



Anthelmintic drugs

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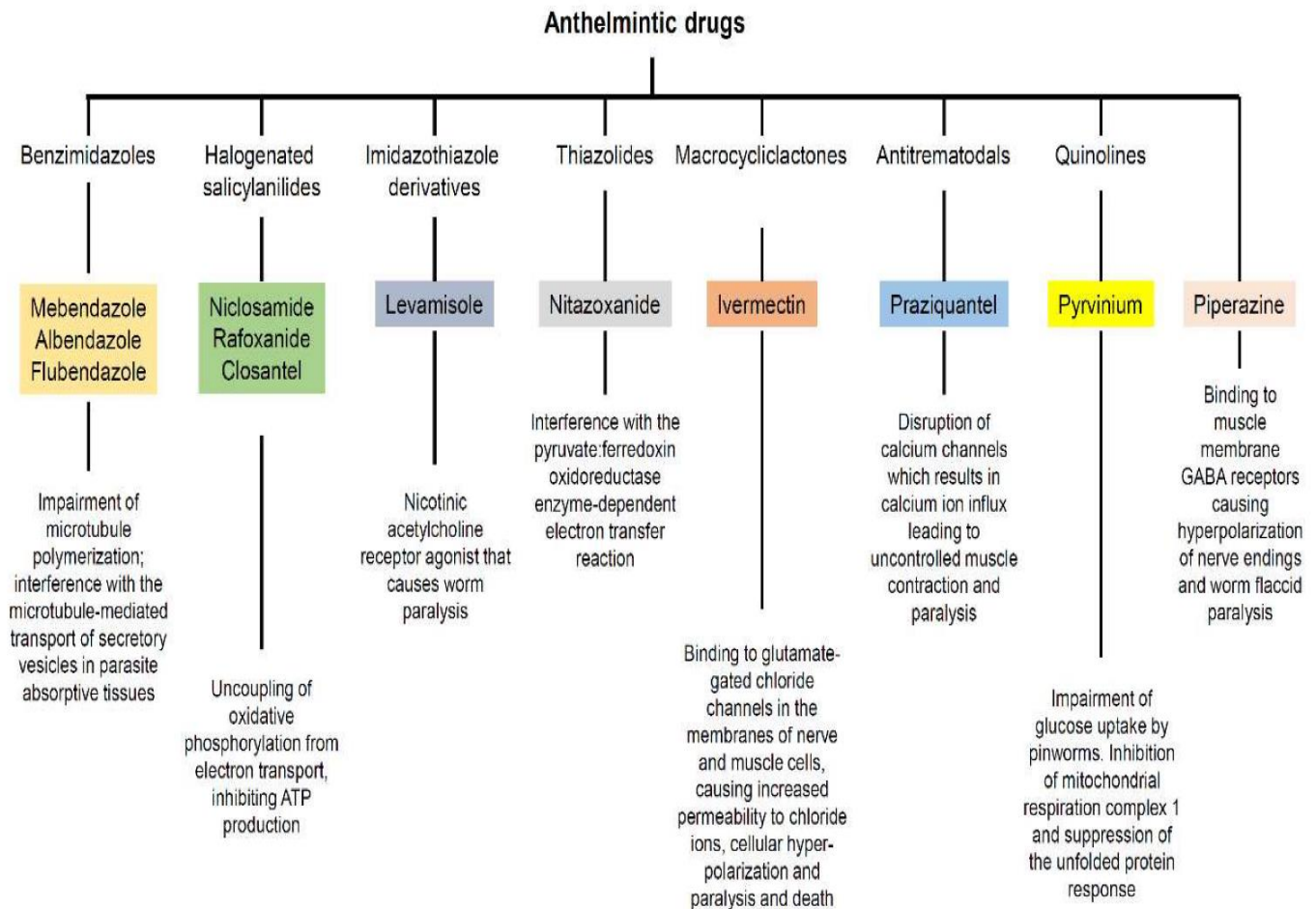
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Introduction

The global problem of animal welfare caused by gastrointestinal nematodes in grazing animals results in significant productivity losses. Anthelmintics have played a key role in these parasite control initiatives for many years. Due to the heavy usage of anthelmintic medications, there are now issues with resistance to the current anthelmintic medications. Resistance to all kinds of broad-spectrum anthelmintics, including macrocyclic lactones, imidothiazoles, and benzimidazoles (BZ), has been shown [1]. Less than 10 years appear to have passed since the introduction of a new class of anthelmintic medications before resistance was found [1]. Multiple resistance issues to different classes have also emerged over time. A significant threat from the multiresistant *Haemonchus contortus* has emerged for the entire small ruminant industry in the South-East of the USA and in a portion of South Africa [2,3].

All of our natively grazing species, including sheep, goats, cattle, and horses, have been found to have resistant nematode populations at this time [1]. Pigs have been found to have *Oesophagostomum* spp. resistance to pyrantel, levamisole, and benzimidazoles [4,5].



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