

Welcome to this promotional program
sponsored by AstraZeneca



A woman with reddish-brown curly hair, wearing a green t-shirt, is shown in profile, coughing into her fist. Her other hand is pressed against her chest. The background is a soft-focus collage of colorful, glowing biological cells and structures, including what appears to be a large cell with a purple nucleus and various organelles, and several smaller, translucent, pill-like shapes. The overall tone is clinical and scientific.

A Proven Path for Severe Asthma Control

AstraZeneca 

Sarah's Asthma Is No Longer Uncontrolled

SARAH IS NO LONGER one of the
8.5 million patients
who had an asthma exacerbation in the last year*

She can get back to the activities she enjoyed
WITHOUT HER ASTHMA INTERFERING

Hypothetical patient for illustrative purposes. Individual results may vary.

*Data from 2020 National Health Interview Survey. Patients were polled as to having had one or more asthma attacks in the past 12 months among people with current asthma.

3 CDC Most Recent National Asthma Data. https://www.cdc.gov/asthma/most_recent_national_asthma_data.htm. Accessed April 5, 2023.

Many Patients Are Still Struggling With Asthma Control



An estimated **2.5 million patients** in the US have **severe asthma**^{1,2,*}

*Data for asthma prevalence from 2020 National Health Interview Survey. Persons who answered "yes" to the questions: "Have you EVER been told by a doctor or other health professional that you had asthma?" and "Do you still have asthma?" Severe asthma prevalence estimated to be 10%.

1. CDC Most Recent National Asthma Data. https://www.cdc.gov/asthma/most_recent_national_asthma_data.htm. Accessed April 5, 2023. 2. Chung KF, et al. *Eur Respir J*. 2014;43:343-373.

Nearly 70% of Patients With Severe Asthma Have Eosinophilic Asthma^{1,*}

Eosinophilic asthma should be considered at ≥ 150 cells/ μL ²⁻⁴

Although not defined by clinical guidelines, characterization of eosinophilic asthma can be a blood eosinophil count of ≥ 150 cells/ μL .

Consider that blood eosinophils can be affected by recent corticosteroid use and can naturally vary throughout the day.

CHARACTERISTICS

- On a high-dose ICS/LABA
- ≥ 2 exacerbations in the last year
- OCS bursts to manage exacerbations
- Nocturnal asthma symptoms



ICS=inhaled corticosteroids; IL=interleukin; LABA=long-acting beta-agonist; OCS=oral corticosteroids.

*Data from the US CHRONICLE Study, an observational study of subspecialist-treated adults with severe asthma which evaluated 1168 eligible and 659 enrolled patients between February 27, 2018 and December 1, 2018. For this analysis, eosinophilic asthma was defined as treatment with anti-IL5/IL5R therapy (estimated 28% of eligible patients) or blood eosinophil count > 150 cells/ μL in patients not receiving anti-IL5/IL5R therapy (estimated 41% of eligible patients). Estimates for patients not receiving anti-IL5/IL5R therapy were derived from enrolled patients with available blood eosinophil counts (n=213) and projected to the full eligible population.

1. Data on File, REF-51332, AZPLP. 2. Skolnik NS, et al. *Curr Med Res Opin.* 2019;35(7):1309-1318. 3. Heaney LG, et al. *Chest.* 2021;160(3):814-830. 4. Tran TN, et al. *Ann Allergy Asthma Immunol.* 2016;116(1):37-42.

Eosinophilic Asthma Can Have Consequences for Your Patients And Can Be Life-Threatening



Risk of fatal asthma exacerbation¹



Increased risk of additional asthma exacerbations¹



Potential for ED visits and hospitalizations¹



Exposure to systemic corticosteroids¹



Reduced lung function^{1,2}



Interference with work or other activities due to asthma^{3,4}

ED=emergencydepartment.

1. GINA. Global Strategy for Asthma Management and Prevention. <https://ginasthma.org/wp-content/uploads/2022/07/GINA-Main-Report-2022-FINAL-22-07-01-WMS.pdf>. Updated 2022. Accessed April 5, 2023. 2. Calhoun W, et al. *J Allergy Clin Immunol*. 2015;136(4):1125-1127.e4. 3. Global Initiative for Asthma. 2020. Appendix. https://ginasthma.org/wp-content/uploads/2020/04/GINA-2020-Appendix_final-wms.pdf. Accessed April 5, 2023. 4. Graham LM, et al. *Curr Med Res Opin*. 2015;31(4):825-835.





