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| **Table 1:** demographic summary of studies included in the pooled analyses. | | | | | | | | | | | | | | | | |
| Reference | Study site | Study size | Dose regimens | Dose (mg/kg) | Sampling matrices | Sample size LF | Samples/patient LF | Sample size DLF | Samples/patient DLF | Male/female (%) | Age (years) | Bodyweight (kg) | Z-score (weight for age) | Parasitaemia | Pregnant women (%) | Estimated gestational age (weeks) |
| [[1](#_ENREF_1)] | 1, 5, 11, 13, 21 | 624 | 6 doses over 3 days | 12 [8.16-24: 10-14.1] | Venous plasma | 594 | 1 [1-1: 1-1] | - | - | 51.6/48.4 | 3.42 [0-12.4: 2.06-5.42] | 13 [5-34: 10.8-16.8] | -0.895 [-4.28-10.5: -1.64--0.215] | 28900 [520-629000: 10900-69200] | 0 | - |
| [[2](#_ENREF_2)] | 2 | 122 | 6 doses over 3 days | 12.3 [8.11-16.1: 10.9-13.6] | Capillary blood | 121 | 1 [1-1: 1-1] | - | - | 59/41 | 7.29 [0.361-14.6: 5-11] | 20 [7.5-50.5: 15.5-29] | -0.715 [-3.49-4.54: -1.41--0.18] | 25600 [1200-4e+05: 7990-67500] | 0 | - |
| [[3](#_ENREF_3)] | 3, 22 | 353 | 6 doses over 3 days | 12 [8.11-24: 10-13.3] | Capillary blood | 339 | 1 [1-1: 1-1] | - | - | 48.2/51.8 | 2.67 [0.333-5: 1.83-3.58] | 12 [5-21: 10-14] | -0.81 [-4.47-3.31: -1.51--0.02] | 48700 [2220-192000: 23300-86800] | 0 | - |
| [[3](#_ENREF_3)] | 3, 22 | 152 | 6 doses over 3 days | 12 [8.14-20: 10-13.3] | Capillary blood | 133 | 1 [1-1: 1-1] | - | - | 46.7/53.3 | 3 [0.417-5: 1.92-3.75] | 12 [6-21: 10-14.8] | -0.885 [-4.22-2: -1.54--0.0975] | 17400 [140-205000: 4840-49000] | 0 | - |
| [[4](#_ENREF_4)] | 3 | 50 | 6 doses over 3 days | 12 [8.57-16: 10.9-13.9] | Venous plasma | 404 | 8 [5-9: 8-9] | - | - | 38/62 | 4 [1-9.92: 2-6] | 12.6 [8-30: 10-16.8] | -1.28 [-3.75-1.72: -1.88--0.655] | 34800 [2120-192000: 5570-57500] | 0 | - |
| [[5](#_ENREF_5)] | 4 | 20 | 6 doses over 3 days | 11.6 [9.6-13.8: 11.2-12.2] | Venous plasma | 120 | 6 [6-6: 6-6] | - | - | 50/50 | 9.4 [5.07-12.4: 6.9-11.3] | 25.5 [20-41: 21-31] | -0.36 [-0.79-0.56: -0.572--0.27] | 19100 [480-147000: 3960-50600] | 0 | - |
| [[6](#_ENREF_6)] | 6 | 177 | 6 doses over 3 days | 12 [8.45-18.5: 10.9-15] | Capillary blood | 157 | 1 [1-1: 1-1] | - | - | 50.8/49.2 | 2.82 [0.497-5.17: 1.66-4.19] | 11 [6.5-19: 10-14] | -1.29 [-5.3-3.31: -2.38--0.46] | 31500 [480-2e+05: 4800-68800] | 0 | - |
| [[7](#_ENREF_7)] | 7 | 101 | 6 doses over 3 days | 10.6 [8.05-18.8: 9.16-13.4] | Venous plasma | 101 | 1 [1-1: 1-1] | - | - | 60.4/39.6 | 2.83 [0.5-4.92: 1.67-3.67] | 12 [6.4-18: 9.4-13.6] | -1.22 [-3.62-2.3: -1.87--0.52] | 57200 [2120-214000: 33800-113000] | 0 | - |
