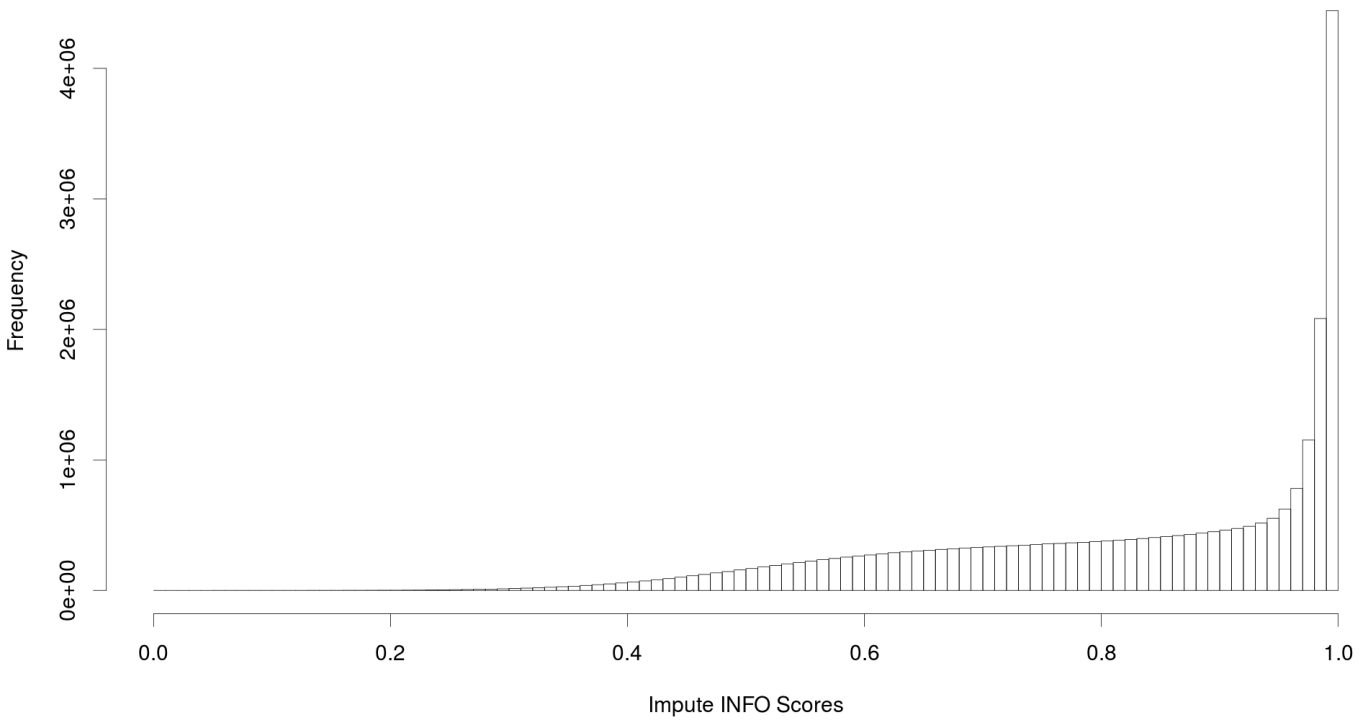


# Ulcerative Colitis

Overall case : control = 950 : 95034

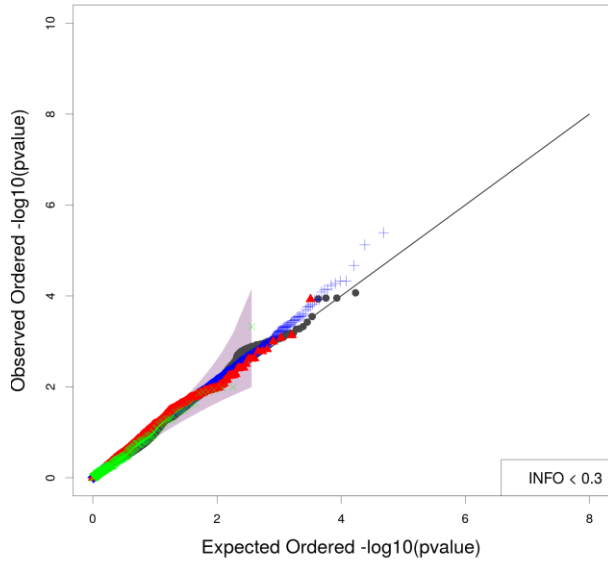
Histogram of INFO scores for the analyzed variants



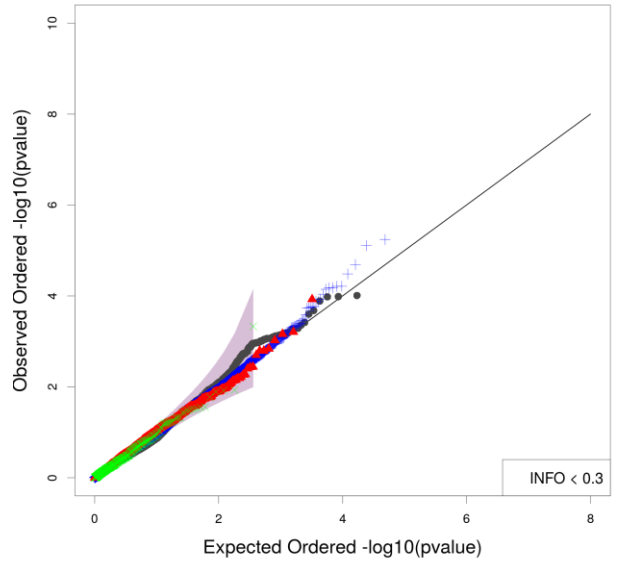
# Ulcerative Colitis

Overall case : control = 950 : 95034  
(INFO < 0.3)

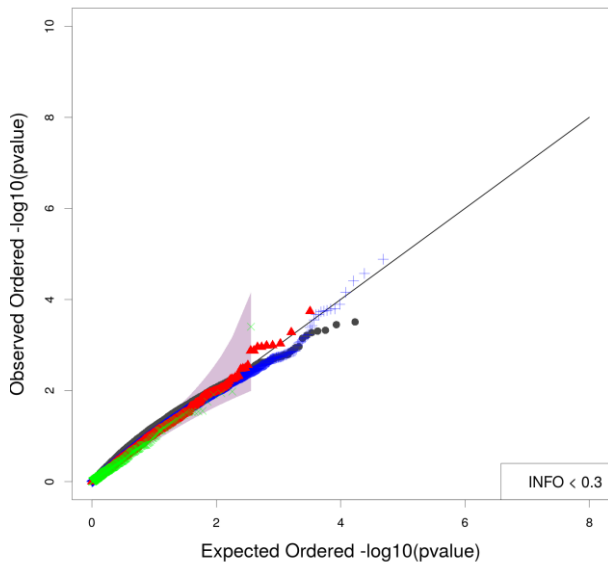
Joint (Dosage)



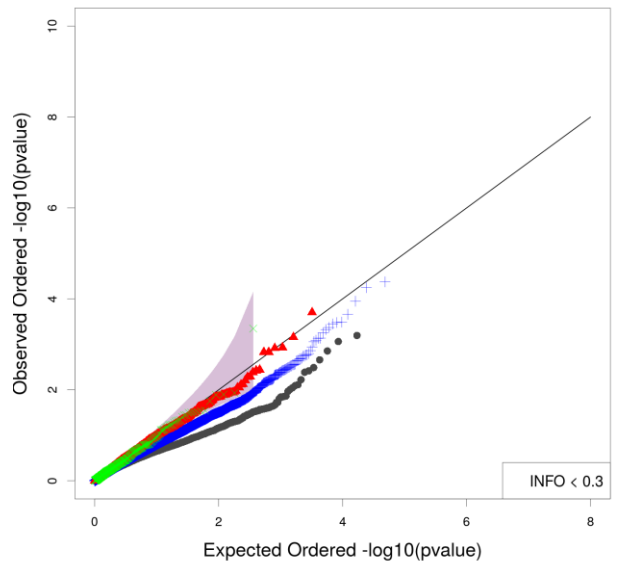
CGF - Spline



Zscore - fastSPA - 0.1



Zscore - fastSPA - 2



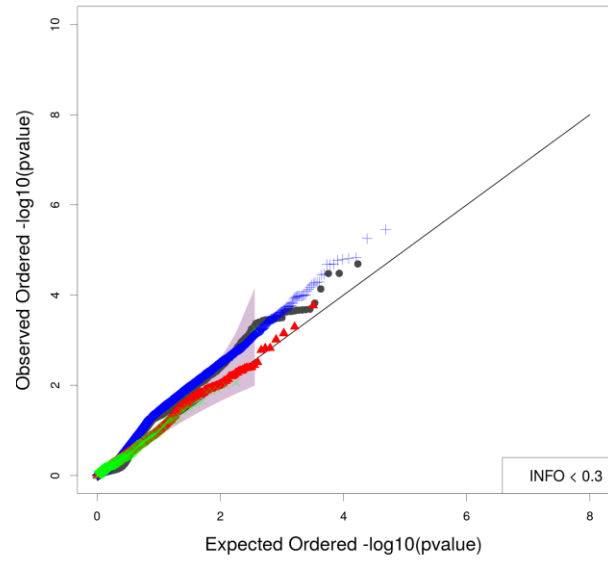
× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

# Ulcerative Colitis

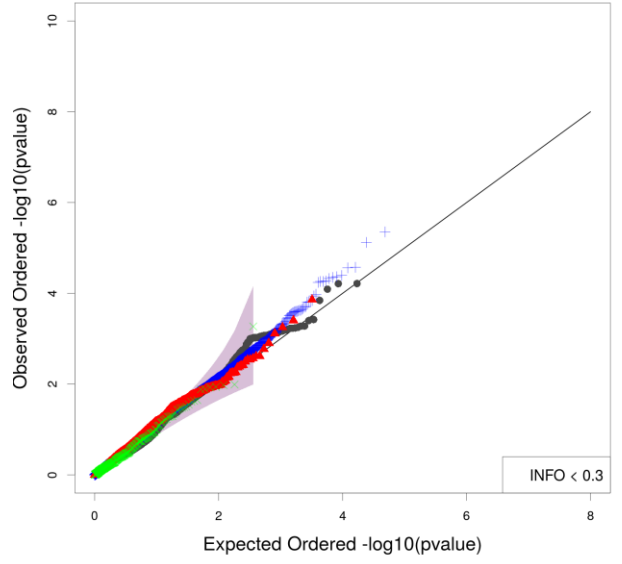
Overall case : control = 950 : 95034

(INFO < 0.3)

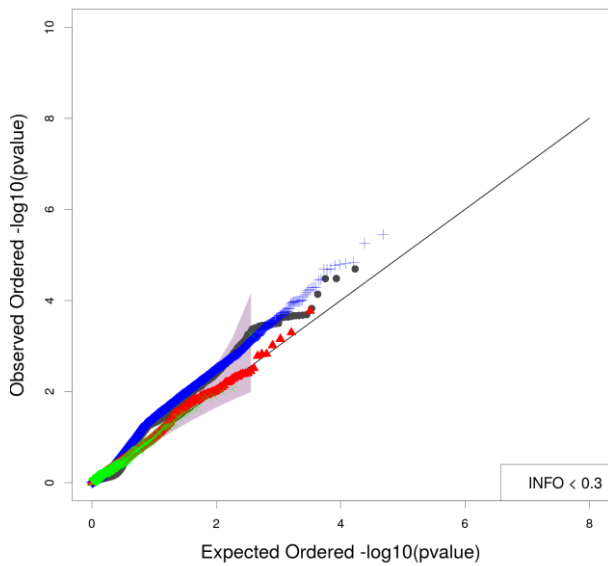
GC - fastSPA - 0.1 (BCG)



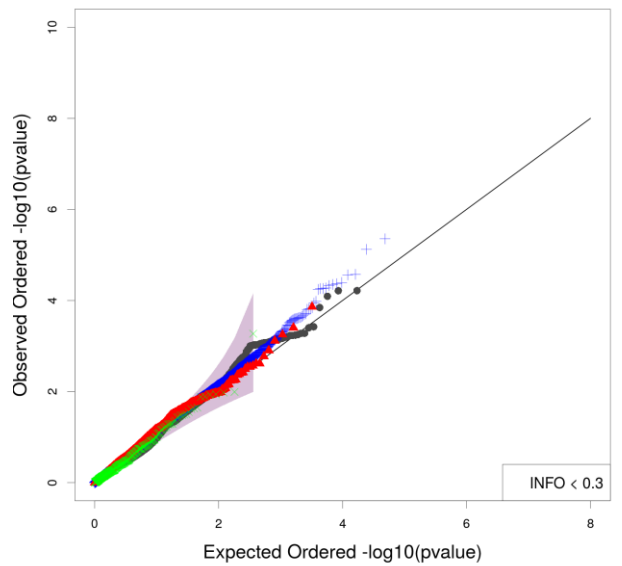
GC - fastSPA - 2 (BCG)



