A partnership between

2022 "Kitty Birth Control" Pilot Clinic Results





October 19, 2022

Background

In early 2022 ACC&D partnered with a local cat shelter, <u>Cat Adoption Team (C.A.T.)</u>, to launch a pilot program to deploy short-term low-dose megestrol acetate (MA) to prevent fertility in some female cats. This project was prompted by C.A.T.'s long waitlist of clients needing access to spay/neuter and a desire to learn more about the feasibility of using low-dose MA as a tool to prevent litters while cats wait for spay surgery. Currently, MA is the only non-surgical contraceptive available for female cats in the U.S.¹ For more information about using low-dose MA as a short-term fertility control method in female cats, read our <u>MA Position Statement</u>.

Synopsis

Four "kitty birth control" clinics were held February through April 2022, totaling 50 appointments. Cats considered high risk for pregnancy were given priority for a clinic appointment. Cats who were considered high risk were between six months to five years old and met one of the following criteria:

- Had access to outside, including balconies;
- Lived indoor-only, but shared the home with an unneutered male cat; or
- Exhibited heat-related behaviors that were problematic for their owners.

Many owners who expressed interest in the program had indoor-only cats that did not live with an unneutered male cat. As interest exceeded appointment availability, cats who were considered very high risk for becoming pregnant, i.e., they lived with an unneutered male or had access to outdoors, were scheduled for a spay appointment instead of receiving an MA prescription. While these cats could have been treated with MA, C.A.T. preferred and had the ability to swiftly schedule these cats for spay appointments. Ultimately 21 cats were prescribed low-dose MA. The dosage for a cat not in heat was 2.5 mg per week for up to 8 weeks. For a cat in heat, the dosage was 5 mg once a day for 3 days, then 2.5 mg weekly for up to 8 weeks.

Each clinic was two hours long and individual cats were scheduled for a ten-minute physical exam. Clients were advised that the purpose of the exam was solely to see if the cat was a good candidate to be treated with MA. With one veterinarian available to

¹ In the U.S., MA was approved by the U.S Food and Drug Administration (FDA) in 1975 for fertility control in female dogs (Ovaban™). Use of MA in cats is considered "off label," meaning it has not been submitted to or reviewed or approved by the FDA. MA has received regulatory approval in several other countries and has been used extensively in Europe to manage reproduction of both cats and dogs. Please note that many drugs commonly used in veterinary medicine in the U.S. are considered off-label by regulatory standards.

examine these cats, six appointments were scheduled for the first hour, and six appointments for the second hour. Clients could arrive anytime within the hour and individual cats were examined in order of client arrival. For some cats that were too factious for a physical exam to be completed, owner consent was obtained to prescribe MA. Cats who received MA were scheduled for spay appointments to coincide with the end of their MA prescription. To keep the price of the medication low, C.A.T. purchased MA in bulk as "office stock" from a local veterinary compounder² and C.A.T. staff pre-filled syringes that were dispensed to eligible clients (6 weeks' worth of MA was available to clients for \$10 or \$12 if the cat was in heat).

Nearly all of the cats treated with MA, except for one, were spayed at C.A.T. Of these cats, none were pregnant at the time of surgery. Additionally, owners reported very few concerning side effects. The most concerning side effect that was reported related to one cat having mammary enlargement that did not subside after her spay. C.A.T. veterinary staff offered to remove the mass at no cost, and upon doing so, the tissue was determined to be encapsulated fat. For more details, see *Cat #2* in *Table 3. Side Effects Reported by Owner* on page 4.

