Evaluation of antiviral activity of nanofiber chitosan and nanofiber chitosan–zinc oxide nano-hybrids against HSV1 infection, in Vero cell lines

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type 1 human and murine herpes virus 1

Vero cell line

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Abstract

Objective: To evaluate the antiviral activity of nanofiber chitosan and nanofiber chitosan–zinc oxide nano-hybrids against HSV1 infection in Vero cell lines.

Methods: Vero cell lines were infected with HSV1 and treated with different concentrations of nanofiber chitosan and nanofiber chitosan–zinc oxide nano-hybrids. The antiviral activity was measured by determining the virus yield in the supernatant of infected cells.

Results: The antiviral activity of nanofiber chitosan and nanofiber chitosan–zinc oxide nano-hybrids was dose-dependent, with the highest antiviral activity observed at the highest concentration tested.

Conclusion: Nanofiber chitosan and nanofiber chitosan–zinc oxide nano-hybrids have potential for use as antiviral agents against HSV1 infection in Vero cell lines.

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Conflict of Interest

The authors declare that they have no conflict of interest.

References

