Figure S.1: Charge-integrated invariant mass distributions of candidates shown in Fig. 2 passing the $B^+ \to [\pi^\pm K^\mp \pi^0]D_h^\pm$ selection.

Figure S.2: Charge-integrated invariant mass distributions of candidates shown in Fig. 4 passing the $B^+ \to [K^+ K^- \pi^0]D_h^\pm$ selection.