

Breed Predispositions to Select Skin Conditions in Dogs and Cats—cont'd

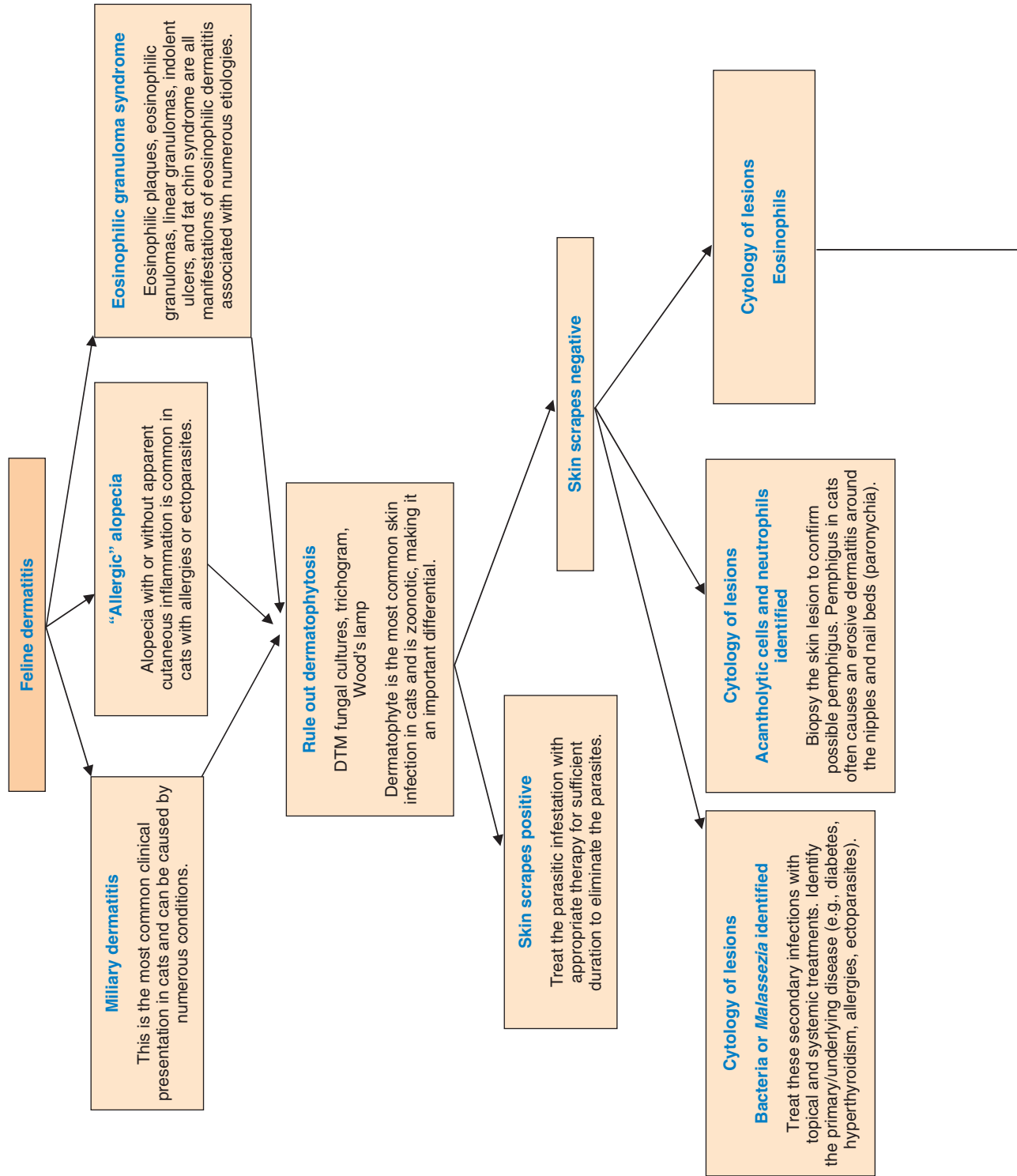


FIGURE 1-30 Algorithm for Working Up a Pruritic Cat.

