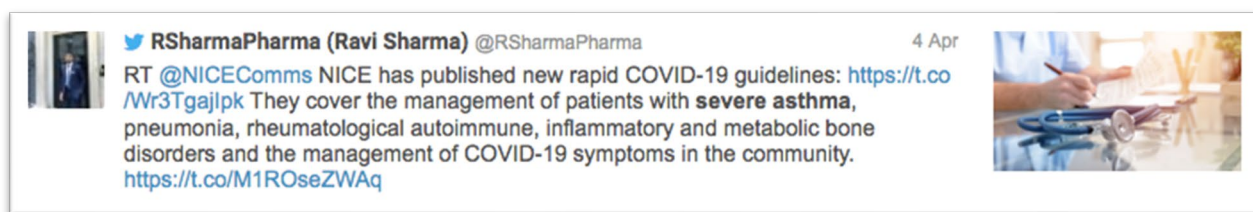
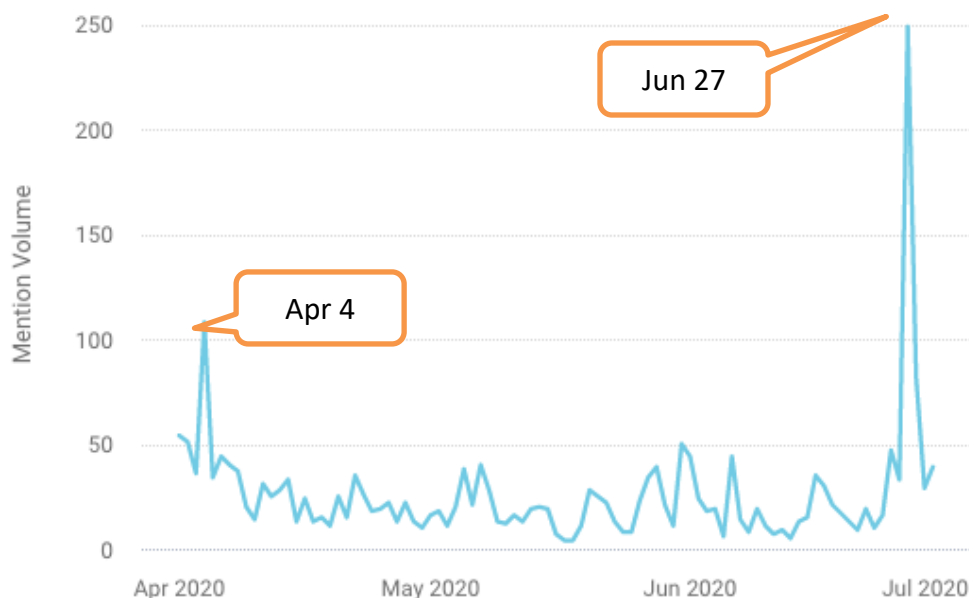


Asthma

Quarterly Social Media Update

HCP CONVERSATION ON TWITTER

Tweets originating from handles identified as healthcare professionals showed the same large spike on June 27 as the overall conversation, but HCP posts also peaked in April. Nearly all of these posts linked to the [National Institute for Health and Care Excellence's \(NICE\) guidelines](#) on COVID-19 for people with severe asthma and pneumonia (as well as other conditions).



Overall, HCP conversations in Q2 accounted for 3% of the total tweets (this was inline with Q1). HCP conversations continued to be dominated by COVID-19 with nearly half of all HCP posts mentioning the virus. Most of these posts can be traced back to retweets of the June 27 and April 4 spikes and most supported people with severe asthma wearing masks (as well as social distancing for safety). Buenos Aires Allergist Juan Ivancevich MD (Aller_MD, 6.5k followers) was the most prolific handle during Q1 and that continued in Q2 with 73 tweets. Content most often mentioned COVID-19, and he frequently linked to [blog posts](#) and drug studies.