| [[8](#_ENREF_8)] | 8 | 143 | 6 doses over 3 days | 11.2 [3.2-18.5: 9.8-13.2] | Venous plasma | 486 | 3 [2-4: 3-4] | 392 | 3 [1-4: 3-3] | 43.4/56.6 | 9 [1-78: 3.75-15.5] | 20 [6.5-150: 13-41] | -1.59 [-4.1-1.08: -2.07--1.02] | 15400 [120-4e+05: 4220-57600] | 2.1 | - |
| [[9](#_ENREF_9)] | 9 | 125 | 6 doses over 3 days | 10 [5.26-12: 8.51-11.6] | Venous plasma | 212 | 2 [1-2: 1-2] | 121 | 1 [1-1: 1-1] | 55.2/44.8 | 2.92 [0.5-5: 1.92-4] | 11 [5.7-23: 9.5-13.5] | -1.52 [-5.31-2.62: -2.29--0.86] | 41400 [280-450000: 13300-101000] | 0 | - |
| [[10](#_ENREF_10)] | 10 | 13 | 6 doses over 3 days | 11.4 [8.89-12.6: 10.9-12] | Venous plasma | 201 | 16 [14-16: 15-16] | 197 | 16 [12-16: 15-16] | 61.5/38.5 | 7.58 [5.17-9.67: 6.75-9] | 19 [15-27: 16-21] | -1.73 [-3.43--0.65: -2.55--1.21] | 11400 [98-127000: 3190-64200] | 0 | - |
| [[11](#_ENREF_11)] | 12 | 470 | 6 doses over 3 days | 10.6 [5.39-16: 9.06-12] | Venous plasma | 887 | 2 [1-2: 2-2] | - | - | 47/53 | 9.01 [1.21-80: 4.31-20.1] | 24 [10-89: 15-49.4] | -0.84 [-4.39-2.56: -1.58--0.14] | 10500 [125-140000: 3460-32500] | 0.213 | - |
| [[12](#_ENREF_12)] | 12 | 116 | 6 doses over 3 days | 8.42 [5.78-10.9: 7.74-9.23] | Venous and capillary plasma | 1030 | 5 [3-26: 5-6] | - | - | 0/100 | 21.5 [15-38: 19-25] | 57 [44-83: 52-62] | - | 1380 [24-194000: 203-5140] | 100 | 22 [13-39: 19-30.2] |
| [[13](#_ENREF_13)] | 14 | 462 | 6 doses over 3 days | 10.9 [5.85-18.9: 9.6-12.4] | Venous blood | 440 | 1 [1-1: 1-1] | - | - | 49.1/50.9 | 13.1 [6.03-86.7: 9.79-18.7] | 34.5 [18-82: 24-50] | -1.24 [-3.14-5.73: -1.88--0.55] | 416 [16-285000: 112-1550] | 0 | - |
| [[14](#_ENREF_14)] | 14 | 141 | 6 doses over 3 days | 10.5 [8.05-17.1: 9.02-13.3] | Venous blood | 106 | 1 [1-1: 1-1] | - | - | 58.2/41.8 | 3.14 [0.745-5.01: 2.15-4.09] | 13 [7-21: 11.2-14.6] | -0.91 [-3.24-1.83: -1.59--0.07] | 26100 [2000-194000: 4800-48900] | 0 | - |
| [[15](#_ENREF_15)] | 15 | 77 | 6 doses over 3 days | 11.2 [6.67-16: 9.63-12.6] | Venous plasma | 77 | 1 [1-1: 1-1] | - | - | 50.6/49.4 | 12 [1-57: 5-25] | 28.5 [8-72: 15.5-47] | -1.15 [-4.97-3.45: -2.46--0.47] | 29000 [5280-202000: 10600-53400] | 0 | - |
| [[16](#_ENREF_16)] | 16, 18 | 44 | 6 doses over 3 days | 11.8 [8.05-16.7: 9.96-14.9] | Capillary blood | 34 | 1 [1-1: 1-1] | - | - | 43.2/56.8 | 1.75 [0.5-5: 1.13-3.37] | 11 [7.2-15.7: 8.98-12.7] | -0.91 [-3.11-1.89: -1.62--0.12] | 16000 [2080-524000: 5930-38200] | 0 | - |
| [[17](#_ENREF_17)] | 17 | 103 | 6 doses over 3 days | 9.8 [7.38-13.7: 9.06-10.3] | Capillary plasma | 466 | 5 [1-5: 4-5] | - | - | 0/100 | 24 [15-42: 20-33] | 49 [35-65: 46.5-53] | - | 3960 [56.8-154000: 668-21300] | 100 | 22.6 [13.1-39: 17.8-28.4] |
| [[18](#_ENREF_18)] | 17 | 225 | 6 doses over 3 or 5 days and 4 doses over 2 days | 9.6 [7.16-16: 9.06-10.9] | Venous plasma | 815 | 4 [1-5: 4-4] | - | - | 72/28 | 23 [3-75: 16-35] | 49 [10-67: 40-53] | -2.41 [-4.03--0.5: -2.77--1.78] | 5250 [381-2e+05: 1650-44000] | 0 | - |