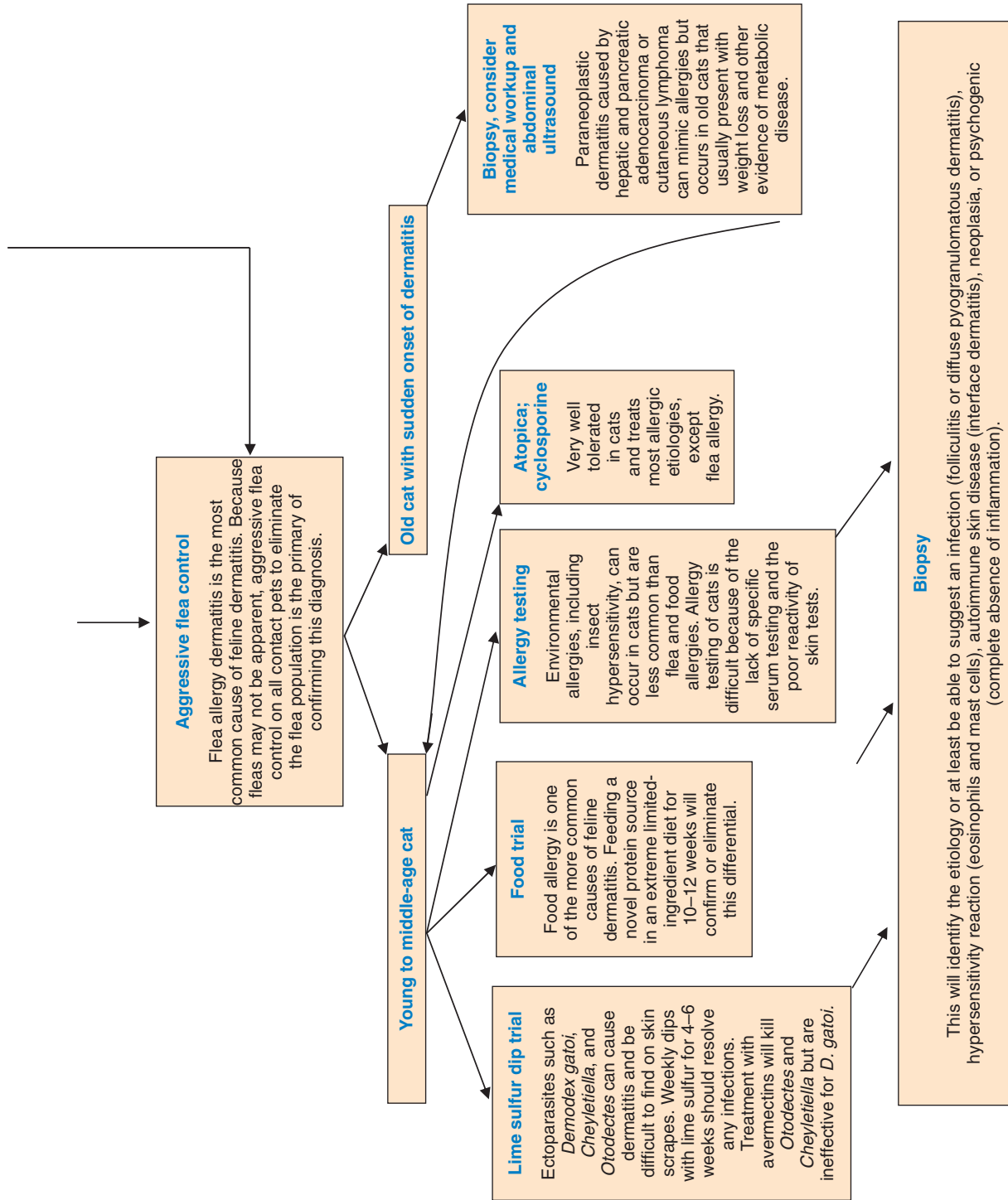


FIGURE 1-30, cont'd

CATS

Cats do NOT have the same patterns or secondary infections that dogs demonstrate.

