I21

## one\_way\_anova

(0.9115171930965795, 0.4021198844865027)

## t\_test

t\_statistic p\_value  
pre\_diabetes vs no\_diabetes -0.844896 0.398314  
diabetes vs no\_diabetes 0.935638 0.349616

## tukey\_hsd

Multiple Comparison of Means - Tukey HSD, FWER=0.05   
==============================================================  
 group1 group2 meandiff p-adj lower upper reject  
--------------------------------------------------------------  
 diabetes no\_diabetes -0.0047 0.5833 -0.0158 0.0064 False  
 diabetes pre\_diabetes -0.0088 0.3788 -0.0242 0.0067 False  
no\_diabetes pre\_diabetes -0.0041 0.7212 -0.0165 0.0084 False  
--------------------------------------------------------------

## covariance\_analysis

sum\_sq df F PR(>F)  
C(no\_diabetes) 0.002144 1.0 0.500249 0.479493  
C(pre\_diabetes) 0.003979 1.0 0.928645 0.335359  
C(diabetes) 0.004263 1.0 0.994847 0.318710  
Age 0.020237 1.0 4.722664 0.029912  
Residual 6.941761 1620.0 NaN NaN

## interaction\_analysis

sum\_sq df F PR(>F)  
C(no\_diabetes) 0.016026 1.0 3.745116 0.053136  
C(pre\_diabetes) 0.004142 1.0 0.968055 0.325313  
C(diabetes) 0.004263 1.0 0.996226 0.318375  
Age 0.020237 1.0 4.729211 0.029799  
C(diabetes):Age 0.013889 1.0 3.245718 0.071796  
Residual 6.927872 1619.0 NaN NaN

## interaction\_analysis2

dfn dfd F PR(>F)  
diabetes 1.0 1487.0 1.490623 0.222313  
pre\_diabetes 1.0 1494.0 0.093529 0.759780

## chi\_square\_test

condition chi2 p\_value dof  
0 no\_diabetes 0.000000 1.000000 1  
1 pre\_diabetes 0.093737 0.759479 1  
2 diabetes 0.318065 0.572773 1

## relative\_risk\_analysis

condition relative\_risk ci p\_value  
0 no\_diabetes 0.004108 0.001707 7.300093e-35  
1 pre\_diabetes 0.000000 0.000000 NaN  
2 diabetes 0.008850 0.002200 1.405478e-11

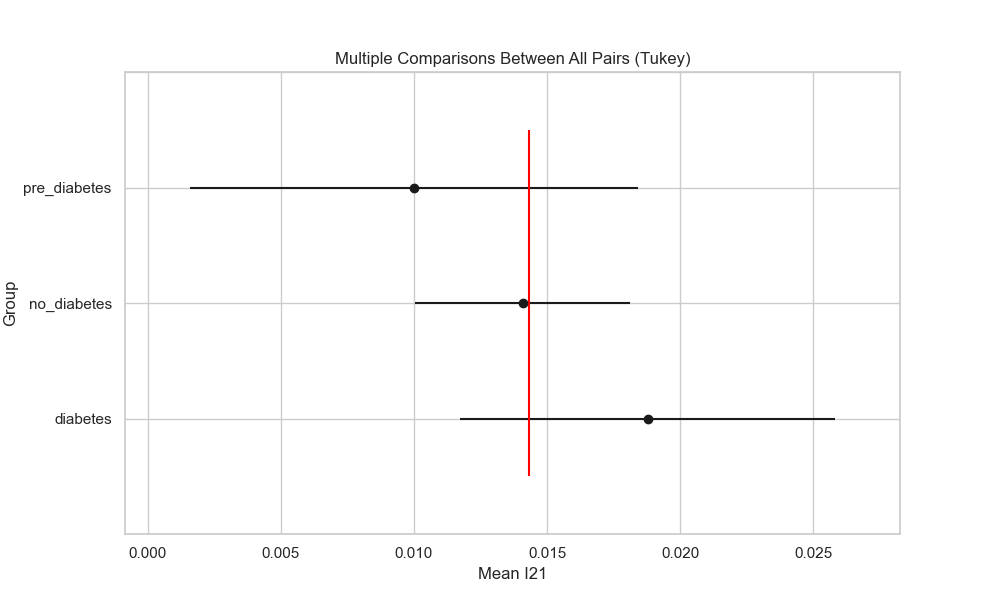
## odds\_ratio\_analysis

condition odds\_ratio ci p\_value  
0 no\_diabetes 1.217000 0.505639 0.685273  
1 pre\_diabetes inf NaN 1.000000  
2 diabetes 0.406183 0.100966 0.256551

