

Final state	Trigger	Lepton selection	Additional selection	
$\tau_h \tau_h$	$\tau_h (35 \text{ GeV}) \tau_h (35 \text{ GeV})$	$p_T^{\tau_h} > 45(40) \text{ GeV},  \eta^{\tau_h}  < 2.1$	Med DeepTau iso	
$\tau_\mu \tau_h$	$\mu(22 \text{ GeV})$ or $\mu(19 \text{ GeV}) \tau_h (20 \text{ GeV})$	$p_T^\mu > 23 \text{ GeV},  \eta^\mu  < 2.1$ $p_T^\mu > 20 \text{ GeV}, p_T^{\tau_h} > 30 \text{ GeV},  \eta^{\tau_h}  < 2.3$	$I_{rel}(\mu) < 0.15$ Med DeepTau iso	$m_T^\mu < 50 \text{ GeV}$
$\tau_e \tau_h$	$e(25 \text{ GeV})$	$p_T^e > 30 \text{ GeV},  \eta^e  < 2.1$ $p_T^{\tau_h} > 30 \text{ GeV},  \eta^{\tau_h}  < 2.3$	$I_{rel}(e) < 0.15$ Med DeepTau iso	$m_T^e < 50 \text{ GeV}$
$\tau_e \tau_\mu$	$\mu(8 \text{ GeV}) e(23 \text{ GeV})$ or $\mu(23 \text{ GeV}) e(12 \text{ GeV})$	$p_T^e > 15 \text{ GeV},  \eta^e  < 2.4$ $p_T^\mu > 15 \text{ GeV},  \eta^\mu  < 2.4$ $p_T^\ell > 24 \text{ GeV}$ for lead trigger leg	$I_{rel}(e) < 0.15$ $I_{rel}(\mu) < 0.20$	