

# Statistical Analysis Plan

Title: “Kawasaki MATCH: A Clinical Decision Support Tool to Detect KD”

Version date December 4, 2025

Primary Outcome:

- Kawasaki MATCH accuracy for final diagnosis (all subjects)

Secondary Outcomes:

- Time to KD diagnosis (KD patients only)
- Hospital admission rate
- KD service consult rate
- ED return visits within 7 days
- Additional interventions: use of laboratory/imaging studies or additional procedures after Kawasaki MATCH
- Provider assessment of KD likelihood (both arms)
- Change in KD likelihood (experimental arm only)
- Helpfulness of Kawasaki MATCH (experimental arm only)

Sample size:

- 200 subjects over two years
- Point estimate of algorithm accuracy with a 95% confidence interval of +/- 4% (estimated 90% accuracy)

Statistical analysis plan:

Primary outcome (Kawasaki MATCH) accuracy will be compared between the non-intervention and experimental arms using chi-square test. Continuous secondary outcomes (time to KD diagnosis, time to ED disposition) will be compared using student t-test. Dichotomous secondary outcomes (hospital admission, KD consultation, ED return visit within 7 days, additional interventions) will be compared using chi-square tests. Visual analog scale results (KD likelihood, helpfulness) will be summarized with 95% confidence intervals. Accuracy of provider diagnosis will be compared between study arms using chi-square test.