What Changed in Sarah's Asthma Treatment Plan?

FASENRA[®] (benralizumab) Indication, Limitations, and Contraindications

INDICATION AND USAGE

FASENRA is indicated for the add-on maintenance treatment of patients with severe asthma aged 12 years and older, and with an eosinophilic phenotype

LIMITATIONS OF USE

FASENRA is not indicated for treatment of other eosinophilic conditions

FASENRA is not indicated for the relief of acute bronchospasm or status asthmaticus

CONTRAINDICATIONS

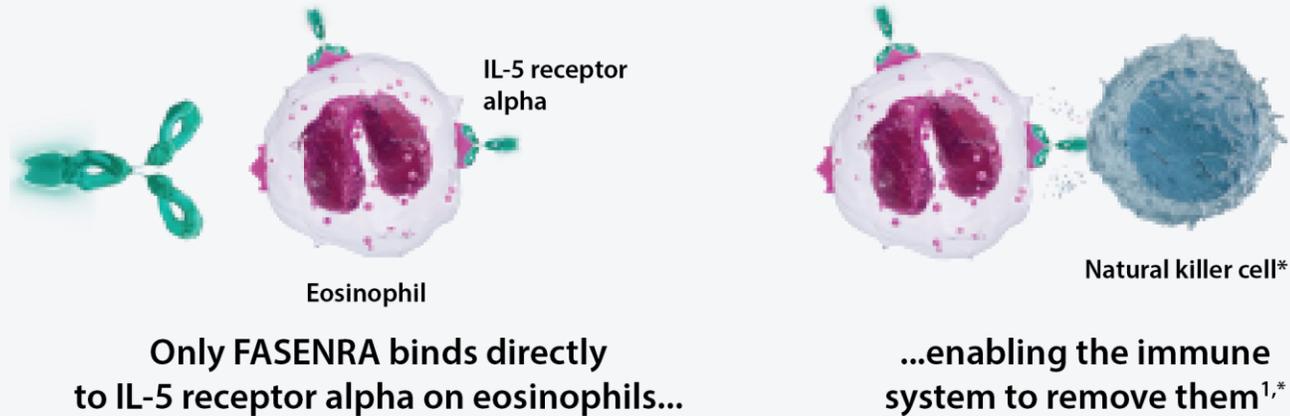
Known hypersensitivity to benralizumab or excipients

Please see additional Important Safety Information throughout and full Prescribing Information at this presentation.

**MOVE
FORWARD WITH**
 **Fasenra[®]**
(benralizumab) Subcutaneous
Injection 30 mg

Target Eosinophilic Asthma At The Source

FASENRA directly and rapidly depletes eosinophils¹⁻³



With benralizumab, airway tissue eosinophils were shown to be reduced by ~96% after 84 days^{4,†}

The mechanism of action of benralizumab in asthma has not been definitively established.

IL=interleukin; SC=subcutaneous.

*The pharmacodynamic response (blood eosinophil depletion) following repeat SC dosing was evaluated in asthma patients in a 12-week Phase 2 trial. Patients received 1 of 3 doses of benralizumab (25 mg [n=6], 100 mg [n=6], or 200 mg [n=6] SC) or placebo (n=6) every 4 weeks for a total of 3 doses. Twenty-four hours post dosing, all benralizumab dosage groups demonstrated complete or near-complete depletion of median blood eosinophil levels, which was maintained throughout the dosing period.¹⁻³

†A 12-week phase I study evaluated the effect of benralizumab on eosinophil depletion in airway mucosa in adult patients with eosinophilic asthma. Patients were randomized to benralizumab 100 mg SC, 200 mg SC, or placebo given every 4 weeks (n=14). Patients had a 96% median reduction from baseline in airway mucosa eosinophils after treatment with benralizumab compared with a 47% reduction in the placebo group at Day 84 (P=0.06). The median percentage change from screening to Days 28 and 84 were not statistically significantly different between the placebo and benralizumab groups.⁴

1. FASENRA® (benralizumab) [package insert]. Wilmington, DE: AstraZeneca Pharmaceuticals LP; February 2021. 2. Pham TH, et al. *Respir Med.* 2016;111:21-29. 3. Data on File, REF-28001, AZPLP. 4. Lavolette M, et al. *J Allergy Clin Immunol.* 2013;132(5):1086-1096.e5.