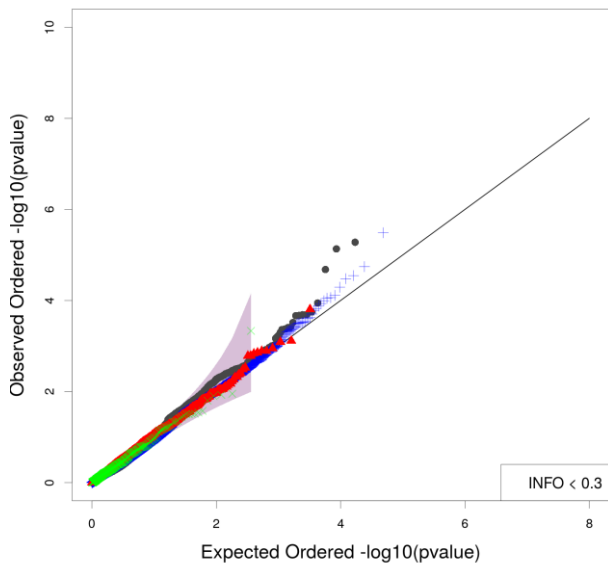
GC - fastSPA - 0.1 (Rounded Dosage)



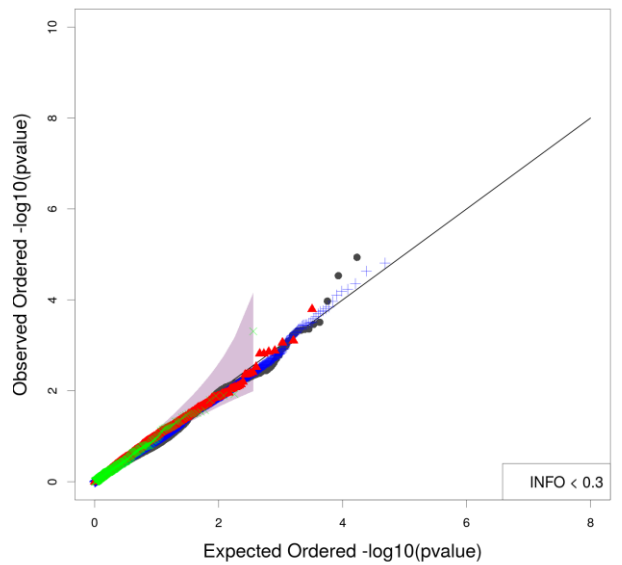
GC - fastSPA - 2 (Rounded Dosage)



GC - fastSPA - 0.1 (HWE)



GC - fastSPA - 2 (HWE)



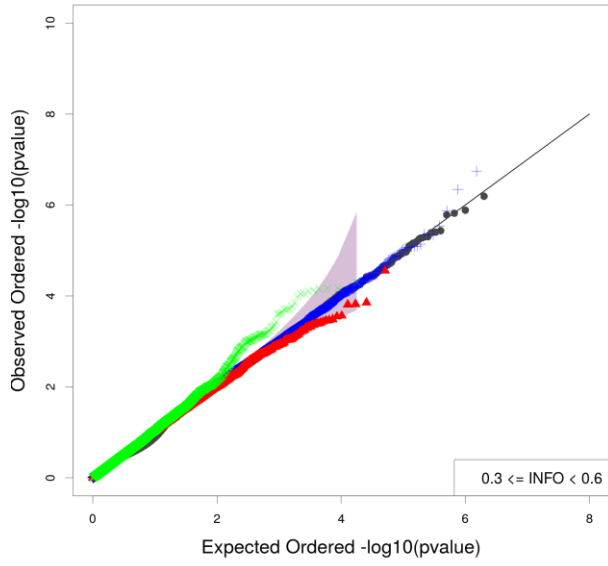
× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

# Ulcerative Colitis

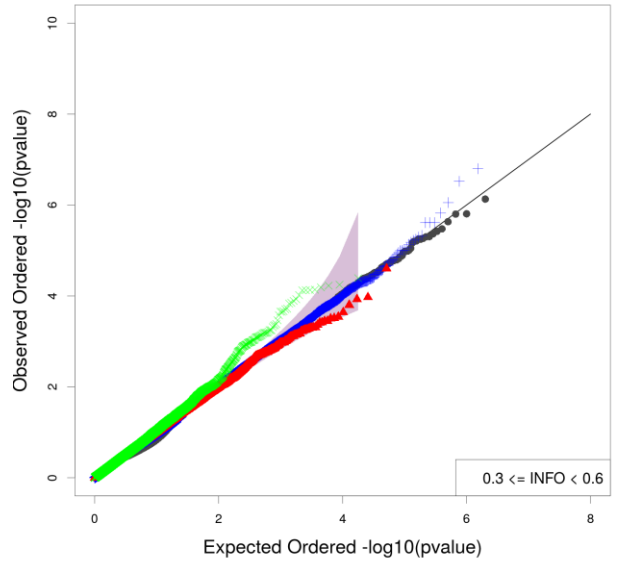
Overall case : control = 950 : 95034

( $0.3 \leq \text{INFO} < 0.6$ )

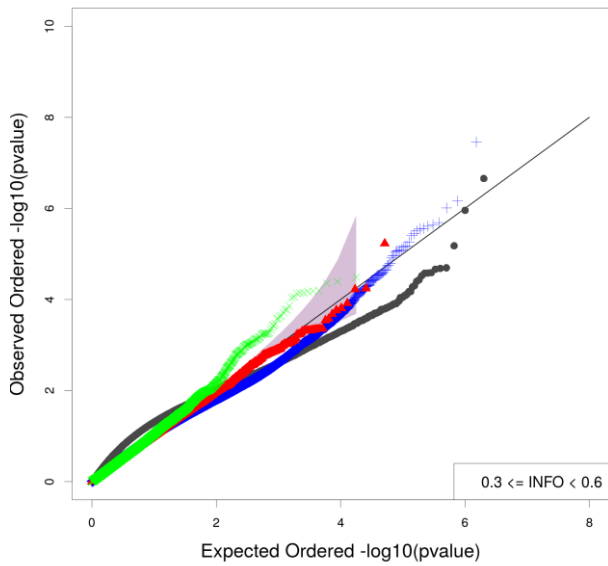
Joint (Dosage)



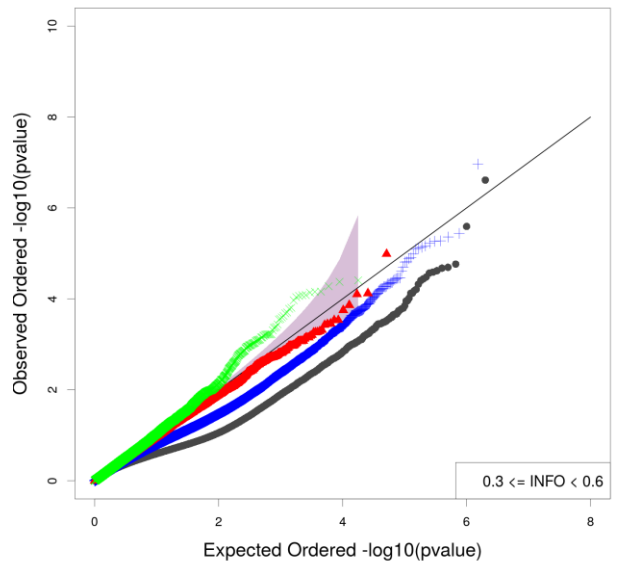
CGF - Spline



Zscore - fastSPA - 0.1



Zscore - fastSPA - 2



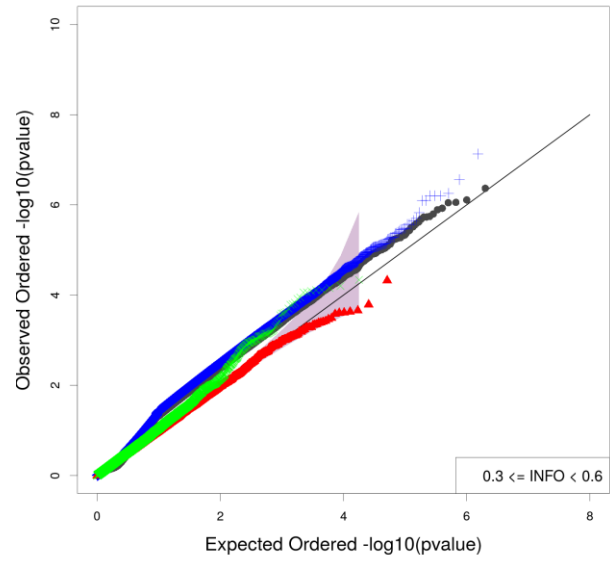
× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

# Ulcerative Colitis

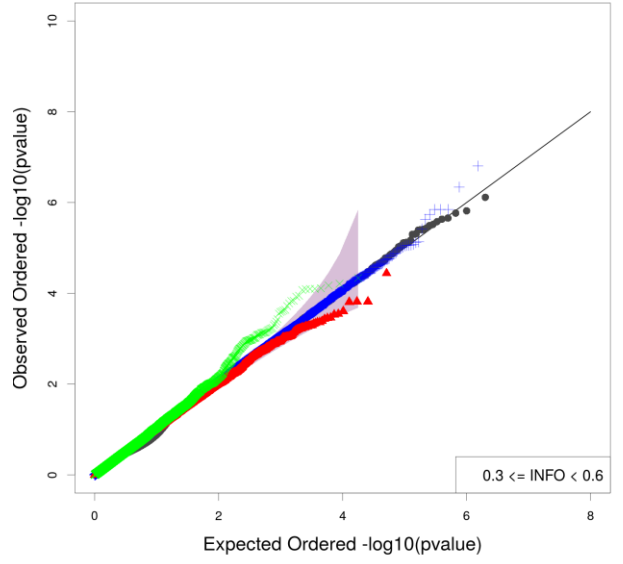
Overall case : control = 950 : 95034

( $0.3 \leq \text{INFO} < 0.6$ )

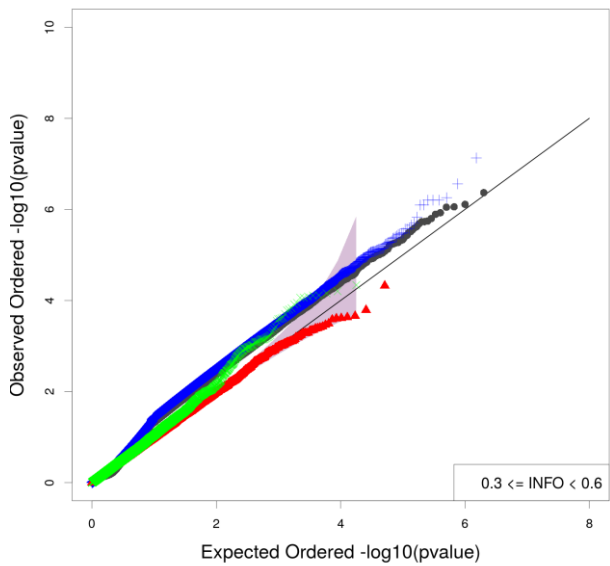
GC - fastSPA - 0.1 (BCG)



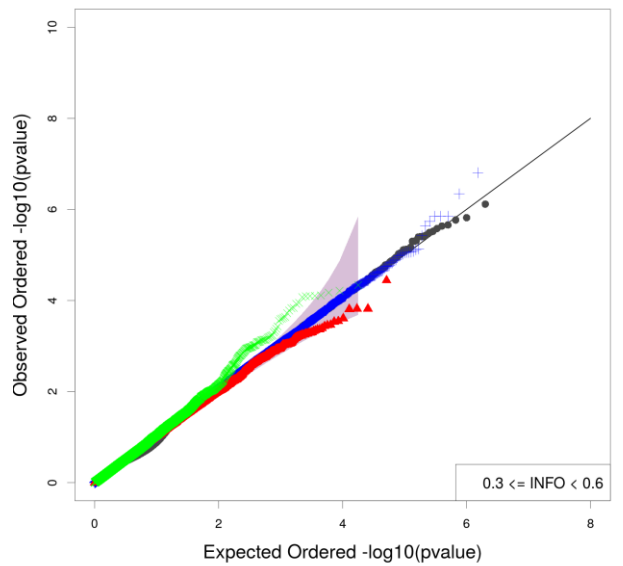
GC - fastSPA - 2 (BCG)



