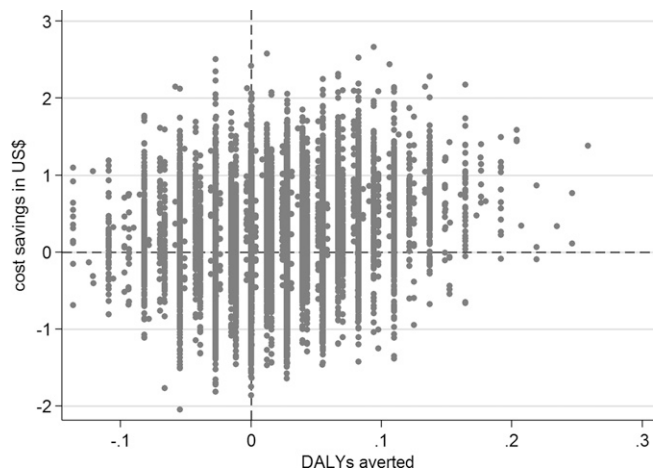
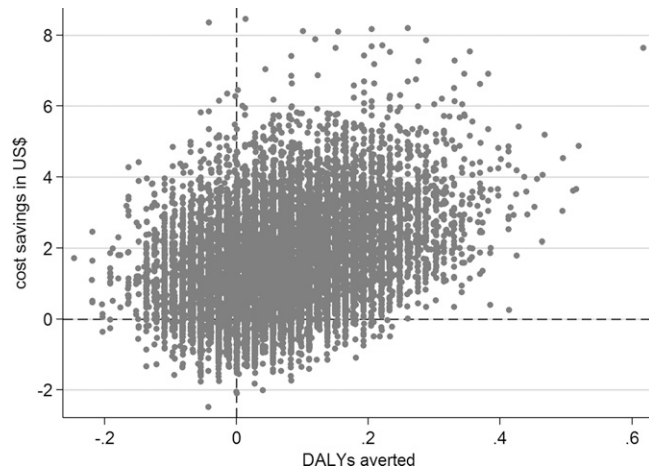


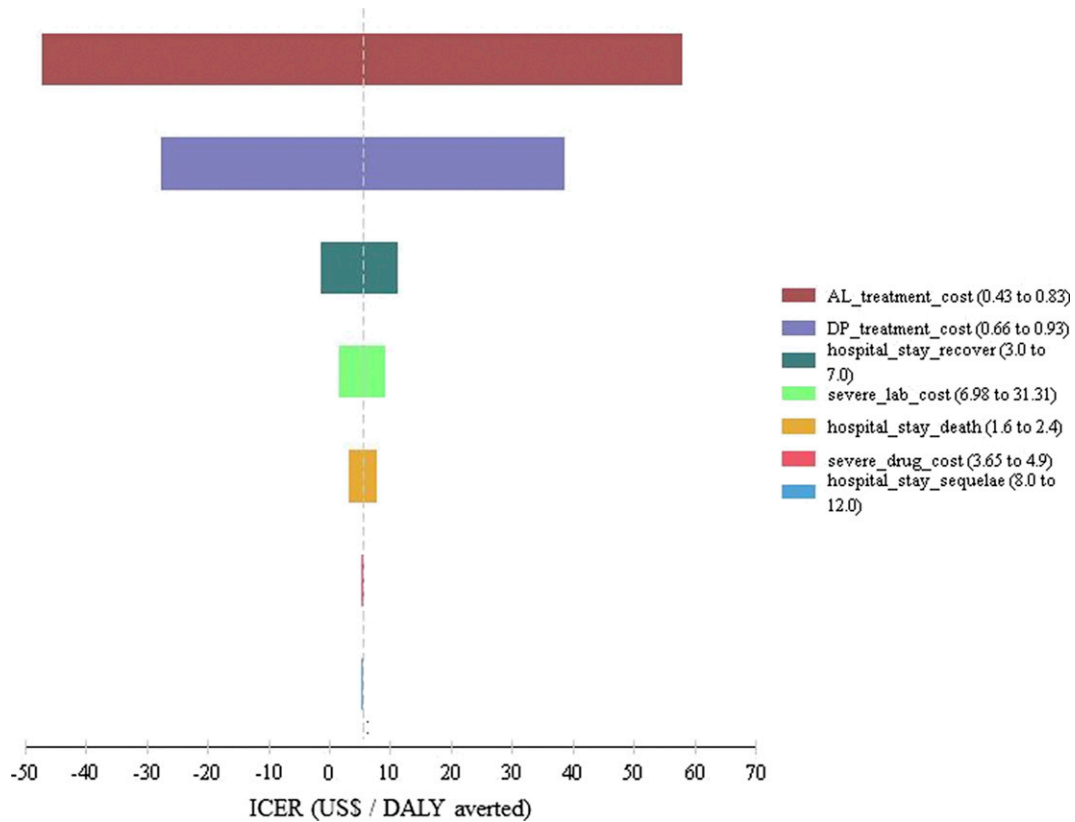
SUPPLEMENTAL FIGURE 1. Kaplan Meier curves for DP and AL treatment in low-to-moderate (**A**) and moderate-to-high (**B**) malaria transmission setting. AL = artemether-lumefantrine; DP = dihydroartemisinin-piperazine.