The FASENRA Phase 3 Program Included Three Confirmatory Trials

SIROCCO^{1,2}

EXACERBATION REDUCTION STUDY

- In SIROCCO and CALIMA, FASENRA and placebo were administered plus SOC. SOC was defined as medium/high-dose ICS/LABA with or without other controllers, including oral steroids
- The primary endpoint was the rate of asthma exacerbations in patients with a baseline blood eosinophil count ≥ 300 cells/ μL who were taking high-dose ICS and LABA
- In the two trials, FASENRA Q8W* provided significant reductions in annual asthma exacerbation rate of up to 51% compared with placebo[†]

*First 3 doses given every 4 weeks.

CALIMA^{1,3}

EXACERBATION REDUCTION STUDY

ZONDA^{1,4}

ORAL CORTICOSTEROID REDUCTION STUDY

The primary endpoint of ZONDA was the median percentage reduction in final OCS dose at Week 28.

In ZONDA, treatment with FASENRA allowed most patients to reduce their OCS dose.^{1,4} 75% reduction in median OCS dose with FASENRA + SOC (n=73) compared to 25% reduction with placebo + SOC (n=75) in ZONDA (28 weeks).^{1,4}

SIROCCO (Trial 1) 48-week study^{1,2} | CALIMA (Trial 2) 56-week study^{1,3}
Randomized, double-blind, parallel-group, placebo-controlled, Phase 3 studies (n=2510)

Select inclusion criteria^{2,3}

- Patients aged 12-75 years
- SOC (medium/high-dose ICS/LABA \pm additional controllers)[†]
- History of ≥ 2 exacerbations in the prior year required
- OCS use permitted
- No baseline blood eosinophil count requirement

Select baseline characteristics^{2,3}

- Mean exacerbations in preceding year: 2.8
- Mean % predicted FEV₁: 58% (SIROCCO)



AER=annual exacerbation rate; FEV₁=forced expiratory volume in 1 second; ICS/LABA=inhaled corticosteroid/long-acting β_2 -agonist; OCS=oral corticosteroid; Q4W=every 4 weeks; Q8W=every 8 weeks; SOC=standard of care.

[†]In SIROCCO (48 weeks), a 51% reduction in annual asthma exacerbation rate was observed in patients treated with FASENRA + SOC (n=267) vs placebo + SOC (n=267) (0.74 vs 1.52, $P < 0.0001$).^{1,2} In CALIMA (56 weeks), a 28% reduction in annual asthma exacerbation rate was observed in patients treated with FASENRA + SOC (n=239) vs placebo + SOC (n=248) (0.73 vs 1.01, $P = 0.019$).^{1,3}

[‡]Patients aged ≥ 18 years treated with high-dose ICS/LABA for ≥ 3 months prior to enrollment in SIROCCO. [§]Patients were enrolled regardless of eosinophil level and then stratified 2:1 ≥ 300 cells/ μL and < 300 cells/ μL .

^{||}Primary analysis set in SIROCCO and CALIMA was based on patients with ≥ 300 cells/ μL and high-dose ICS/LABA.

1. FASENRA[®] (benralizumab) [package insert]. Wilmington, DE: AstraZeneca Pharmaceuticals LP; February 2021. 2. Bleeker ER, et al. *Lancet*. 2016;388(10056):2115-2127. 3. FitzGerald JM, et al. *Lancet*. 2016; 388(10056):2128-2141. 4. Nair P, et al. *N Engl J Med*. 2017;376(25):2448-2458.

