

**S4 Table. Molecular tests for the diagnosis of human schistosomiasis in Brazil**

| Reference                              | Index test                         | Reference test                                              | Reference test specification: n° of slides, n° of samples               | Total number of cases | Total number of non-cases | Sensitivity (%) | Specificity (%) |
|----------------------------------------|------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------|---------------------------|-----------------|-----------------|
| Pontes et al. (2003) <sup>44</sup>     | PCR                                | Kato-Katz                                                   | 2 slides, 3 samples                                                     | 60                    | 134                       | 96.7            | 88.1            |
| Gomes et al. (2009) <sup>46</sup>      | PCR                                | Kato-Katz                                                   | 6 slides, 1 sample                                                      | 28                    | 39                        | 92.6            | 62.0            |
| Gomes et al. (2010) <sup>47</sup>      | PCR-ELISA                          | Kato-Katz                                                   | 12 slides, 1 sample                                                     | 38                    | 168                       | 97.4            | 85.1            |
| Gomes et al. (2010) <sup>47</sup>      | PCR-ELISA                          | Kato-Katz                                                   | 2 slides, 1 sample                                                      | 27                    | 179                       | 96.3            | 79.9            |
| Oliveira et al. (2010) <sup>29</sup>   | PCR                                | Kato-Katz                                                   | 3 samples                                                               | 34                    | 46                        | 73.5            | 100             |
| Oliveira et al. (2010) <sup>29</sup>   | PCR<br>SmF/SmR                     | Kato-Katz                                                   | 3 samples                                                               | 34                    | 46                        | 82.4            | 100             |
| Siqueira et al. (2021) <sup>23</sup>   | PCR-ELISA                          | Kato-Katz                                                   | 12 samples                                                              | 29                    | 172                       | 55.2            | 88.3            |
| Siqueira et al. (2021) <sup>23</sup>   | PCR-ELISA                          | Kato-Katz                                                   | 1 slide                                                                 | 16                    | 185                       | 68.8            | 86.5            |
| Carvalho et al. (2012) <sup>21</sup>   | PCR                                | Kato-Katz                                                   | 2 slides, 1 sample                                                      | 16                    | 203                       | 93.8            | 70.0            |
| Enk et al. (2012) <sup>43</sup>        | PCR                                | Kato-Katz, saline gradient and miracidia hatching technique | Kato-Katz: 18 slides, 4 samples. SG: 500mg, 1 sample. MHT: 1g, 1 sample | 69                    | 125                       | 100             | 91,2            |
| Gandasegui et al. (2018) <sup>25</sup> | LAMP<br>SmMIT                      | Kato-Katz                                                   | 2 slides, 1 sample                                                      | 13                    | 149                       | 93.0            | 80.1            |
| Senra et al. (2018) <sup>54</sup>      | PCR-ELISA<br>(commercial platform) | Kato-Katz                                                   | 12 slides                                                               | 38                    | 168                       | 97.4            | 85.1            |
| Senra et al. (2018) <sup>54</sup>      | PCR-ELISA<br>(commercial platform) | Kato-Katz                                                   | 12 slides                                                               | 38                    | 168                       | 97.4            | 91.1            |
| Magalhães et al. (2020) <sup>22</sup>  | qPCR                               | Kato-Katz or saline gradient or Helmintex                   | 18 slides, 3 samples ou 1 saline gradient ou 1 Helmintex                | 104                   | 111                       | 91.4            | 80.2            |

|                                      |                               |                                 |                                                                               |     |     |      |      |
|--------------------------------------|-------------------------------|---------------------------------|-------------------------------------------------------------------------------|-----|-----|------|------|
| Siqueira et al. (2021) <sup>23</sup> | qPCR<br>(Estreito de Miralta) | Kato-Katz                       | 2 slides, 1 sample                                                            | 15  | 127 | 80.0 | 89.0 |
| Siqueira et al. (2021) <sup>23</sup> | qPCR<br>(Estreito de Miralta) | Kato-Katz                       | 24 slides, 1 sample                                                           | 28  | 114 | 64.3 | 92.9 |
| Siqueira et al. (2021) <sup>23</sup> | qPCR<br>(Estreito de Miralta) | Saline gradient                 | 1000mg, 1 sample                                                              | 26  | 116 | 69.2 | 93.1 |
| Siqueira et al. (2021) <sup>23</sup> | qPCR<br>(Estreito de Miralta) | Kato-Katz or<br>saline gradient | 24 slides, 1 sample<br>(Kato-Katz, 1000mg, 1<br>sample (saline<br>gradient))  | 35  | 107 | 57.1 | 94.4 |
| Siqueira et al. (2021) <sup>23</sup> | qPCR<br>(Tabuas)              | Kato-Katz                       | 2 slides, 1 sample                                                            | 23  | 125 | 95.7 | 81.6 |
| Siqueira et al. (2021) <sup>23</sup> | qPCR                          | qPCR                            | 24 slides, 1 sample                                                           | 31  | 117 | 96.8 | 87.2 |
| Siqueira et al. (2021) <sup>23</sup> | qPCR<br>(Tabuas)              | Saline gradient                 | 1000mg, 1 sample                                                              | 43  | 105 | 81.4 | 90.5 |
| Siqueira et al. (2021) <sup>23</sup> | qPCR<br>(Tabuas)              | Kato-Katz or<br>saline gradient | 24 slides, 1 sample<br>(Kato-Katz, 1000mg, 1<br>samples (saline<br>gradient)) | 46  | 102 | 82.6 | 93.1 |
| Gomes et al. (2022) <sup>26</sup>    | LAMP<br>SmITS1                | Kato-Katz                       | Kato-Katz                                                                     | 144 | 178 | 11.8 | 93.3 |