

02

FELINE CHRONIC GINGIVOSTOMATITIS





2.1 About fCGS

Feline Chronic Gingivostomatitis

Feline chronic gingivostomatitis (FCGS) is inflammation of the oral mucosa or deeper tissues in cats. It is a long-lasting, difficult-to-heal, and recurrent condition. **Cats have a high probability of 13.1% of getting oral inflammation, making it one of the most common diseases in cats (second only to dental calculus).** The exact cause of cat oral inflammation remains unclear. Common symptoms in cats with oral inflammation include bad breath, drooling, and white foam at the mouth corners. Oral examination may reveal varying degrees of redness, swelling and tissue overgrowth in the oral cavity. Additionally, oral pain can cause cats to lose their appetite, with many cats starving to death due to severe pain preventing them from eating. With current medical resources, cats infected with oral inflammation often suffer for life, as there is no definitive cure. Even after full or partial tooth extraction surgery, 30-40% of cats cannot be healed.

About 60-70% of affected cats can be cured or significantly improved through full or near full tooth extraction. The remaining 30-40% do not respond well to extraction and often require lifelong treatment with antibiotics, steroids and painkillers. Traditional immunosuppressants such as corticosteroids and cyclosporine have significant side effects limiting long-term use, and their effectiveness decreases or is lost over time, so more effective and safer treatment strategies are needed.

13.1%

The probability of cats suffering
from oral inflammation

60-70%

Cure or significant improvement
through full or near full tooth
extraction

30-40%

cats cannot be healed

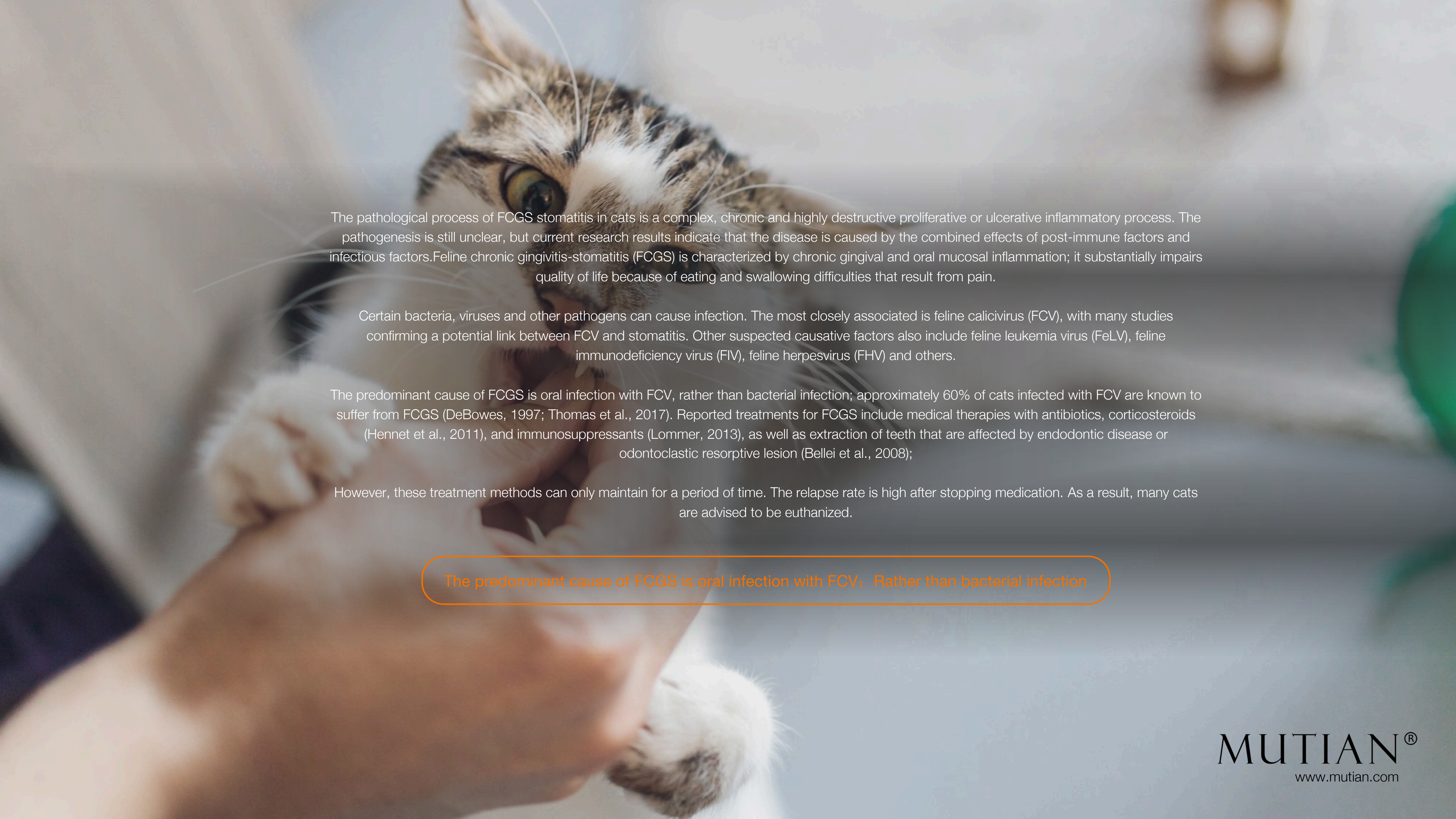


fCGS

*CHRONIC /
COMPLEX*

*ULCERATIVE
INFLAMMATORY
PROCESS*

*HIGHLY
DESTRUCTIVE
PROLIFERATIVE*



The pathological process of FCGS stomatitis in cats is a complex, chronic and highly destructive proliferative or ulcerative inflammatory process. The pathogenesis is still unclear, but current research results indicate that the disease is caused by the combined effects of post-immune factors and infectious factors. Feline chronic gingivitis-stomatitis (FCGS) is characterized by chronic gingival and oral mucosal inflammation; it substantially impairs quality of life because of eating and swallowing difficulties that result from pain.