MOVE FORWARD WITH Fasenra[®]
(benralizumab) Subcutaneous Injection 30 mg

MELTEMI Study Design: Open-label Safety and Efficacy Extension Trial

YEAR 1

YEAR 2

YEARS 3–5

PREDECESSOR STUDIES

Randomized, placebo-controlled,
Phase 3 studies*

SIROCCO (48 weeks)

Exacerbation Study
N=1205

CALIMA (56 weeks)

Exacerbation Study
N=1306

ZONDA (28 weeks)

OCS Reduction Study
N=220

EXTENSION STUDY

Double-blind, randomized, parallel-group study
Safety and efficacy up to 2 years*

BORA (56 weeks)

Safety Extension Study
N=2123
≥16 and <40 weeks in BORA

EXTENSION STUDY

Open-label safety and efficacy up to 5 years

MELTEMI (up to 5 years)

Safety Extension Study
N=446

86% (n=384)
completed MELTEMI†

OCS=oral corticosteroid; Q4W=every 4 weeks; Q8W=every 8 weeks.

*Included Q4W and Q8W treatment arms. This presentation will only discuss results from the Q8W treatment arm.

†Patients completing MELTEMI received at least one dose of study drug; study duration varied based on discontinuations and timing of commercial availability in various local markets.

Korn S, et al. *J Allergy Clin Immunol Pract.* 2021;9(12):4381-4392.e4.

