

<https://doi.org/10.29289/259453942024V34S2060>

28488 – DETECTION, ISOLATION, AND CHARACTERIZATION OF VIABLE BOVINE LEUKEMIA VIRUS IN FRESH MAMMARY TISSUE AND HUMAN LEUKOCYTES

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Introduction: Bovine leukemia virus (BLV) is the etiological agent of enzootic bovine leukosis. It infects immune system cells, mammary gland cells, and endothelial cells in cattle. Affected animals can be asymptomatic, exhibit persistent lymphocytosis, or develop B-cell lymphomas. The most severe clinical form of the disease occurs in less than 10% of cases. Increasing evidence suggests that humans can be infected with BLV and that it may be associated with the development of breast cancer in women. **Conclusion:** Only one published study reports the detection of BLV DNA in fresh mammary tissue samples from Colombian women. Some limitations related to the execution of the tests or the collection of fresh tissue may have resulted in a lower than expected frequency of positives, compared to those found in Colombia in 2021. However, the negative results in leukocytes and formalin-fixed paraffin-embedded (FFPE) tissues support the hypothesis that, for the most part, the women in the study were not infected with BLV.