Background and aims The aim of this study is to determine the effects of adjuvant immunoglobulin M-enriched IVIG therapy on neonatal mortality and haematological variables in newborn infant with blood culture-proven sepsis.

Methods Demographic and clinical features and outcome measures of 63 newborn infant with blood culture-proven sepsis were retrospectively documented from the medical records. The patients were divided into two groups according to their treatment history. The patients in Group 1 received antibiotic therapy only and the patients Group 2 received both antibiotic and adjuvant IgM-enriched IVIG.

Results The study revealed that mortality rates were 28.1% and 12.9% in Group 1 and Group 2, respectively. The mortality rate was lower in group 2, but the difference between the two groups was not statistically significant (p = 0.21) Coagulase negative Staphylococcus was the most common type of bacteria isolated from blood culture in both groups. When compared changing of laboratory results in both groups, haemoglobin, leukocyte count and CRP levels were different between two groups during the first three days of antibiotic treatment.

Conclusion Our study revealed that if diagnosed at an early stage and treated aggressively with appropriate and effective antibiotics, adjuvant IgM-enriched IVIG treatment have no additional benefits in neonatal sepsis.