Certain bacteria, viruses and other pathogens can cause infection. The most closely associated is feline calicivirus (FCV), with many studies confirming a potential link between FCV and stomatitis. Other suspected causative factors also include feline leukemia virus (FeLV), feline immunodeficiency virus (FIV), feline herpesvirus (FHV) and others.

The predominant cause of FCGS is oral infection with FCV, rather than bacterial infection; approximately 60% of cats infected with FCV are known to suffer from FCGS (DeBowes, 1997; Thomas et al., 2017). Reported treatments for FCGS include medical therapies with antibiotics, corticosteroids (Hennet et al., 2011), and immunosuppressants (Lommer, 2013), as well as extraction of teeth that are affected by endodontic disease or odontoclastic resorptive lesion (Bellei et al., 2008);

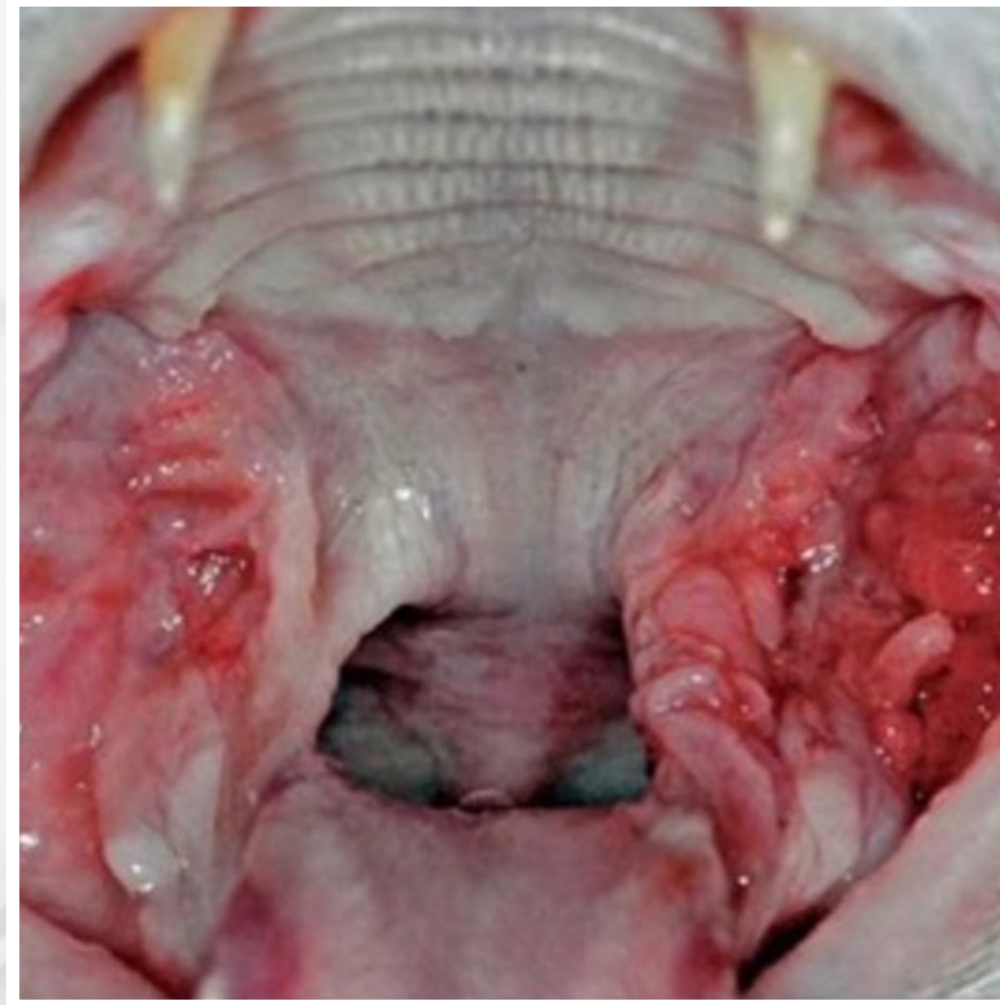
However, these treatment methods can only maintain for a period of time. The relapse rate is high after stopping medication. As a result, many cats are advised to be euthanized.

The predominant cause of FCGS is oral infection with FCV. Rather than bacterial infection

2.2 Clinical symptoms and diagnosis of FCGS



Approximately 60-70% of cats are cured after receiving dental extraction surgery (full molar extraction).



A cat that has had teeth extracted may also develop ulcerative proliferative stomatitis near the anus.



