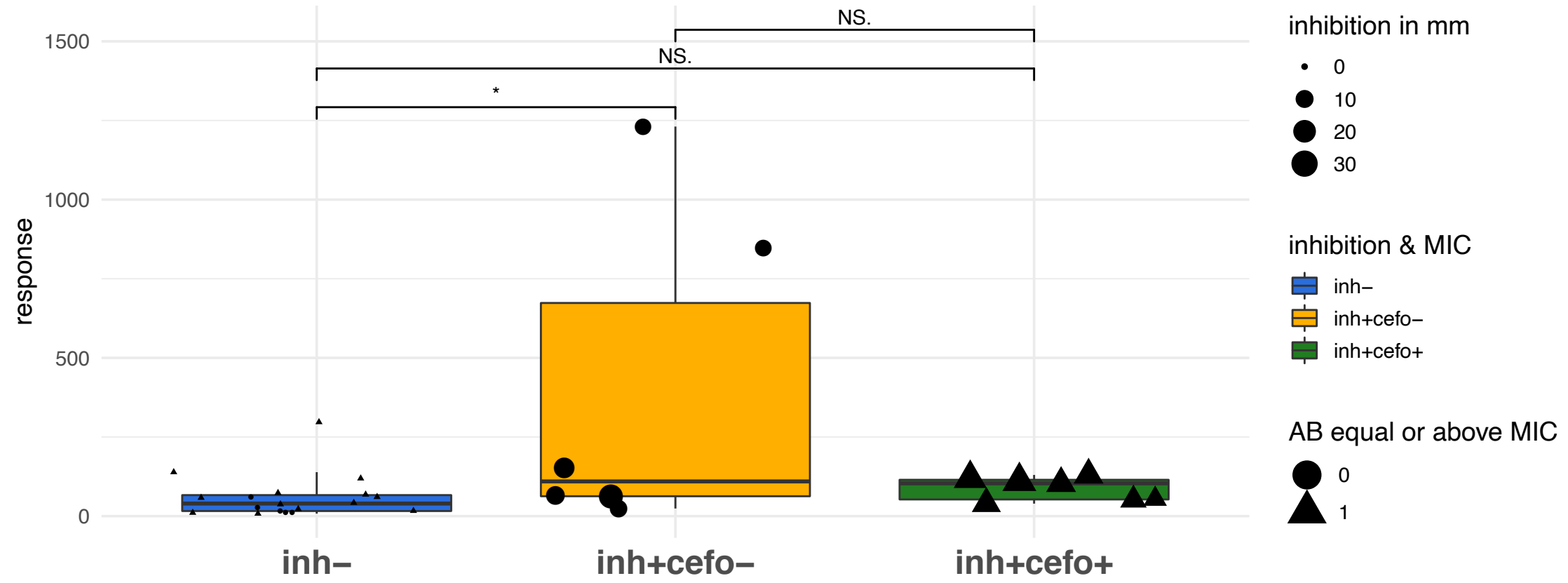


A

AdcA2

unpaired wilcoxon test

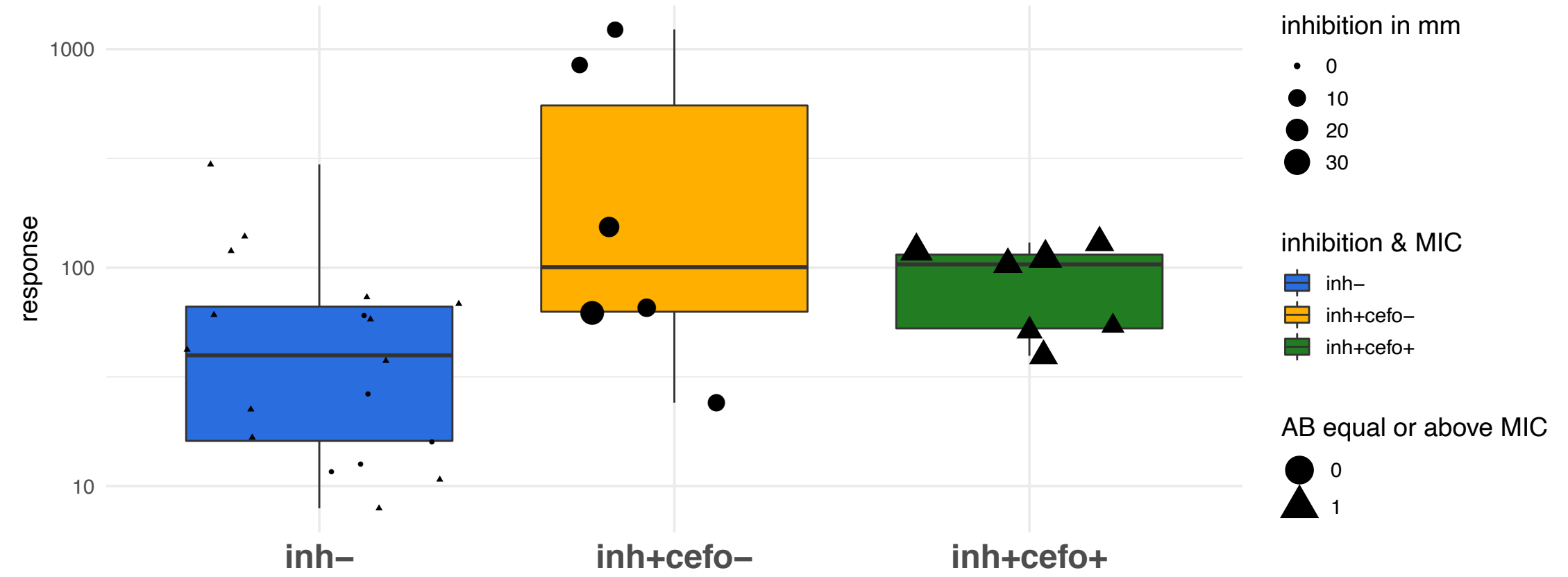


NS >0.05, * <0.05, ** < 0.01, *** <0.001

B

AdcA2

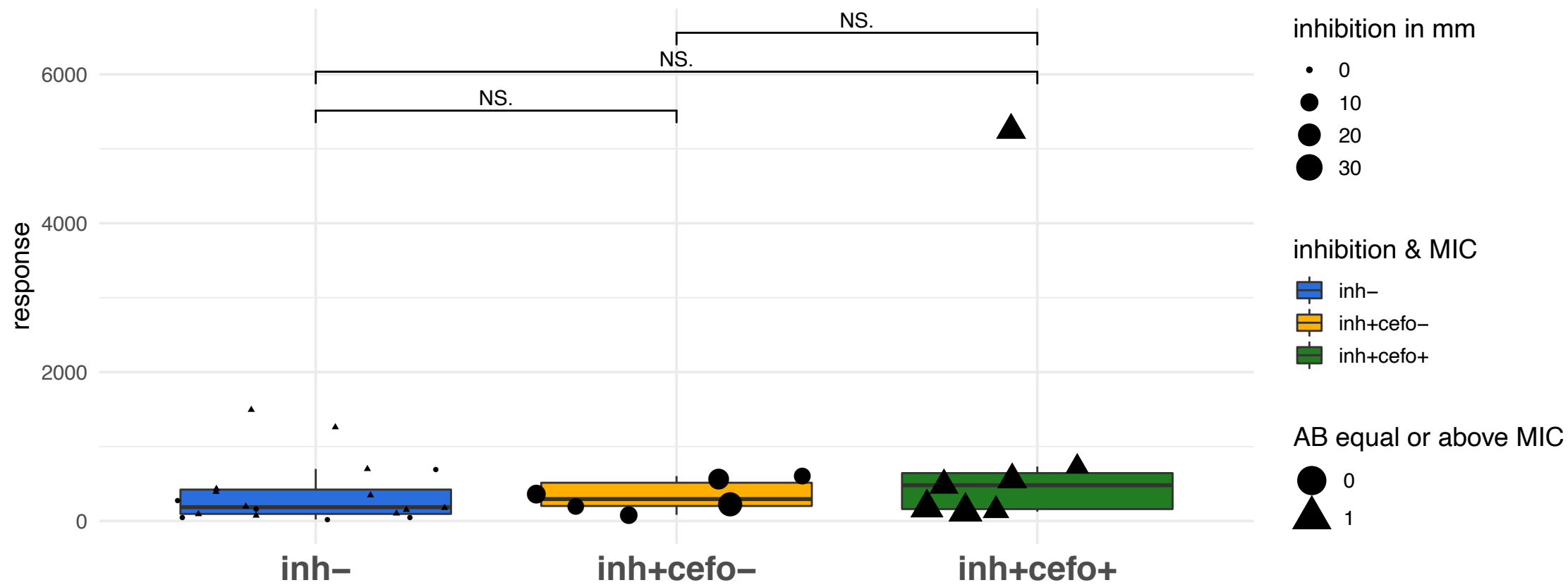
y-axis = log₁₀-scale



A

AliA

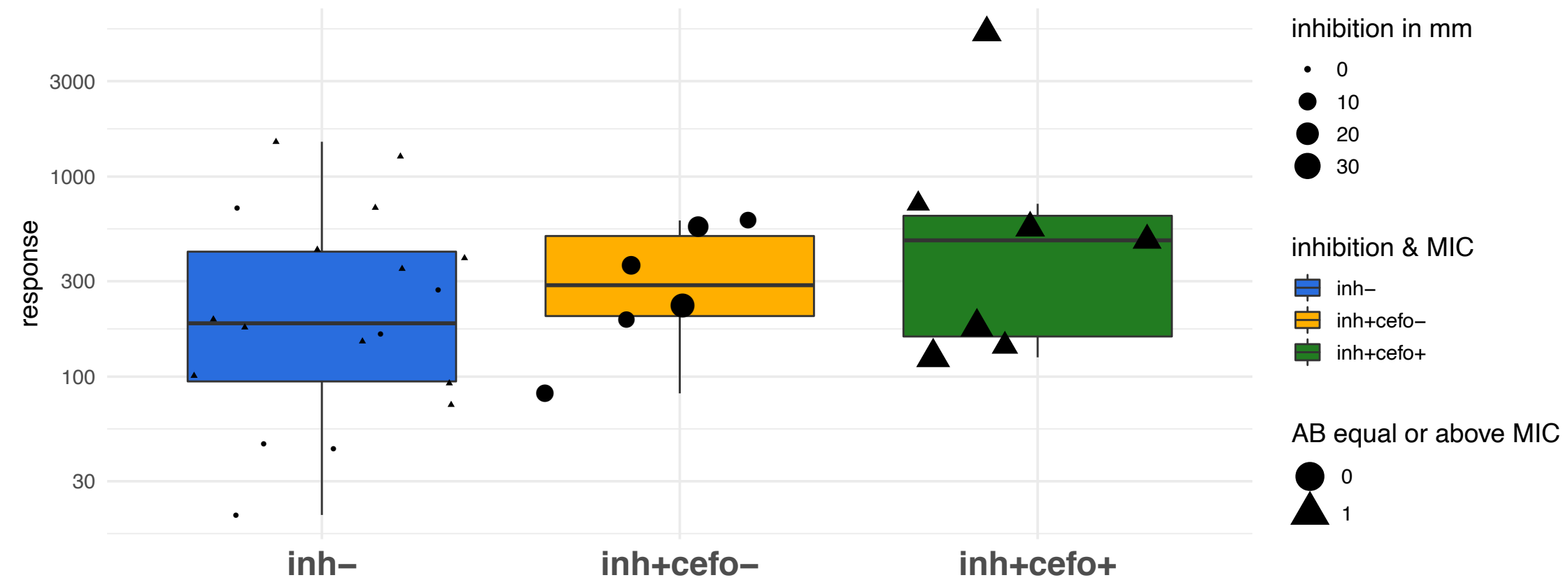
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

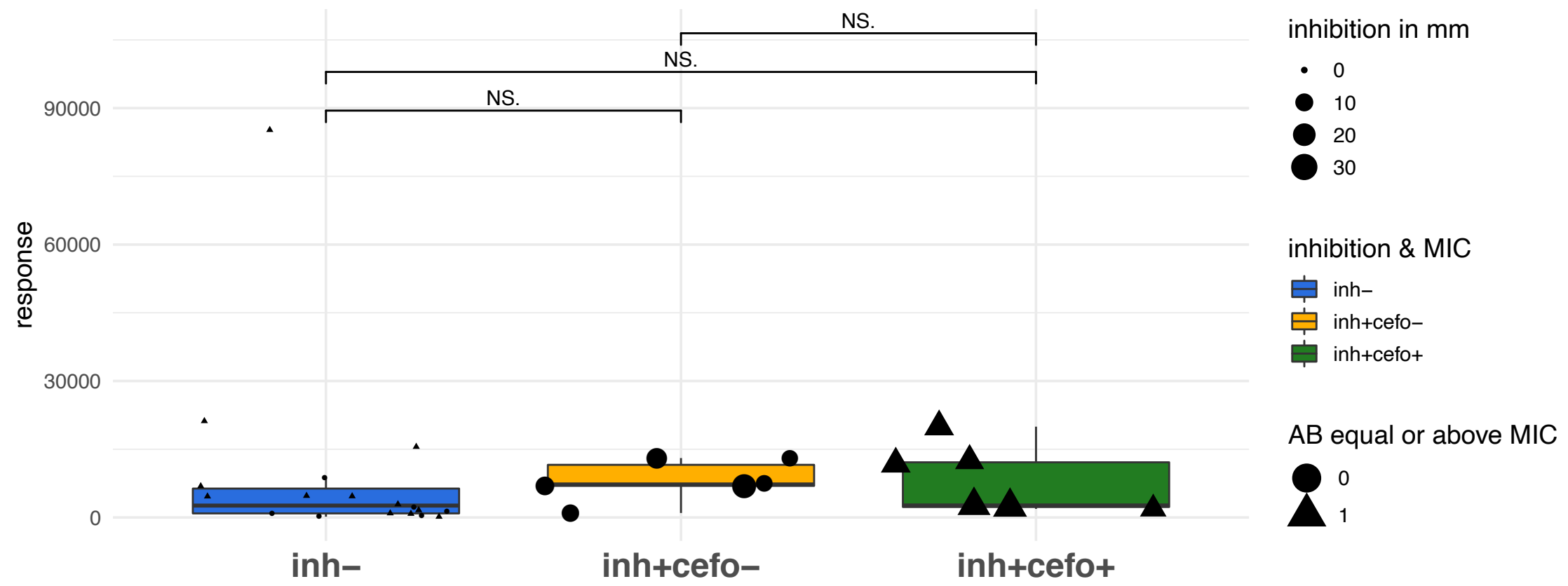
AliA

y-axis = log₁₀-scale

A

AlIB

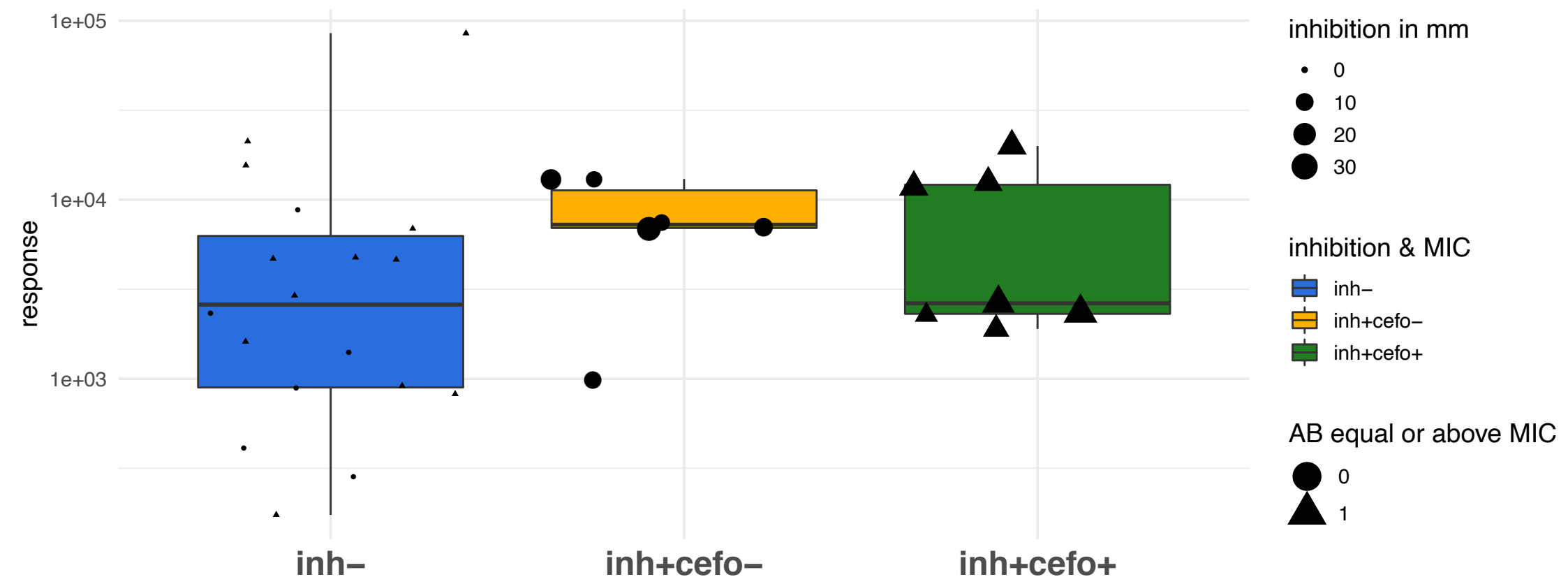
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

