Based on the attached contingency table and the logistic regression determine whether there is a significant association between treatment (tx) and current anxiety disorder (anxiety) by interpreting the logistic regression results. State the statistical findings from the logistic regression that support your conclusion. Include the nature of relationship and state whether the null hypothesis should be retained or rejected. (Use the contingency table to interpret direction of the relationship)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **tx \* anxiety Crosstabulation** | | | | | |
|  | | | anxiety | | Total |
| 0 | 1 |
| Tx | 0 | Count | 83 | 28 | 111 |
| % within tx | 74.8% | 25.2% | 100.0% |
| % within anxiety | 50.0% | 51.9% | 50.5% |
| % of Total | 37.7% | 12.7% | 50.5% |
| 1 | Count | 83 | 26 | 109 |
| % within tx | 76.1% | 23.9% | 100.0% |
| % within anxiety | 50.0% | 48.1% | 49.5% |
| % of Total | 37.7% | 11.8% | 49.5% |
| Total | | Count | 166 | 54 | 220 |
| % within tx | 75.5% | 24.5% | 100.0% |
| % within anxiety | 100.0% | 100.0% | 100.0% |
| % of Total | 75.5% | 24.5% | 100.0% |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Chi-Square Tests** | | | | | |
|  | Value | df | Asymp. Sig. (2-sided) | Exact Sig. (2-sided) | Exact Sig. (1-sided) |
| Pearson Chi-Square | .056a | 1 | .813 |  |  |
| Continuity Correctionb | .006 | 1 | .936 |  |  |
| Likelihood Ratio | .056 | 1 | .813 |  |  |
| Fisher's Exact Test |  |  |  | .876 | .468 |
| Linear-by-Linear Association | .056 | 1 | .814 |  |  |
| N of Valid Cases | 220 |  |  |  |  |
| a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 26.75. | | | | | |
| b. Computed only for a 2x2 table | | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk Estimate** | | | |
|  | Value | 95% Confidence Interval | |
| Lower | Upper |
| Odds Ratio for tx (0 / 1) | .929 | .502 | 1.717 |
| For cohort anxiety = 0 | .982 | .845 | 1.142 |
| For cohort anxiety = 1 | 1.058 | .665 | 1.682 |
| N of Valid Cases | 220 |  |  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables in the Equation** | | | | | | | | | |
|  | | B | S.E. | Wald | df | Sig. | Exp(B) | 95% C.I.for EXP(B) | |
| Lower | Upper |
| Step 1a | tx(1) | .074 | .313 | .056 | 1 | .813 | 1.077 | .583 | 1.991 |
| Constant | -1.161 | .225 | 26.675 | 1 | .000 | .313 |  |  |
| a. Variable(s) entered on step 1: tx. | | | | | | | | | |