Supplemental material

**Eprinomectin nanoemulgel for transdermal delivery against endo- and ectoparasites: preparation, *in vitro* and *in vivo* evaluation**

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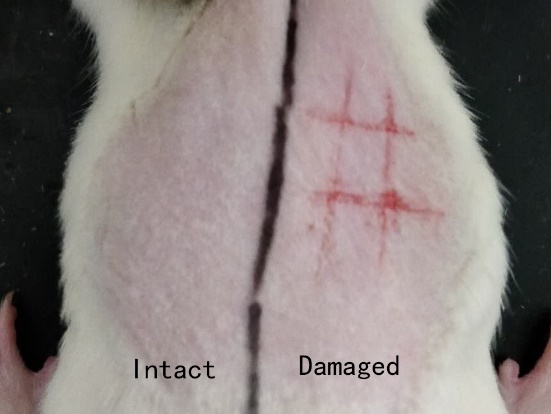
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**Figure S1.** Intact skin and damaged skin of rats.

**Table S1.** The score of erythema according to symptoms

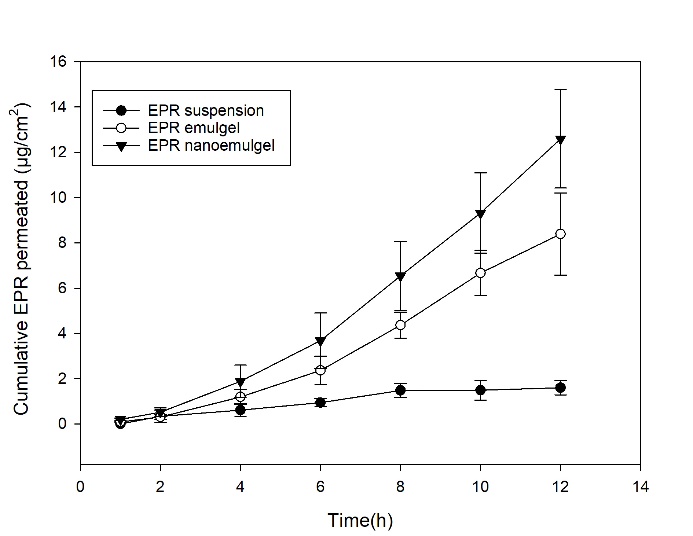
|  |  |
| --- | --- |
| Symptoms | Score |
| No erythema | 0 |
| Mild erythema (barely seen) | 1 |
| Visible | 2 |
| Severe erythema | 3 |
| Dark red erythema with scab | 4 |

**Table S2.** The score of edema according to symptoms

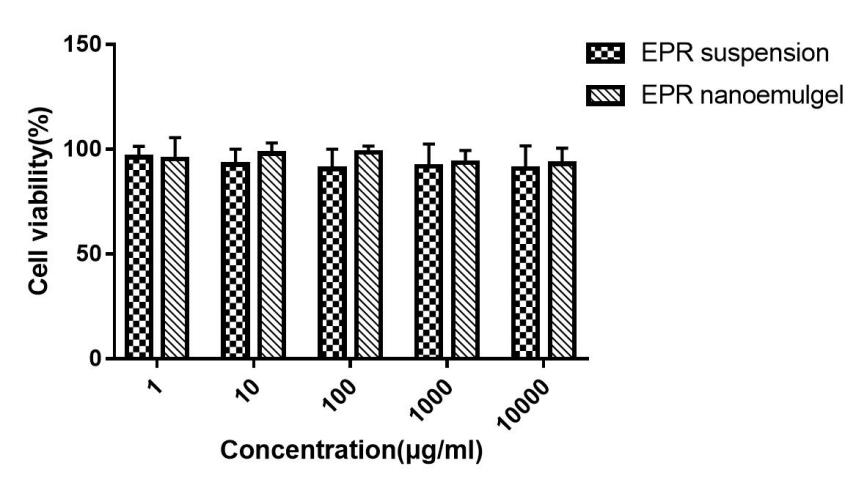
|  |  |
| --- | --- |
| Symptoms | Score |
| No edema | 0 |
| Mild edema (barely seen) | 1 |
| Bump with clear boundary | 2 |
| Bump up about 1cm | 3 |
| Bump up>1 cm, range increase | 4 |



**Figure S2.** Zeta size and zeta potential of optimized EPR nanoemulsion (A & B) and EPR emulsion (C & D).



**Figure S3.** The cumulative transdermal permeation profile of different EPR formulations (n=3, mean±SD)



**Figure S4.** Cell viability (%) exposed to EPR suspension and EPR nanoemulgel at different concentration.

**Table S3.** Average skin stimulation scores of different group (n=3)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Group | Intact/damaged skin | Scores | | | |
| 1(h) | 24(h) | 48(h) | 72(h) |
| Normal saline | Intact | 0 | 0 | 0 | 0 |
| Damaged | 0 | 0 | 0 | 0 |
| EPR nanoemulgel | Intact | 0 | 0 | 0 | 0 |
| Damaged | 0 | 0 | 0 | 0 |
| Blank nanoemulgel | Intact | 0 | 0 | 0 | 0 |
| Damaged | 0 | 0 | 0 | 0 |
| EPR nanoemulsion | Intact | 0 | 0 | 0 | 0 |
| Damaged | 0 | 0 | 0 | 0 |
| Blank nanoemulsion | Intact | 0 | 0 | 0 | 0 |
| Damaged | 0 | 0 | 0 | 0 |