THE LATEST ON SEVERE ASTHMA

MOVE OVER MELATONIN

Is your asthma worse at night? About half of people who live with the condition would answer "yes." Researchers have a new theory that may explain why nighttime asthma symptoms are worse. Asthma closes up the pathway that moves air to and from your lungs. A new study finds that melatonin—a sleep hormone that your body emits at night—causes that airway to get even tighter. Some asthma medications relax and open up the airway, but melatonin can make these medications less effective. The research findings could lead to a special treatment for nighttime asthma that blocks melatonin receptors.

SOURCE: American Journal of Physiology-Lung Cellular and Molecular Physiology

NEW TREATMENTS COULD TARGET UNIQUE CAUSES

Different immune-system problems may lead to severe asthma in different people. When researchers analyzed particles from the lungs of people with severe asthma, they found that different immune cells were activated or depleted in different lung samples. This means that even though the people with severe asthma tend to have the same symptoms, those symptoms may have unique causes. Effective treatment may not be “one-size-fits-all.” The study could lead researchers to develop multiple treatments to target each of the causes of the disease. That matters since many people with severe asthma don’t benefit from standard inhalers.

SOURCE: Cell Reports

300 MILLION

Estimated number of people who have asthma worldwide.

SOURCE: Asthma Research and Practice

439,000

Annual number of asthma-related hospital stays in the U.S. every year.

SOURCE: American College of Allergy, Asthma and Immunology

3-4 in 100

Number of people with asthma who have severe disease worldwide.

SOURCE: Journal of Allergy and Clinical Immunology

34%

Amount of U.S. adults with asthma who miss work in a given year because of their condition. (Those with uncontrolled or poorly controlled asthma are most likely to miss work.)

SOURCES: CDC, Journal of Asthma and Allergy

3-4

in 100

Number of people with severe disease worldwide.

SOURCE: Journal of Allergy and Clinical Immunology
STATS & FACTS

By Sonya Collins
Reviewed by Brunilda Nazario, MD, WebMD Chief Physician Editor, Medical Affairs

4x

How much more often U.S. adults with uncontrolled asthma go to the hospital compared with adults without asthma.

9.6%

Amount of adult women who have asthma compared with 6.3% of men.

$56 BILLION

Estimated annual cost of severe asthma in the U.S.

1.3 million

Number of asthma-related ER visits in the U.S. every year.

50%

Amount of U.S. severe asthma health care costs related to severe asthma.

42% plus

African Americans’ odds of having asthma compared with white Americans’ odds.

3x

How much more often women with asthma stay in the hospital compared with men.

12 in 100

Number of Native Americans who have asthma—compared with 11 in 100 African Americans, 8 in 100 whites, 6 in 100 Hispanics, and 4 in 100 Asians.

SOURCES: Asthma Research and Practice, Current Allergy and Asthma Reports, American Lung Association, Cell Reports, American College of Allergy, Asthma, & Immunology
WHAT IS SEVERE ASTHMA?
Symptoms, Triggers, and More

By Kendall K. Morgan
Reviewed by Neha Pathak, MD, WebMD Lead Medical Editor

About 25 million Americans—approximately 1 in every 12 adults and children—have asthma. For most of them, their asthma responds well to treatment with inhaled medications, including long-term controllers to reduce swelling and prevent symptoms and quick relievers to temper symptoms as they happen. But, for up to 10% of people with asthma, these treatments aren’t enough to control asthma and its symptoms.

“There are two aspects to consider when it comes to severe asthma,” says Reynold A. Panettieri Jr., MD, director of the Rutgers Institute for Translational Medicine in New Jersey and a member of the Asthma and Allergy Foundation of America’s Medical Scientific Council. “One is the amount of medications that’s necessary to control the symptoms. If the disease is under control with maximum therapy, that would still be considered severe asthma but controllable. If symptoms persist or require frequent bursts of oral steroids, then asthma is uncontrolled, and that too is severe asthma.”