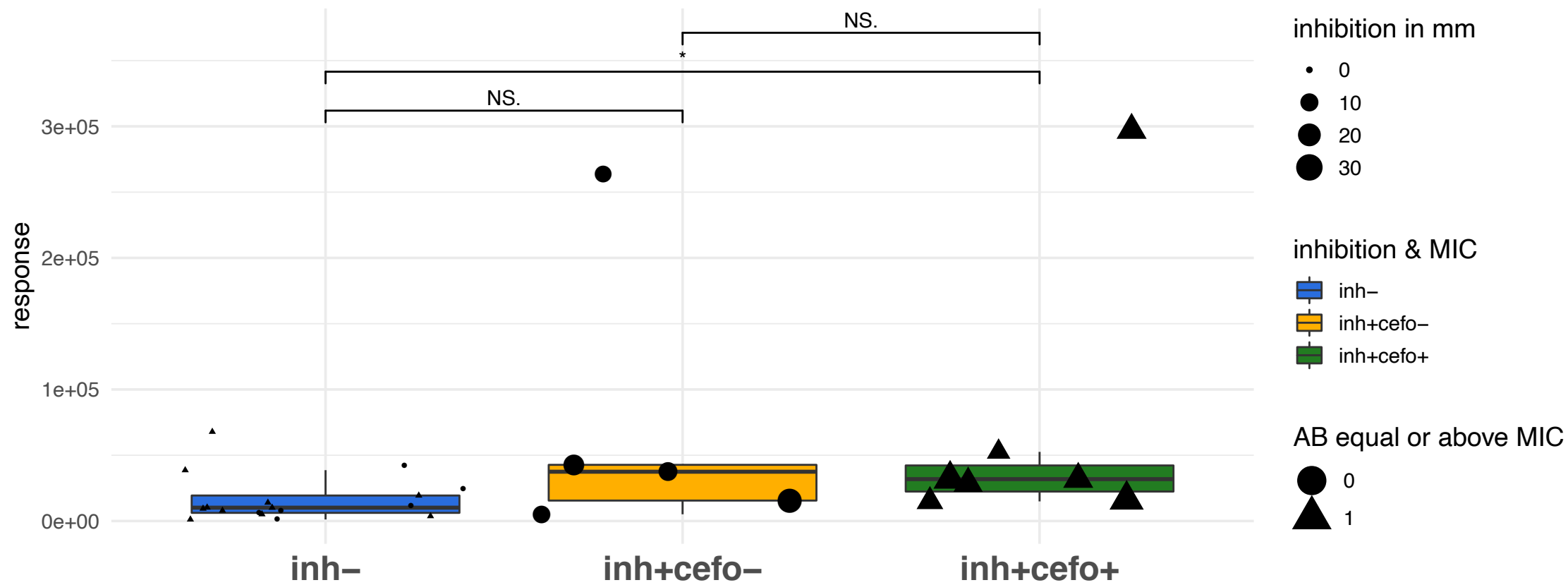
AlIB

y-axis = log₁₀-scale

A

AliC

unpaired wilcoxon test

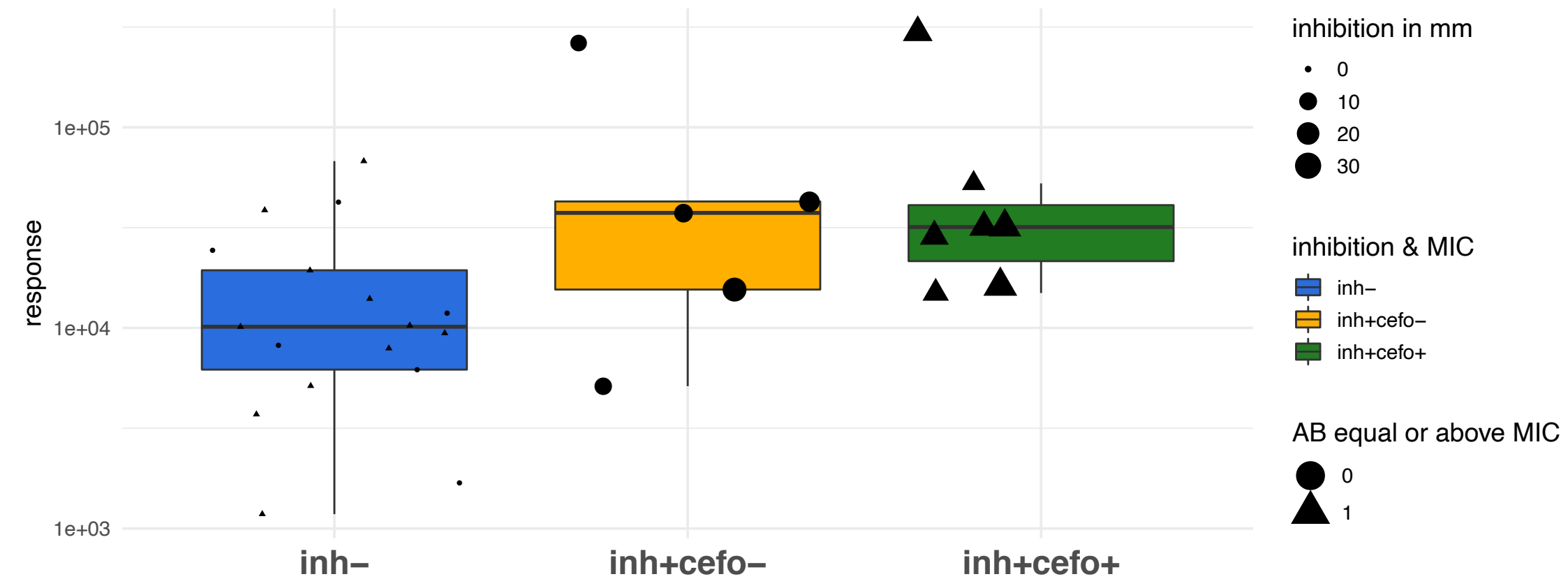


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

AliC

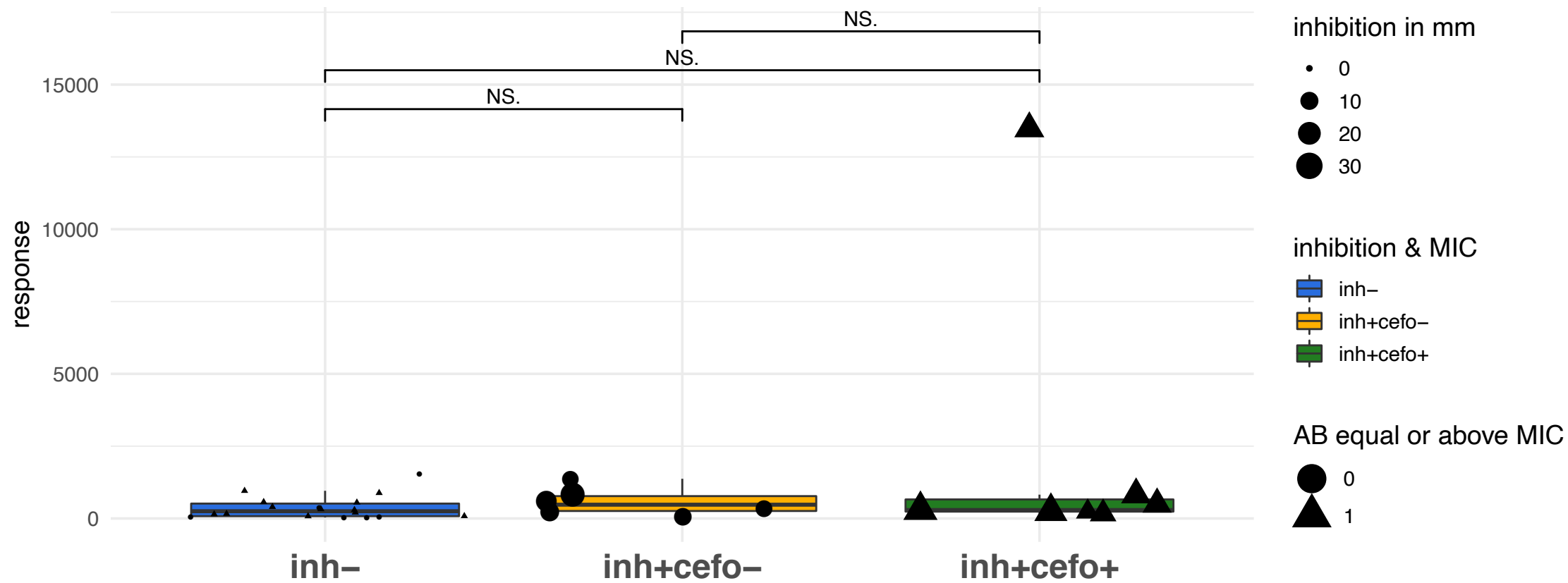
y-axis = log₁₀-scale



A

AIiD

unpaired wilcoxon test

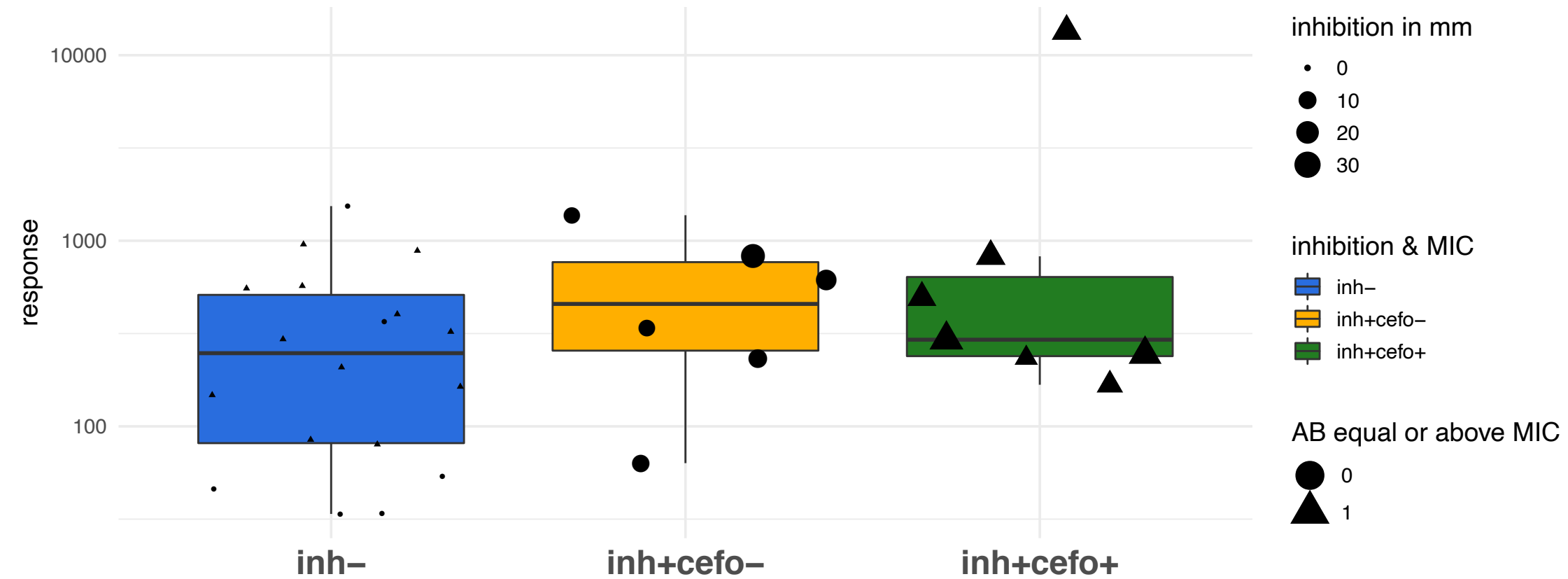


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

AIiD

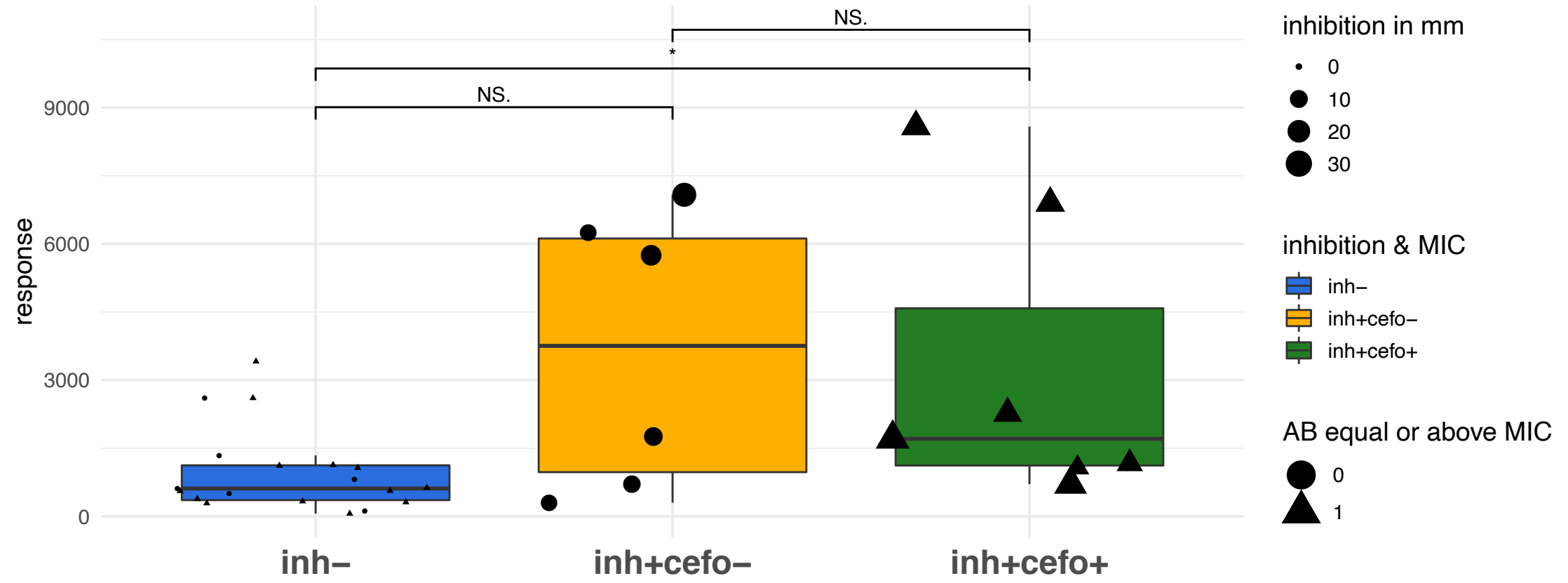
y-axis = log₁₀-scale



A

AmiA

unpaired wilcoxon test

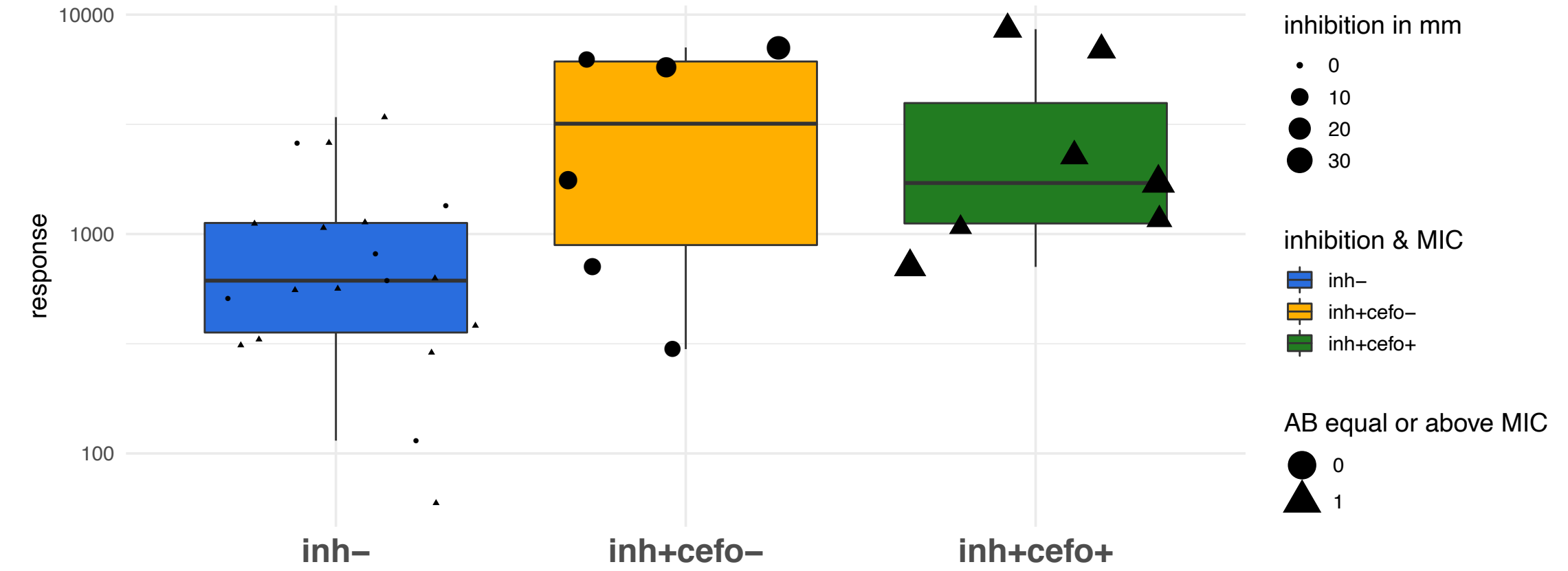


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

AmiA

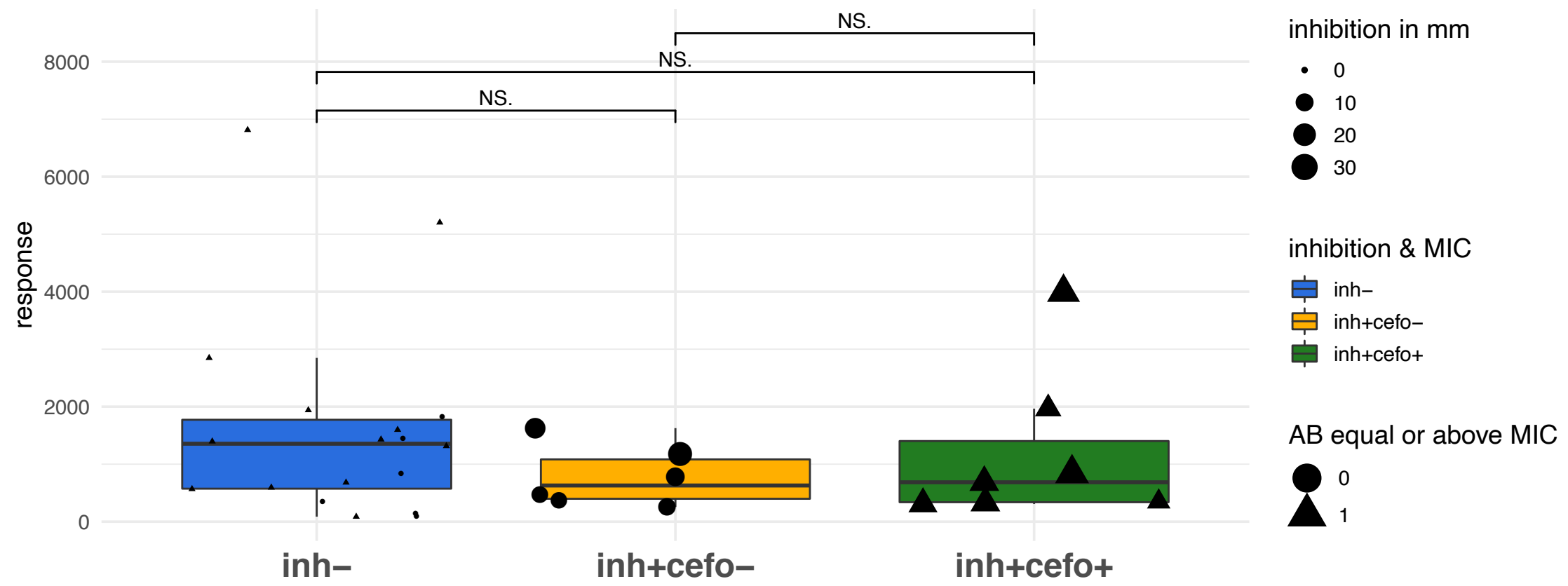
y-axis = log10-scale



A

Cbpc

unpaired wilcoxon test

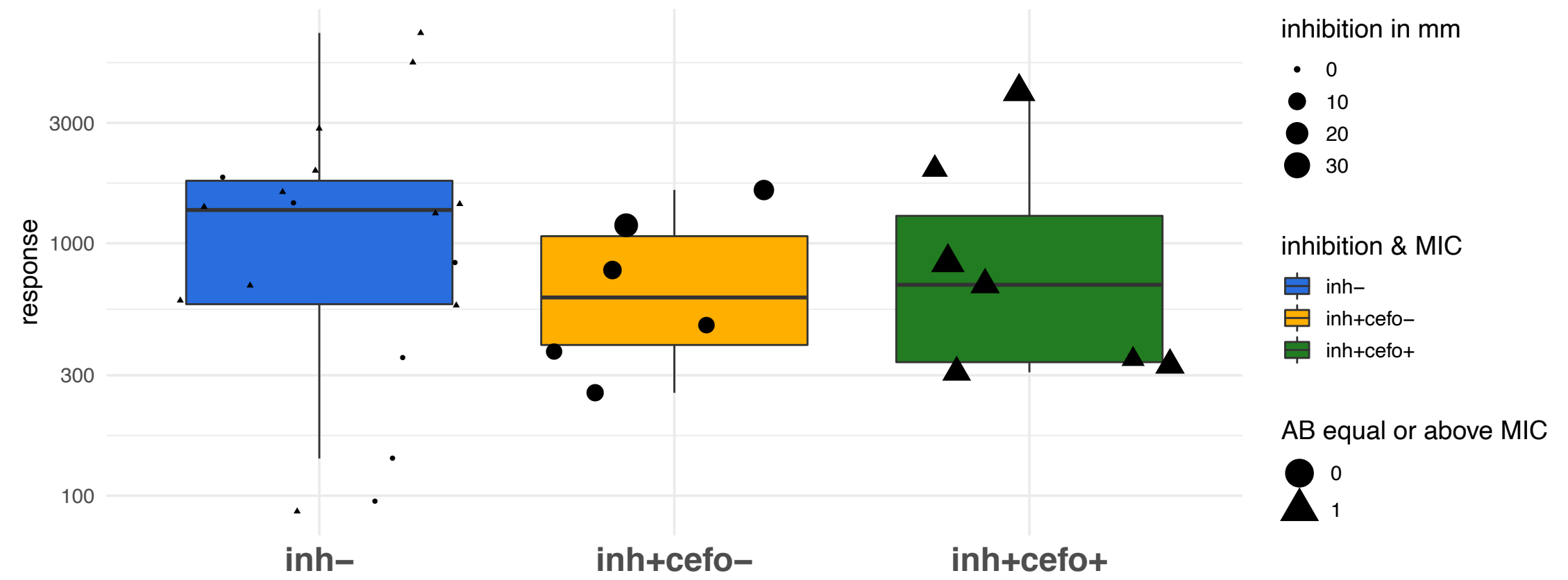


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

Cbpc

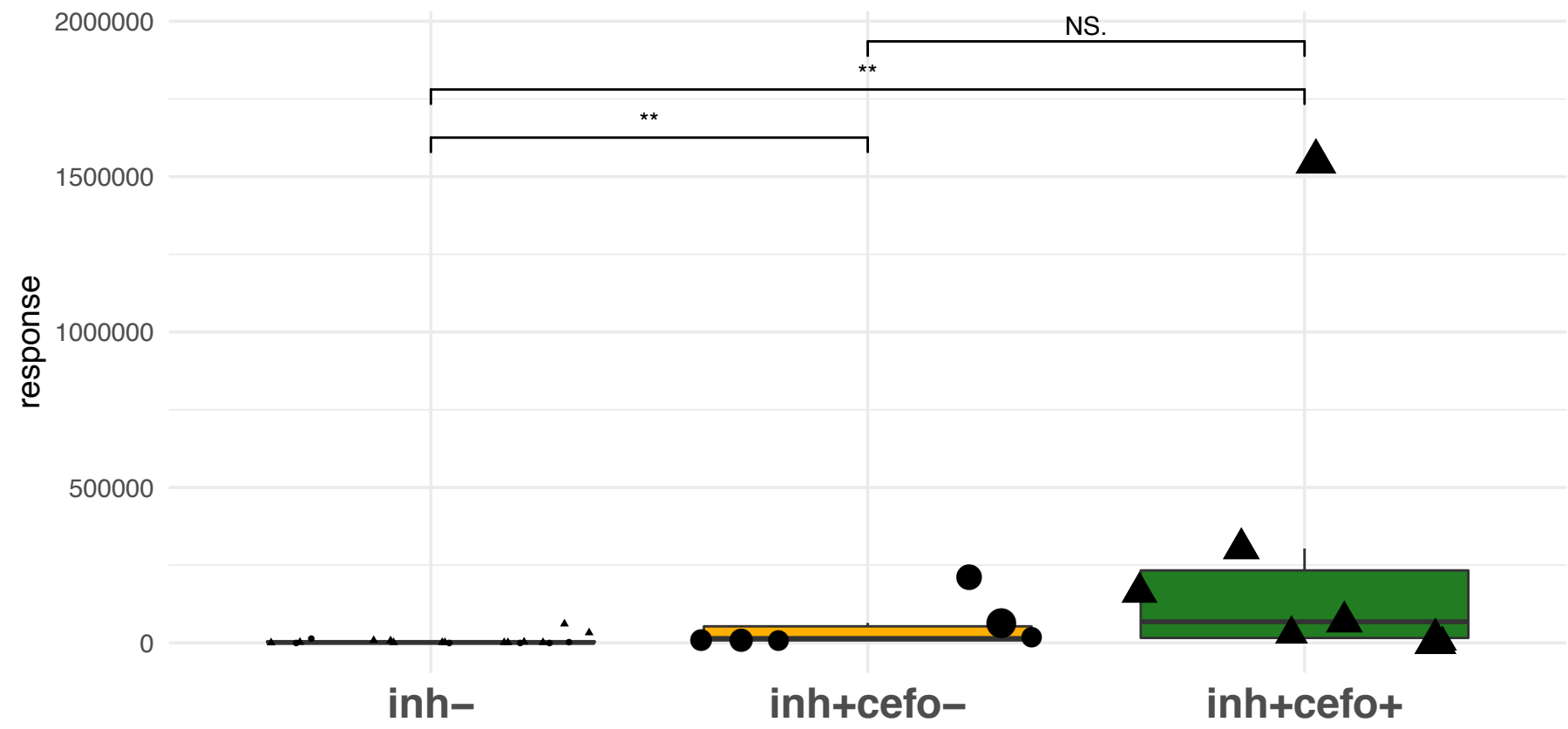
y-axis = log10-scale



A

Cbpe

unpaired wilcoxon test

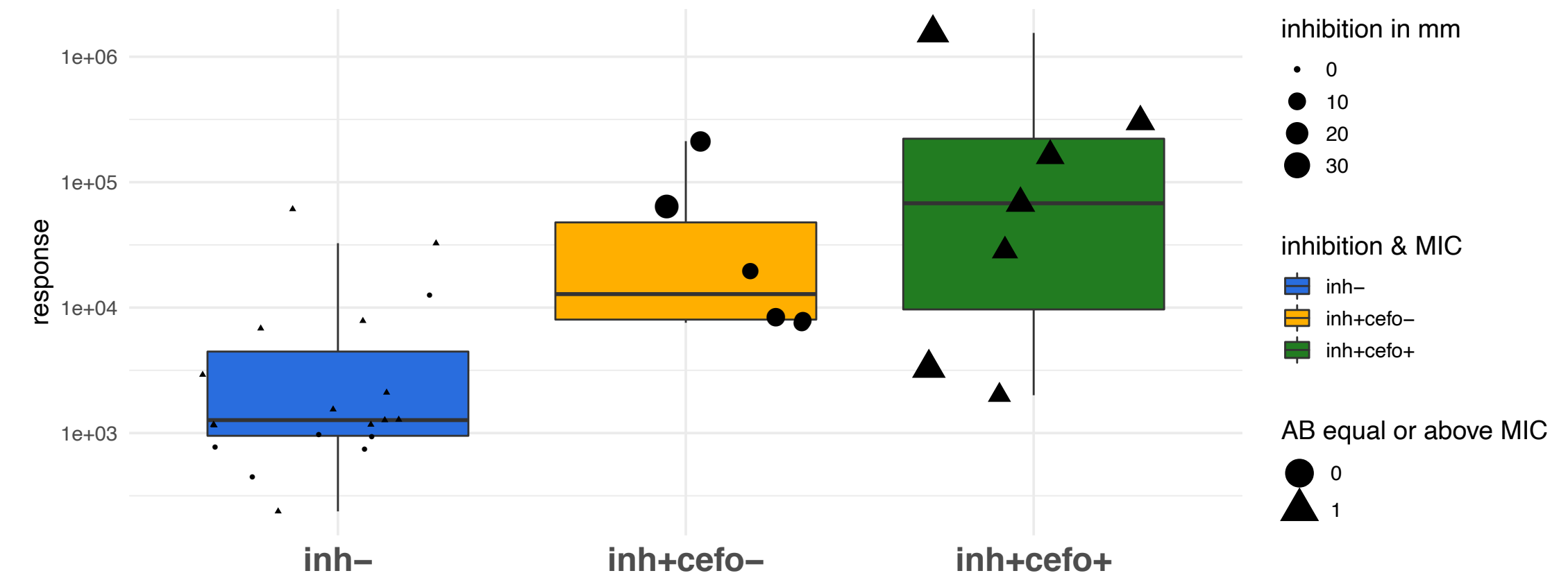


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

Cbpe

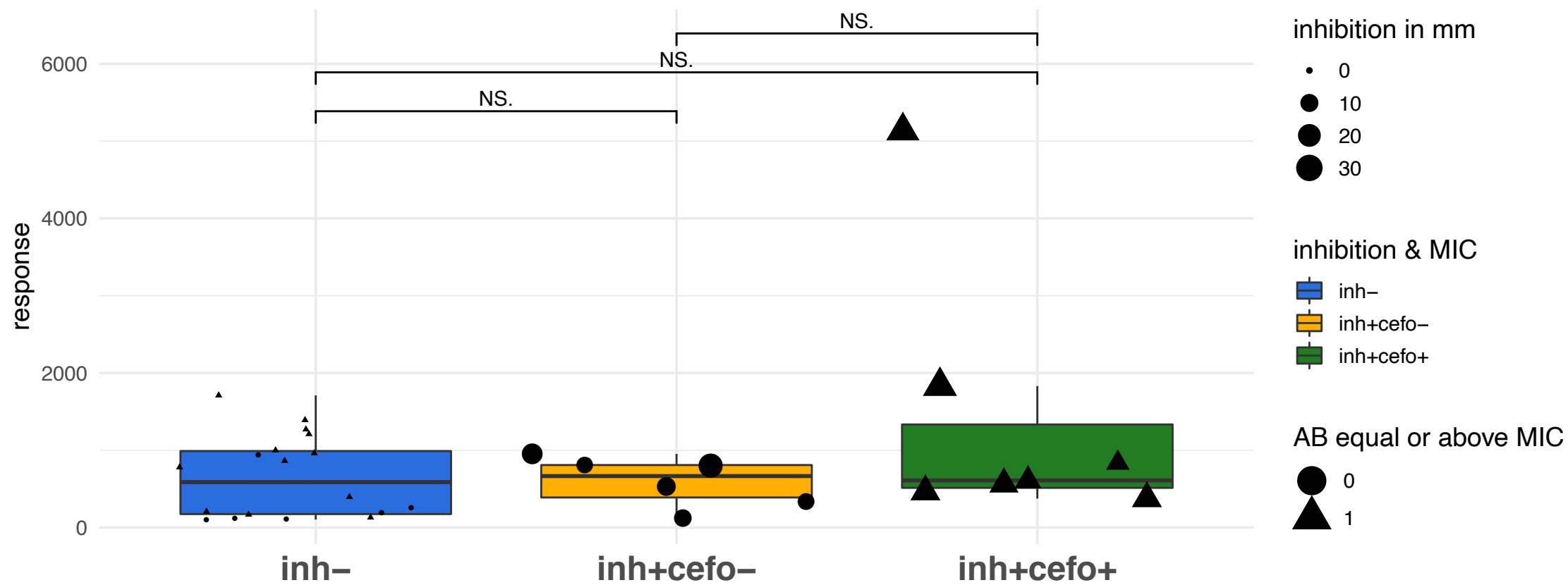
y-axis = log10-scale



A

CbpF

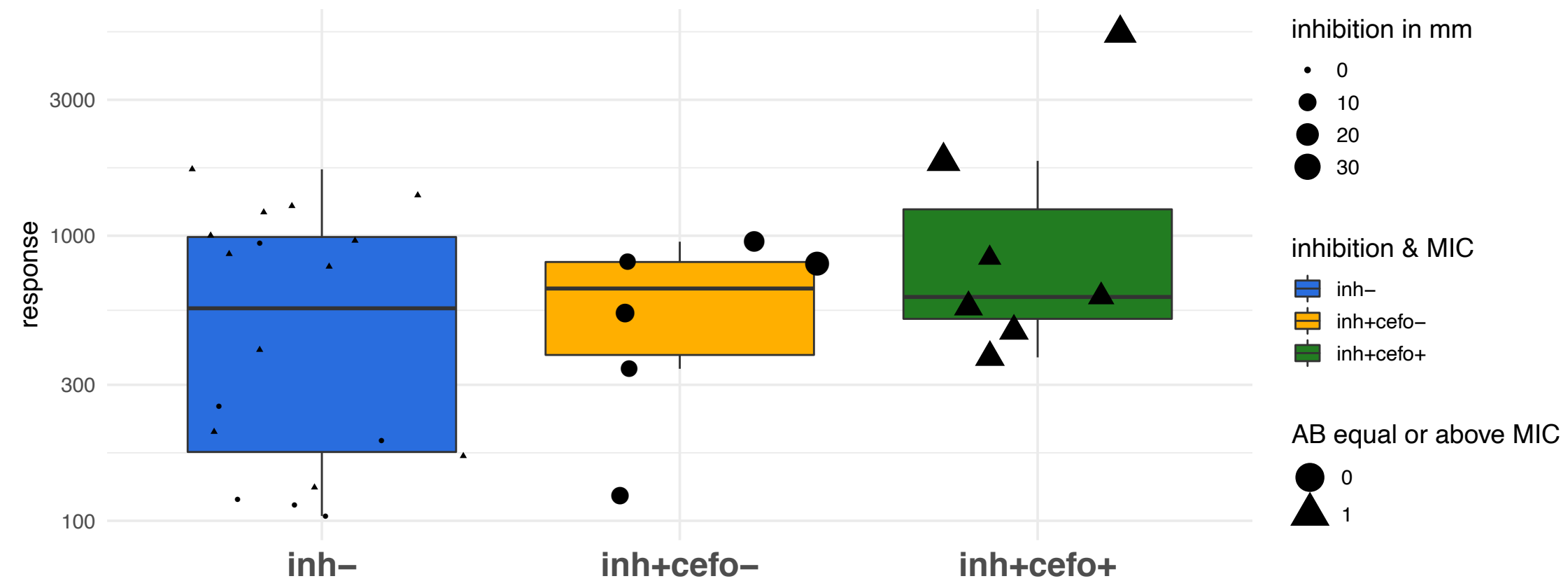
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

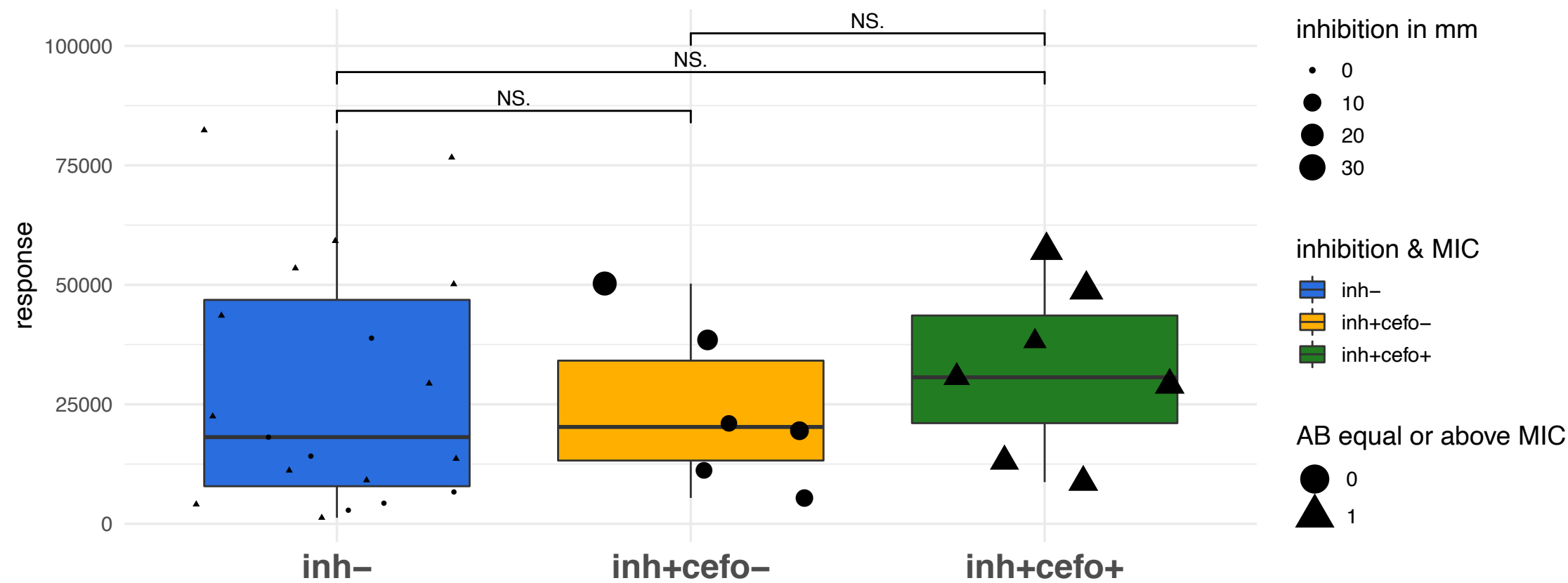
CbpF

y-axis = log₁₀-scale

A

CbpL

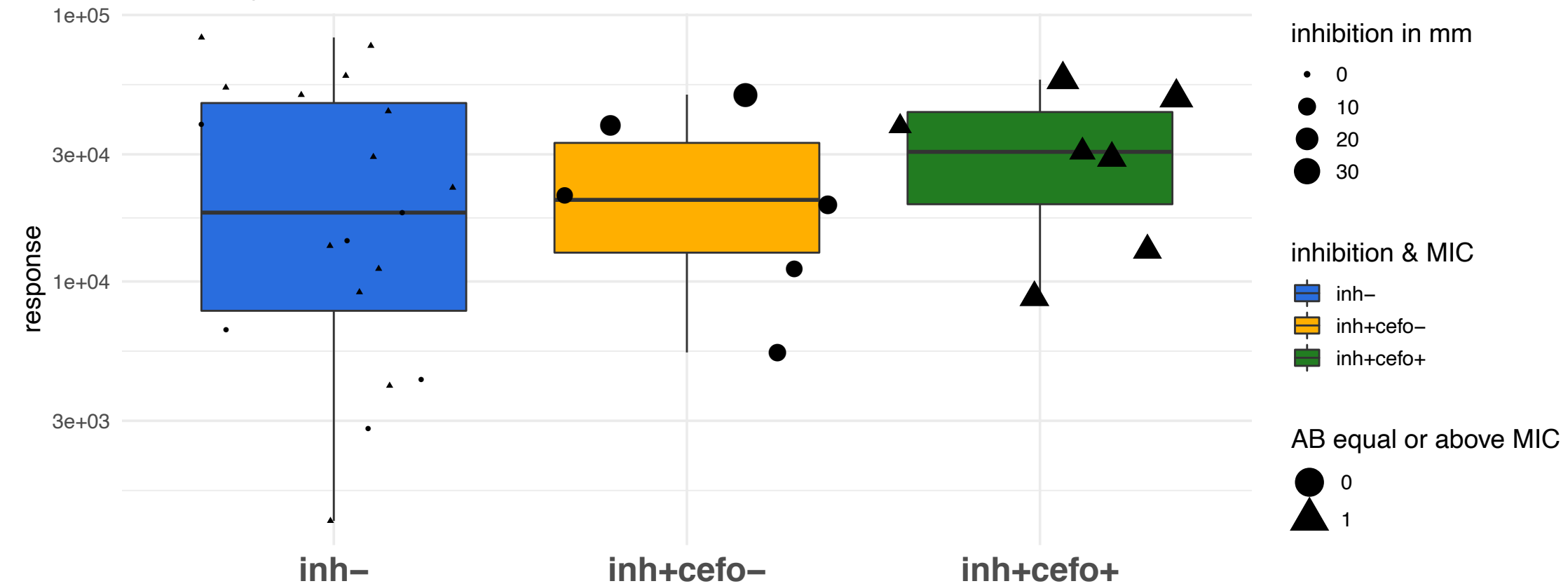
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