MELTEMI Study Endpoints and Study Limitations

PRIMARY ENDPOINT

SAFETY AND TOLERABILITY

All patients who enrolled in MELTEMI and received at least 1 dose of FASENRA

SECONDARY ENDPOINT

ANNUALIZED ASTHMA EXACERBATION RATE*

Patients with blood eosinophils ≥ 300 cells/ μ L at baseline in the predecessor studies using high-dose ICS/LABA

STUDY LIMITATIONS

- MELTEMI was an open-label extension study with no control arm
- Patients who did not experience benefits with their asthma treatment may have been more likely to discontinue the study vs those who did experience benefits
- Similarly, patients who experienced certain SAEs in predecessor studies were not eligible to enter MELTEMI

The points above could contribute to selection bias

ICS/LABA=inhaled corticosteroid/long-acting β_2 -agonist; SAE=serious adverse event.

*Annual exacerbation rate defined as $365.25 \times$ total number of exacerbations/total duration of on-treatment follow-up within the treatment group and time interval (days).

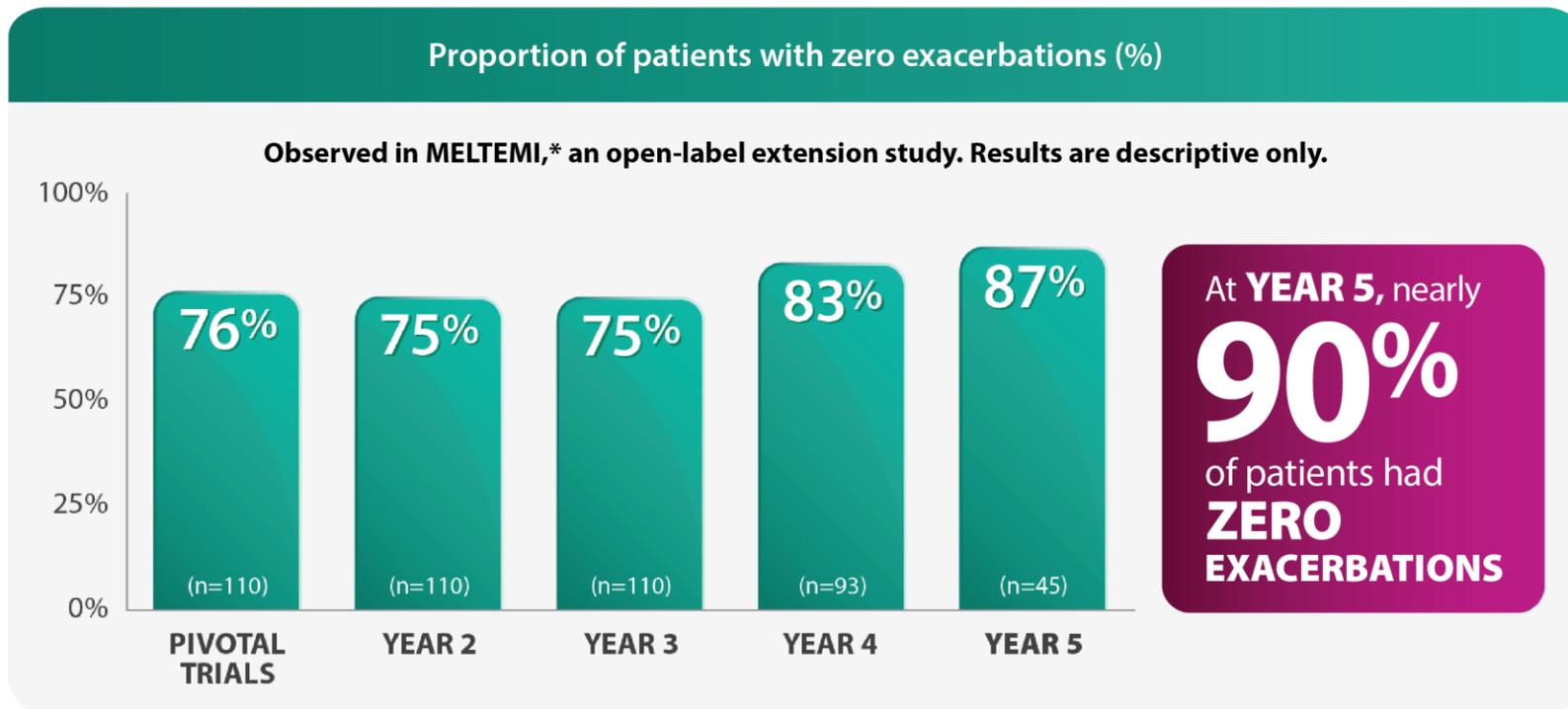
Korn S, et al. *J Allergy Clin Immunol Pract.* 2021;9(12):4281-4392.e4.