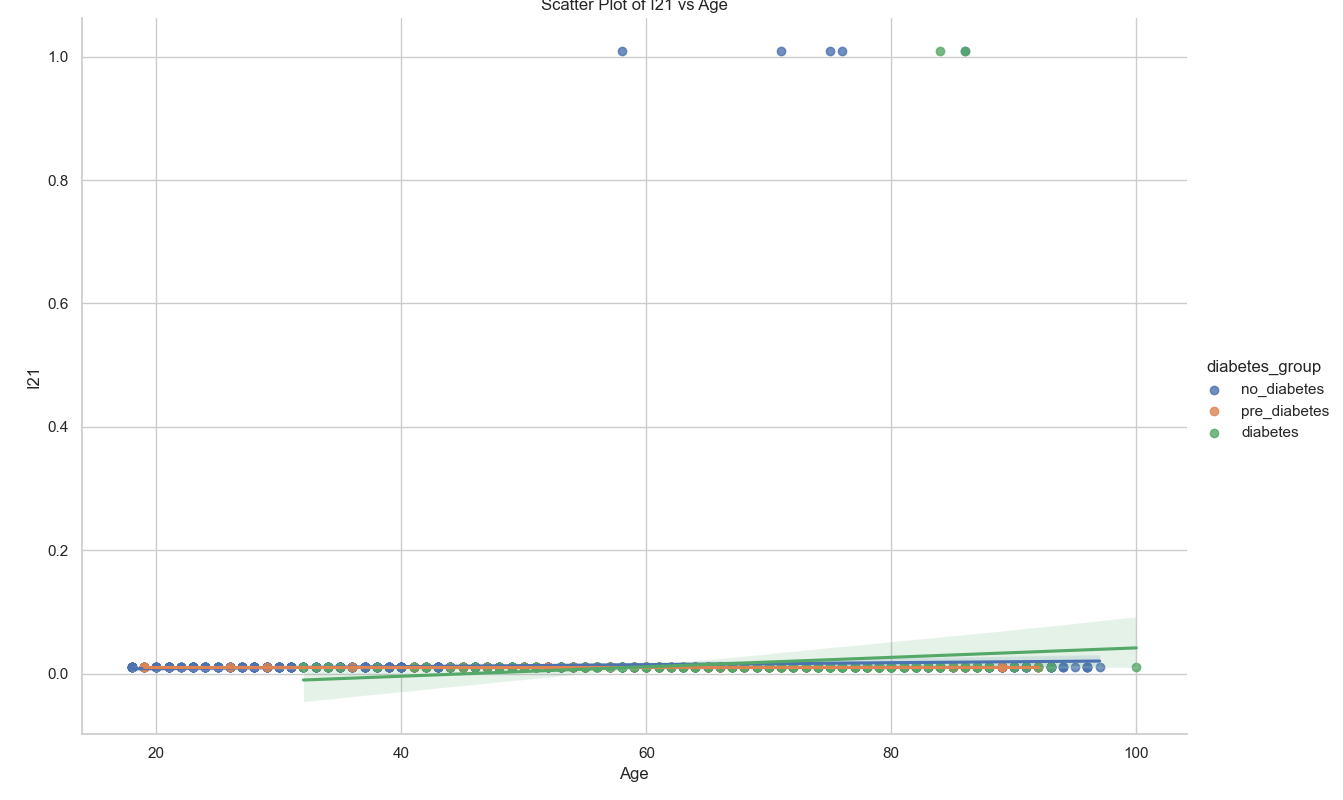
## relative\_risk\_by\_age

age\_group condition relative\_risk p\_value confidence\_interval  
3 40-60 No Diabetes 0.000000 1.000000 0.000000  
4 40-60 Pre-Diabetes inf 1.000000 NaN  
5 40-60 Diabetes inf 1.000000 NaN  
0 60+ No Diabetes 0.970990 1.000000 0.363179  
1 60+ Pre-Diabetes inf 1.000000 NaN  
2 60+ Diabetes 0.520468 0.609661 0.129161

