$$\mathcal{L} = C_{align \atop ref} \cdot \text{Variance}\left(X_{ref}^{align}\right) + C_{align \atop dat} \cdot \text{Variance}\left(X_{dat}^{align}\right) + C_{\text{class}} \cdot \text{CrossEntropy}\left(Y, \widehat{Y}\right)$$