SPEAKER: Treatment of MAC is based on starting three antibiotics. Based off American Thoracic Society and Infectious Disease Society of America, you should start three medications in the same time. And really, the reason that we do that is we want to prevent of drug resistant pathogen.

Is it a good data to support that we need to start three? Unfortunately, no. It is what for that we learn and adopted from treatment of mycobacterium tuberculosis.

However, at this point there is a clinical trial going on. My hospital is the center for it. And we are looking for the treatment of three, versus two, medications for the patients. But until getting the result for that study, we recommend starting three medications together. The most common regimen that we start for the those kind of patients is combination of macrolide, rifampin, and also ethambutol.

Let's back to the microbiology a little bit. Macrolide-- they are one of the best treatment for nontuberculous mycobacterial. Azithromycin and clarithromycin, two most common used antibiotic in this group. I personally prefer azithromycin. And the reason is I use just once per day. And that going to be the dose that patient can tolerate it better.

But clarithromycin is very good medication in this family, too. And in that case, you need to use twice per day. Rifampicin family, rifampin is one of those medication is probably most common used. It's cheap, and it's toleratable with many patients. The dose that we are using usually is 600 milligrams per day, and that going to be everyday treatment for patient with MAC.

And ethambutol is medication that is not that strong against MAC. But the reason that we recommend is preventing of drug resistant against macrolide and rifampin in that setting. And this treatment basically is very typical treatment for MAC at this point. This treatment will be a start for every patient that we are concerned, and there is no evidence for cavitary legion on it. Those specific patients should be follow-up every month, at least for the first six months of treatment.

In other protocol at University of Miami, we request CBC and CMP to check for the blood change, white blood cells, leukopenia, hemoglobin, platelets, and also liver, and kidney every month during treatment. And we also recommend starting a sputum culture after three months of treatment.

So the whole philosophy behind of it is whenever that you get first negative of your sputum, and then follow-up for the next couple of months, and you have three months negative, the first set should be the date that you're going to continue 12 months treatment with MAC. An entire idea is shorten the treatment as much as possible, but in the same time, get enough treatment and eradicate MAC from the lung.

So I gonna just go over again. Every month, just check for CBC, liver, kidney. And then after three months start checking your sputum monthly until get the sputum negative. And basically, you'll have more than 85% chance to convert a sputum if the patient doesn't have any cavitary legion in chest image, and also never been treated and there is no evidence for drug resistant.