

## **Zosia Piotrowska, MD, answers your COVID-19 questions**

We asked Zosia Piotrowska, MD, from the Thoracic Oncology Department at Massachusetts General Hospital in Boston, to answer questions that are most relevant to the lung cancer community regarding coronavirus COVID-19.

Dr. Piotrowska's answers fall into three categories:

- About Coronavirus - COVID-19
- COVID-19 and Lung Cancer
- Practical Advice

Below are the answers to the questions discussed in the accompanying video:

- About Coronavirus – COVID-19

1. What is COVID-19?

COVID-19 is a coronavirus. Coronaviruses are actually incredibly common. We have all had many coronaviruses in our lives; in fact, they cause the common cold. However, we have also seen other coronaviruses that can cause serious infections, such as SARS and MERS. COVID-19 is a new strain of coronavirus, which started in the Wuhan region of China in late December of 2019 and has spread to the rest of the world, causing what the WHO is calling a pandemic. COVID-19 is an illness that can cause a broad range of symptoms, but, again, it is in a family of viruses that is not new.

2. What are symptoms of COVID-19?

There is a range of symptoms. The hallmark features seem to be a triad of fever, cough, and shortness of breath (difficulty breathing), and these can vary widely in severity. Generally, the cough is dry—not so much a productive kind of junky cough. Less common but sometimes seen are other kinds of flu-like symptoms, such as sore throat, body aches, and chills. There have also been some cases of diarrhea.

3. Who is at risk of getting sick with COVID-19?

Right now what we know is that anyone can get infected with COVID-19. We have seen patients of all ages test positive for this virus. What varies is how sick patients get. That seems to be somewhat dependent both on age and other kinds of host factors. We know that people who are most at risk of getting sick and seriously ill are patients who are older. The older we get, the higher the risk of complications seems to be.

Also at higher risk are those who have underlying medical illnesses, including heart and lung conditions, as well as patients who are on treatment or have underlying conditions that may suppress their immune system.

We have also seen that children can be infected, but they generally have mild symptoms. They can, of course, spread COVID-19 to other family members who may be at higher risk.

4. How is COVID-19 spread?

What we know so far is that the main mode of transmission is droplets, in particular those that sit on surfaces. These droplets may still infect someone even after they have been on the

surface for hours. This is why hand-washing and wiping down surfaces that are commonly used by many people are both so incredibly important to preventing infection. If you touch anything commonly touched, such as door knobs, be sure to wash your hands afterward and avoid touching your face, in particular your mouth, your nose, and your eyes. This is how the virus enters your body.

We know that spread occurs through these droplets, but generally it is not spread through aerosolized droplets in the air, especially when you are not in close contact with someone. This is where the guidance to stay at least six feet away from people as part of social distancing has come from. We know that if you maintain that distance, even if someone is sick and you do not know it, the chances that those droplets would reach you are quite low. It can feel uncomfortably far away to stand from people, but it is the best way to keep yourself safe.

5. Are there treatments for COVID-19?

Right now the main treatments for COVID-19 are what we generally refer to as supportive measures. We don't have any readily available antiviral treatments to treat this infection. What we are doing is helping support your own body as it is fighting the infection. That can involve a number of different measures, among them providing supplemental oxygen or prescribing medicines to help calm inflammation.

There are many researchers working to develop direct treatments for COVID-19 antiviral therapies, and some are being tested now.

We also do not yet have a COVID-19 vaccine. A vaccine is ultimately the best way to prevent the virus from spreading. There are also many researchers working to develop one.

- COVID-19 and Lung Cancer

1. Are there special concerns for people with lung cancer?

There are special concerns for lung cancer patients. Lung cancer is on the list of conditions that put people at higher risk for complications of COVID-19.

