all patients have a *written asthma action plan* with instructions about:
  - Increasing controller and reliever medication when asthma worsens
  - Taking a short course of OCS for severe asthma exacerbations
  - When to seek medical help
  - See the GINA 2020 report for more information about treatment options for asthma action plans.
- *Avoid nebulizers* where possible
  - Nebulizers increase the risk of disseminating virus to other patients AND to health care professionals
  - Pressurized metered dose inhaler via a spacer is the preferred treatment during severe exacerbations, with a mouthpiece or tightly fitting face mask if required

COVID-19 and asthma *(as at March 30, 2020)*

- *Avoid spirometry* in patients with confirmed/suspected COVID-19
  - Spirometry can disseminate viral particles and expose staff and patients to risk of infection
  - While community transmission of the virus is occurring in your region, postpone spirometry and peak flow measurement within health care facilities unless there is an urgent need
  - Follow contact and droplet precautions
- *Follow strict infection control procedures* if aerosol-generating procedures are needed
  - For example: nebulization, oxygen therapy (including with nasal prongs), sputum induction, manual ventilation, non-invasive ventilation and intubation
  - World Health Organization (WHO) infection control recommendations are found here: www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125
- *Follow local health advice* about hygiene strategies and use of personal protective equipment, as new information becomes available in your country or region

Continue therapy as previous!

CANADIAN THORACIC SOCIETY

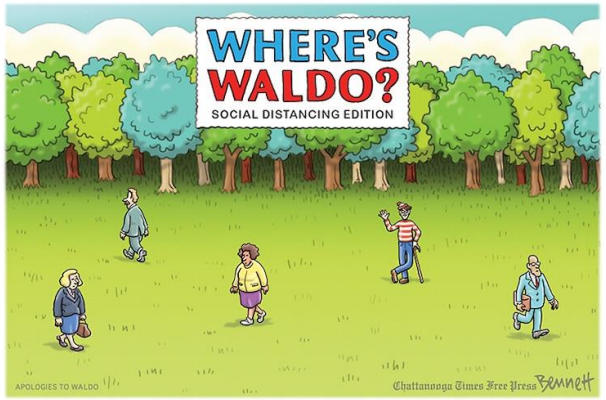
Asthma

POSITION STATEMENT FROM THE CANADIAN THORACIC SOCIETY (CTS) ASTHMA ASSEMBLY STEERING COMMITTEE

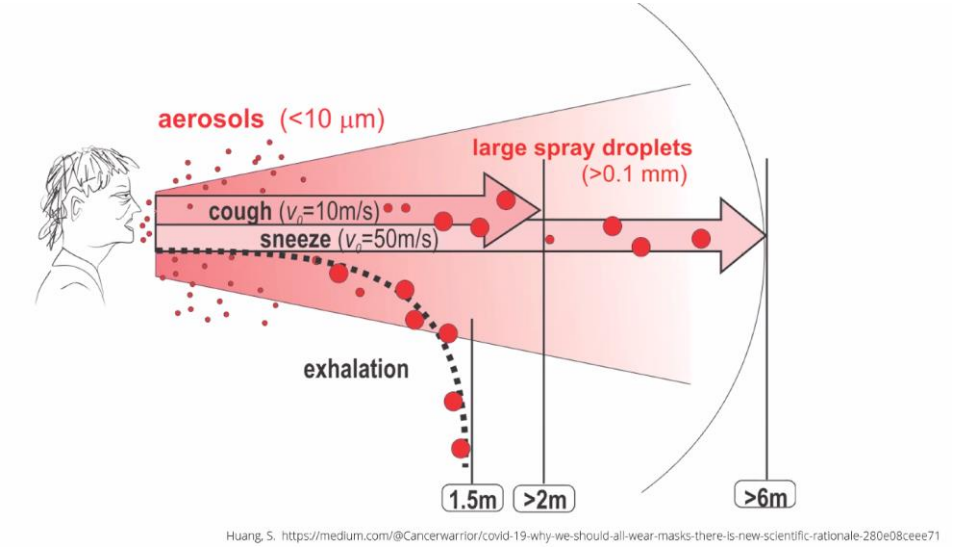
ADDRESSING THERAPEUTIC QUESTIONS TO HELP CANADIAN PHYSICIANS OPTIMIZE ASTHMA MANAGEMENT FOR THEIR PATIENTS DURING THE COVID-19 PANDEMIC

Christopher Licskai[a], Connie L. Yang[b], Francine M. Ducharme[c], Dhenuka Radhakrishnan[d], Delanya Podgers[e], Clare Ramsey[f], Tania Samanta[g], Andréanne Côté[h], Masoud Mahdavian[i], M. Diane Lougheed[j]

- Ensure control
- No increased risk of developing COVID-19
- Risk of COVID-19 severity likely related to control as any other viral infection
- Use ICS
- Use prednisone when you have to
- Continue the biologics!
- Do not use Nebulizers…switch!!
- Hold off on elective spirometry
- Physical distancing



Aerosol generation



Huang, S. https://medium.com/@Cancerwarrior/covid-19-why-we-should-all-wear-masks-there-is-new-scientific-rationale-280e08ceee71

?

shutterstock.com • 634513259

?

Asthma Control

International Primary Care Respiratory Group
IPCRG work locally collaborate globally

Today's Date: _____

Patient's Name: _____

FOR PATIENTS:

Take the Asthma Control Test™ (ACT) for people 12 yrs and older.

Know your score. Share your results with your doctor.

Step 1 Write the number of each answer in the score box provided.
Step 2 Add up each score box for your total.
Step 3 Take the test to the doctor to talk about your score.

					SCORE
1. In the past **4 weeks**, how much of the time did your **asthma** keep you from getting as much done at work, school or at home?	All of the time 1	Most of the time 2	Some of the time 3	A little of the time 4	None of the time 5	
2. During the past **4 weeks**, how often have you had shortness of breath?	More than once a day 1	Once a day 2	3 to 6 times a week 3	Once or twice a week 4	Not at all 5	
3. During the past **4 weeks**, how often did your **asthma** symptoms (wheezing, coughing, shortness of breath, chest tightness or pain) wake you up at night or earlier than usual in the morning?	4 or more nights a week 1	2 or 3 nights a week 2	Once a week 3	Once or twice 4	Not at all 5	
4. During the past **4 weeks**, how often have you used your rescue inhaler or nebulizer medication (such as albuterol)?	3 or more times per day 1	1 or 2 times per day 2	2 or 3 times per week 3	Once a week or less 4	Not at all 5	
5. How would you rate your **asthma** control during the past **4 weeks**?	Not controlled at all 1	Poorly controlled 2	Somewhat controlled 3	Well controlled 4	Completely controlled 5	
						TOTAL

AMERICAN LUNG ASSOCIATION.

The American Lung Association supports the Asthma Control Test and does not endorse products.

WISCONSIN ASTHMA COALITION

If your score is 19 or less, your asthma may not be controlled as well as it could be. Talk to your doctor.

FOR PHYSICIANS:

The ACT is:

- Clinically validated by spirometry and specialist assessment[1]
- Supported by the American Lung Association
- A self-administered, brief, 5-question assessment that can help you assess your patients' asthma during the past 4 weeks

Reference: 1. Nathan RA et al. *J Allergy Clin Immunol.* 2004;113:59-65.

GlaxoSmithKline

Childhood Asthma Control Test for children 4 to 11 years.

How to take the Childhood Asthma Control Test

- **Step 1** Let your child respond to **the first four questions (1 to 4).** If your child needs help reading or understanding the question, you may help, but let your child select the response. Complete the remaining **three questions (5 to 7)** on your own and without letting your child's response influence your answers. There are no right or wrong answers.
- **Step 2** Write the number of each answer in the score box provided.
- **Step 3** Add up each score box for the total.
- **Step 4** Take the test to the doctor to talk about your child's total score.

19 or less

If your child's score is 19 or less, it may be a sign that your child's asthma is not controlled as well as it could be. No matter what the score, bring this test to your doctor to talk about your child's results.

Have your child complete these questions.

					SCORE
1. How is your asthma today?	0 Very bad	1 Bad	2 Good	3 Very good	
2. How much of a problem is your asthma when you run, exercise or play sports?	0 It's a big problem, I can't do what I want to do.	1 It's a problem and I don't like it.	2 It's a little problem but it's okay.	3 It's not a problem.	
3. Do you cough because of your asthma?	0 Yes, all of the time.	1 Yes, most of the time.	2 Yes, some of the time.	3 No, none of the time.	
4. Do you wake up during the night because of your asthma?	0 Yes, all of the time.	1 Yes, most of the time.	2 Yes, some of the time.	3 No, none of the time.	

Please complete the following questions on your own.

