T84

## one\_way\_anova

(4.109334332773446, 0.016803210939315943)

## t\_test

t\_statistic p\_value  
pre\_diabetes vs no\_diabetes -2.332261 0.020024  
diabetes vs no\_diabetes -1.746247 0.081298

## tukey\_hsd

Multiple Comparison of Means - Tukey HSD, FWER=0.05   
===============================================================  
 group1 group2 meandiff p-adj lower upper reject  
---------------------------------------------------------------  
 diabetes no\_diabetes 0.0287 0.1249 -0.0058 0.0633 False  
 diabetes pre\_diabetes -0.0073 0.9125 -0.0494 0.0348 False  
no\_diabetes pre\_diabetes -0.036 0.033 -0.0698 -0.0023 True  
---------------------------------------------------------------

## covariance\_analysis

sum\_sq df F PR(>F)  
C(no\_diabetes) 0.189158 1.0 8.418549 0.003827  
C(pre\_diabetes) 0.093937 1.0 4.180722 0.041248  
C(diabetes) 0.051615 1.0 2.297158 0.130048  
Age 0.170903 1.0 7.606121 0.005964  
Residual 16.245221 723.0 NaN NaN

## interaction\_analysis

sum\_sq df F PR(>F)  
C(no\_diabetes) 0.013227 1.0 0.588026 0.443434  
C(pre\_diabetes) 0.051838 1.0 2.304597 0.129429  
C(diabetes) 0.051615 1.0 2.294695 0.130254  
Age 0.170903 1.0 7.597967 0.005991  
C(diabetes):Age 0.005059 1.0 0.224930 0.635452  
Residual 16.240161 722.0 NaN NaN

## interaction\_analysis2

dfn dfd F PR(>F)  
diabetes 1.0 592.0 13.156649 0.000311  
pre\_diabetes 1.0 591.0 8.784945 0.003160

## chi\_square\_test

condition chi2 p\_value dof  
0 no\_diabetes 6.635297 0.009998 1  
1 pre\_diabetes 3.186802 0.074235 1  
2 diabetes 1.143001 0.285019 1

## relative\_risk\_analysis

condition relative\_risk ci p\_value  
0 no\_diabetes 0.037383 0.022695 2.052426e-38  
1 pre\_diabetes 0.000000 0.000000 NaN  
2 diabetes 0.007353 0.001028 4.922974e-07

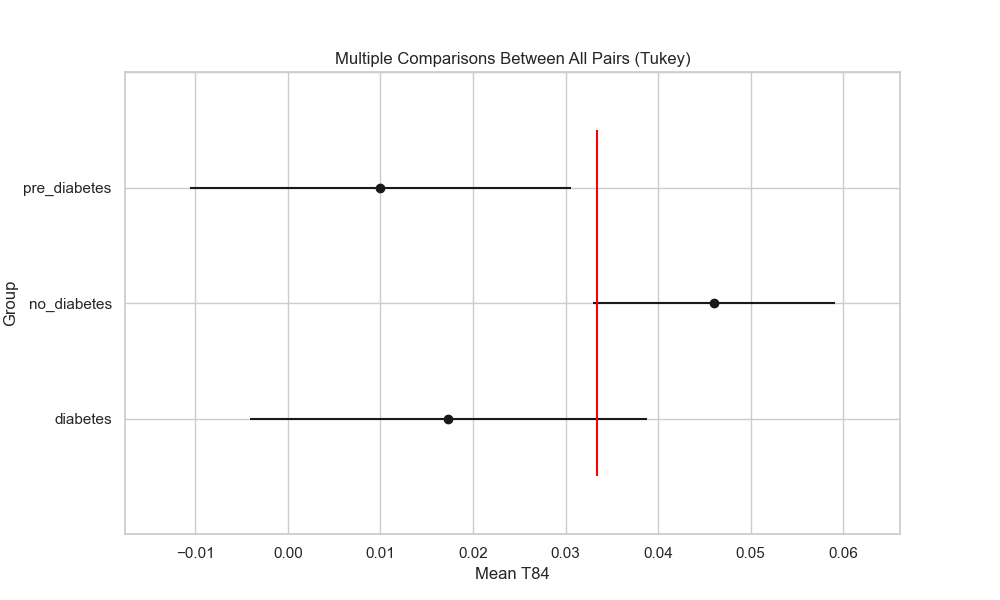
## odds\_ratio\_analysis

condition odds\_ratio ci p\_value  
0 no\_diabetes 0.094858 0.057588 0.004163  
1 pre\_diabetes inf NaN 0.031428  
2 diabetes 3.790941 0.530178 0.220247

