

**Table S2: Outliers identified per study**

| <b>Study</b>                    | <b>Contributed<br/>(n)*</b> | <b>Outliers<br/>(n)</b> | <b>p-value**</b>             | <b>Number<br/>included</b> |
|---------------------------------|-----------------------------|-------------------------|------------------------------|----------------------------|
| Bancone_et_al_2015 (27)         | 101                         | 0                       | 0.09                         | 101                        |
| Bancone_et_al_2016 (28)         | 110                         | 4                       | 1                            | 106                        |
| Bancone_et_al_2017 (29)         | 276                         | 5                       | 0.13                         | 271                        |
| Brito_et_al_2016 (30)           | 2                           | 0                       | 1                            | 2                          |
| Deng_et_al_2017 (31)            | 22                          | 14                      | <b>&lt;0.001</b>             | 8                          |
| Johnson_et_al_2009 (32)         | 87                          | 4                       | 0.79                         | 83                         |
| Kim_et_al_2011 (33)             | 66                          | 1                       | 0.58                         | 65                         |
| La_Rue_et_al_2014 (34)          | 73                          | 0                       | 0.18                         | 73                         |
| Ley_et_al_2021 (35)             | 144                         | 7                       | 0.5                          | 137                        |
| Pal_et_al_2021 (36)             | 19                          | 0                       | 0.83                         | 19                         |
| Reading_et_al_2016 (37)         | 68                          | 2                       | 1                            | 66                         |
| Roca-Feltrer_et_al_2014<br>(38) | 125                         | 7                       | 0.29                         | 118                        |
| Roh_et_al_2016 (39)             | 50                          | 11                      | <b>&lt;0.001</b>             | 39                         |
| Satyagraha_et_al_2015 (40)      | 68                          | 1                       | 0.55                         | 67                         |
| Satyagraha_et_al_2016 (41)      | 42                          | 1                       | 1                            | 41                         |
| Satyagraha_et_al_2021 (42)      | 243                         | 0                       | <b>&lt;0.001<sup>a</sup></b> | 243                        |
| Xia_et_al_2016 (43)             | 242                         | 4                       | 0.13                         | 238                        |

\* excludes wild-type individuals, age <1yr, malaria positive individuals

\*\* p-value from chi-sq test comparing proportion of outliers in each study with proportion of outliers in the rest of the database, including Bonferroni adjustment

<sup>a</sup> % outliers significantly lower than other studies