5. During the last 4 weeks, how many days did your child have any daytime asthma symptoms?	5 Not at all	4 1-3 days	3 4-10 days	2 11-18 days	1 19-24 days	0 Everyday	
6. During the last 4 weeks, how many days did your child wheeze during the day because of asthma?	5 Not at all	4 1-3 days	3 4-10 days	2 11-18 days	1 19-24 days	0 Everyday	
7. During the last 4 weeks, how many days did your child wake up during the night because of asthma?	5 Not at all	4 1-3 days	3 4-10 days	2 11-18 days	1 19-24 days	0 Everyday	
							TOTAL

Review Technique

THE LUNG ASSOCIATION™

When you can't breathe, nothing else matters.

New Inhalation Device Videos on YOUTUBE

The Lung Association has added two more inhaler videos to YOUTUBE. Check out these new videos on how to properly use the Handihaler and the nebulizer/compressor.

Handihaler Inhalation Device

This video discusses the proper use of the Handihaler inhalation device. The Handihaler is an egg-shaped device used to inhale the medicine contained in the Spiriva capsule and is used mainly for people with COPD.

Video: http://youtu.be/KE1h6O1IpKk

Nebulizer/Compressor Device

This video discusses the proper use of the nebulizer/compressor device for inhalation treatment. A nebulizer uses air pressure to turn liquid medicine into a mist that is then inhaled through a facemask or mouthpiece.

Video: http://youtu.be/HGZSCe98CWU

Other Inhalation Device Videos on YOUTUBE

Metered dose inhaler (MDI) with spacer: http://youtu.be/hrTK3rGIu3c.

MDI: http://youtu.be/6IgTD-TQdac.

Turbuhaler: http://youtu.be/J9Rv9_ix3Fg.

Diskus: http://youtu.be/6ZMh686CjTI.

Deal with asthma triggers

- The Canadian Survey on Living with Chronic Diseases reported on the top ten asthma triggers as reported by Canadians with asthma

Top ten asthma triggers reported	Percent
1. Colds or chest infections	74.1
2. Dust	68.1
3. Tobacco smoke	63.8
4. Exercise/physical activity	63.7
5. Cold air	57.5
6. Pollen	55.3
7. Mould or mildew	51.4
8. Dampness or humidity	50.2
9. Furry or feathered pets (for example, cats, dogs, rabbits, birds)	49.1
10. Outdoor air pollution	46.1

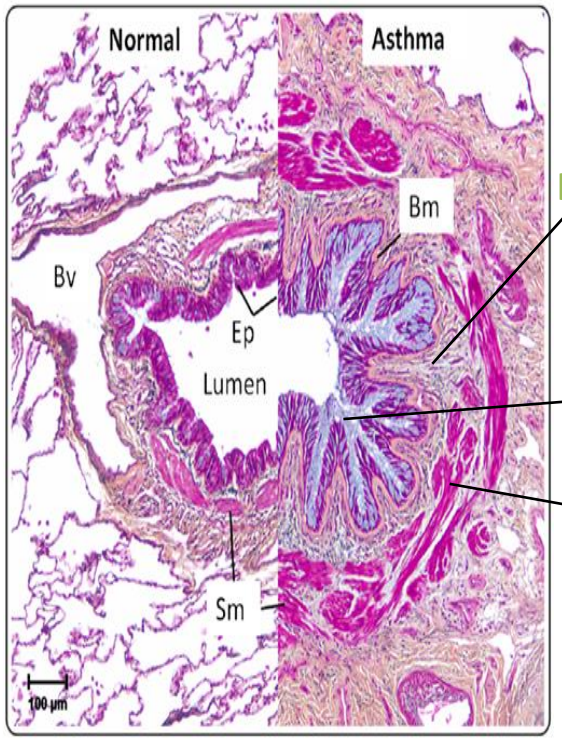
Public Health Agency of Canada, Asthma Fast Facts

Smoking cessation

- Time of potential change!!
  - Reduced work stresses
  - Balanced by time of personal stress and boredom
- 2A's
  - ASK,ACT
- Offer pharmcotherapy
  - NRT
  - Varenicline
  - Buproprion
- Support

Treating Asthma:
Asthma is a chronic inflammatory disease

Healthy Vs Fatal Asthma

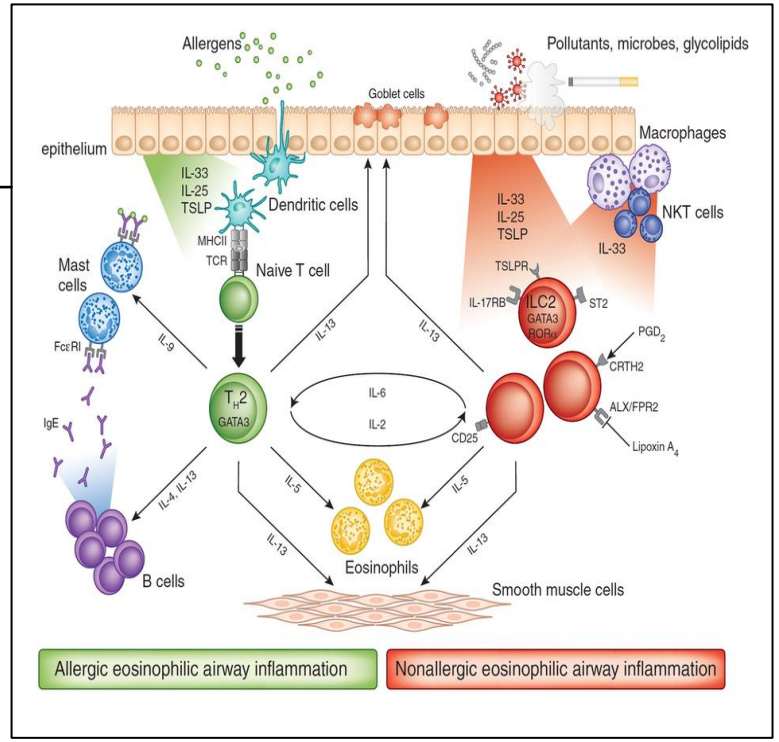


INFLAMMATION

Mucus hypersecretion

Smooth muscle thickened

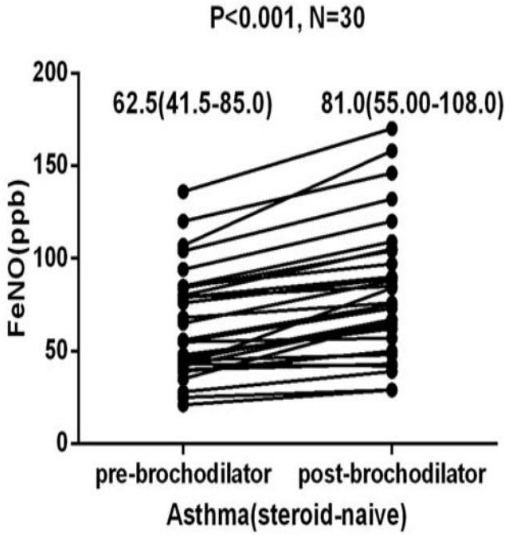
Key Inflammatory Pathways in Asthma



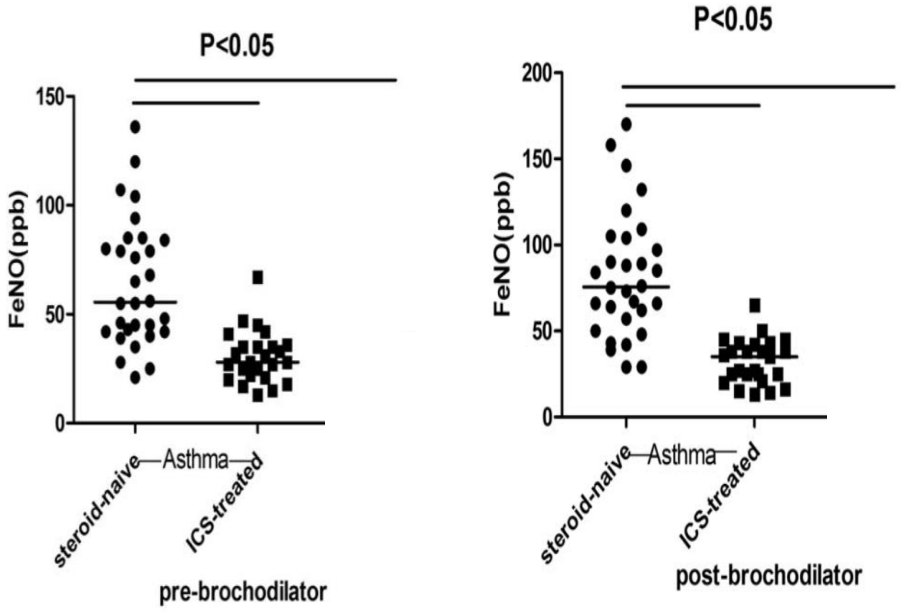
Holgate et al., Nature Reviews Disease Primers volume 1, Article number: 15025 (2015), www.ginasthma.org. Accessed March 31, 2018; 2. Asthma. http://www.physio-pedia.com/Asthma. Accessed July 30, 2018; 3. Brusselle GG et al. Nat Med 2013; 19(8): 977-9.