Gingivitis and periodontitis with oral lesions

Determining whether a cat has stomatitis primarily relies on visual examination, with two major criteria:

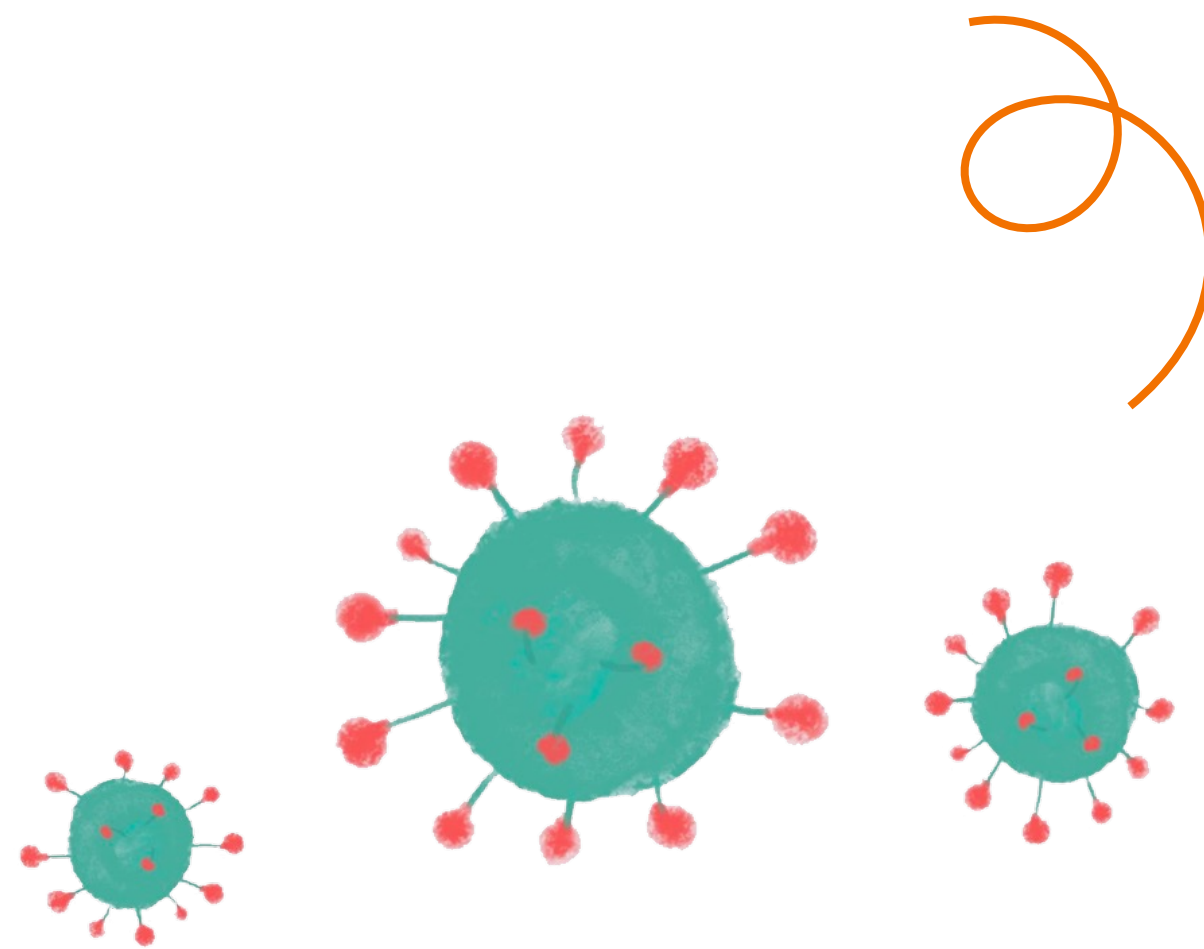
The first requirement is stomatitis, which is when the infection spreads to the lip mucosa or even the alveolar mucosa from the gingiva. More specifically, this can be categorized as rostral stomatitis or identified as alveolar mucositis.

The second requirement, known as caudal stomatitis, is the presence of inflammation and granulation in the posterior oral cavity, near to the tonsillar sides and palatoglossal arch. This provides a basis for the clinical diagnosis; if it is present, it is definitely stomatitis. This kind is the most prevalent, most difficult to treat, and most likely to recur.

It may be deemed to be stomatitis if one of the aforementioned conditions is satisfied. It should not be regarded as stomatitis if the aforementioned requirements are not fulfilled. Visual examination is typically used to diagnose stomatitis. To rule out tumours, sampling and testing should be done if any atypical nodules or granulations emerge.

2.3 About Mutoral

Mutoral® is an oral small molecule antiviral drug. It exerts its antiviral action by introducing copying errors during viral RNA replication. Currently, the results of a 15-week pivotal clinical study of Mutoral® in the treatment of moderate to severe gingivostomatitis in cats showed that the drug achieved the co-primary endpoint and key secondary endpoints of reducing gingivostomatitis symptoms and repairing oral lesions. As a key new drug from Mutian, Mutoral® can significantly relieve and even cure this difficult to treat painful feline disease to a large extent.



Before



After 12 weeks



*Moderate to severe cases
of oral ulceration with
dental trauma or
absorptive lesions)*

Efficiency: 85%
Significant Efficiency:
40%

*Mild to moderate cases
of oral ulceration (with
healthy teeth)*

Efficiency: 95%
Significant Efficiency: 88%

*Poor oral outcomes after
tooth extraction*

Efficiency: 88%
Significant Efficiency:
75%

Dental extraction surgery is currently the most commonly used treatment for stomatitis in cats, but 30-40% of cats still have a poor prognosis after tooth extraction. Within two weeks of medication, all of these cats showed positive effects, including 7/8 cats that basically recovered oral health, including some cases that were ineffective to hormones.

