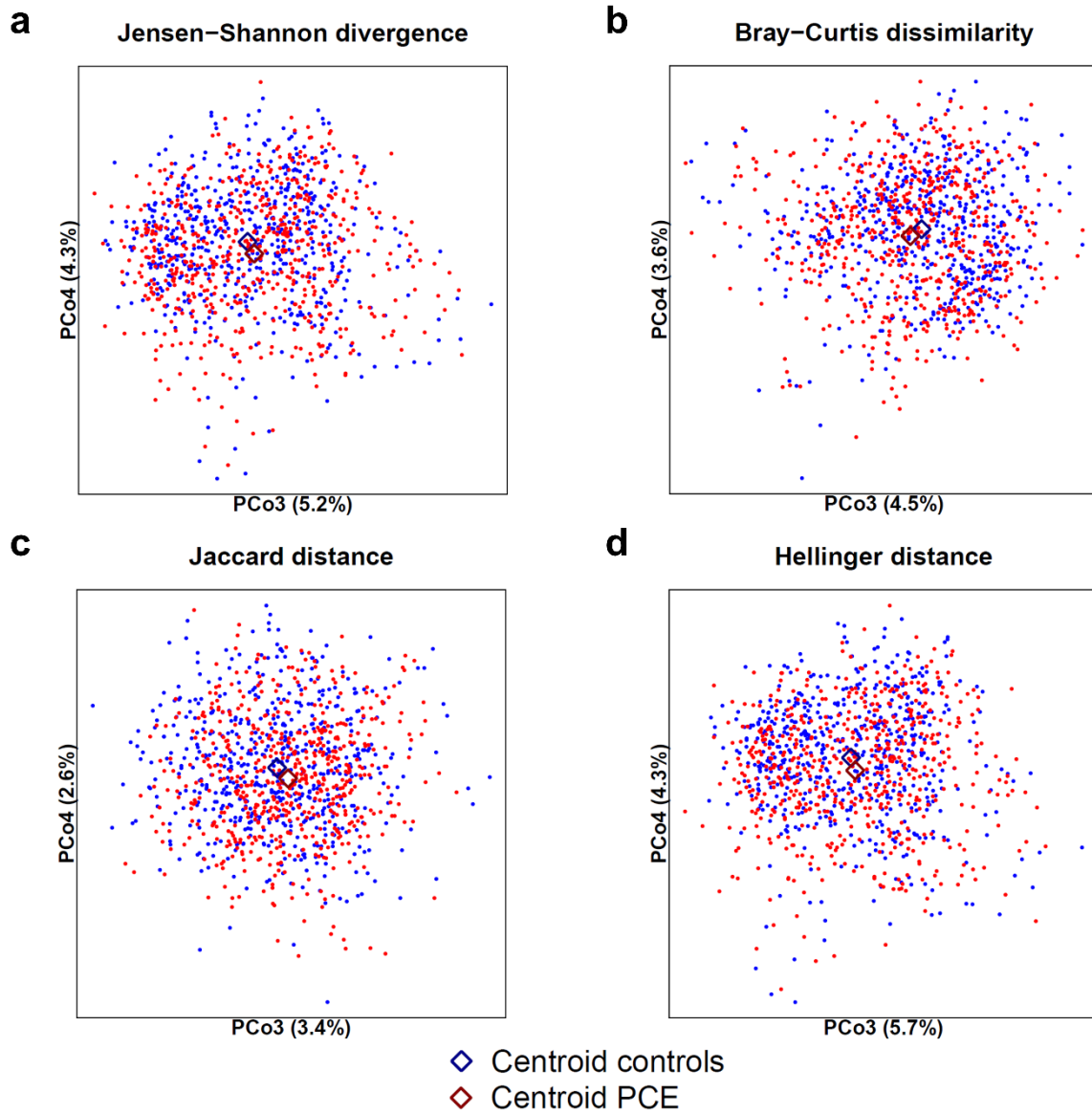


# **Carrying asymptomatic gallstones is not associated with changes in intestinal microbiota composition and diversity but cholecystectomy with significant dysbiosis**