SABA is not anti-inflammatory, anti-inflammatories are anti-inflammatory!

Salbutamol does not reduce airway inflammation[1]

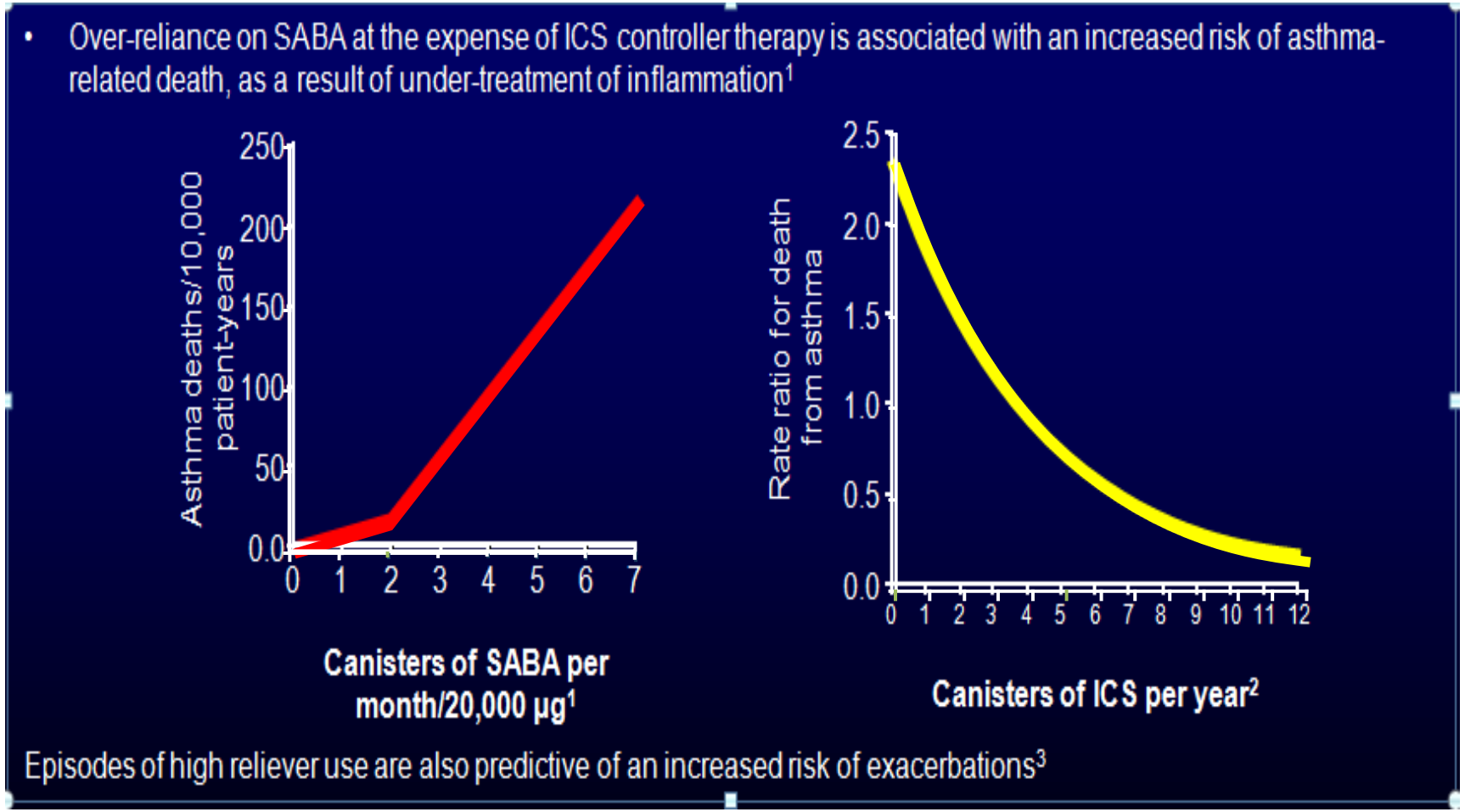


ICS reduces airway inflammation (beta agonist has no effec



1. Zhao et al., Clinical Respiratory Journal (2017)

Over-reliance on SABA and under-use of ICS both increase mortality



1. Suissa S, et al. Am J Respir Crit Care Med 1994;149:604–10;
2. Suissa S, et al. N Engl J Med 2000;343:332–6; 3. Buhl R, et al. Respir Res 2012;13:59

SUGGESTED INITIAL CONTROLLER TREATMENT IN ADULTS AND ADOLESCENTS WITH A DIAGNOSIS OF ASTHMA

FIRST ASSESS:

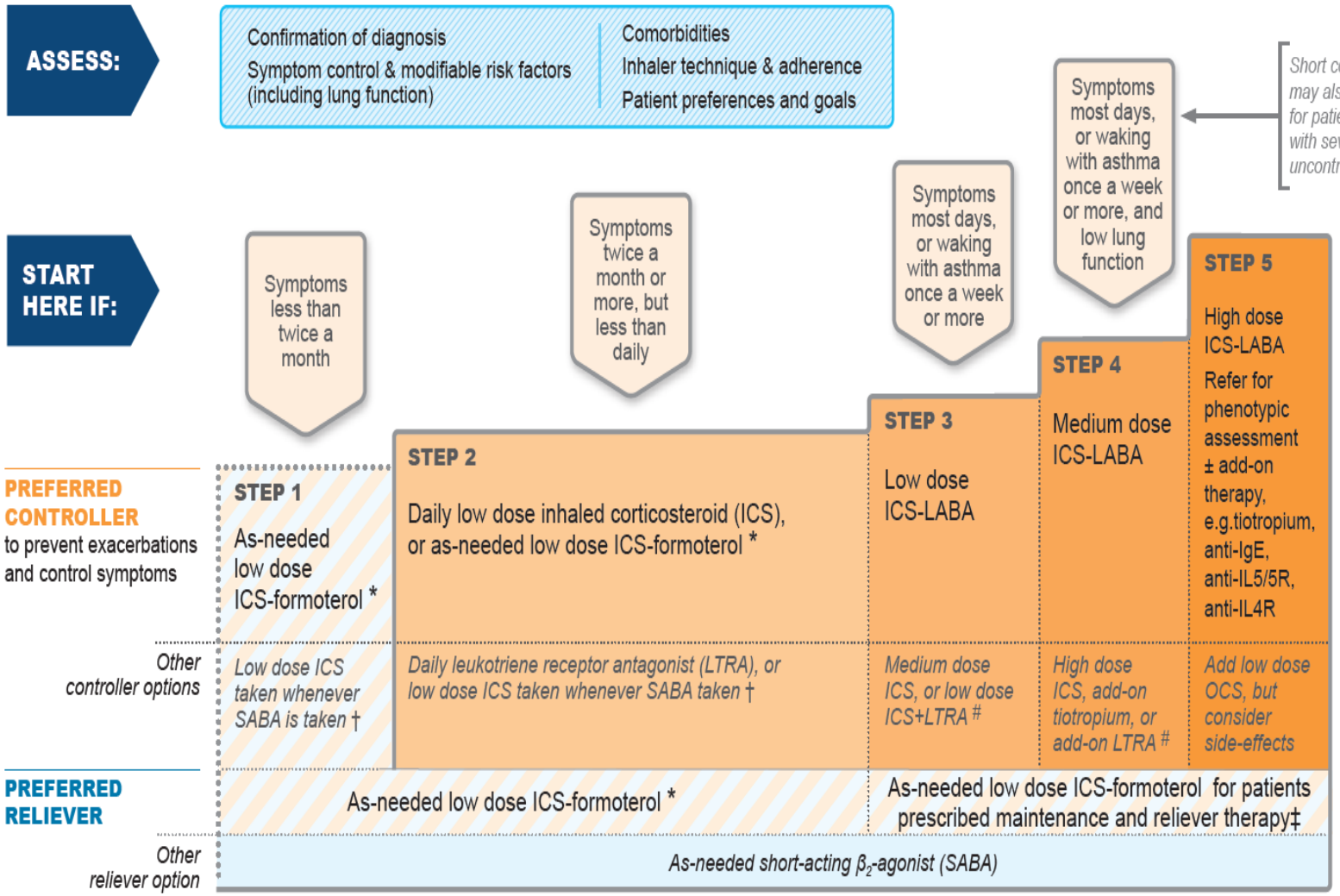
- Confirmation of diagnosis
- Symptom control & modifiable risk factors (including lung function)
- Comorbidities
- Inhaler technique & adherence
- Patient preferences & goals

