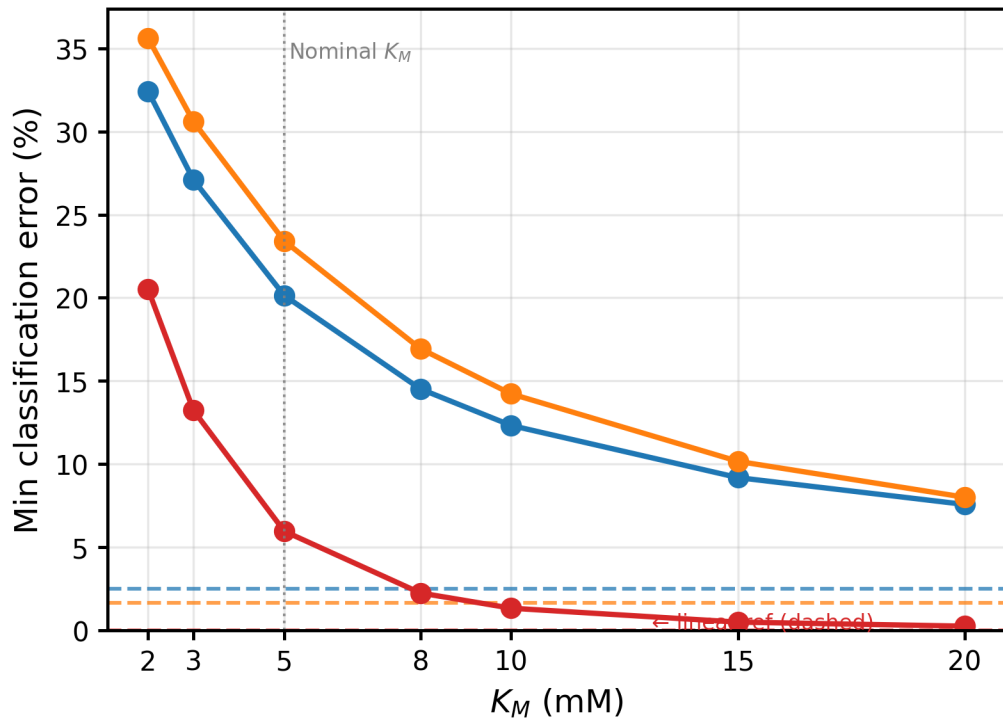


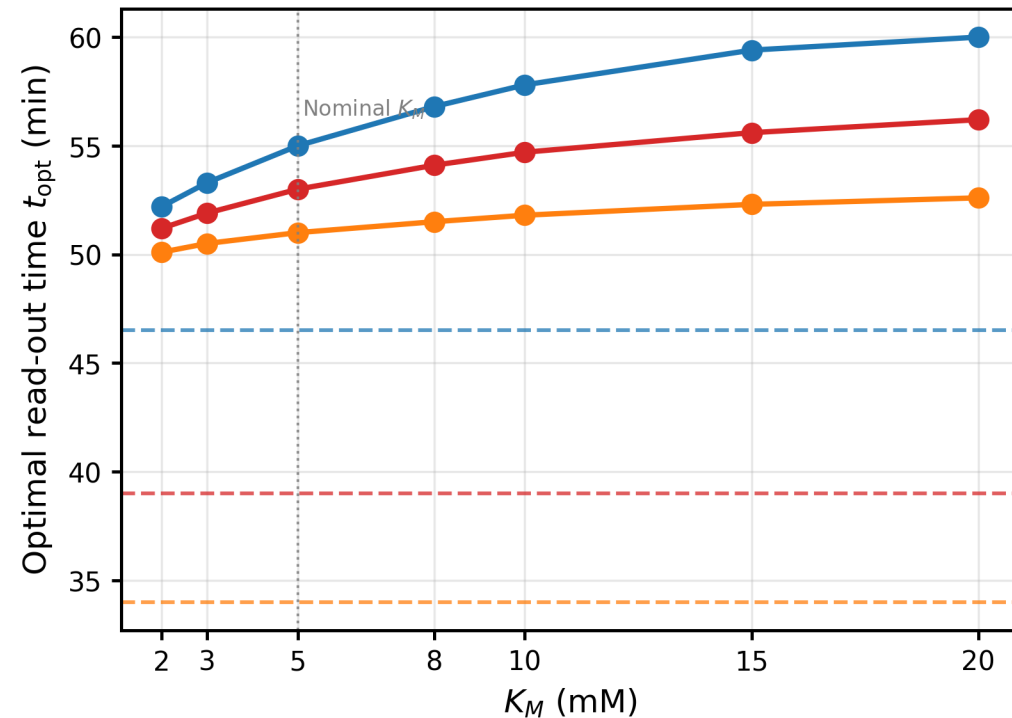
Figure S5 – Impact of Michaelis-Menten enzymatic saturation on discrimination performance (area-matched at $G_{ref} = 200$ mg/dL; $\sigma_S = 2\%$; $t_{read} \leq 60$ min)

