

INFECTIOUS DISEASE

Diagnosing and Treating Feline Infectious Peritonitis

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Diagnosis of feline infectious peritonitis (FIP) can present clinical challenges, but obtaining a timely and precise diagnosis is imperative to treatment success. The widespread availability of antiviral medications for FIP makes successful patient outcomes common when cats are diagnosed accurately and treatment is started early.

Before prioritizing diagnostic tests for FIP, it is critical to adequately rule out diagnostic differentials that may mimic FIP. It is inappropriate to use antivirals for suspected FIP without having adequately assessed for the presence and risk of other differentials. Once such differentials have been ruled out, treatment trials with

antiviral medications may be considered. Of note, treatment trials may be needed in cases with high suspicion for, but without confirmed diagnosis of, FIP (e.g., by reverse transcription PCR testing). In such cases, a recheck of the cat's response to the antiviral therapy is recommended within a few days; if there is no improvement, other differentials need to be considered and tests performed to investigate them.

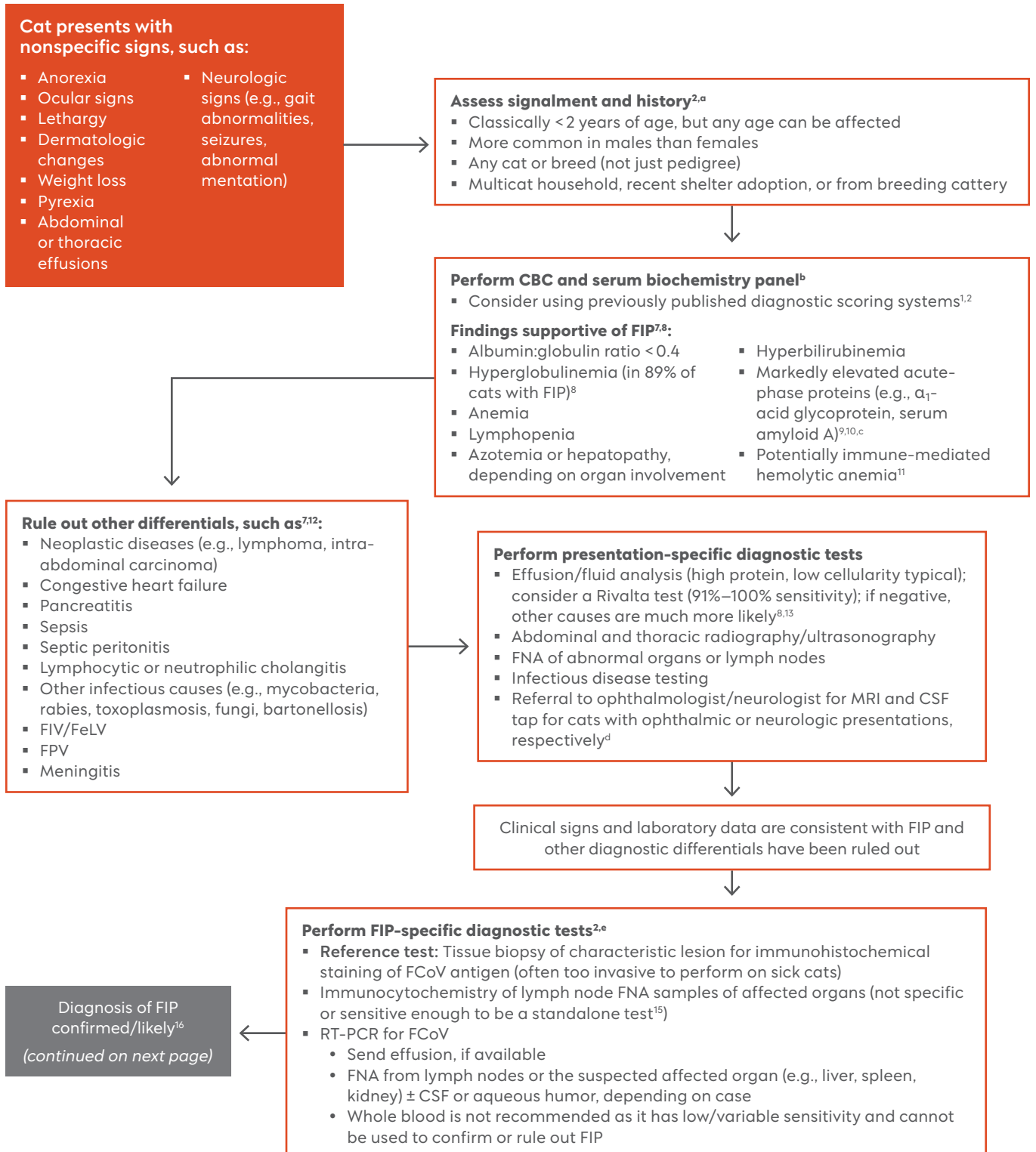
Using expert-developed scoring systems to gauge the likelihood of FIP can be helpful. The Brisbane score can increase confidence in suspicion of FIP by providing quantitative diagnostic criteria for assessing an individual patient.¹ The European Advisory Board on Cat Diseases has also developed excellent diagnostic scoring systems that can help when FIP is suspected.²