IF: / **START WITH:**

- Symptoms most days, waking at night ≥ once a week and low lung function? — YES → Medium dose ICS-LABA (MART or maintenance-only) — **STEP 4**
  - *Short course OCS may also be needed for patients presenting with severely uncontrolled asthma*
- NO
- Symptoms most days,or waking at night ≥ once a week? — YES → Low dose ICS-LABA (MART or maintenance-only) — **STEP 3**
- NO
- Symptoms twice a month or more? — YES → Daily low dose ICS or as-needed low dose ICS-formoterol — **STEP 2**
- NO
- As-needed low dose ICS-formoterol — **STEP 1**

GINA 2020, Box 3-4B

SUGGESTED INITIAL CONTROLLER TREATMENT IN ADULTS AND ADOLESCENTS WITH A DIAGNOSIS OF ASTHMA

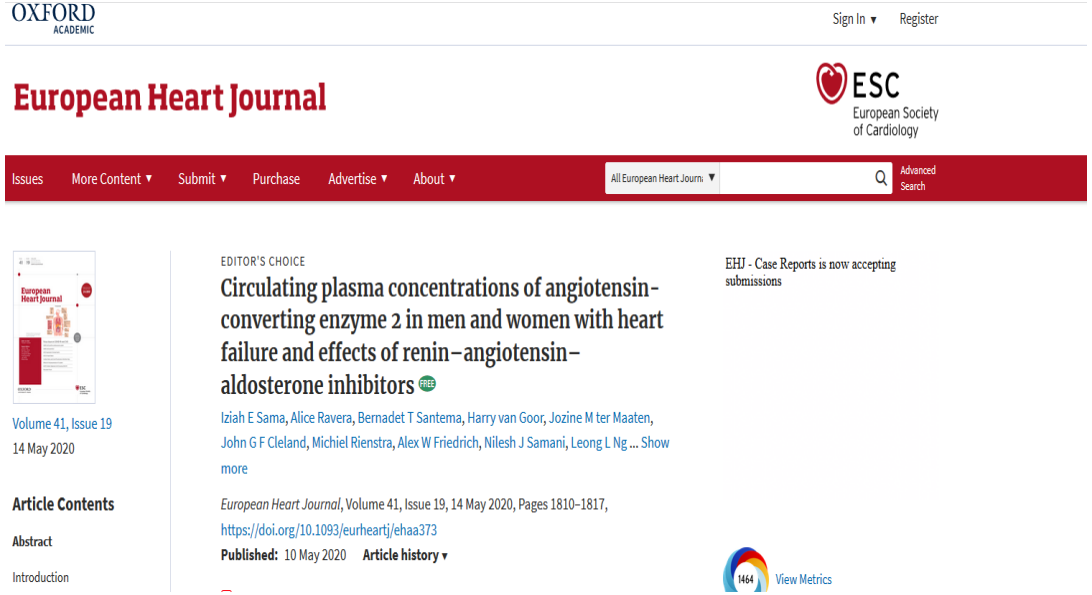


* Data only with budesonide-formoterol (bud-form)

† Separate or combination ICS and SABA inhalers

‡ Low-dose ICS-form is the reliever only for patients prescribed bud-form or BDP-form maintenance and reliever therapy

Consider adding HDM SLIT for sensitized patients with allergic rhinitis and FEV1 >70% predicted



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Volume 41, Issue 19
14 May 2020

Article Contents

Abstract

Introduction

EDITOR'S CHOICE

Circulating plasma concentrations of angiotensin-converting enzyme 2 in men and women with heart failure and effects of renin–angiotensin–aldosterone inhibitors

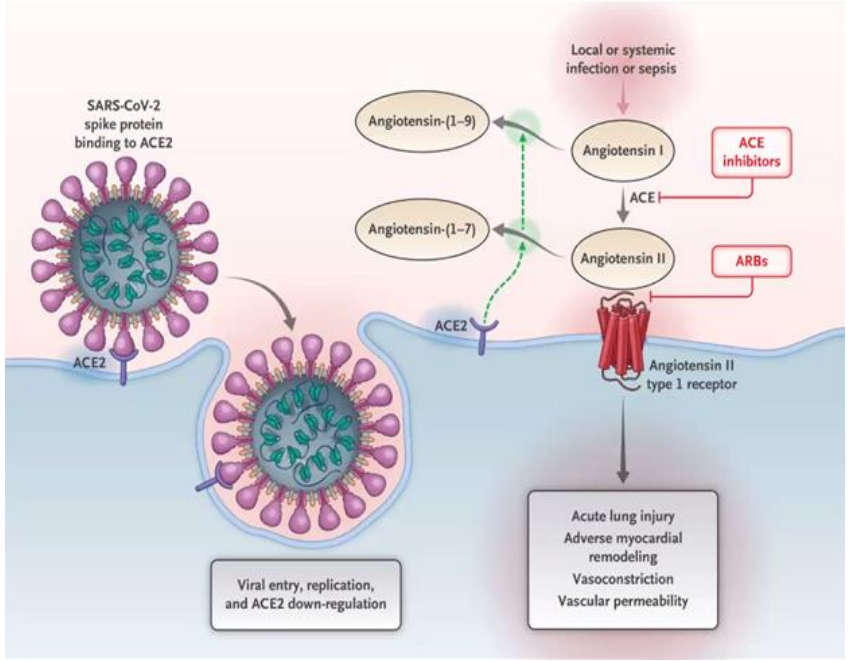
Iziah E Sama, Alice Ravera, Bernadet T Santema, Harry van Goor, Jozine M ter Maaten, John G F Cleland, Michiel Rienstra, Alex W Friedrich, Nilesh J Samani, Leong L Ng ... Show more

European Heart Journal, Volume 41, Issue 19, 14 May 2020, Pages 1810–1817, https://doi.org/10.1093/eurheartj/ehaa373

Published: 10 May 2020 **Article history** ▾

EHJ - Case Reports is now accepting submissions

1464 View Metrics



- Patients with CV issues higher risk of severe Covid
- ?Related to **ACE 2 receptors** in lung?
- Neither ACE inhibitors nor angiotensin-receptor blockers (ARBs) were associated with higher plasma ACE2 concentrations.
- But they are higher in patients with CHF!!
- Should they be held…NO!

ARE ICS Protective?

	Number of patients	Health-care workers (%)	Mean or median age (years)	Prevalence (%)			
				Chronic respiratory disease	COPD	Asthma	Diabetes
Patients with COVID-19							
China[12]	44 672	3·8%	~51	2·4%	..	..	5·3%
Wuhan, China[13]	140	..	57*	..	1·4%	..	12·1%
Patients with SARS							
Toronto, Canada[14]	147	51%	45*	..	1·0%	..	11·0%
Taipei, Taiwan[15]	67	37%	51·0	6·0%	..	..	23·9%
Kaohsiung, Taiwan[16]	52	31%	48·1	..	10·0%	..	..
Hong Kong[17]	88	19%	42·1	..	0	1·0%	10·0%
Hong Kong[18]	112	61%	39·3	..	2·6%	..	4·5%
General population†							
China[19]	..	..	..	6·9%	4·9%	2·3%	6·6%
Canada[19]	..	..	..	10·4%	5·4%	5·4%	8·2%
Taiwan[19]	..	..	..	13·1%	10·4%	3·9%	10·6%
Hong Kong[20]	..	..	..		1·4%	1·9%	3·8%

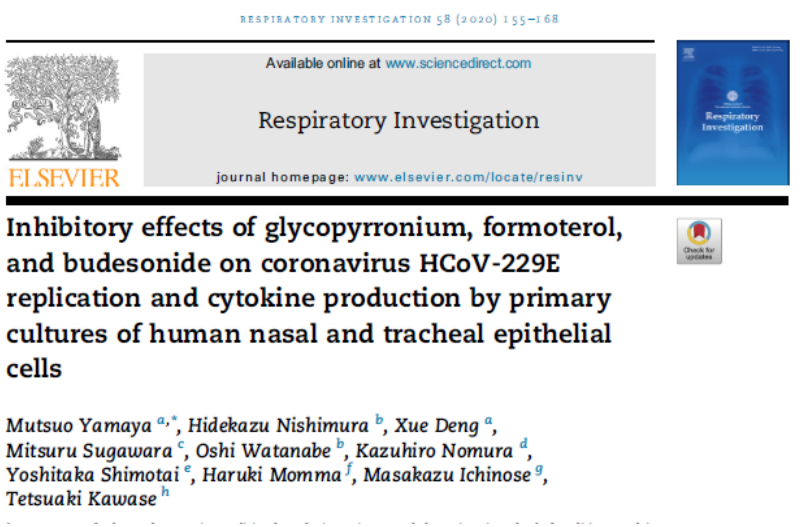
Table references are listed in the appendix. COPD=chronic obstructive pulmonary disease. COVID-19=coronavirus disease 2019. SARS=severe acute respiratory syndrome. *Median age. †Estimates for China, Canada, and Taiwan from the Global Burden of Disease Study; Hong Kong estimates from the Department of Health, Hong Kong Special Administrative Region Government.

