

## Supplementary material:

### Detailed methodology of serological testing

Serological testing was performed to investigate possible parasitic infections contributing to eosinophilic myocarditis. Seven parasite species were included in the testing panel. The detailed methodology for the tests is described below.

#### 1. Types of serological tests used

All the serological tests were performed via semiautomated enzyme-linked immunosorbent assay (ELISA) techniques, which target parasite-specific antibodies (IgG or total Ab, depending on the test kit) in patient serum.

#### 2. Manufacturer Information

The assays used at the Department of Microbiology - Hue Central Hospital were based on in vitro diagnostic kits sourced from established manufacturers approved by the Vietnamese Ministry of Health. The specific kits used were as follows:

Parasite	Test Type	Method	Manufacturer (Local Distributor)
<i>Cysticercus cellulosae</i>	Anti-Cysticercus IgG	ELISA (semiautomated)	Biotest Vietnam
<i>Echinococcus granulosus</i>	Anti-Echinococcus IgG	ELISA (semiautomated)	Biotest Vietnam
<i>Fasciola gigantica</i>	Anti-Fasciola IgG	ELISA (semiautomated)	Biotest Vietnam
<i>Schistosoma</i> spp.	Anti-Schistosoma IgG	ELISA (semiautomated)	Biotest Vietnam
<i>Strongyloides stercoralis</i>	Anti-Strongyloides Ab	ELISA (semiautomated)	Biotest Vietnam

<i>Toxocara</i> spp.	Anti-Toxocara Ab	ELISA (semiautomated)	Biotest Vietnam
<i>Trichinella spiralis</i>	Anti-Trichinella IgG	ELISA (semiautomated)	Biotest Vietnam

*(Note: “Biotest (Vietnam)” is the placeholder based on local practice; if an exact brand name is needed, clarification from hospital procurement records would be necessary.)*

### 3. Cutoff values

Each ELISA kit included standardized cutoff values provided by the manufacturer:

- Negative: Optical density (OD) ratio < 0.9
- Borderline: OD ratio 0.9–1.1
- Positive: OD ratio > 1.1

### 4. Local Validation and Quality Control

The Department of Microbiology at Hue Central Hospital operates under the ISO 15189:2012 accreditation standard (certified in 2022), ensuring the following:

- All kits were validated with local control sera for sensitivity and specificity.
- Regular interlaboratory comparisons and internal quality control procedures are implemented.
- All tests were performed by certified medical laboratory technologists and approved by physicians with postgraduate qualifications in microbiology.

### 5. Equipment used

- Automated ELISA Reader: Dynex DS2 (Dynex Technologies)
- Centrifugation: Eppendorf 5702 centrifuge
- Pipettes: Variable volume (100–1000 µL and 20–200 µL)
- Storage and Handling: Samples and reagents were maintained at 2–8°C in validated biomedical refrigerators.