SAMPLE TWEETS BY @ALLER_MD



Allier_MD (Juan C Ivancevich MD) @Allier_MD 8 Apr

RT @Els_Allergy New Targeted Therapies for **Uncontrolled Asthma** - Part of a **Biologics** article collection: <https://t.co/6qqhEHEA73> <https://t.co/WGVLEVFPa8>



Allier_MD (Juan C Ivancevich MD) @Allier_MD 7 Apr

RT @JACIInPractice In Press! #Mepolizumab for #Allergic #Bronchopulmonary #Aspergillosis: report of 20 cases from the Belgian #Severe #Asthma Registry and review of the literature <https://t.co/kRyWeY8uuC>




Allier_MD (Juan C Ivancevich MD) @Allier_MD 5 Apr

RT @AllergyEaaci The importance of being not significant: blood eosinophils and clinical responses do not correlate in **severe asthma** patients treated with **Mepolizumab** in real life. Corresponding Author: Giovanni Passalacqua; Download Article Here: <https://t.co/NWIEQkrbDK> #biomarker #mepolizumab <https://t.co/5mSANAY6w3>




SAMPLE TWEETS FROM TOP HCPS (BY FOLLOWERS)



Dlaureate (Ablebae) @Dlaureate 5 May

RT @trending_medic Moderate to **Severe Asthma** has been shown as a risk factor to more serious clinical symptoms of COVID-19. If you've been diagnosed, social distancing and other precautions should be paramount in your routine. Stay safe. #WorldAsthmaDay



kstreet111 (K.Street111 SOS America) @kstreet111 28 Jun

RT @eugenegu This Trader Joe's Karen is lying. No real doctor would tell a patient not to wear a mask during COVID-19. Even those with **asthma**, **COPD**, and other respiratory conditions should wear a mask in public. It won't interfere with your breathing. It'll save lives. <https://t.co/xDa9frgSJU>

HCP MENTIONS - TREATMENTS AND PRODUCTS

HCP Twitter conversations that tied to asthma treatments and products showed two major spikes during Q2:

- The first peak between April 10-13 did not tie to one single driver. Topics included the FDA's approval of the first generic albuterol sulfate inhaler for patients 4 years and older with reversible obstructive airway disease. Other tweets focused on UnitedHealthcare's decision to deny coverage of Nucala, used to maintain lung capacity.
- June 18 posts were driven by new guidelines from the Global Initiative for Asthma (GINA) that said Salbutamol (SABA) was no longer recommended as first line asthma relief, instead recommended that low dose corticosteroids and Formoterol be used.



SAMPLE TWEETS BY HCPS



alsulaimankh (Khalid A. Alsulaiman) @alsulaimankh 18 Jun

Salbutamol (SABA) NOT any more recommend as first line relievers in **asthmatic** patients, New guidelines (GINA), now recommends the use low dose inhaled corticosteroids + **Formoterol (Budesonide + Formoterol)** as reliever. <https://t.co/O5nGnUvoTg>





legend_dw (DWK_RN) @legend_dw 11 Apr

RT [@RoKhanna](#) Today, in the midst of Covid-19, UnitedHealthcare denied coverage of **Nucala**, a medicine people with **Asthma** need to maintain lung capacity. My case is not severe, but my doctor is spending all weekend fighting for dozens of patients denied. I rest my case for Medicare for All. <https://t.co/a3theJxfO3>