Table 1. Operational Results

	Total	Comments
Clinics held	4	Clinic dates: 2/1, 3/1, 3/28, 4/11/2022
Total # of people who were emailed general info about clinic	235	For each clinic a general email was sent notifying individuals (on the low-income Spay and Save waitlist) about the upcoming clinic. If interested in participating, the client completed a Google Form to provide more details about their cat(s), which was then used to prioritize cats for filling appointments. As clinics progressed, fewer but more targeted emails were sent to clients with higher risk cats.
Appointments filled/offered	50/52	Each clinic was scheduled for 2 hours. With one veterinarian available, 12 appointments (6 per hour) were available per clinic on 2/1, 3/1, and 4/11. 16 appointments (8 per hour) were available on 3/28 when two veterinarians were available. The total number of "appointments filled" includes cancelations on the day of the clinic. We attempted to fill appointments that were canceled prior to day of the clinic.

² C.A.T. is located in Oregon which permits veterinarians to purchase "office stock." Not all states allow veterinarians to purchase "office stock." Check your state's regulations for determining if this option is available.

	Total	Comments
Cats prescribed regular low-dose MA (2.5 mg/week) Cats prescribed the in-	21 4/21	Office stock of liquid Megace was purchased from a local compounder. 3 of these cats were too fractious to be examined, but their owners consented to receiving MA. (These cats also received a prescription for a sedative for the cat's spay appointment.) The in-heat dosage was 5 mg/day for 3 days, then 2.5 mg weekly.
heat dose	4/21	The in-fleat dosage was 3 hig/day for 3 days, then 2.3 hig weekly.
No shows or cancelations on day of clinic	14	9 cancellations or no shows occurred on 4/11/22 due to unusual inclement weather (snow)
Cats attending appointments, but not prescribed MA	15	 Reasons why cats were not prescribed MA or examined at their Clinic appointment: 6 cats were prioritized for a spay appointment due to being high risk (living with intact male, access to outside). The appointments took place within a few days to a week. 1 had pyometra and was prioritized for spay 1 was an intact male 1 cat was possibly pregnant. Since this owner also brought a 2nd cat to the clinic, both cats were prioritized for spay on the same day (2 cats total) 5 cat owners were confused about the appointment purpose. A few clients were upset their cats weren't getting spayed at the MA clinic because the appointment reminder email had the word "spay" in it despite the content of emails explaining otherwise. 2-3 owners showed up asking why they had to get birth control for their cat, and after explaining that it wasn't required, decided not to proceed.

Note: During scheduling, several clients requested MA appointments but were instead prioritized for spay appointments for various reasons, e.g., an older cat (7-year-old), cats younger than 6 months old, owner was concerned cat may already be pregnant.

Side Effects

About halfway through the period in between receiving MA and the cat's spay appointment, clients were contacted by email and asked whether they observed any side effects. We asked:

- Did you notice any mammary development, increased thirst or appetite, or changes in your cat's personality? If yes, please describe what you observed.
- Did you notice any other side effects? Please describe.
- Is there anything else you would like to share?

We received responses from 18 out of 21 cats.

Table 2. Side Effects – Cumulative Results

	# of cats	Comments
Total # of cats prescribed MA	21	
# of these cats spayed at CAT	20/21	None of these cats were pregnant at the time of their spay
Info about side effects provided by owner	18/21	
No side effects reported	4/18	
Side effects reported	14/18	More details in Table 3.
Behavior-related side effects	9/14	Most reported increased sociability/affection
Weight gain or increased appetite	7/14	
Increased thirst	4/14	
Mammary development	3/14	
Decreased appetite	1/14	

Table 3. Side Effects Reported by Owner

ID	Cat's age	Clinic Date	MA Dose	S/N Date	Summary of side effects reported	Owner response
1	8-9 mos	2/1/22	Regular low dose	3/15/22	increased appetite and thirst	I saw a difference in her behavior after the first dose. Unfortunately, she got smart as to the smell of the medication and made it very interesting for me to get her to eat it with food. But I haven't seen any "in heats" that means she must be getting something. There has been an increase of appetite and also drinking more water.
2	1 yr	2/1/22	Regular low dose	3/18/22	mammary development, increased appetite, behavior changes	She has developed mammary development, increased appetite, and changes to her behavior (is more affectionate/vocal.) I can feel two tissues (mammary development) now where there wasn't anything otherwise. She has been even more of a lap cat, wanting comfort and pets.

