



**REENCONTROS
NOVOS ESPAÇOS
OPORTUNIDADES**

XXXIV SIC Salão Iniciação Científica

**26 - 30
SETEMBRO
CAMPUS CENTRO**

Evento	Salão UFRGS 2022: SIC - XXXIV SALÃO DE INICIAÇÃO CIENTÍFICA DA UFRGS
Ano	2022
Local	Campus Centro - UFRGS
Título	Efficacy and safety of enzyme replacement therapy with alglucosidase alfa for the treatment of patients with infantile Pompe Disease: a systematic review and metanalysis
Autor	ANA PAULA PEDROSO JUNGES
Orientador	IDA VANESSA DOEDERLEIN SCHWARTZ

Efficacy and safety of enzyme replacement therapy with alglucosidase alfa for the treatment of patients with infantile Pompe Disease: A Systematic Review and metanalysis.

Introduction: Pompe disease is a glycogen storage disorder caused by deficient activity of acid alpha-glucosidase (GAA). We sought to review the latest available evidence on the safety and efficacy of recombinant human GAA enzyme replacement therapy for early-onset Pompe disease (EOPD). **Methods:** We systematically searched the MEDLINE (via PubMed), Embase, and Cochrane databases for prospective clinical studies evaluating enzyme replacement therapy for EOPD on pre-specified outcomes. **Results:** Of 1722 articles identified, 15 were included. Studies were heterogeneous and with very low certainty of evidence for most outcomes. Moderate/high risk of bias were present for outcome evaluated according to ROBINS-I. The following outcomes showed improvements associated with GAA alglucosidase alfa, over natural history of PD/placebo, for a mean follow-up of 48.3 months: cardiomyopathy [(mean change 131.3 g/m² ((95% confidence interval [[CI] 81.02, 181.59)))]], time to start ventilation (TSV) [(HR 0.21 (95% CI 0.12, 0.36))] and survival [(HR 0.10 (95% CI 0.05, 0.19))]. There were no differences between the pre- and post- ERT period for myocardial function and neuropsychomotor development. **Conclusion:** Our data suggest that alglucosidase alfa GAA enzyme replacement therapy potentially improves cardiomyopathy, TSV, and survival in EOPD patients.