Supplementary Material

**Innate immune response of primary human keratinocytes to West Nile virus infection and its modulation by mosquito saliva**

**Magali GARCIA1,2, Haoues ALOUT3, Fodé DIOP4, Alexia DAMOUR2, Michèle BENGUE4,Mylène WEILL3, Dorothée MISSE4, Nicolas LEVEQUE1,2 and Charles BODET2**

**Correspondence:** Charles Bodet, [charles.bodet@univ-poitiers.fr](mailto:charles.bodet@univ-poitiers.fr)

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**Supplementary Figure 1.** Effect of 0.5 µg/L of *Aedes aegypti* saliva on WNV replication. Viral titers were determined in cell supernatant by end-point dilution assay at 24 h and 48 h post-infection. Data are represented as mean + SEM of three independent experiments performed in duplicate.

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**Supplementary Figure 2.** Effect of 0.5 µg/L of *Aedes aegypti* (**A**) or *Culex quinquefasciatus* (**B**) saliva on the WNV-induced inflammatory response during human primary keratinocyte infection. M-CSF mRNA expression by keratinocytes infected with WNV at MOI of 1 for 24 h and 48 h. Data are represented as mean + SEM of three independent experiments performed in duplicate. \*p< 0.05.

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**Supplementary Figure 3.** Effect of 0.5 µg/L of *Aedes aegypti* saliva on the WNV-induced IFNβ and CXCL10 secretion during human primary keratinocyte infection. Protein concentrations (pg/mL) were measured by ELISA assays in culture supernatants of keratinocytes infected with WNV at MOI of 1 for 48 h. Data are represented as mean + SEM of three independent experiments performed in duplicate. \*p< 0.05.

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**Supplementary Figure 4.** Effect of 0.5 µg/L of *Aedes aegypti* saliva on uninfected human primary keratinocytes after 24 h of stimulation. mRNA expression levels are expressed as the fold increase above unstimulated cultures. Data are represented as mean + SEM of three independent experiments realized in duplicate.

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**Supplementary Figure 5.** Effect of 0.5 µg/L of *Culex quinquefasciatus* saliva on the WNV-induced IFNβ and CXCL10 secretion during human primary keratinocyte infection. Protein concentrations (pg/mL) were measured by ELISA assays in culture supernatants of keratinocytes infected with WNV at MOI of 1 for 48 h. Data are represented as mean + SEM of three independent experiments performed in duplicate. \*p< 0.05.

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**Supplementary Figure 6.** Effect of 0.5 µg/L of *Culex quinquefasciatus* saliva on uninfected human primary keratinocytes after 24 h of stimulation. mRNA expression levels are expressed as the fold increase above unstimulated cultures. Data are represented as mean + SEM of three independent experiments realized in duplicate.