**Supplementary Table 1.** The efficacy of the ‘test’ antivenoms (described by the amount (mg) and volume (l) of antivenom administered at volumes equivalent half (0.5 x), equal (1 x) or two and half times (2.5 x) of dose of the SAIMR ‘gold standard’ antivenoms that protected 100% (the calculated 2xED50) of the mice from the lethal toxicity of the East African snake venoms.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **The % survival of mice and the amount (mg) and volume (l) of ‘test’ antivenoms examined at 0.5, 1 and 2.5 fold volumes of the SAIMR antivenoms that imparted 100% protection against envenoming** | | | | | | | | | | | | **The amount (mg) and volume (l) of ‘gold standard’ SAIMR antivenoms imparting 100% protection (2xED50 dose) to mice \*\*** | |
|  | **Premium Serums & Vaccines PAN AFRICA** | | | **VINS**  **African** | | | **INOSAN**  **Inoserp PANAFRICAIN** | | | **Sanofi Pasteur**  **FavAfrique** | | |
| **Venom dose, g (# LD50)** | **0.5 x** | **1x** | **2.5x** | **0.5 x** | **1x** | **2.5x** | **0.5 x** | **1x** | **2.5x** | **0.5 x** | **1x** | **2.5x** | **SAIMR polyvalent** | **SAIMR ECHIS** |
| *B. arietans* 97.8 (5 LD50) | 0 %  1.32 mg  21 l | 40 %  2.65 mg  42 l | 40 % \*  6.64 mg  105 l | 0 %  0.45 mg  21 l | 0 %  0.91 mg  42 l | 0 %  2.27 mg  105 l | 0 %  0.66 mg  21 l | 0 %  1.33 mg  42 l | 40 %  3.32 mg  105 l | 0 %  2.03 mg  21 l | 0 %  4.06 mg  42 l | 80 %  10.15 mg  105 l | 100%  4.71 mg  42.14 l |  |
| *E. p. leakeyi* 80.0 (5 LD50) | ND | 80 %  2.21 mg  35 l | 60 % \*  5.57 mg  88 l | ND | 0 %  0.75 mg  35 l | 20 %  1.90 mg  88 l | ND | 60 %  1.11 mg  35 l | 100 %  2.79 mg  88 l | ND | 0 %  3.38 mg  35 l | 80 %  8.51 mg  88 l |  | 100%  2.52 mg  35.12l |
| *N. nigricollis* 61.0 (2.5 LD50) | 100 %  4.36 mg  69 l | 100 %  8.73 mg  138 l | ND | 0 %  1.49 mg  69 l | 100 %  2.99 mg  138 l | ND | 0 %  2.19 mg  69 l | 100 %  4.37 mg  138 l | ND | 100 %  6.67 mg  69 l | 100 %  13.34 mg  138 l | ND | 100%  15.45 mg  138.34l |  |
| *N. pallida*  46.5 (5 LD50) | 100 %  4.68 mg  74 l | 100 %  9.37 mg  148 l | ND | 0 %  1.61 mg  74 l | 0 %  3.21 mg  148 l | ND | 0 %  2.35 mg  74 l | 100 %  4.69 mg  148 l | ND | 100 %  7.16 mg  74 l | 100 %  14.31 mg  148 l | ND | 100%  16.42 mg  147.04l |  |
| *N. haje*  40.8 (5 LD50) | 0 %  4.49 mg  71 l | 0 %  8.98 mg  142 l | ND | 0 %  1.54 mg  71 l | 0 %  3.08 mg  142 l | ND | 0 %  2.25 mg  71 l | 0 %  4.50 mg  142 l | ND | 0 %  6.86 mg  71 l | 20 %  13.73 mg  142 l | ND | 100%  15.86 mg  142.0l |  |
| *D. polylepis* 30.8 (5 LD50) | 0 %  0.89 mg  14 l | 0 %  1.77 mg  28 l | 100 %  4.43 mg  70 l | 0 %  0.30 mg  14 l | 0 %  0.61 mg  28 l | 0 %  1.52 mg  70 l | 0 %  0.44 mg  14 l | 0 %  0.89 mg  28 l | 0 %  2.22 mg  70 l | 0 %  1.35 mg  14 l | 60 %  2.71 mg  28 l | 100 %  6.77 mg  70 l | 100%  3.08 mg  27.64l |  |
| \* Mice died from the high density of antivenom/venom complexes, not from venom-induced effects. This occurs occasionally in murine preclinical testing as a consequence of the 30 minute, 37oC incubation of the venom/antivenom mixture prior to injection. It likely has no clinical relevance, but can obfuscate preclinical results. \*\* This 2xED50 figure was calculated (double that) from the ED50 figure provided in Table 4. ND – not done. Blue boxes identify ‘test’ antivenoms & doses providing 100% protection against envenoming with lower amounts, mg, of antivenom (more dose-effective) than the 2xED50 ‘gold standard’ antivenom dose. Green boxes identify ‘test’ antivenoms & doses providing 100% protection against envenoming with higher amounts, mg, of antivenom (less dose-effective) than the 2xED50 ‘gold standard’ antivenom dose. Unshaded boxes identify antivenom & doses that failed to impart 100% protection to envenoming. | | | | | | | | | | | | | | |