These Clinical Guidelines have been created using resources that were current as of the "Reviewed" date noted at the beginning of the document. Clinicians should refer to the manufacturer's Prescribing Information (or equivalent) for the most up-to-date information. While CarepathRx has published these Clinical Guidelines after a close review of available literature and a clinical review process, given the evolving nature and complexity of modern pharmaceutical products, CarepathRx does not and cannot warrant or guarantee that these Clinical Guidelines reflect the objectively best or highest standard of care at any given time.

Nothing within these Clinical Guidelines is intended to supersede or interfere with any individual clinician's decision-making or professional judgment with respect to either (1) prescribing or dispensing the drug or product in question or (2) the overall treatment plan for an individual patient.

Anifrolumab- fnia (Saphnelo) Clinical Guideline for Home Intravenous Therapy

Section: Clinical Guideline
Compliance: ACHC Infusion Pharmacy
ACHC Standards: N/A
URAC Standards: N/A
Policy ID: CG021
Effective: 1/1/2022
Reviewed: 3/3/2025
Revised: 3/3/2025
Approved by, Title and Date Approved: Kathleen Patrick, President, 1/1/22, 3/3/25

I. BACKGROUND

Anifrolumab-fnia (Saphnelo) is a human immunoglobulin G1 kappa (IgG1k) monoclonal antibody that inhibits type 1 IFN signaling by inducing the internalization of IFNAR1 when bound to the type 1 interferon receptor. The reduction of IFNAR1 available on the cell surface causes a blockade of receptor mediated type 1 IFN signaling that inhibits IFN responsive gene expression and therefore dampens the inflammatory and immunologic processes downstream. Anifrolumab is indicated in adult patients with moderate to severe systemic lupus erythematosus (SLE) who are receiving standard therapy. The following outlines the procedures for servicing patients in need of outpatient anifrolumab home infusions.

II. PATIENT ACCEPTANCE CRITERIA

A. All candidates for home care service must be evaluated by the clinician(s) and deemed appropriate to receive home care based upon admission criteria.

B. The decision to administer a first dose in the home by a field nurse will be determined on a case-by-case basis and reviewed by nursing and pharmacy management. The following criteria will be evaluated:

1. Prescriber preference
2. Allergy profile
3. Age
4. Other relevant social and/or medical history

C. Physician orders for anifrolumab must include:

1. Drug
2. Dose
3. Route of administration
4. Frequency of administration
5. Emergency medications per protocol
6. Orders for pre-medications
7. Line care protocol
8. Routine lab monitoring, if applicable

D. Dispensing pharmacy treatment protocol for anaphylaxis will be instituted unless a more comprehensive patient-specific orders are provided by physician. See Appendix A (Nursing CarepathRx policy on *Management of Allergic/Anaphylactic Reactions*).

III. PHARMACOLOGY OVERVIEW

Refer to manufacturer's full Prescribing Information for most up to date information

A. Indications: Treatment of adult patients with moderate to severe systemic lupus erythematosus (SLE) who are receiving standard therapy.

Limitations: The efficacy of anifrolumab has not been evaluated in patients with severe active lupus nephritis or severe active central nervous system lupus.

B. Dosing: 300mg IV infusion over 30 minutes every 4 weeks.

C. Dose adjustments:

1. No dosage adjustment is recommended in patient with renal or hepatic impairment
2. Missed dose: Administer planned infusion as soon as possible but maintain at least 14 days between infusions.

D. Duration: Duration of therapy is dependent on patient response and adverse reactions.

E. Contraindications: Contraindicated in patients with a known history of anaphylaxis to anifrolumab or any of its components.

