**Decision letter**

...

**Author response**

*...*

**Author response table 1.**

<Author response table 1 title/legend>Expression values excluding sex-bias FC>2 (ancestry not considered).</Author response table 1 title/legend>

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *S. japonicum*  schistosomula | *S. japonicum*  adults | *S. mansoni*  schistosomula | *S. mansoni*  adults |
| Female Z:A | 0.86 N.S. | 0.81 N.S. | 0.93 N.S. | 0.69 \* |
| Male Z:A | 1.55 \*\*\* | 1.18 N.S. | 1.21\* | 1.14 N.S. |
| Z(F:M) / A(F:M) | 0.58 \*\*\* | 0.68 \*\*\* | 0.67 \*\*\* | 0.63 \*\*\* |
| Z(fem) : Z(male) | 0.61 \*\* | 0.76 \* | 0.70 \* | 0.73 \* |
| A(fem) : A(male) | 1.04 N.S. | 1.11 \* | 1.05 N.S. | 1.15 \* |
| N (Z) | 237 | 189 | 298 | 224 |
| N (A) | 2,364 | 1,447 | 2,364 | 1,447 |

**Author response table 2.**

<Author response table 2 title/legend>Expression values excluding sex-bias FC>2 (considering ancestry).</Author response table 2 title/legend>

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *S. japonicum* schistosomula | *S. japonicum* adults | *S. mansoni* schistosomula | *S. mansoni* adults |
| Female Z:A | 0.83\* | 0.71\* | 0.92 N.S. | 0.72 N.S. |
| Male Z:A | 1.23 N.S. | 1.38 N.S. | 1.20\* | 1.34 N.S. |
| Z(F:M) / A(F:M) | 0.67 \*\*\* | 0.52\*\*\* | O.77\*\*\* | 0.54\*\*\* |
| Z(fem) : Z(male) | 0.65\* | 0.50\* | 0.78 N.S. | 0.56\* |
| A(fem) : A(male) | 0.98 N.S. | 0.97 N.S. | 1.02 N.S. | 1.03 N.S. |
| N (Z) | 50 | 31 | 111 | 66 |
| N (A) | 2,364 | 1,447 | 2,364 | 1,447 |

...

**Author response table 3.**

<Author response table 3 title/legend>Ratio of expression values, with minimum threshold of RPKM>1 and maximum expression threshold of RPKM<5. We did not account for ancestry. Level of significance (Wilcoxon test): \*P-value<0.05, \*\*P-value<0.001, \*\*\*P-value<0.0001,

N.S. P-value>0.05.</Author response table 3 title/legend>

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *S. japonicum*  schistosomula | *S. japonicum*  adults | *S. mansoni*  schistosomula | *S. mansoni*  adults |
| Female Z:A | 0.76\*\* | 0.67\*\* | 0.76\*\*\* | 0.76\* |
| Male Z:A | 1.39\*\*\* | 1.22\* | 1.18\* | 1.33\* |
| Z(F:M) / A(F:M) | 0.57\*\*\* | 0.63\*\*\* | 0.69\*\*\* | 0.64\*\*\* |
| Z(fem) : Z(male) | 0.59\*\*\* | 0.68\*\* | 0.73\*\*\* | 0.72\*\* |
| A(fem) : A(male) | 1.04 | 1.07 | 1.06\* | 1.12\* |
| N (Z) | 43 | 38 | 55 | 46 |
| N (A) | 486 | 321 | 486 | 321 |

**Author response table 4.**

<Author response table 4 title/legend>Ratio of expression values, with minimum expression threshold of RPKM>1 and maximum expression threshold of RPKM<5. We normalized by the ancestral state of expression. Level of significance (Wilcoxon test \*P-value<0.05, \*\*P-value<0.001, \*\*\*P-value<0.0001, N.S. P-value>0.05.</Author response table 4 title/legend>

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | *S. japonicum*  schistosomula | *S. japonicum*  adults | *S. mansoni*  schistosomula | *S. mansoni*  adults |
| Female Z:A | 0.82\* | 0.79 N.S. | 0.90 N.S. | 1.05 N.S. |
| Male Z:A | 1.22 N.S. | 1.17 N.S. | 1.22 N.S. | 1.50\* |
| Z(F:M) / A(F:M) | 0.67\*\*\* | 0.67\* | 0.74\* | 0.70\* |
| Z(fem) : Z(male) | 0.62\* | 0.66 N.S. | 0.79 N.S. | 0.72 N.S. |
| A(fem) : A(male) | 0.93 N.S. | 0.98 N.S. | 1.07 N.S. | 1.02 N.S. |
| N (Z) | 11 | 8 | 23 | 16 |
| N (A) | 486 | 321 | 486 | 321 |