Table: Prevalence of chronic respiratory diseases and diabetes in patients with COVID-19 and SARS

Halpin DMG Lancet Respir Med **2020** Published **Online** April 3, 2020 https://doi.org/10.1016/S2213-2600(20)30167-3

CRD = Under-represented
PROTECTIVE EFFECT?

In the ‘common cold’


RESPIRATORY INVESTIGATION 58 (2020) 155–168

Available online at www.sciencedirect.com

Respiratory Investigation

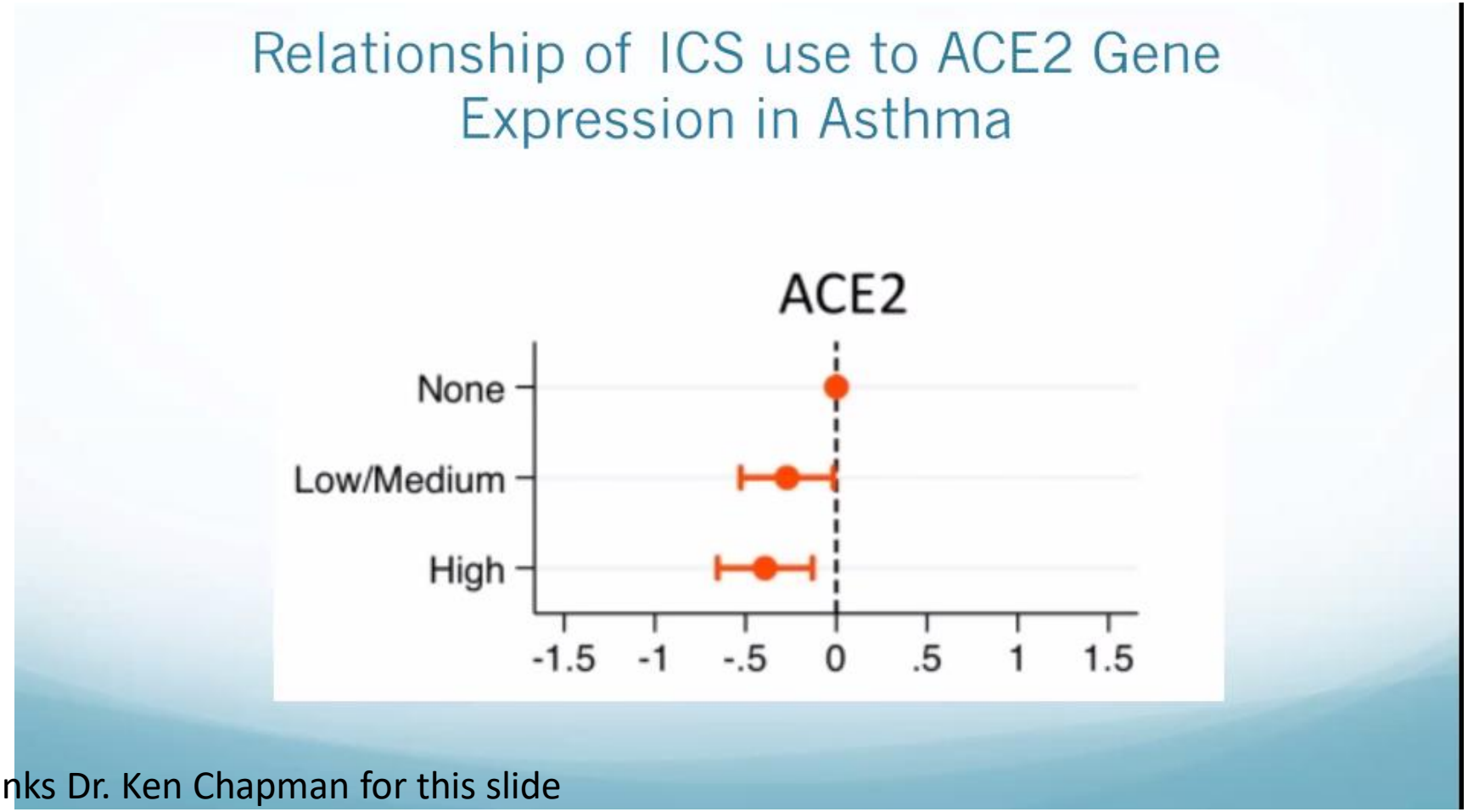
journal homepage: www.elsevier.com/locate/resinv

Inhibitory effects of glycopyrronium, formoterol, and budesonide on coronavirus HCoV-229E replication and cytokine production by primary cultures of human nasal and tracheal epithelial cells

Mutsuo Yamaya [a,], Hidekazu Nishimura [b], Xue Deng [a], Mitsuru Sugawara [c], Oshi Watanabe [b], Kazuhiro Nomura [d], Yoshitaka Shimotai [e], Haruki Momma [f], Masakazu Ichinose [g], Tetsuaki Kawase [h]*

- Human coronaviruses (HCoV)-229E and HCoV-OC43 cause the common cold
- Glycopyrronium, formoterol, and a combination of glycopyrronium, formoterol, and budesonide inhibit HCoV-229E replication partly by inhibiting receptor expression and/or endosomal function and that these drugs modulate infection-induced inflammation in the airway.

Dose response: More ICS. → lower the ACE2 gene expression
ICS may lead to less susceptibility!