Retweets: 0 Replies: 0 Impressions: 206



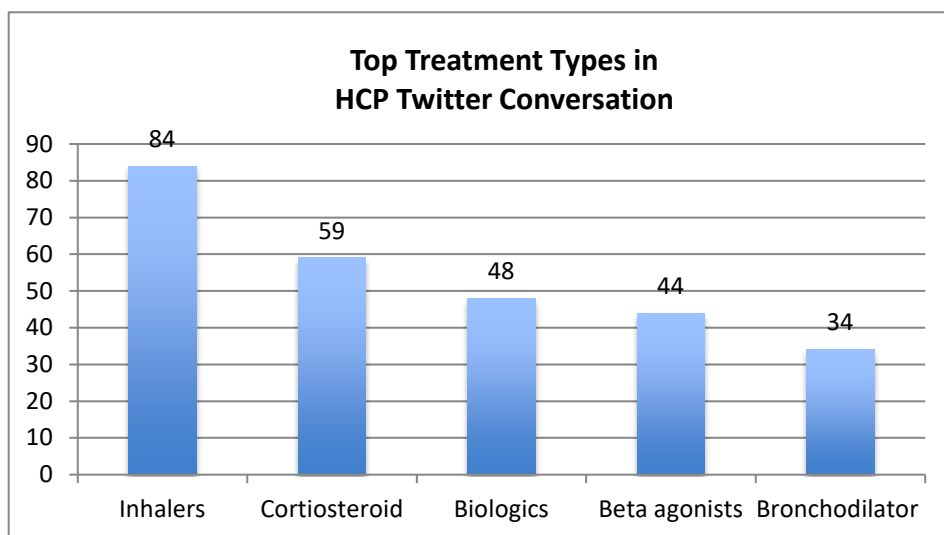


Physns1stWatch (PhysiciansFirstWatch) @Physns1stWatch 10 Apr

The FDA has approved the first **generic** version of an **albuterol** sulfate inhaler for patients 4 years and older with reversible obstructive airway disease. **#asthma**

TOP ASTHMA PRODUCTS WITHIN THE HCP CONVERSATION

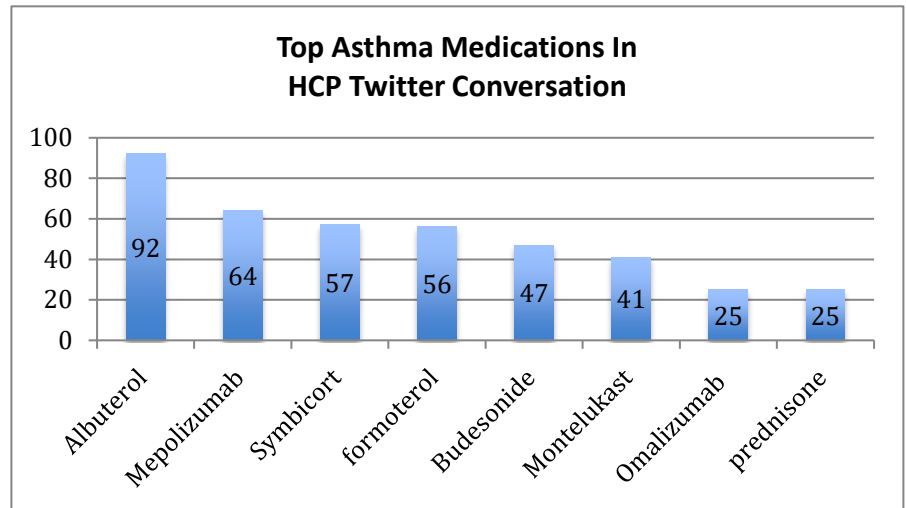
Inhalers were the most mentioned asthma treatment during Q2 by HCPs. Posts included mentions of shortages during COVID-19, use of inhalers (handles posting they rely on them frequently), and FDA's clearance to allow [Symbicort to connect to its digital health platform](#).



Corticosteroid mentions were driven by GINA's recommendation against SABA as first line asthma relief.

Tweets mentioning biologics were primarily driven by three influencers: Florin-Dan Popescu (@FlorinDanPopesc, 7.2k followers), Juan Ivancevich (@Aller_MD, 6.5k followers), and Michael Blaiss (@wheezemd, 3.7k followers). Posts shared new research and conferences.

As was the case in Q1, Albuterol was the most mentioned asthma medication this quarter (this included references to ProAirm Ventolin, RespiClick, and Proventil). Posts often tied to COVID-19 and mentioned shortages of the drug, while others posted research pieces or mentioned their personal use of the medication.



Mepolizumab/Nucala mentions were tied to mentions of UnitedHealthcare denying coverage of the drug for maintaining lung capacity. Other posts mentioned Mepolizumab as one of only a handful of biologics approved by the FDA, as well as conferences and studies.

Symbicort posts were driven by Propeller Health's announcement that it would digitize treatment.

GINA's new guideline recommending the use of low dose inhaled corticosteroids + Formoterol/Budesonide (instead of SABA) were frequently retweeted.

News coverage claiming off-label Singulair (Montelukast) was effective at treating COVID-19 drove Singulair mentions.

Prednisone posts tended to be in passing and mentioned using the medication to stop a reaction or mentioned other asthma related drugs alongside it.

