**Table S2: Effect of *atxA* gene on the toxin independent virulent trait in rabbits IV injection model**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Strain** | **Description** | **Inoculum****(CFU)** | **Dead/****infected** | **MTTD****(days)** |
| Vollum ΔpXO1 | pXO1-pXO2+ | 108 | 0/4 | >14 |
|  |  |  |  |  |
| Vollum Δ*pag*Δ*cya*Δ*lef* | Complete deletion of the *pag, lef* and *cya* genes | 107 | 4/4 | 1 |
|  |  |  |  |  |
| Vollum Δ*pag*Δ*cya*Δ*lef***Δ*atxA*** | Complete deletion of the pag, lef , cya and *atxA* genes | 108 | 0/4 | >14 |
|  |  |  |  |  |
| Vollum ΔpXO1 *ba2805::****atxA*** | Deletion of pXO1 and insertion of the *atxA* into the genome.  | 107 | 4/4 | 1 |
|  |  |  |  |  |
| Vollum **Δ*atxA*** | Complete deletion of the *atxA* genes | 107 | 3/6 | 3 |
|  |  |  |  |  |
| Vollum **Δ*atxA*** SC |  | 5x107 | 0/4 | >14 |

Rabbits were inoculated IV with different doses of vegetative cells of the wild type and mutants strains.