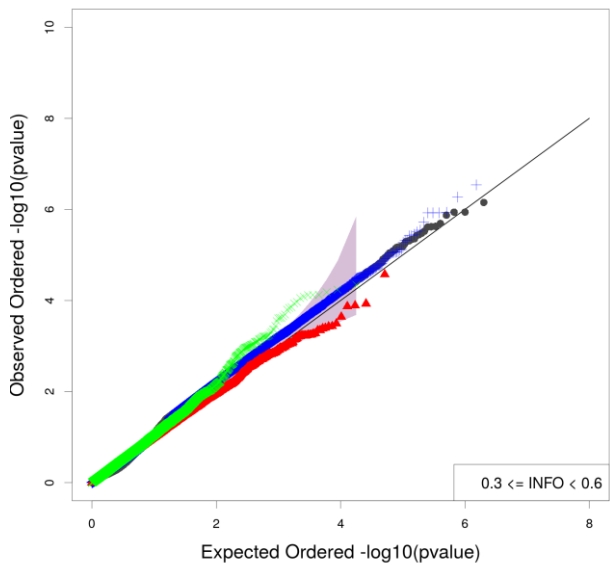
GC - fastSPA - 0.1 (Rounded Dosage)



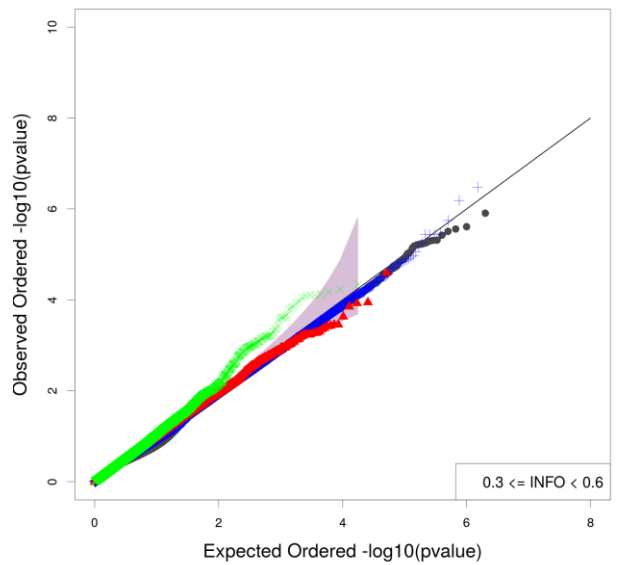
GC - fastSPA - 2 (Rounded Dosage)



GC - fastSPA - 0.1 (HWE)



GC - fastSPA - 2 (HWE)

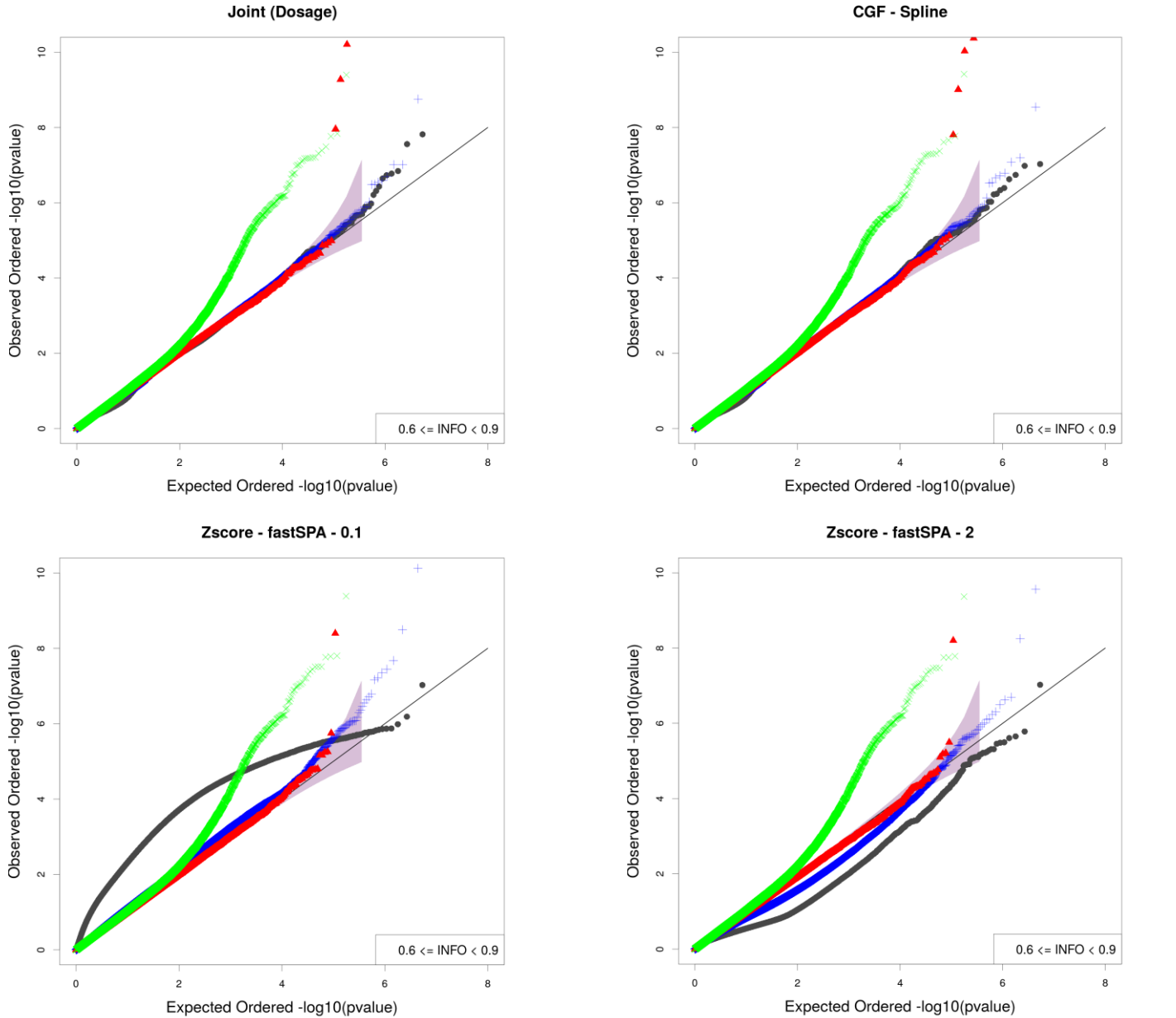


× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

# Ulcerative Colitis

Overall case : control = 950 : 95034

( $0.6 \leq \text{INFO} < 0.9$ )



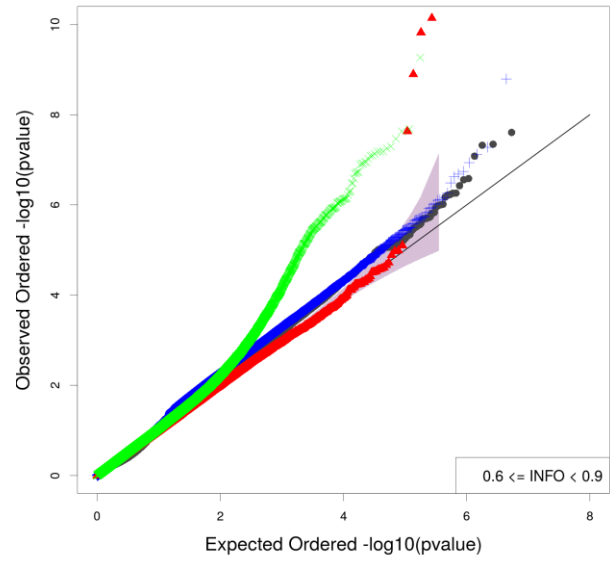
× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

# Ulcerative Colitis

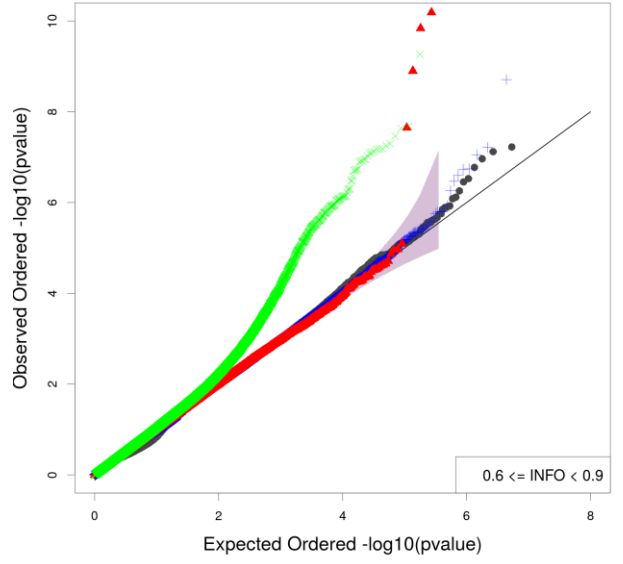
Overall case : control = 950 : 95034

( $0.6 \leq \text{INFO} < 0.9$ )

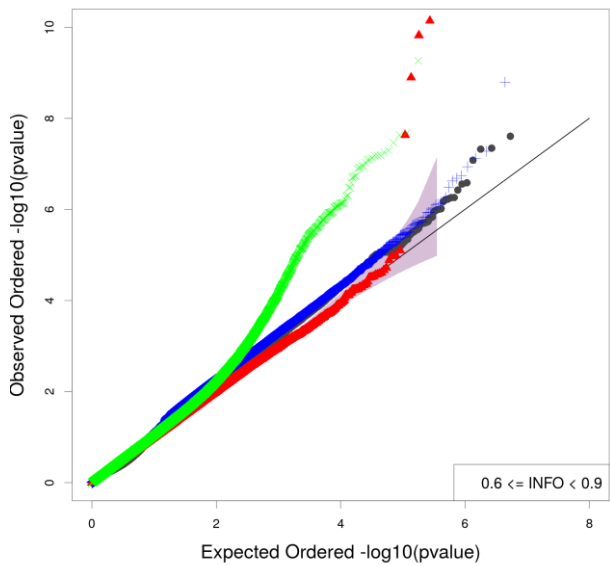
GC - fastSPA - 0.1 (BCG)



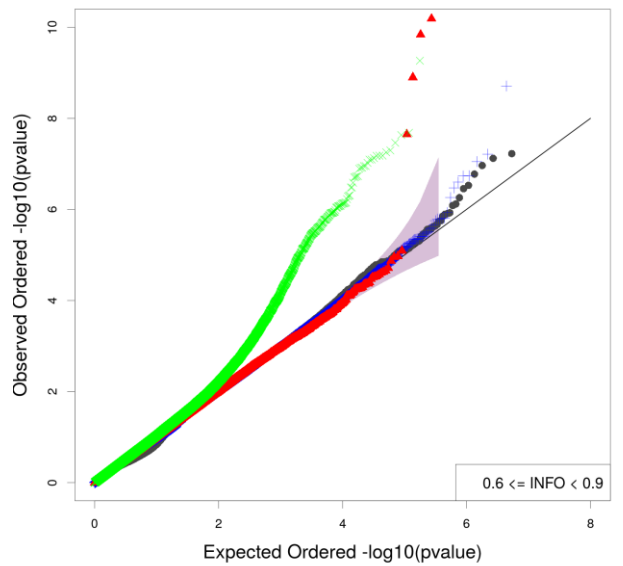
GC - fastSPA - 2 (BCG)



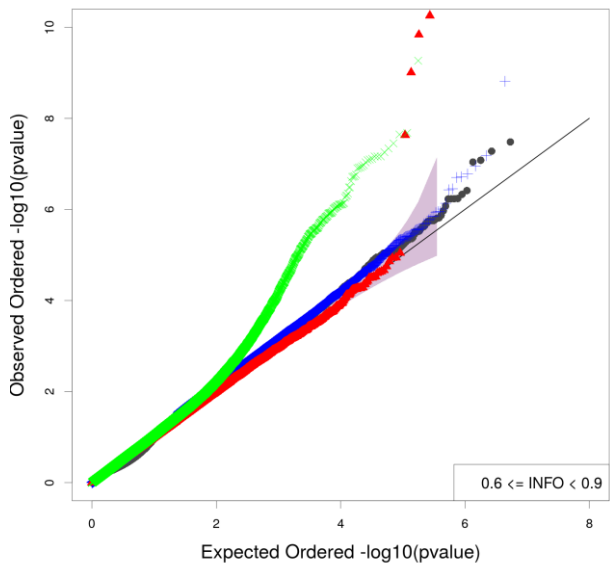
GC - fastSPA - 0.1 (Rounded Dosage)