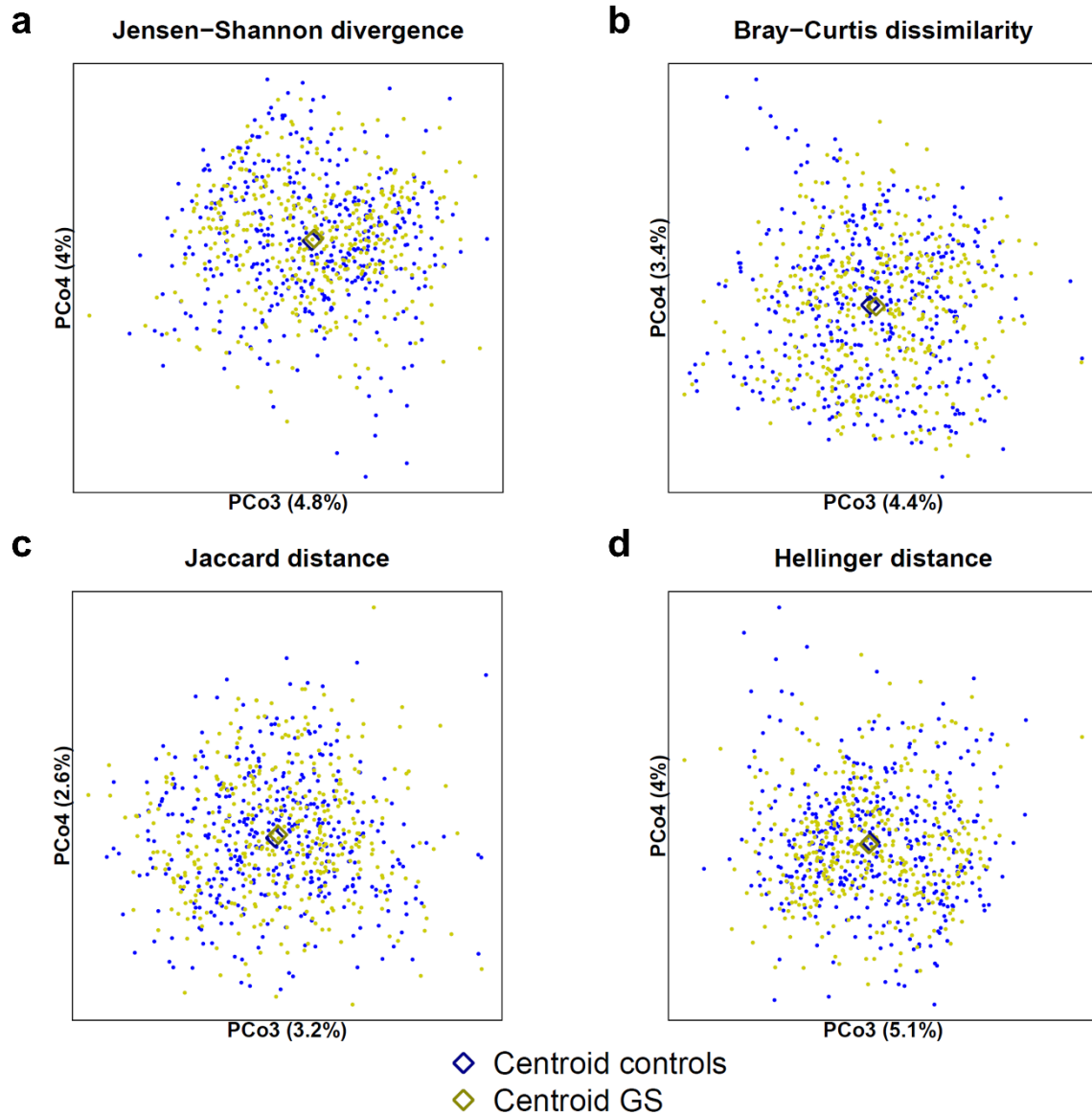
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**Fig. S1:** Principal coordinate analysis (PCoA) of gut microbiota profiles from individuals post-cholecystectomy (PCE,  $n=580$ , red color) and matched controls ( $n=580$ , blue color). Shown are PCo3 and PCo4 of 1,160 gut microbiota samples. PCoA was performed based on **(a)** Jensen-Shannon divergence, **(b)** Bray-Curtis dissimilarity, **(c)** Jaccard distance, or **(d)** Hellinger distance.



**Fig. S2:** Principal coordinate analysis (PCoA) of gut microbiota profiles from gallstone carriers (GC, n=404, yellow color) and matched controls (n=404, blue color). Shown are PCo3 and PCo4 of 808 gut microbiota samples. PCoA was performed based on **(a)** Jensen-Shannon divergence, **(b)** Bray-Curtis dissimilarity, **(c)** Jaccard distance, or **(d)** Hellinger distance.