

A106230034 W9 HW 赵清杰

例 7.13 抽 200 男 150 女 ; 显著水平 0.05
150 女 78 有险

$$(1) H_0: p_1 - p_2 \leq 0, H_1: p_1 - p_2 > 0.$$

$$(2) \alpha = 0.05$$

$$(3) C = \{z > z_{\alpha}\} = \{z > 1.645\}$$

$$(4) n_1 = 200, n_2 = 150, x = 108, y = 78, \hat{p}_1 = \frac{108}{200} = 0.54, \hat{p}_2 = \frac{78}{150} = 0.52$$

$$\bar{p} = \frac{x+y}{n_1+n_2} = \frac{108+78}{200+150} = 0.531$$

$$z = \frac{\hat{p}_1 - \hat{p}_2}{\sqrt{\bar{p}(1-\bar{p})\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} = \frac{0.54 - 0.52}{\sqrt{0.531(1-0.531)\left(\frac{1}{200} + \frac{1}{150}\right)}} = 0.371$$

\therefore 男性投保意外险比例没有显著性