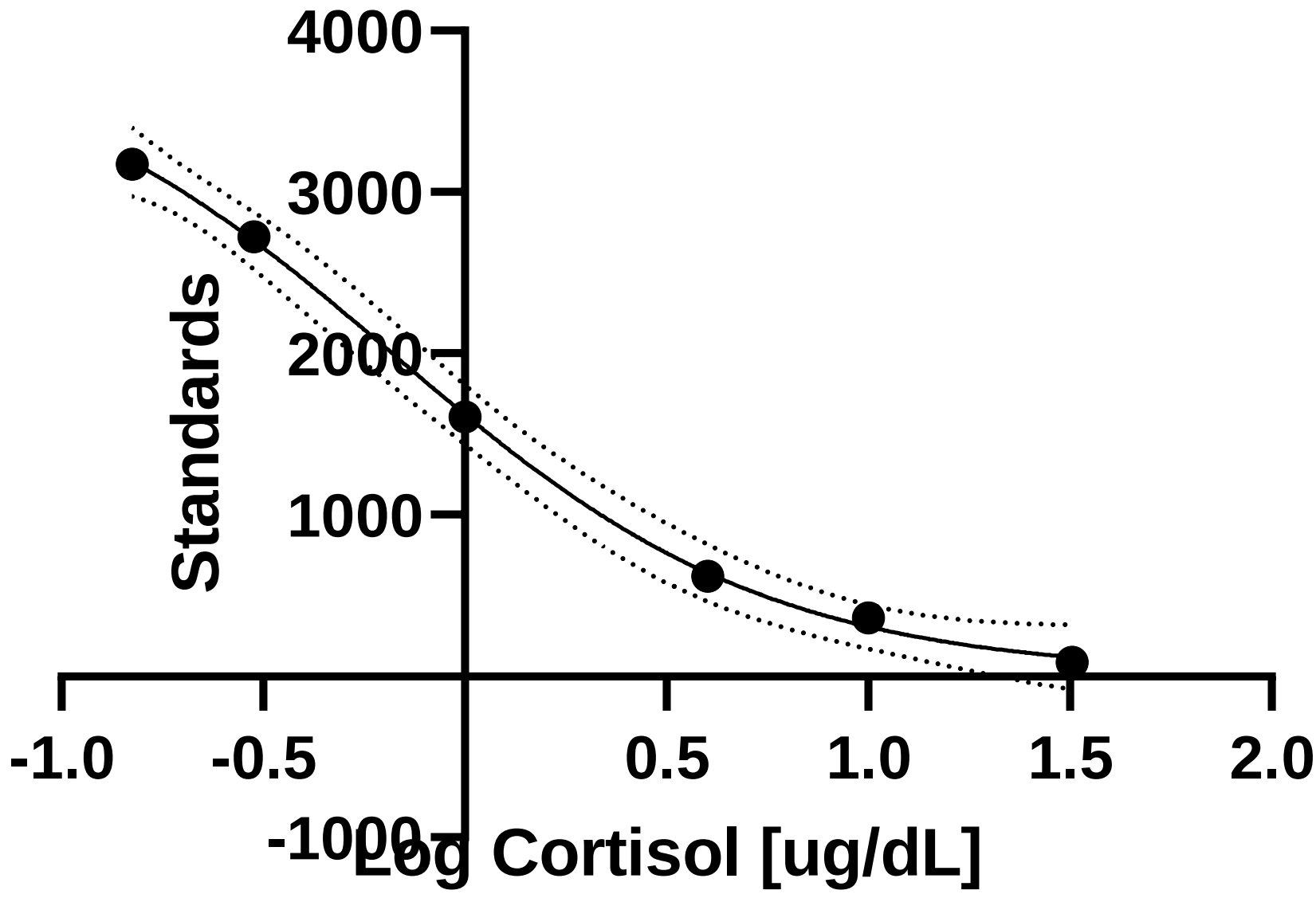log_trans_ Data_Nadine2023