### palette = {'Control': 'w', '2DG':'w'}

fig\_title = ''

figsize = (10,10)

fig\_title\_size = 25

fig\_title\_style = 'normal'

y\_axis\_label = "OMI index"

y\_axis\_label\_size = 45

y\_axis\_label\_style = 'normal'

x\_axis\_label = '24 hpb'

x\_axis\_label\_size = 45

x\_axis\_label\_style = 'normal'

x\_axis\_data\_labels = ['Control','Metformin']

x\_axis\_data\_label\_size = 45

x\_axis\_data\_label\_style= 'normal'

boxplot\_line\_width= 0.5

axis\_line\_width = 0.5

y\_axis\_tick\_thickness = 0.5

swarmplot\_size = 7

dotplot\_replicate\_alpha = 1

boxplot\_width = 0.7

save\_fig = True

save\_fig\_filename = 'Metformin\_OMI index.svg'

x\_axis\_col\_name = 'Group'

y\_axis\_col\_name = 'OMI index'

replicate\_id\_col\_name = 'Repeat'

replicate\_list = [1,2,3]

condition\_list = ['Control','Metformin']

y\_axis\_tick\_label\_size = 45

y\_axis\_tick\_label\_style = 'normal'

# Type None for auto scaling

y\_axis\_ticks = None

replicate\_color\_list = [ '0',

'0.5',

'0.8',

(8/255,90/255,161/255),

(86/255,180/255,233/255),

(208/255,238/255,255/255)]

assert(len(x\_axis\_data\_labels) == len(condition\_list))

assert(len(replicate\_color\_list) == (len(condition\_list)\*len(replicate\_list)))

test\_dataframe\_dict = generate\_sub\_dataframes(df,

x\_axis\_col\_name,

y\_axis\_col\_name,

replicate\_id\_col\_name,

replicate\_list,

replicate\_color\_list,

condition\_list)

generate\_figure(test\_dataframe\_dict,

condition\_list,

x\_axis\_col\_name,

y\_axis\_col\_name,

fig\_title,

figsize,

fig\_title\_size,

fig\_title\_style,

y\_axis\_label,

y\_axis\_label\_size,

y\_axis\_label\_style,

x\_axis\_label,

x\_axis\_label\_size,

x\_axis\_label\_style,

x\_axis\_data\_labels,

x\_axis\_data\_label\_size,

x\_axis\_data\_label\_style,

swarmplot\_size,

axis\_line\_width,

y\_axis\_tick\_thickness,

y\_axis\_tick\_label\_size,

y\_axis\_tick\_label\_style,

boxplot\_line\_width,

boxplot\_width,

dotplot\_replicate\_alpha,

save\_fig,

save\_fig\_filename,

y\_axis\_ticks)