

### Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: <https://reachmd.com/programs/living-rheum/key-considerations-for-medication-administration-in-rheumatology/13349/>

### ReachMD

www.reachmd.com  
info@reachmd.com  
(866) 423-7849

---

## Key Considerations for Medication Administration in Rheumatology

### Announcer:

You're listening to ReachMD.

This episode of *Living Rheum*, titled "Key Considerations for Medication Administration in Rheumatology," is sponsored by Novartis US Clinical Development and Medical Affairs. The host and speakers have been compensated for their time. This program is intended for health care professionals.

Here's your host, Dr Jason Liebowitz.

### Dr Liebowitz:

Over the past 2 decades, we have seen an explosion of new biologic therapies for patients with rheumatologic diseases. Yet the way we administer these medications can vary widely. How can clinicians choose what's right for their patients?

This is ReachMD, and I'm Dr Jason Liebowitz. Joining me to discuss how we should factor in the route of administration when selecting a medication are Dr Jonathan Greer and Mrs Karen McKerihan. Dr Greer is a rheumatologist with the Arthritis and Rheumatology Associates of Palm Beach. He's also an assistant clinical professor of medicine at both Nova Southeastern University and the University of Miami. Mrs Karen McKerihan is a family nurse practitioner in rheumatology and is also the infusion director with Articularis Healthcare in South Carolina. Dr Greer and Mrs McKerihan, thanks for being here today.

### Mrs McKerihan:

Thank you very much for having us.

### Dr Liebowitz:

So, diving right in, Mrs McKerihan, can you tell us how injectable and infusion biologic medications compare?

### Mrs McKerihan:

Well, there's quite a few similarities. Both routes of administration can apply to a number of our biologic therapies. They all require testing for hepatitis B, and sometimes for C, and for tuberculosis prior to initiating therapy. There's also precautions around infections, active infections, at the time of administration. They have fixed interval dosing, and depending on the drug, some drugs come only as an infusion or only as an injectable, or some can be given either way.

In terms of differences, the injectable medications are most often self-administered by the patient in their home. Infusion medications must be administered and observed by a nurse in an infusion center or by a home infusion nurse, and that provides some degree of reassurance to the patients that they're being monitored during their infusions. The dose of infusion medications is more easily adjusted based on the patient's weight. Injectable medications are typically administered more frequently than the infusion medications. Infusions require more careful handling and refrigeration, and self-injectables can provide flexibilities for patients, especially when traveling.

### Dr Liebowitz:

Thank you so much for that very helpful summary. And if we stay on this subject of injectable medications, Dr Greer, can you give us an overview of the advantages and disadvantages of these medications?

**Dr Greer:**

Well, certainly. There are many advantages and disadvantages. To go over the advantages first, the injections can be given at home, either by the patient themselves or by a friend or a family member, provided they're trained in the office first on how to self-inject. It does provide some flexibility for patients to travel with a medication as well, so if they're going on a trip, they can take the medication with them and administer it where they are. Administration is often easier using an autoinjector pen or a prefilled syringe, and sometimes both devices are available for the same medication. Many videos and other resources can exist online that allow for training of the patients on how to give the injection, although as I mentioned, we usually train our patients in the office before they leave so they can inject themselves without too much difficulty. And usually, there's no premedication required.

Now, having talked about the advantages, there are several disadvantages. It sometimes can be challenging for patients who do not like the idea of self-administering medication, or who have a needle phobia. Injection site reactions can occur, and of course, if that happens at their home, there's no one there to really care for them if it's severe, and they may have to get help other ways. There are issues with inventory and receiving shipments of the medication that may delay administration. For example, sometimes the medications can be delivered to the doctor's office, where the patient has to pick it up, or it goes to the patient's home and delays can occur in both locations. The dosing intervals for these injections are typically more frequent. It can be as often as once a week, although some injections are once every 2 weeks, once a month, and even once every 3 months. There are challenges in maintaining a suitable storage condition. Most of these self-injectables require refrigeration, and if there are temperature fluctuations, that can affect medication stability, so the patient needs to make sure that they're in a proper storage area. And then the treaters—that is, the providers such as myself—rely on the patient's word for the medication adherence and compliance, so we're taking their word they're getting themselves the medication and hopefully they're doing it correctly.

**Dr Liebowitz:**

Thank you very much. This is a very helpful discussion. Now going back to infusion medications, Mrs McKerihan, what are some of the pros and cons of using these types of medications?

**Mrs McKerihan:**

Well, the pros or the advantages for infusion medications is that it's administered by a trained medical professional, usually a registered nurse. And so, it's given often in a monitored infusion center, which is comforting for the patient, especially if there's any kind of an adverse reaction or if the patient has any questions regarding the infusion or the medication. Often the dosing between the medication intervals is longer, so they don't have to get the medicine as frequently. Infusions are more easily accessed through insurance plans, especially through the medical benefits under the buy and bill model. Dose and frequency of administration can often be adjusted based on the patient's weight and response to their treatment. For example, if the patient were to gain some weight, their dose is adjusted up at their next infusion. Or if they find that their response to the treatment is not as good as they would like, or as their provider would like, sometimes that dosage per kilogram can be adjusted up for the patient.