F. Precautions

1. **Serious infections**: Serious and fatal infections (including COVID-19) may occur during treatment. The incidence of serious infections in controlled trials was similar in patients receiving anifrolumab compared with placebo, whereas fatal infections occurred more
2. frequently in patients receiving anifrolumab. Monitor closely and consider interrupting anifrolumab in patients who develop new infections while appropriate anti-infective therapy is administered. Consider the risks and benefits of administering anifrolumab in patients who have chronic infections or are at high risk for developing infections before starting therapy. Do not start therapy in a patient who has an active serious infection until it has resolved. Anifrolumab increases the risk of respiratory infections and Herpes Zoster.
3. **Hypersensitivity reactions:** Hypersensitivity reactions, including anaphylaxis and angioedema, have been reported following the administration of anifrolumab. Other hypersensitivity reactions and infusion-related reactions such as bradycardia, dyspnea, headache, hypotension, myalgia, pruritus, rash, nausea, vomiting, fatigue, dizziness and urticaria have occurred following administration of anifrolumab. Consider pre-medication before anifrolumab administration for patients with a history of these reactions.
4. **Malignancy**: The impact of anifrolumab on the potential development of malignancies is not known. Immunosuppressants may increase risk of malignancy. Consider the individual benefit-risk in patients who develop malignancies.
5. **Immunizations:** Avoid concurrent use of live or live-attenuated vaccines in patients who are treated with anifrolumab. Update vaccinations according to current immunization guidelines prior to initiation of anifrolumab.
6. **Concomitant Use with Other Biologic Therapies:** Use with biologic therapies is not recommended.
7. **Pregnancy and Lactation:**

    a. Available data on use of anifrolumab in pregnant women is insufficient to inform on drug-associated risk for major birth defects, miscarriage, or adverse maternal or fetal outcome. If pregnancy occurs while receiving anifrolumab, enroll in AstraZeneca pregnancy registry for

monitoring 1-877-693-9268. Monoclonal IgG antibodies are known to be actively transported across the placenta as pregnancy progresses; therefore, anifrolumab exposure to the fetus may be greater during the third trimester of pregnancy. In an enhanced pre- and post-natal development study with pregnant cynomolgus monkeys that received intravenous administration of anifrolumab, there was no evidence of embryotoxicity or fetal malformations with exposures up to approximately 28-times the exposure at the maximum recommended human dose.

b. No data is available regarding the presence of anifrolumab in human milk, the effects on the breastfed child, or the effects on milk production. Anifrolumab was detected in the milk of female cynomolgus monkeys administered anifrolumab.

G. Pharmacokinetics

1. Peak concentration: Cmax: 1.36. Steady state: reached on day 85.
2. Volume of distribution: 6.23 L
3. Metabolism: catabolic pathway via proteolysis.
4. Total body clearance: 0.193 L/day

H. Adverse Reactions

1. Dermatologic: Incidences include breast cancer and squamous cell carcinoma and non-melanoma skin cancers (1.3%)
2. Immunologic: Herpes zoster (6.1%), hypersensitivity reaction (2.8%)
3. Respiratory: Serious infectious disease (4.8%), bronchitis (11%), upper respiratory infection (34%), infectious diseases (69.7%), cough (5%)
4. Other: Infusion reactions (9.4%)

I. Drug Interactions

1. Avoid concurrent use of biologic products with anifrolumab; co-administration could cause additive effects from both therapies.
2. Avoid administration of live or live-attenuated vaccines while using anifrolumab therapy; concurrent use may result in decreased efficacy of immunization.
3. Drug-drug interactions may exist. Consult interaction database for patient specific assessment.

IV. ADMINISTRATIVE GUIDELINES

A. Administration: IV infusions should be given immediately after reconstitution and dilution. Begin infusion within 4 hours of preparation per current USP Immediate-Use Guidelines. [Check PI to ensure time is not less than 4 hours].