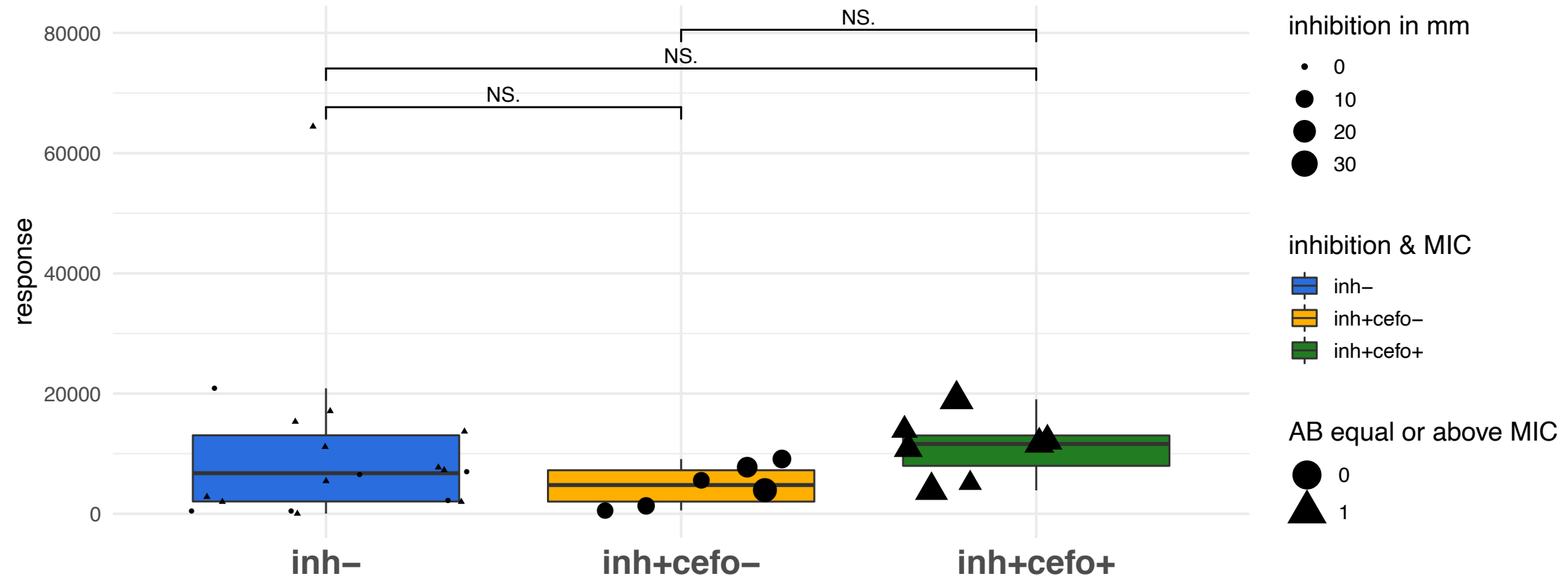
CbpL

y-axis = log₁₀-scale

A

Chimeric__PspA_PspC

unpaired wilcoxon test

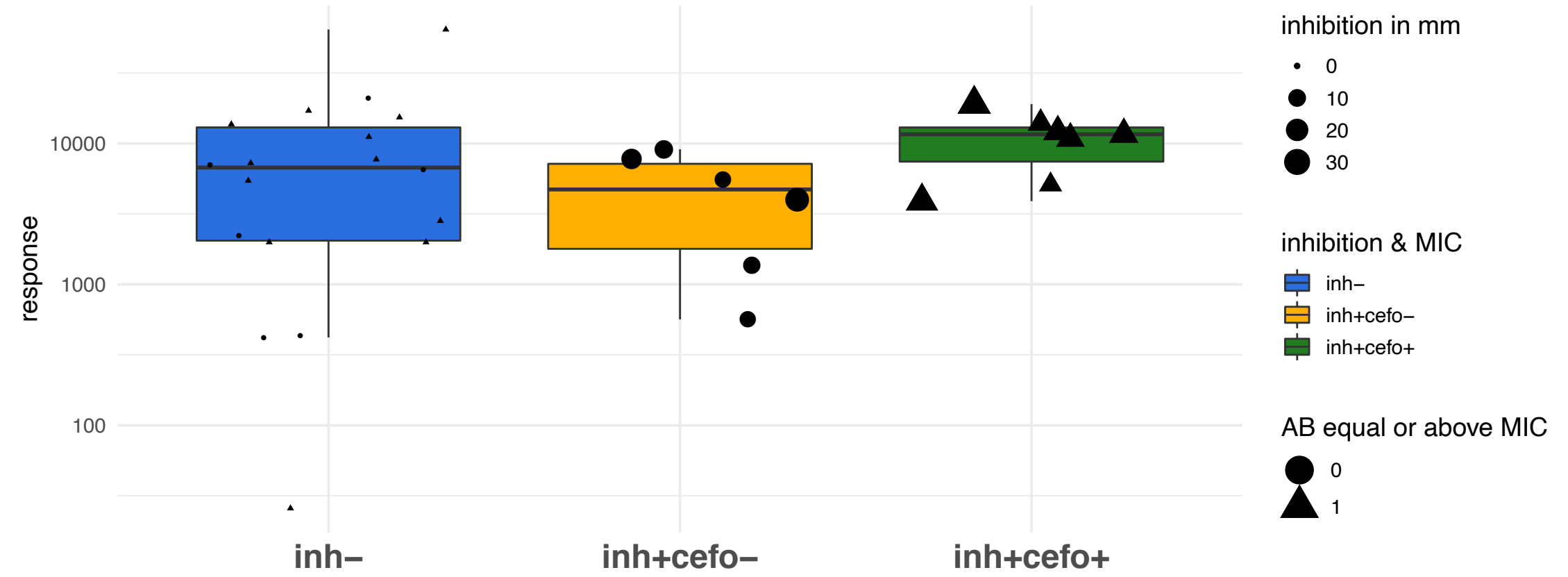


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

Chimeric__PspA_PspC

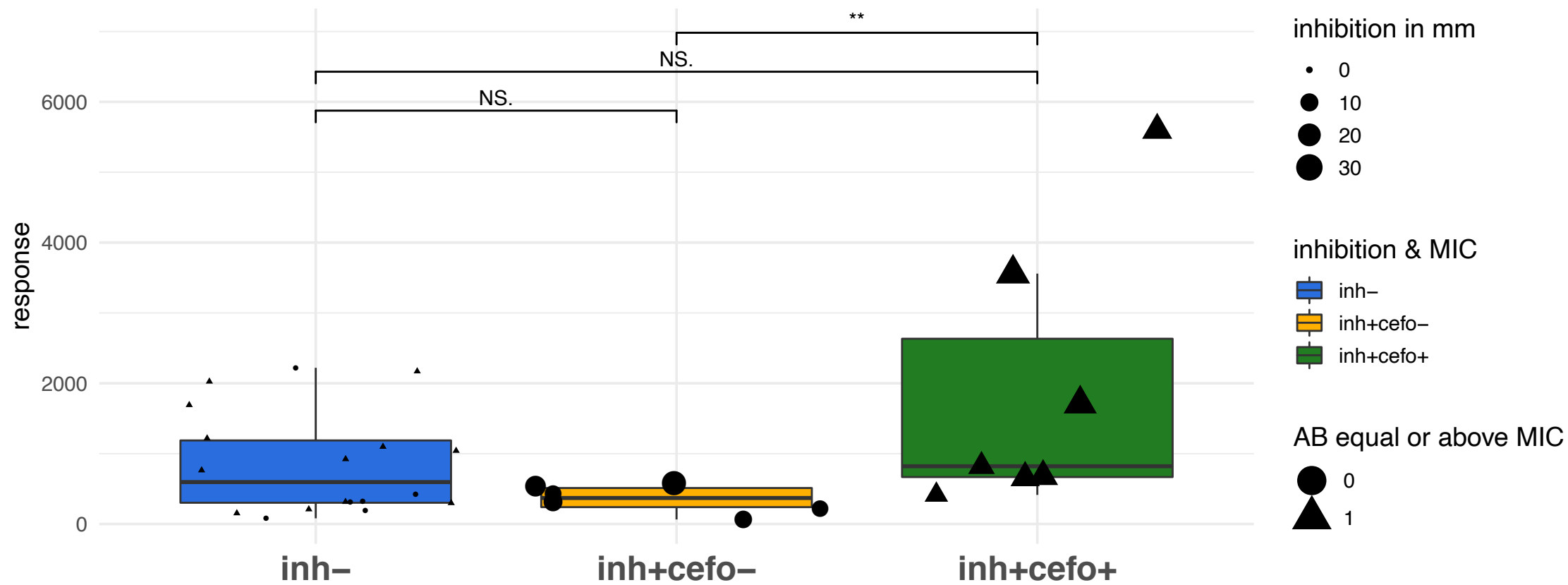
y-axis = log₁₀-scale



A

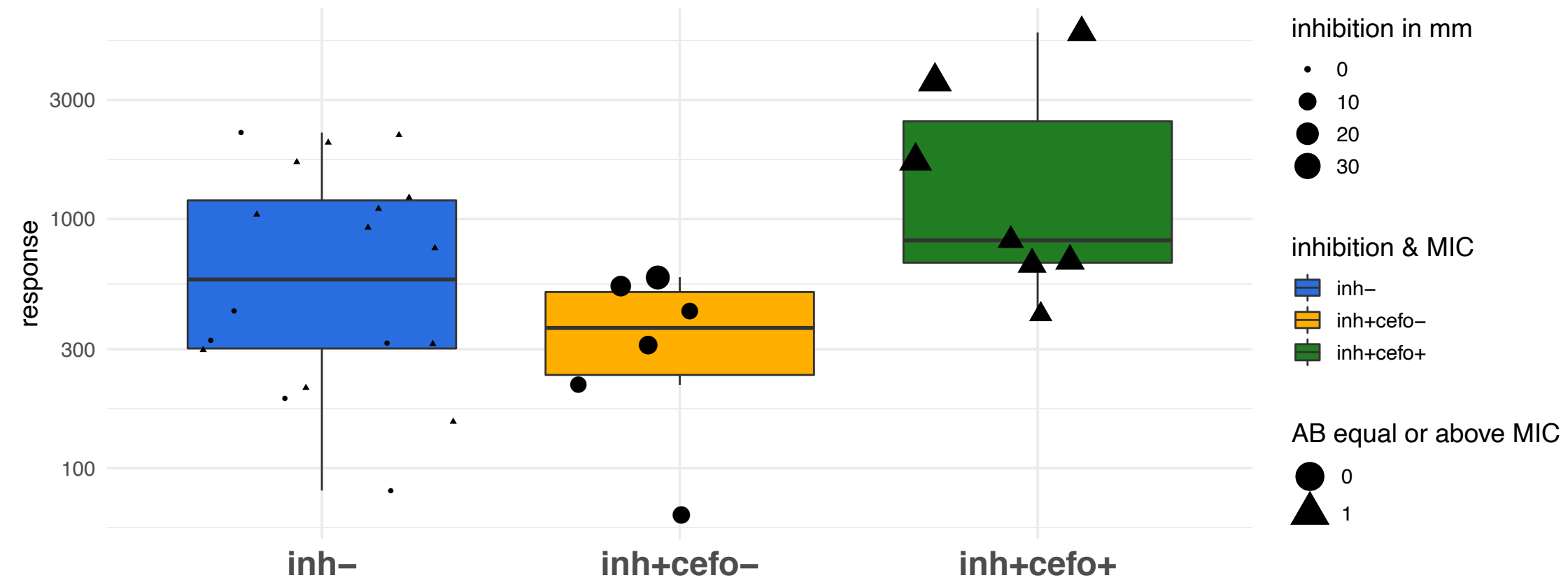
DacA

unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

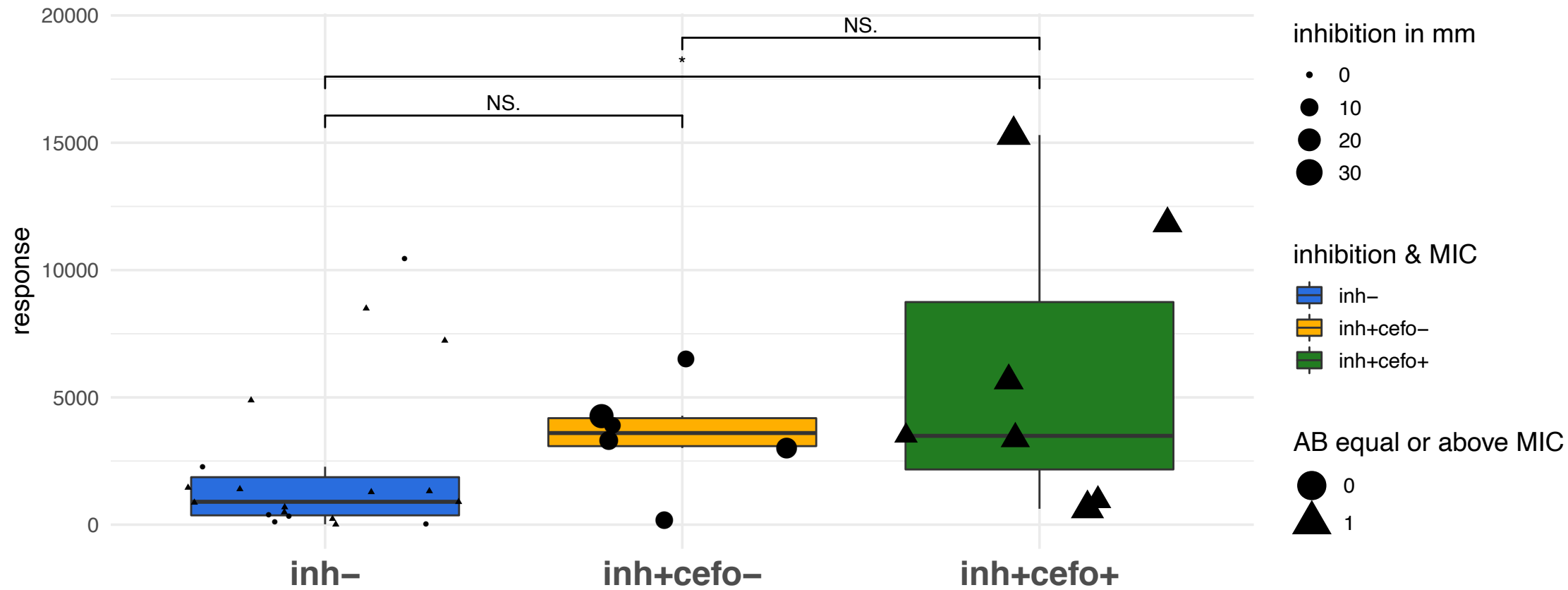
B

DacAy-axis = log₁₀-scale

A

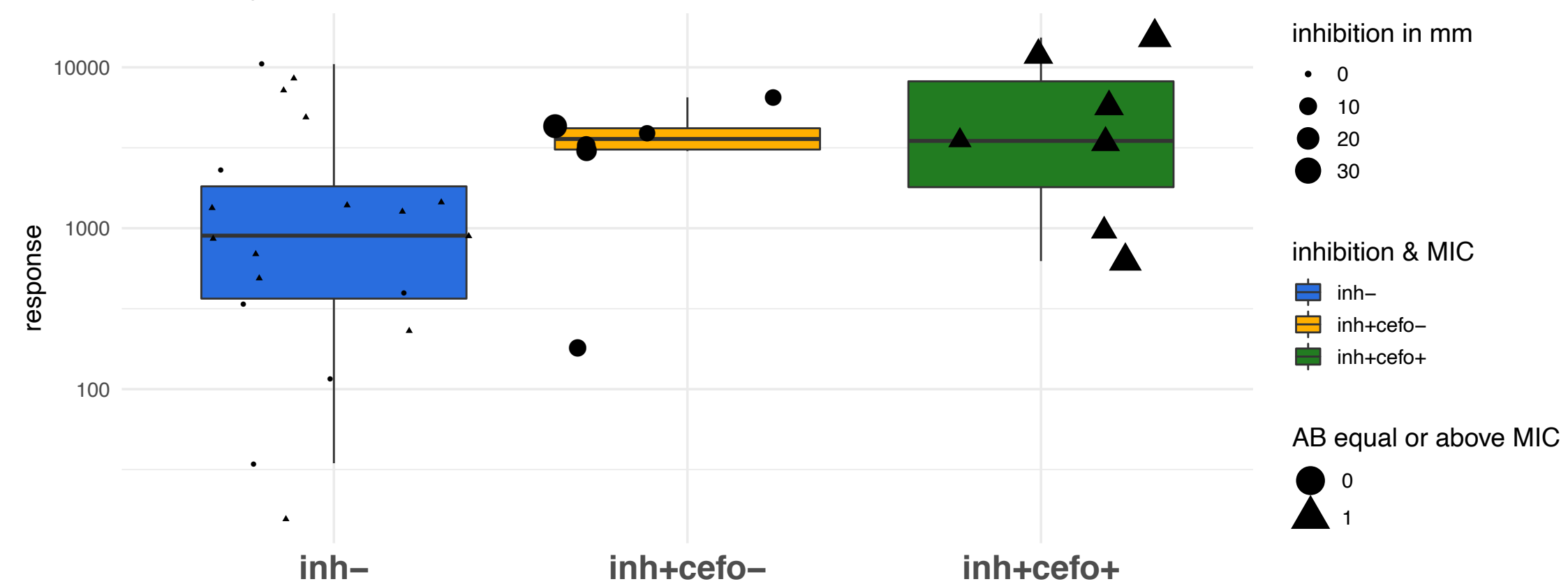
DacB

unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

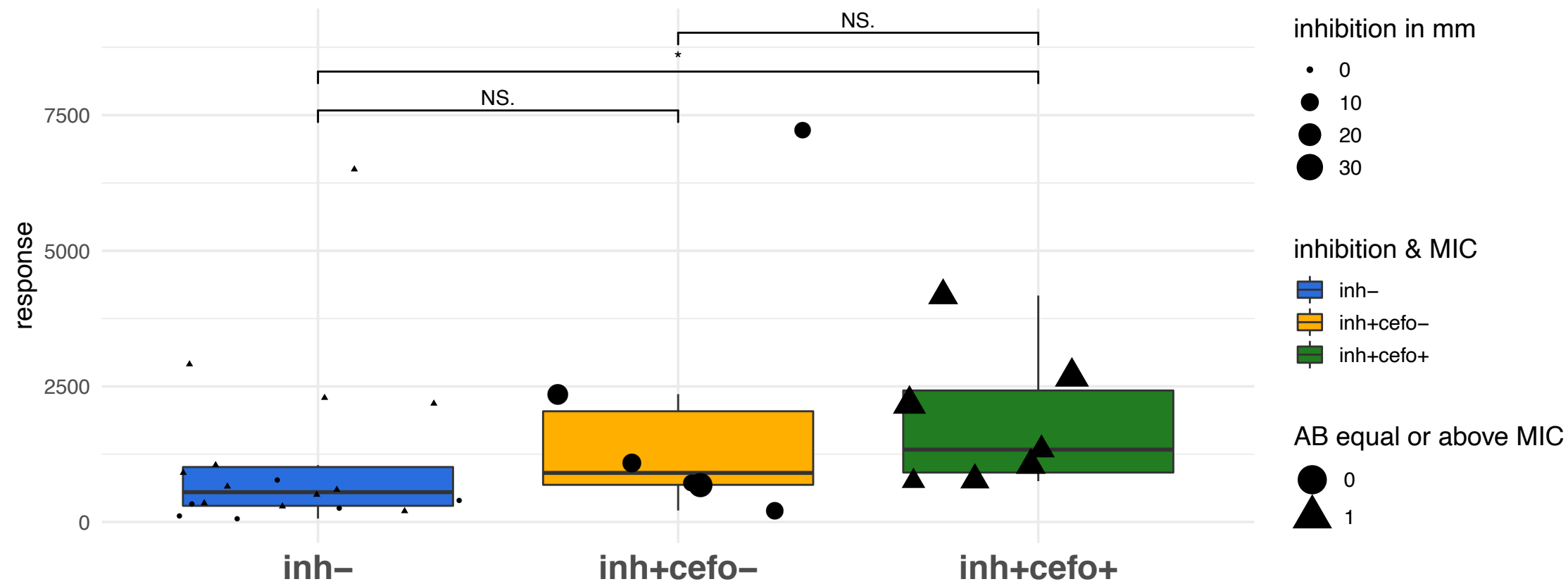
B

DacBy-axis = log₁₀-scale

A

Eno

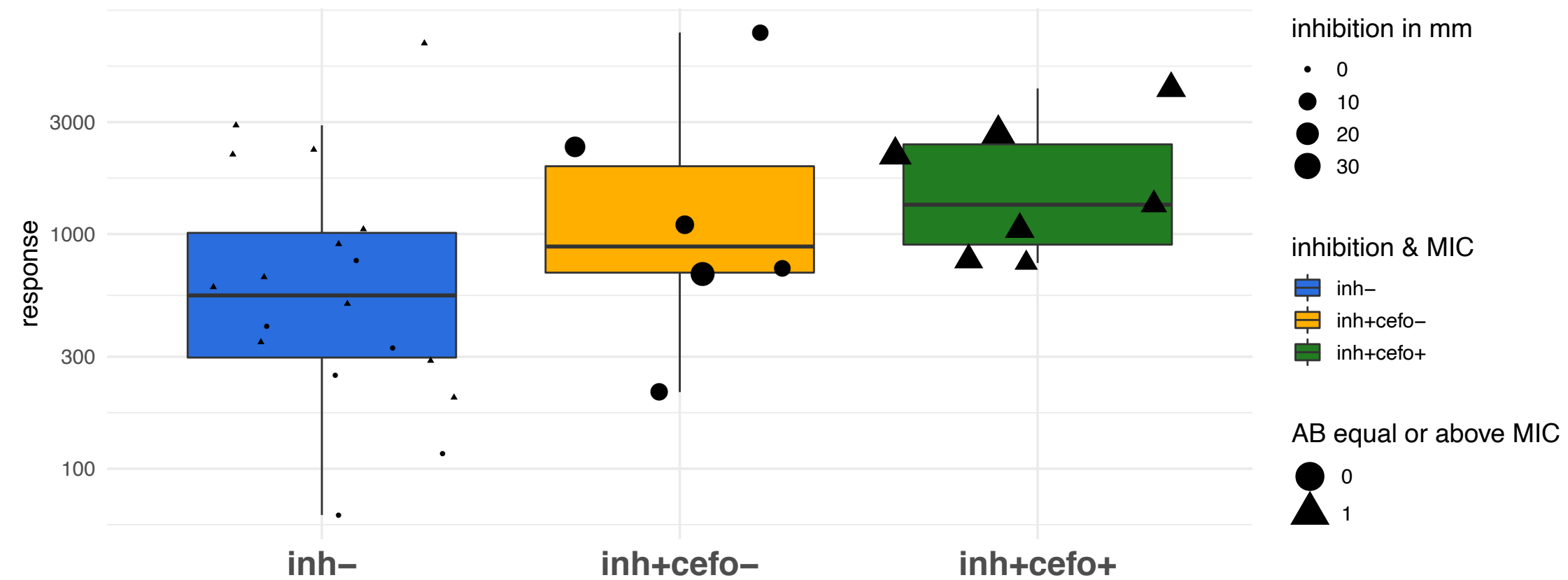
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

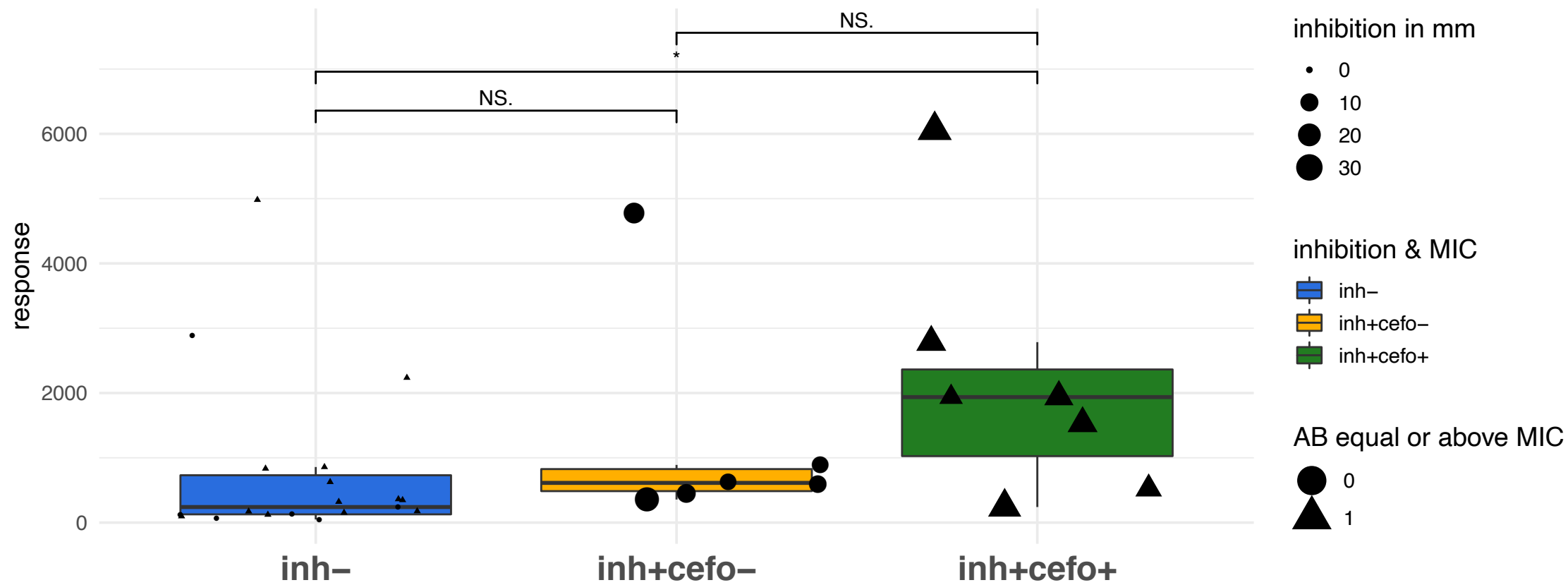
Eno

y-axis = log₁₀-scale

A

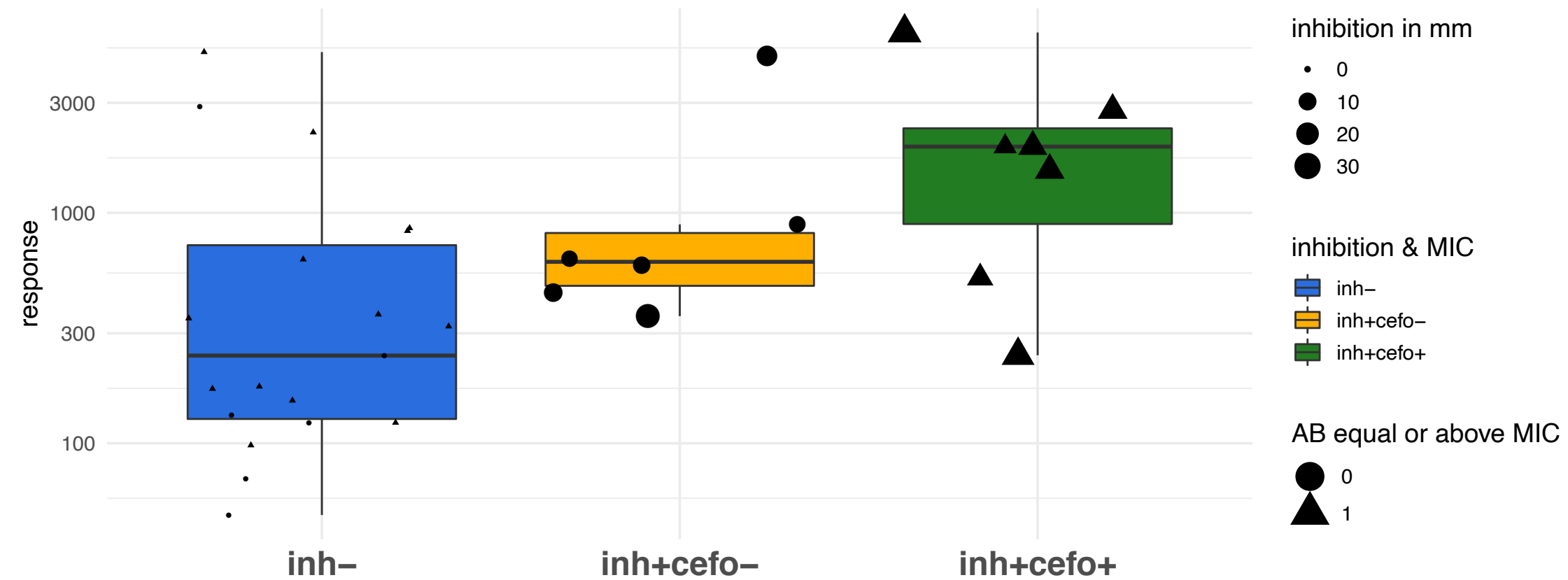
EtrX1

unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

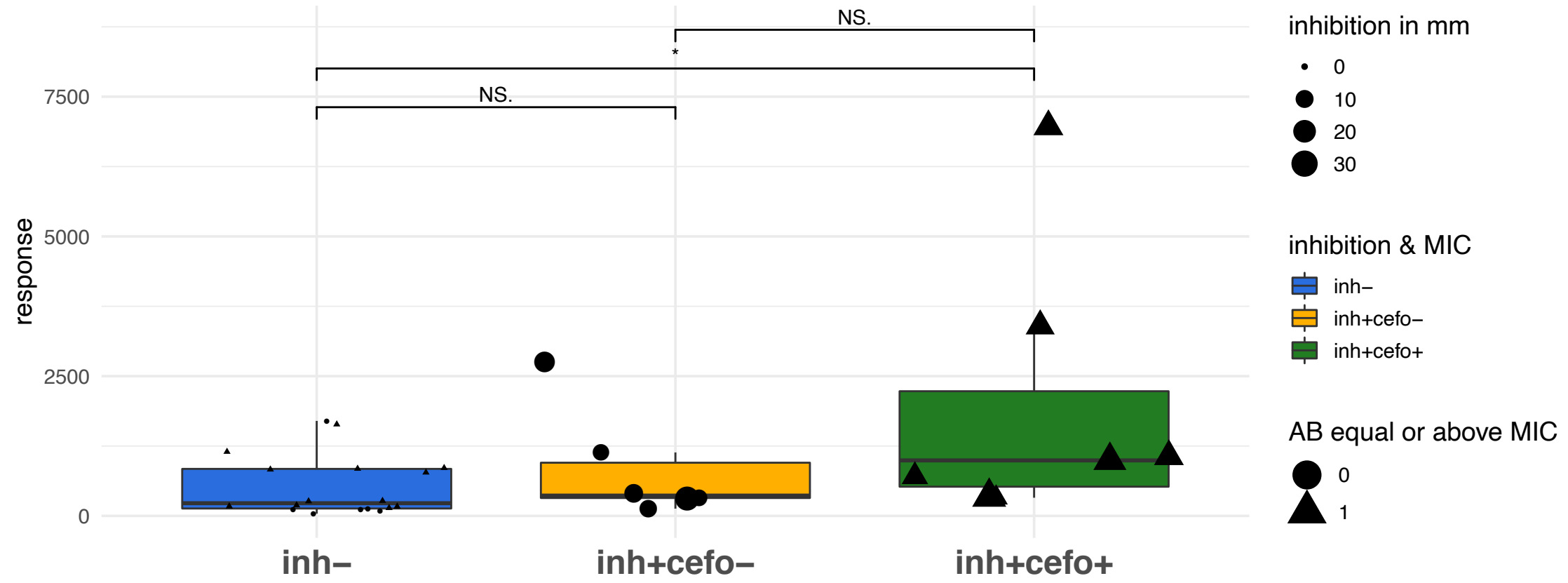
B

EtrX1y-axis = log₁₀-scale

A

EtrX2

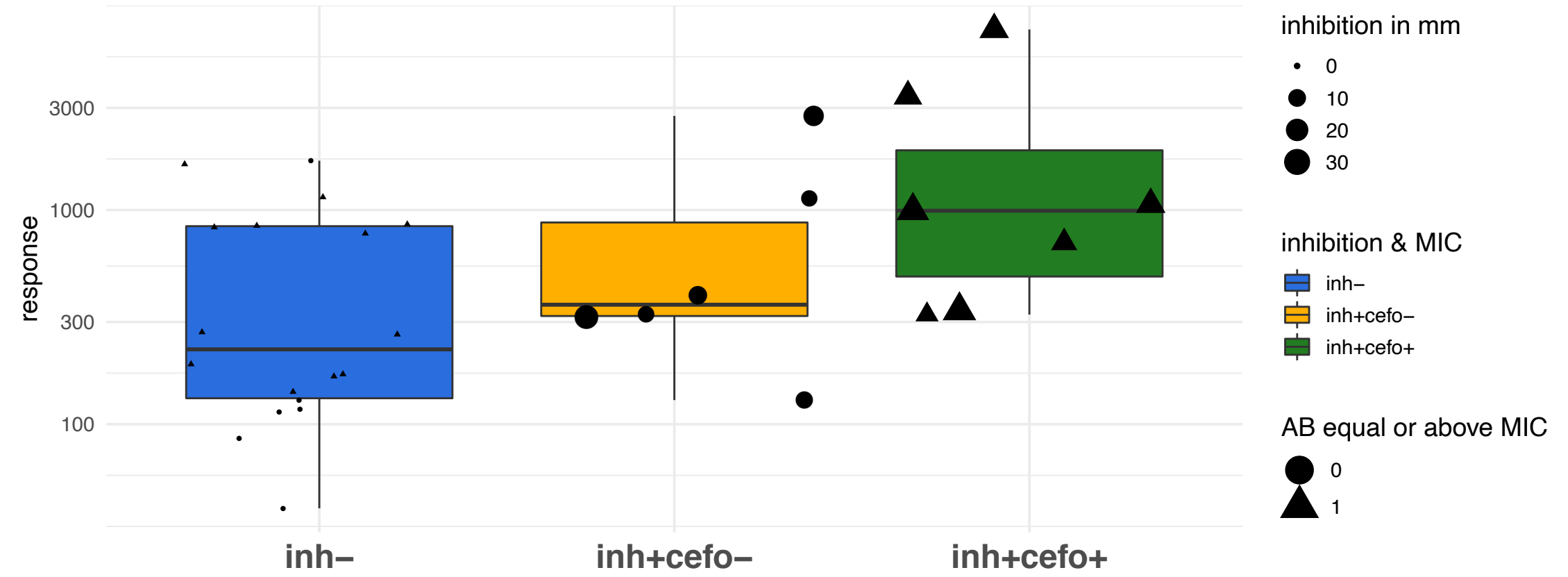
unpaired wilcoxon test



NS >0.05, * <0.05, ** < 0.01, *** <0.001

B

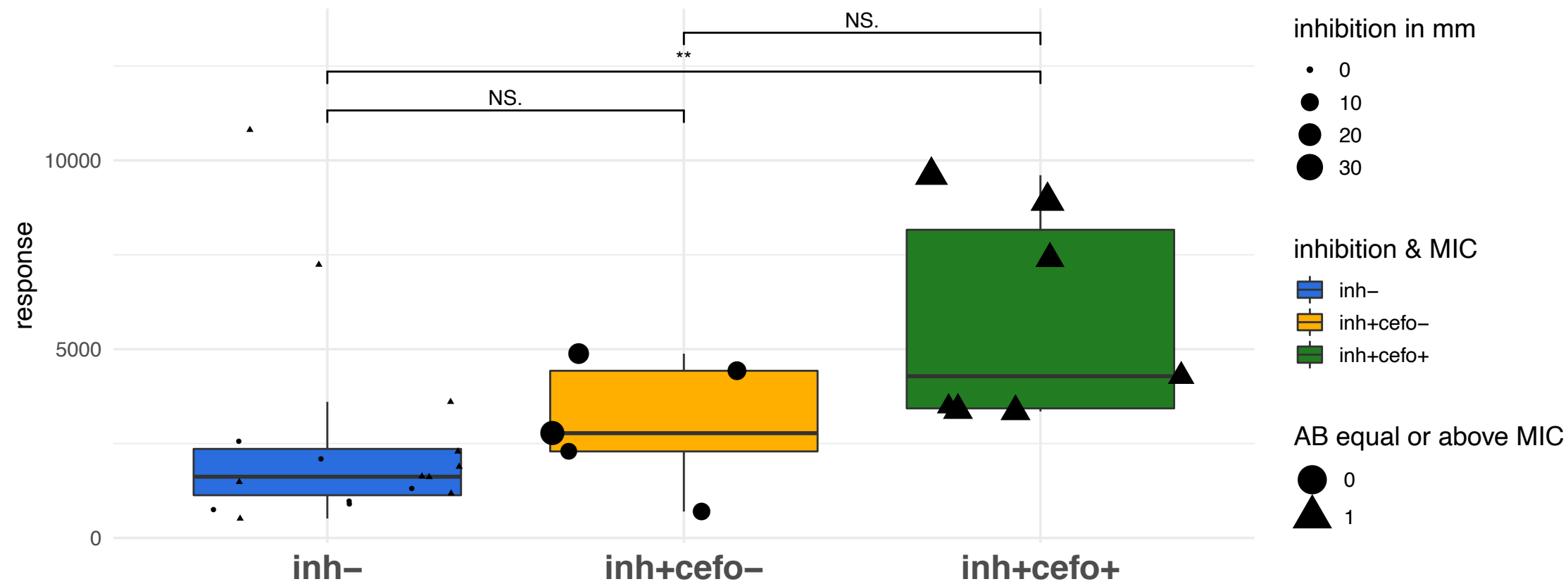
EtrX2

y-axis = log₁₀-scale

A

GpsB

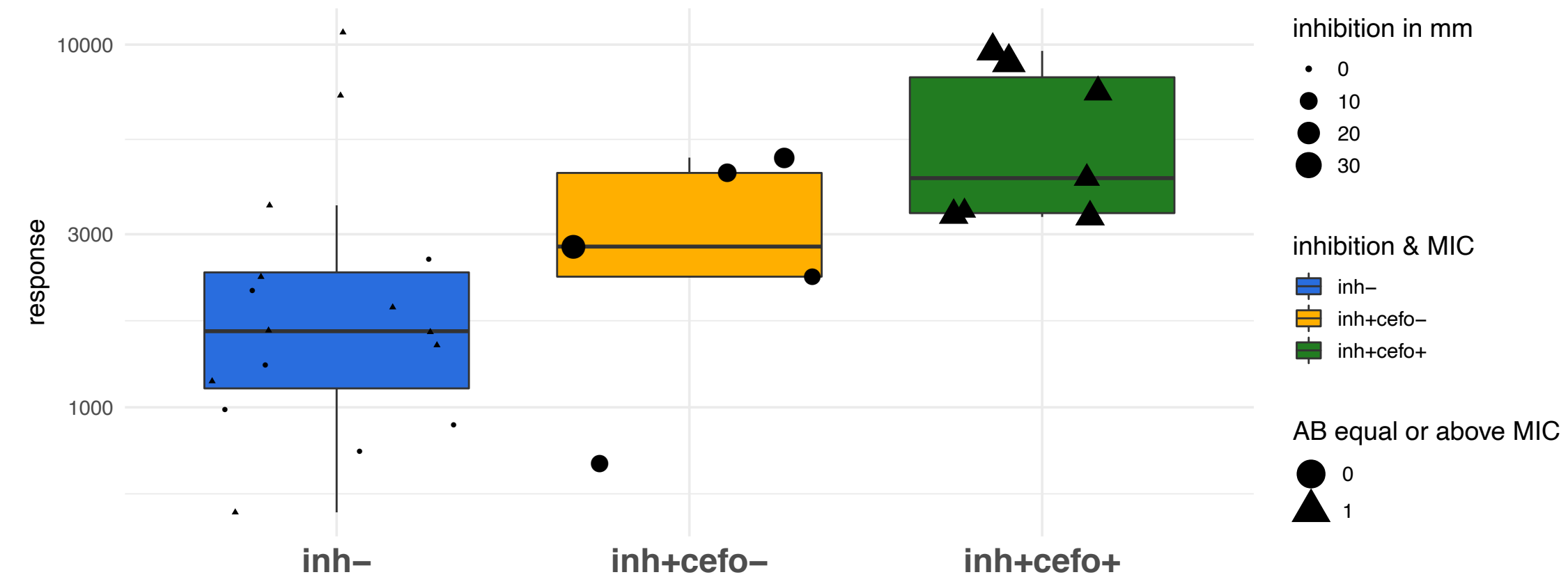
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