— 100 vs 140 mg/dL — 140 vs 200 mg/dL — 100 vs 200 mg/dL - - - Linear surrogate (ref.) ····· Nominal $K_M = 5$ mM

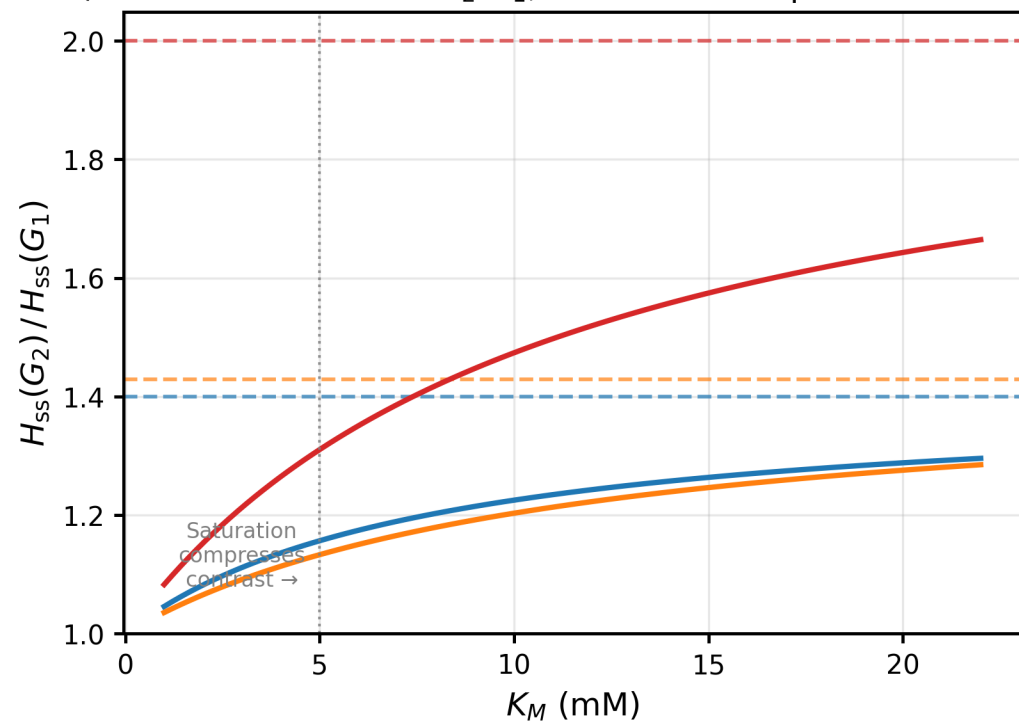
A Discrimination error vs K_M



B Optimal read-out time vs K_M



C $H_{ss}(G_2)/H_{ss}(G_1)$ vs K_M
 (dashed = linear limit G_2/G_1 ; saturation compresses contrast)



D Signal traces for 100 vs 140 mg/dL
 at $K_M = 5$ mM (nominal) and $K_M = 2$ mM (saturated)