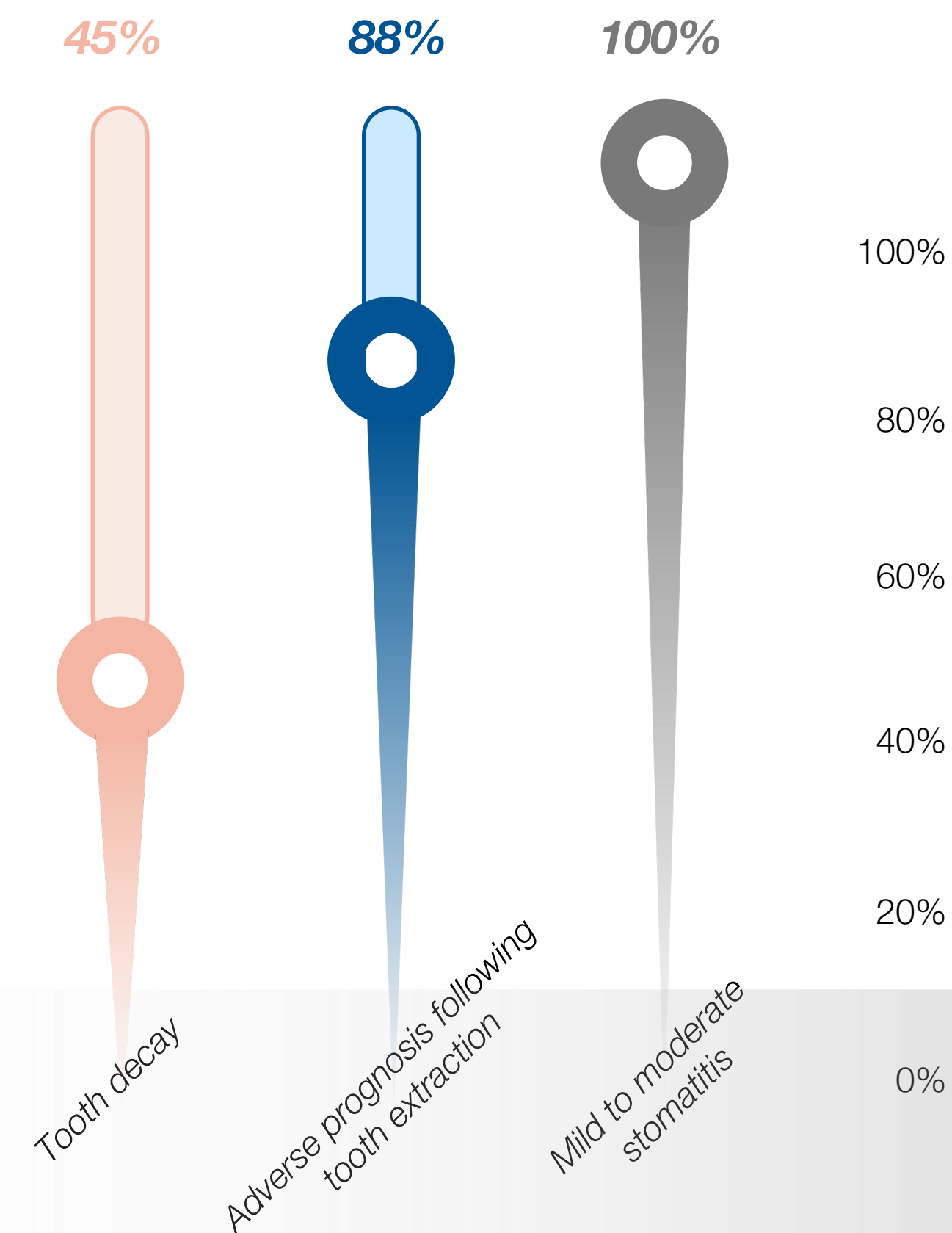
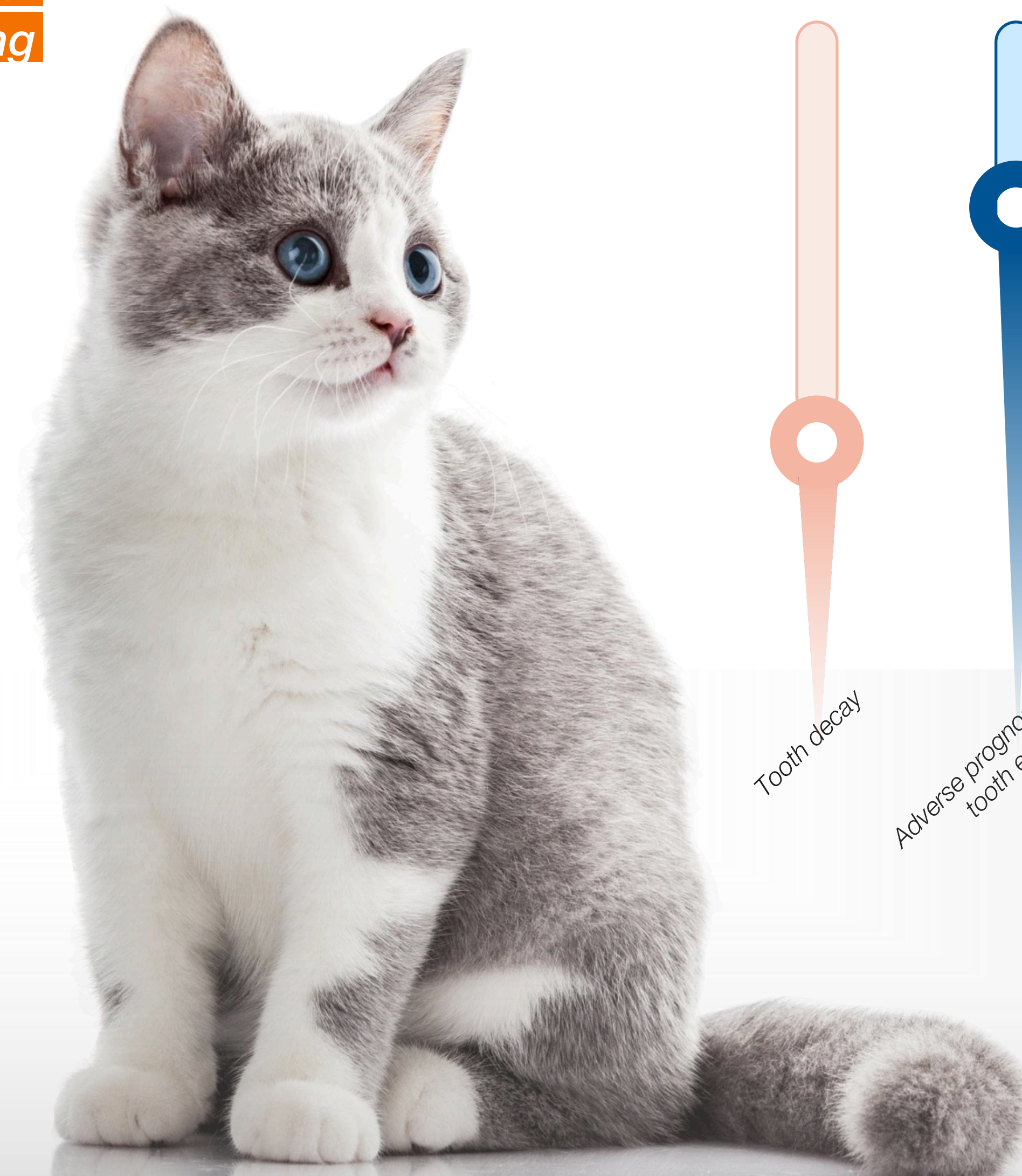
For cases where the teeth themselves have obvious lesions, there is generally significant improvement within two weeks of medication, but dental issues cannot be alleviated by drugs alone. Therefore, most cases enter a bottleneck period after one month, and dental extraction surgery is still recommended for such cats.