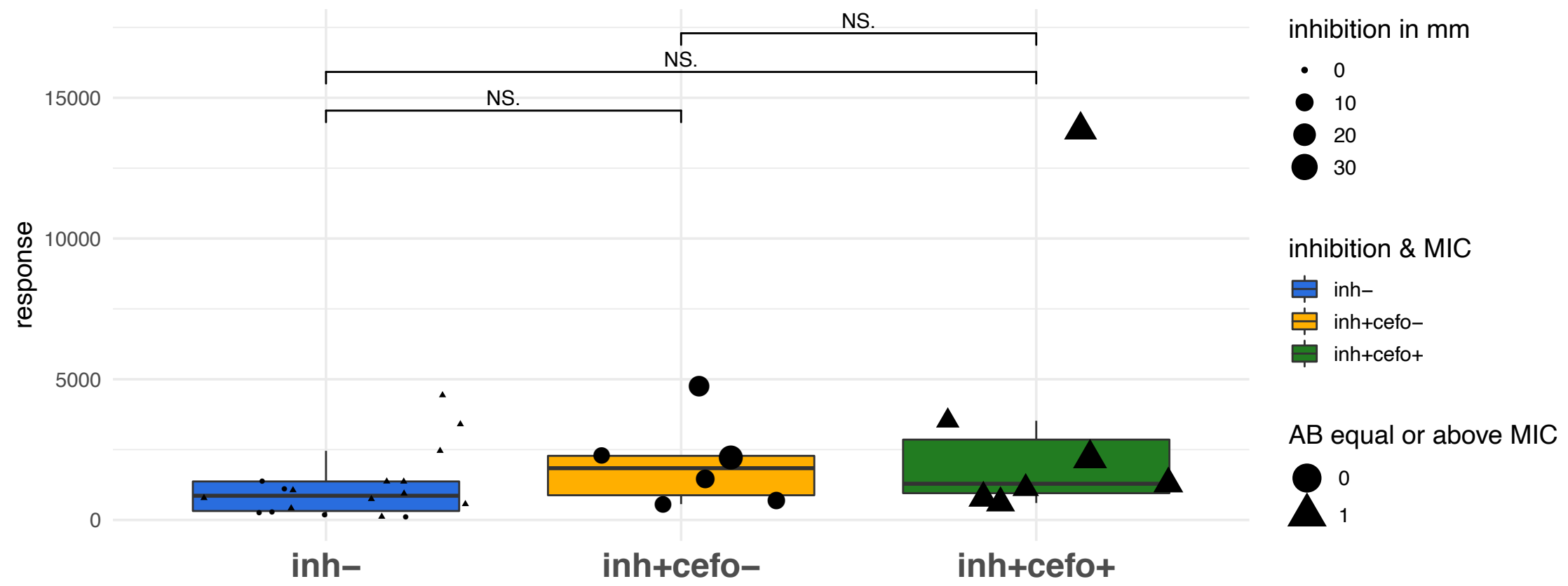
GpsB

y-axis = log₁₀-scale

A

Hic2

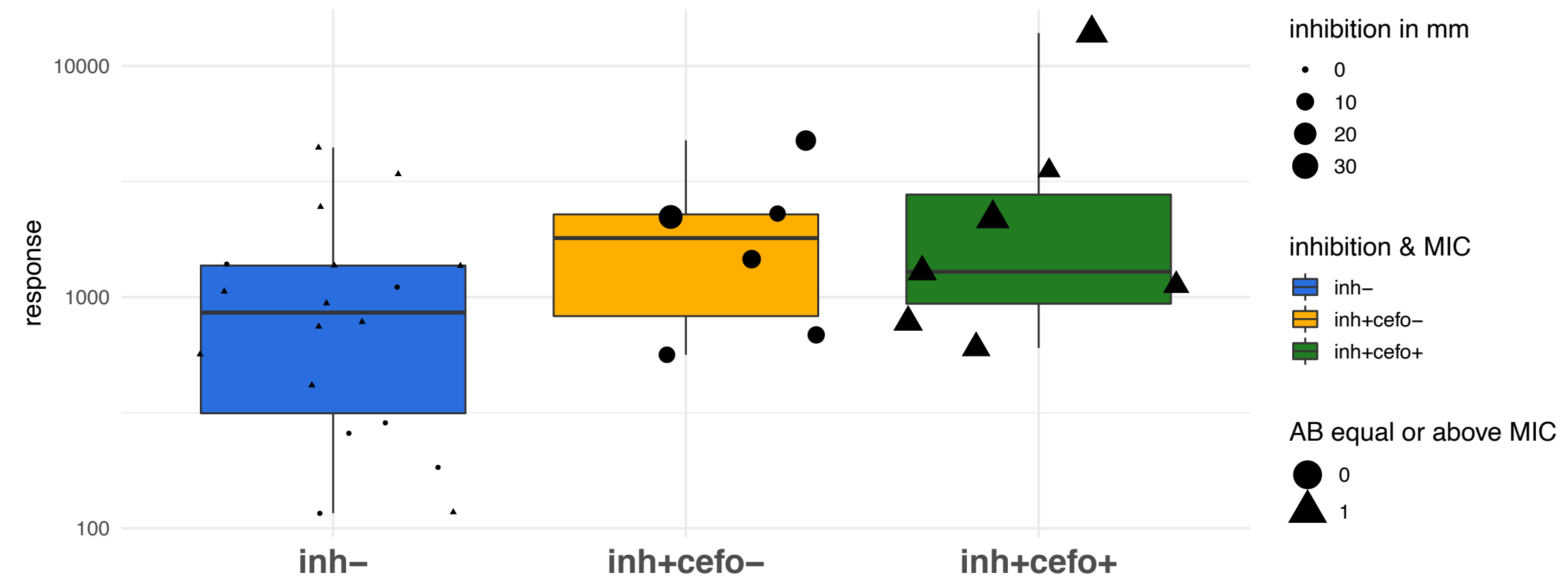
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

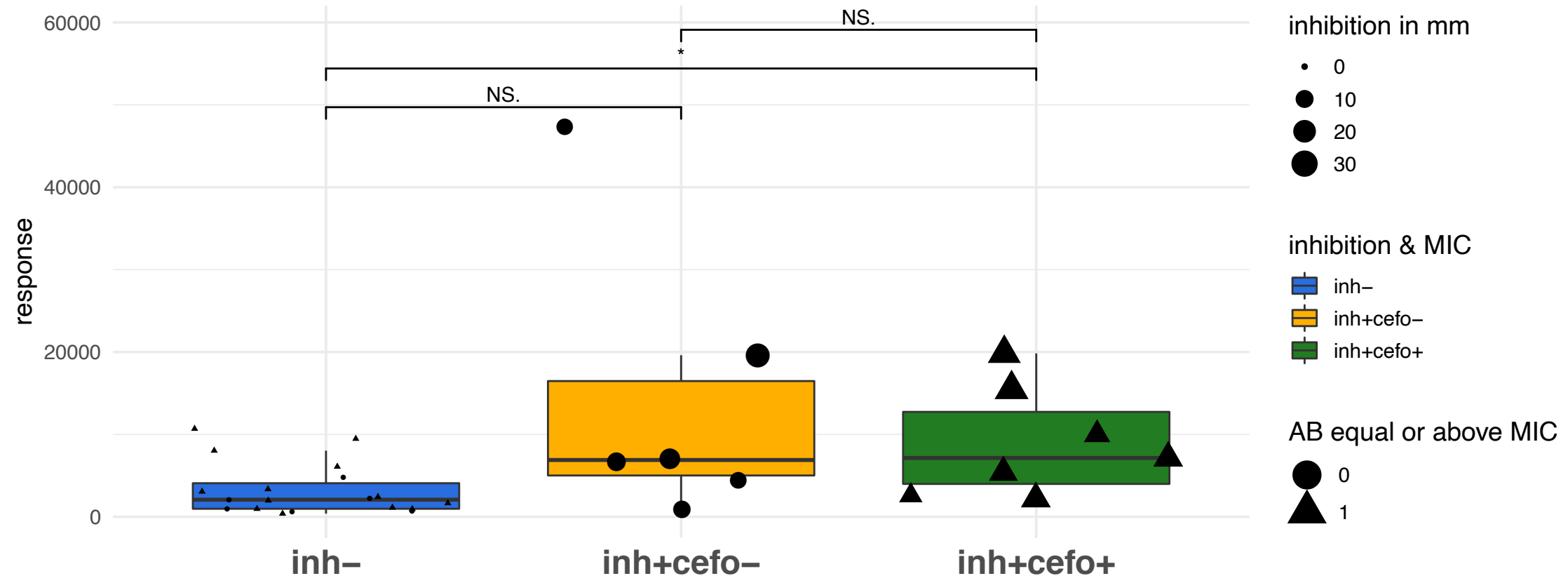
Hic2

y-axis = log₁₀-scale

A

LytA

unpaired wilcoxon test

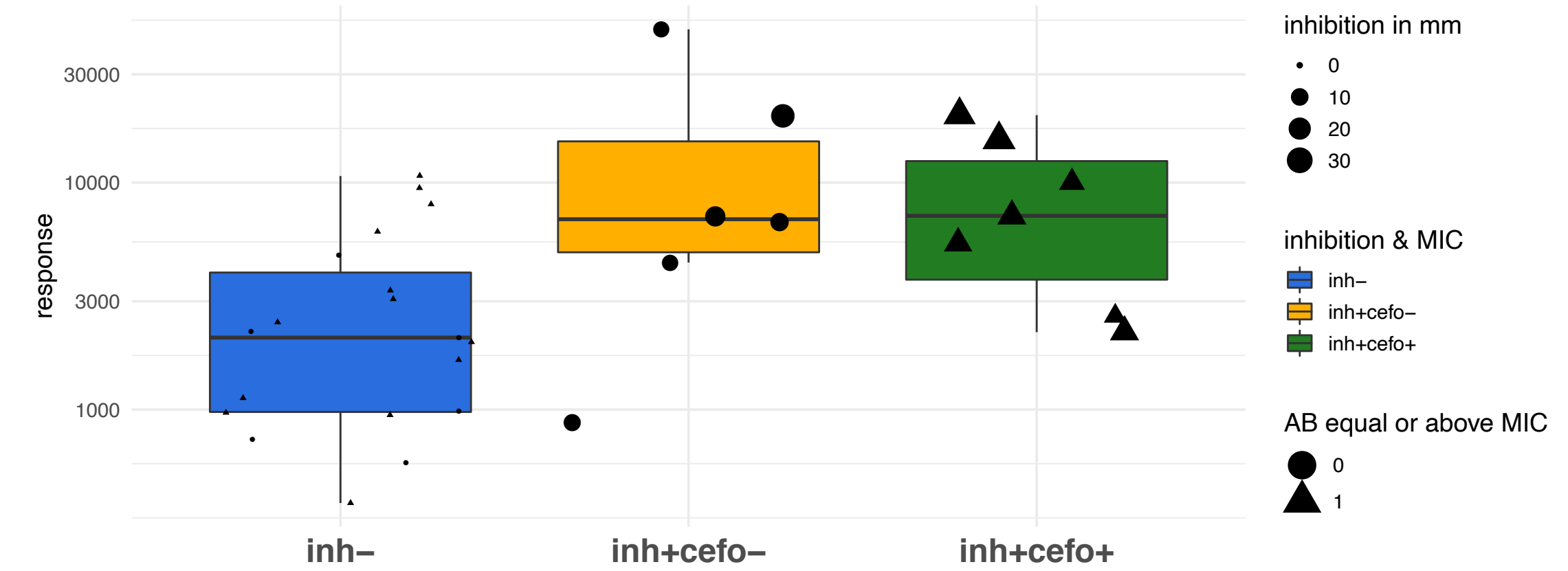


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

LytA

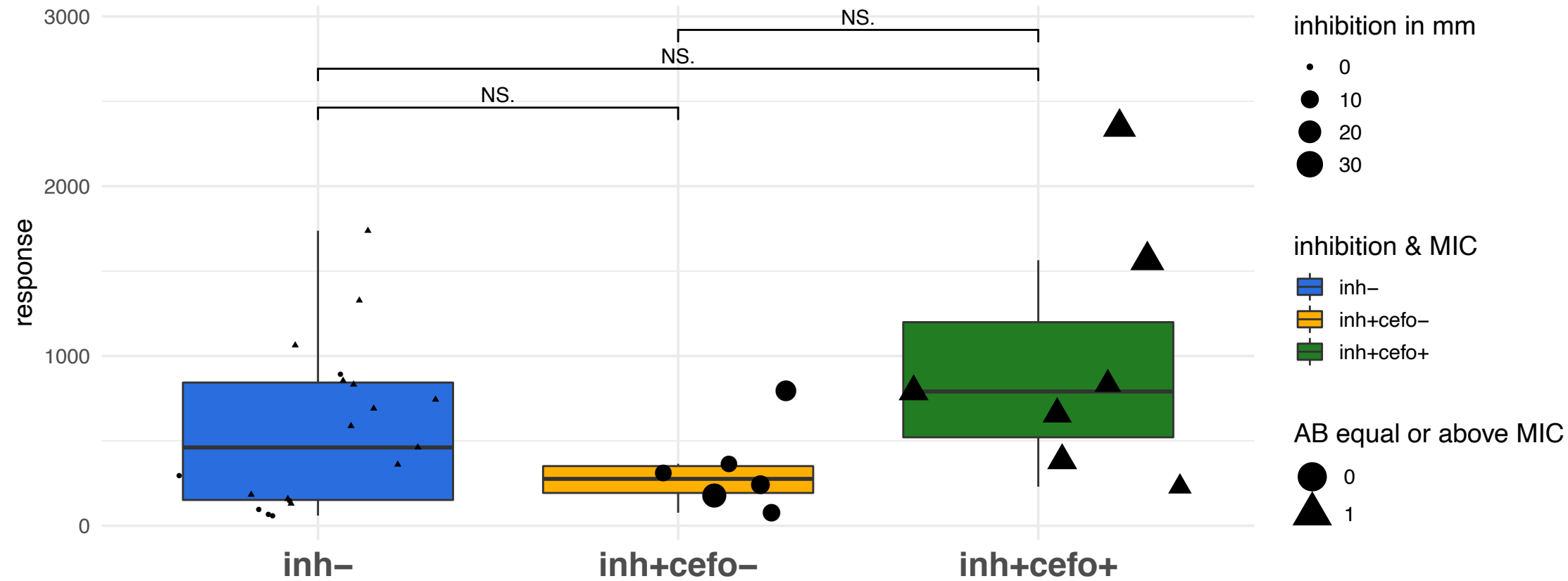
y-axis = log10-scale



A

LytB

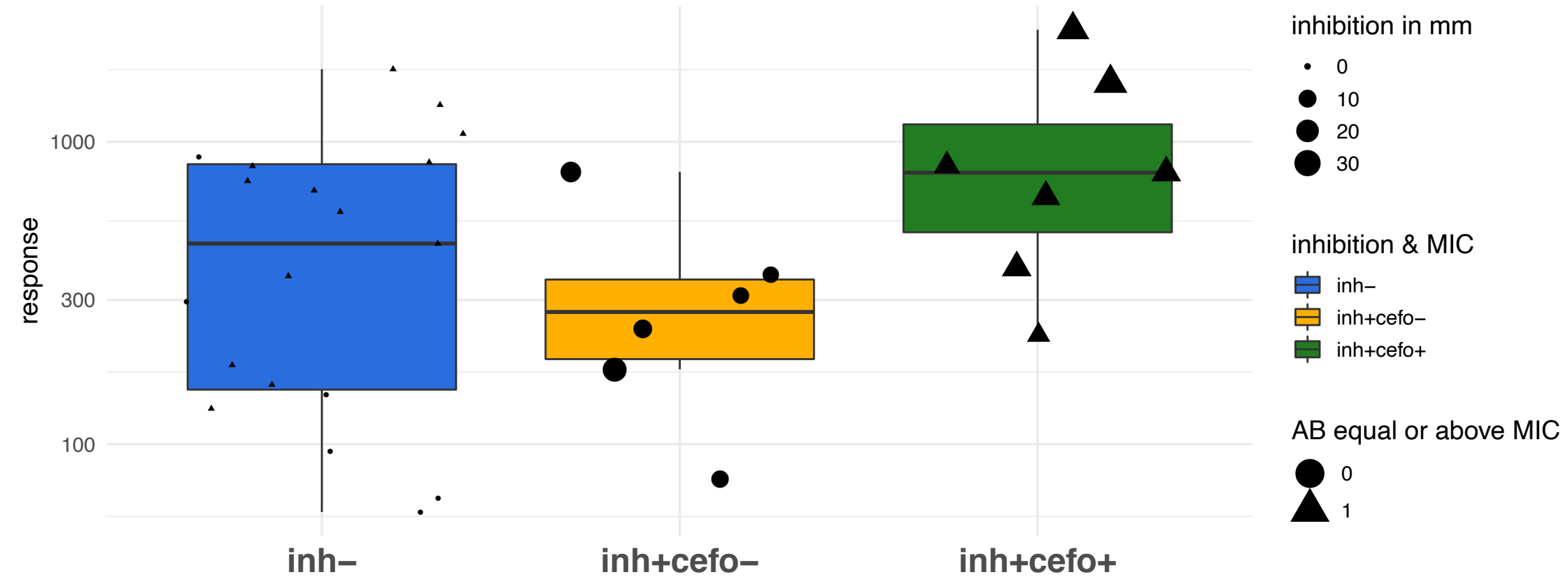
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

