



S2.2. Comparison of resistance, impact on weight and tolerance between mouse strain for each *Eimeria* isolates. (A) Maximum oocysts per gram of feces used as a proxy for (inverse of) resistance; (B) Impact on host health measured as the maximum weight loss during patent period relative to starting weight (%); (C) Tolerance estimated by the slope of the linear regression with null intercept modelling maximum relative weight loss as a response of maximum oocysts per gram of feces. A steep slope corresponds to a low tolerance. Differences of maximum parasite load and of maximum weight loss could be detected between mouse strains infected by *E. ferrisi* Brandenburg64 and *E. falciformis* Brandenburg88, but not *E. ferrisi* Brandenburg139. Tolerance differed between mouse strains only upon infection with *E. falciformis* Brandenburg88.

Likelihood ratio tests:

Maximum OPG (A):

Brandenburg139: G=5.9, df=3, p=0.11; Brandenburg64: G=16.4, df=3, p<0.001; Brandenburg88: G=14.1, df=6, p=0.03;

Maximum weight loss (B):

Brandenburg139: G=3.6, df=3, p=0.3; Brandenburg64: G=15.1, df=3, p=0.0018; Brandenburg88: G=16.7, df=3, p<0.001;

Tolerance (C):

Brandenburg139: G=3, df=3, p=0.4; Brandenburg64: G=1.8, df=3, p=0.62; Brandenburg88: G=9.6, df=3, p=0.022