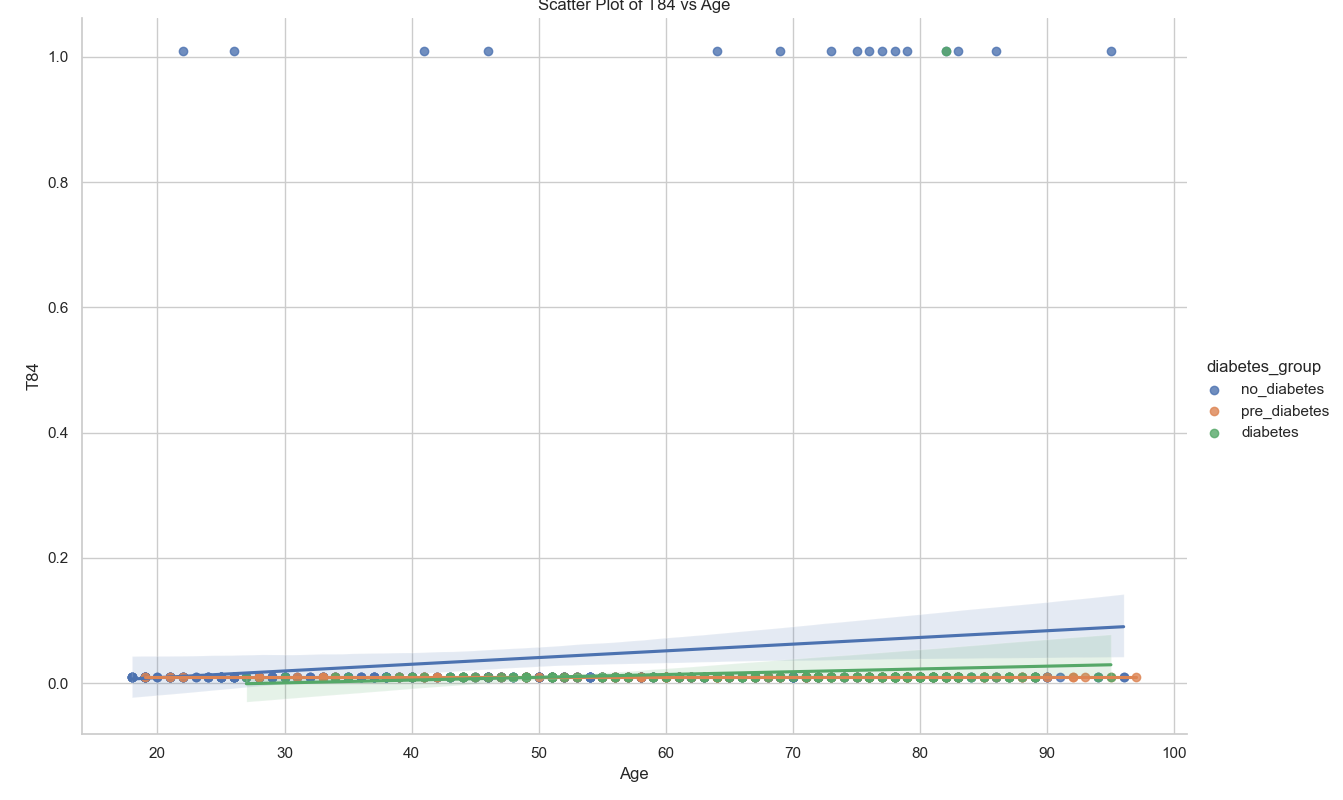
## relative\_risk\_by\_age

age\_group condition relative\_risk p\_value confidence\_interval  
6 18-40 No Diabetes 0.000000 1.000000 0.000000  
7 18-40 Pre-Diabetes inf 1.000000 NaN  
8 18-40 Diabetes inf 1.000000 NaN  
3 40-60 No Diabetes 0.000000 0.534410 0.000000  
4 40-60 Pre-Diabetes inf 1.000000 NaN  
5 40-60 Diabetes inf 1.000000 NaN  
0 60+ No Diabetes 0.079768 0.002947 0.044464  
1 60+ Pre-Diabetes inf 0.044005 NaN  
2 60+ Diabetes 4.206642 0.198122 0.586497