Mild to moderate cases of gingivitis showed promising improvement in oral health during this trial.

Symptoms typically improved significantly within two weeks as appetite, energy, grooming behaviors, and oral health were restored.

Best results were seen at

8-12 weeks



2.3.1 One of User feedback

I have been blessed to be a part of a trial here with my cat Bella in the US for FCGS which is Feline chronic gingivostomatitis/ stomatitis . Mutian the same company we use for treatment for the cure of FIP have developed Mutoral for the cure of stomatitis . Thousand of cats suffer daily with this life debilitating disease leaving cats unable to eat.

They have terrible mouth pain they drool no longer groom themselves they lose weight and suffer terribly . My Bella was one of them ... even with full mouth extractions she suffered daily even on atopica gabapentin and bupropion she still could hardly eat . Well after patiently waiting months I was able to be a part of this trial of MUTORAL. My Bella is on week 3 of a 12 week treatment and her stomatitis is almost 100% GONE ! Gone! She is pain free no longer drooling no lesions sores bleeding .She can eat ... she is grooming ... she is back to my beautiful Bella. I am beyond grateful and can't wait until this is available to everyone whose cat is suffering. Just as FIP was once a death sentence ... and no longer is STOMATITIS will be curable What a huge game changer for thousands of cats! We need to do better by our animals here in the United States! Here are some before pictures and the last is my Bella once again feeling confident and comfortable ! A huge Thank you to my dear friend Nancy who made sure we got in the trial when it became available!