The disadvantages are that the scheduling and the logistics of coming to an infusion center can sometimes be challenging for patients, and so getting in those infusions on a timely basis is difficult for some people. Some infusions require premedication and so that can be challenging because often there is a wait. Once the premedication has been administered, the patient still has to wait an additional 30 minutes before the medication can be started. Infusion reactions can occur, and that would then extend the time of the infusion, especially if somebody has a significant reaction you would want to hold on to that patient for longer just to make sure that everything is okay. So sometimes the time can be extended if there is a reaction. And then, usually it takes longer to get an infusion. The shortest infusion is 30 minutes, and then tack on time to start the IV and mix the medication, you're talking about an hour plus. So self-administered injections tend to be a shorter duration.

**Dr Liebowitz:**

Wonderful. Now let's switch gears a bit and take a look at medication administration. Dr Greer, are there any considerations you take into account when helping patients choose the right medication?

**Dr Greer:**

Well certainly there are, and there are many considerations we have to take into account. The first involves selection of proper therapy, and that considers the mechanism of action of a medication that's most appropriate for the patient's disease, and we are blessed in rheumatology with a wealth of biologic agents to use that can be given either by infused methods or self-injectable. But selecting that, takes some clinical expertise by the provider, as well as patient input. We need to know in the past if the patient's received a medication—a biologic, that is—and if they responded to that or if they did not respond to that. So prior treatment is important.

Secondly, there are patient details we want to go through. That includes the patient's preference. Do they want to receive an injectable that they give themselves? Do they want to receive an infused product, or would they like an oral tablet? All of those we have to consider with the patient's preferences. We need to know the patient's comfort level with receiving a parenteral drug, either IV or subcutaneous. And then there are also physical limitations that may impact the ease of injection, and this includes living arrangements, travel schedules, and access to an infusion center, and I would also add the patient's own physical limitations. If they're self-injecting and they have severe arthritis in their hands and cannot use the device appropriately, that could be a problem as well. There are also very practical considerations we keep in mind, that includes the cost of medication and insurance coverage, and we rely heavily upon prior authorization issues with our staff to navigate these areas which quite complicated before we even consider giving a patient the medication. Patients oftentimes are on polypharmacy, and sometimes these other medications they are taking may interact with a drug we want to use. Patients also may have comorbidities, for example, frequent infections may preclude the use of certain medicines we use as well. And then there the presence or absence of any allergies to any of the medications we use or its excipients. All of those are practical considerations we would consider before moving forward.

**Dr Liebowitz:**

Wonderful discussion. And now with this information in mind, Dr Greer, do you have any advice you would like to give to clinicians in general on this subject?

**Dr Greer:**

Well, yes, and it's important if a clinician has not started using a biologic drug or parenteral therapy for their patient to read resources—and they could be online or printed medical journals which often include head-to-head comparisons of one biologic to another—for patients with various rheumatologic diseases. Physicians and providers in general should attend any lectures or sessions on these topics with their local, regional, and national organizations. In our state of Florida, the Florida Society of Rheumatology is very active in this area, and, of course, the national organization with the American College of Rheumatology is also important. We certainly consult our colleagues and thought leaders, who have experience treating patients with these biologic agents and using a variety of medical conditions. And of course, reading the package insert. I would stress that they should review the important safety information on these package inserts to know what the patient may expect if there's any type of adverse reaction going forward.

**Dr Liebowitz:**

And Mrs McKerihan, any final thoughts you'd like to leave our audience with today?

**Mrs McKerihan:**

Well, I'd like to echo what Dr Greer just said around educating ourselves and our staff. Opportunities to network and speak with other providers and other nurses in this space I have found to be very helpful, especially for my nurses who are in the infusion area. So that's definitely something that needs to be encouraged. And for the physicians and the AAPs that are out there, answering your nurses' questions and equipping them with the answers and the ability to speak intelligently to the patients, because let's face it, it's going to be the nurses that are going to get a lot of the questions and are going to just further the discussion that you've just had with the patient in the exam room. And so, equipping them with knowledge that they need to speak to the patients is definitely a big advantage for your nurses.

**Dr Liebowitz:**

That's a great way to round out our discussion on this topic. I want to thank our guests for helping us better understand the various routes of administration for medications in rheumatology. Dr Greer and Mrs McKerihan, it was a great pleasure speaking with you both today.

**Mrs McKerihan:**

Thank you.

**Dr Greer:**

Thank you very much.

**Announcer:**

This industry podcast was sponsored by Novartis US Clinical Development and Medical Affairs. If you missed any part of this discussion

or to find others in this series, visit [reachmd.com/living-rheum](https://reachmd.com/living-rheum).

This is ReachMD. Be part of the knowledge.