If your symptoms—including coughing, wheezing, trouble breathing, chest tightness, and asthma attacks—are persistent and hard to control despite treatment, these are signs your asthma may be severe. Severe asthma is often unpredictable and affects daily life.

There’s no specific cause of severe asthma, Panettieri explains. The condition is defined instead by the severity and frequency of symptoms, the need for maximum therapy including oral steroids, and potentially life-threatening asthma attacks. It’s more likely for people who don’t take their treatments as prescribed or aren’t able to avoid their asthma triggers, such as dust or mold. But, even if you do everything right, you may still have severe asthma along with the side effects of its treatment.

“The more steroids you take, the more adverse effects you’d have—hypertension, mood swings, there’s a whole variety [of side effects],” Panettieri says. “You have to weigh the symptoms [of severe asthma] versus the consequences of therapy.”

But, there’s reason for hope. While they don’t work for everyone, there are now biologic medications that can help people control severe asthma without the side effects of oral steroids.

“If we go back about 10 years, the outlook for severe asthma was pretty grim,” Panettieri says. “It was the same old therapy. We are now in a revolution in therapy for severe asthma, mostly driven by biologics.”

ASK YOUR DOCTOR

If you are struggling with severe asthma, talk to an expert about questions you may have.

+ Are there blood tests I should get to understand my asthma and how to treat it?
+ Are there any other tests I should get?
+ Should I try a biologic? Which one?
+ How can I find my asthma triggers?
+ What else can I do?
Introducing the first and only treatment approved for severe asthma that is not limited to a specific type.

TEZSPIRE helps to reduce inflammation brought on by your body’s overreaction to triggers that can lead to asthma attacks. Adding TEZSPIRE can help prevent attacks and you can focus on being you.

The mechanism of action for TEZSPIRE in asthma is not fully understood.

TEZSPIRE has been proven to help:

Reduce asthma attacks

Improve breathing in as little as 2 weeks

Improved asthma symptom control

ASK YOUR DOCTOR ABOUT TEZSPIRE
TEZSPIRE.COM

Please see Important Safety Information below.

IMPORTANT SAFETY INFORMATION

Do not use TEZSPIRE if you are allergic to tezepelumab-ekko or any of its ingredients.

Do not use to treat sudden breathing problems.

TEZSPIRE may cause serious side effects, including:

- severe allergic (hypesensitivity) reactions, such as rash or eye allergy. Call your healthcare provider or get emergency help right away if you have any of the following symptoms of an allergic reaction:
  - rash
  - breathing problems
  - hives
  - red, itchy, swollen, or inflamed eyes

Before using TEZSPIRE, tell your healthcare provider about all of your medical conditions, including if you:

- have ever had a severe allergic reaction
- have a parasitic (helminth) infection.

- have recently received or are scheduled to receive any vaccinations. You should not receive a “live vaccine” if you are treated with TEZSPIRE.

- are pregnant or plan to become pregnant.

- are breastfeeding or plan to breastfeed. It is not known if TEZSPIRE passes into your breast milk. Talk to your healthcare provider about the best way to feed your baby if you use TEZSPIRE.

- are taking prescription and over-the-counter medicines, vitamins, or herbal supplements.

Do not change or stop taking your other asthma medicines unless instructed to do so by your healthcare provider.

The most common side effects of TEZSPIRE include:

- Sore throat, joint and back pain. These are not all the possible side effects.

APPROVED USE

- TEZSPIRE is a prescription medicine used with other asthma medicines for the maintenance treatment of severe asthma in people 12 years of age and older whose asthma is not controlled with their current asthma medicine.

- TEZSPIRE helps prevent severe asthma attacks (exacerbations) and can improve your breathing.

- TEZSPIRE is not used to treat sudden breathing problems. Tell your healthcare provider if your asthma does not get better or if it gets worse after you start treatment with TEZSPIRE.

- It is not known if TEZSPIRE is safe and effective in children under 12 years of age.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.FDA.gov/medwatch or call 1-800-FDA-1088.
What is TEZSPIRE?