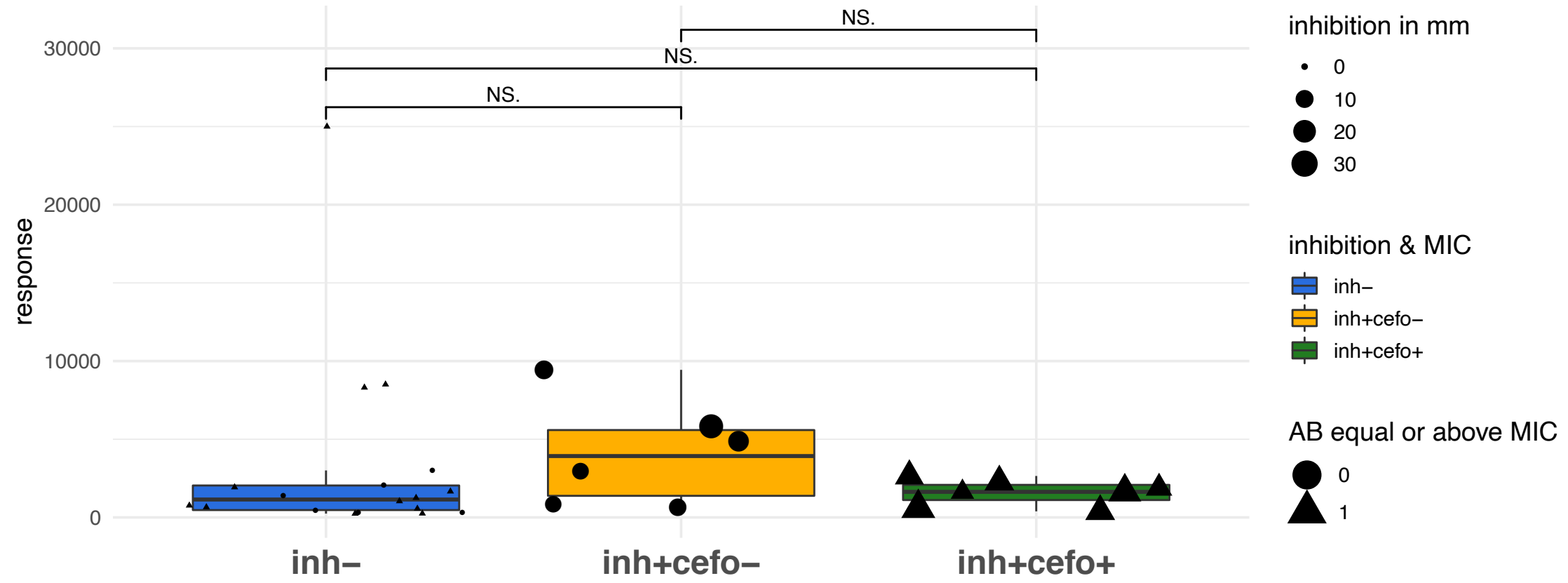
LytB

y-axis = log₁₀-scale

A

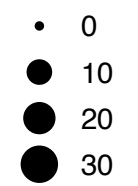
LytC

unpaired wilcoxon test

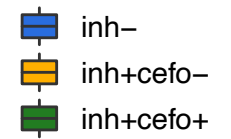


NS >0.05, * <0.05, ** <0.01, *** <0.001

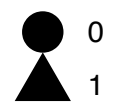
inhibition in mm



inhibition & MIC



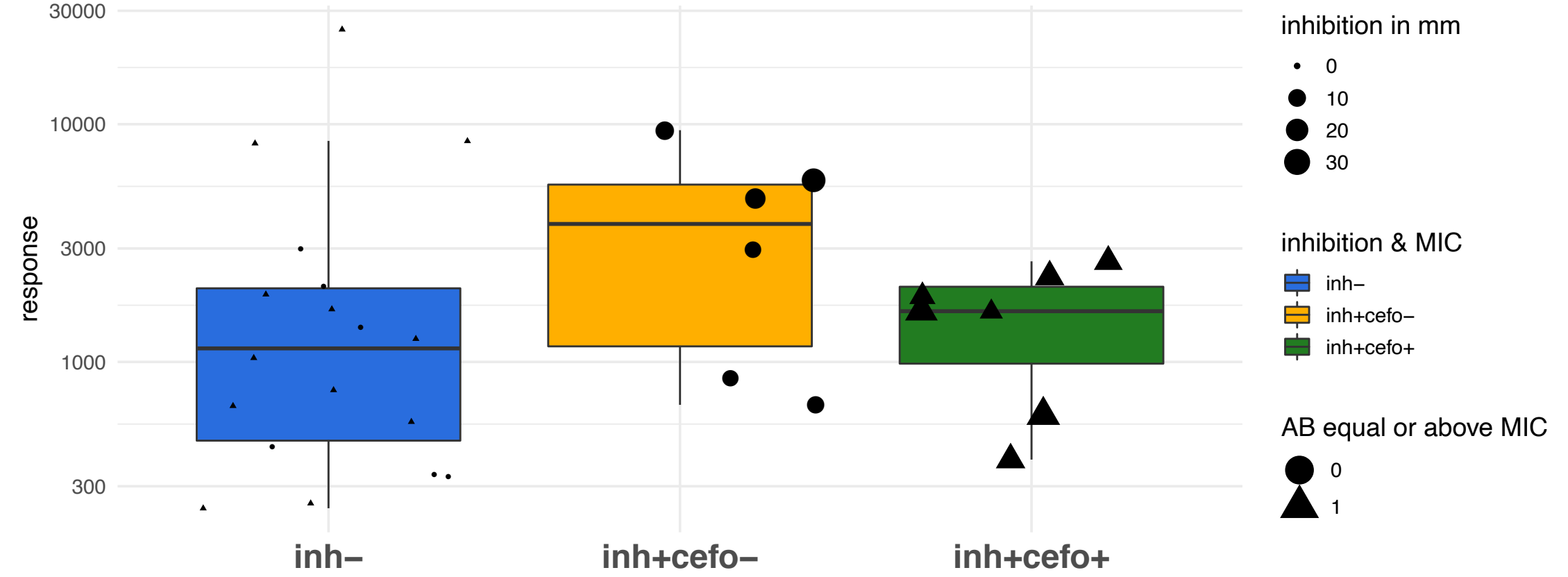
AB equal or above MIC



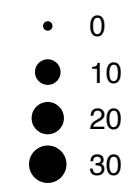
B

LytC

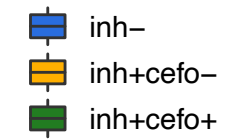
y-axis = log10-scale



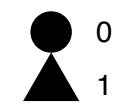
inhibition in mm



inhibition & MIC



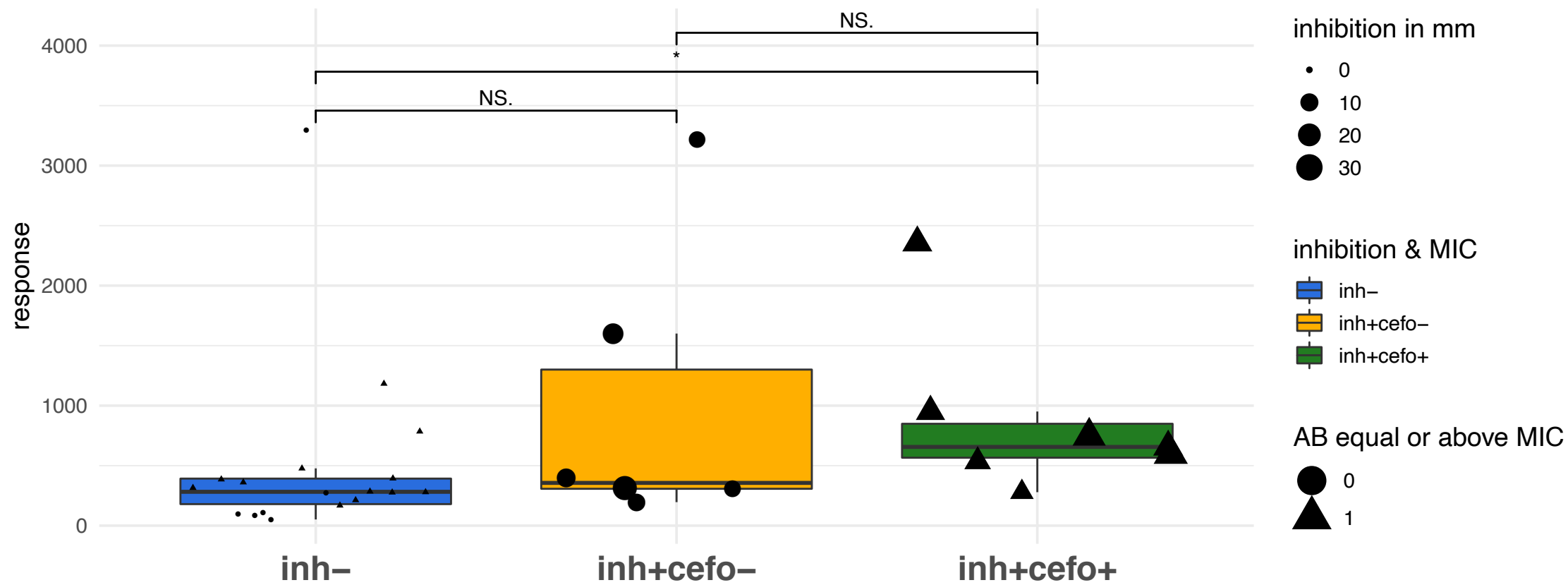
AB equal or above MIC



A

MetQ

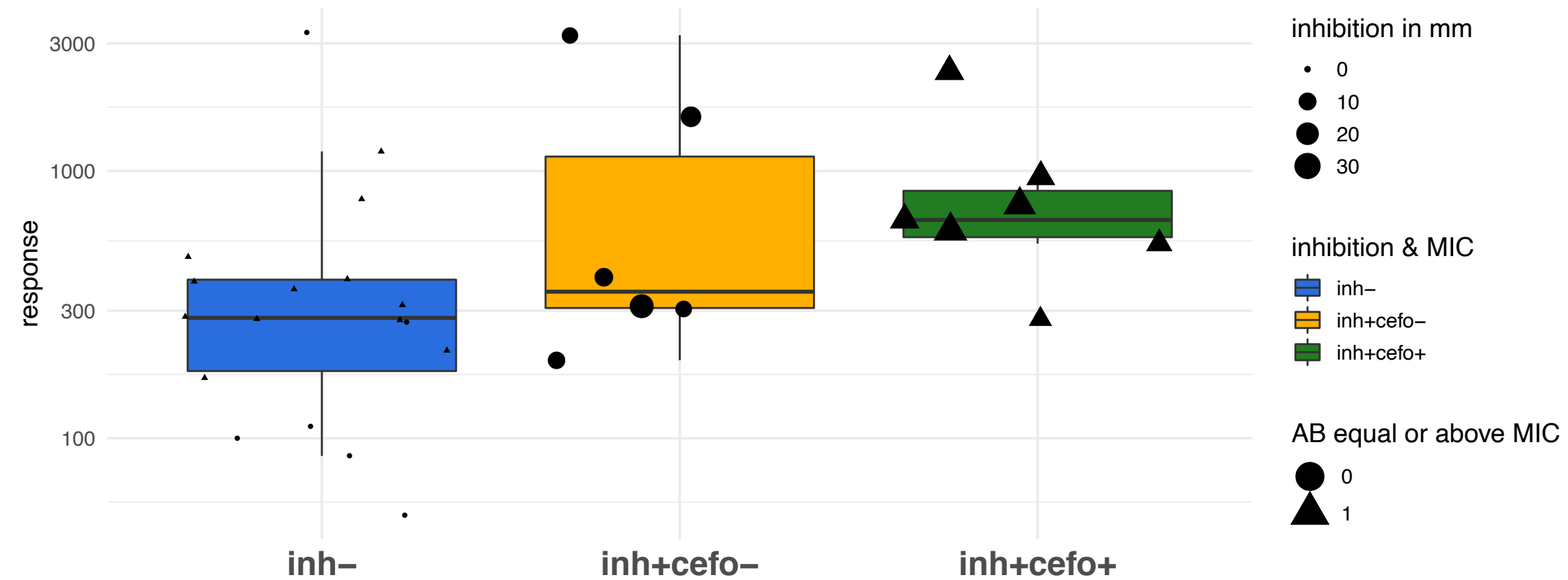
unpaired wilcoxon test



NS >0.05, * <0.05, ** < 0.01, *** <0.001

B

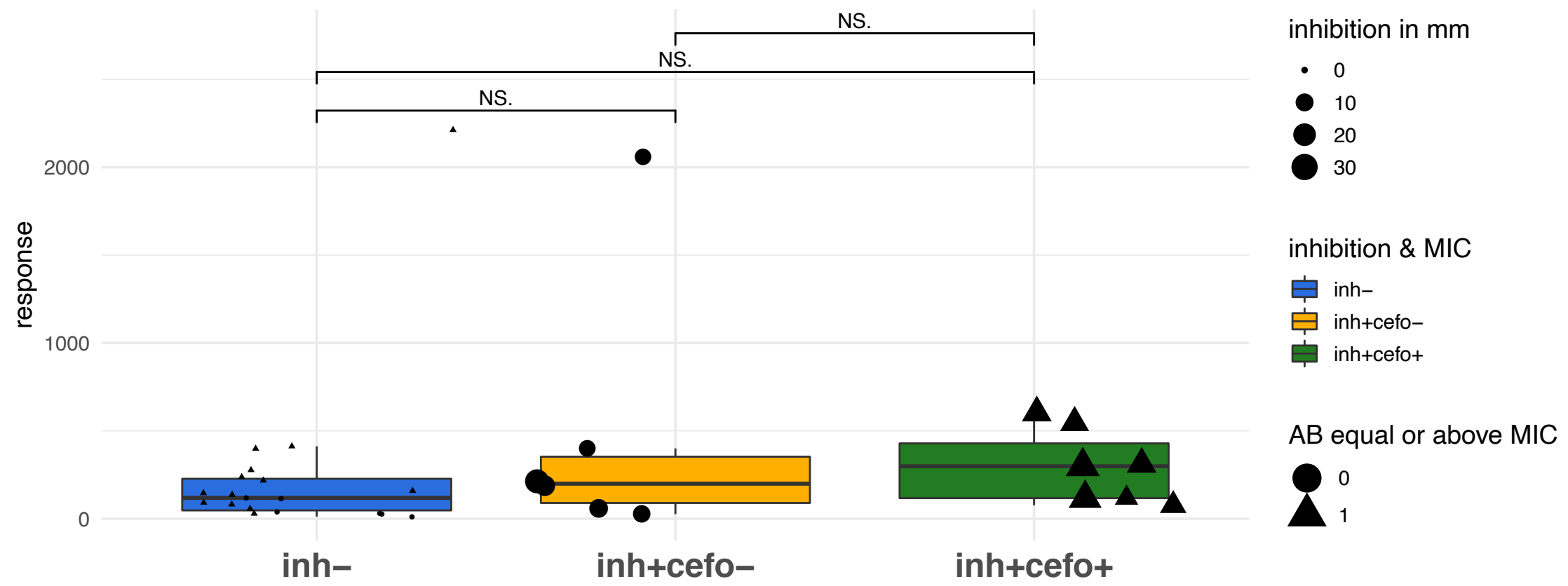
MetQ

y-axis = log₁₀-scale

A

MsrAB2

unpaired wilcoxon test

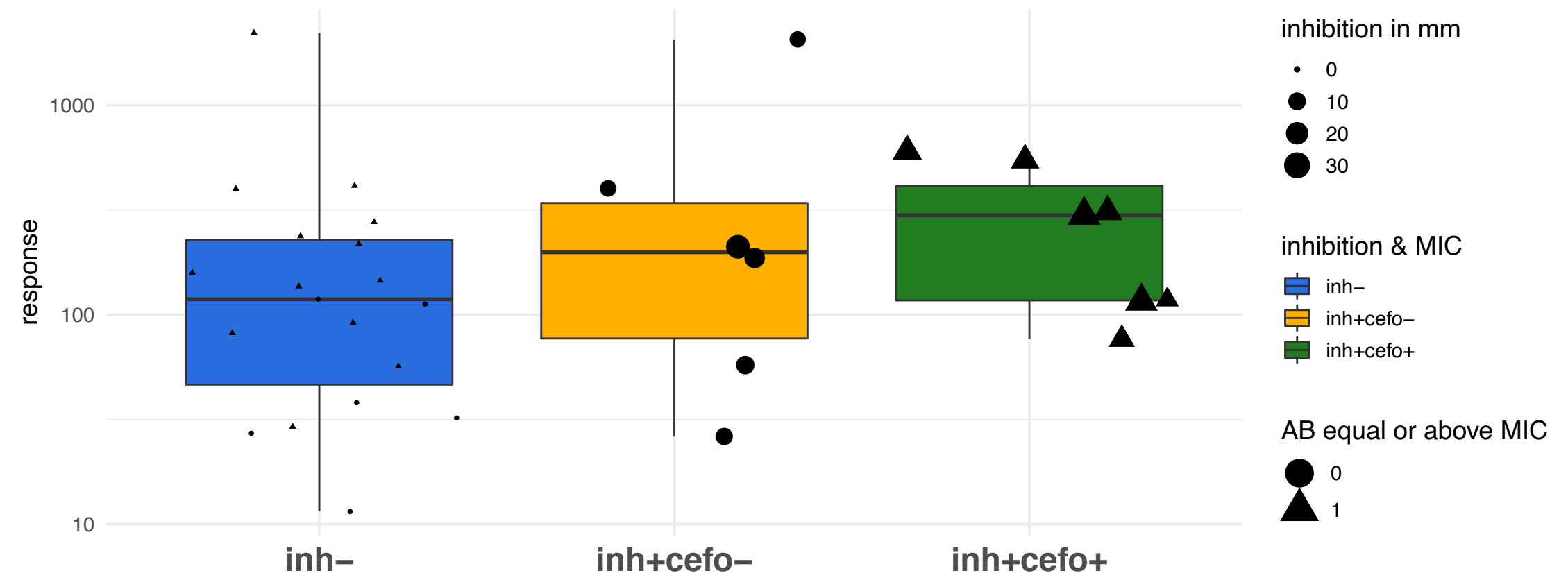


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

MsrAB2

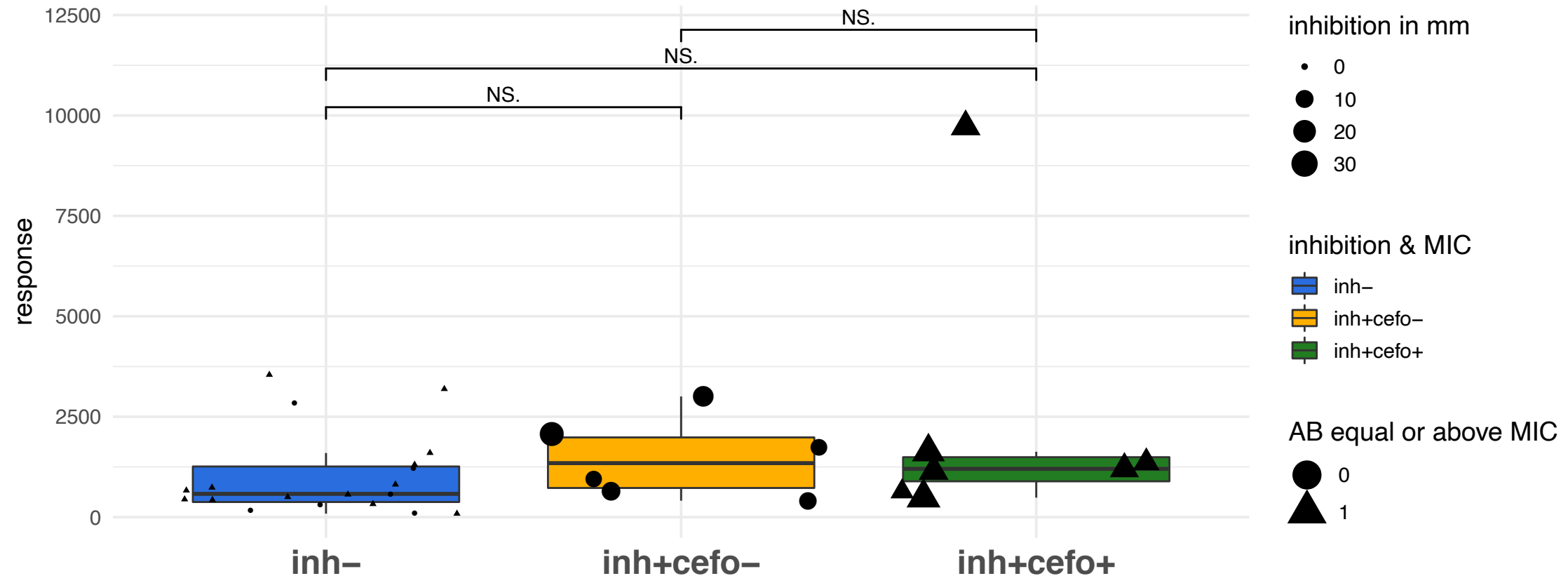
y-axis = log₁₀-scale



A

NanA

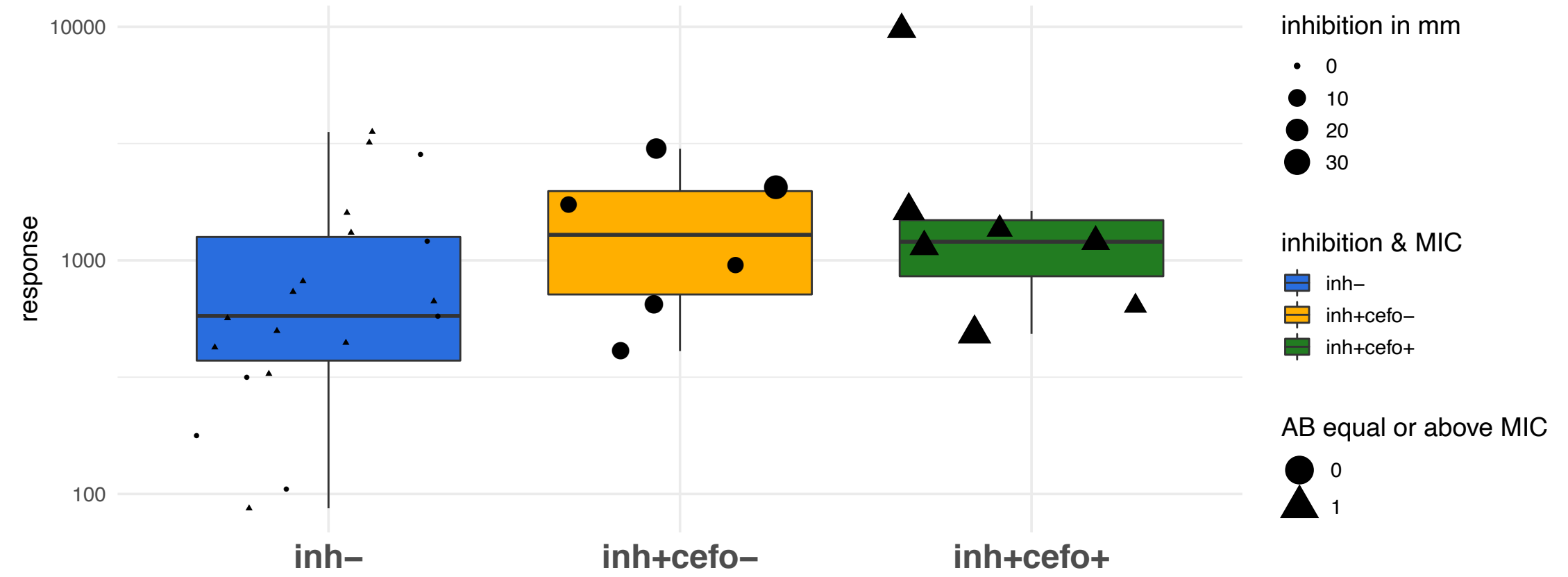
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

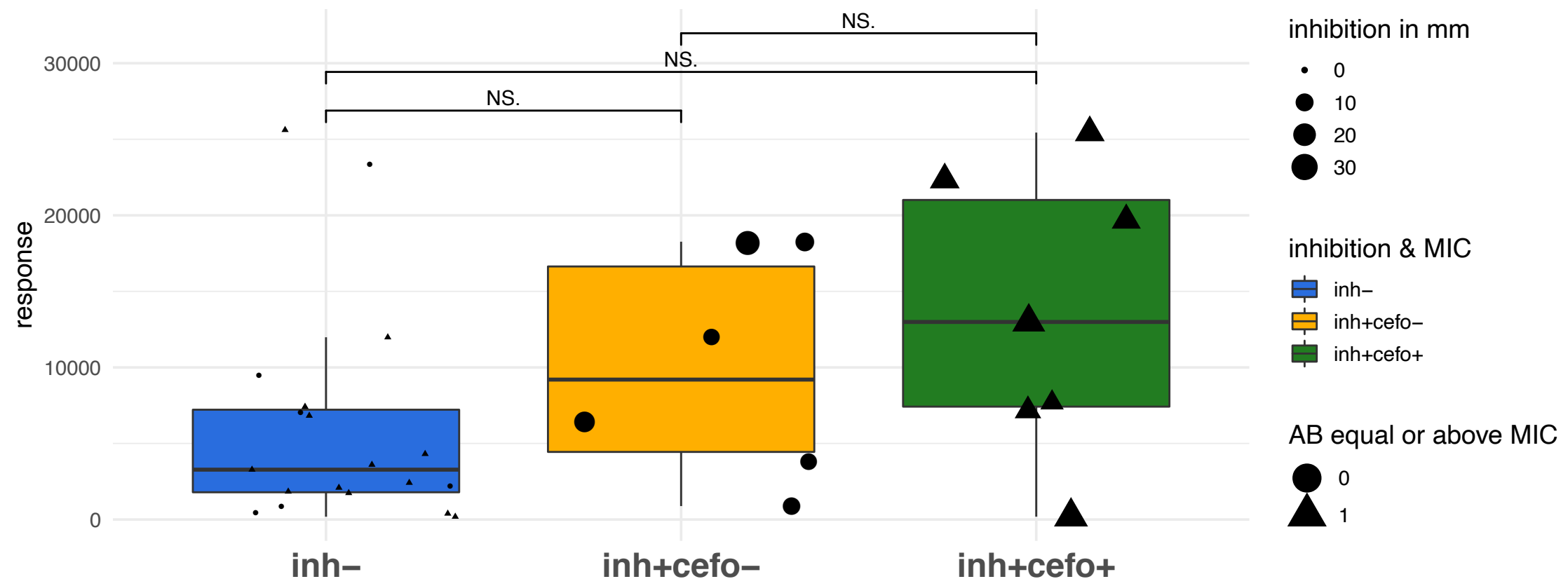
NanA

y-axis = log₁₀-scale

A

PavB

unpaired wilcoxon test

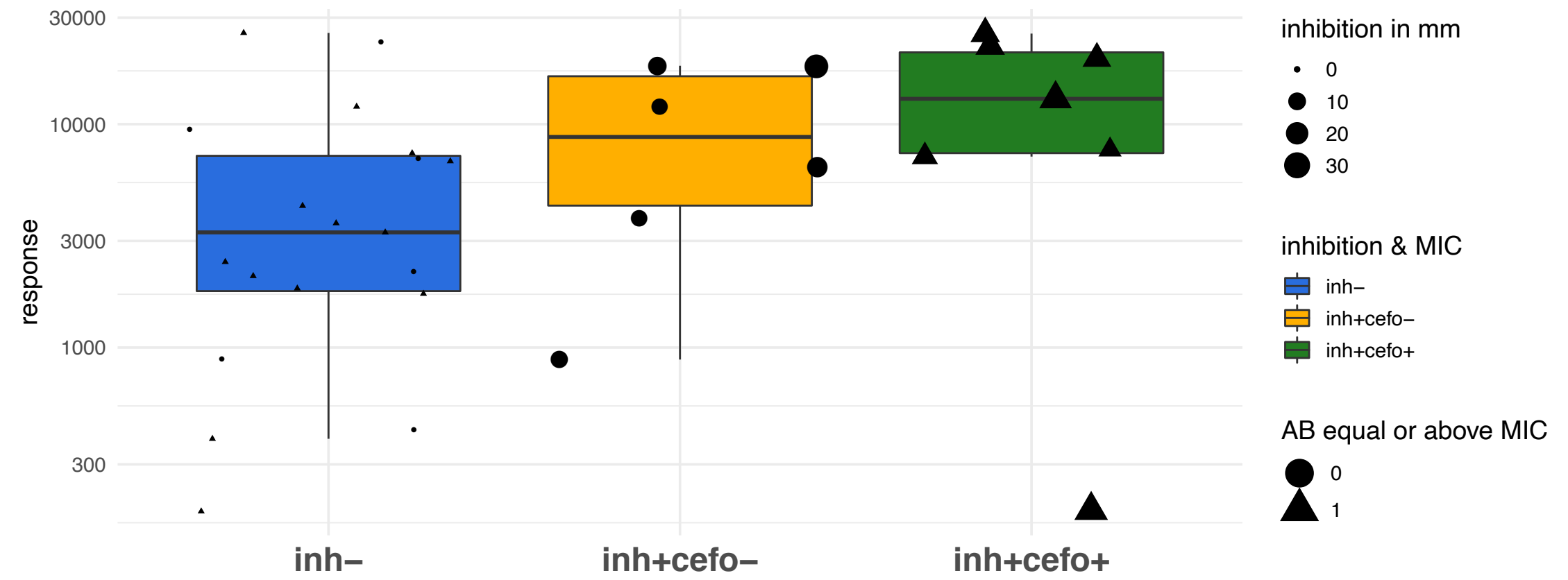


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

PavB

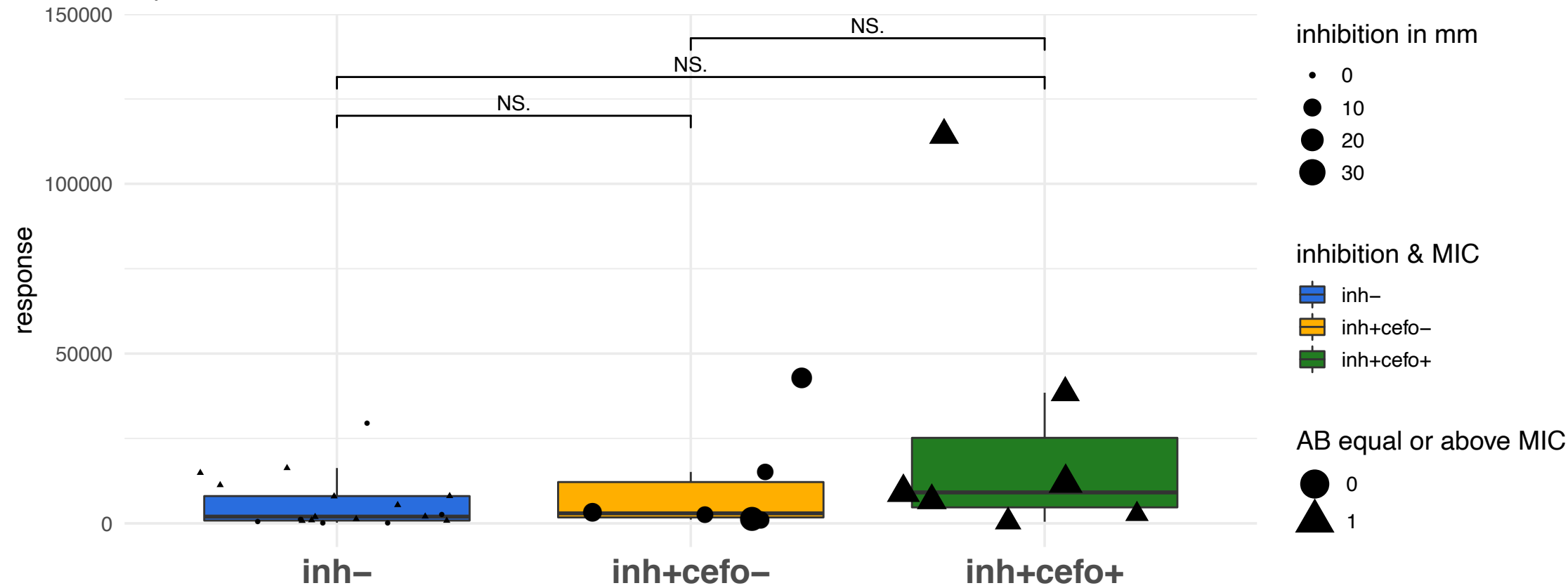
y-axis = log10-scale



A

PccL

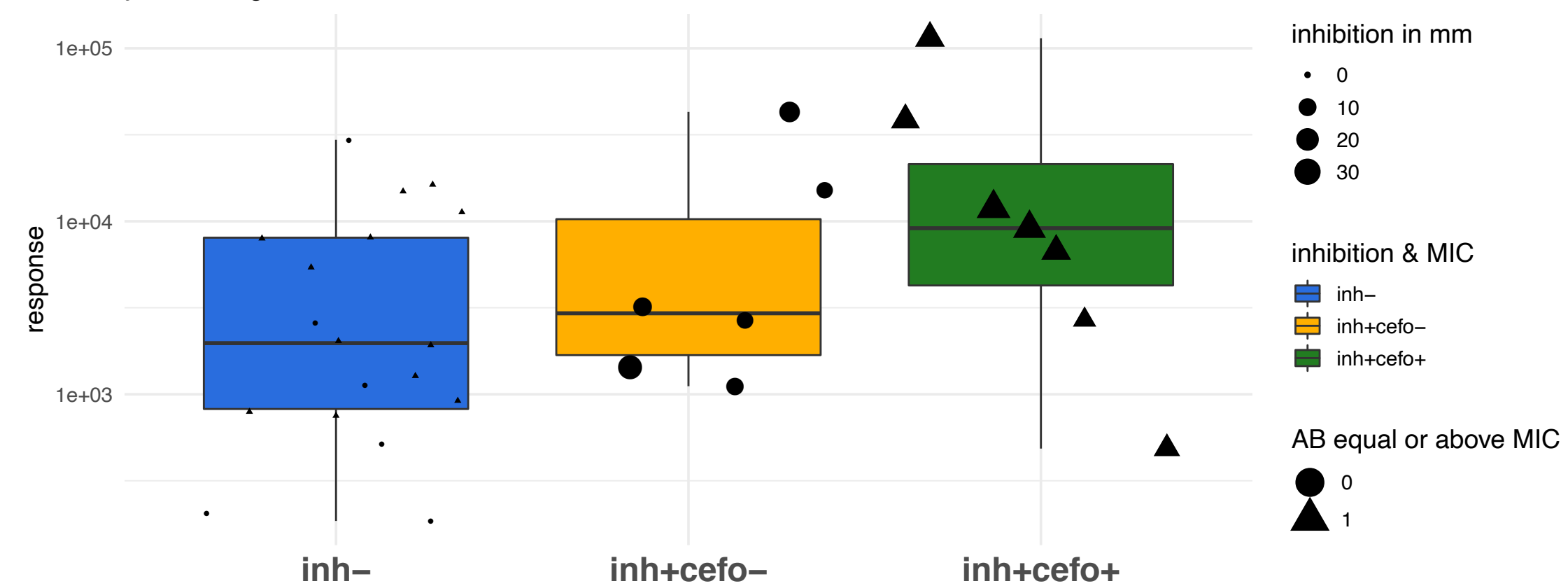
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

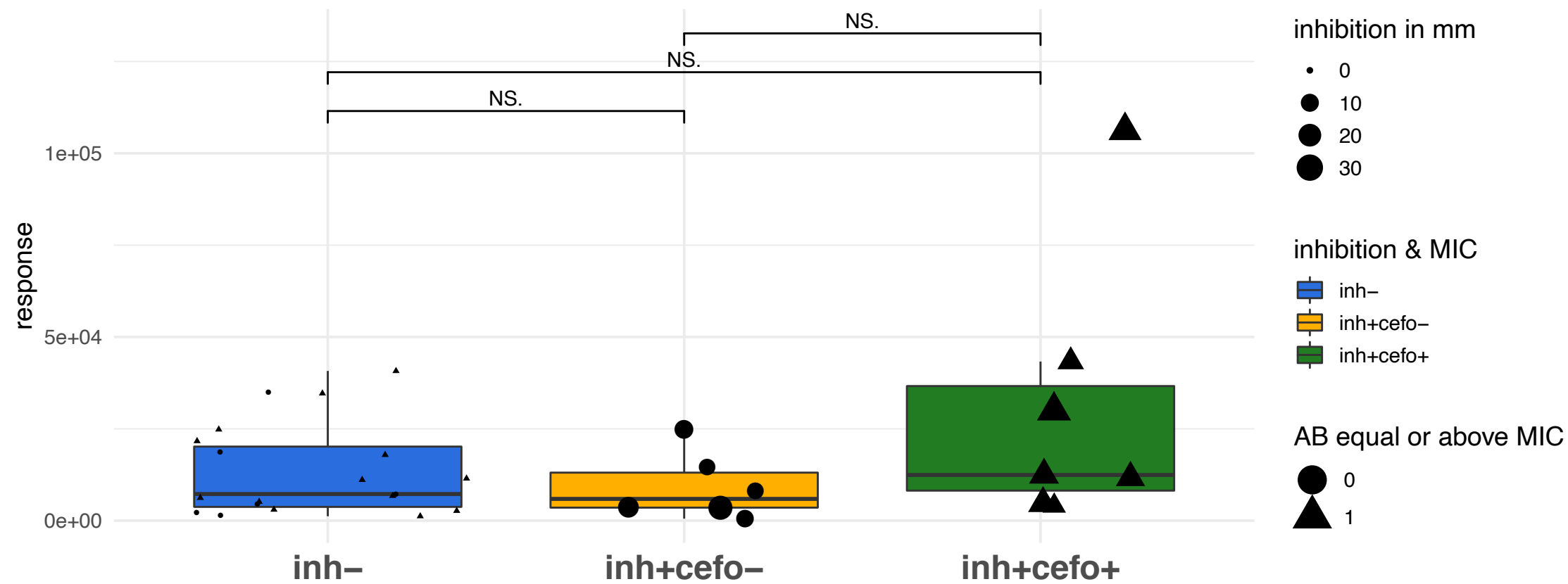
PccL

y-axis = log₁₀-scale

A

PcpA

unpaired wilcoxon test

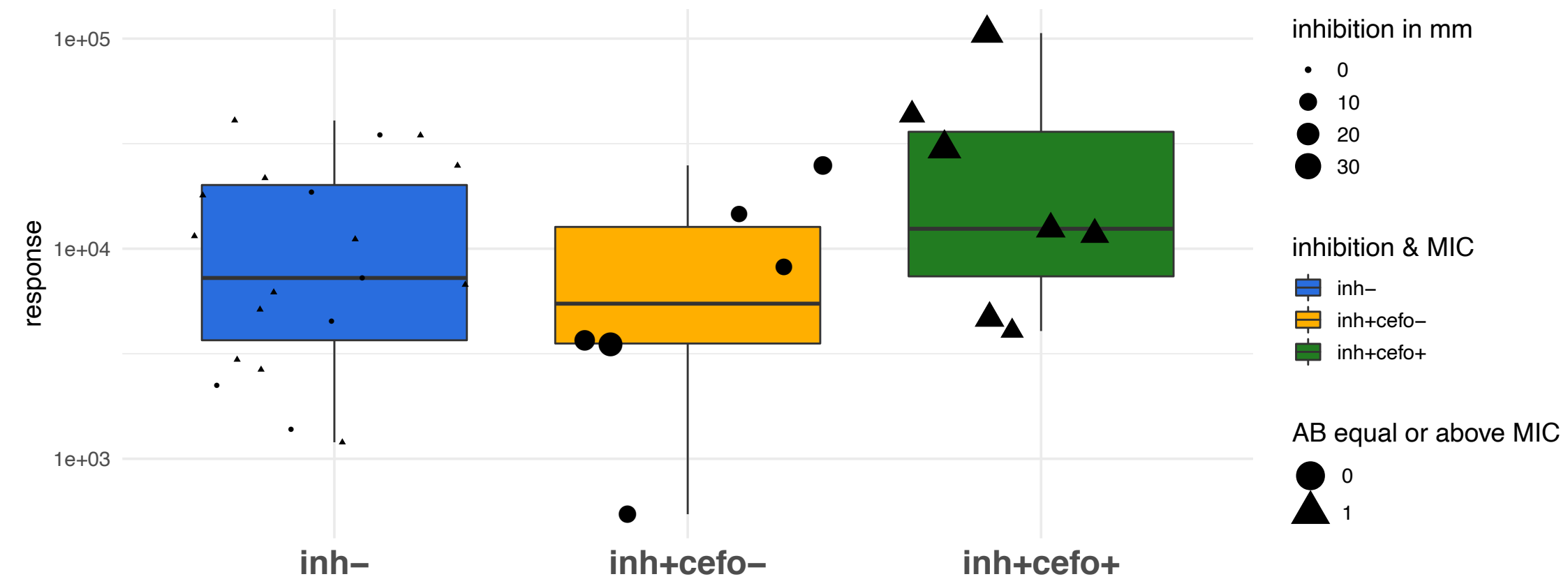


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

PcpA

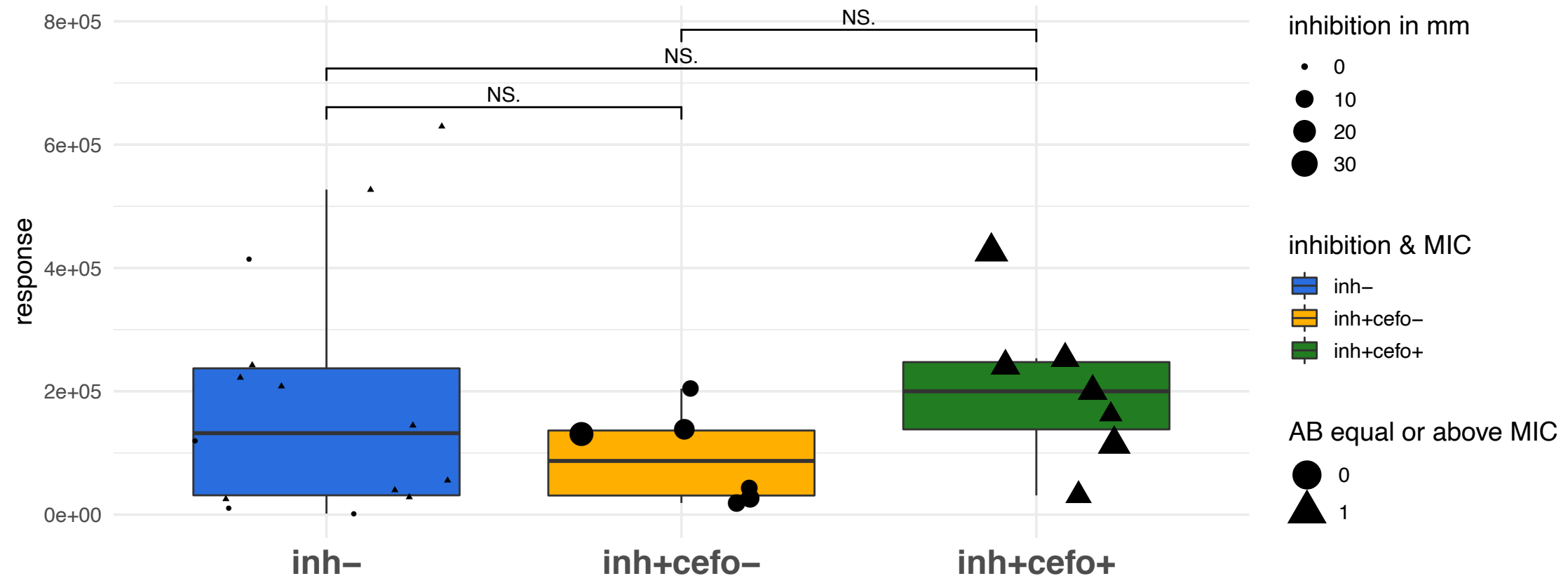
y-axis = log10-scale



A

PcsB

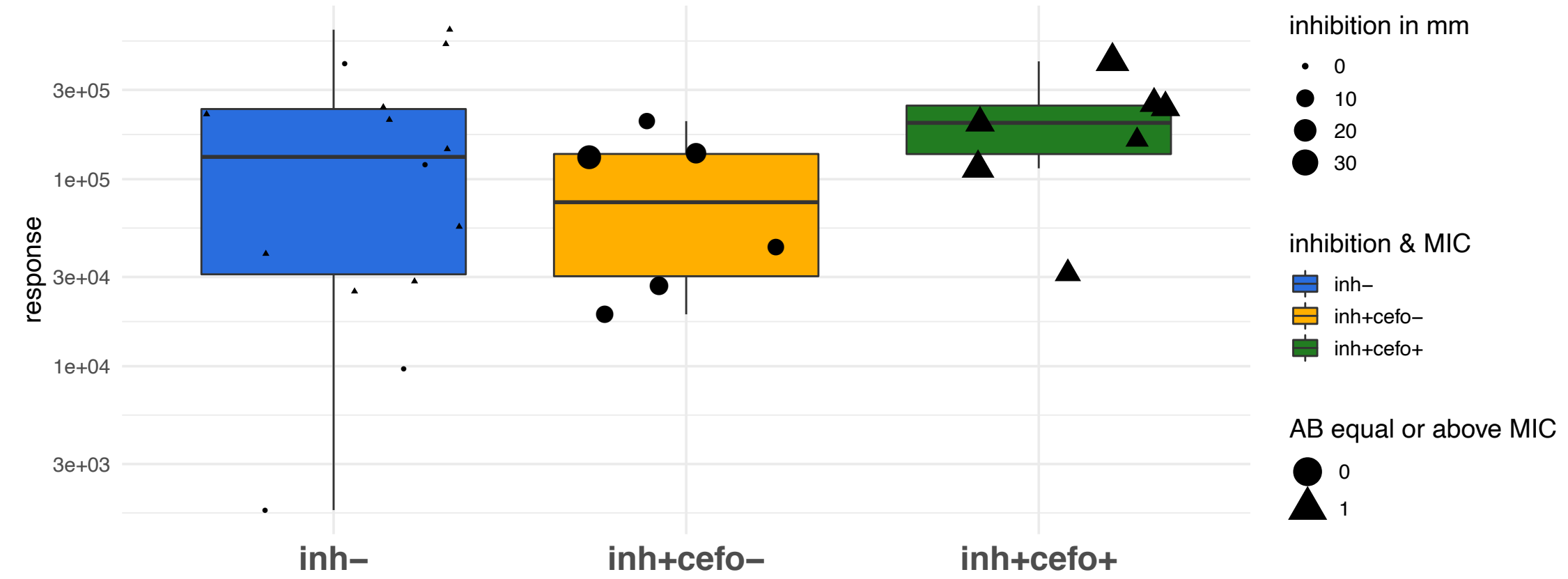
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