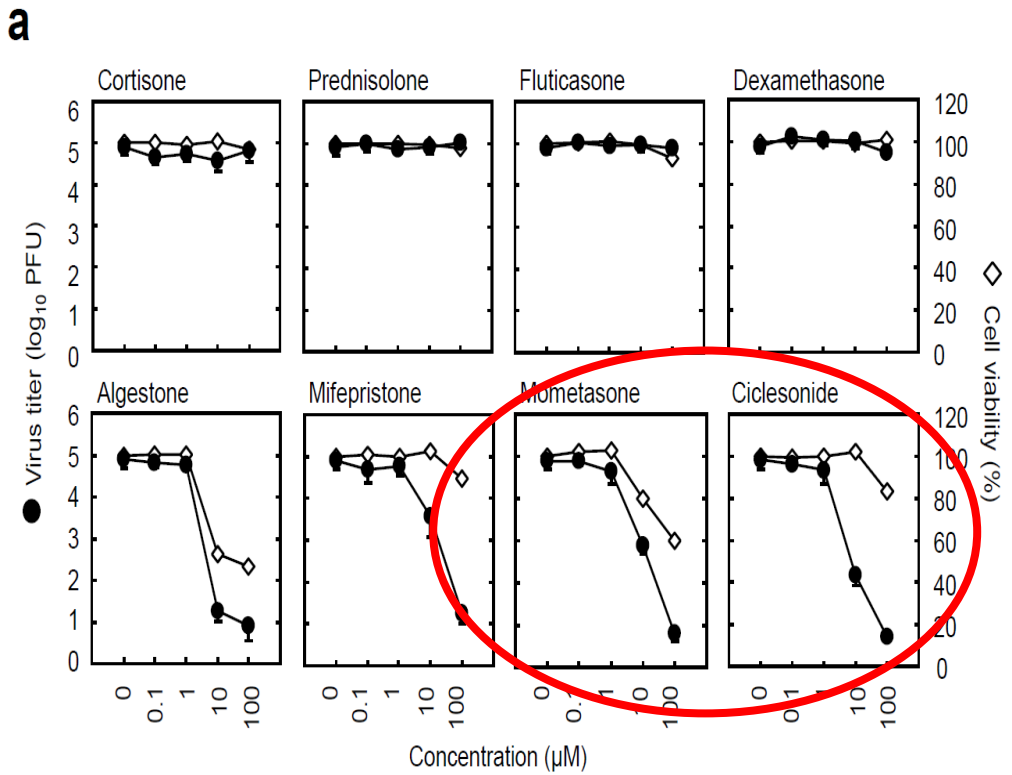
Thanks Dr. Ken Chapman for this slide

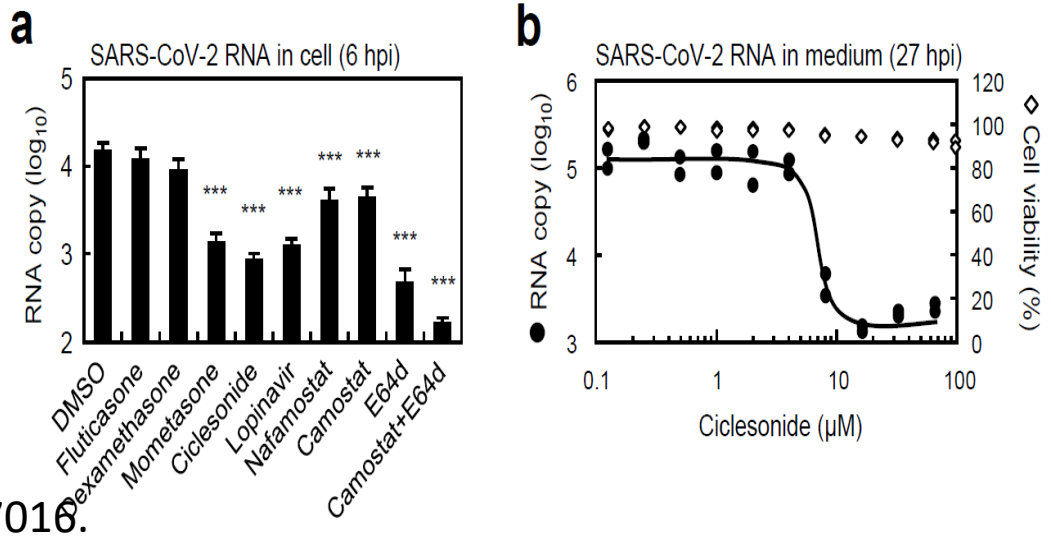
PETERS et al. COVID-19 Related Genes in Sputum Cells in Asthma: Relationship to Demographic Features and CorticosteroidsAJRCCM April 29, 2020

The inhaled corticosteroid ciclesonide blocks coronavirus RNA replication by targeting viral NSP15

Shutoku Matsuyama*[1], Miyuki Kawase[1], Naganori Nao[1], Kazuya Shirato[1], Makoto Ujike[2], Wataru Kamitani[3], Masayuki Shimojima[4], and Shuetsu Fukushi[4]

- Ciclesonide/Mometasone demonstrated low cytotoxicity and potent suppression of MERS-CoV viral growth.
- Systemic steroids cortisone, prednisolone and dexamethasone or inhaled Fluticasone did not suppress viral growth.





https://doi.org/10.1101/2020.03.11.987016.

Study on ICS antiviral effects

HOME 〉 Pharma

Researchers to test asthma drug to treat Covid-19

By Kim Yun-mi Published 2020.04.16 16:20 Updated 2020.04.16 16:20 comments 0

Local infectious disease specialists said they would evaluate the potential of asthma treatment ciclesonide (brand name: Alvesco) against the new coronavirus.

Recently, the Institute Pasteur Korea (IPK) suggested that ciclesonide and niclosamide, an ingredient of animal tapeworm drug, as two medicines with a possible potency against the deadly virus that has no cure or vaccine.

141 mild Covid-19 patients and divide them into three groups -- --ciclesonide alone group,
-ciclesonide plus hydroxychloroquine group,
-conservative standard treatment group..

Meds:

a) ciclesonide 320ug twice a day at 12-hour intervals for 14 days,
b) hydroxychloroquine 400mg, once daily for 10 days.

Primary endpoints:

-negative rate of respiratory virus (on day 7, 14),
-the time until the virus turns negative (days),
-the period until clinical improvement (days),
- the fraction of clinical failures.

Another study on ICS in symptomatic Covid patients in US

Covis Pharma B.V. Initiates Phase 3 Clinical Trial of Alvesco (Ciclesonide) Inhaler for the Treatment of COVID-19

NEWS PROVIDED BY
Covis Pharma →
May 19, 2020, 08:00 ET

SHARE THIS ARTICLE

U.S. Food *filing to study the use o*

Study wi *atients Aged 12 and Abo*

The study will enroll 400 patients at multiple clinical trial sites across the United States.
Patients will be randomized in a 1:1 ratio to receive treatment with 320 µg of an Alvesco metered-dose inhaler twice daily plus standard supportive care, or to receive placebo plus standard supportive care.
The primary efficacy endpoint is the percentage of patients with a hospital admission or death by day 30.

Or are asthmatics protected because of the condition?

Journal Pre-proof

Type 2 Inflammation Modulates ACE2 and TMPRSS2 in Airway Epithelial Cells

Hiroki Kimu[illegible] Francisco, MS, Michelle Conway, BS, Fernando D. Martinez, [illegible] ncesca Polverino, MD, PhD, Dean Billheimer, PhD, Mor[illegible]

ACE2 is required for cell entry by SARS-CoV-2.
The expression of ACE2 in asthma and allergy is modulated by IL-13.

PII: S0091-674[illegible]

DOI: https://doi.org/10.1016/j.jaci[illegible]

Reference: YMAI 14554

To appear in: *Journal of Allergy and Clinical Immunology*

Received Date: 13 April 2020

Revised Date: 5 May 2020

Accepted Date: 7 May 2020

Please cite this article as: Kimura H, Francisco D, Conway M, Martinez FD, Vercelli D, Polverino F, Billheimer D, Kraft M, Type 2 Inflammation Modulates ACE2 and TMPRSS2 in Airway Epithelial Cells, *Journal of Allergy and Clinical Immunology* (2020), doi: https://doi.org/10.1016/j.jaci.2020.05.004.

Our Response to COVID-19 as Endocrinologists and Diabetologists

Ursula B. Kaiser,[1] Raghavendra G. Mirmira,[2] and Paul M. Stewart[3]

[1]Department of Medicine, Brigham and Women's Hospital, Boston, Massachusetts 02115; [2]Department of Medicine, University of Chicago, Chicago, Illinois 60637; and [3]Faculty of Medicine and Health, University of Leeds, Leeds LS2 9NL, UK

ORCiD numbers: 0000-0002-8237-0704 (U. B. Kaiser); 0000-0002-5013-6075 (R. G. Mirmira); 0000-0002-1749-9640 (P. M. Stewart).

- Do NOT stop Oral Steroids when sick
- "Sick Day" mgmt for adrenal suppression:
- Any patient with a dry continuous cough and fever should immediately **double their daily oral glucocorticoid dose** and continue on this regimen until the fever has subsided.
- Deteriorating patients and those who experience vomiting or diarrhea should seek urgent medical care and be treated with parenteral glucocorticoids

What about Asthma Biologics?

- Do **NOT** stop them
- Anti TNF alpha do effect T cell function and theoretical risk of being immune suppressed
- This is NOT the case for Asthma biologics which affect mostly eosinophils which are not responsive to infection!

Date:

Patient name:

Name Health Care Provider - HCP:

Asthma Action Plan™

symptom control & reduction of future risk

Patient Version

FPAGC AAP 2019

Adults(12 years and over)

The Green Zone: **ALL** of the following

Asthma is controlled when all of the following are true for the past week.

Symptoms

1. No day interference with usual day Activities, especially exercise, on all days of the week.
2. No night interference with sleep, especially no nocturnal awakenings, on all nights of the week.
3. Day time asthma symptoms on not on most days - less than 4 days per week.
4. Need for Reliever/rescue medication on

AND

PEFR > 80%

Green Zone **Asthma Action Plan**

All adults and adolescents should receive symptom-driven **OR** regular low dose ICS-containing controller treatment.

daily low dose ICS-formoterol:

OR symptom-driven low dose ICS-formoterol:

daily low dose ICS with SABA:

OR symptom-driven low dose ICS with SABA:

Yellow Zone: **ANY** Action Point

Asthma not controlled if any symptom or PEF action point Is active.

Symptom action points within the past week:

1. Any day interference with usual day activities, especially exercise, on any day of the week.
2. Any night interference with usual sleep, especially nocturnal awakening, on any night of the week.
3. Day time asthma symptoms on most days (4 or more days per week).
4. Need for Reliever/rescue medication on most days (4 or more times per week).

OR

Not well controlled: 1 step of step-up therapy: quad ICS

3 of 4 symptom action points in the yellow zone for 7 days.

OR PEF under 80% and over 60% of personal best for 2 days.

Start your quadruple ICS. See your HCP ASAP (within days).

very poorly controlled: 2 steps : add OCS to quad ICS

Failure to improve within 48 hours of step-up quadruple ICS

OR PEF under 60% of personal best

add OCS for 5 days to quadruple ICS. See your HCP urgently.

Peak Expiratory Flow Action Points within the past 2 days:

1. Action Point 1: PEF 80% to 60% of Personal Best.
2. Action Point 2: (under 60% of Personal Best).
3. Action Point 3: (under 50% of Personal Best).