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It is not known if TEZSPIRE is safe and effective in children under 12 years of age.

Do not receive TEZSPIRE if you:

- are allergic to tezepelumab or any of the ingredients in TEZSPIRE. See the end of this Patient Information leaflet for a complete list of ingredients in TEZSPIRE.

Before you receive TEZSPIRE, tell your healthcare provider about all of your medical conditions, including if you:

- have ever had a severe allergic reaction (hypersensitivity).
- have a parasitic (helminth) infection.
- have recently received or are scheduled to receive any live attenuated vaccinations. People who receive TEZSPIRE should not receive live attenuated vaccines.
- are pregnant, think you may be pregnant, or plan to become pregnant. It is not known if TEZSPIRE may harm your unborn baby.
- are breastfeeding or plan to breastfeed. It is not known if TEZSPIRE passes into your breast milk. Talk to your healthcare provider about the best way to feed your baby if you receive TEZSPIRE.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

Do not change or stop your corticosteroid medicines or other asthma medicines unless your healthcare provider tells you to.

How will I receive TEZSPIRE?

- Your healthcare provider will give you TEZSPIRE in a healthcare setting.
- TEZSPIRE is injected under your skin (subcutaneously) 1 time every 4 weeks.
- If you miss an appointment, ask your healthcare provider when to schedule your next treatment.

What are the possible side effects of TEZSPIRE?

TEZSPIRE may cause serious side effects, including:

- severe allergic reactions. Call your healthcare provider or get emergency medical care if you get any of the following symptoms of allergic reaction:
  - rash
  - breathing problems
  - hives
  - red, itchy, swollen, or inflamed eyes

The most common side effects of TEZSPIRE include:

- sore throat (pharyngitis)
- joint pain (arthralgia)
- back pain

These are not all of the possible side effects of TEZSPIRE. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

General information about the safe and effective use of TEZSPIRE

Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. You can ask your pharmacist or healthcare provider for information about TEZSPIRE that is written for health professionals.

What are the ingredients in TEZSPIRE?

Active ingredient: tezepelumab-ekko

Inactive ingredients: glacial acetic acid, L-proline, polysorbate 80, sodium hydroxide, and water for injection

Manufactured by:
AstraZeneca AB, Sodertalje, Sweden SE-15185
US License No. 2059
At: Amgen Inc., One Amgen Center Drive, Thousand Oaks, CA 91320-1799
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For more information, go to https://www.TEZSPIRE.com or call 1-800-236-9933.
Issued: 12/2021 US-56182 12/21
MEDICATIONS ARE THE GO-TO TREATMENT FOR SEVERE ASTHMA. BUT NONMEDICAL THERAPIES MAY SUPPORT THESE TREATMENTS. SEVERE ASTHMA IS ASTHMA THAT IS HARD TO CONTROL EVEN ON MEDICATION, SO IT’S EVEN MORE IMPORTANT TO STAY IN TOUCH WITH YOUR DOCTOR AND ON TOP OF CARE.

THIS DOESN’T MEAN YOU HAVE TO AVOID PRACTICES LIKE YOGA OR MINDFULNESS, OR EVEN SOME SUPPLEMENTS OR VITAMINS. THE KEY IS TO USE THESE SUPPORTS SAFELY. IT’S VITAL YOU INVOLVE YOUR DOCTOR BEFORE TRYING THEM.

YOGA AND MINDFULNESS

ANY LUNG DISEASE THAT CAUSES SHORTNESS OF BREATH IS OFTEN ALSO GOING TO CAUSE ANXIETY. SOME ONGOING RESEARCH ON MINDFULNESS AND YOGA PAIRED WITH PULMONARY REHABILITATION SHOWS THEY CAN HELP REDUCE STRESS AND IMPROVE BREATH CAPACITY IN PEOPLE WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD).