Bacterial pyoderma can be self resolved in cats with out antibiotics, if the triggering disease is treated and controlled.

Convenia is the best antibiotic for cats.

Yeast dermatitis in cats is rare but usually triggered by metabolic disease (diabetes, hyperthyroidism).

Kittens and shelter cats are the most common source of dermatophytes (*Microsporum canis*) which is zoonotic.

Herpes virus dermatitis in cats is increasing in frequency and presents as erosive facial dermatitis. DNA PCR testing is the best diagnostic method to confirm the diagnosis.

Skin lesions around the nipples is almost always associated with pemphigus in cats.

Otitis is rare in cats and usually caused by tumors or ceruminous gland cysts.

Most older cats will have increased dark waxy exudate which is not a disease or problem and should not be treated as treatment usually makes the situation worse.

Most inflammatory diseases in cats are caused by a lymphocytic, plasmacytic, eosinophilic immune response and Atopica (cyclosporine) is the safest and best long-term treatment option.

The allergy-pattern syndromes in cats are: allergic alopecia, bald belly, eosinophilic plaques, eosinophilic granulomas, indolent ulcers, fat chin syndrome, otitis, allergic asthma, stomatitis.

Any allergy (food, insect, pollen, mold) can trigger any of allergy-patterns in cats.

The infectious causes of the allergy-patterns in cats are: demodex cati, dermatophyte, herpes virus.

The best treatment progression for cats with the allergy-patterns would be to:

1. submit DNA PCR testing for Herpes, Demodex, dermatophyte
2. treat with an isoxazoline parasiticide to rule out insect allergy
3. start Atopica (cyclosporine) therapy for 1 month
4. consider skin biopsies and blood work
5. consider a home cooked food trial with pork or beef as the base protein
6. consider steroid therapy (oral or at-home injectable) every 3 days
7. consider allergy skin testing and allergy vaccine therapy

Injectable Depomedrol and Vetalog cause diabetes and heart failure in 20% of treated cats.

Cats with sudden onset of the allergy-pattern syndromes over the age of 10 years often have paraneoplastic syndrome with internal carcinoma of the liver, pancreases or lung. Radiographs and abdominal ultrasound are best to identify the source.

THERE WAS MINIMAL EVIDENCE OF INFECTION BASED ON CLINICAL EXAM AND MICROSCOPIC CYTOLOGY

DNA PCR TESTING SAMPLES WERE COLLECTED AND ARCHIVED TO IDENTIFY POSSIBLE HERPES VIRUS, MITES, FUNGAL DERMATOPHYTE INFECTIONS

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ALLERGIC DERMATITIS CAN BE CAUSED BY MANY TRIGGERS (INSECTS, POLLENS, MOLDS, FOODS, ETC)

MOST RESPOND WELL BUT A PROGRESSIVE THERAPY TRIAL WILL BE USED EVERY 2 WEEKS TO FIND THE SAFEST MOST EFFECTIVE AND COST EFFECTIVE TREATMENT PLAN