TWEETS BY TOP HCPS



FlorinDanPopesc (Florin-Dan Popescu) @FlorinDanPopesc 16 Apr
RT @ginasthma New #2020 #GINA Inhaled **Corticosteroid** table for Adults and adolescents with #asthma. @PCRSUK @RespNprang @RCPLondon @EuroRespSoc @atscommunity @AsthmaAustralia @bigcatdoc @Breathe_to_win @inhalers4u <https://t.co/TIA9iqzbDV> <https://t.co/fYk0YCOU>

Low, medium and high ICS doses: adults/adolescents

ICS dose (µg/day)	Low	Medium	High
Budesonide (Symbicort)	80-160	160-320	320-640
Budesonide (Symbicort) + LABA	80-160	160-320	320-640
Budesonide (Symbicort) + LABA + LAMA	80-160	160-320	320-640
Budesonide (Symbicort) + LABA + LAMA + LABA	80-160	160-320	320-640
Budesonide (Symbicort) + LABA + LAMA + LABA + LABA	80-160	160-320	320-640
Budesonide (Symbicort) + LABA + LAMA + LABA + LABA + LABA	80-160	160-320	320-640

This is NOT a table of equivalence. There are significant side effects for the 'low', 'medium' and 'high' dose treatment options with different ICS.



SPulim (Sandeep Pulim) @SPulim 26 May
RT @PropellerHealth We're excited to share that Propeller has received FDA clearance to connect patients using the Symbicort Inhaler to our platform, a huge milestone in bringing digital health to people with asthma and COPD. <https://t.co/LsR6BKfdB9>



FlorinDanPopesc (Florin-Dan Popescu) @FlorinDanPopesc 8 Jun
Next at #eaaci2020: #EAACI #AAAAI #JointSymposium (18:15 CEST): new era in #asthma management: perspectives from US @AAAAI_org #SisterSocietySymposium: Personalized #asthma care - #biologics, #Allergen environmental interventions, Reconciling differences in #guidelines <https://t.co/fHhwSlmqXF>

ISSUE 1000 - AAAAI joint symposium
A new era in asthma management perspectives from the United States
Monday, 9 June 2020 - 18:15 (18:15 CEST)

Learning Objectives:

- To demonstrate a personalized approach to the selection of a biologic agent for a patient with severe asthma.
- To discuss the current state of evidence on allergen avoidance in asthma management.
- To describe differences in asthma guidelines.

Personalized asthma care - the use of biologics
Thomas Casadevall (New York)

Allergen avoidance: the impact of environmental interventions in different patient populations
Marika Phippard (London, United Kingdom)

Reconciling differences in asthma guidelines
Leonard Bachman (London, United Kingdom)



Aller_MD (Juan C Ivancevich MD) @Aller_MD 27 Jun
RT @ImmunAllergyBMC Differential response to **biologics** in a patient with severe asthma and ABPA: a role for dupilumab? <https://t.co/RGkesGNkLu>



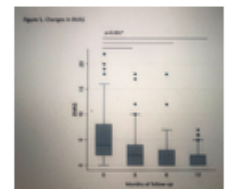
Aller_MD (Juan C Ivancevich MD) @Aller_MD 10 Apr
As part of an open call for papers, Elsevier and the editors of the official journals of the American Academy of Allergy, Asthma & Immunology (AAAAI) would like to make these recent **Biologics** research articles available free through May 15, 2020. <https://t.co/F2aV8aVVg3>



wheezemd (Michael Blaiss, MD) @wheezemd 15 Jun
COVID-19, SEVERE ASTHMA AND **BIOLOGICS** <https://t.co/CZbPSfeBw5>



DrPetryna (Olga Petryna) @DrPetryna 4 Jun
#EULAR2020 #op0148 real world European study of **Mepolizumab** in 142 pts w/EGPA shows significant improvement of general, ENT, pulm&neuro symptoms. Significant reduction in BVAS, 90%decrease of asthma attacks by 12 mo, decreased steroid use. 21.1%non-serious AEs @RheumNow <https://t.co/fN4tKPvUaE>



wheezemd (Michael Blaiss, MD) @wheezemd 2 Jun
Real-world experience with **mepolizumab**: Does it deliver what it has promised? Clinical relevance: **Mepolizumab** is efficient in severe eosinophilic asthma in real life. <https://t.co/B5QspReY9k>