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## New Approaches to Non-Surgical Sterilization for Dogs and Cats

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### Message from the Guest Editors

The attempts to control the reproduction of companion animals have a long history. More recently the most commonly used methods have been spaying and neutering. Surgical sterilization has had an important role in reducing the number of stray or euthanized pet in shelters, but it requires infrastructure and resources that make it unsuitable to reduce the population of unwanted dogs and cats worldwide. Unfortunately it has been estimated that there are more than 200 million stray dogs worldwide that means new strategies have to be found. Since the mid-1970s, researchers have been investigating alternatives to using surgery to sterilize dogs and cats: pharmacological techniques, ultrasounds, intra-testicular injections of chemicals etc. have been studied. Early research investigated the novel idea that animals could be induced to mount an immune response to antigens that are important in reproduction, such as gonadotropins or zona pellucida proteins or the use of a cytotoxin conjugate that could directly target a subset of cells critical for reproduction.

The aim of this Special Issue is therefore to gather the most recent scientific findings on non-surgical sterilization.



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# Special Issue



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## Message from the Editor-in-Chief

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