~~EXACERBATIONS~~

Zero in on Exacerbations



Over 5 years, at least 75% of patients had ZERO EXACERBATIONS each year



Q4W=every 4 weeks; Q8W=every 8 weeks.

*MELTEMI was an open-label, Phase 3 extension study that enrolled patients who were previously enrolled in a predecessor clinical trial—SIROCCO, CALIMA, or ZONDA—and enrolled in BORA for ≥ 16 weeks and < 40 weeks and then transitioned to MELTEMI. In predecessor studies, patients received placebo or FASENRA 30 mg subcutaneously, either Q4W or Q8W (first 3 doses Q4W); in BORA, patients receiving placebo were randomized to FASENRA Q4W or Q8W and continued on the same treatment in MELTEMI until FASENRA was commercially available in their local market. Results above are specific to the group of patients who received FASENRA Q8W from predecessor studies through MELTEMI with baseline blood eosinophils ≥ 300 cells/ μ L receiving high-dose inhaled corticosteroids (HD-ICS) at baseline.[‡] In MELTEMI, patients could continue in the study until FASENRA was commercially available in their local market or for 130 weeks in countries in which a marketing application was not submitted. As FASENRA became approved in various markets, patient numbers declined.

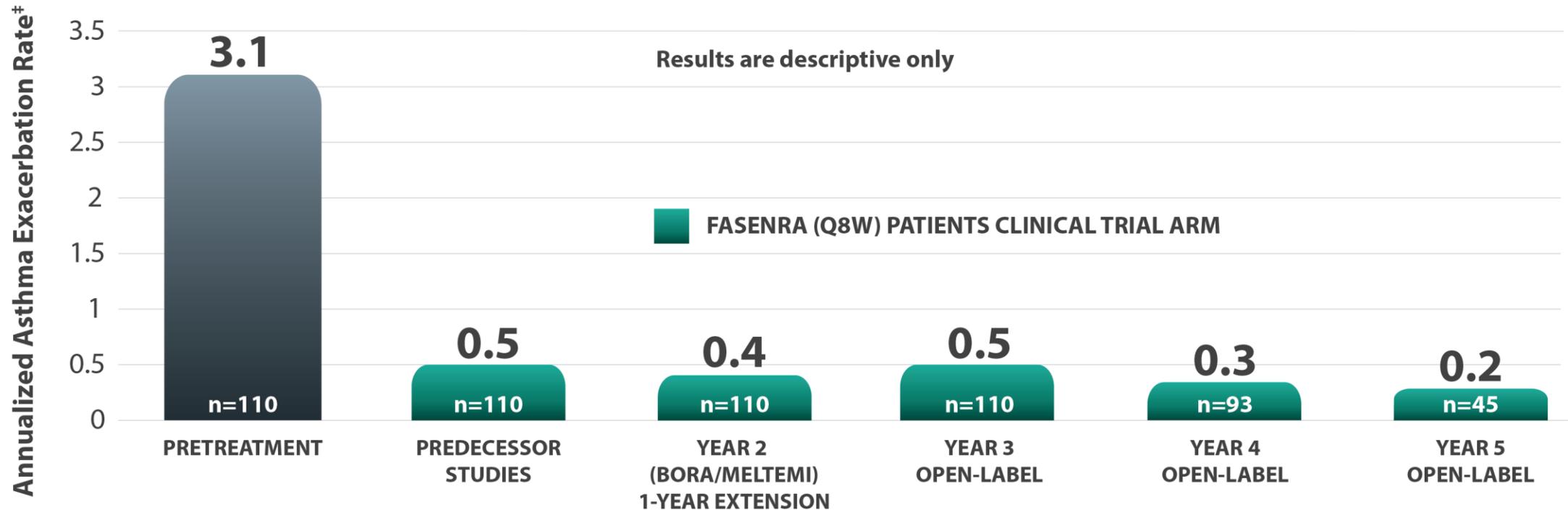
[‡]Per GINA guidelines, HD-ICS was defined as > 500 μ g fluticasone propionate equivalents daily.

Korn S, et al. *J Allergy Clin Immunol Pract.* 2021;9(12):4381-4392.e4.

MOVE
FORWARD WITH
Fasenra[®]
(benralizumab) Subcutaneous
Injection 30 mg

MELTEMI Open-label Extension Study: Exacerbation Data Over 5 Years^{1,2,*}

Exacerbation rates in patients with baseline blood eosinophils ≥ 300 cells/ μ L receiving high-dose ICS[†]



bEOS=blood eosinophils; GINA=Global Initiative for Asthma; ICS=inhaled corticosteroids; Q4W=every 4 weeks; Q8W=every 8 weeks; SC=subcutaneous.

*MELTEMI was an open-label, Phase 3 extension study that enrolled patients who were previously enrolled in a predecessor clinical trial—SIROCCO, CALIMA, or ZONDA—and enrolled in BORA for ≥ 16 weeks and < 40 weeks and then transitioned to MELTEMI. In predecessor studies, patients received placebo or FASENRA 30 mg SC, either Q4W or Q8W (first 3 doses Q4W); in BORA, patients receiving placebo were randomized to FASENRA Q4W or Q8W and continued the same treatment in MELTEMI until FASENRA was commercially available in their local market. Results above are specific to the group of patients who received FASENRA Q8W from predecessor studies through MELTEMI with bEOS ≥ 300 cells/ μ L receiving high-dose ICS at baseline.[‡]

[†]Per GINA guidelines, high-dose ICS was defined as > 500 μ g fluticasone propionate equivalents daily.

[‡]Annual exacerbation rate defined as $365.25 \times$ total number of exacerbations/total duration of on-treatment follow-up within the treatment group and time interval (days).

1. Bourdin A, et al. Oral poster presented at: Virtual American Thoracic Society Annual Meeting; May 14-19, 2021. 2. Korn S, et al. *J Allergy Clin Immunol Pract.* 2021;9(12):4381-4392.e4.