All PEF Action Points are based on Personal Best PEF:

Action 1: 1 step of therapy. MUST see your HCP ASAP within days.

Action 2: 2 steps of therapy. MUST see your HCP urgently:1-2 days.

Action 3: 2 steps of therapy and seek Immediate help. See Red zone.

Red Zone is urgent loss of Asthma Control if **ANY** of these are true:

1. If you cannot speak due to asthma?
2. If you have Shortness of Breath at rest?
3. If your reliever does not work?
4. If your Peak Expiratory Flow is less than 50% of your Personal Best?
5. If you know from past experience that this is a severe attack?

Red Zone Action Plan

1. Seek help.
2. Continue 2 puffs of your reliever every 10 minutes.
3. Go to the nearest Emergency.
4. Do not attempt to drive yourself.

Is there a Ventolin shortage?

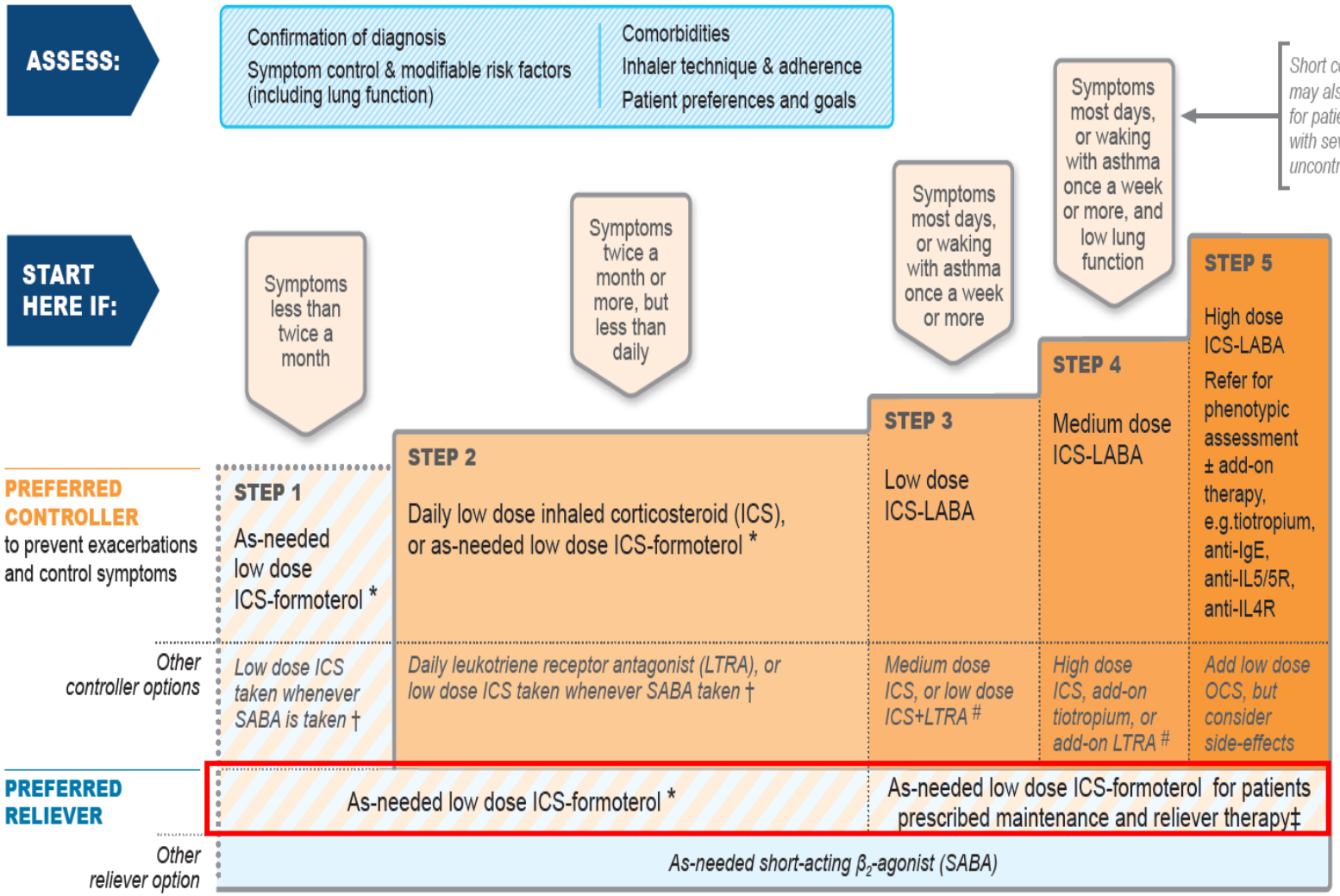
CANADIAN THORACIC SOCIETY

Alternative Substitution (Not approved by Health Canada as a reliever medication in asthma)		
Formoterol 6 mcg or 12mcg Turbuhaler (Oxeze) (6ug inhaler preferred, 12ug only if 6ug not available)	≥6 years	Patient Population: Patients on any daily inhaled corticosteroid or leukotriene receptor antagonist, or daily budesonide/formoterol, mometasone/formoterol that can use a dry powder inhaler* Formoterol is a fast-acting long-acting beta-agonist. It is Health Canada approved as add-on to an inhaled corticosteroid but not as a reliever medication. Dosing considerations: 6 mcg of formoterol provides approximately equivalent effect to 200ug of salbutamol

- SABA: Terbutaline, Salbutamol Nebules
- SAMA: Ipratropium MDI, Nebules
- LABA: Formoterol
- SABA/SAMA Salbutamol/Iratropium
  - Combivent Respimat
  - Duovent nebules etc
- LABA/ICS, Budesonide/Formoterol
- ? Mometasone/Formoterol
- Oral SABA Orciprenaline
- SC epinephrine

		inhaler is used.
Mometasone/Formoterol 100mcg/5mcg or 200mcg/5mcg pMDI (Zenhale)	≥12 years	Patient Population: Patients on Mometasone/Formoterol as daily maintenance therapy Mometasone/Formoterol is a combination inhaled steroid and fast-acting-long acting bronchodilator There is no evidence of efficacy or safety to use mometasone/formoterol as a reliever in patients on maintenance with any type of ICS-LABA combination. Dosing considerations: Extrapolating from data for Budesonide/Formoterol, we would recommend a maximum dose of 6 inhalations in one occasion and 8 inhalations/day. We would preferentially recommend mometasone/formoterol 100mcg/5mcg instead of 200mcg/5mcg given the potential for very high doses of inhaled steroids to be used with 200mcg/5mcg PRN and would suggest a maximum of 4 inhalations/day if the 200mcg/5mcg inhaler is used. Patients should be encouraged to use the same inhaler for both daily maintenance controller and reliever and dispensing should be limited to one inhaler or a one month supply.

SUGGESTED INITIAL CONTROLLER TREATMENT IN ADULTS AND ADOLESCENTS WITH A DIAGNOSIS OF ASTHMA



* Data only with budesonide-formoterol (bud-form)

† Separate or combination ICS and SABA inhalers

‡ Low-dose ICS-form is the reliever only for patients prescribed bud-form or BDP-form maintenance and reliever therapy

Consider adding HDM SLIT for sensitized patients with allergic rhinitis and FEV1 >70% predicted

Asthma Right Care Movement

SABA USE IN ASTHMA NEEDS MAJOR IMPROVEMENT

- Over-reliance needs defining
- Not “use” but “reliance” = type of *dependency*

ASTHMA IS LOW PRIORITY FOR CHANGE

This is despite:

- Unwarranted variation in outcomes
- Avoidable mortality, morbidity and HCU
- Substantial investment in education over time