“LEARNING HOW TO MODULATE YOUR BREATH, BE AWARE OF YOUR BREATH—AND SIMILARLY TO BE AWARE OF SYMPTOMS OF SHORTNESS OF BREATH—MAY BE HELPFUL FOR AN INDIVIDUAL TO FEEL MORE EMPOWERED TO MANAGE THEIR ASTHMA,” SAYS MEGAN CONROY, MD, PULMONOLOGIST AT THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER IN COLUMBUS, OH.

YOU SHOULDN’T THINK OF THESE TECHNIQUES AS STANDALONE TREATMENT, SHE CAUTIONS.

“[THESE PRACTICES] THEMSELVES WON’T CHANGE DISEASE OR OVERALL CONTROL,” SHE SAYS.

ACUPUNCTURE AND CHIROPRACTIC

ACUPUNCTURE INVOLVES A PRACTITIONER INSERTING VERY THIN NEEDLES INTO YOUR SKIN AT SPECIFIC POINTS ON YOUR BODY. THE IDEA IS THAT THESE POINTS STIMULATE THE CENTRAL NERVOUS SYSTEM, WHICH IN TURN RELEASES CHEMICALS THAT PROMOTE HEALING AND WELL-BEING.

A FEW STUDIES SUGGEST IT MAY REDUCE THE NEED FOR INHALED STEROIDS, ESPECIALLY IN CHILDREN. BUT THERE’S NOT ENOUGH DATA FOR DOCTORS TO RECOMMEND IT AS AN EFFECTIVE TREATMENT. IF YOU DO TRY IT, BE SURE TO SEE A LICENSED ACUPUNCTURIST WITH EXPERIENCE.

SIMILARLY, THERE IS NO SCIENTIFIC EVIDENCE TO SUPPORT THE USE OF CHIROPRACTIC CARE FOR ASTHMA. CHIROPRACTIC CARE INCLUDES SPINAL AND JOINT MANIPULATION, WHICH CAN HELP REDUCE PAIN, CORRECT THE BODY’S ALIGNMENT, AND IMPROVE OVERALL PHYSICAL FUNCTION.

CONROY SUGGESTS CAUTION.

“THERE ARE RISKS FOR STROKE OR PARALYSIS WITH SPINAL INTERVENTIONS FROM CHIROPRACTIC MANIPULATIONS,” SHE SAYS. “WITHOUT EVIDENCE OF BENEFIT AND WITH KNOWLEDGE OF POTENTIALLY SERIOUS—THOUGH THEY MAY BE RARE—RISKS, THE USE OF CHIROPRACTIC CARE FOR ASTHMA SEEMS TO HAVE THE POSSIBILITY FOR REAL SERIOUS RISK WITH LITTLE POSSIBILITY FOR ANY BENEFIT.”

SUPPLEMENTS

SUPPLEMENTS AREN’T REGULATED BY THE FDA, SO THERE’S ALWAYS SOME RISK WHEN YOU TAKE THEM, ESPECIALLY AT A HIGH DOSE ON A REGULAR BASIS.

“[HERBAL SUPPLEMENTS] HAVE BEEN KNOWN TO CAUSE THINGS LIKE LIVER DAMAGE TO PEOPLE TRYING TO TAKE SOMETHING MARKETED TO IMPROVE THEIR HEALTH OR WELL-BEING,” CONROY SAYS.

A CHINESE HERBAL SUPPLEMENT CALLED DING-CHAUN TANG (DCT) MAY POSSIBLY DECREASE AIRWAY INFLAMMATION, BUT THERE’S NOT MUCH SCIENTIFIC DATA TO PROVE IT. SOME STUDIES SHOW VITAMIN C MAY IMPROVE ASTHMA SYMPTOMS, BUT RESEARCH ON ITS BENEFITS IS ALSO SLIM.

BOTTOM LINE: SOME SUPPLEMENTS MIGHT BE FINE TO TAKE, BUT VERY FEW, IF ANY, WILL TREAT YOUR ASTHMA TO THE DEGREE THAT MEDICATIONS DO.

