



## 232. Apoptosis is related to immune passive transfer in newborn ruminant

Castro-Alonso, A.<sup>‡</sup>, Castro, N.<sup>§</sup>, Capote, J.<sup>†</sup>, Morales-delaNuez, A.<sup>§</sup>, Moreno-Indias, I.<sup>§</sup>, Sanchez-Macias, D., Herraez, P.<sup>‡</sup>, Argüello, A.<sup>§</sup>

*‡* Department of Morphology, Las Palmas de Gran Canaria University, Arucas 35413, Spain. § Department of Animal Science, Las Palmas de Gran Canaria University, Arucas 35416, Spain. *†*Canary Agronomic Science Institute, La Laguna, Tenerife, Spain. Email: <u>aarguello@dpat.ulpgc.es</u>

Eight goat kids were slaughtered at birth, at 24, at 48, at 72 hours and at 60 days after partum to evaluate the relationship between apoptosis and immune passive transfer in neonate enterocytes. A samples of duodenum of each animal were taken after slaughter, fixed, dehydrated and embedded in paraffin wax. Sections were stained using a TUNEL assay for visualizing apoptotic cells. Immunohistochemistry using a commercial polyclonal anti-IgG antibody was performed to evaluate the presence of IgG. The main observation in the present experiment is the evidence that the responsibility to absorb IgG is in apoptotic enterocytes. In the future the delay in apoptosis development may increase the possibilities to avoid the failure in immune passive transfer.