FIRST SABA CONVERSATIONS AFFECT FUTURE USE

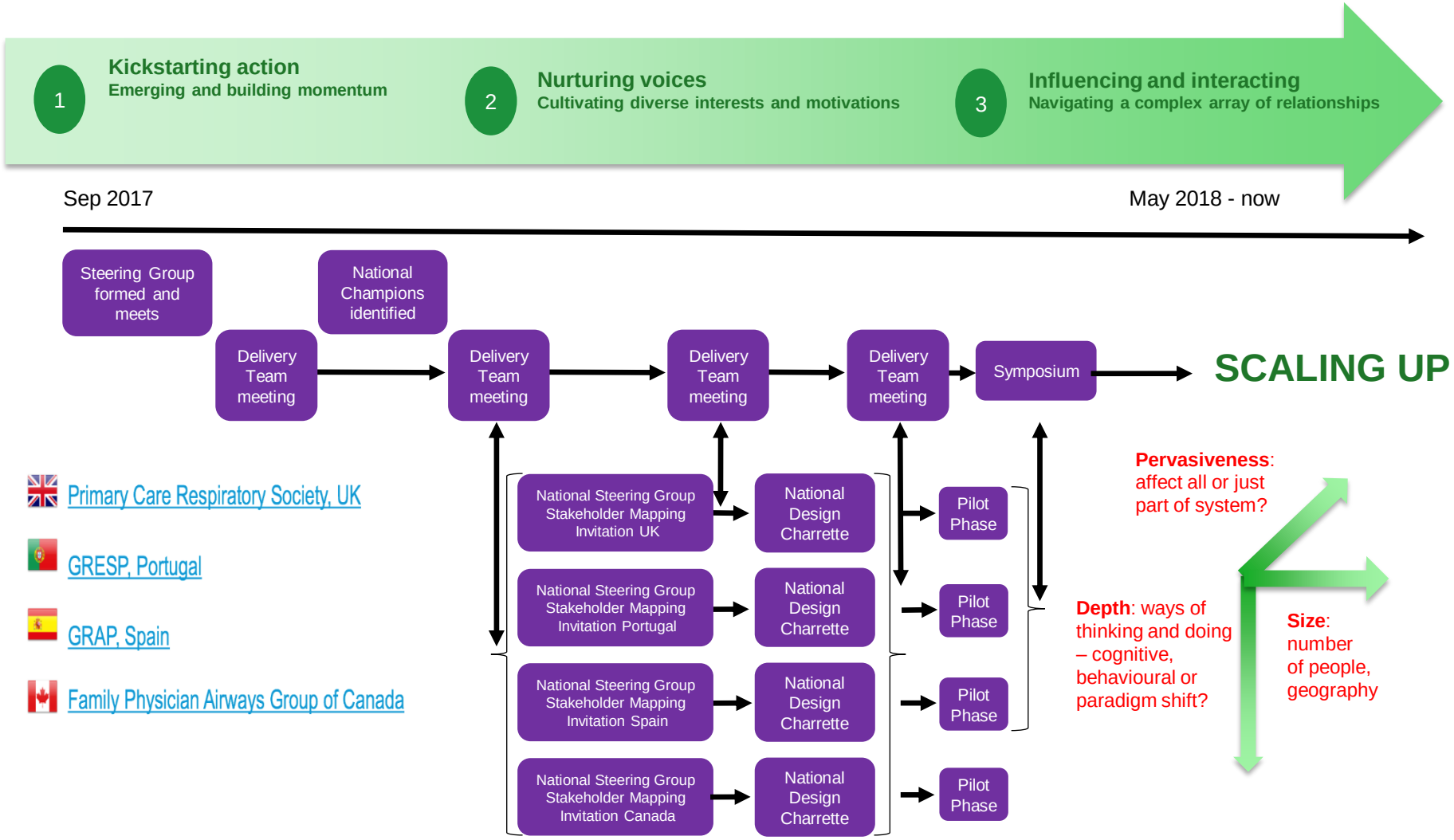
- Occur in many settings (pharmacies, EDs, GP/FP)
- Need to understand these conversations

HCPS NEED TO WANT CHANGE

- Messages about asthma improvement will only be received and adopted once HCPs desire change

- ☐ **Apply the evidence about achieving change at scale**
- ☐ **Disrupt comfort with the current state!**
- ☐ **Gain acceptance of room for improvement**
- ☐ **Move on to addressing underuse of ICS**

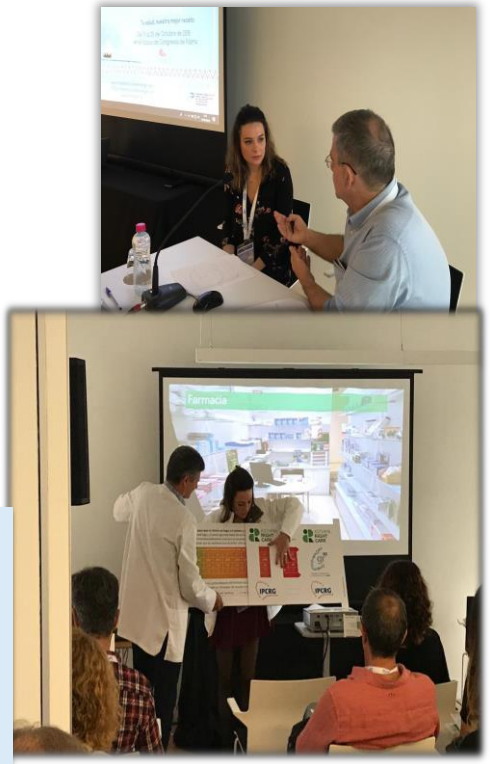
Getting our social movement going



Nesta 2017. : https://media.nesta.org.uk/documents/we_change_the_world_report.pdf (accessed August 2019)

Summary of the Asthma Right Care movement

- 10,000 frontline HCPs and global primary care leaders reached so far
- Now launching in Netherlands, Greece, France, Tunisia, Australia and Latin America
- 4 international and multiple national conferences attended
- Materials produced:
  - Asthma Right Care Slide Rule (English, Spanish and Portuguese)
  - Question Cards in different formats (English, Spanish and Portuguese)
  - Reliever Reliance Test (led by Rob Horne; IPCRG endorsed)
  - 5 teaching case studies
    (primary care, ED, etc)



- Mild asthma
- “Chest infection”
- Transition from child to adult
- Seen in ED, but not admitted
- Difficult to manage (moderate or severe?)

ED, emergency department; HCP, healthcare professional; SABA, short-acting beta$_2$-agonist

ASTHMA RIGHT CARE

International Primary Care Respiratory Group IPCRG work locally collaborate globally

SABA* RISK QUESTIONNAIRE (SRQ)

A questionnaire about risks associated with over reliance on blue RELIEVER INHALERS

This questionnaire is designed to help you and your healthcare professional to understand what you think about your traditional blue RELIEVER INHALER and whether you might be at risk of relying on it too much.

PART 1 Your views about your blue RELIEVER INHALER

1. Please circle the score that best represents your current view
2. Please write the number for each statement in the score box next to it
3. Please add up the numbers to get your total score
4. Share your score with your doctor/nurse or pharmacist

There are no right or wrong answers. We are interested in your views

PART 1 SCORE

1 Using my blue **RELIEVER INHALER** to treat symptoms is the best way to keep on top of my asthma.

Strongly disagree	1	Disagree	2	Uncertain	3	Agree	4	Strongly agree	5	☐

2 I don't worry about asthma when I have my blue **RELIEVER INHALER** around.

Strongly disagree	1	Disagree	2	Uncertain	3	Agree	4	Strongly agree	5	☐

3 My blue **RELIEVER INHALER** is the only asthma treatment I can really rely on.

Strongly disagree	1	Disagree	2	Uncertain	3	Agree	4	Strongly agree	5	☐

4 The benefits of using my blue **RELIEVER INHALER** easily outweigh any risks.

Strongly disagree	1	Disagree	2	Uncertain	3	Agree	4	Strongly agree	5	☐

5 I prefer to rely on my blue **RELIEVER INHALER** than my **STEROID PREVENTER INHALER.**

Strongly disagree	1	Disagree	2	Uncertain	3	Agree	4	Strongly agree	5	☐

PART 1 TOTAL ☐

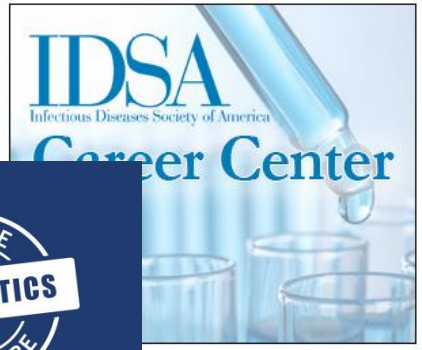
What about antibiotics for Covid?

ACCEPTED MANUSCRIPT

Bacterial and fungal co-infection in individuals with coronavirus: A rapid review to support COVID-19 antimicrobial prescribing FREE

Timothy M
Keira Skoli

Clinical Inf
Published



- For C…vere reported as ex…fection during hosp…is dem…ctrum antib…idence for bacte…nalysis, 1450…d received antin…al stewardship inter…

Nice evidence review

https://www.cebm.net/covid-19/asthma-and-covid-19-risks-and-management-considerations/

Summary

Asthma Diagnosis - confirmed
Symptoms - ACT Control Test
Triggers
Health
- mood
- co-morbidities :GERD and rhinitis

Medications - technique and adherence
Action Plan - AsthmaActionPlan.com

- Review goals/Reasssure
- Optimize medication/ aim for total control!
- ICS may be protective!
- Careful with SABAs!
- Not the time for stepping down therapy
- Trigger advice/Technique/Nebulization
- Treat exacerbations as you would normally
- Encourage activity
- Check for mood/anxiety! (PHQ-4)

- Contact: For4kids@gmail.com