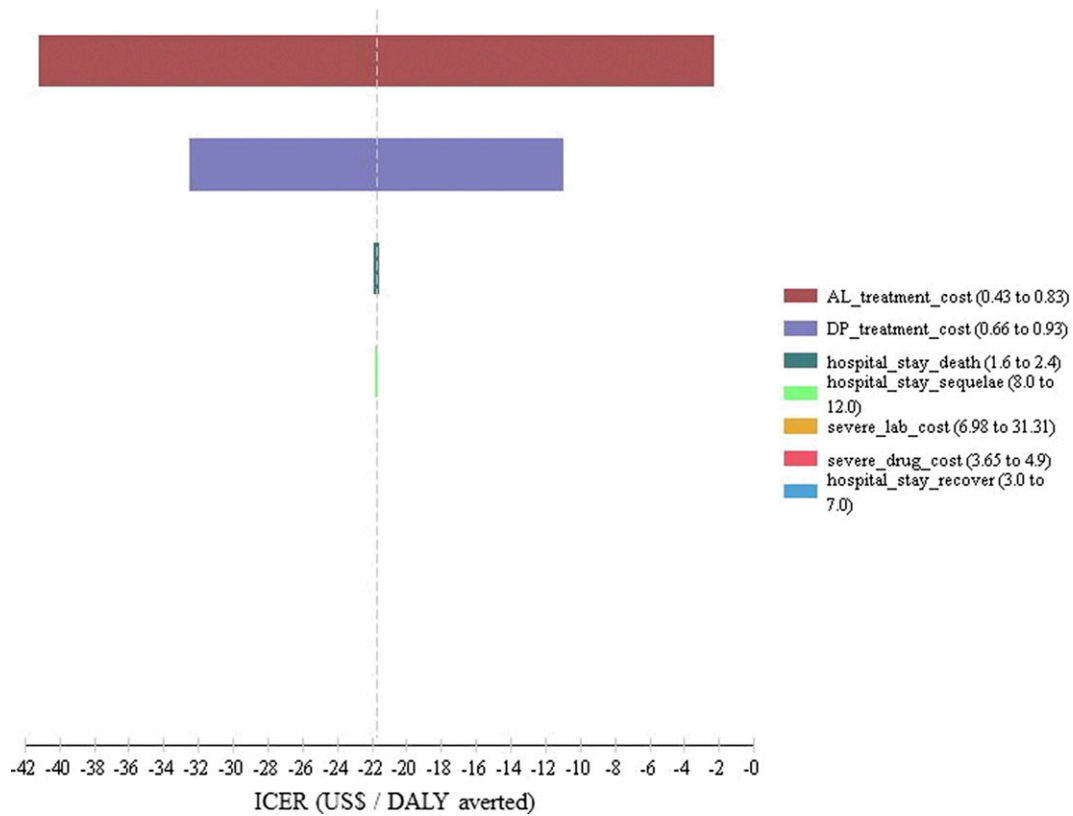
SUPPLEMENTAL FIGURE 2. Scatterplot of incremental costs and effectiveness for DP vs. AL for first-line treatment of uncomplicated *Plasmodium falciparum* malaria in the low-to-moderate transmission scenario (10,000 iterations) (all values are calculated per child over 1 year). AL = artemether-lumefantrine; DP = dihydroartemisinin-piperazine.