“If benefits were proven enough, and safety profile favorable enough, you can bet we’d be using it as a ‘medicine’ instead of a ‘supplement,’” CONROY SAYS.

Always tell your doctor before trying any substance to help with your asthma.
MEDICATIONS TO MANAGE SEVERE ASTHMA

GAIN SYMPTOM CONTROL WITH THESE OPTIONS

By Rachel Reiff Ellis
Reviewed by Brunilda Nazario, MD, WebMD Chief Physician Editor, Medical Affairs

Most cases of mild to moderate asthma can be managed with a daily corticosteroid inhaler alone or as needed in combination with another medication. These help reduce symptoms and reduce the risk of serious asthma flares. But when you have severe asthma, you may need other types of treatment to fully manage your symptoms. Severe asthma is asthma that’s hard to control even when you’re using your medications well and at high doses.

In order for your treatment plan to have the best chance to work, you need to have a solid grasp on what each medication is for and when and how to use it.

“It’s important to understand what medications are controller, everyday medications, and what medications are for rescue and symptom flares,” says Nicholas Kenyon, MD, professor and chief of pulmonary medicine at UC Davis Health in Sacramento, CA.

It may take some time to find the right combination of treatments to keep your severe asthma under control. Some options include:

Corticosteroids. These medications treat symptoms by decreasing swelling in your airways. There are several ways and reasons to take them:

- Inhalers and nebulizers deliver corticosteroids straight into your airways through a fine mist you breathe in. Doctors typically prescribe two different inhalers: one for everyday prevention—usually a high-dose inhaled corticosteroid for severe asthma—and one for “rescue” that you use when symptoms flare. The key is to have it when you need it. “Some people prefer to store a rescue inhaler in their car or at work, so they know they will have access to them,” Kenyon says.
- Pills help treat asthma flares. Usually you’d take these for 5 to 7 days to deal with the flare, and then stop. But with severe asthma, you might need to take them longer. Oral steroids go through your bloodstream, so they can cause severe side effects.

Bronchodilators. These medications work on your nervous system to relax the muscle bands that tighten around your airways. Much like steroid medication, there are two kinds:

- Short-acting (rescue medication) for attacks.
- Long-acting that works for 12 hours.

You can take them as inhalers.

Leukotriene modifiers. Leukotrienes are chemicals your body releases when you come into contact with an allergen that causes coughing, inflammation, mucus, or wheezing. They’re medications you take in pill form. How often you take them will depend on your case of asthma.

Biologics. Biologics target a cell or protein in your body to prevent airway swelling. You get them as shots or infusions every few weeks. Some biologics are OK to take at home, others you’ll have to go to a doctor’s office to get. You’ll continue to take other types of medications along with your biologic.

Doctors usually move to biologics if your symptoms haven’t gotten better after taking other types of medications.

“Before prescribing a biologic, your doctor should make sure you’re taking your other controller medications as instructed, avoiding any potential triggers for your asthma, and treating any other associated medical conditions that could be making your asthma worse,” Kenyon says.
How to Exercise With Severe Asthma

By Kendall K. Morgan
Reviewed by Brunilda Nazario, MD, WebMD Chief Physician Editor, Medical Affairs

When you have severe asthma that doesn’t respond well even to high doses of inhaled medicines, you might have to work harder to get your symptoms controlled. To keep your lungs healthy, it’s also a good idea to exercise.

“Every person with asthma should be able to exercise,” says Payel Gupta, MD, an adult and pediatric allergy, asthma and immunology specialist at Mt. Sinai Medical Center in New York City and national spokesperson for the American Lung Association. “We want your asthma to be controlled so that you can exercise, and that is possible with treatments that are available.”

See Your Doctor First
First, make sure you’re seeing the right doctor. You may need stronger medicines that only an asthma specialist can give you.

“When you have controlled asthma, you shouldn’t be short of breath,” Gupta says. “You shouldn’t need a rescue inhaler. You should feel like other people—that’s our goal.”