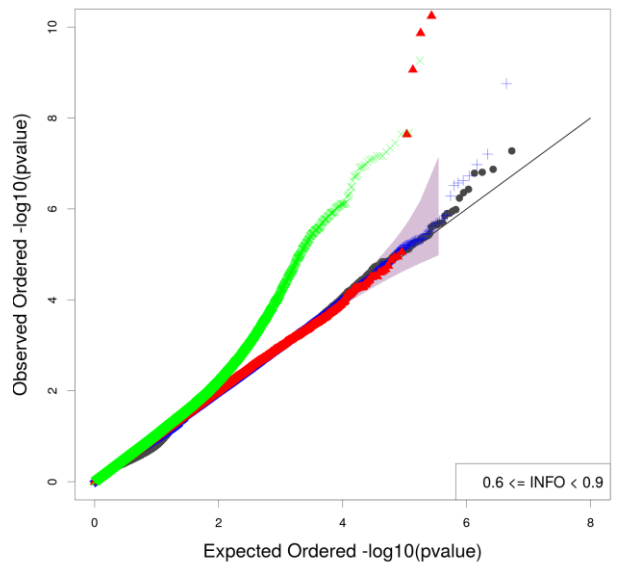
GC - fastSPA - 2 (Rounded Dosage)



GC - fastSPA - 0.1 (HWE)



GC - fastSPA - 2 (HWE)

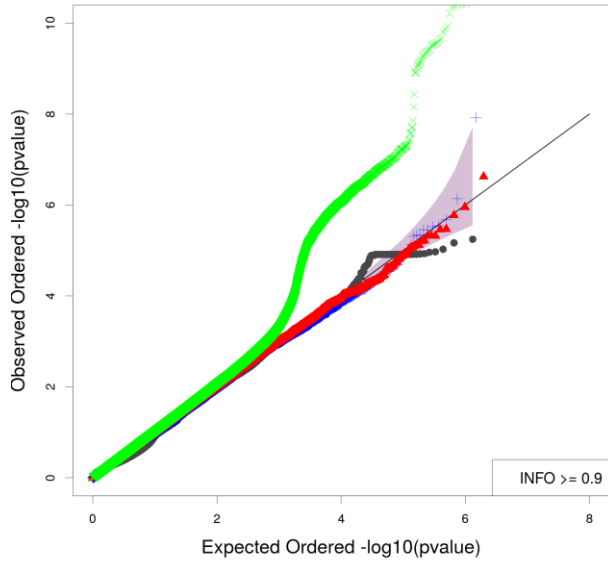


× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

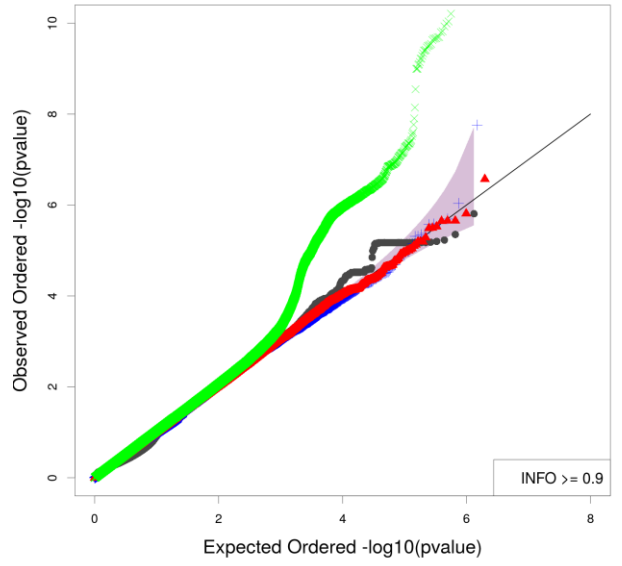
# Ulcerative Colitis

Overall case : control = 950 : 95034  
(INFO  $\geq 0.9$ )

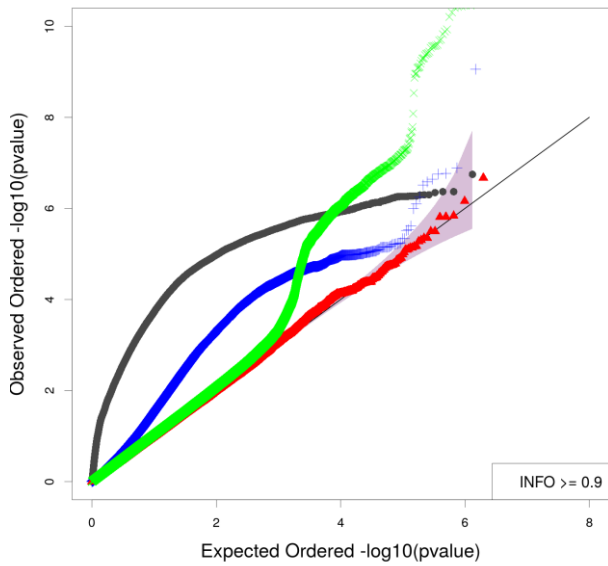
Joint (Dosage)



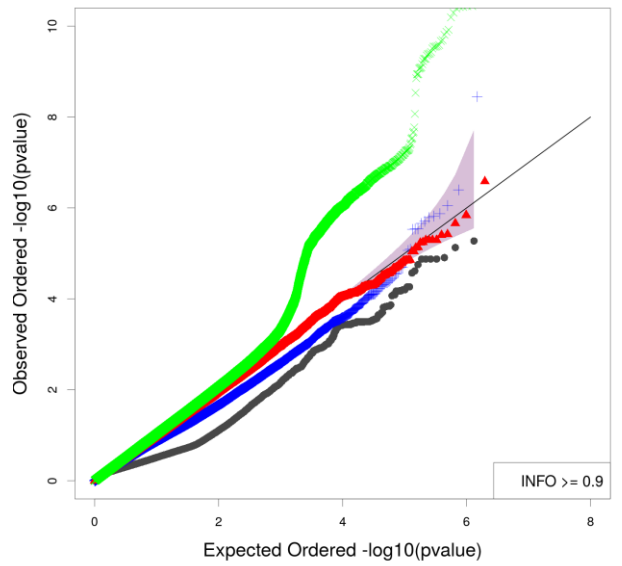
CGF - Spline



Zscore - fastSPA - 0.1



Zscore - fastSPA - 2



× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

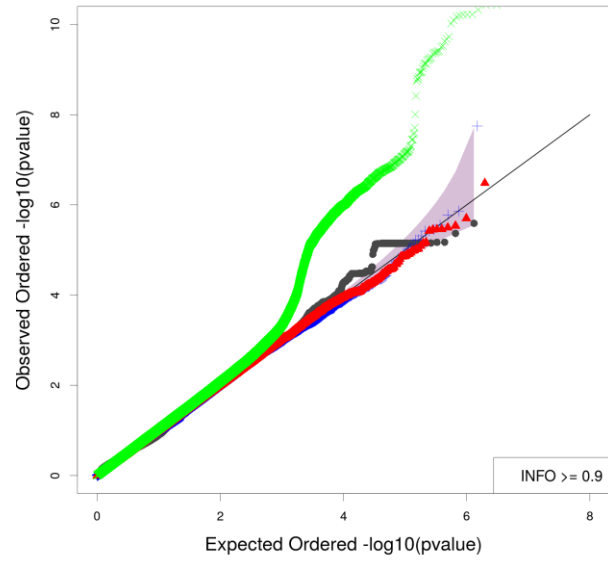


# Ulcerative Colitis

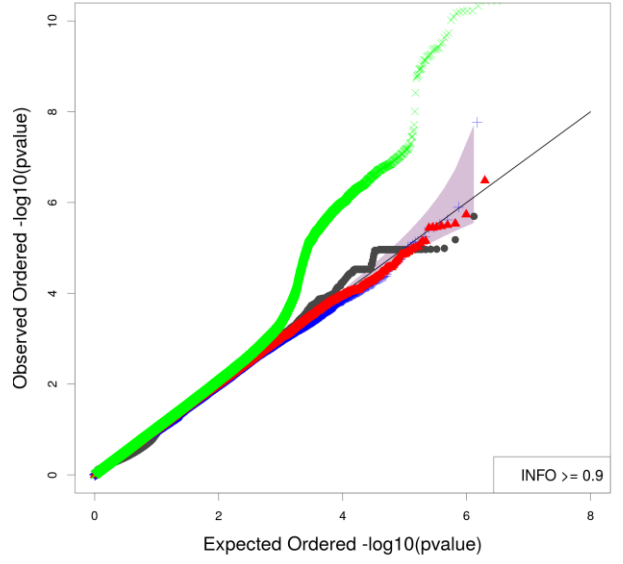
Overall case : control = 950 : 95034

(INFO  $\geq 0.9$ )

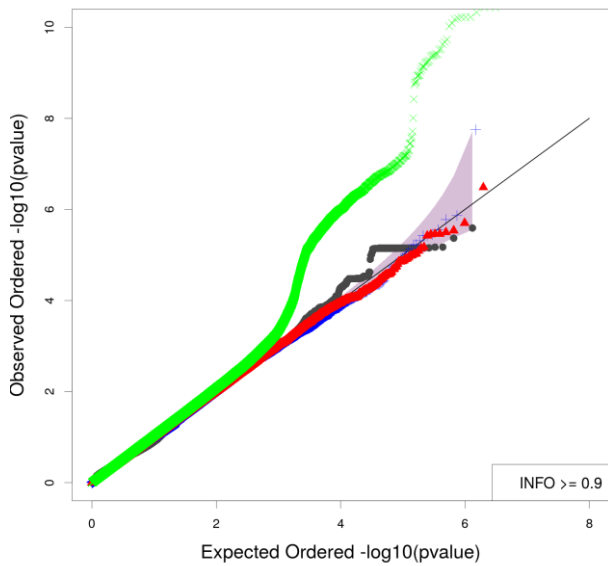
GC - fastSPA - 0.1 (BCG)



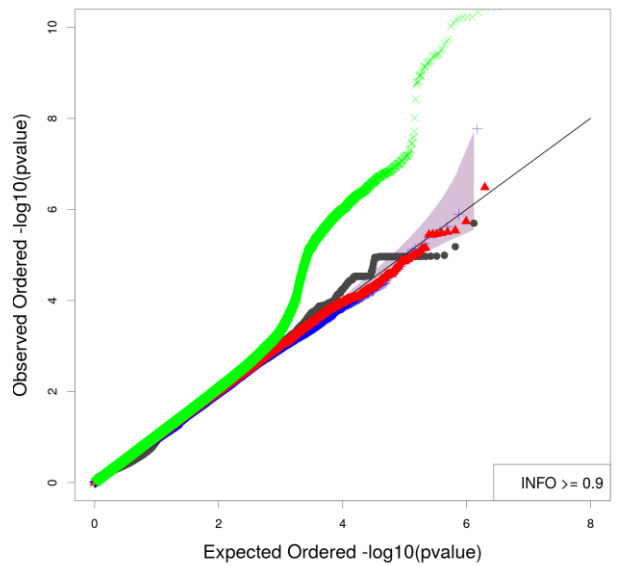
GC - fastSPA - 2 (BCG)



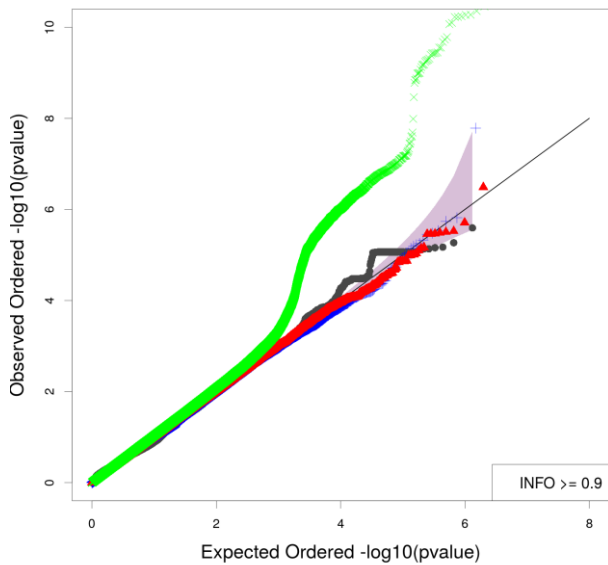
GC - fastSPA - 0.1 (Rounded Dosage)



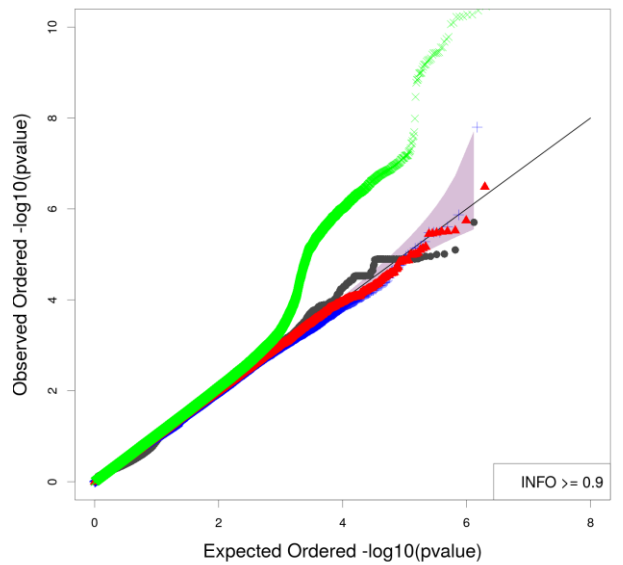
GC - fastSPA - 2 (Rounded Dosage)



