

Comparative hydrodynamic and nanoscale imaging study on the interactions of teicoplanin-A2 and bovine submaxillary mucin as a model ocular mucin

CHUN, Taewoo, PATTEM, Jacob, GILLIS, Richard http://orcid.org/0000-0002-7607-6808, DINU, Vlad T., YAKUBOV, Gleb E., CORFIELD, Anthony P. and HARDING, Stephen E.

Available from Sheffield Hallam University Research Archive (SHURA) at:

https://shura.shu.ac.uk/32139/

This document is the Supplemental Material

Citation:

CHUN, Taewoo, PATTEM, Jacob, GILLIS, Richard, DINU, Vlad T., YAKUBOV, Gleb E., CORFIELD, Anthony P. and HARDING, Stephen E. (2023). Comparative hydrodynamic and nanoscale imaging study on the interactions of teicoplanin-A2 and bovine submaxillary mucin as a model ocular mucin. Scientific Reports, 13 (1): 11367. [Article]

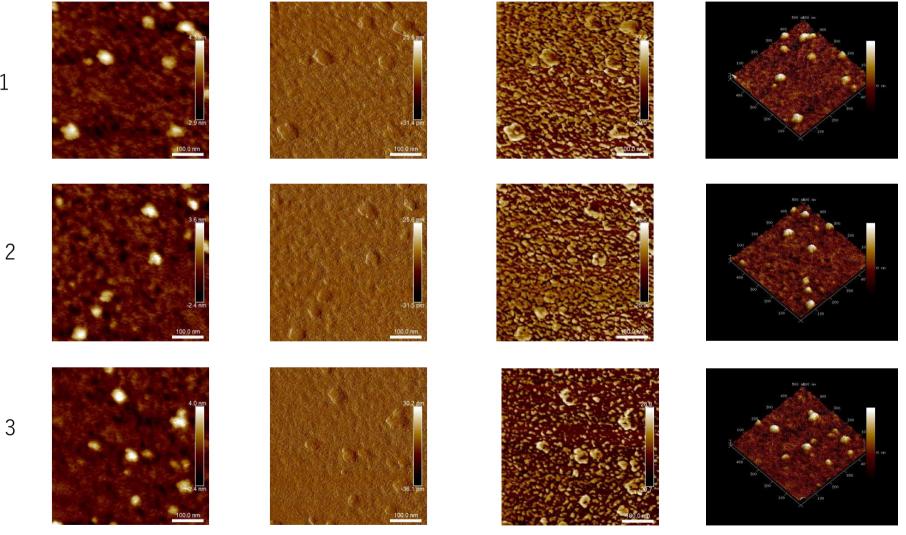
Copyright and re-use policy

See http://shura.shu.ac.uk/information.html

Comparative hydrodynamic and nanoscale imaging study on the interactions of teicoplanin-A2 and bovine submaxillary mucin as a model ocular mucin (Chun et al)

Supplementary Information for Figure 4: AFM imaging for teicoplanin-BSM mixtures, with controls

Teicoplanin control 0.125 mg/ml – H_2O



Area 1

Area 2

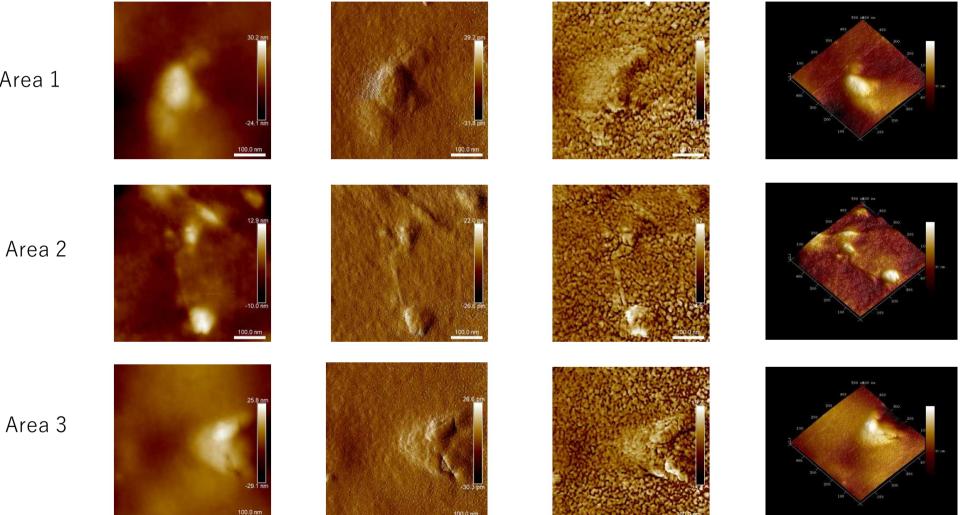
Teicoplanin Control 1.25 mg/ml – H_2O

5.9 nn 109.9 pn -116.7 pm -3.7 nn Height Senso Amplitude Error 145.0 pr -151.3 pm Height Sensor Amplitude Error 100.0 nm 122<u>.4 pm</u> 6.6 nn -135.6 pm -4.0 nm Height Sensor Amplitude Error 100.0 nm

