

$$P_{S_{\bar{c},a}|S_{\bar{c},\bar{a}}}^{\oplus} = P_{e|S_{\bar{c},\bar{a}}}^{\oplus} P_{a|S_{\bar{c},\bar{a}}}^{\oplus} + (1 - P_{e|S_{\bar{c},\bar{a}}}^{\oplus}) P_{a|S_c}$$