| [[19](#_ENREF_19)] | 19 | 51 | 6 doses over 3 or 5 days and 4 doses over 2 days | 10.2 [6.96-13.3: 8.73-10.7] | Venous plasma | 633 | 13 [9-13: 12-13] | - | - | 64.7/35.3 | 23 [15-50: 20-30] | 47 [36-69: 44.8-55] | - | 13300 [529-176000: 4430-39200] | 0 | - |
| [[20](#_ENREF_20)] | 19, 17 | 147 | 6 doses over 3 days | 9.7 [5.93-16: 8.73-10.9] | Venous plasma | 715 | 5 [3-6: 5-5] | - | - | 72.8/27.2 | 22 [2-63: 16-30] | 49.5 [8-81: 41-55] | -1.34 [-3.07-2.08: -2.17--0.242] | 6260 [264-165000: 2410-34100] | 0 | - |
| [[21](#_ENREF_21)] | 20 | 79 | 6 doses over 3 days | 9.6 [7.27-14.1: 8.73-10.9] | Venous plasma | 79 | 1 [1-1: 1-1] | - | - | 81/19 | 23 [6-49: 18.5-29.5] | 50 [17-66: 41.5-55] | -2.28 [-3.12--1.45: -2.7--1.87] | 19600 [21.2-1e+05: 5930-43100] | 0 | - |
| [[22](#_ENREF_22)] | 17 | 36 | 6 doses over 3 days; 3 doses over 3 days | 15.5 [7.74-20.9: 9.6-17.5] | Venous plasma | 463 | 13 [4-14: 13-14] | - | - | 86.1/13.9 | 29.5 [18-64: 26.8-40] | 54 [42-63: 49.8-56.2] | - | 5120 [92.8-142000: 849-36400] | 0 | - |
| [[23](#_ENREF_23)] | 17 | 13 | 6 doses over 3 days | 10.2 [8.42-11.7: 9.8-10.7] | Venous plasma | 196 | 15 [15-16: 15-15] | 152 | 15 [10-15: 13.5-15] | 0/100 | 20 [14-42: 18-27] | 47 [41-57: 45-49] | - | 758 [91-25600: 299-2040] | 100 | 23 [13.1-38: 19.2-30.1] |
| [[24](#_ENREF_24)] | 17 | 44 | 4 doses over 2 days | 9.51 [7.5-11.7: 8.73-10.6] | Venous plasma | 44 | 1 [1-1: 1-1] | - | - | 84.1/15.9 | 25.5 [9-63: 17.8-37] | 49.5 [22-64: 42-55] | -1.33 [-1.74--0.92: -1.54--1.12] | 2390 [43-161000: 625-41900] | 0 | - |
| [[25](#_ENREF_25)] | 19 | 164 | 6 doses over 3 days | 9.52 [5.91-13.7: 8.72-10.4] | Venous plasma | 449 | 2 [1-6: 2-3] | - | - | 70.1/29.9 | 25 [12-71: 20.8-34] | 50.4 [35-81.2: 46-55] | - | 1610 [13-436000: 194-20500] | 0 | - |

*Data are presented as median [range: interquartile range].*

*Included study sites were Benin (1); Bandim Health Projects study area (Bandim, Belem, and Cuntum), Guinea-Bissau (2); Fukayosi, Tanzania (3); Kampala, Uganda (4); Kenya (5); Kibaha District, Tanzania (6); Kilifi, Kenya (7); Kilombero District, Tanzania (8); Madang and East Sepik Provinces, Papua New Guinea (9); Madang Province, Papua New Guinea (10); Mali (11); Mbarara, Uganda (12); Mozambique, Mozambique (13); Nimba County, Liberia (14); Phalanxay District, Loas (15); Sekou, Liberia (16); SMRU, Thailand (17); Allada, Benin (18); Bangkok, Thailand (19); Battambang Province, Cambodia (20); Tanzania (21) and Yombo, Tanzania (22). Age-for-weight z-score was calculated for all children below 10.08 years of age*.

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