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IF POSSIBLE

APPLY GENESIS DROPS TO ANY RED ITCHY AREA EVERY 12-24 HOURS AND ALLOW 5 MINUTES BEFORE LICKING

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EVERY 2 WEEKS

WE WILL PROGRESS UNTIL SIGNIFICANT BENEFIT IS OBSERVED

SUPER AGGRESSIVE INSECT CONTROL FOR ALL PARASITES

HEARTWORMS, INTESTINAL WORMS, MOSQUITOES, MITES, AND FLEAS

Apply Revolution Plus or Bravecto every 30 days

GIVE 1/2 - 1 TABLET OF CHLORPHENIRAMINE (4MG TABS) EVERY 12-24 HOURS TO CONTROL THE ALLERGIES

GIVE ATOPICA ORALLY EVERY DAY FOR 2-3 WEEKS THEN EVERY OTHER DAY.
MIX IN YUMMY FOOD OR GIVE ORALLY WITH A YUMMY CHASER

GIVE ORAL DEX TABLETS OR ORAL LIQUID EVERY DAY FOR 3 DAYS THEN EVERY 2-3 DAYS FOR CONTROL

ORAL AMITRIPTYLINE 10MG EVERY 12 HOURS

GIVE INJECTABLE DEX EVERY 2-3 DAYS FOR LONG-TERM CONTROL AND PREVENTION

ALLERGY SKIN TESTING AND VACCINE THERAPY - GIVE WEEKLY VACCINE

GIVE APOQUEL ORALLY EVERY 12-24 HOURS - DISSOLVE WITH WATER AND ADD TO YUMMY TREAT

HOME COOKED RESTRICTED FOOD TRIAL

GIVE INJECTABLE CYCLOSPORINE EVERY DAY FOR 2 WEEKS THEN EVERY 2-3 DAYS FOR LONG-TERM CONTROL AND PREVENTION

SKIN BIOPSIES TO DIAGNOSIS AUTO-IMMUNE SKIN DISEASE OR CANCER

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Feline Dermatology and Pruritus

Feline pruritus is one of the most common dermatologic problems affecting cats. Mild cases often respond to empiric antipruritic treatments. Severe or chronic cases need a thorough workup to identify and control the primary etiology for long-term success. Since many etiologies can cause the 3 common clinical patterns (alopecia, miliary dermatitis, and eosinophilic granuloma complex) a prioritized differential list should be used to systematically work through the different etiologies. Flea allergy, insect hypersensitivity, Demodicosis, and food allergy are the most common pruritic diseases; however, dermatophytosis and other infectious causes of alopecia and miliary dermatitis should be eliminated.

Clinical Features:

Regardless of the underlying cause, cats seem to react with 3 distinct clinical patterns. Alopecia is one of the most common presentations, especially on the abdomen and inner thighs. Often there are no skin lesions just alopecia. Miliary dermatitis and eosinophilic granuloma complex (eosinophilic plaque, linear granuloma, indolent ulcer, oral granuloma) are also common feline dermatologic patterns. Regardless of the clinical pattern, the differential list is similar.

THE NEW ERA: 5 Steps to success WITH OUT steroids

1. **Rule out Flea allergy** is the most common allergy in cats and most pruritic cats respond to an aggressive flea control trial. Cats commonly present with pruritic miliary dermatitis with secondary excoriations, crusting, and alopecia of the neck, dorsal lumbosacral area, caudomedial thighs and/or ventral abdomen. Other symptoms include symmetrical alopecia secondary to excessive grooming, and eosinophilic granuloma complex lesions. Many cats are extremely effective at removing fleas and flea dirt by grooming making it difficult to prove the existence of a flea infestation. Therefore, all pruritic cats should be treated aggressively for possible flea allergy dermatitis. Capstar administered every other day for 1 month effectively prevents flea feeding and eliminates the pet's exposure to flea saliva. If the patient is better after 12-15 every other day doses of Capstar, FLEA exposure and FLEA ALLERGY has been confirmed.
2. **Culture for RING WORM: Dermatophyte** is the most common infectious skin disease in cats. The most common clinical lesion pattern is miliary dermatitis. Diagnosis is usually based on Wood's lamp examination and cultures. Since ringworm can mimic so many other diseases, it should be considered and ruled out in all cats with skin lesions.
3. **Eliminate Mites: Demodex gatoi** may be the more common Demodex species (especially in the Southern states) and causes pruritic symptoms similar to allergic dermatitis. *D. gatoi* is the short bodied mite that inhabits the superficial skin structures and may be contagious to other cats. Generalized disease is characterized by variably pruritic, multifocal, patchy, regional, or symmetric alopecia with or without erythema, scaling, crusts, macules, and hyperpigmentation. Lesions usually involve the head, neck, limbs, flanks, and/or the ventrum. Ceruminous otitis externa and secondary pyoderma may be present. *Notoedres cati* is rare. *Cheyletiella* mites live on hair and fur and are usually found with tape preps, skin scrapes, flea comb surf examination, or fecal.
4. **Consider a food trial if the Patient will comply:** Food allergy is a nonseasonal pruritic dermatitis that may respond to steroids. The distribution of the pruritus and lesions may be localized to the head and neck, or it may be generalized and involve the trunk, ventrum, and limbs. Skin lesions are variable and may include alopecia, erythema, miliary dermatitis,

