posterior_epred() gives the draws from the expected value of the posterior $logit(\pi_i) = \alpha + \beta x_i$ predictive distribution, or the average of each draw from posterior_predict(). In logistic regression, this is

 π on the probability scale

(or inverse logit).

posterior_linpred(transform = TRUE) also gives the posterior draws of π on the probability scale.

$y_i \sim \text{Binomial}(1, \pi_i)$

 $E(y_i)$

posterior_linpred() gives the posterior draws of π on the logit or log odds scale.

posterior_predict() gives the draws from a random binomial distribution with draws from the posterior distribution of π .

These are 0s and 1s.