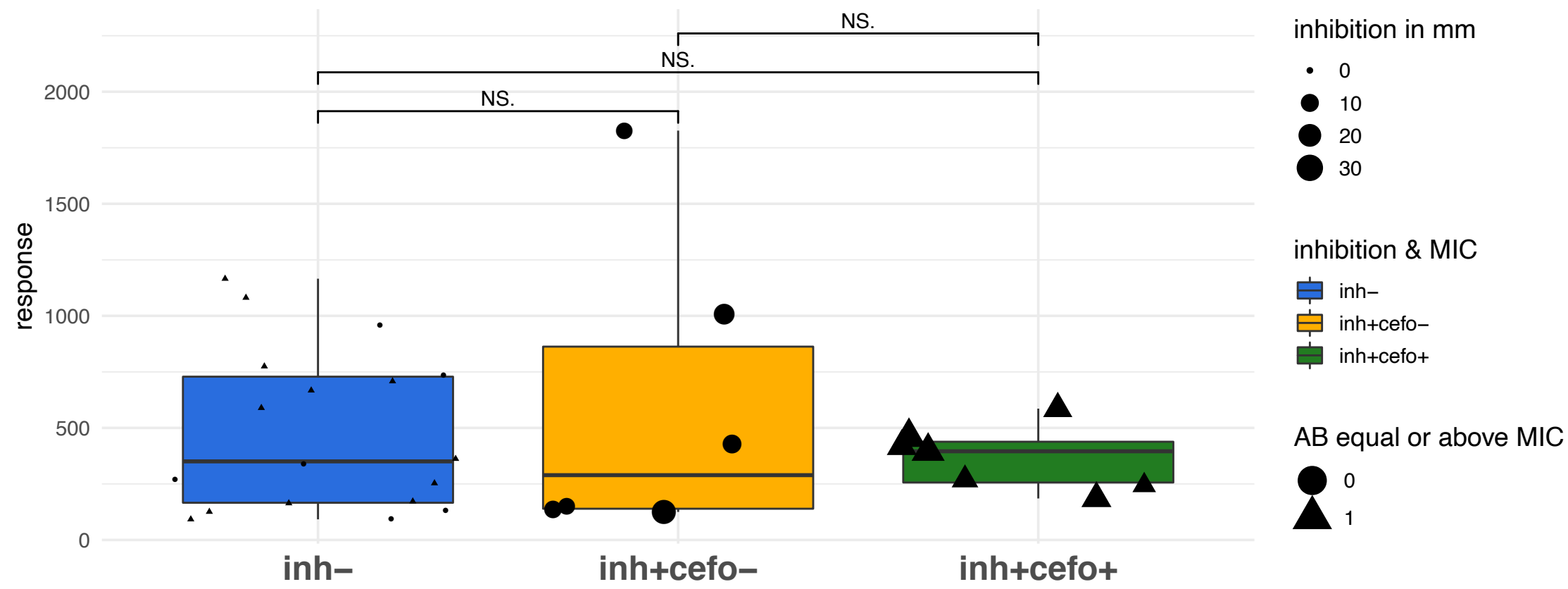
PcsB

y-axis = log₁₀-scale

A

PepO

unpaired wilcoxon test

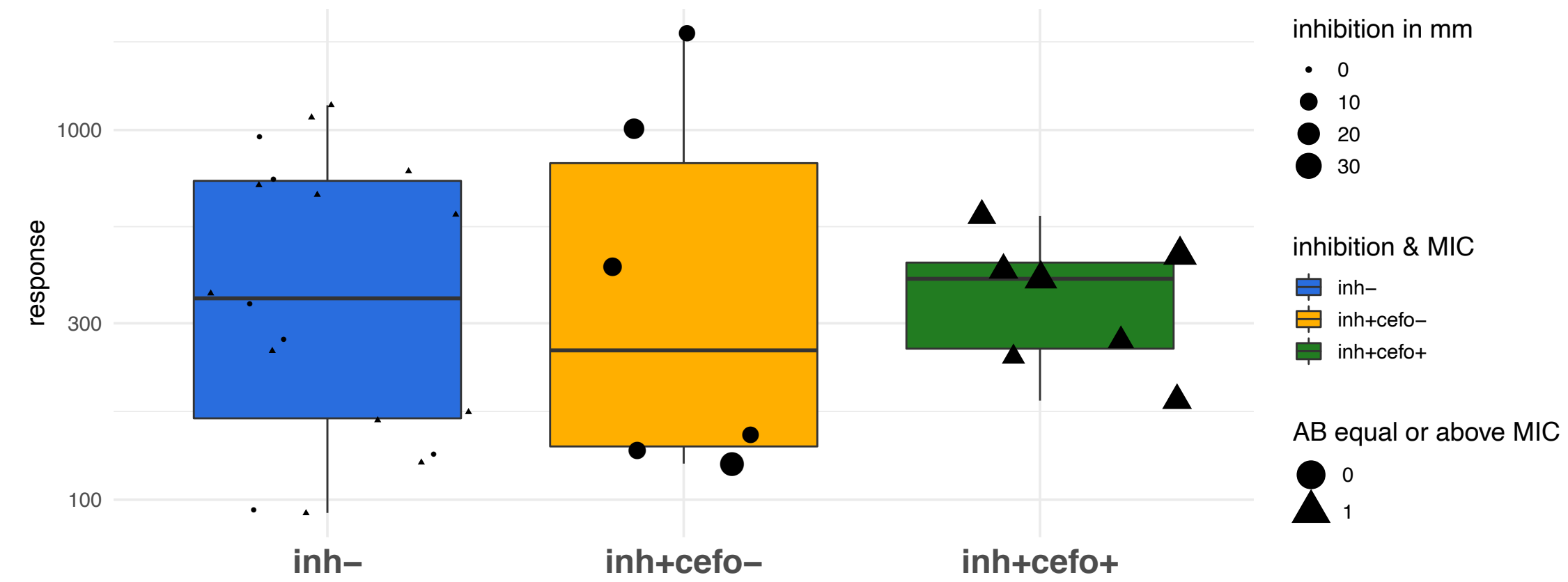


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

PepO

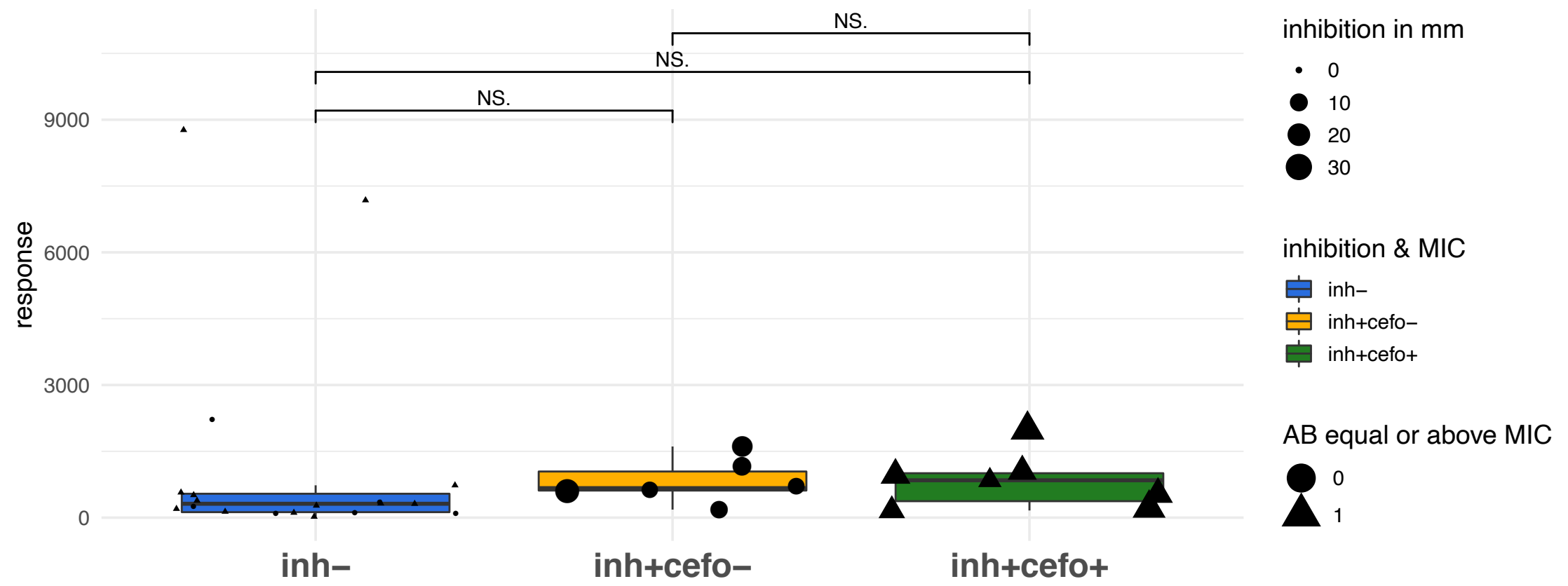
y-axis = log10-scale



A

PfbA

unpaired wilcoxon test

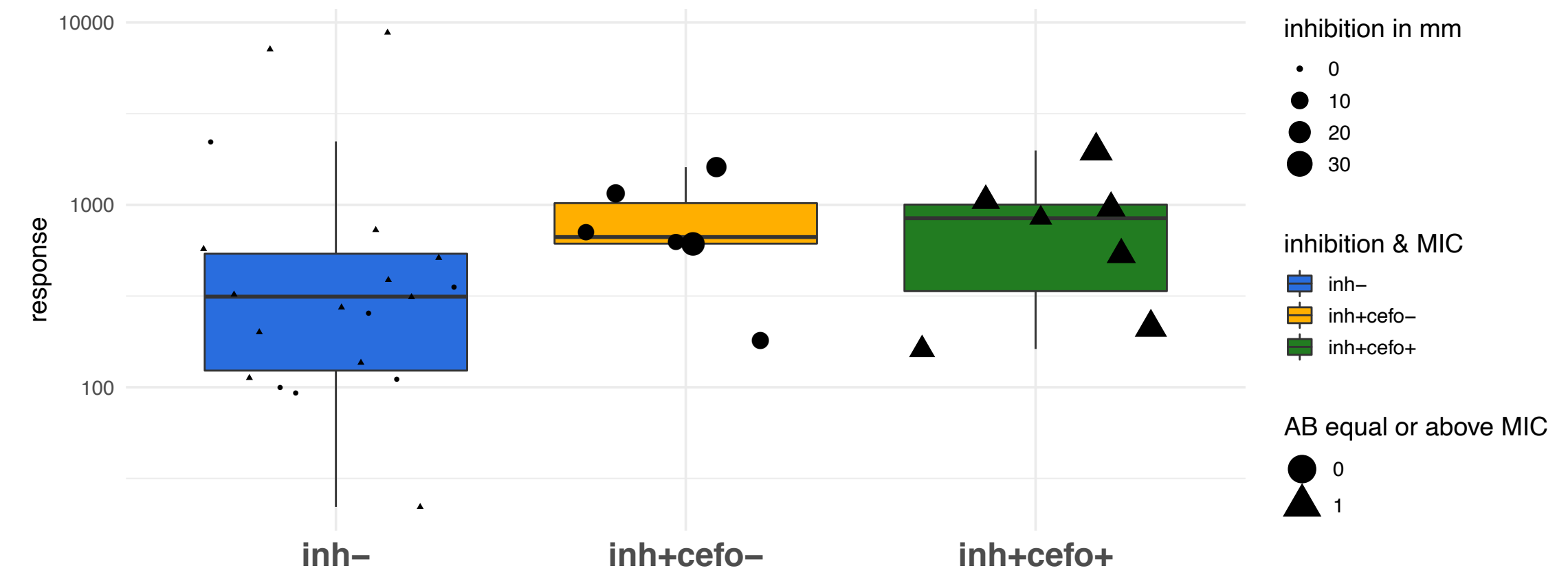


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

PfbA

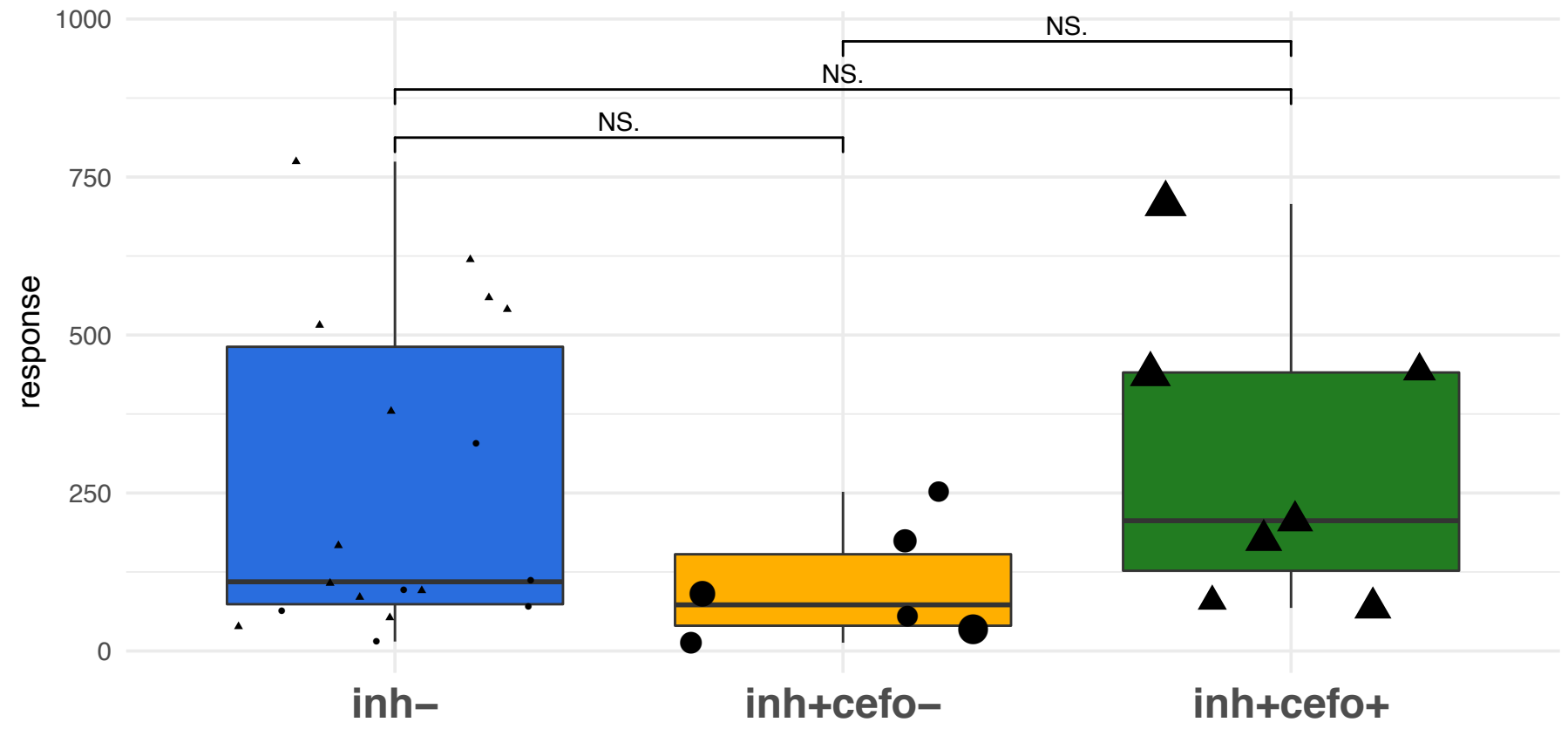
y-axis = log10-scale



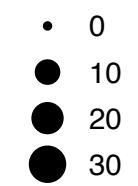
A

PGK

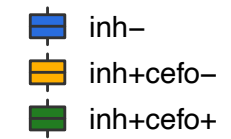
unpaired wilcoxon test



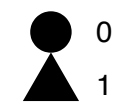
inhibition in mm



inhibition & MIC



AB equal or above MIC

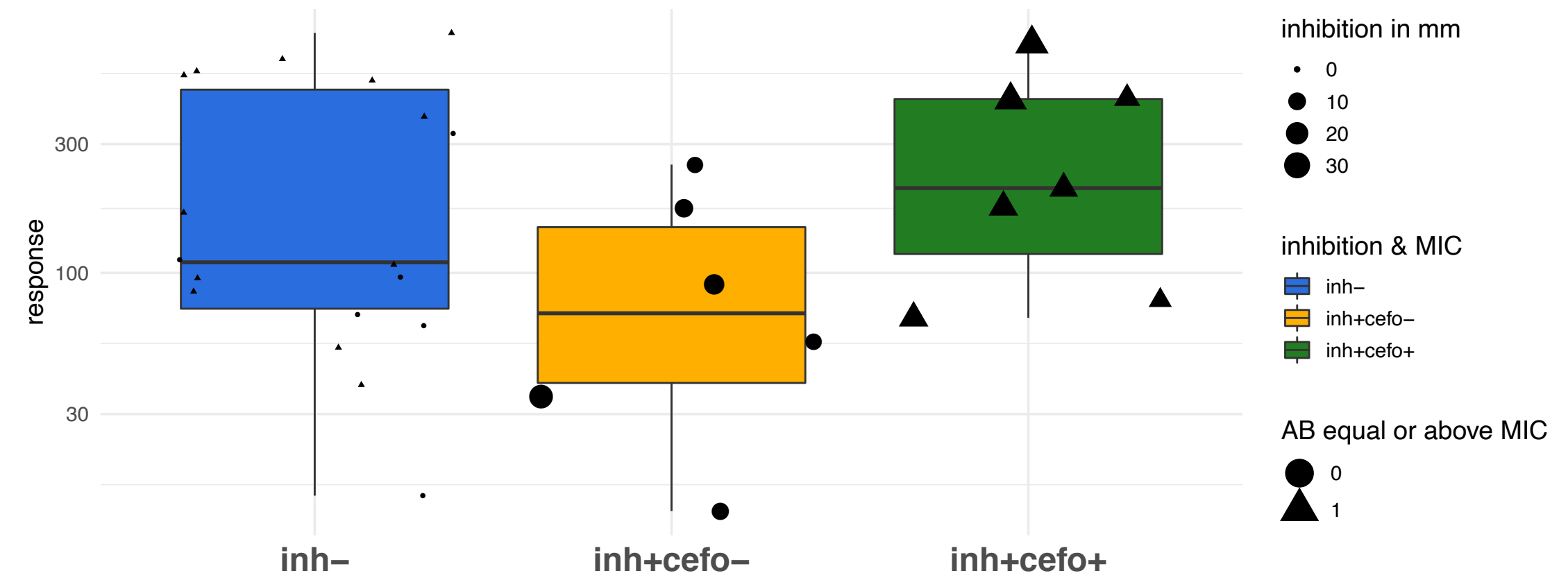


NS >0.05, * <0.05, ** <0.01, *** <0.001

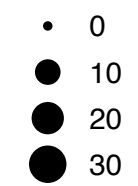
B

PGK

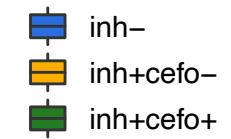
y-axis = log₁₀-scale



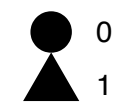
inhibition in mm



inhibition & MIC



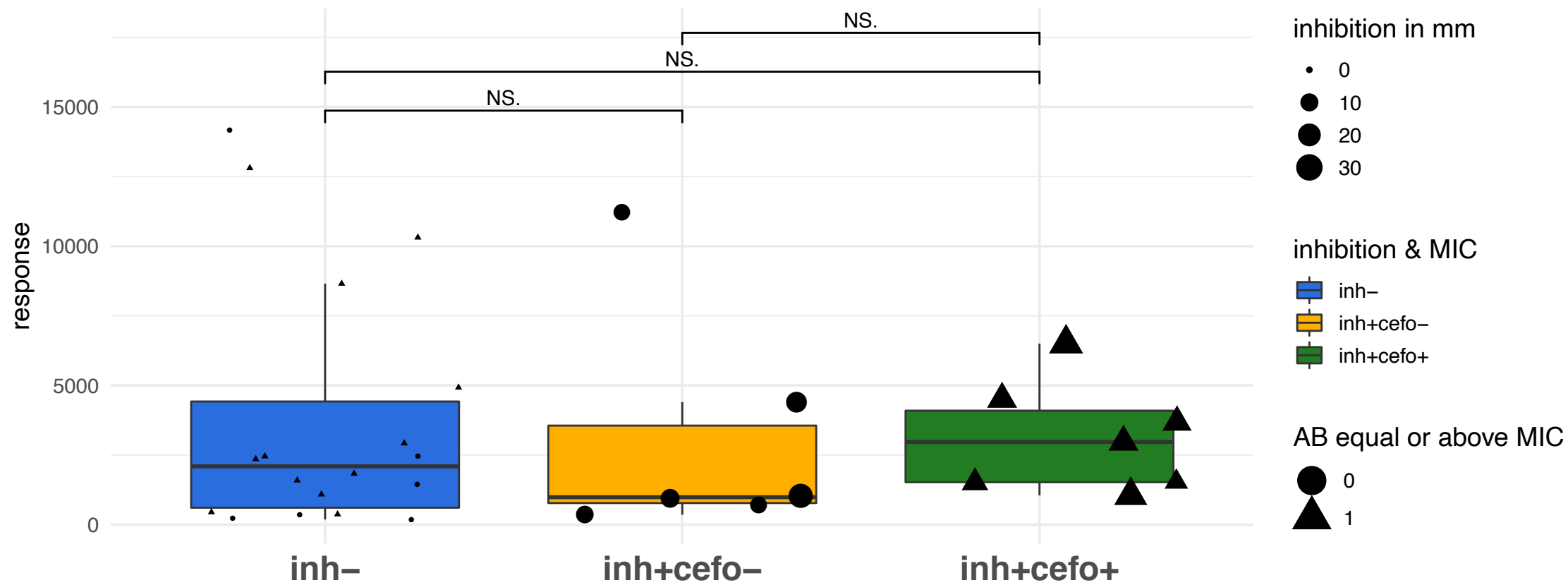
AB equal or above MIC



A

PhpP

unpaired wilcoxon test

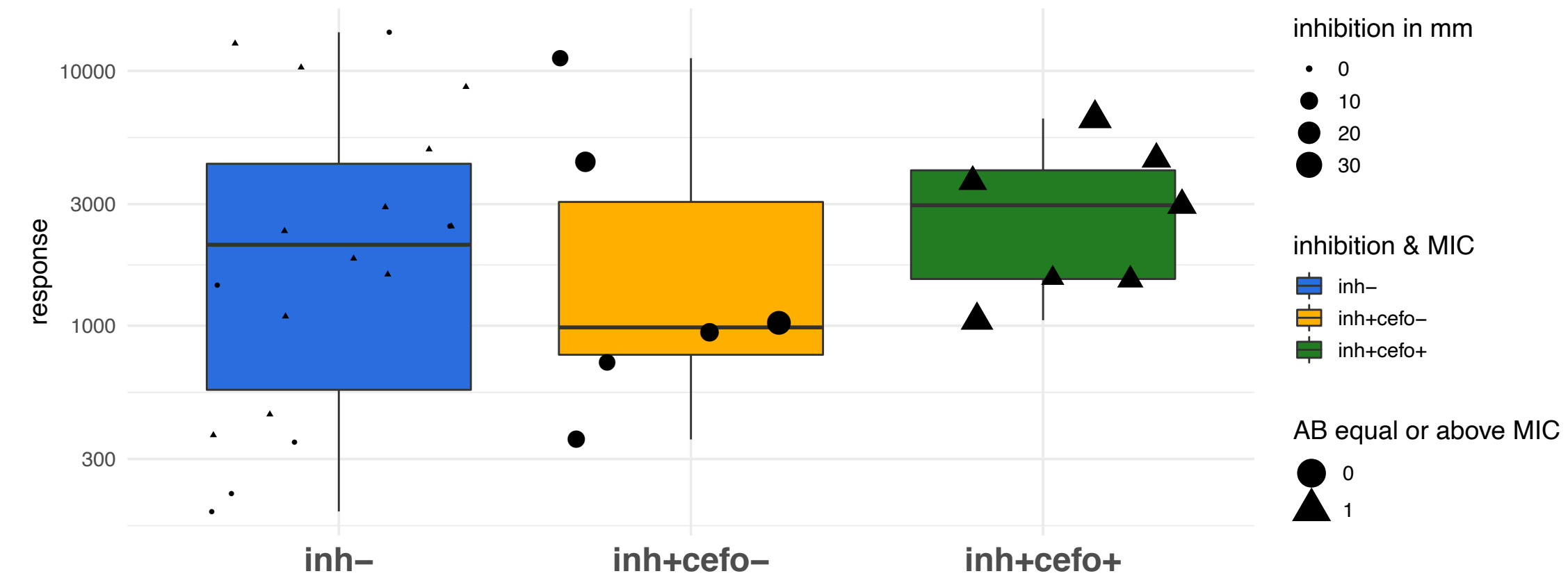


NS >0.05, * <0.05, ** <0.01, *** <0.001

B

PhpP

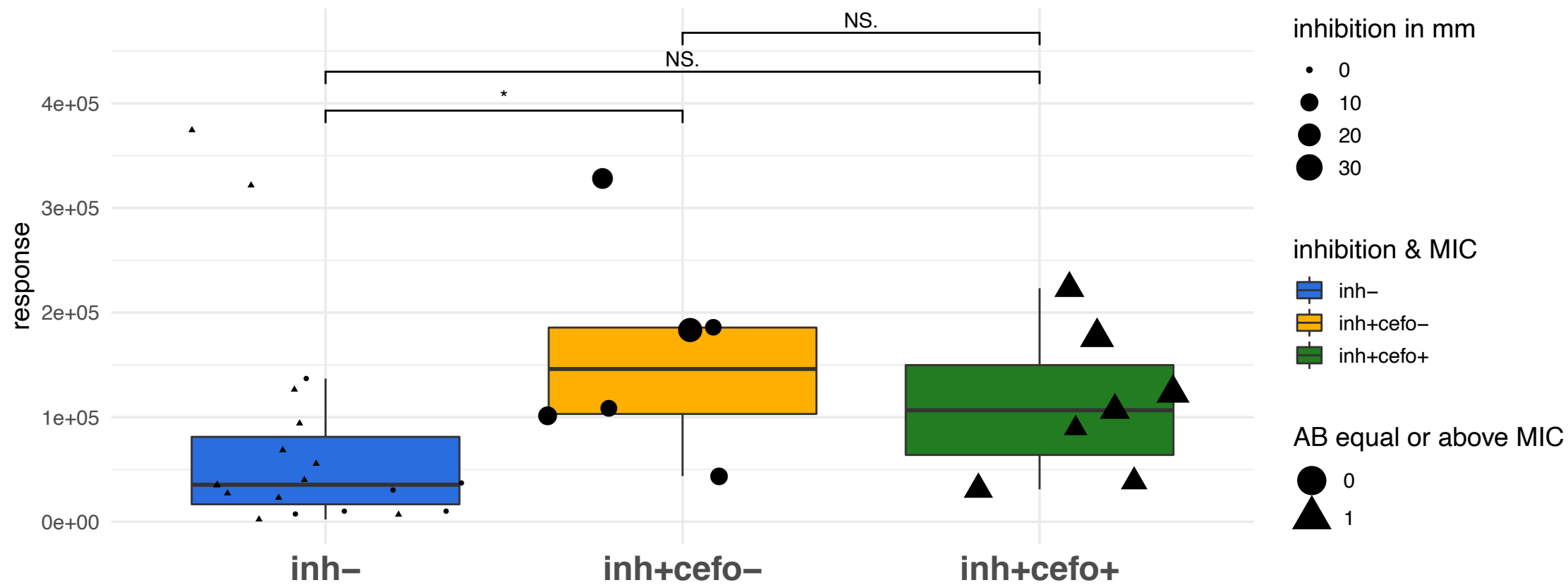
y-axis = log₁₀-scale



A

PhtD

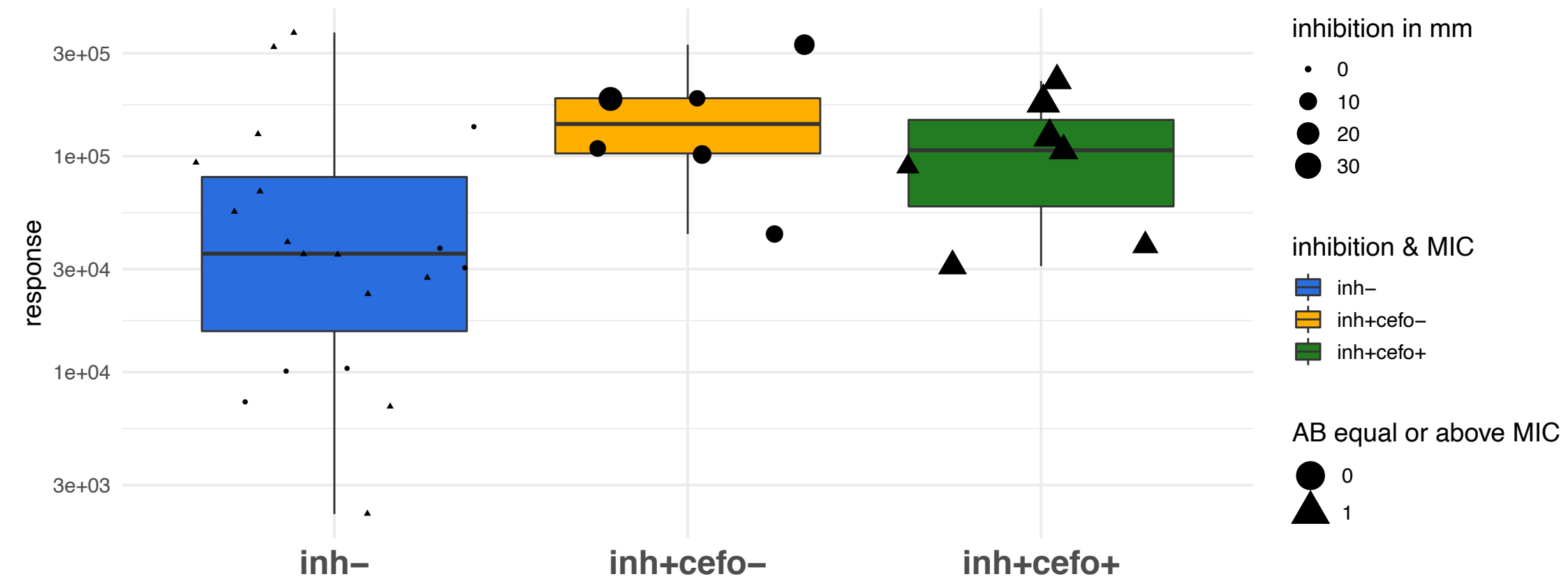
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

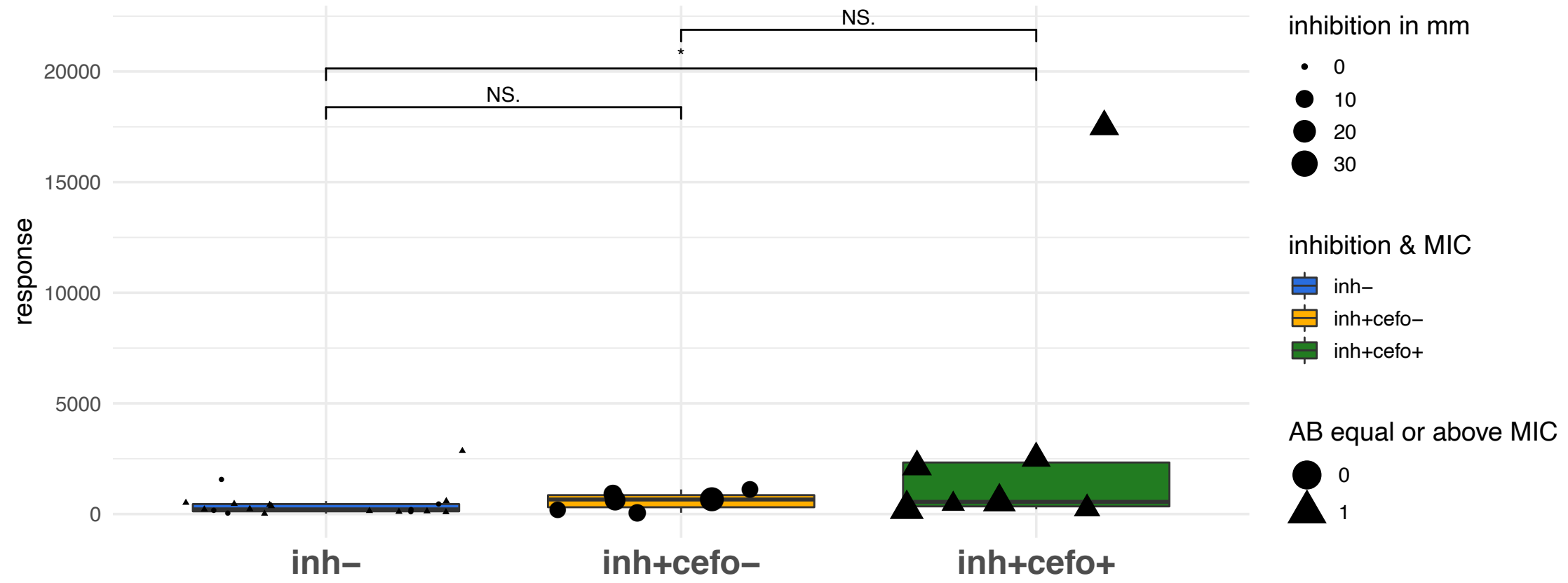
PhtD

y-axis = log₁₀-scale

A

PiaA

unpaired wilcoxon test

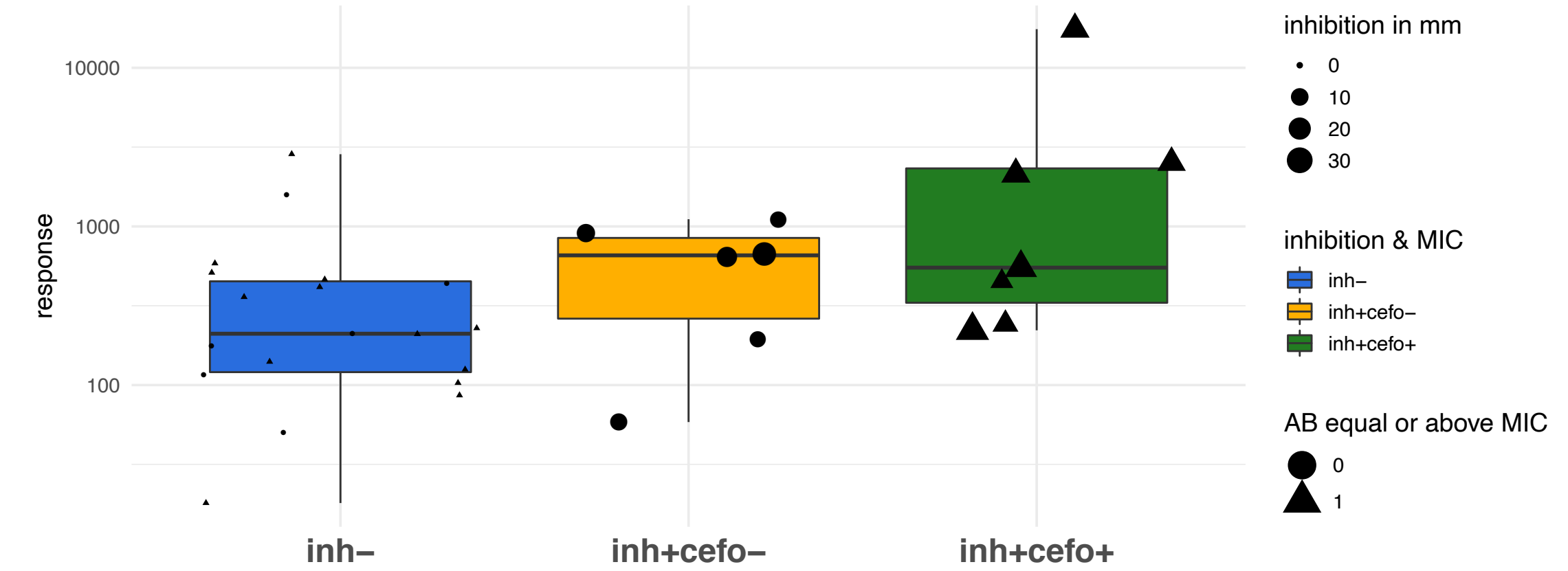


NS >0.05, * <0.05, ** < 0.01, *** <0.001

B

PiaA

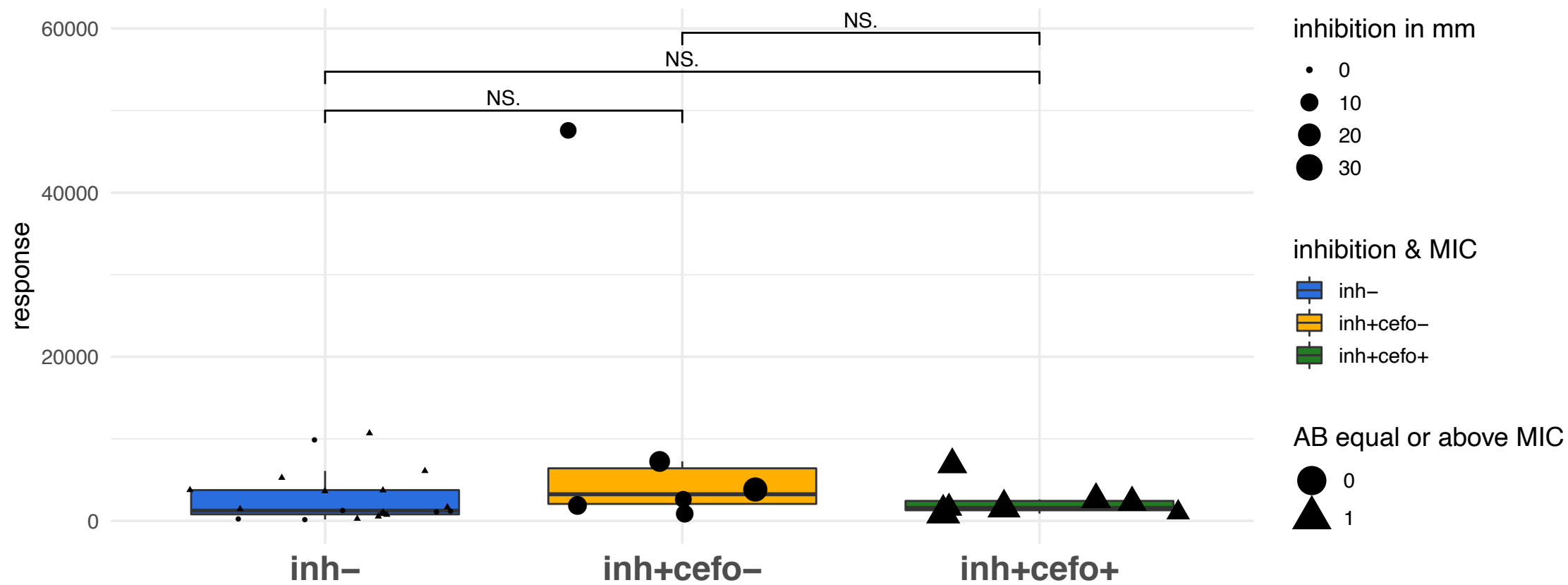
y-axis = log10-scale



A

PitB

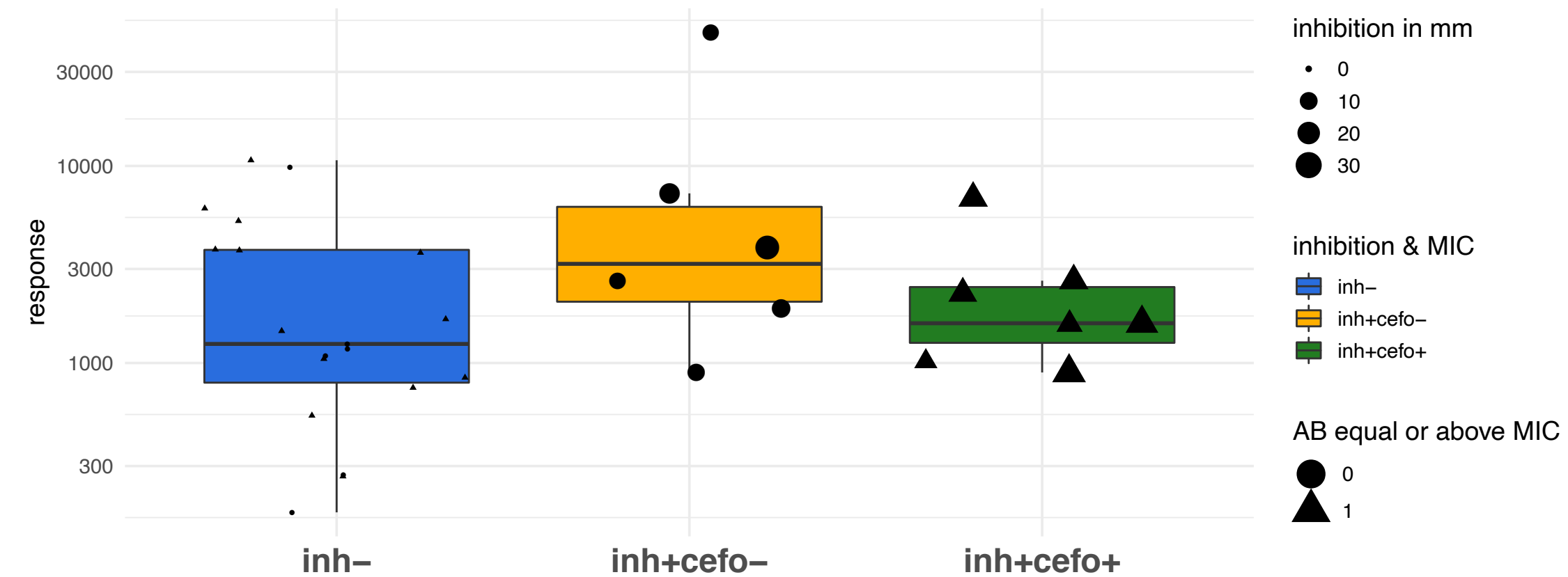
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