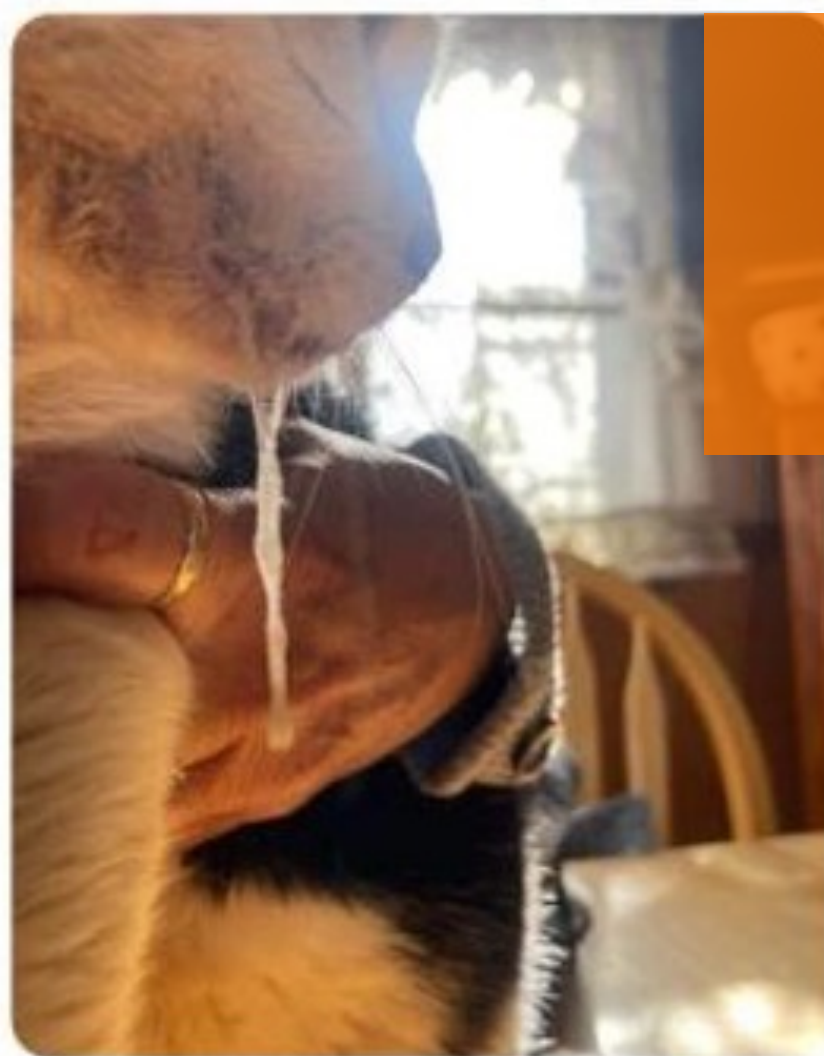
Hi everyone a lot of you have already seen my story but please look again my Bella has been on the treatment for just over 3 weeks and she is a totally different cat! Take a look in the comments for a picture of her mouth this am. Bella wants to wish all her fellow friends starting treatment good luck just look at my happy beautiful girl 6 weeks into treatment! Mutoral saved her life.

The first collage is my poor Bella 51 days ago before mutoral. She was drooling not grooming hardly eating unless doped up on bupropion and gabapentin She would hide wasn't socializing i had tried everything the second set is Bella 51 days into treatment ! No lesions.... Eating grooming playing back to herself she was before she was plagued by stomatitis! I am blessed to have been able to give my Bella her life back !