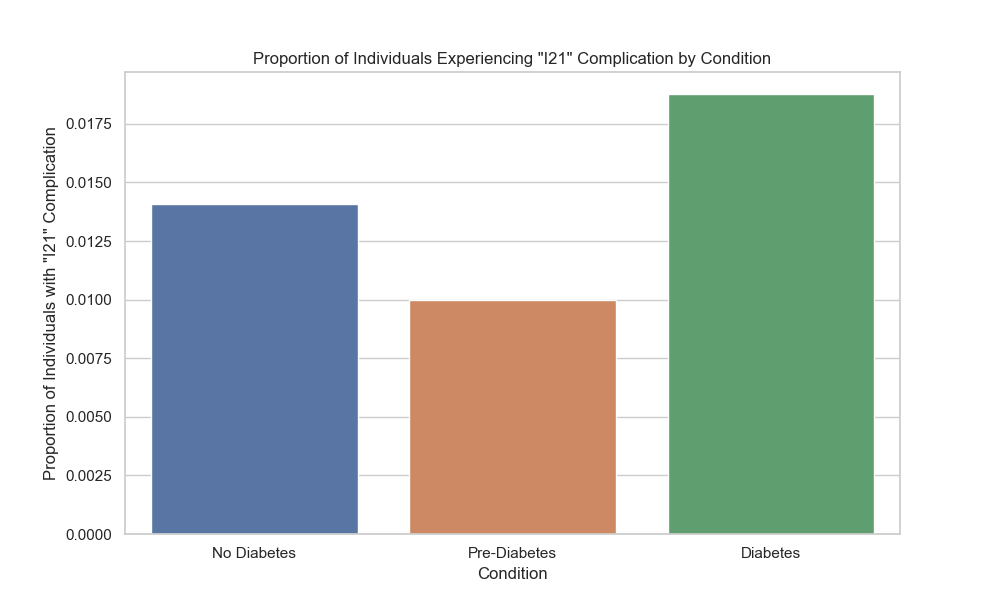
## visualize\_tukey\_results



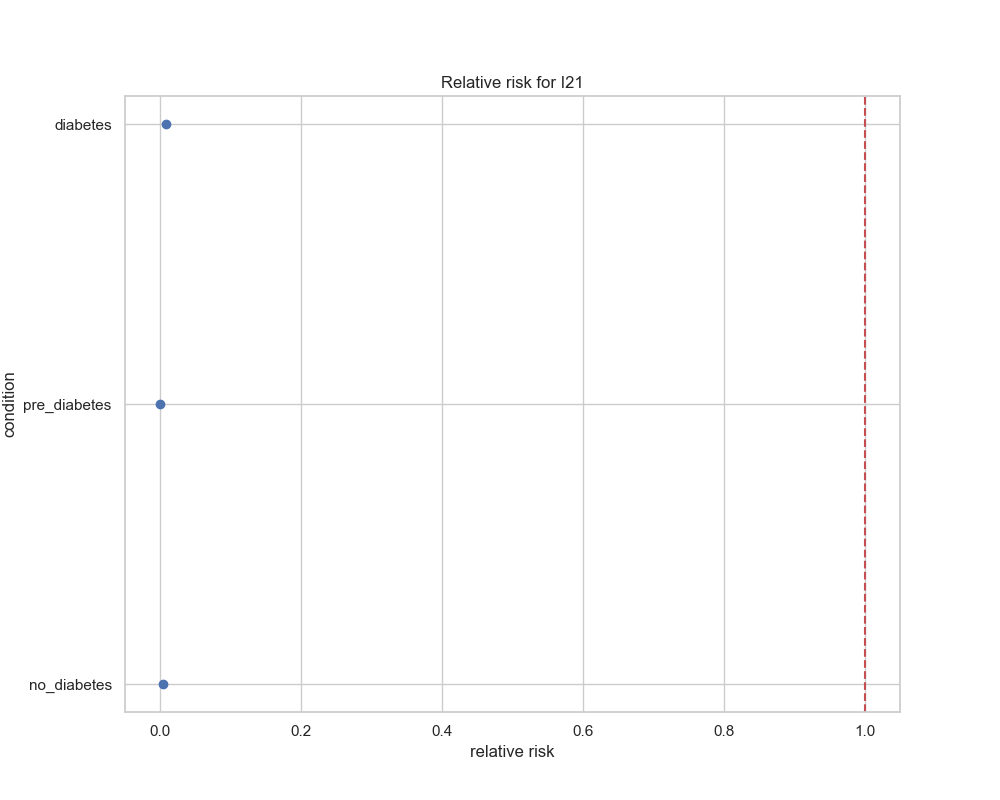
## plot\_interaction\_analysis



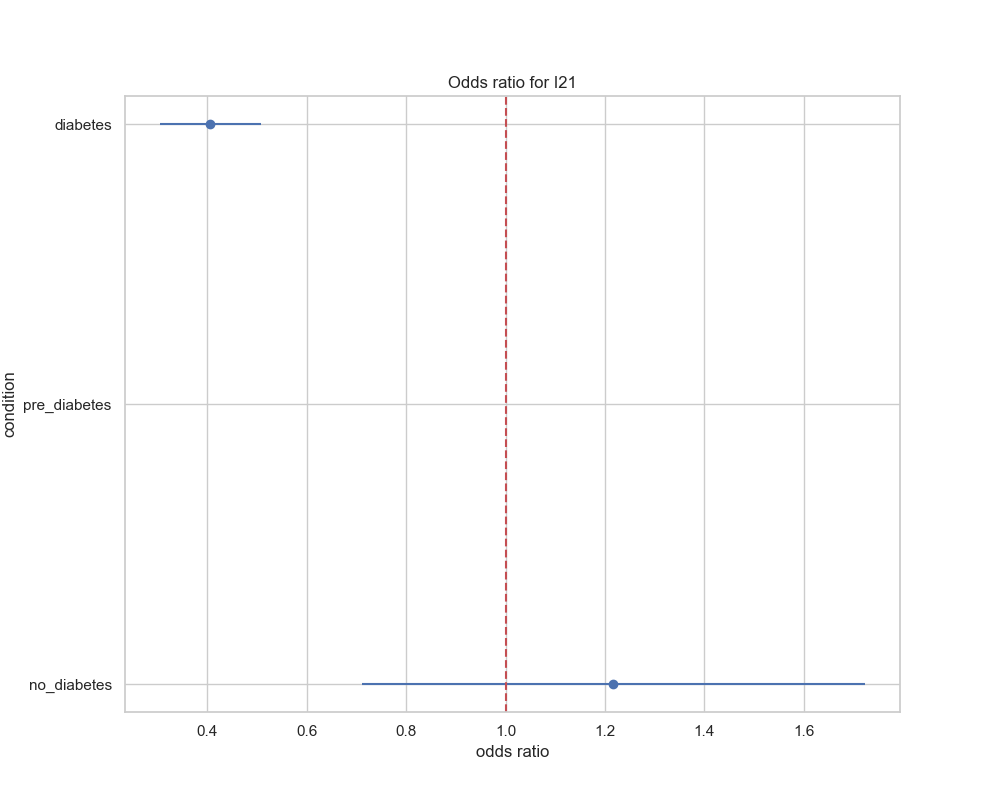
## visualize\_chi\_square\_results



## visualize\_relative\_risk\_results



## visualize\_odds\_ratio\_results



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