Listen to Your Body
Once your doctor says it’s OK to exercise, remember that there are many ways to go about it.

“It could be yoga,” Gupta says. “It could be stretching. It could be going into a pool and moving your arms and legs around. The important thing is that your body needs to move.”

Gupta says it’s essential to listen to your body as you try new ways to get moving. If your first try doesn’t feel good, try something else.

Start Slow
No matter which exercise you choose, start slow and build up.

“Sometimes people set goals and go hard and that’s overwhelming,” Gupta says. “People give up.”

Start with a goal to exercise 2 days a week for a few minutes at a time. See how that feels. Ease gradually into doing more as your body adjusts.

Try Again Later
Some days you’ll feel better than others. Take a break if you have a cold or other issue and your body needs time to heal.

“If you are exercising and feel like you can’t breathe, that’s an indication in that moment that it’s not working for you,” Gupta says.

If you don’t feel good in the morning, see if you feel better later in the day, she says. Check in with yourself often to find what works for you. And, if you’ve tried many things and you’re still struggling with exercise, it might be time to reassess.

“Talk to your doctor and make sure you’re on the right meds,” Gupta says.
WHEN SEVERE ASTHMA REQUIRES A VISIT TO THE HOSPITAL

WHAT TO EXPECT
By Rachel Reiff Ellis
Reviewed by Brunilda Nazario, MD, WebMD Chief Physician Editor, Medical Affairs

Asthma is the reason for more than 1.3 million ER visits each year. Most often this happens if your asthma isn’t under control. When you have severe asthma—asthma that isn’t easy to control, even when you stay on top of medications such as inhaled corticosteroids and long-acting beta antagonists—it’s even more important to know when and why you might need urgent care.

WHEN TO GO

At your regular visits, your doctor should go over your personalized asthma treatment plan with you. This plan should tell you which symptoms mean it’s time for you to seek urgent care. Many of these warning signs are the same for anyone with asthma.

“In general, severe breathlessness, increased work of breathing, or chest tightness unrelied by albuterol is a warning sign to seek care,” says David R. Stukus, MD, member of the Board of Regents of the American College of Allergy, Asthma and Immunology and professor of clinical pediatrics in the Division of Allergy and Immunology at Nationwide Children’s Hospital in Columbus, OH.

Another way to get a read on an asthma crisis is to check your peak flow.

“A peak flow meter essentially measures the rate at which a patient can exhale in one maximal exhalation,” says Barbara Mann, MD, a pulmonary diseases and critical care medicine specialist at the Icahn School of Medicine at Mount Sinai in New York City.

For this to work, you need to know what’s normal for you when you feel well. If your number is much lower than usual when your asthma is acting up, Mann says, it’s a sign your asthma isn’t well controlled.

Ultimately, if you think you may need to go to the ER for your asthma, go right away. Otherwise, Stukus says, your body may try to make do in other ways and make the situation worse.
PREVENTING A HOSPITAL VISIT

David Stukus, MD, shares ways to avoid the ER.

+ Follow your plan.
The best way to prevent exacerbations is to use controller medications as prescribed.

+ Avoid triggers.
Know what brings on asthma attacks so you can steer clear.

+ Address symptoms right away.
Waiting days to treat coughing, wheezing, or chest tightness often leads to less success at home and increases the need for emergency room care.

“Means of compensating—for example, breathing faster and stacking breaths on top of one another—can ultimately backfire and lead to complications that can be life-threatening,” he says. “The sooner the proper treatments are administered, the better the outcome will be.”

HOSPITAL CARE
Once you’re at the hospital, your doctor will check your status by examining:

- Whether you can speak in full sentences
- How quickly you’re breathing
- Whether you’re using extra muscles such as your neck muscles to breathe
- Your heart rate
- Your oxygenation saturation and carbon dioxide levels

Then they’ll decide what the best immediate treatment is to help you breathe better.