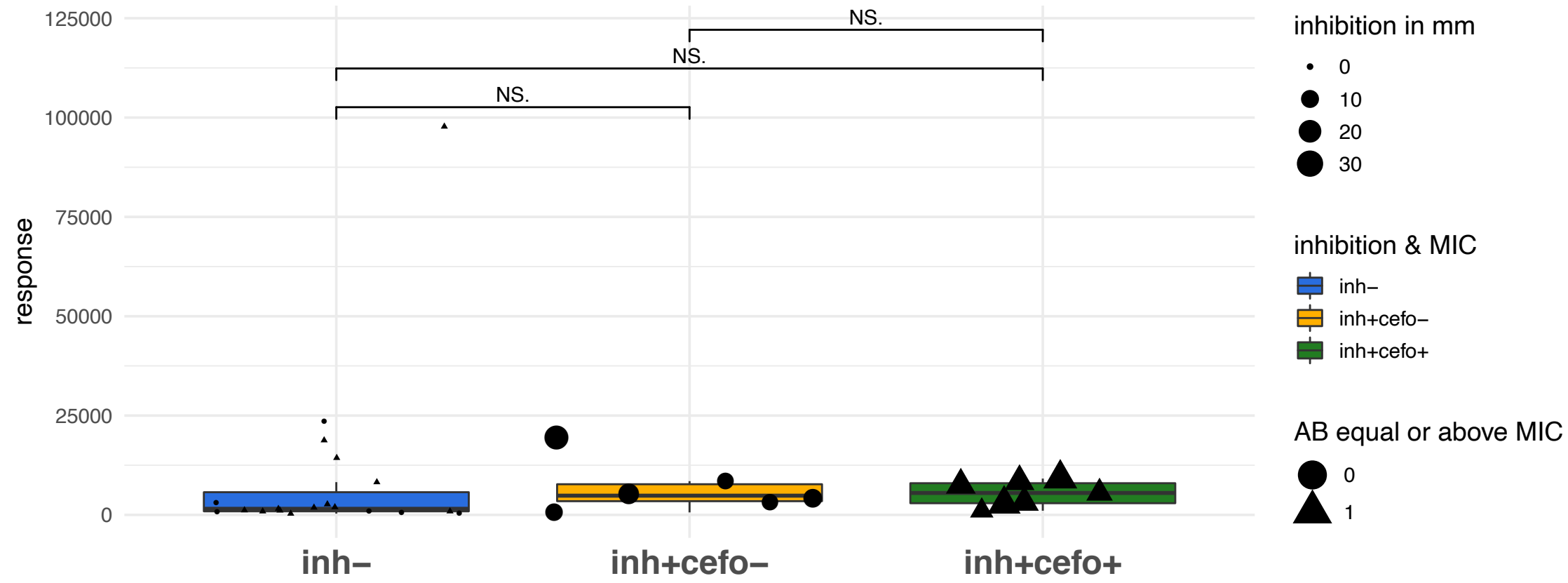
PitB

y-axis = log₁₀-scale

A

Ply

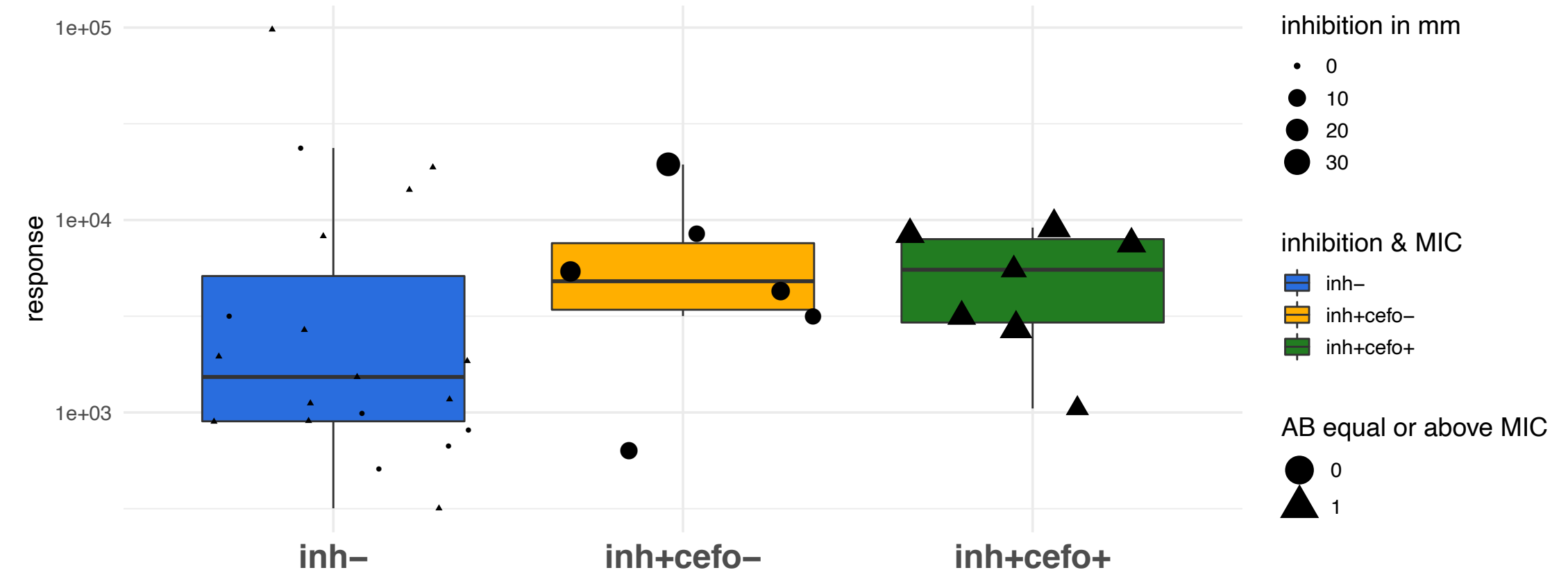
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

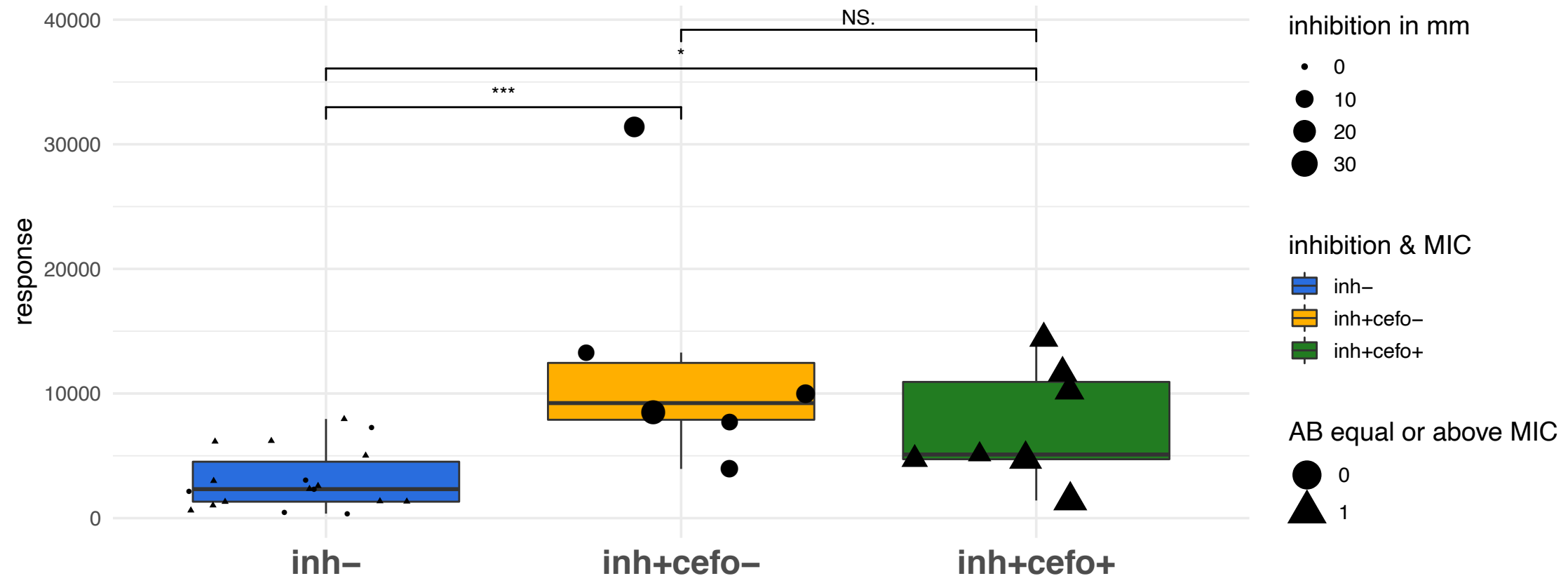
Ply

y-axis = log₁₀-scale

A

PnrA

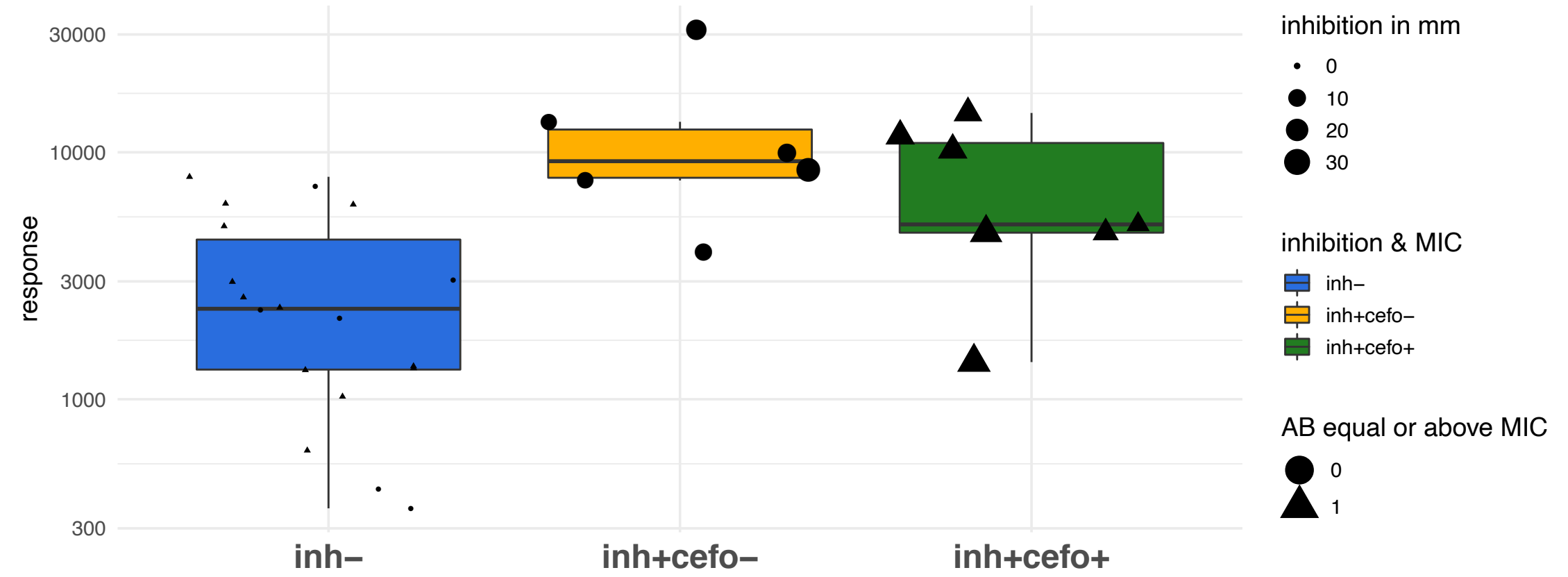
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

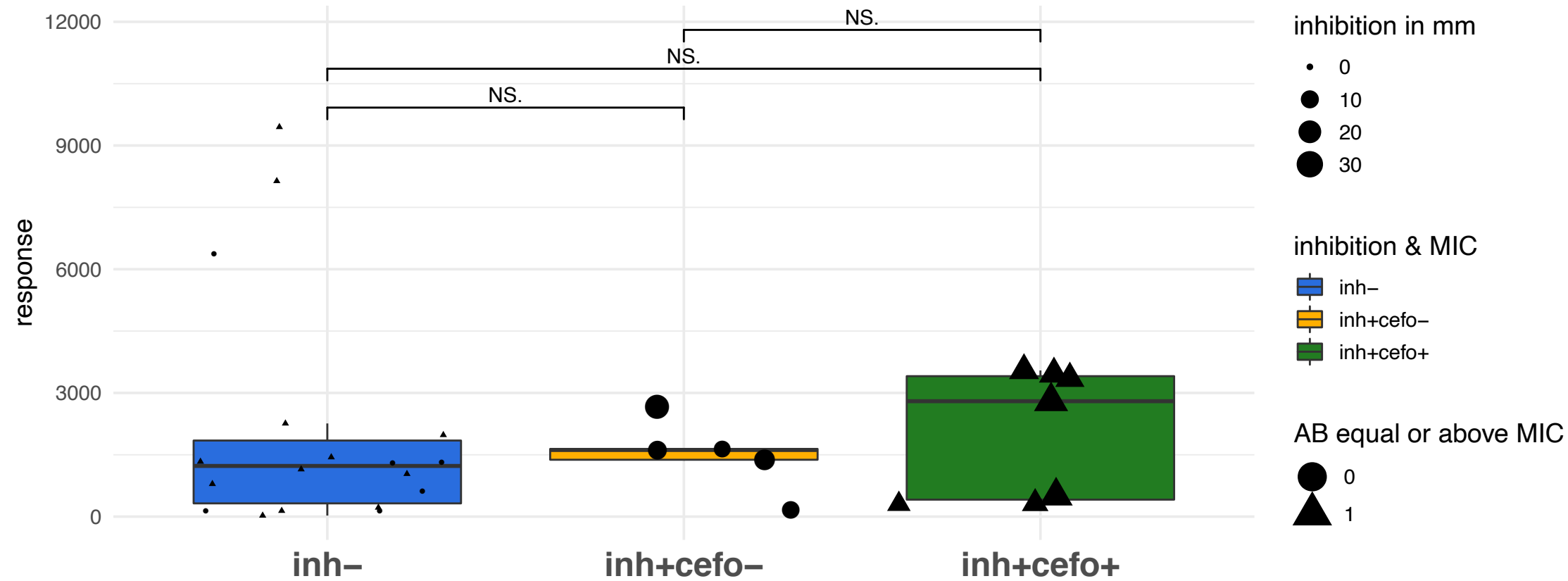
PnrA

y-axis = log₁₀-scale

A

PpmA

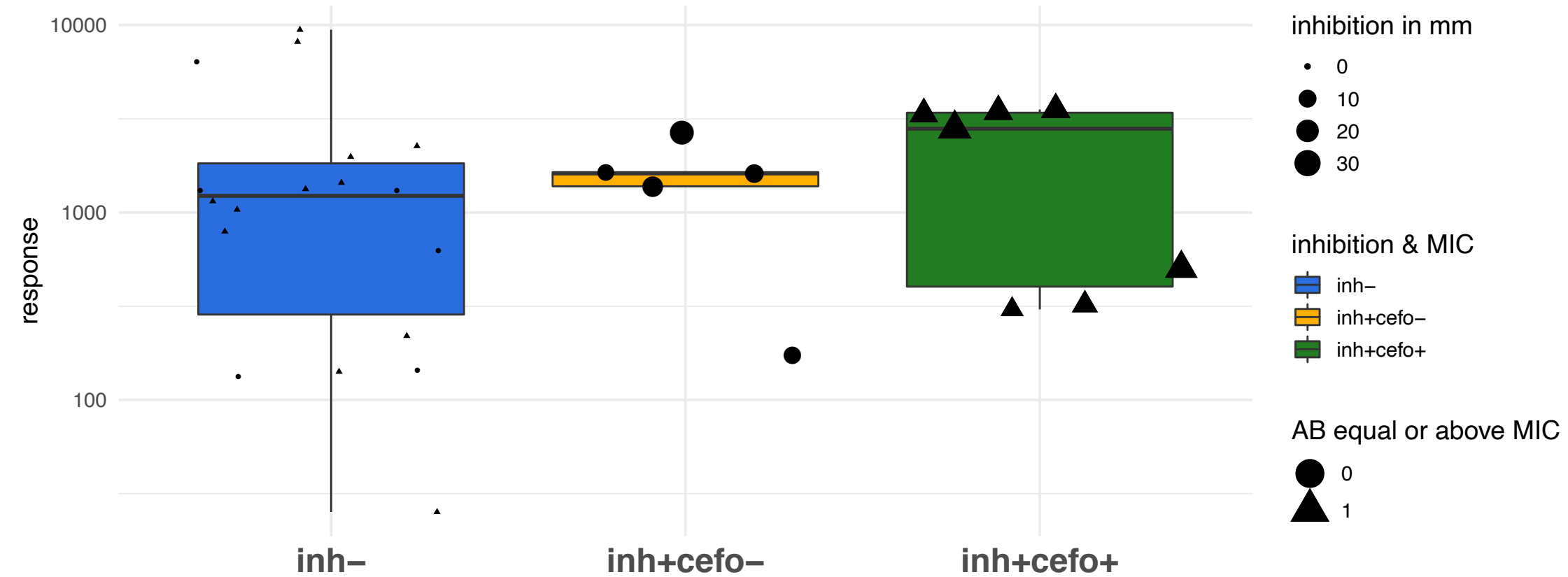
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

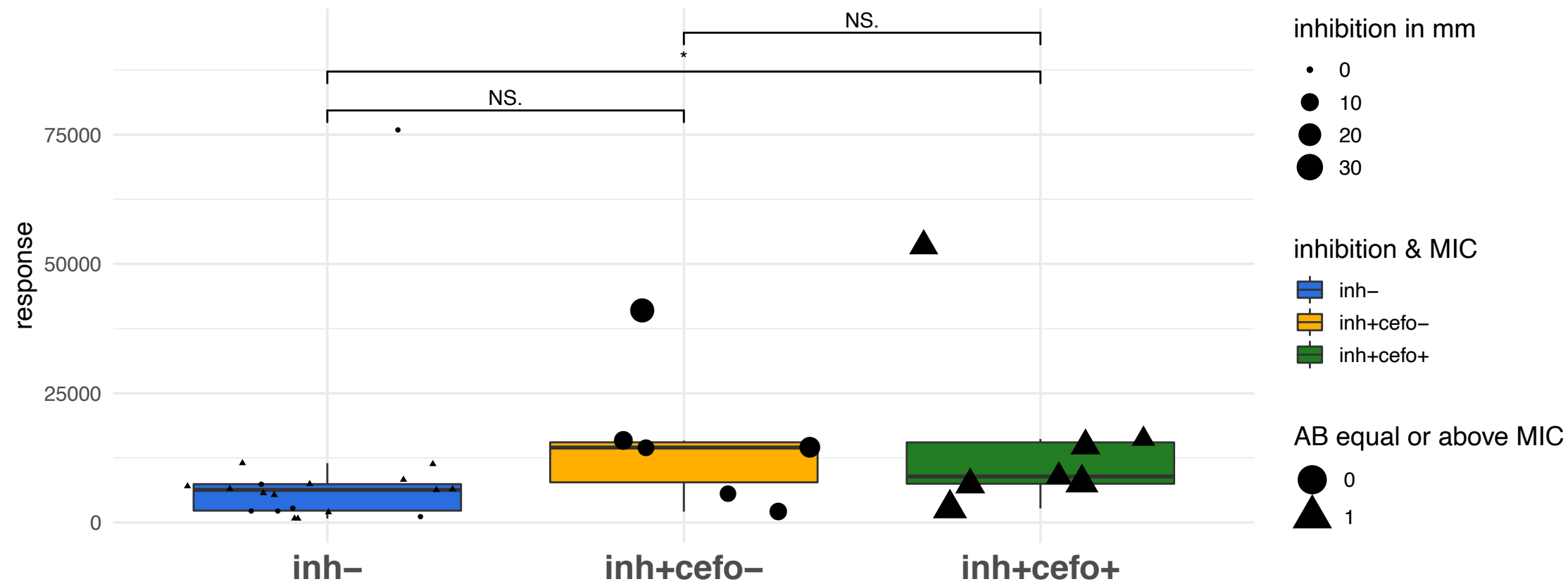
PpmA

y-axis = log₁₀-scale

A

PrtA2

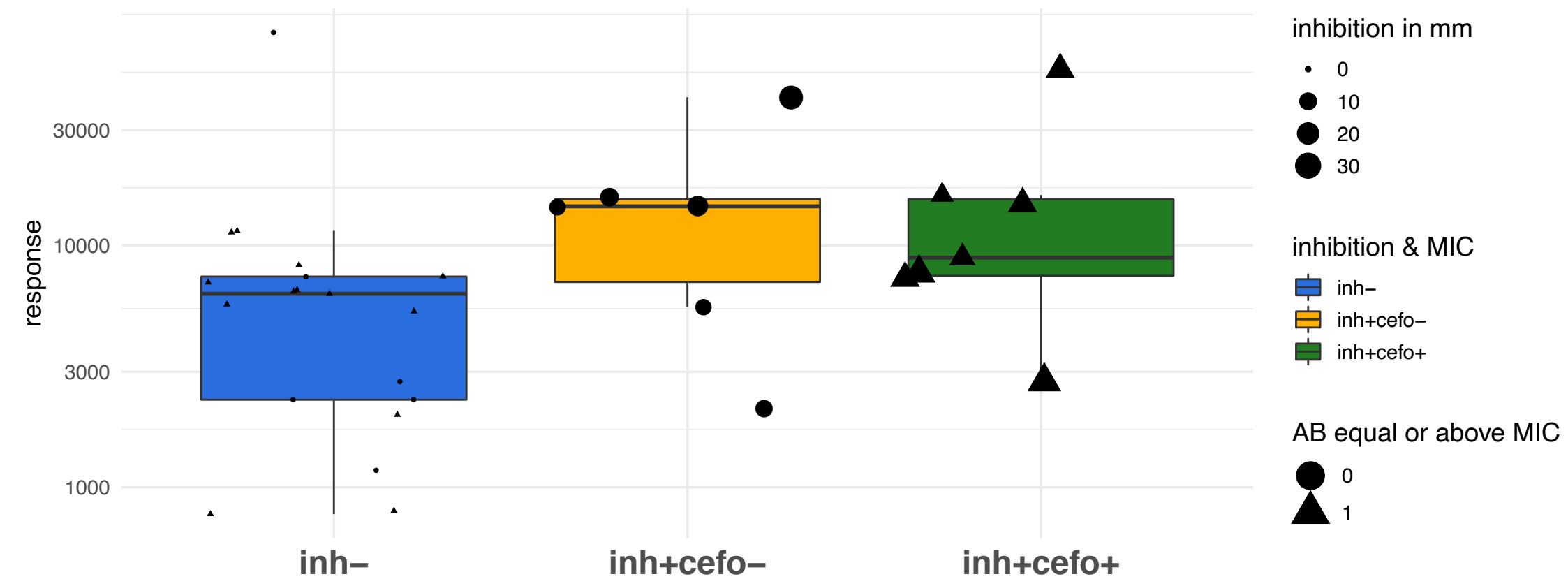
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

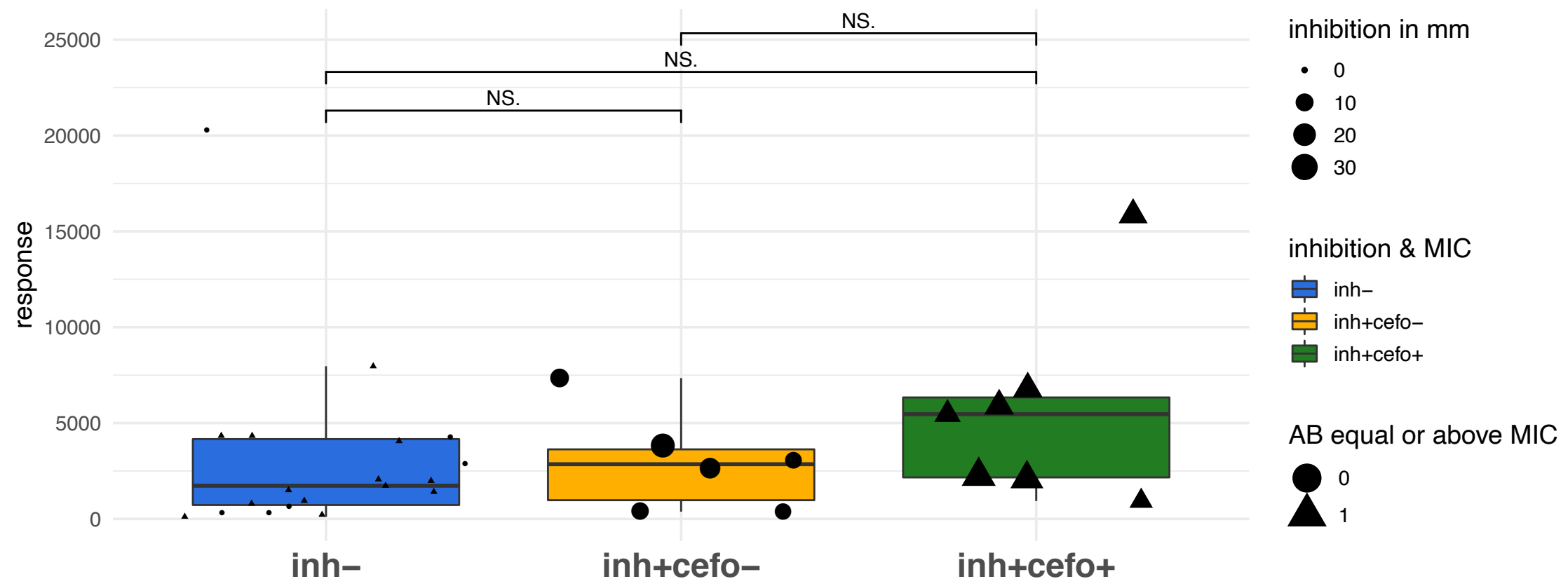
PrtA2

y-axis = log₁₀-scale

A

PsaA

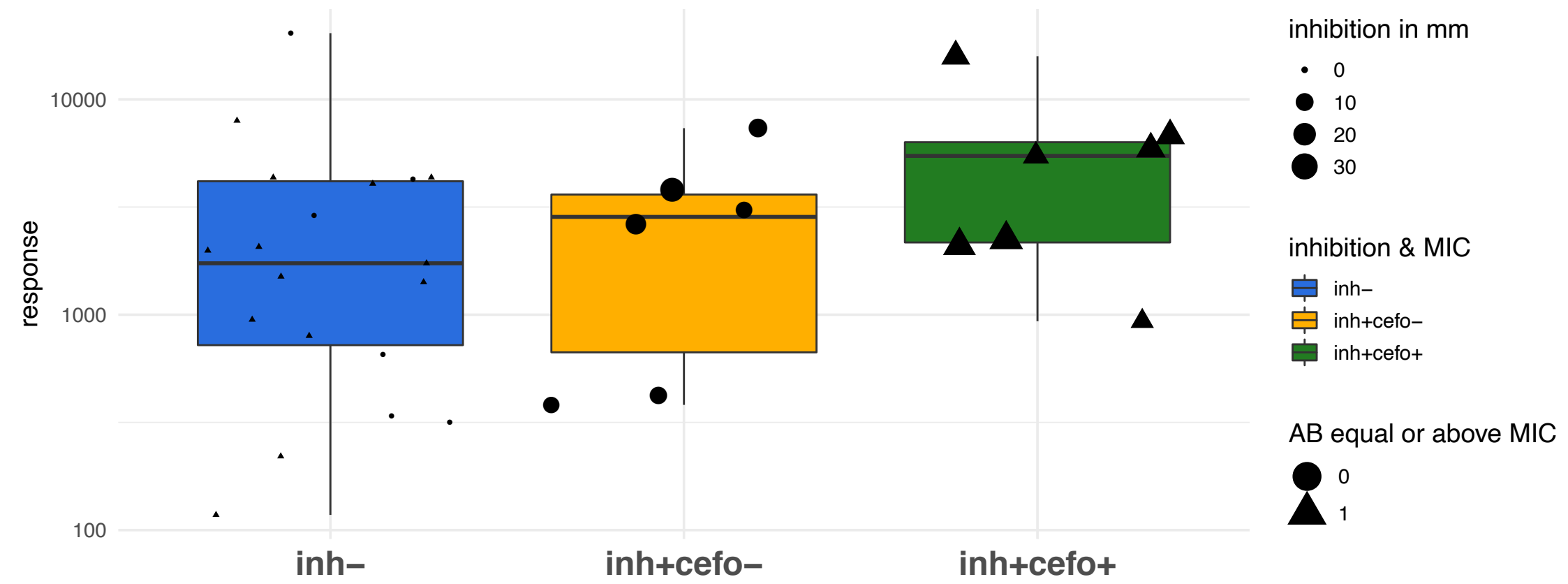
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