We know that lung cancer can often come along with other underlying lung conditions, such as COPD, emphysema, or other kinds of conditions that may also increase the risk of being infected with COVID-19. In addition, the treatments that patients are getting for lung cancer may sometimes suppress their immune system and put them at higher risk. I do not think that means that we have to panic, and it does not mean that everyone who has lung cancer who gets infected with this illness is going to become seriously ill. It does, though, speak to the fact that lung cancer patients have to be extra careful to try to keep themselves healthy and, if they are not feeling well, seek medical attention or speak to their providers to figure out exactly what to do.

2. How immune-compromised are you on targeted therapies and immune-therapies?

This question is one that is hard to answer in a broad sense because this is lumping together very different types of treatments, even ones that fall into the same category of targeted therapies or immunotherapies, as well as lumping together many different types of patients. The approach should be that if you are on any type of treatment for lung cancer, whether it be chemotherapy, targeted therapy, or immunotherapy, be vigilant for symptoms and have a very

low threshold to reach out to your medical team to talk to them, because these treatments can have different impacts on people.

It is true that, in general, targeted therapies and immunotherapies are less immunosuppressive than chemotherapy. That being said, not all chemotherapy is very immunosuppressive; it can vary. With some targeted therapies, patients may have more immunosuppression than others. Even with immunotherapy, we do not know yet exactly what the interaction between immunotherapies and a viral infection like this might be. It is hard to make broad statements here. For all patients, knowing what treatment you are on and being in close touch with your providers is the best way to stay healthy and watch out for any issues that may arise.

3. If I get exposed to COVID-19, will I develop an infection?

Not necessarily. COVID-19 is not uniform in transmission. Of course, being exposed to someone with COVID-19 is one of the greatest risk factors we know for being infected yourselves.

However, that does not mean that everyone who is exposed to someone with COVID-19 will be infected. It also does not mean that everyone who will be infected will have serious illness or serious symptoms or even become symptomatic.

If you are exposed to someone with COVID-19 and you are infected, typically symptoms will develop after about two to 14 days. If you know that you have been exposed to someone with COVID-19, especially if you are a lung cancer patient, it is worth a phone call to your provider to talk to them about any testing that you should have done. Again, this will depend a lot on what treatment you are on, what your immune status is, and what other conditions you have. If you know that you have been exposed, talk to your team and figure out what the best steps to take are.

4. Should I continue to get my treatment during this time?

There is not one answer for the entire lung cancer community except to say that it is incredibly important to talk about this with your physicians. The answer to this question will depend on a number of factors. What type of treatment are you on? How was that treatment working? Is it a type of treatment that can be safely held for a while or not? What are the risks if we hold it?

There are many kind of considerations that go into the risk-benefit decision-making of whether or not you should continue your treatment, and these are incredibly important questions to ask. There may be some patients who are stable on a treatment that they have been on for a long time who may decide with their providers that it is actually safer for them to skip a dose or two and not go to clinic during that time.

For other patients, it may feel like the risk of skipping doses or not going to clinic is greater than the risk of going into clinic or taking these treatments. Again, it really depends on the specific situation that you are in, but it is very important to talk to your providers. There may be situations when your doctor says, "You know what, actually I think we should hold treatment." That can sometimes be scary when you have been on a schedule and you feel like it is something that has really been keeping you doing well for all this time. Your doctor will help you make a decision as to whether it actually may be better to hold that treatment. In many cases, you can safely do that for some time without any major adverse effects on your cancer.

5. What should I do if I develop symptoms that might be COVID-19?  
The best advice is to call your doctor and talk it over with them. You do not need to panic. Again, with COVID-19, the symptoms can range from mild to more serious. Many patients can stay at home with good supportive measures.
6. What do I need to do if I am going to an appointment or visiting Mass General Cancer Center?  
What we have been telling our patients is that if you have any symptoms that seem more than your normal baseline, call ahead and talk to the team before you go in and let them know that you are having these symptoms. They will ask you a series of questions about your symptoms and possible exposures. They will decide with you whether you should go in and, if you do, whether you should go to the regular clinic or to a specific testing place. Be assured that we are here to keep you safe and to do what is best for you, but we want to have as much information ahead of time so that we can plan appropriately.