Area 1

Area 2

Teicoplanin Control 12.5 mg/ml – H_2O



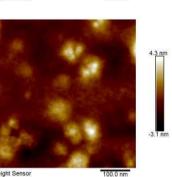
Area 1

BSM Control 1 mg/ml – H_2O

-6.4 nm

Area 1

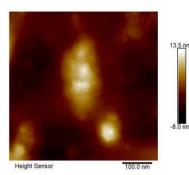


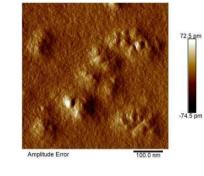


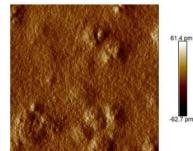
100.0 nm

Height Sensor

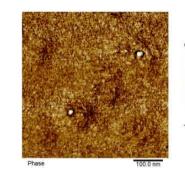
Height Sensor

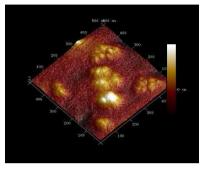


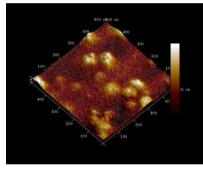


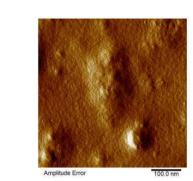


