



**Keywords:** Acute pain; Cattle; Pain diagnosis; Behavioral changes;

in technology allow for more objective and accurate behavioral assessments through video recordings and machine learning.

## Results

A review of current diagnostic methods indicates that the diagnosis of acute pain in cattle relies heavily on a combination of clinical observation, behavioral monitoring, and physiological assessment. Early detection of pain through these methods can lead to more effective treatment strategies, improving the overall welfare and health outcomes of cattle. One study reviewed in this article found that cattle subjected to post-surgical pain had significantly altered behaviour, including a marked reduction in feeding and drinking behavior, as well as changes in vocalization frequency. In another study, researchers observed that pain scoring systems, incorporating behavioral and physiological markers, could significantly improve the diagnosis and management of pain in cattle post-trauma [7,8].

## Discussion

Acute pain diagnosis in cattle presents several challenges due to the inability of cattle to verbally communicate their discomfort. However, advancements in behavioral monitoring, clinical assessments, and

Early detection of pain through video recording and machine learning allows for more objective and accurate behavioral assessments, which can lead to more effective treatment strategies and improved welfare outcomes in cattle post-trauma.