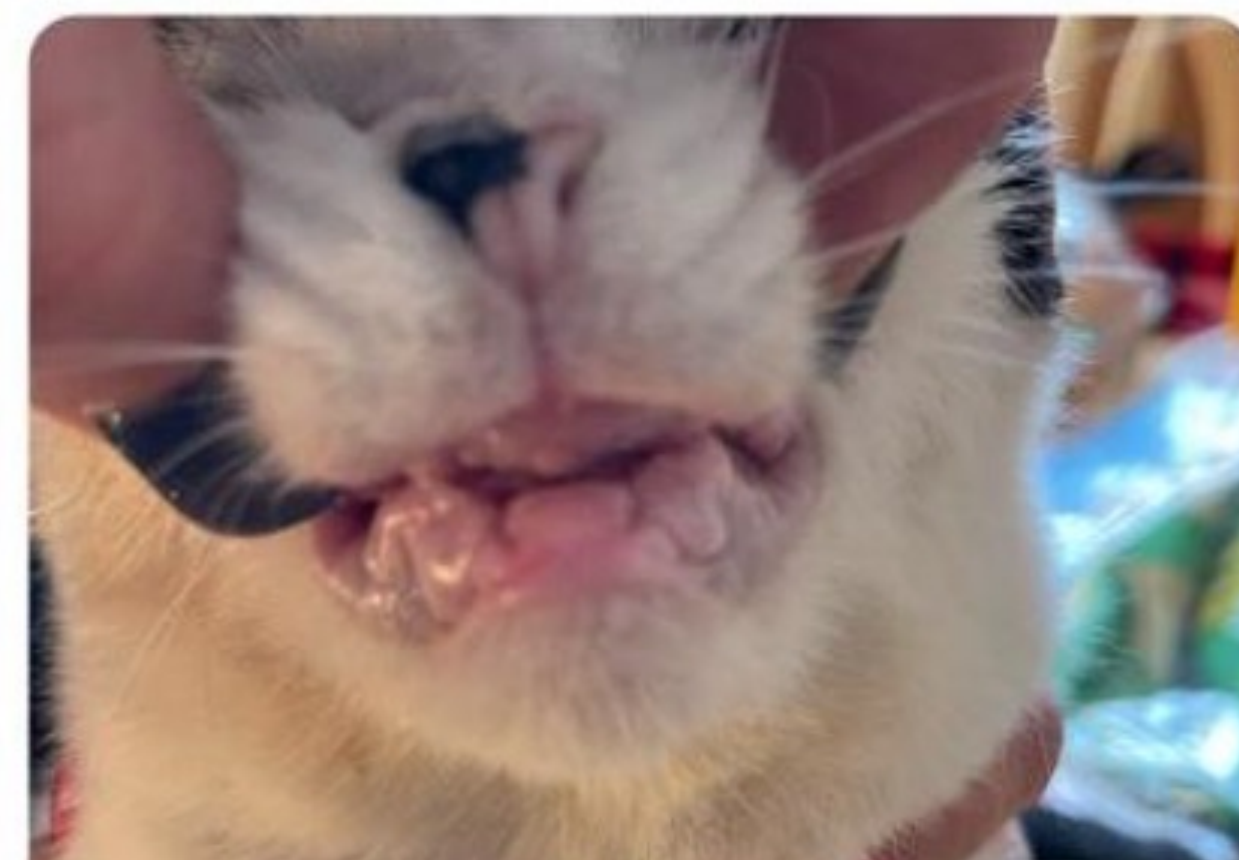
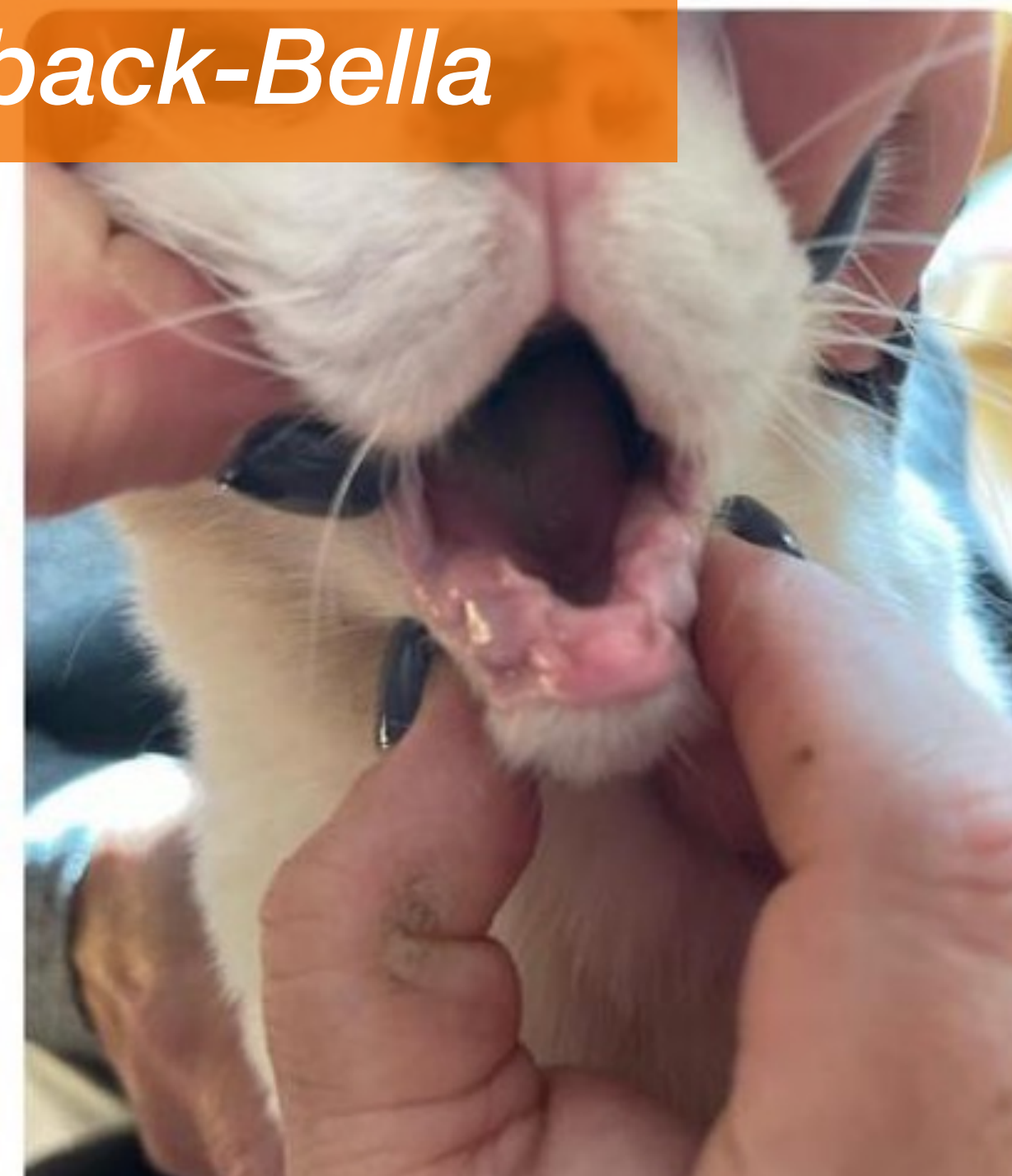
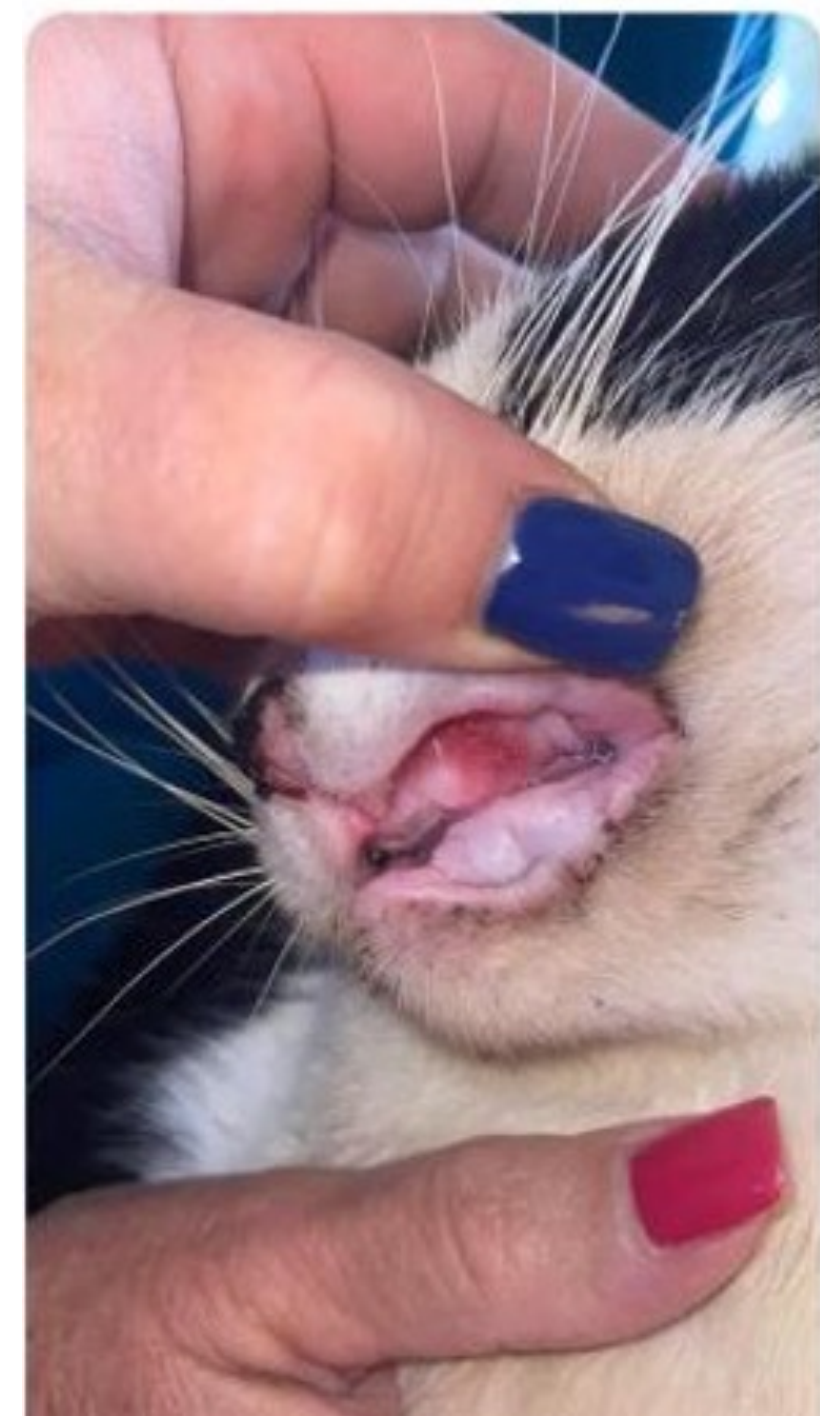
**I am
blessed to
have been
able to
give my
Bella her
life back !**