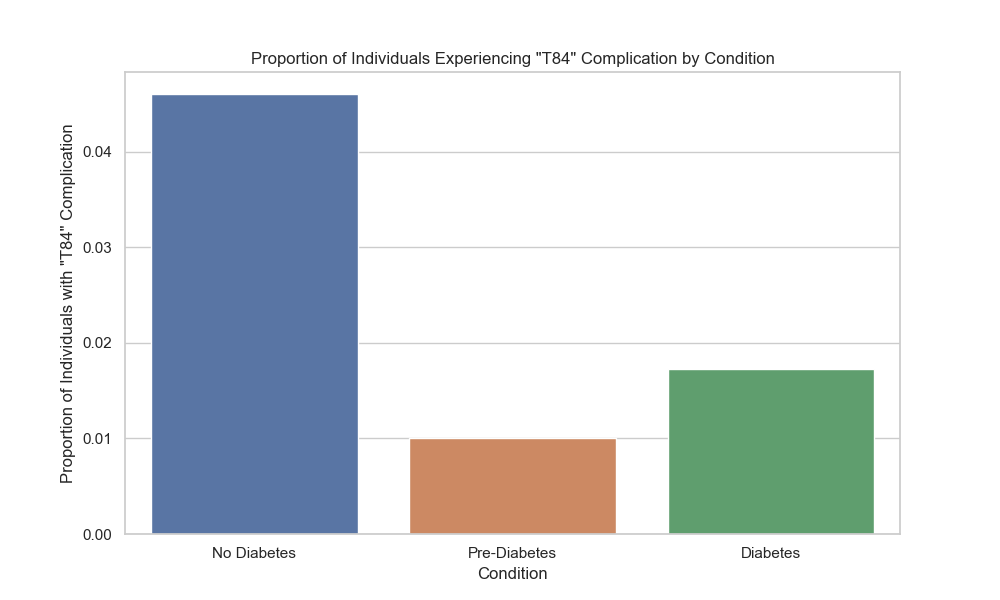
## visualize\_tukey\_results



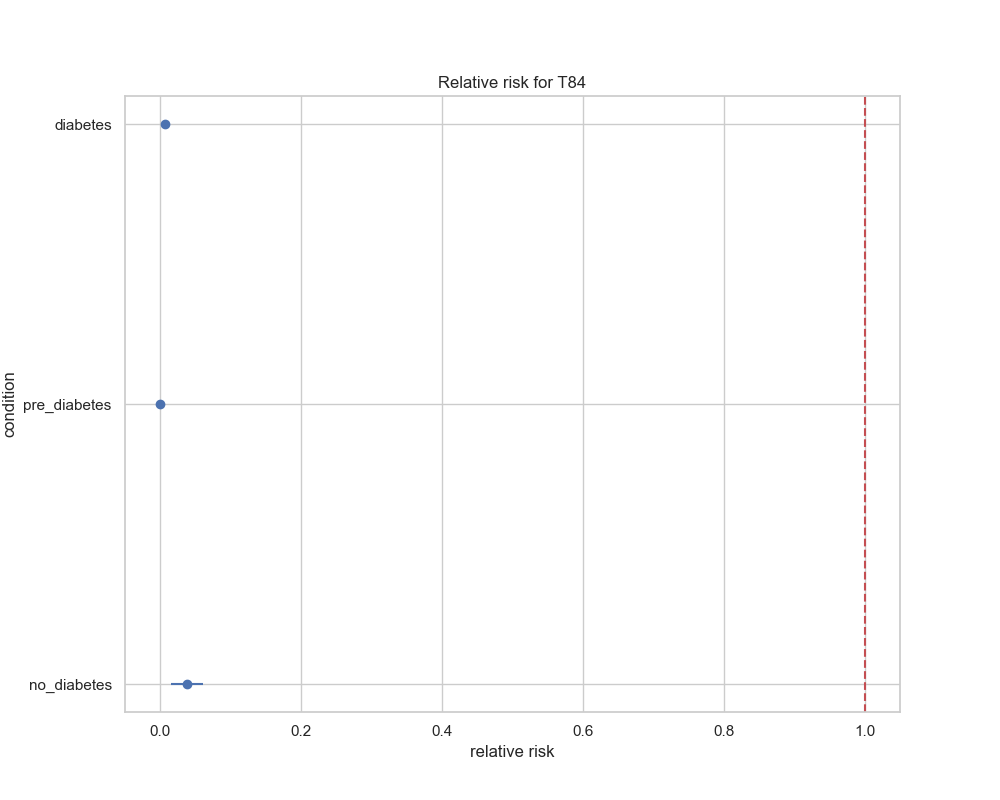
## plot\_interaction\_analysis



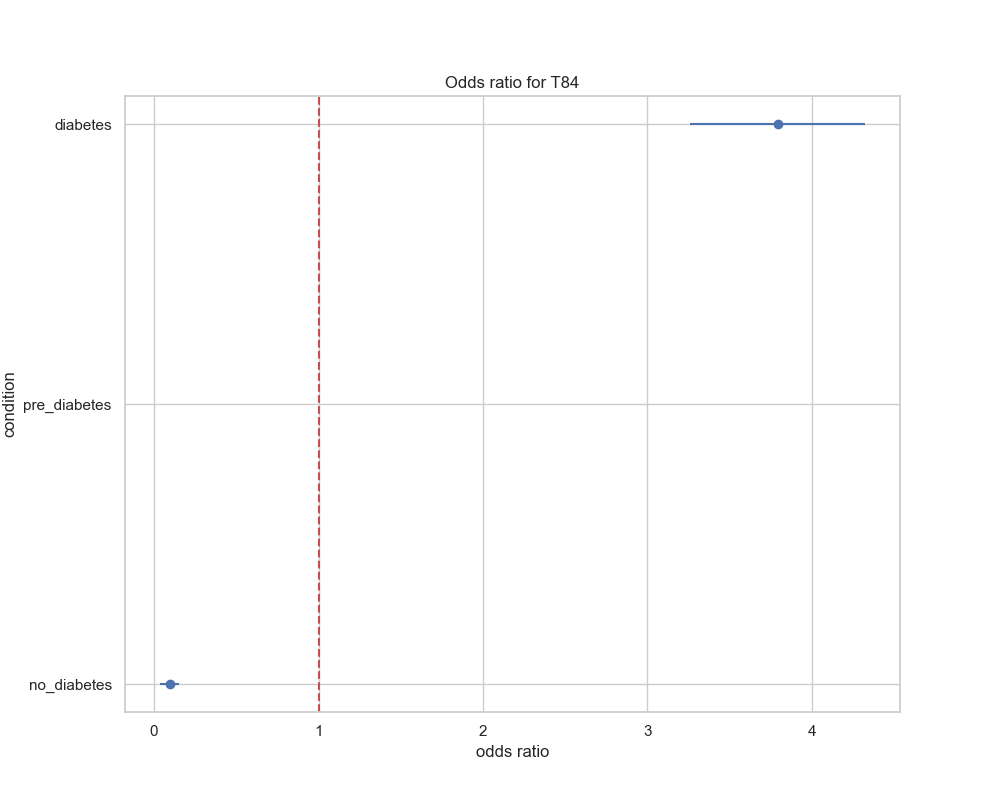
## visualize\_chi\_square\_results



## visualize\_relative\_risk\_results



## visualize\_odds\_ratio\_results



## visualize\_relative\_risk\_by\_age\_results