GC - fastSPA - 0.1 (HWE)



GC - fastSPA - 2 (HWE)

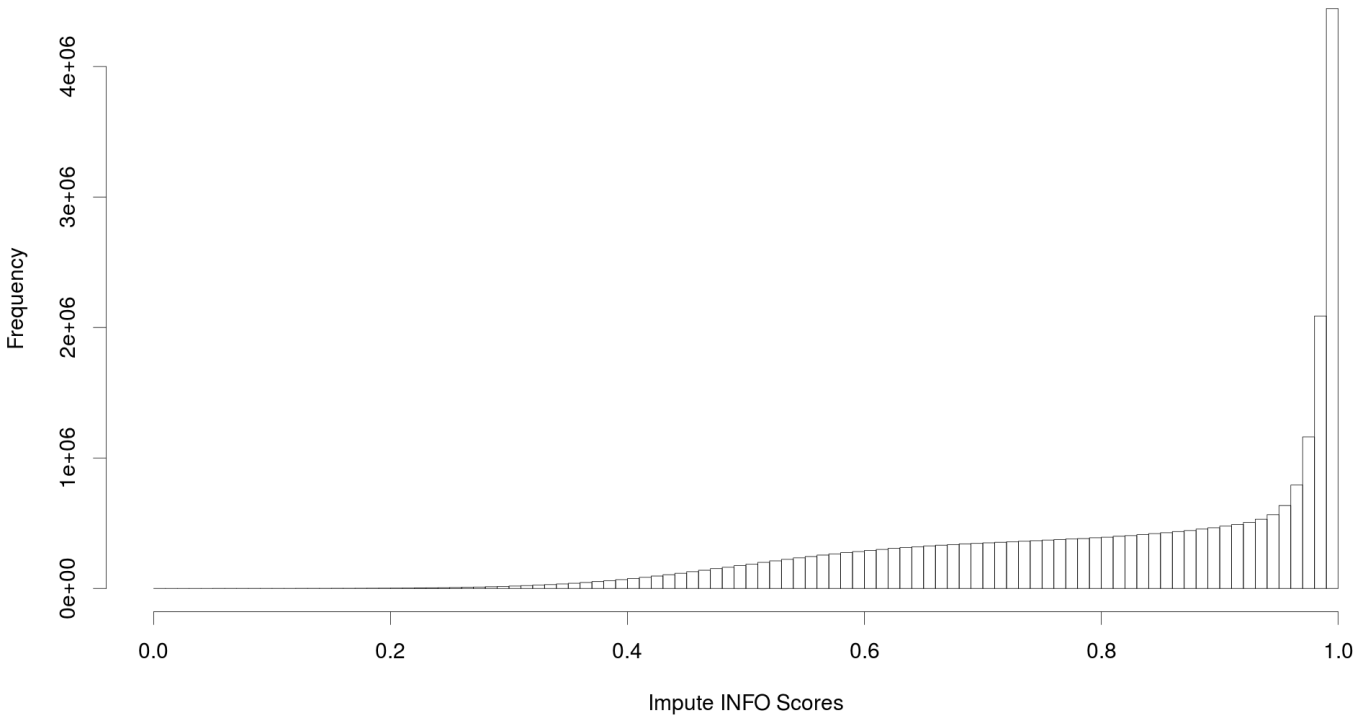


× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

# Psoriasis

Overall case : control = 657 : 10952

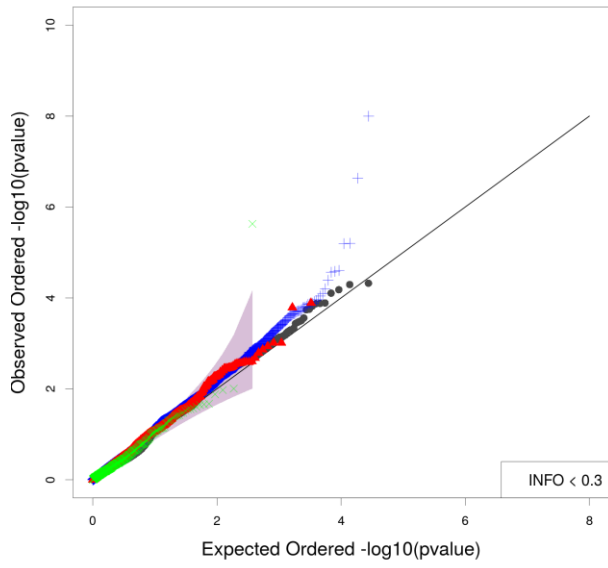
Histogram of INFO scores for the analyzed variants



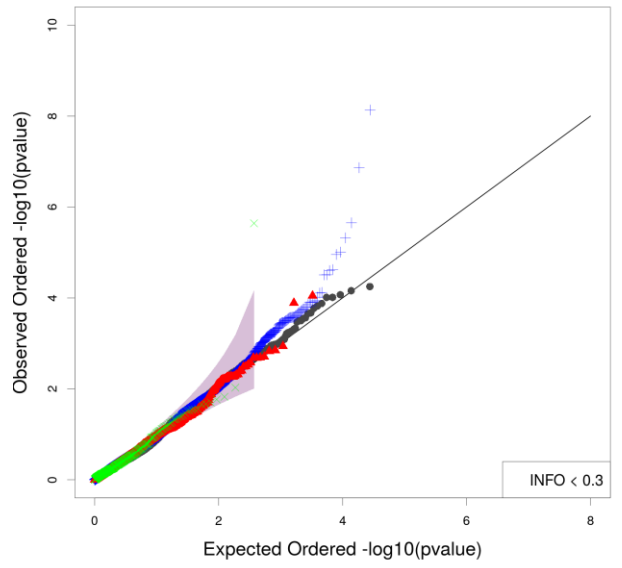
# Psoriasis

Overall case : control = 657 : 109526  
(INFO < 0.3)

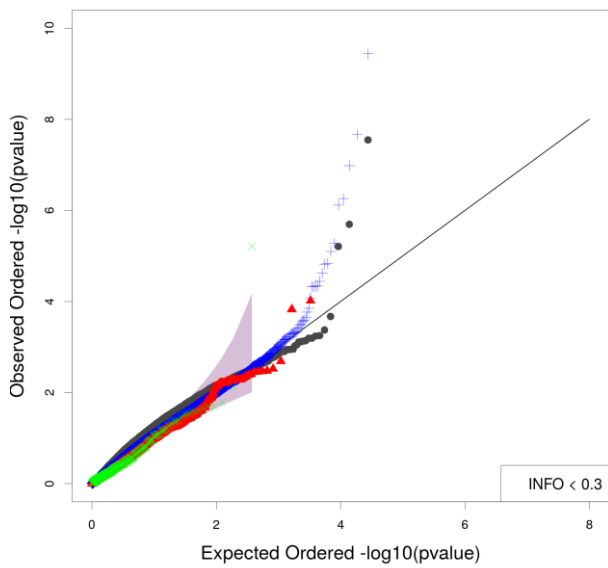
Joint (Dosage)



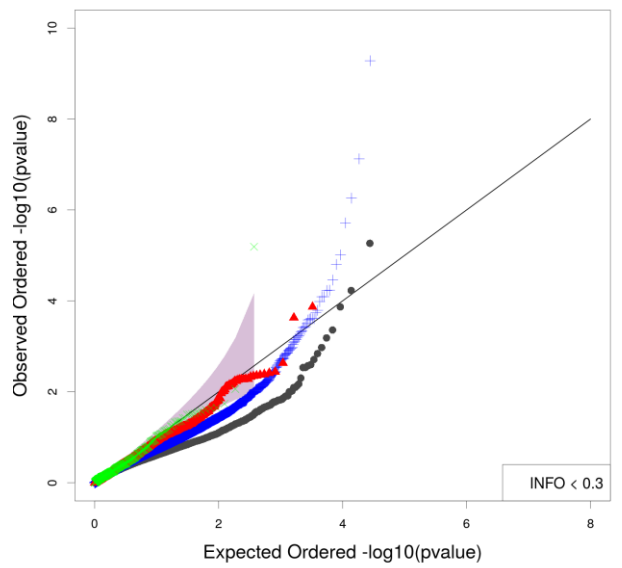
CGF - Spline



Zscore - fastSPA - 0.1



Zscore - fastSPA - 2

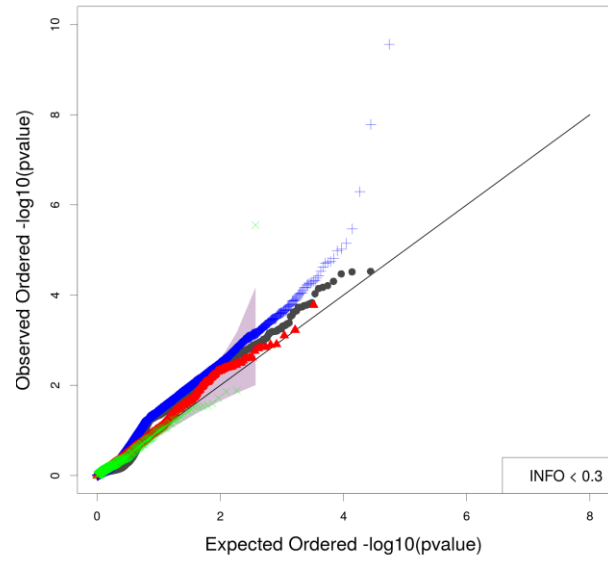


× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

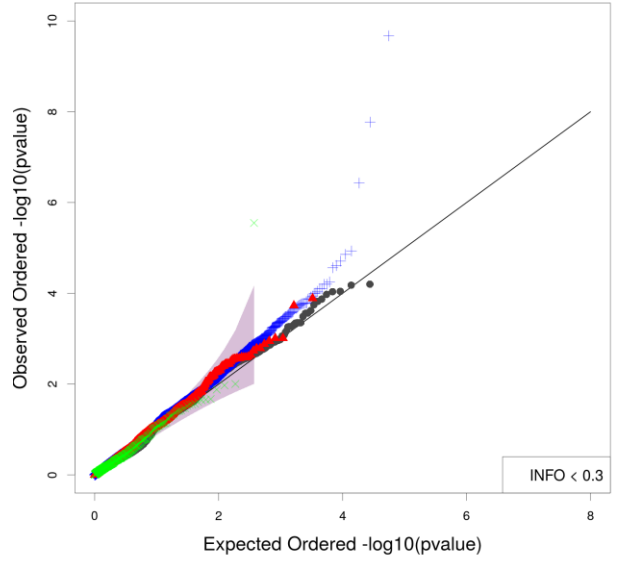
# Psoriasis

Overall case : control = 657 : 109526  
(INFO < 0.3)

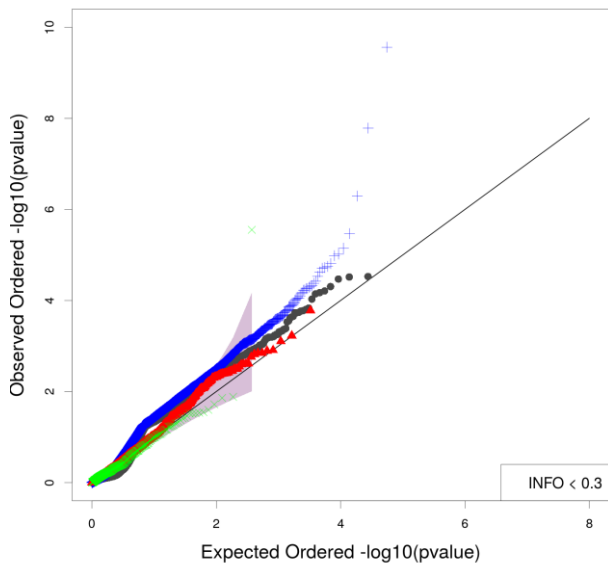
GC - fastSPA - 0.1 (BCG)



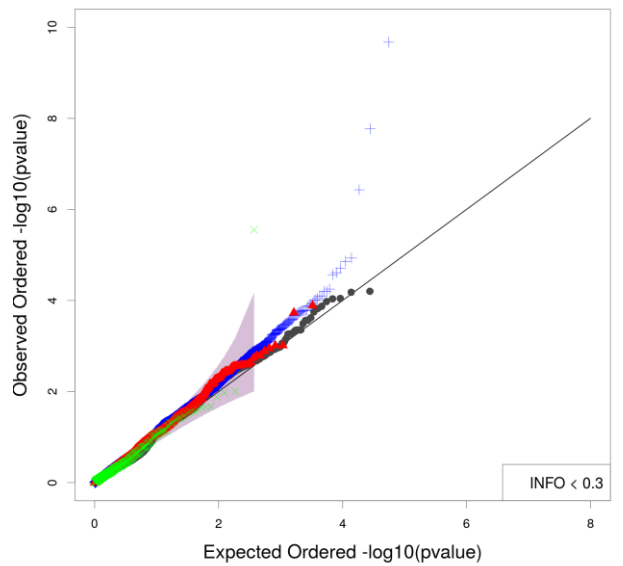
GC - fastSPA - 2 (BCG)