ID	Cat's age	Clinic Date	MA Dose	S/N Date	Summary of side effects reported	Owner response
						Post-spay: She still has significant mammary development even after her surgery. It developed with the MA after about three weeks but has not gone away since the surgery. Staff notes: Cat was too fractious to be physically examined at MA appointment, but owner permission was given to prescribe MA. No abnormalities were noted at time of spay. Upon additional exam (cat was prescribed a sedative), mammary enlargement was smooth and well-defined. Mass was removed intending for biopsy but upon removal discovered it was
3	1 yr 8 mos	2/1/22	In-heat	4/5/22	behavior changes, increased appetite	encapsulated fat. There has been a distinct difference in my cat's personality. She has become quite affectionate, whereas before she was very feisty. I have also noticed an increase in her appetite.
4	8 mos	2/1/22	Regular low dose	3/16/22	mammary development, behavior changes	She did have slight mammary development. I'm not seeing that she has increased thirst or appetite. She has been calmer since being on MA. Follow up note: Client advised mammary develop went away after a few days
5	11 mos	2/1/22	Regular low dose	3/18/22	behavior changes	Our kitty did great on MA. She was maybe a little more sleepy. The only issue we had was the syringe used to inject the MA into her mouth would get caught up in the bottom of the tube and therefore hard to release into mouth.
6	1 yr	2/1/22	Regular low dose	3/15/22	behavior changes, reduced appetite	She is sleeping way more and eating a little less.

ID	Cat's age	Clinic Date	MA Dose	S/N Date	Summary of side effects reported	Owner response
7	7 mos	2/1/22	Regular low dose	3/15/22	increased thirst and appetite	She is eating a lot and is very thirsty. She is super cuddly now.
8	6-7 mos	2/1/22	Regular low dose	3/18/22	maybe a slight increased thirst	Maybe a slight uptick in water consumption. The cats did seem to notice the medicine if mixed in food and by the end of the course of medicine were refusing adamantly to eat it. It did prevent the cats from going into heat before being spayed.
9	6-7 mos	2/1/22	Regular low dose	3/18/22	maybe a slight increased thirst	Same owner as cat 8. See above.
10	10-13 mos	3/1/22	Regular low dose	4/13/22	behavior changes, increased appetite	Cat has gained weight a little bit, eats more, and is much more loving.
11	1.5 yrs	3/1/22	Regular low dose	4/13/22	weight gain	She has gained weight
12	"Under a year?"	3/1/22	Regular low dose	4/13/22	None	No side effects reported
13	7 mos	3/28	Regular low dose	5/18/22	increased appetite	Before MA she didn't really want to eat, assuming it was because of the effects of her heat. Since starting the birth control she's been eating but eating the right amount. No other side effects noticed. Noticed that when it seems to start wearing off (about the time she gets her next dose) she starts getting overly lovey and very vocal.
14	9 mos	3/28	In heat	5/20/22	None	She is responding well to the treatment. She appears to have no side effects and it has stopped her heat cycles.
15	11 mos	3/28	Regular low dose	5/18/22	None	No side effects reported

ID	Cat's age	Clinic Date	MA Dose	S/N Date	Summary of side effects reported	Owner response
16	8-9 mos	4/11	Regular low dose	6/3	behavior changes, weight gain, increased thirst, increased appetite	Somewhat increase in thirst and hunger. She's put on a little weight and has been a bit more lazy but she still has a bunch of energy and runs around.
17	10 mos	4/11	Regular low dose	Unknown – appt was canceled	behavior changes, mammary development	Her mammaries got a tiny bit more developed but not by much (went away quickly). She's been extra loving too.
18	8 mos	4/11	In heat	6/1/22	None	My cat has been doing well on MA and I've noticed no changes in her behavior except for the ceasing of the being in heat symptoms.