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eosinophilic granuloma complex lesions, excoriations, crusts, and scales. Ceruminous otitis externa is often present. Concurrent gastrointestinal symptoms may be present.

5. **Cyclosporine Therapy** controls almost all other allergies or other caused of immune mediated dermatosis in cats. Insect hypersensitivity (Mosquitoes, moth, cockroach, ants, etc) is possibly the second most common cause of allergy in cats. Atopy symptoms may be seasonal or non-seasonal depending on the offending allergens. The pruritus may occur on the head, neck, and ears, or it may be in other areas such as the ventral abdomen, caudal thighs, forelegs, and/or the lateral thorax. Pemphigus is usually a nonpruritic disease with lesions that include superficial erosions, crusts, scales, epidermal collarettes, and alopecia. Occasionally, the cat grooms excessively which can be interpreted as pruritus. Lesions around the nail beds and nipples are common.
6. **IF OVER 10 years of age at Onset:** Paraneoplastic pruritus is a rare disorder but can be observed in older cats with certain tumors. Pruritus associated with systemic and cutaneous tumors is more common in aged cats. Too often, the diagnosis is only made after prolonged attempts to identify more common causes of pruritus.

Diagnostics: Perform appropriate diagnostics based on prioritized differential list.

Trichogram	The microscopic examination of the hair (both the root and tip) may provide evidence of pruritus (fractured hair tips) or dermatophytosis (frayed root end).
	Many cats are reluctant to groom in front of the pet owner; therefore, owners may not be aware of the pruritus. Fractured hair tips can provide crucial evidence to confirm pruritus and convince the owner to proceed with diagnostic testing and treatment.
Fungal culture	Dermatophytosis is rarely pruritic; however, cats with miliary lesions may groom excessively.
Flea Combing	This should be one of the first diagnostic tests employed.
	The identification of fleas or flea dirt will confirm this common cause of feline skin disease.
	The flea comb material may also be used for microscopic identification of other ectoparasites (Cheyletiella, ticks, and other mites)
Cytology	The identification of bacterial (folliculitis), yeast, or acantholytic cells (pemphigus) will help guide additional diagnostics and treatments.
	Eosinophils are commonly found regardless of the primary etiology.
Skin Scrapes	The identification of Demodex (common), Cheyletiella, and Notoedres mites (uncommon) would confirm these diagnoses.
Fecal	Examination will occasionally reveal ectoparasites (mites) that were not found

floatation	on routine skin scrapings.
Flea Control Trial	Capstar administered every other day for 1 months effectively prevents flea feeding and the pets exposure to flea saliva. Aggressive Flea control on all pets in the home. Often, cats will have no evidence of flea infestation but respond to aggressive flea control.
Therapeutic trial for Demodex	Since skin scrapes for <i>Demodex gato</i> i can be falsely negative in infected cats, a therapeutic trial consisting of 6 weeks of lime sulfur dips may be needed to confirm or rule out this differential.
Skin biopsy	This is often the quickest way to collect the most information regarding a dermatosis. Even if not diagnostic, enough information can be gathered to guide additional diagnostic tests or therapeutic trials (allergic dermatitis compared to folliculitis compared to paraneoplastic dermatitis).
Food Trial	Currently, a dietary food trial is the only way to confirm or eliminate food allergy dermatitis as a cause of pruritus. There are no in vitro testing methodologies that correlate with clinical disease.
	The most allergen restricted yet palatable diets should be used for a 10-week trial.
	Home-prepared diets provide better allergen restriction and are often more palatable than commercial diets, but are not balanced or complete.
	Following the 10-week elimination food trial, a dietary challenge should be used to confirm the diagnosis of food allergy. Often other treatments are initiated during the 10-week period. A food challenge will confirm or eliminate the restricted diet as the cause of improvement and thus substantiate the diagnosis of food allergy.