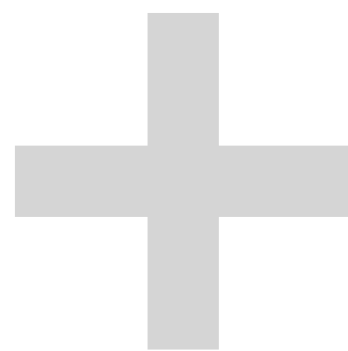
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www.mutian.com



MUTIAN[®]

User feedback-Bella





[Description]

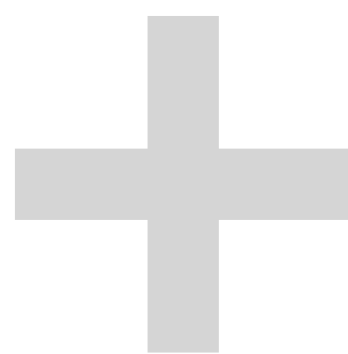
Mutoral® I is a multifaceted compound tablet, harnessing antibacterial, anti-inflammatory, antiviral, and immunomodulatory properties. Its active ingredients, totaling 50 mg, consist of MT2071 and Moxifloxacin hydrochloride, accompanied by inactive components such as Microcrystalline Cellulose, Polyvinylpolypyrrolidone cross-linked, and Magnesium stearate.

Mutoral®II is an oral tablet with antimicrobial, anti-inflammatory, and antiviral properties. It contains 100 mg MT2071 active ingredients, accompanied by inactive components such as Microcrystalline Cellulose, Polyvinylpolypyrrolidone cross-linked, and Magnesium stearate.

[Specification]

14 tablets/box

MUTIAN®
www.mutian.com



[Description]

Mutoral® injection is a Colorless and transparent liquid, non toxic, without excient, non corrosive and not an environmental pollutant. Each bottle contains 150mg of the active ingredient, consist of MT2071 and Acetylcysteine. And other inactive ingredients: dissolved water, citric acid, sodium hydrogen carbonate, etc.

[Specification]

5ml/150mg

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