$$\frac{x+2}{(x+2)^2}$$

Which of the following expressions is equivalent to the given expression, where  $x \neq -2$ ?

A) 
$$x+2$$

B) 
$$\frac{1}{x+2}$$

C) 
$$x^2 + 2x + 4$$

D) 
$$\frac{1}{x^2 + 2x + 4}$$