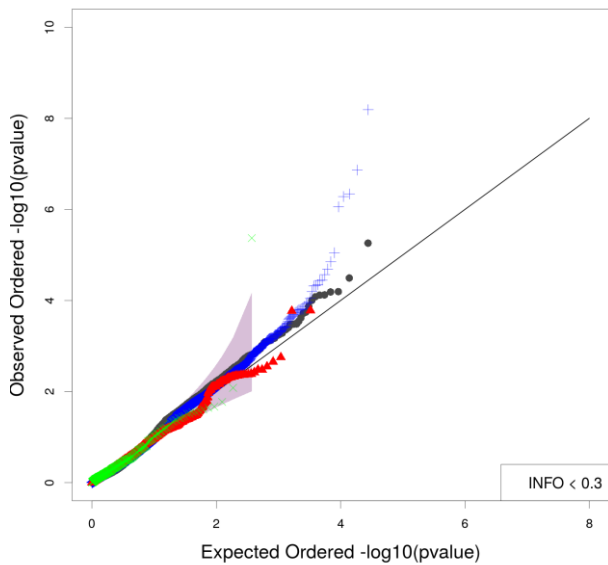
GC - fastSPA - 0.1 (Rounded Dosage)



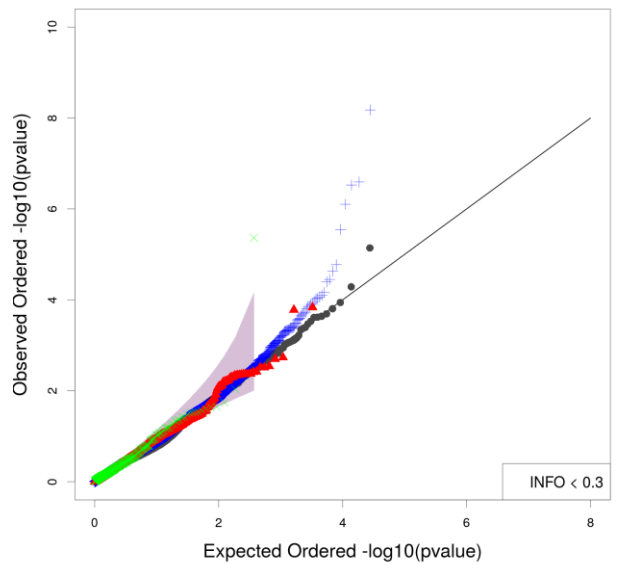
GC - fastSPA - 2 (Rounded Dosage)



GC - fastSPA - 0.1 (HWE)



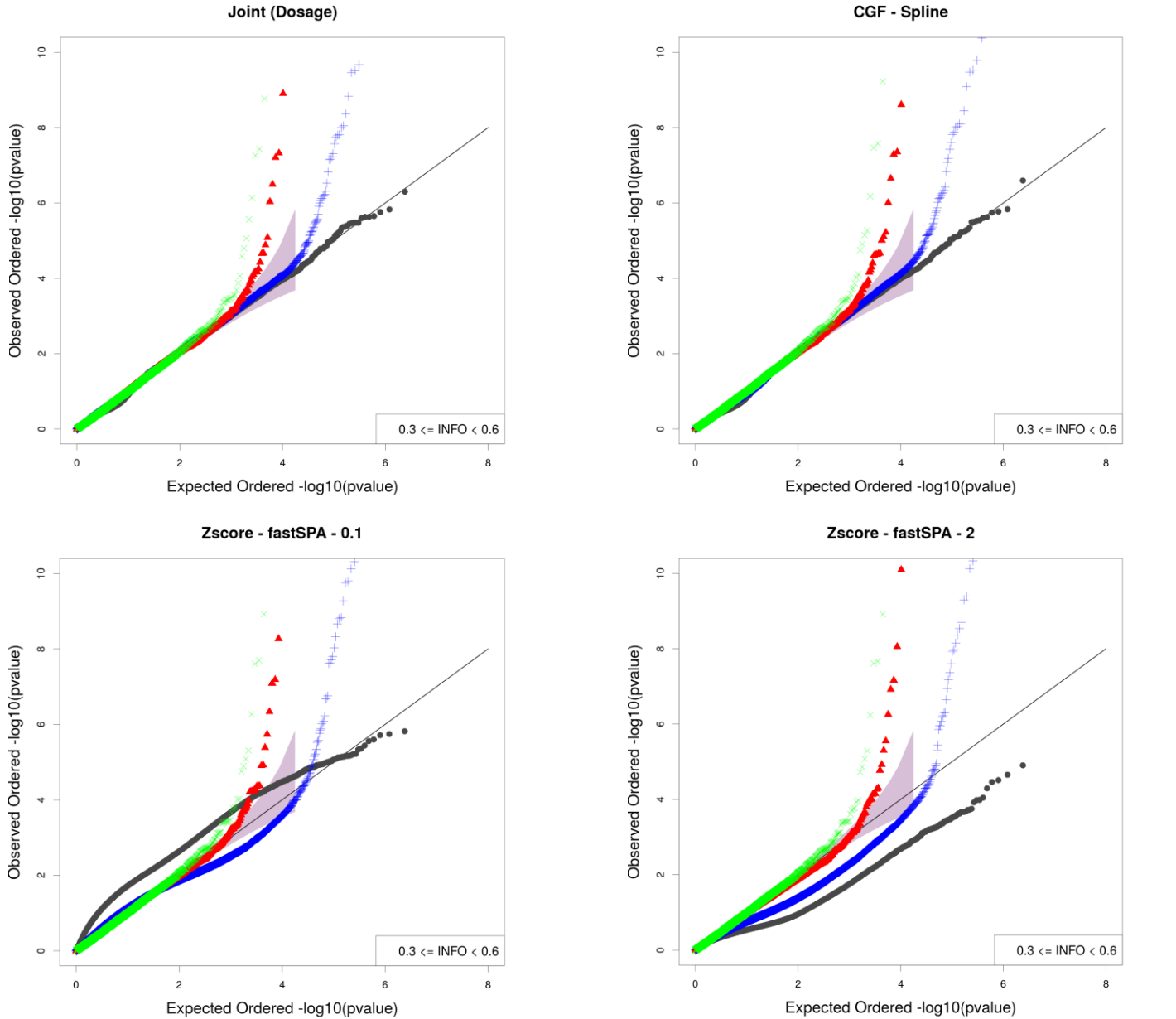
GC - fastSPA - 2 (HWE)



× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

# Psoriasis

Overall case : control = 657 : 109526  
( $0.3 \leq \text{INFO} < 0.6$ )

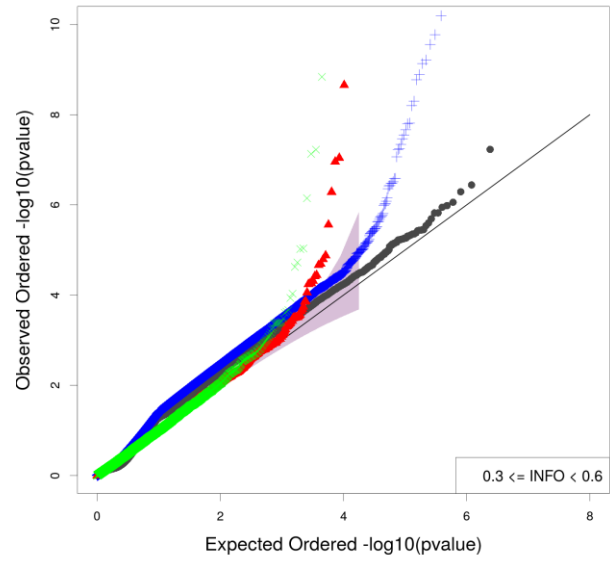


× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

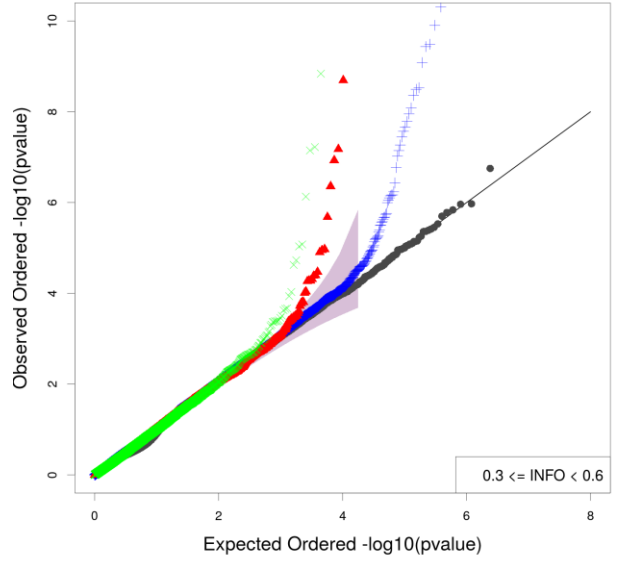
# Psoriasis

Overall case : control = 657 : 109526  
( $0.3 \leq \text{INFO} < 0.6$ )

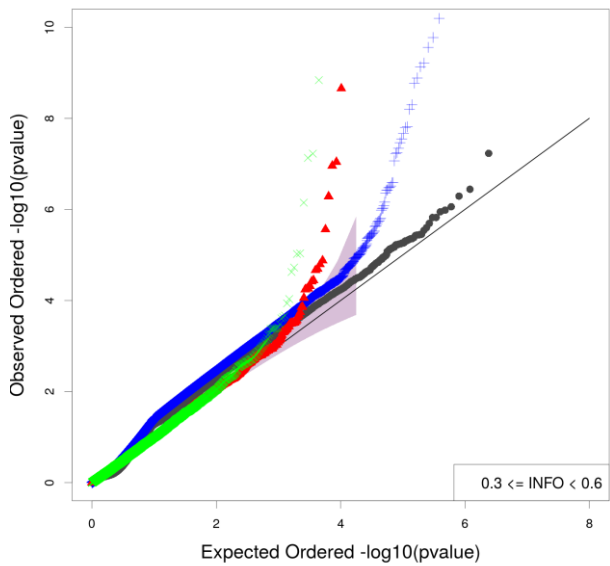
GC - fastSPA - 0.1 (BCG)



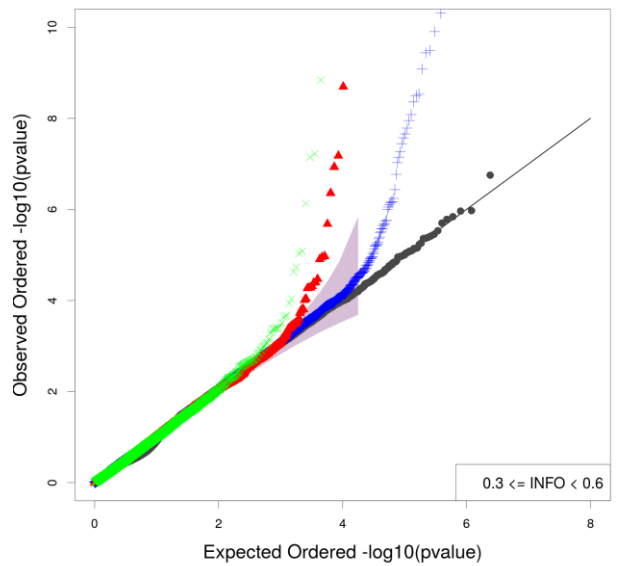
GC - fastSPA - 2 (BCG)



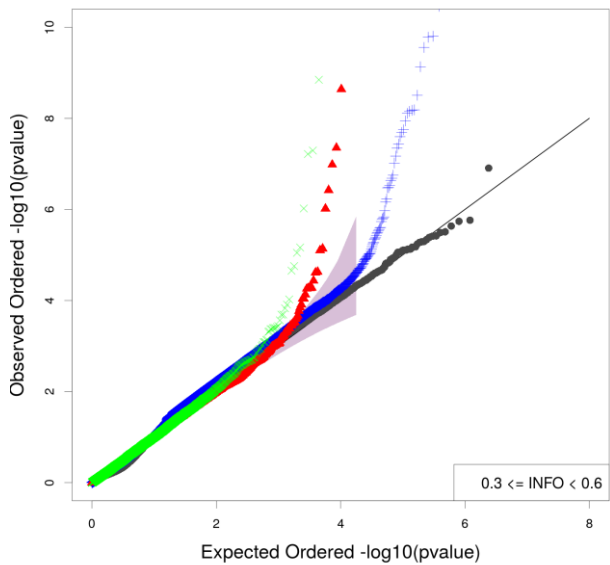
GC - fastSPA - 0.1 (Rounded Dosage)



