

Post Heart Transplant Gene Expression Panels for Rejection Risk via Peripheral Blood

- I. The use of post heart transplant gene expression panels for rejection risk via peripheral blood to determine management of patients after heart transplantation is considered **medically necessary** when:
 - A. The member is age 18 or older, **AND**
 - B. The member has undergone heart transplant, **AND**
 - C. The member is at low-risk for organ rejection, **AND**
 - D. The member's heart transplant was performed at least 2 months ago and less than 5 years ago.
- II. The use of post heart transplant gene expression panels for rejection risk via peripheral blood to determine management of patients after heart transplantation is considered **investigational** for all other indications.

RATIONALE AND REFERENCES

Post Heart Transplant Gene Expression Panels for Rejection Risk via Peripheral Blood

International Society of Heart and Lung Transplantation (ISHLT)

The ISHLT guidelines for the care of heart transplant patients (2023) include recommendations for the non-invasive monitoring of acute cellular rejection (ACR) after heart transplant (HT). They specifically address Allomap and state that peripheral blood testing “can be used in low-risk patients between 2 months and 5 years after HT to identify adult recipients who have low risk of current ACR to reduce the frequency of EMB [endomyocardial biopsy]”. At this time, the recommendation is specific to adults given data in children does not allow for a general recommendation for GEP (p. e38).

Velleca A, Shullo MA, Dhital K, et al. The International Society for Heart and Lung Transplantation (ISHLT) guidelines for the care of heart transplant recipients. J Heart Lung Transplant. 2023;42(5):e1-e141. doi:10.1016/j.healun.2022.10.015