1 Review

Mammary defences and immunity against mastitis in sheep

Angeliki I. Katsafadou ¹⁺, Antonis P. Politis ¹⁺, Vasia S. Mavrogianni ¹, Mariana S. Barbagianni ¹,
 Natalia G.C. Vasileiou ¹, George C. Fthenakis ^{1*}, Ilektra A. Fragkou ¹

6 + These authors have contributed equally and their names are listed alphabetically

7 8

Figure S1: (a) Inducible lymphoid nodule, present at the border between teat duct and teat cistern, with presence of lymphocytes (H&E stain) (Mavrogianni, personal collection); (b) Inducible lymphoid nodule, present at the border between teat duct and teat cistern, with presence of T lymphocytes (CD3+) (immunohistochemical stain) (Fragkou, personal collection); (c) Inducible lymphoid nodule, present at the border between teat duct and teat cistern (H&E stain) (Fragkou, personal collection); (d) Inducible lymphoid nodule, present at the border between teat duct and teat

15 cistern (immunohistochemical stain) (Fragkou, personal collection).



- 20
- 21
- 22

- 23 Figure S2: (a) Presence of neutrophils in milk during acute stage of mammary infection (Giemsa
- stain) (Mavrogianni, personal collection); (b) Presence of neutrophils in mammary tissue during acute
- 25 stage of mammary infection (H&E stain) (Fthenakis, personal collection).



Figure S3: Presence of clots within the teat cistern of ewes during mastitis, as a consequence of cell accumulation therein, detected ultrasonographically (longitudinal section, image taken and processed on a MyLab® 30 ultrasonography system [ESAOTE SpA, Italy] with linear transducer, imaging frequency: 12.0 MHz - scanning depth: 30 mm) (Barbagianni, personal collection).



- 47 Figure S4: (a) Presence of lymphocytes in mammary tissue during chronic stage of mammary
- 48 infection (H&E stain) (Fthenakis, personal collection); (b) Presence of lymphocytes in teat during
 49 chronic stage of mammary infection (immunohistochemical stain) (Fragkou, personal collection).
- 49 chronic stage of manimary meetion (inimunonistochemical stain) (Fragkou, personal conectio





59 identification by MALDI-TOF MS) (Katsafadou, personal collection).



- 69 Figure S6: Identification of lactoferrin (TRFL) and lactoperoxidase (PERL) spots on a two-
- dimensional agarose gel from the milk of a ewe with mastitis (protein identification by MALDI-TOFMS) (Katsafadou, personal collection).



72



© 2019 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).