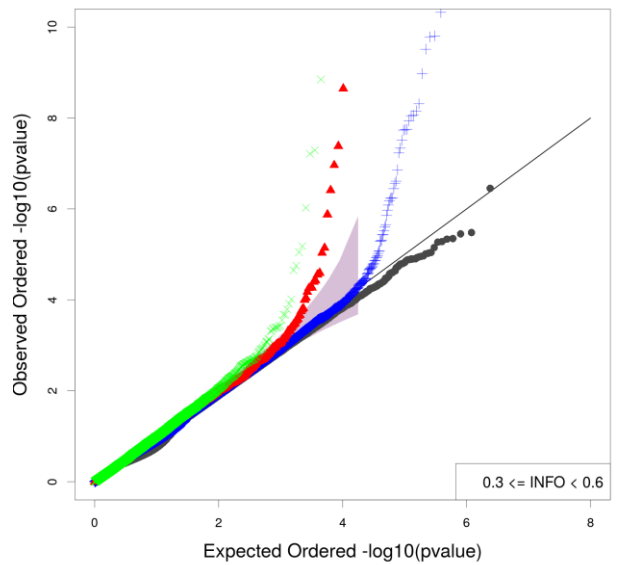
GC - fastSPA - 2 (Rounded Dosage)



GC - fastSPA - 0.1 (HWE)



GC - fastSPA - 2 (HWE)

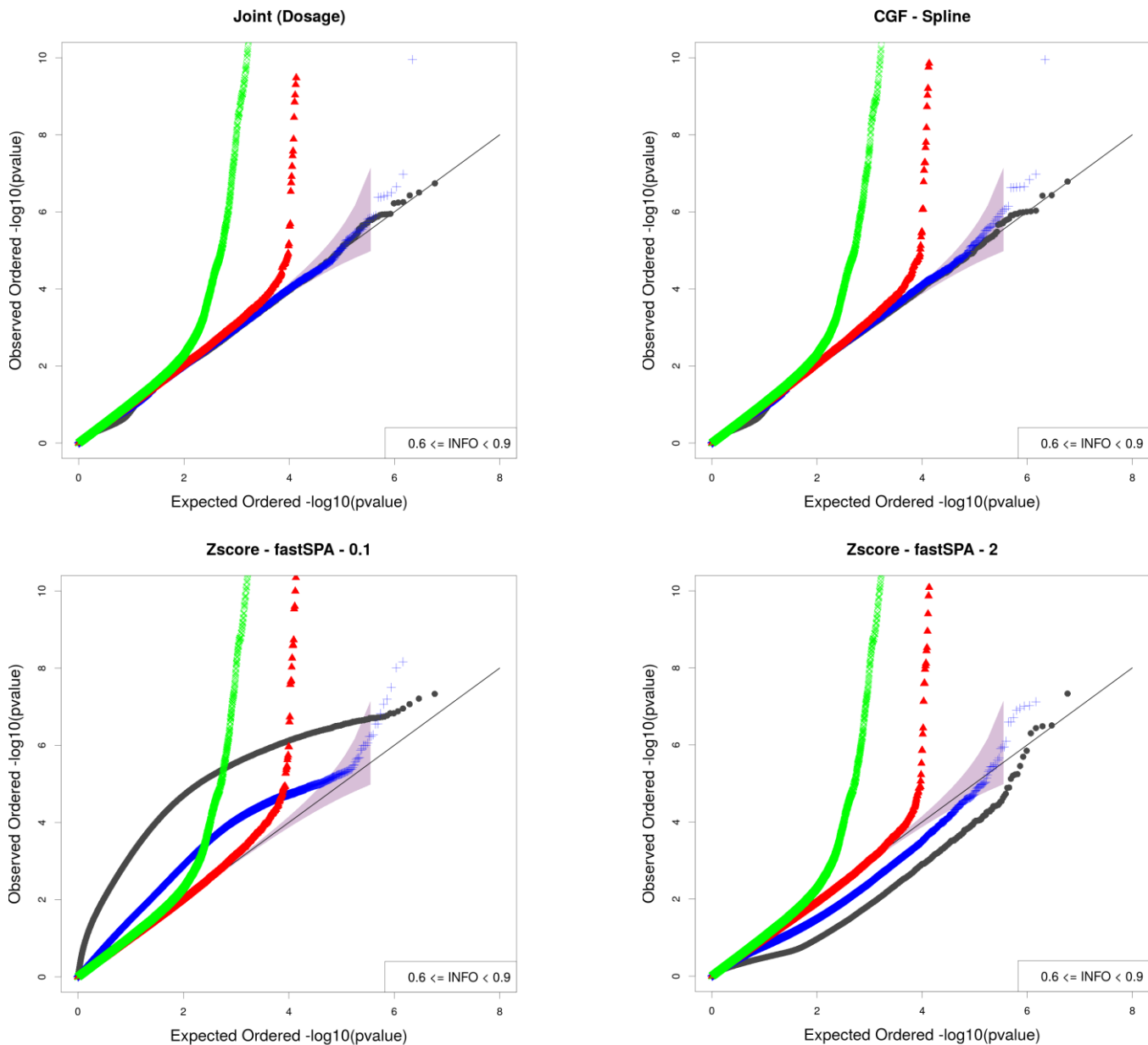


× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

# Psoriasis

Overall case : control = 657 : 109526

( $0.6 \leq \text{INFO} < 0.9$ )



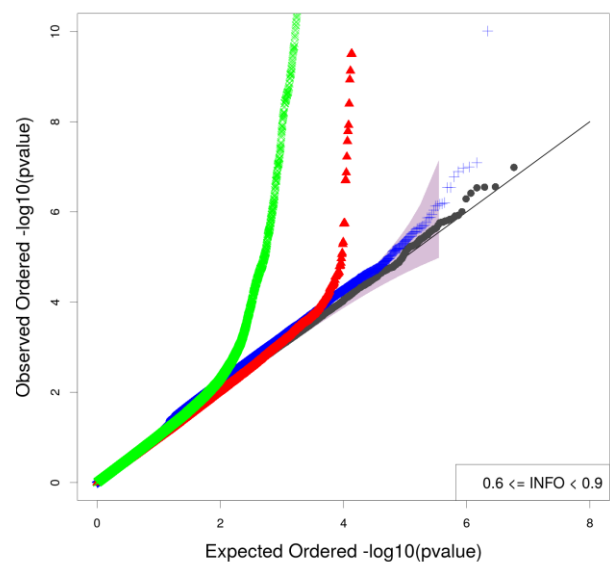
× MAF [0.05,0.5]    ▲ MAF [0.01,0.05]    + MAF [0.001,0.01]    ● MAF < 0.001

# Psoriasis

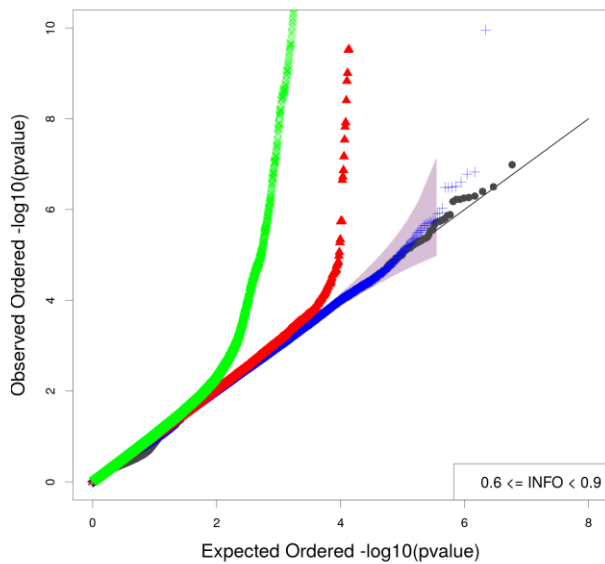
Overall case : control = 657 : 109526

( $0.6 \leq \text{INFO} < 0.9$ )

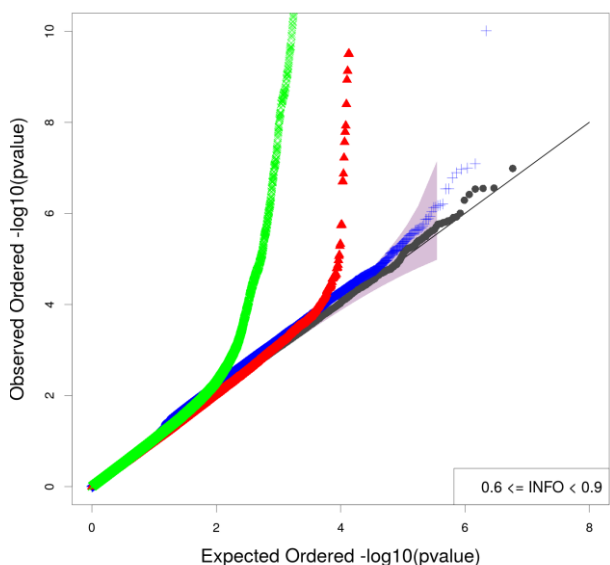
GC - fastSPA - 0.1 (BCG)



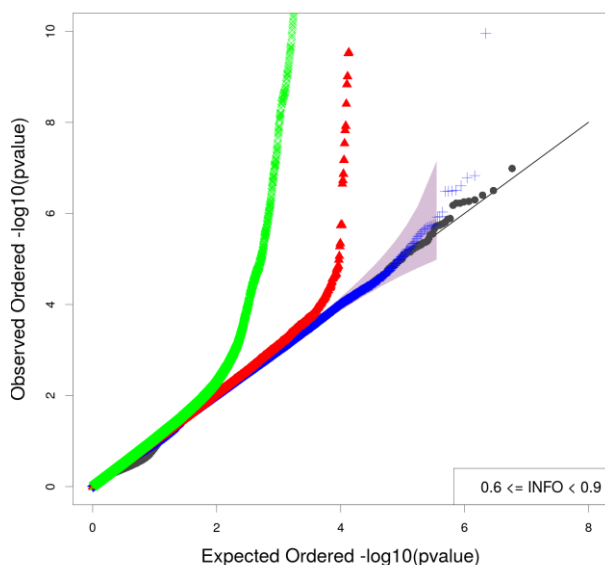
GC - fastSPA - 2 (BCG)



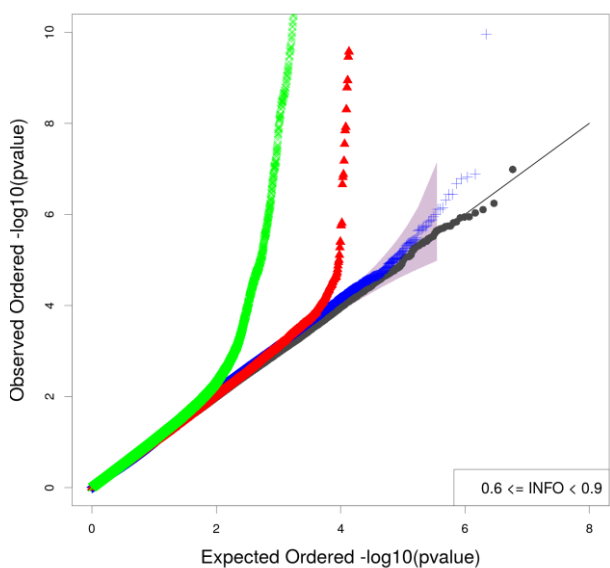
GC - fastSPA - 0.1 (Rounded Dosage)



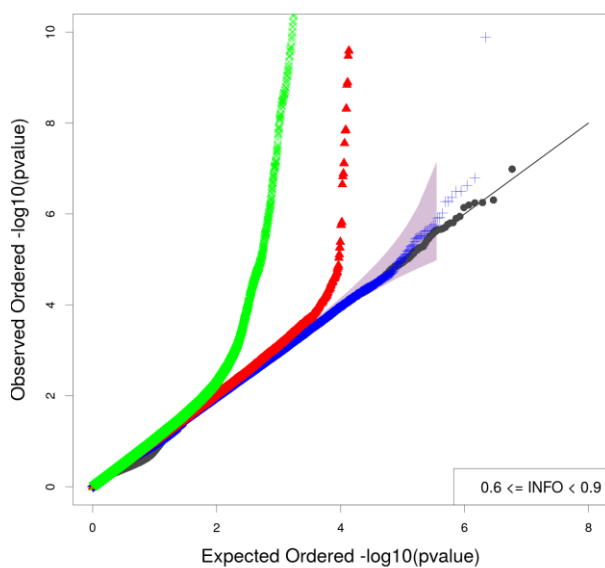
GC - fastSPA - 2 (Rounded Dosage)