Summary:

Since flea allergy is the most common cause of skin lesions in cats, it is imperative to rule out flea allergy dermatitis through an aggressive flea control trial. The key to success is a thorough dermatologic workup. By considering and ruling out the more common or more easily treatable causes of feline dermatitis, success is easily achievable with out the need for steroids.

FELINE SUBMISSION FORM



RESEARCH • ASSOCIATES • LABORATORY

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Owner Name:		
Animal Name:		
Species:		
Age:	Sex:	Date:

Specimen Source (Please Circle)	
Blood	Swab

ACCOUNT	Acct #
	Name
	Address
	City
	State/ZIP
	Country
	Phone#
	Email
	Fax

Check Enclosed	Amount: _____
Credit Card	
AMEX	Discover
Master Card	Visa
On File	
Exp. Date: ____/____/____	
Name On Card	
Credit Card Number	

Specimen Requirements:	Blood - 0.1 ml whole blood	Swab - Dry sterile swab
LIVE ANIMAL TESTING	ENVIRONMENTAL TESTING	POST MORTEM

DNA TESTS \$18.00

Anaplasma Aspergillus fumigatus Aspergillus Genus Babesia Bartonella Blastocystis Blastomyces Bordetella bronchiseptica Brucella Campylobacter coli Campylobacter Genus Campylobacter jejuni Candida albicans Candida Genus Cheyletiella Mite Chlamydomphila felis Chlamydomphila Genus Clostridium difficile Clostridium Genus Clostridium perfringens Clostridium piliformes Coccidioides immitis Coxiella burnetti Cryptococcus Cryptosporidium Cytauxzoon felis Demodex Mite	Dwarf Tapeworm (H. nana) E. coli E. cuniculi Ehrlichia Encephalitozoon sp. Entamoeba histolytica Feline Hemotropic Mycoplasma Feline Herpesvirus Feline Panleukopeniavirus Flea DNA Presence Detec. Francisella tularensis Fungal Pathogens (Medically relevant) Giardia Heartworm (D. immitis/repens) Helicobacter Genus Hepatozoon felis Hepatozoon Genus Histoplasma capsulatum Klebsiella pneumoniae Lawsonia intracellularis Legionella Genus Legionella pneumophila Leishmania Leptospira Listeria monocytogenes Lyme Disease M.R.S.A.	M.R.S.P. Malessezia Mycobacterium avium Mycobacterium non-TB Mycobacterium TB Mycoplasma felis Mycoplasma haemofelis Notoedres Mite Orthopoxvirus Octodectes Mite Pasteurella multocida Plasmodium Genus (Malaria) Rickettsia rickettsii (RMSF) Ringworm (Dermatophytes) Salmonella Salmonella typhimurium Sarcocystis Genus Tapeworms (D.caninum/Taenia) Toxocara cati Toxoplasma gondii Tritrichomonas foetus Tritrichomonas Genus Trypanosoma Ssp. Yersinia pestis (Plague) Other _____
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PANEL TESTS \$75.00 each

Tick Panel: Anaplasma, Babesia, Bartonella, Ehrlichia, Lyme, Rickettsia rickettsii, Francisella tularensis

RNA TESTS \$25.00 each

Feline B Cell Neoplasia Feline Calicivirus Feline Coronavirus Feline Infectious Peritonitis (FIP M gene) Feline Infectious Virus (FIV) Feline Leukemia Virus (FeLV) Feline T Cell Lymphoma (TCRG) Influenza A Rabies Virus West Nile Virus

For additional species and tests please visit online @ <http://www.vetdna.com>