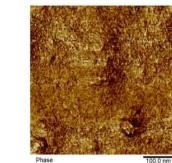
Amplitude Error









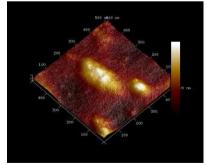


Phase

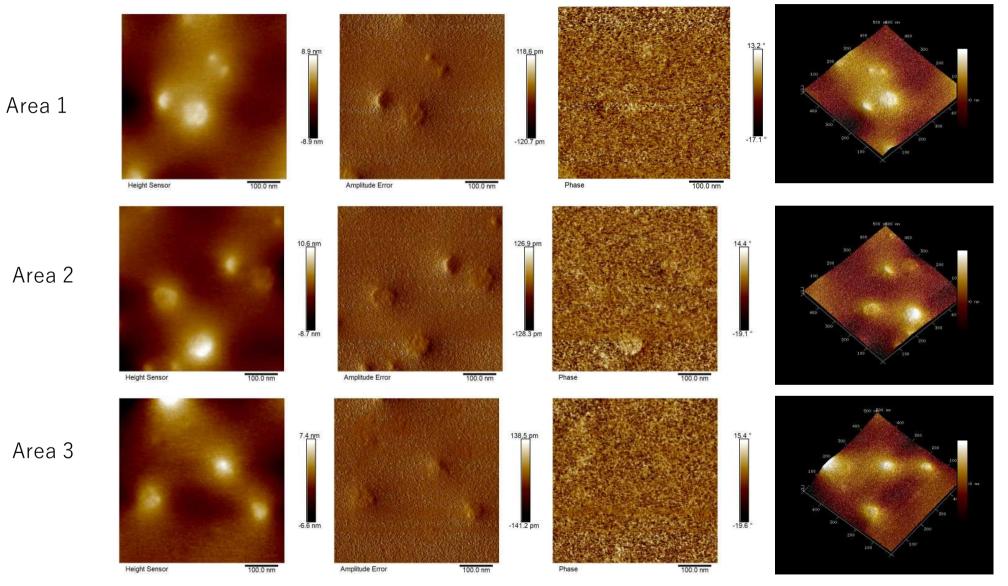
90.8 p

-95.4 pm

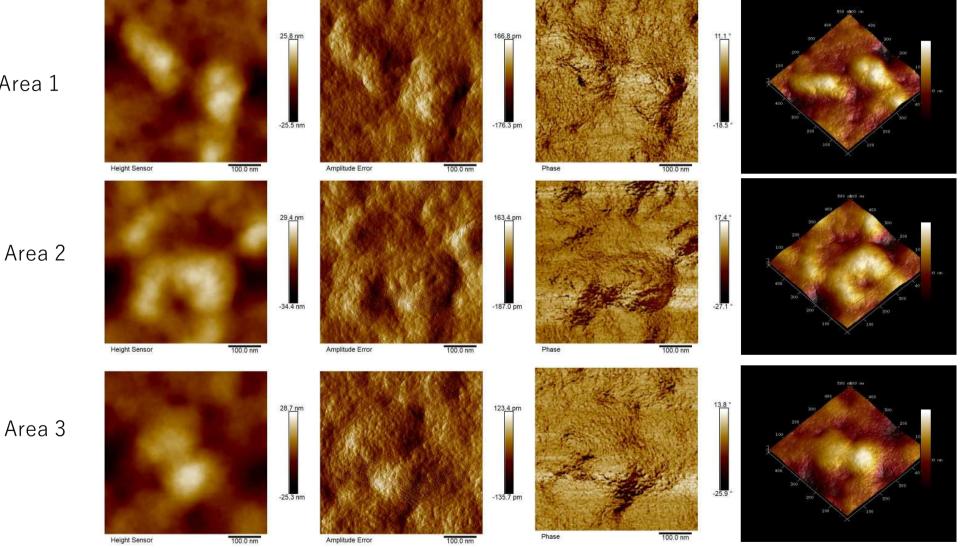




TP (0.125 mg/ml) - BSM (1 mg/ml) - H_2O

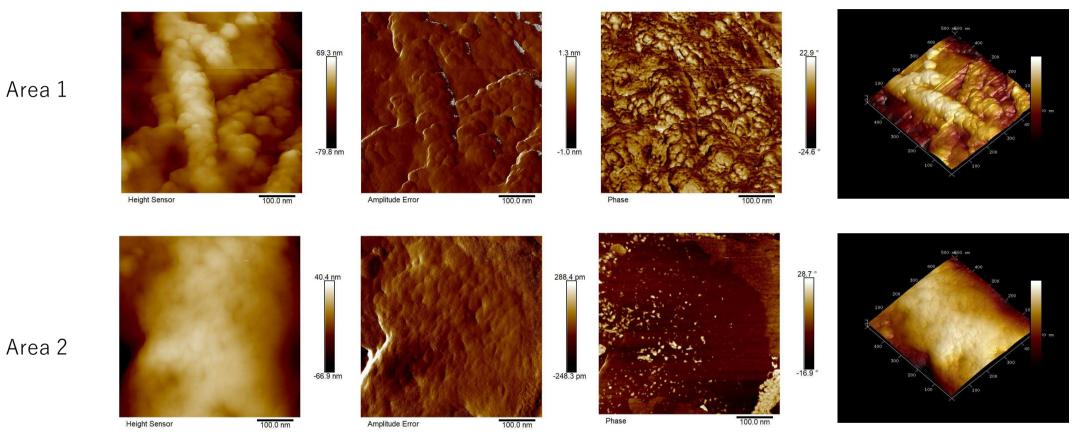


TP (1.25 mg/ml) - BSM (1 mg/ml) - H_2O



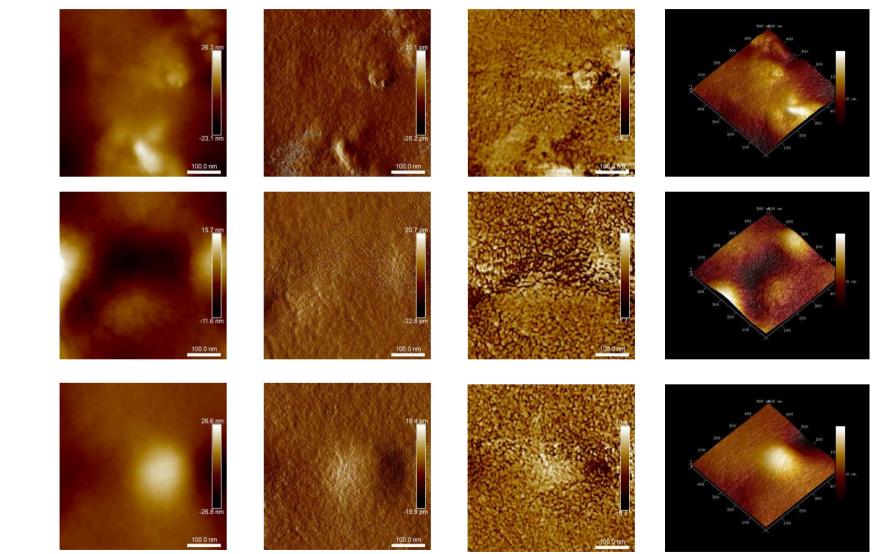
Area 1

TP (12.5 mg/ml) - BSM (1 mg/ml) - H_2O



Area 2

Additional TP (12.5 mg/ml) - BSM (1 mg/ml) - H_2O



Area 1

Area 2