Identity link $y = \beta x$ $\mathcal{L}(\beta) = \prod_i^n \frac{\beta x_i{}^{y_i} e^{-\beta x_i}}{y_i!}$

Log link $y = e^{\beta x}$ $\mathcal{L}(\beta) = \prod_i^n \frac{e^{\beta x_i}{}^{y_i} e^{-e^{\beta x_i}}}{y_i!}$