GC - fastSPA - 0.1 (HWE)



GC - fastSPA - 2 (HWE)

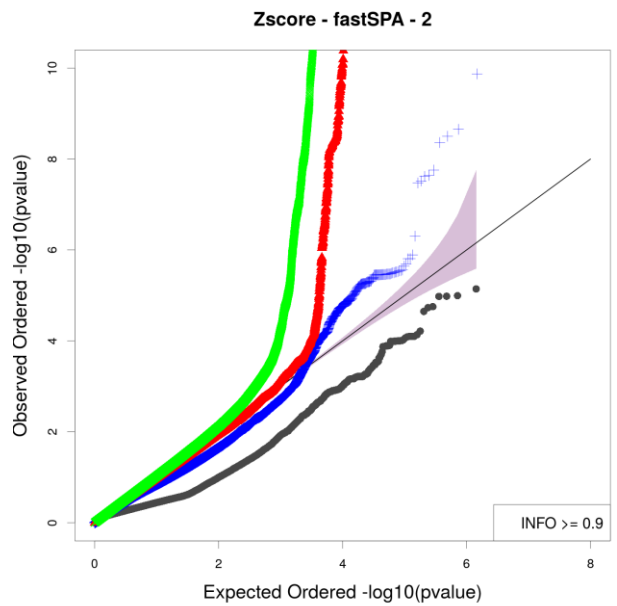
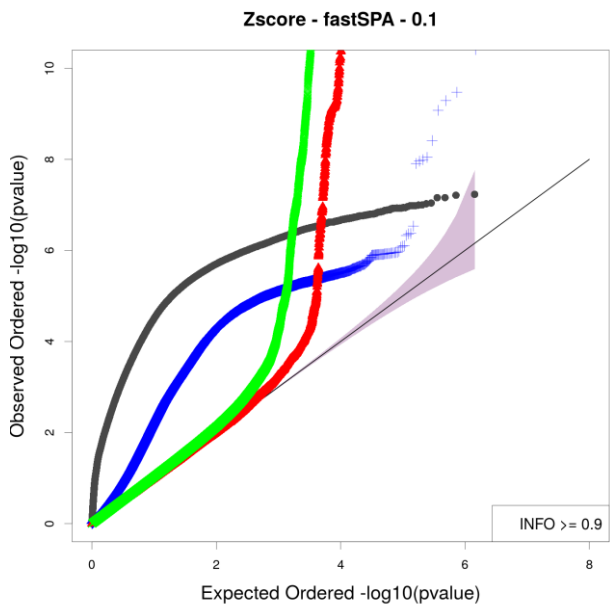
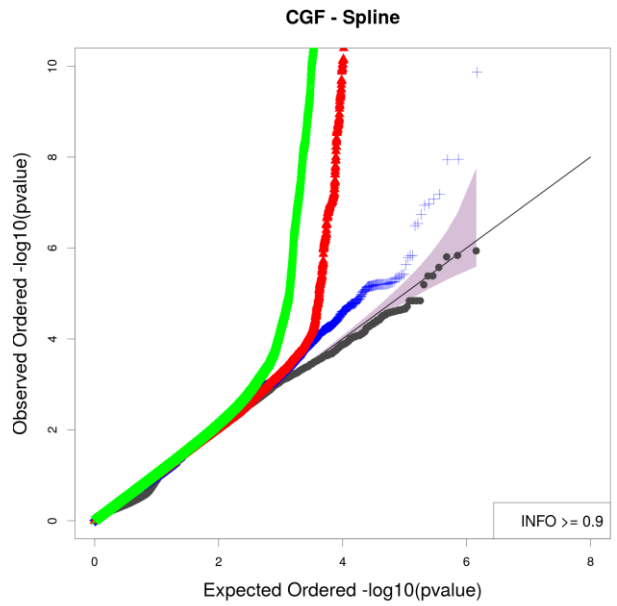
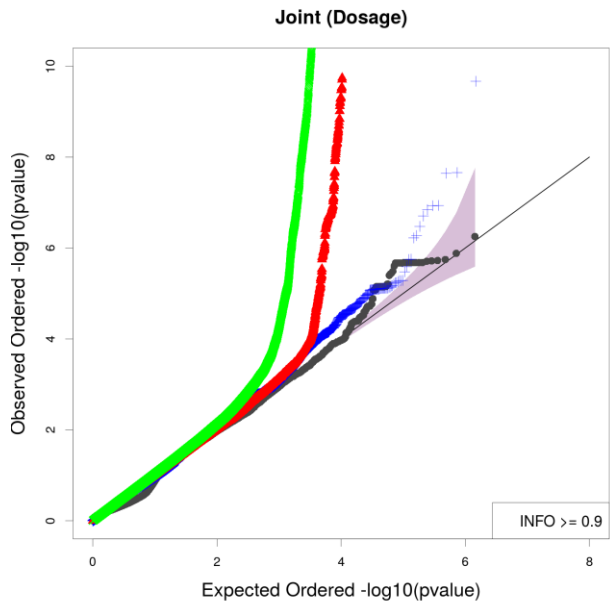


× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001



# Psoriasis

Overall case : control = 657 : 109526  
(INFO  $\geq 0.9$ )

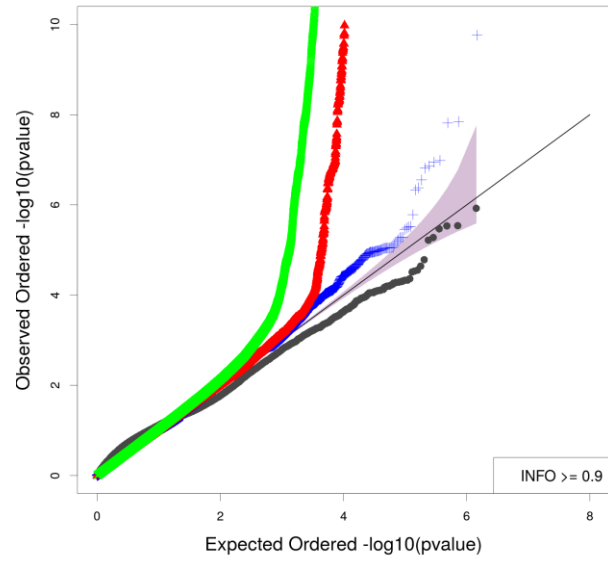


× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001

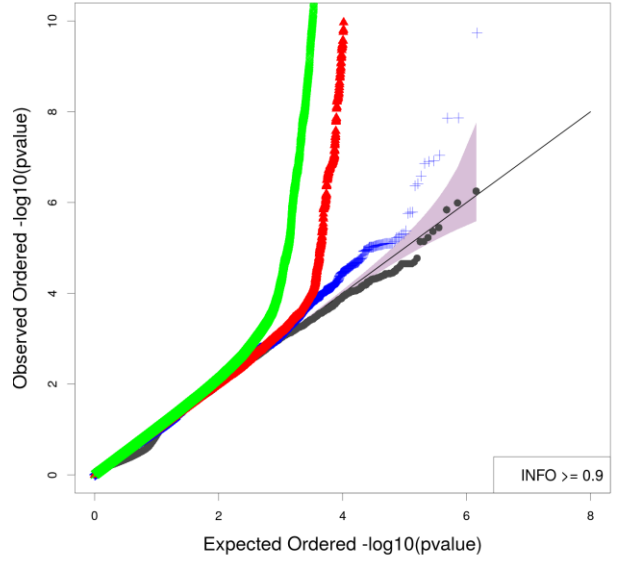
# Psoriasis

Overall case : control = 657 : 109526  
(INFO  $\geq 0.9$ )

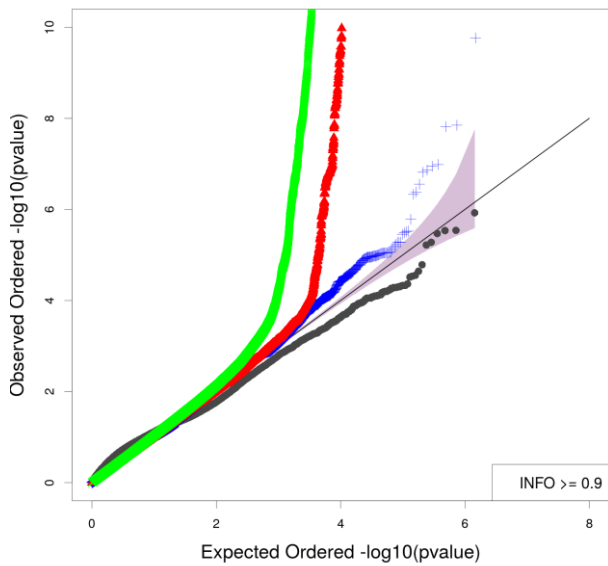
GC - fastSPA - 0.1 (BCG)



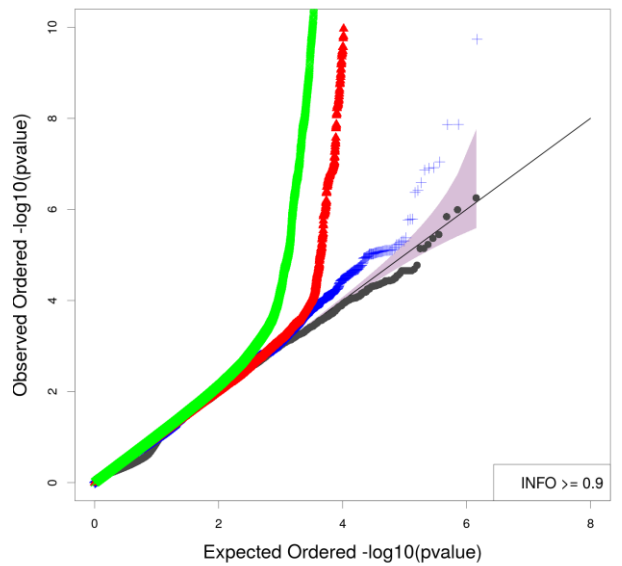
GC - fastSPA - 2 (BCG)



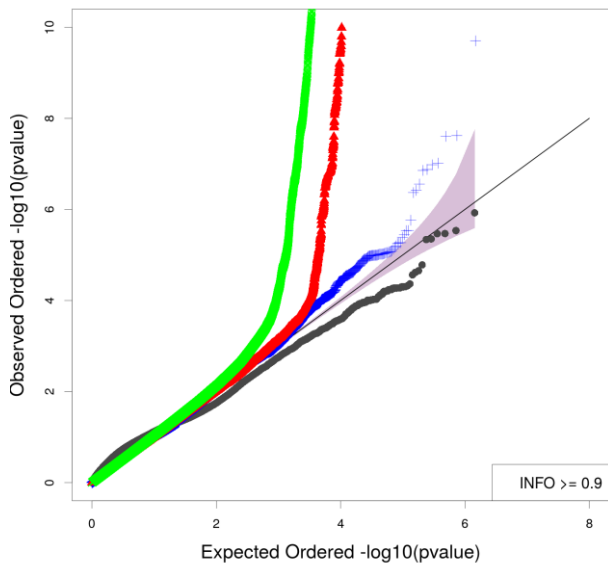
GC - fastSPA - 0.1 (Rounded Dosage)



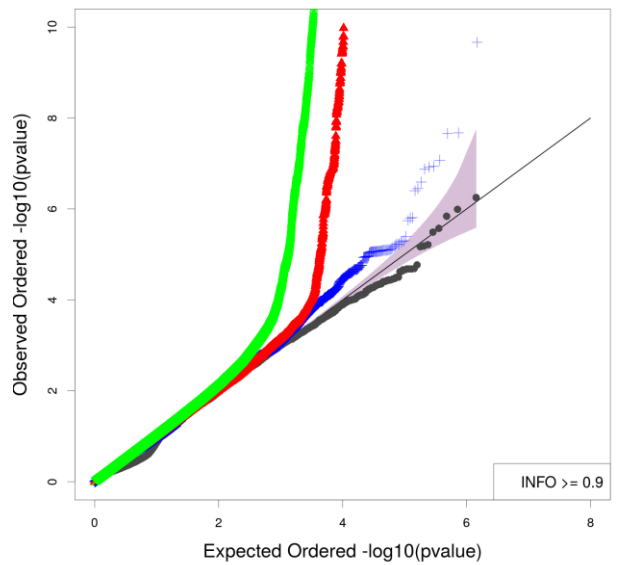
GC - fastSPA - 2 (Rounded Dosage)



GC - fastSPA - 0.1 (HWE)



GC - fastSPA - 2 (HWE)



× MAF [0.05,0.5]    ▲ MAF [0.01,0.05)    + MAF [0.001,0.01)    ● MAF < 0.001