B. Use a **0.2 to 15 micron in- line or add-on low protein binding filter** during anifrolumab administration.

C. Do not co-administer other medicinal products in the same infusion line as anifrolumab.

V. NURSING PROCEDURE

A. Supplies may include but are not limited to:

1. Alcohol Swabs
2. Gloves
3. Tape
4. IV access supplies as applicable

a. Peripheral IV access supplies for patients requiring peripheral IV access

1) IV start Kit
2) Peripheral IV catheter (ex. 22 Gauge x1" and 24 Gauge x ¾")
3) Extension set 8" with needless connector

b. Port access supplies for patients with a port

1) Port needle (ex. 22 Gauge x ¾ to 1" safe step)
2) Needless connector
3) Central line dressing change kit

5. IV Pole
6. IV administration set (flow regulator or gravity tubing) with in-line filter (i.e. 0.22 or 2.2 micron filter).
7. Syringes (10 mL) with needles (20 G x 1")
8. Sharps container

B. Prescription items:

1. #1 Vial of Anifrolumab (300mg/2mL)
2. Bag of sodium chloride 0.9% for dilution (100 mL)
3. Flush bag: Normal Saline (0.9%) Injection 50mL bag for flushing product from tubing
4. Standard flushes per protocol

C. How Supplied: Anifrolumab for injection is provided as a 2mL clear glass vial containing 300mg/2mL (150mg/mL). The solution should appear clear to opalescent, colorless to slightly yellow. Anifrolumab is available in a carton containing one single-dose vial (NDC-0310-3040-00).

D. Storage and Handling: Store vials at 36°F to 46°F (2°C to 8°C) in original carton protected from light. Do not freeze or shake. Protect from the light.

E. Compatibility

1. Stable in 0.9% sodium chloride solution
2. Do not infuse with other agents.
3. Do not dilute with D5W, 0.45% sodium chloride, or Lactated Ringer's solution.

F. Procedures

1. Explain the reason for the visit and use of anifrolumab.
2. Don gloves.
3. Assess for signs and symptoms of infection prior to establishing venous access and preparing medication. Notify the ordering physician and pharmacist if signs or symptoms are present.
4. Establish venous access prior to preparation of drug.
5. Counsel patient on warnings, precautions, and potential side effects including but not limited to: Hypersensitivity reactions, respiratory infections, bronchitis, headache (migraine), herpes zoster, and cough.
6. Prepare product:

a. Remove vial from refrigerator and inspect the vial for particulate matter and discoloration. Discard if cloudy or if it contains particulate matter.

b. Withdraw and discard 2 mL of normal saline from the 100 mL stock bag. Total volume will be 100 mL after product dilution.
c. Withdraw 2 mL of anifrolumab from vial and add it to the normal saline stock bag.
d. Mix the solution by gentle inversion. **Do not shake.**
e. Diluted product must be infused within 4 hours of preparation.

7. Infusion Rates: Infusion should be administered continuously over a period of 30 minutes.
8. Post infusion flush: After administration of anifrolumab, flush the entire administration tubing with 25 mL of 0.9% Sodium Chloride Injection to ensure all of the medication is administered. Spike the 50mL 0.9% Sodium Chloride Injection flush bag and administer the flush at the same rate as the anifrolumab infusion (approximately 7.5 minutes or 200 mL/hour). Discard remainder of 0.9% sodium chloride flush bag.
9. Post infusion monitoring: Monitor patient and vital signs periodically during the infusion and 30 minutes after the infusion is complete per CarePathRx Nursing Best Practice Administration Guidelines

VI. CLINICAL MONITORING

A. Prior to therapy:

1. Ensure patients are up-to-date on immunizations
2. Assess patients for signs or symptoms of active infection prior to starting anifrolumab.

B. During therapy:

1. Monitor for signs and symptoms of infection. Therapy may need interrupted during an active infection.
2. Monitor disease severity including Malar or discoid rash, photosensitivity, oral ulcers, serositis, arthritis, renal disorders, neurological disorders, hemolytic anemia, anti-nuclear antibodies
3. Laboratory assessment including CBC, ESR, BUN/Creatinine, and LFTs
4. Monitor for signs and symptoms of hypersensitivity reactions (during and after).

