



Figure S.1. Pre-treatment of mice with *M. muris* had minimal impact on clinical score and weight loss.

Mean clinical score (A) and weight loss (B) for all treatment groups of mice. Values are presented as the mean +/- standard error of the mean. D = Days post challenge, with influenza A challenge (IAV) as the reference point. NTHi was administered on Day 3 and mice were monitored to Day 7 (*M. muris* only to Day 4); * $p < 0.01$ when compared between Mm+IAV+NTHi and IAV+NTHi. Black lines with filled black circles represent mice that did not receive *M. muris* (Mm) pre-treatment prior to IAV+NTHi; black dashed lines with open white circles represent mice that were pre-treated intranasally with *M. muris* on Day -1 prior to IAV+NTHi (Mm+IAV+NTHi). Grey lines and open shapes represent control groups of mice that were treated with either *M. muris* only, IAV only or *M. muris* + IAV.