SUPPLEMENTAL FIGURE 3. Scatterplot of incremental costs and effectiveness for DP vs. AL for first-line treatment of uncomplicated *Plasmodium falciparum* malaria in the moderate-to-high transmission scenario (10,000 iterations) (all values are calculated per child over 1 year). AL = artemether–lumefantrine; DP = dihydroartemisinin–piperaquine.



SUPPLEMENTAL FIGURE 4. Tornado diagram: univariate sensitivity analyses for the low-to-moderate transmission scenario.



SUPPLEMENTAL FIGURE 5. Tornado diagram: univariate sensitivity analyses for the moderate-to-high transmission scenario.

SUPPLEMENTAL TABLE 1
Day 42 treatment failure rates for DP and AL

| Study site | Country | All patients | | DP treatment | | AL treatment | |
|--|--------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|
| | | Sample size (<i>n</i>) | Day 42 failure rate (%) | Sample size (<i>n</i>) | Day 42 failure rate (%) | Sample size (<i>n</i>) | Day 42 failure rate (%) |
| Low-to-moderate transmission: day 42 failure rate < 35% | | | | | | | |
| Epicentre, Mbarara | Uganda | 276 | 23.91 | 185 | 20.00 | 91 | 31.87 |
| Kilifi, KEMRI-Wellcome Trust Collaborative Program | Kenya | 222 | 29.73 | 150 | 30.67 | 72 | 27.78 |
| Centro de Investigaçao em Saude de Manhica | Mozambique | 445 | 25.84 | 299 | 24.08 | 146 | 29.45 |
| Tropical Diseases Research Center, Ndola | Zambia | 304 | 30.59 | 203 | 25.62 | 101 | 40.59 |
| Moderate-to-high transmission: day 42 failure rate ≥ 35% | | | | | | | |
| Center Muraz, Nanaro | Burkina Faso | 301 | 36.21 | 301 | 30.85 | 100 | 47.00 |
| All study sites | | | | | | | |
| Total | - | 1,548 | 29.01 | 1,038 | 25.92 | 510 | 35.29 |

AL = artemether-lumefantrine; DP = dihydroartemisinin-piperazine.

SUPPLEMENTAL TABLE 2

Baseline and posttreatment hazard rates for recurrent malaria by antimalarial treatment and transmission setting

| Transmission setting | Low-to-moderate transmission | | Medium-to-high transmission | |
|----------------------|------------------------------|--------|-----------------------------|--------|
| | Hazard rate | SD | Hazard rate | SD |
| Baseline hazard rate | 0.0795 | 0.0088 | 0.1319 | 0.0228 |
| DP treatment | | | | |
| Week 1 | 0.0219 | 0.0052 | 0.0000 | 0.0000 |
| Week 2 | 0.0262 | 0.0057 | 0.0000 | 0.0000 |
| Week 3 | 0.0153 | 0.0044 | 0.0000 | 0.0000 |
| Week 4 | 0.0234 | 0.0055 | 0.0202 | 0.0101 |
| Week 5 | 0.0519 | 0.0083 | 0.0361 | 0.0136 |
| Week 6 | 0.0715 | 0.0100 | 0.1123 | 0.0245 |
| AL treatment | | | | |
| Week 1 | 0.0074 | 0.0043 | 0.0000 | 0.0000 |
| Week 2 | 0.0198 | 0.0070 | 0.0000 | 0.0000 |
| Week 3 | 0.0429 | 0.0104 | 0.0000 | 0.0000 |
| Week 4 | 0.0633 | 0.0129 | 0.1919 | 0.0440 |
| Week 5 | 0.0986 | 0.0167 | 0.1750 | 0.0468 |
| Week 6 | 0.0875 | 0.0165 | 0.1515 | 0.0479 |

AL = artemether-lumefantrine; DP = dihydroartemisinin-piperazine; SD = standard deviation.