BOX 1**Tips For Monitoring Blood Test Results During Treatment**

- Try to keep monitoring using laboratory testing to a minimum to reduce excess costs to the caregiver and stress to the cat; if the cat is clinically improving at home based on owner phone check-ins, consider performing follow-up tests 3–4 weeks after starting treatment.
- Focus on previously abnormal values for that individual patient (e.g., hematocrit, packed cell volume, bilirubin).
- Albumin and globulin normalization may take several weeks.
- Evaluation of basic parameters (e.g., CBC, serum biochemistry panel, acute-phase proteins like α_1 -acid glycoprotein where available) at 6 and 12 weeks is recommended; adjust as needed to 3 and 6 weeks if using a 42-day course.

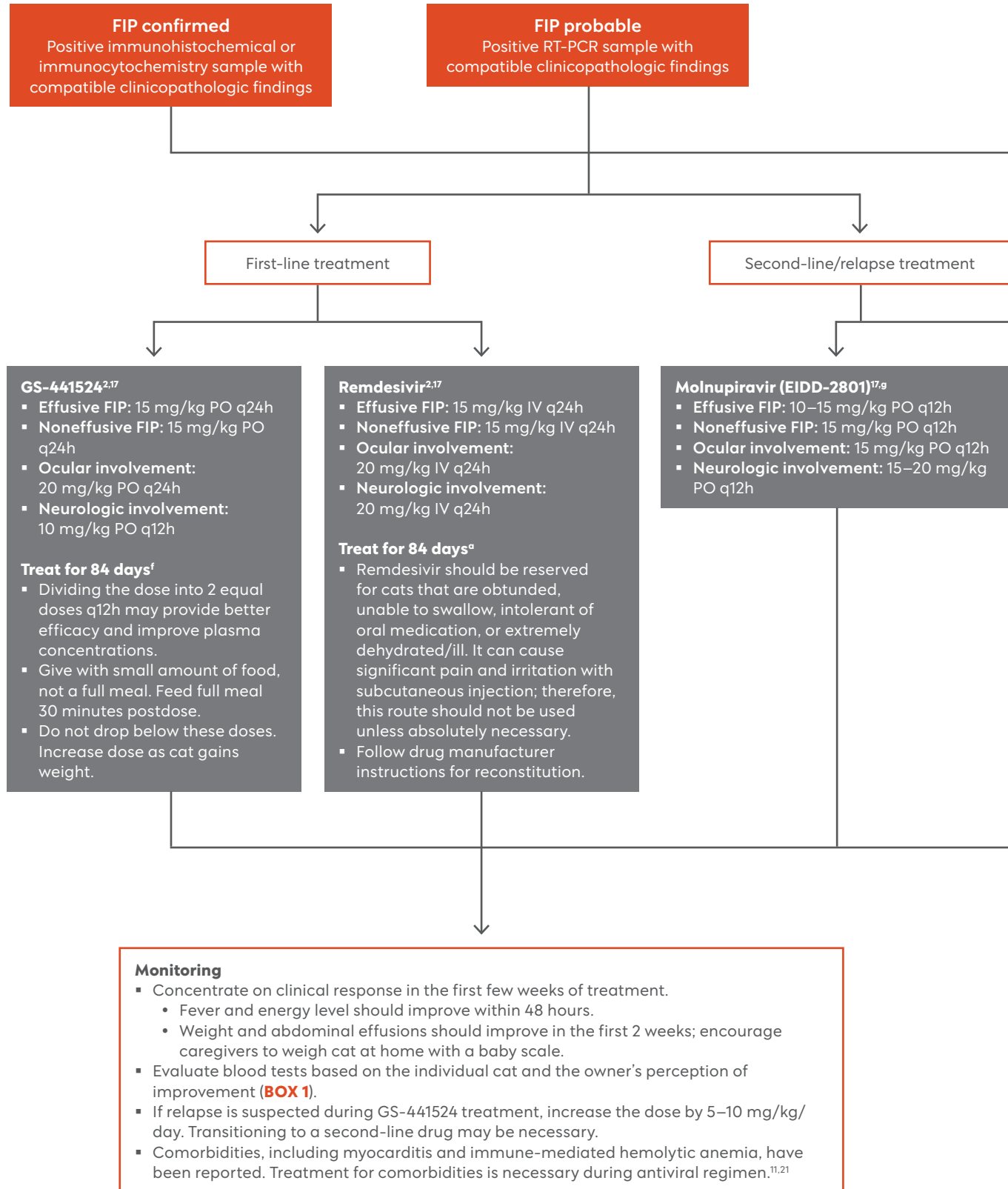
After a definitive diagnosis has been obtained, or if there is a strong suspicion for FIP in a patient with appropriate clinicopathologic findings, treatment should be started as quickly as possible. The 2 antiviral classes currently used to treat this disease are nucleoside analogues (remdesivir and its active metabolite GS-441524 and molnupiravir and its active metabolite EIDD-1931) and protease inhibitors (nirmatrelvir–ritonavir and GC376 [not commercially available]). Nucleoside analogues are the most well-studied and have proven safety and efficacy for FIP.^{3–5} Protease inhibitors may have some efficacy as add-on treatments or as treatment for refractory cases,⁶ but more research regarding their use is needed.

This algorithm focuses on FIP diagnosis and when and how to treat this disease. However, because the presentation of this disease is variable, readers are encouraged to explore the extensive reviews available online,^{2,7} which provide more detail.