MOVE FORWARD WITH
Fasenra[®]
(benralizumab) Subcutaneous Injection 30 mg

Trust an Established and Consistent Safety Profile^{1,2}



FASENRA demonstrated a consistent safety profile through 5 years²

Adverse reactions for FASENRA observed in MELTEMI were similar to placebo in pivotal trials¹

| | ADVERSE REACTIONS (≥3%) (SIROCCO AND CALIMA) | | ADVERSE REACTIONS (ZONDA) | |
|-----------------------------------------|-------------------------------------------------|--------------------|------------------------------|-------------------|
| | FASENRA (n=822) | Placebo (n=847) | FASENRA (n=73) | Placebo (n=75) |
| Headache | 8% | 6% | 8.2% | 5.3% |
| Pyrexia | 3% | 2% | 2.7% | 1.3% |
| Pharyngitis* | 5% | 3% | — | — |
| Hypersensitivity reactions [†] | 3% | 3% | — | — |

NO boxed warning¹ **NO** new safety signals identified¹

Injection site reactions

In SIROCCO and CALIMA, injection site reactions with FASENRA were similar to placebo: 2.2% vs 1.9%, respectively.¹

In BORA, injection site reactions were 2% for patients who received FASENRA 30 mg SC Q8W in SIROCCO and CALIMA and in BORA (n=512) vs 1% for patients who received placebo in SIROCCO and CALIMA and then FASENRA 30 mg SC Q8W in BORA (n=281).³

MELTEMI open-label extension study

The most common adverse events (≥5 per 100 patient-years in the FASENRA Q8W arm) were nasopharyngitis, worsening asthma, bronchitis, and headache.^{2,‡} There were no associations between treatment and increased risk of parasitic infection or malignancy.²

AE=adverse event; bEOS=blood eosinophils; Q4W=every 4 weeks; Q8W=every 8 weeks; SC=subcutaneous.

*Pharyngitis was defined as follows: pharyngitis, pharyngitis bacterial, viral pharyngitis, and pharyngitis streptococcal.¹

[†]Hypersensitivity reactions were defined as follows: urticaria, urticaria papular, and rash.¹

[‡]All analyses were descriptive. This study was not powered to test any null hypothesis. Of patients initiating Q8W dosing at baseline (n=59), 14.5% (n=23) were on treatment for ≥5 years. Not all patients who entered treatment year 5 completed the year (total patient follow-up: 26 years). Among the 215 patients in the Q8W and Q4W treatment arms who initiated benralizumab in the predecessor studies, median bEOS levels reached 0 cells/μL by predecessor Week 4, and 178 patients remained at or near 0 cells/μL through the end of the integrated period.²

1. FASENRA® (benralizumab) [package insert]. Wilmington, DE: AstraZeneca Pharmaceuticals LP; February 2021. 2. Korn S, et al. *J Allergy Clin Immunol Pract.* 2021;9(12):4381-4392.e4.

3. Busse WW, et al. *Lancet Respir Med.* 2019;7(1):46-59.



~~INCONVENIENCE~~

Move Forward With Convenience

The FIRST AND ONLY respiratory biologic that combines Q8W maintenance dosing* with in-office or at-home administration

Q8W

MAINTENANCE DOSING

Administer 30 mg/mL by subcutaneous injection every 4 weeks for the first 3 doses, followed by once every 8 weeks thereafter.



IN-OFFICE ADMINISTRATION



AT-HOME ADMINISTRATION

Talk to your patients about which administration option is most convenient for them.

- FASENRA is indicated for use under the guidance of a healthcare professional. In line with clinical practice, monitoring of patients after administration of biologic agents is recommended
- Patients/caregivers may administer with FASENRA Pen after proper training in subcutaneous injection technique and after the healthcare professional determines it is appropriate

FASENRA offers patients the fewest doses per year

Dosing comparisons do not imply comparable efficacy, safety, or FDA-approved indications.

Q4W=every 4 weeks; Q8W=every 8 weeks.

*Every 8 weeks following the first 3 doses Q4W.

FASENRA® (benralizumab) [package insert]. Wilmington, DE: AstraZeneca Pharmaceuticals LP; February 2021.