Some clinics are actually doing what we call prescreening. They call patients ahead of their scheduled appointments to check and make sure that they are not having symptoms, just to keep other patients, providers, and everyone safe and healthy.

- Practical Advice

1. Should I travel?  
This is a question whose answer has been evolving most rapidly. Right now, I would say, "Today March 16<sup>th</sup>, I think any travel other than really very important travel that we have no alternative for should be avoided." It is just not worth the risk; we should all be trying to stay home and not be going out.

Whether we can safely hold graduations and other family events a few months from now is still up in the air; we might be in a different situation then. For now, it is not the time for family gatherings. Try to do them virtually if you can.

2. What should I do if I have been exposed to someone with COVID-19 but do not have symptoms?  
For patients who have lung cancer who have been exposed to someone with COVID-19, a phone call just to check in with your doctors and talk to them is warranted. More than likely, they are going to tell you to watch for symptoms, stay home, and monitor yourself. It is critical that you self-quarantine yourself in that situation. If you have been exposed, you should be staying home and minimizing your contact with others.

If you do develop symptoms, if you are not feeling well, if you are having fevers, cough, or shortness of breath, then you should talk to your provider because the threshold when we are testing people and when we are just monitoring them at home varies depending on the situation. These are decisions you have to make with your providers. So talk to your doctors, and stay home. Usually the recommendation is to quarantine for 14 days after that exposure; this is usually the time period within which you will develop symptoms if you are going to have them.

3. How can I protect myself from COVID-19?

There are a number of important, key things that we can do. These are important not only for patients with lung cancer or for caregivers, but also for everyone around us. These are basic, common-sense things. Wash your hands all the time and wash your hands well, including in between your fingers and underneath your nails. This is especially true if you have been out in public or if you have touched commonly touched things. As children have learned in school, sing happy birthday twice for a full 20 seconds for an effective wash. You can use soap or, if they are available, alcohol-based sanitizers like Purell.

If you are using soap, make sure that you use good soap and water and do it frequently, and certainly before you eat. Do not touch your face, do not touch your nose, do not touch your eyes, and do not touch your mouth. These are very hard not to do! But again, not touching anywhere on your face is a good way to help prevent anything that is on your hands from getting into your mucosa.

Stay away from people who are sick or who have any symptoms. For all of us now, it is best to avoid other people as much as possible.

Certainly all of us should be avoiding crowded places to minimize possible exposure to COVID-19. This is not the time to be going out to eat. If you do have to go out—sometimes we have to go out to a doctor's appointment, to the grocery store, or to the pharmacy,—it is okay, but try to maintain that six-foot distance from people. Social distancing is important. Along those same lines, try to plan ahead and buy enough groceries so you do not have to go back multiple times. Plan ahead and buy medications so that you do not have to be going back and forth to the pharmacy.

For patients with lung cancer or caregivers, it's okay to tell people who ask whether they can come by to check on you something like this: "Thank you, but it's better if you do not come by. Right now I'm just trying to practice social distancing, as I am someone who is at a little bit higher risk for COVID-19. I just really want to keep myself healthy." I think the good news is we have phones, FaceTime, Zoom, and all of these other methods to stay in touch.

4. Does wearing a mask reduce my risk of becoming infected?

Right now I do not think that anyone who is asymptomatic, lung cancer patients or anyone else, needs to be wearing masks. In fact, the CDC does not recommend it. Masks provide psychological support, but in fact methods such as hand washing, keeping your distance, not shaking hands, and not hugging people are more effective.

5. How can people around me prevent the spread of COVID-19?

People should avoid going out. Anyone who has to go out in public and interact with other people should be checking themselves and making sure that have no symptoms. Someone with symptoms should absolutely wear a mask. People should not sneeze or cough into their hands, but into their elbows. If they do sneeze or cough into their hands, they should wash their hands immediately afterward. Sneezing and coughing should be done away from other people. No shaking hands, hugging, or other physical contact: waving is perfectly sufficient from a few feet away. Again, the main thing is if someone has symptoms, they should wear a mask and avoid others.