“Severe asthma attacks are caused by three main problems: smooth muscle constriction of the airways, which limits airflow, swelling inside the airways, and inflammation,” Stukus says. “Treatment focuses on delivering inhaled medications such as albuterol and atrovent to loosen the muscles causing constriction and treating inflammation and swelling with either oral or intravenous medications such as steroids.”

The inhaled medicines are given either through an inhaler with spacer attachment, or through a nebulizer machine. You may also need supplemental oxygen or other supportive care.

GOALS TO GET YOU HOME
Your doctor will release you from care once you’ve improved in certain ways:

- Your symptoms have improved
- Air flow measurements are better
- You can go several hours between bronchodilator treatments
- You can give yourself treatments without help
- Oxygen and carbon dioxide levels in your blood are normal

Your doctor will also check to be sure you have a stable environment that will help you continue good asthma care. “For instance, if someone is unable to administer their own medications, they may need arrangements for in-home care,” Stukus says. “Also, being discharged into a home where people smoke cigarettes or are exposed to other irritants will increase risk for readmission unless asthma is under very good control.”
TEST YOURSELF

How much do you know about severe asthma?

By Kendall K. Morgan
Reviewed by Brunilda Nazario, Chief Physician Editor, Medical Affairs

If you are having frequent asthma attacks despite taking your medicines as prescribed, your asthma may be severe. Take this quiz to find out how much you know about severe asthma and learn some things that could help you breathe easier along the way.

1. If you have severe asthma, it’s not a good idea to exercise or spend time outdoors.
   - True
   - False

2. Black Americans have worse asthma outcomes because of genetic differences.
   - True
   - False

3. If you take asthma medicines all the time, they will stop working.
   - True
   - False

4. Alternative therapies such as breathing exercises and acupuncture can treat severe asthma.
   - True
   - False

5. Biologic medicines for severe asthma fight inflammation in your airways.
   - True
   - False

1. False. The goal of treatment for severe asthma is for you to live a normal life and participate fully in activities including exercise, both indoors and out. If you are struggling with exercise, tell your doctor to see if there’s a way to adjust your medicines. There also could be certain times when you need to take extra care. For example, if you live in an area affected by wildfire smoke or you know a pollen you are allergic to is at high levels, you might want to take a break from high-intensity outdoor activities for a while or wear a mask to stop you from breathing in air particles that could trigger asthma symptoms.

2. False. Some people are more prone to severe asthma or less likely to respond well to common asthma medicines because of their genetics, that’s true. Researchers are trying to learn more about this to improve asthma treatment in studies such as The Precision Interventions for Severe and/or Exacerbation-Prone Asthma Network (PrecISE). But genetic differences aren’t why Black Americans tend to have worse asthma outcomes than other groups. Studies show that racial disparities in asthma are mainly due to differences among groups in access to health care and other environmental factors, not genetics.

3. False. It’s important to take asthma medicines as prescribed by your doctor. Some asthma medicines are taken every day to work properly. Others you will take only as needed. Biologic medicines for severe asthma are taken every 2 to 8 weeks. If you’re using a rescue inhaler multiple times a week, your asthma isn’t well-controlled with the medicines you’re taking regularly. Talk to your doctor to see what other options you have. It’s important to take your medicines and keep taking them.

4. False. Some people with asthma do use breathing exercises. These exercises probably won’t hurt you and might help you relax or feel better in other ways. But there’s not good evidence this will help much, if at all, with your asthma symptoms. There’s some evidence that acupuncture together with your usual medicines might improve your asthma symptoms. In general, alternative therapies may be OK to try, but it’s always a good idea to check with your doctor to be sure as they won’t replace your regular medications.

5. True. There are multiple biologics that work in slightly different ways. They are called biologics because they are made from antibodies that target the proteins or cells that cause inflammation. The goal is to stop inflammation before it starts. Biologics can really help in some cases of severe asthma, but they don’t work for everyone. If your asthma is severe, ask your doctor if a biologic is an option you could try.