CSF=cerebrospinal fluid; FCoV=feline coronavirus; FeLV=feline leukemia virus; FIP=feline infectious peritonitis; FIV=feline immunodeficiency virus; FNA=fine-needle aspiration; FPV=feline panleukopenia virus; MRI=magnetic resonance imaging; RT-PCR=reverse transcription polymerase chain reaction.

^aWhile common signalment and history parameters are listed, not all cats with FIP fit into one of these categories. Do not automatically rule out FIP based on signalment/history alone. ^bNo cat should be diagnosed with FIP based on biochemical or hematologic changes alone. ^cThese tests may not be available. ^dSome cats with neurologic FIP have normal biochemical and hematologic profiles.¹⁶ ^eSerology is often not useful in diagnosing FIP.



FIP fits

Compatible clinicopathologic findings, and other important differentials have been ruled out

EIDD-1931 dosages for relapse¹⁷

- Effusive FIP: 15 mg/kg PO q12h
- Noneffusive FIP: 15 mg/kg PO q12h
- Ocular involvement: 15 mg/kg PO q12h
- Neurologic involvement: 20 mg/kg PO q12h

¹⁷At the time of this writing, a complete 84-day course is still recommended, although several recent publications show efficacy of a 42-day course; thus, this can be considered in certain situations.^{18,19}

¹⁸Documented side effects of molnupiravir include cytopenias (neutropenia and anemia), whisker loss, and ear folding.²⁰ Molnupiravir may have mutagenic and teratogenic properties; administer with caution and wear gloves.



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