MOVE
FORWARD WITH
Fasenra[®]
(benralizumab) Subcutaneous
Injection 30 mg

For Patients With Severe Eosinophilic Asthma, Move Forward With **FASENRA**

**TARGET EOSINOPHILIC ASTHMA AT THE SOURCE.
TAKE THE NEXT STEP TOWARD ASTHMA CONTROL.¹**



**ZERO IN ON
EXACERBATIONS AND
OCS REDUCTION¹**



The **FIRST AND ONLY**
respiratory biologic for
eosinophilic asthma with a
**CONSISTENT EFFICACY AND
SAFETY PROFILE STUDIED
THROUGH 5 YEARS²**



**ONLY FASENRA
OFFERS THE FEWEST
DOSES PER YEAR (Q8W)**
combined with in-office or
at-home administration options¹

Every 8 weeks following the first 3 doses Q4W

**FASENRA is covered for the majority of commercially
insured patients with an EOS count ≥ 150 cells/ μL ³**

Payers may require labs to be within a certain time period (eg, 6 weeks of initiation of therapy). AstraZeneca does not endorse any Commercial plan or plans. Individual costs and benefit design may vary by plan. Costs to patients may vary by plan. Please consult with individual plan for specific information.

Information as of September 21, 2022.

1. FASENRA® (benralizumab) [package insert]. Wilmington, DE: AstraZeneca Pharmaceuticals LP; February 2021.

2. Korn S, et al. *J Allergy Clin Immunol Pract.* 2021;9(12):4381-4392.e4. 3. Data on File, US-70054, AZPLP.

**MOVE
FORWARD WITH**
 **Fasenra**[®]
(benralizumab) Subcutaneous
Injection 30 mg

FASENRA IMPORTANT SAFETY INFORMATION AND PROGRAM SUMMARY

FASENRA® (benralizumab)

Important Safety Information

CONTRAINDICATIONS

Known hypersensitivity to benralizumab or excipients.

WARNINGS AND PRECAUTIONS

Hypersensitivity Reactions

Hypersensitivity reactions (eg, anaphylaxis, angioedema, urticaria, rash) have occurred after administration of FASENRA. These reactions generally occur within hours of administration, but in some instances have a delayed onset (ie, days). Discontinue in the event of a hypersensitivity reaction.

Acute Asthma Symptoms or Deteriorating Disease

FASENRA should not be used to treat acute asthma symptoms, acute exacerbations, or acute bronchospasm.

Reduction of Corticosteroid Dosage

Do not discontinue systemic or inhaled corticosteroids abruptly upon initiation of therapy with FASENRA. Reductions in corticosteroid dose, if appropriate, should be gradual and performed under the direct supervision of a physician. Reduction in corticosteroid dose may be associated with systemic withdrawal symptoms and/or unmask conditions previously suppressed by systemic corticosteroid therapy.

**MOVE
FORWARD WITH**
 **Fasenra**[®]
(benralizumab) Subcutaneous
Injection 30 mg

FASENRA® (benralizumab)

Important Safety Information (cont'd)

WARNINGS AND PRECAUTIONS (cont'd)

Parasitic (Helminth) Infection

It is unknown if FASENRA will influence a patient's response against helminth infections. Treat patients with pre-existing helminth infections before initiating therapy with FASENRA. If patients become infected while receiving FASENRA and do not respond to anti-helminth treatment, discontinue FASENRA until infection resolves.

ADVERSE REACTIONS

The most common adverse reactions (incidence \geq 5%) include headache and pharyngitis.

Injection site reactions (eg, pain, erythema, pruritus, papule) occurred at a rate of 2.2% in patients treated with FASENRA compared with 1.9% in patients treated with placebo.

USE IN SPECIFIC POPULATIONS

A pregnancy exposure registry monitors pregnancy outcomes in women exposed to FASENRA during pregnancy. To enroll call 1-877-311-8972 or visit www.mothersbaby.org/fasenra.

The data on pregnancy exposure from the clinical trials are insufficient to inform on drug-associated risk. Monoclonal antibodies such as benralizumab are transported across the placenta during the third trimester of pregnancy; therefore, potential effects on a fetus are likely to be greater during the third trimester of pregnancy.

Please read full Prescribing Information, including Patient Information, available at this presentation.

MOVE
FORWARD WITH
 **Fasenra**[®]
(benralizumab) Subcutaneous
Injection 30 mg



A Proven Path for Severe Asthma Control

- AstraZeneca is committed to conducting business with the highest standards of integrity and professionalism. If you have comments that could improve the delivery of our promotional educational programs, please contact AstraZeneca at 1-800-236-9933
- Thank you for your participation today
- This concludes today's program