Please refer to the package insert for the most up to date guidance on this medication.

REFERENCES:

Saphnelo [package insert]. Wilmington, DE. AstraZeneca. 2021.

Fanouriakis A, Kostopoulou M, Alunno A, *et al* 2019 update of the EULAR recommendations for the management of systemic lupus erythematosus. *Annals of the Rheumatic Diseases 2019;*78:736-745.

USP General Chapter <797>: Pharmaceutical Compounding- Sterile Preparations. Rockville, MD: United States Pharmacopeia Convention; 2008.

APPENDIX A: ANAPHYLAXIS KIT INTRUCTIONS

Emergency Medication After Your Infusion

Please call your pharmacy if you have any questions or concerns. In the event of an emergency, always call 911.

Your nurse will tell you when you need to use Emergency Medications.
The epinephrine dose will be noted on the Anaphylaxis Protocol included with your kit.

Start with a clean work surface and clean hands.

Open the supply bag labeled Anaphylaxis Kit Contents.

You will need:

1. **Bag containing Pills** (2 Acetaminophen and 2 Diphenhydramine)
2. **Bag containing Alcohol Prep Pads**
3. **Bag labeled IM Epinephrine**

All other contents will not be needed.

Open the IM Epinephrine Bag

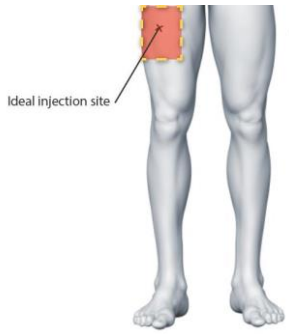
1. **Remove 1 of each item**
    a. 1 -syringe
    b. 1 – brown labeled filter needle (BD Filter Needle)- **for ampule use only**
    c. 1 – black labeled safety needle (Magellan Hypodermic Safety Needle 22G x 1”)
    d. 1 ampule of epinephrine

Prepare IM (intramuscular) injection of Epinephrine:

1. **Attach the brown filtered needle to syringe**
    a. Be careful to not touch the tip of the syringe or the needle.
2. Using an **alcohol swab, wipe the neck of the epinephrine ampule.**
3. Holding the ampule upright, **swirl and flick the ampule until all fluid flows to the bottom chamber** (the top chamber should be empty).
4. Using a new alcohol wipe, grasp the neck of the ampule and with your other hand grasp the bottom chamber of the ampule. **Quickly snap the top of the ampule off, directing the snap way from you.**
5. **Place the tip of the brown filter needle inside the ampule**. Tilting the ampule, **withdraw dose of medication into the syringe** by gently pulling back on the plunger. Be careful to not pull the plunger out of the syringe.
6. Remove the needle from the ampule and h**old the syringe upright** with the needle pointing upward. **Gently tap the side of the syringe to bring any air to the top of the syringe.**

7. **Push the air out of the syringe by gently pushing on the plunger**.
8. Replace the cap on the brown filter needle. Discard remainder in ampule.
9. **Remove the brown filter needle and place the black safety needle onto the syringe.**

Give your IM Epinephrine injection



1. **Grasp your leg muscle at the outer mid-thigh** and **cleanse the area** with a new alcohol wipe.
2. **Push the needle into your leg muscle straight** in at a 90-degree angle.
3. **Inject the medication** by depressing the plunger in a slow and steady motion.
4. **Remove the needle** and wipe the site with the alcohol wipe.
5. May repeat dose every 5 minutes (**maximum 3 doses**) if ordered per protocol.

Take the pills by mouth.

a. 2 – Acetaminophen
b. 2 – Diphenhydramine

Place all trash in the bag the pills came in and take with you when you seek medical care.
Give the bag to the nurse or EMT, so your doctor will know what medication you already took. They will properly dispose of the syringe and needles.
Call 911 or have someone drive you to the emergency department.