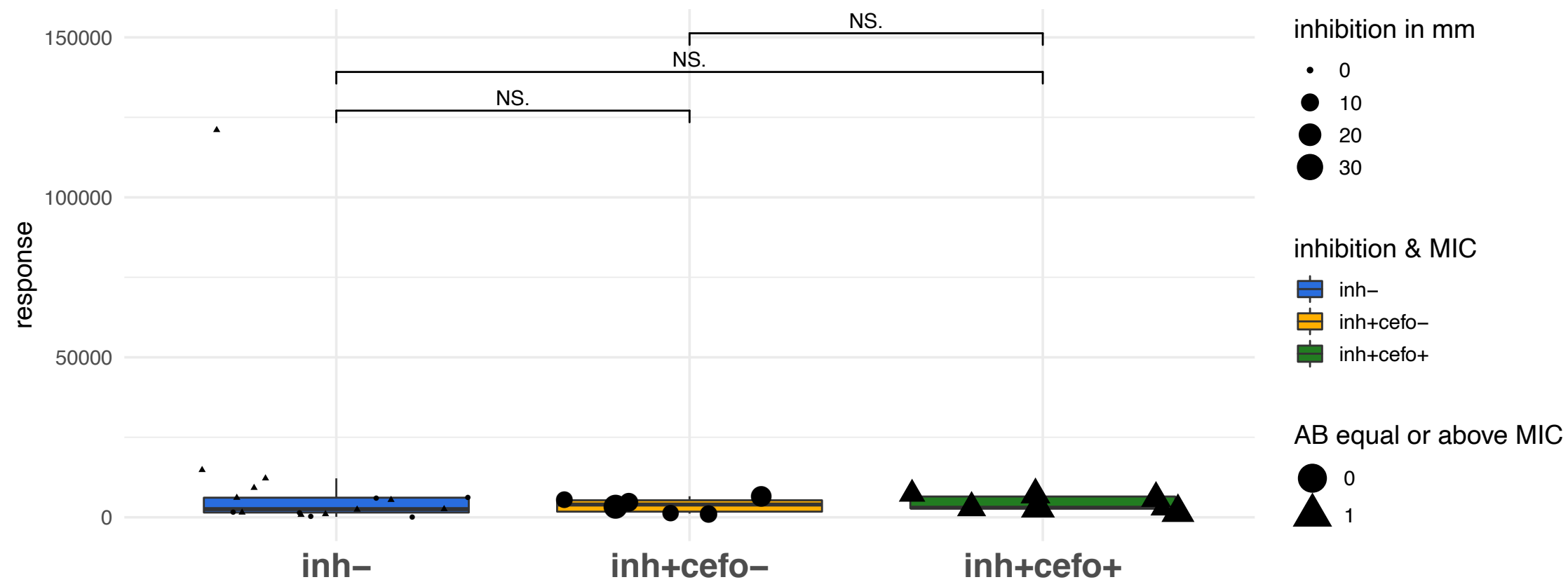
PsaA

y-axis = log₁₀-scale

A

PspA

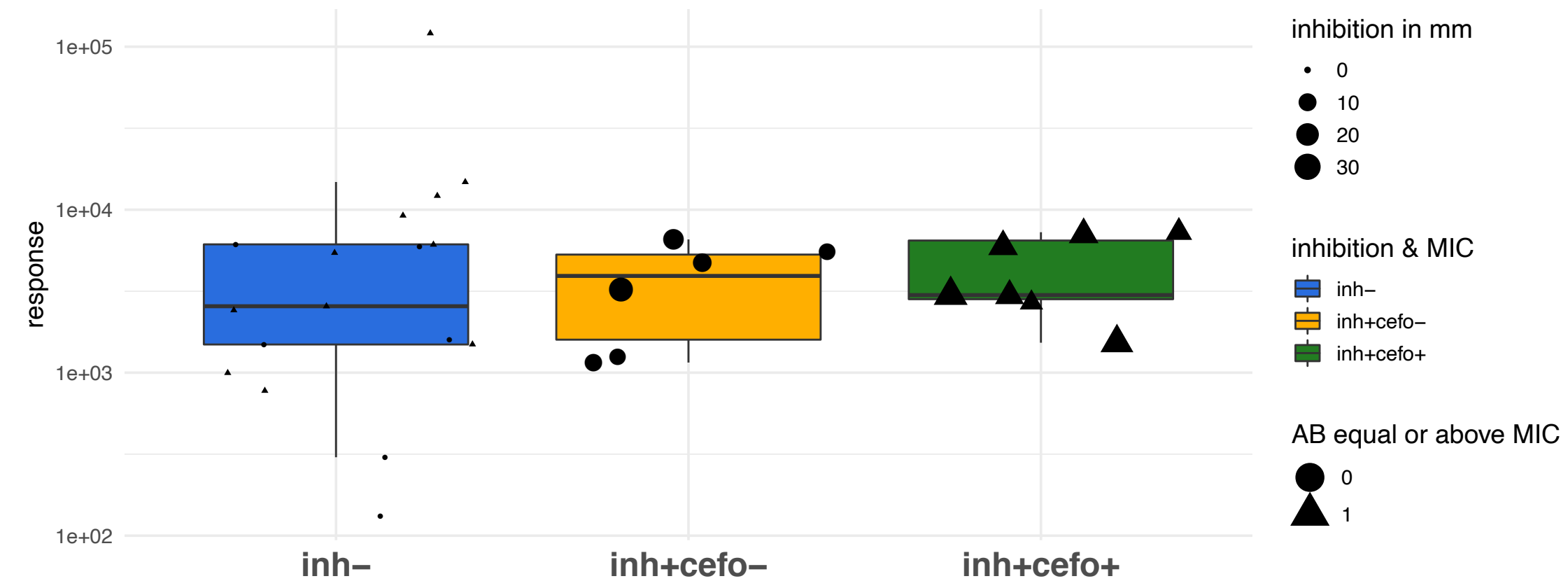
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

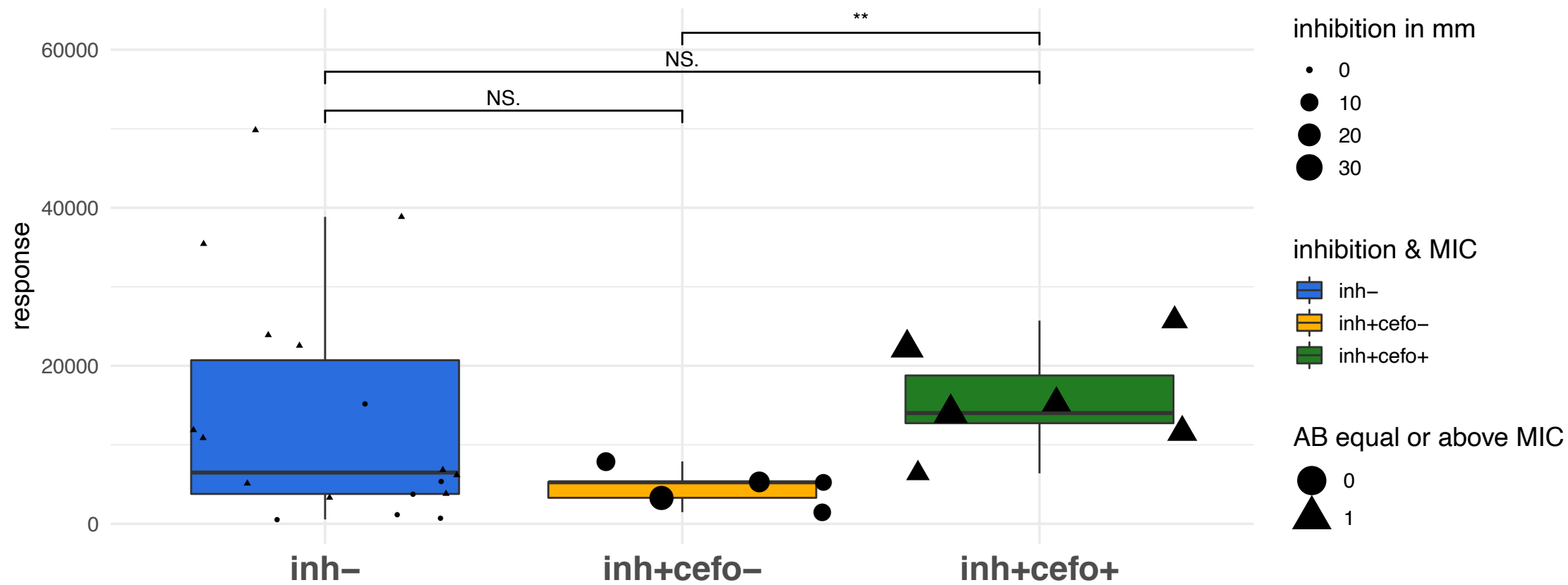
PspA

y-axis = log₁₀-scale

A

PspC

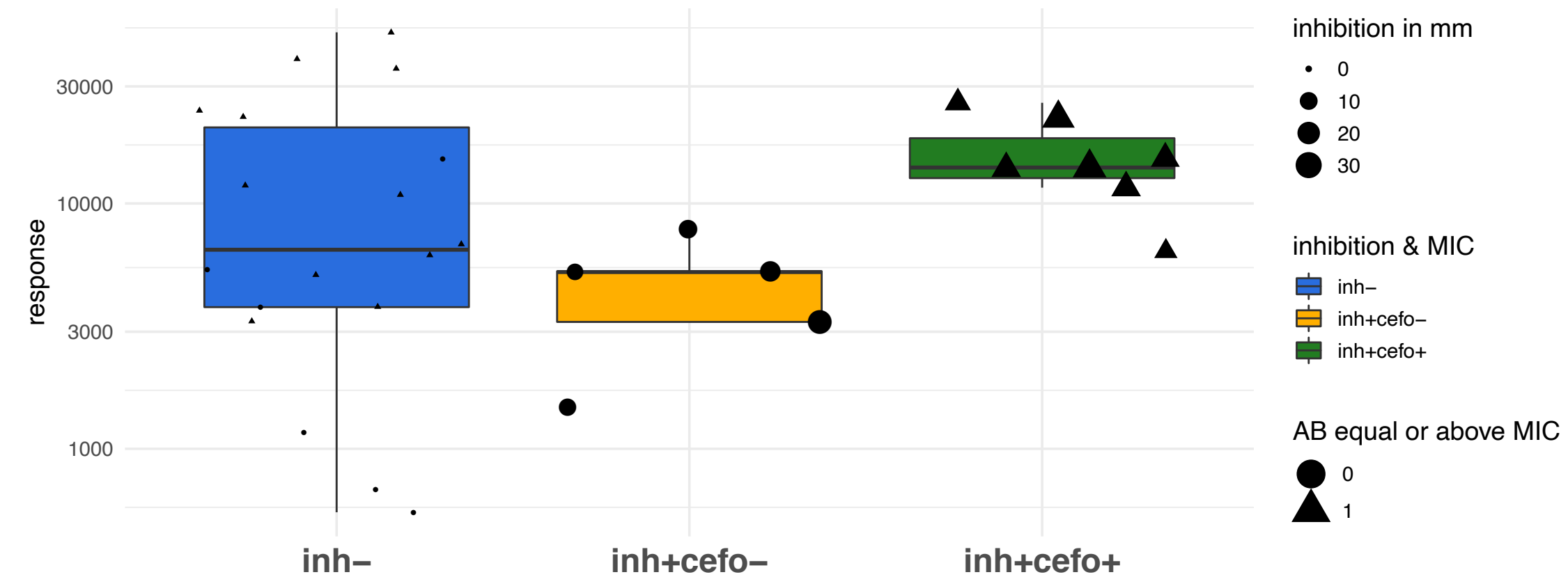
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

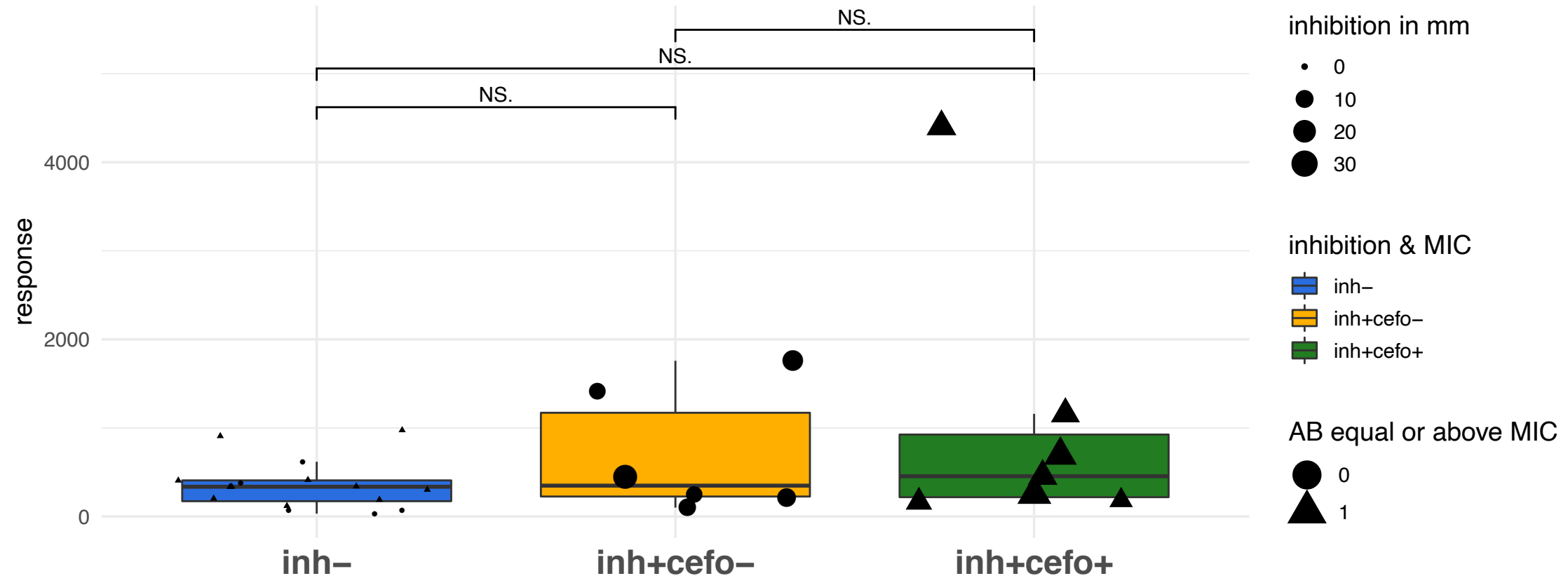
PspC

y-axis = log₁₀-scale

A

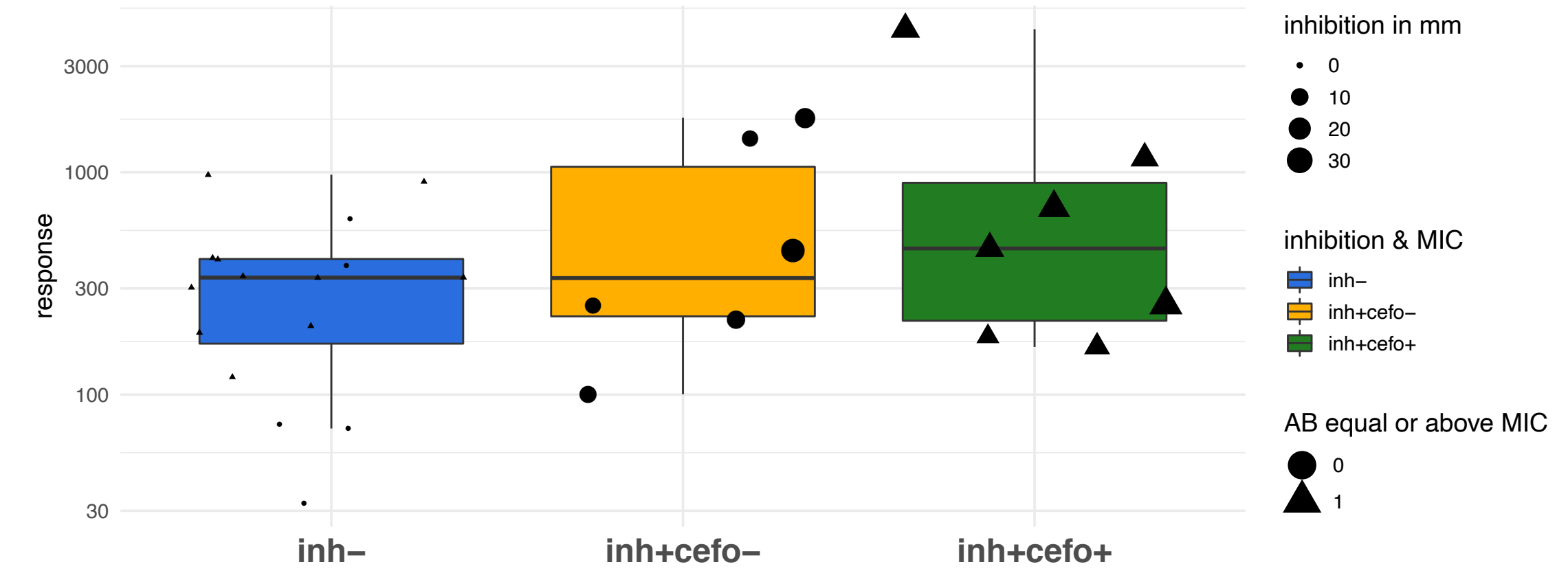
PsrP

unpaired wilcoxon test



B

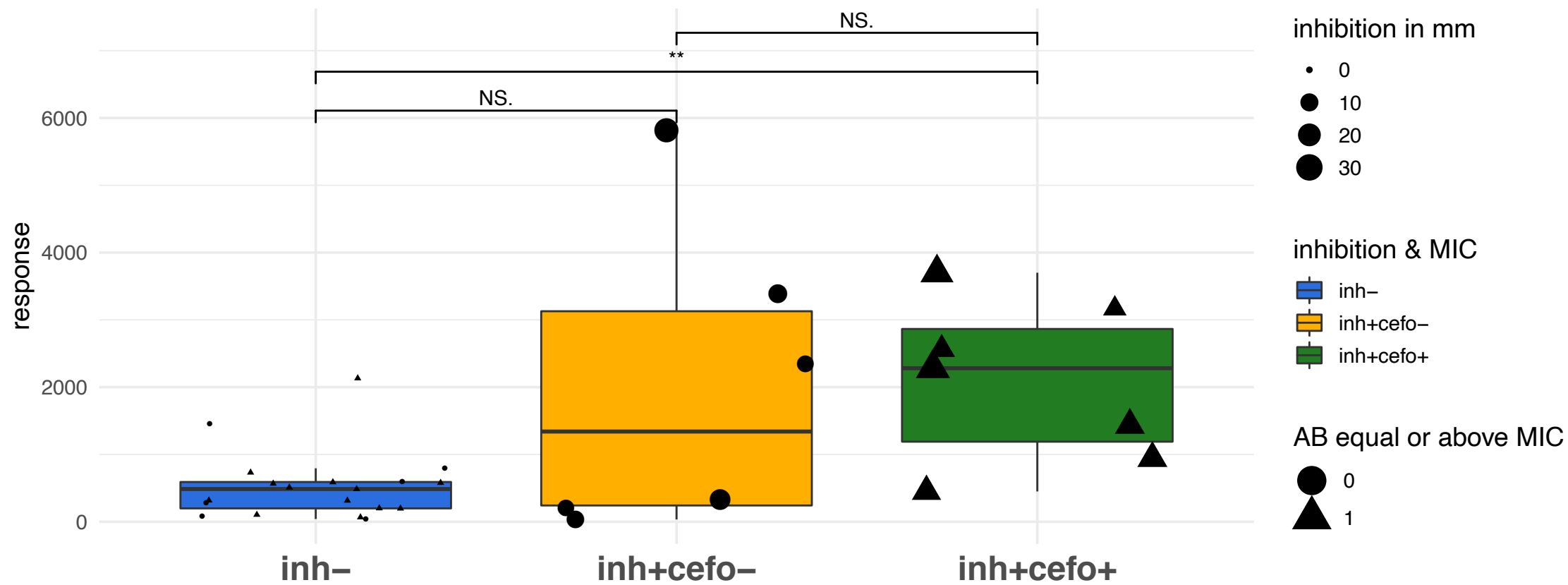
PsrP

y-axis = log₁₀-scale

A

RrgA

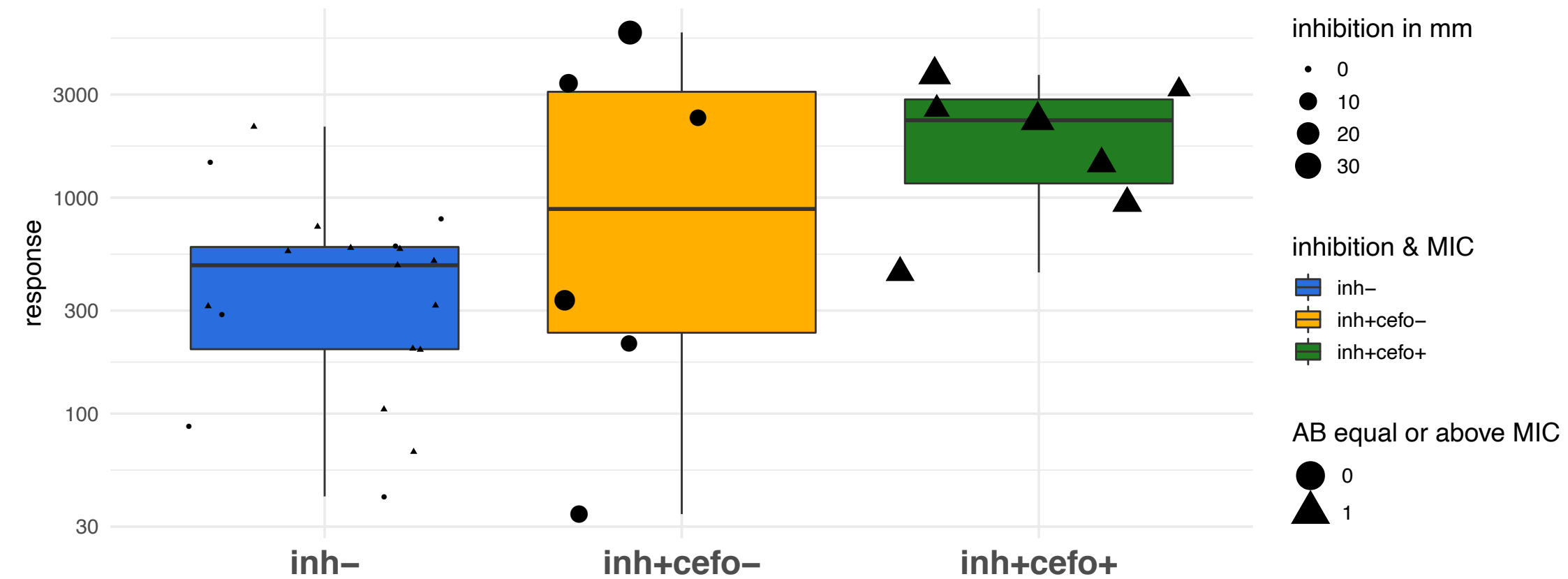
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

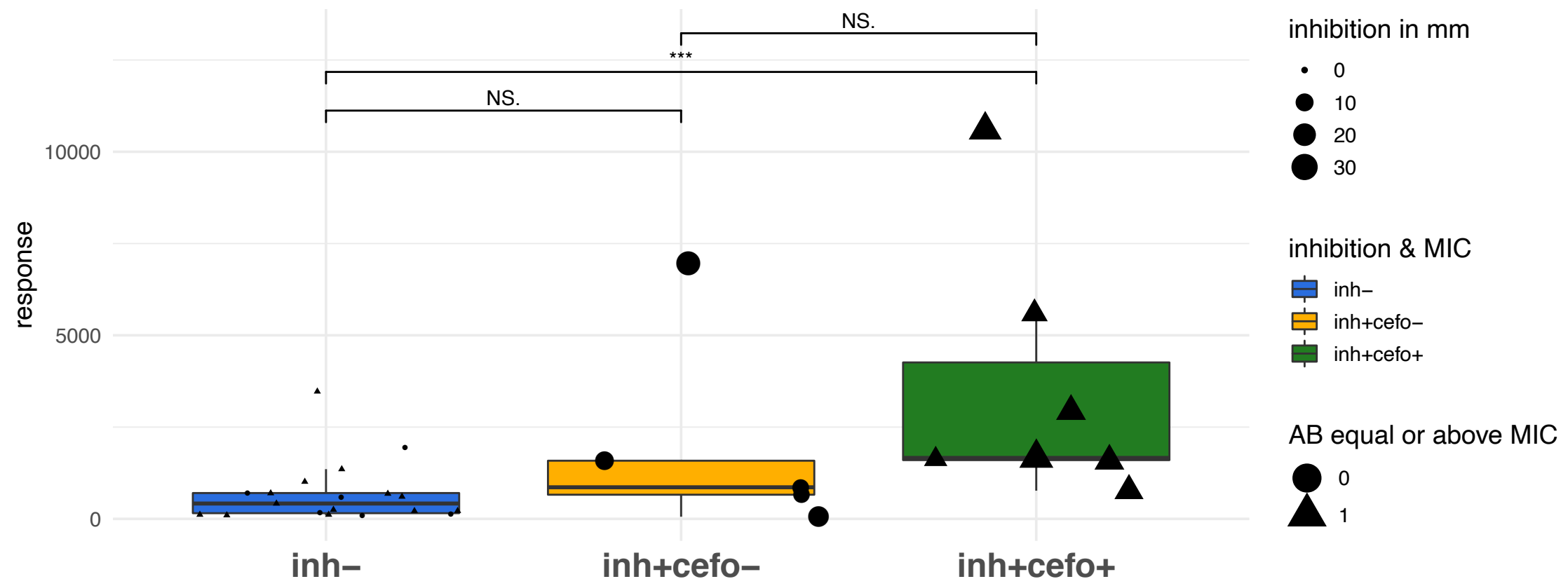
RrgA

y-axis = log₁₀-scale

A

RrgB

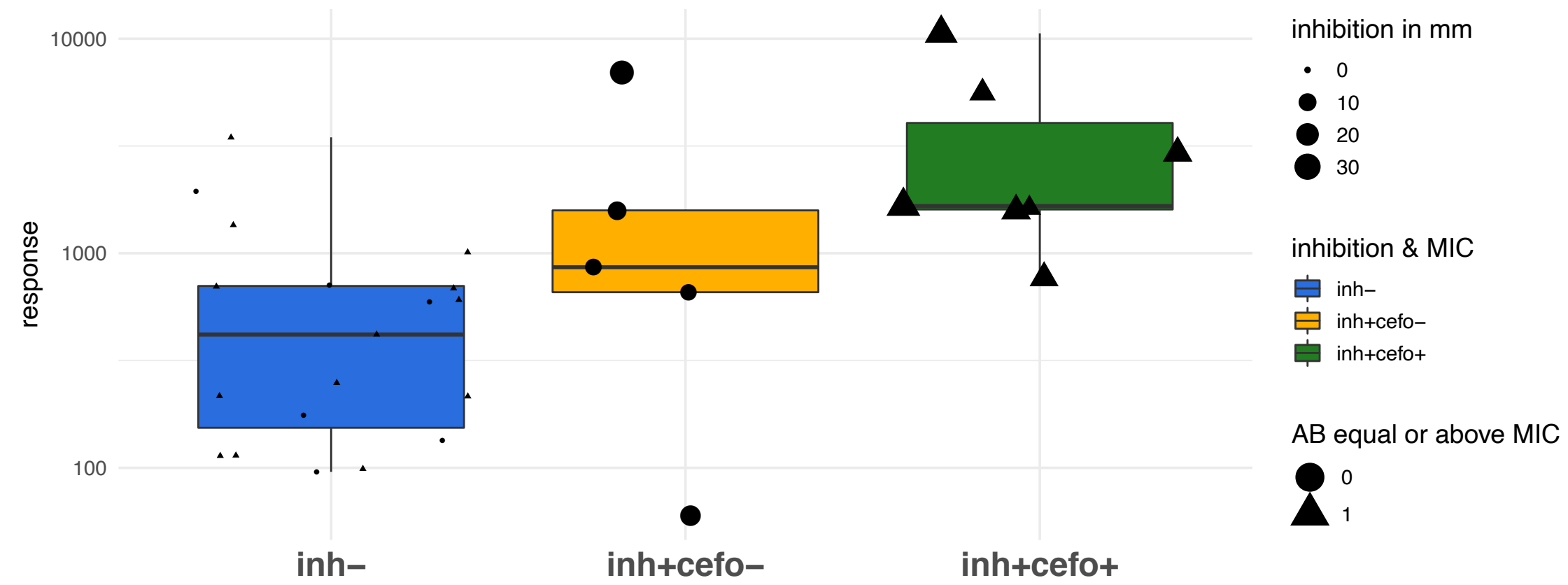
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

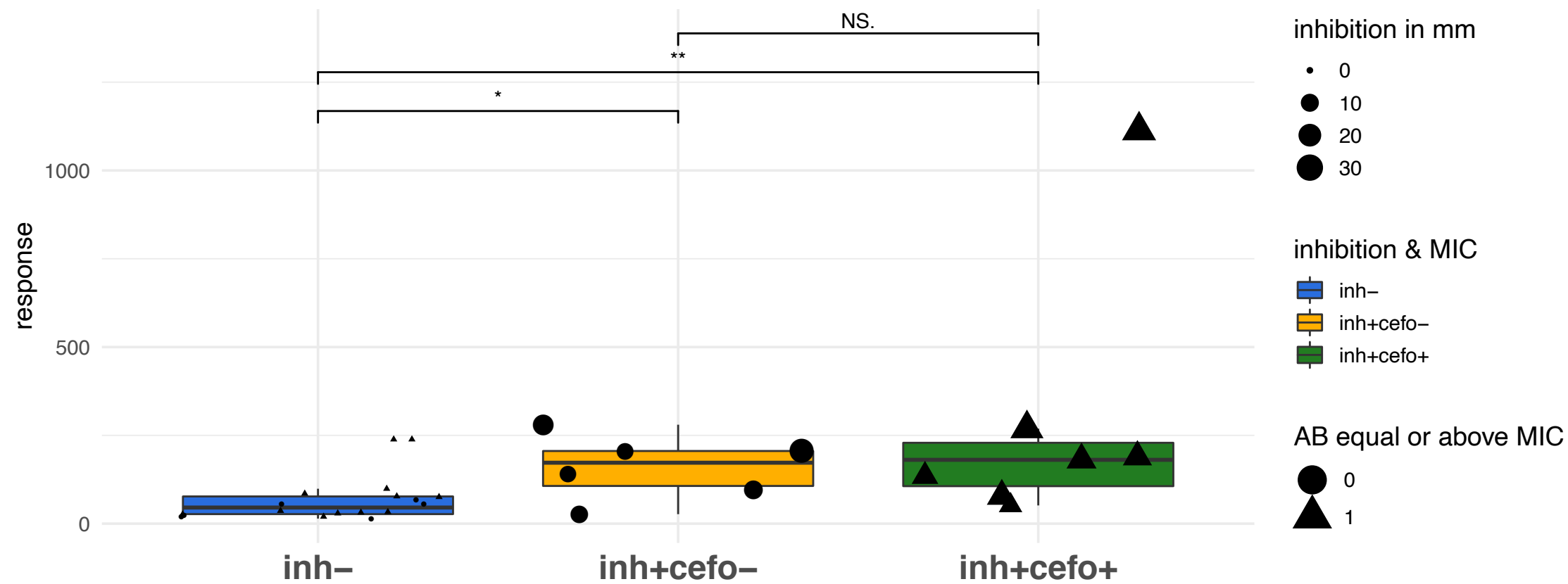
RrgB

y-axis = log₁₀-scale

A

RrgC

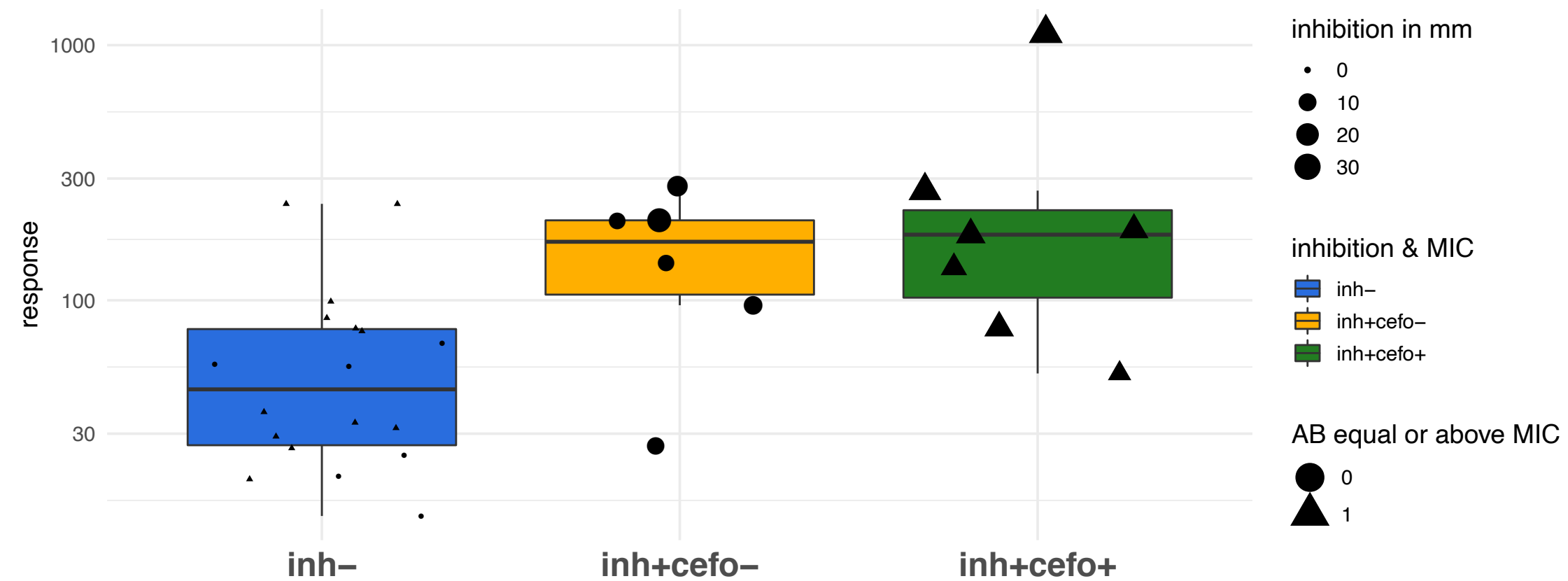
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

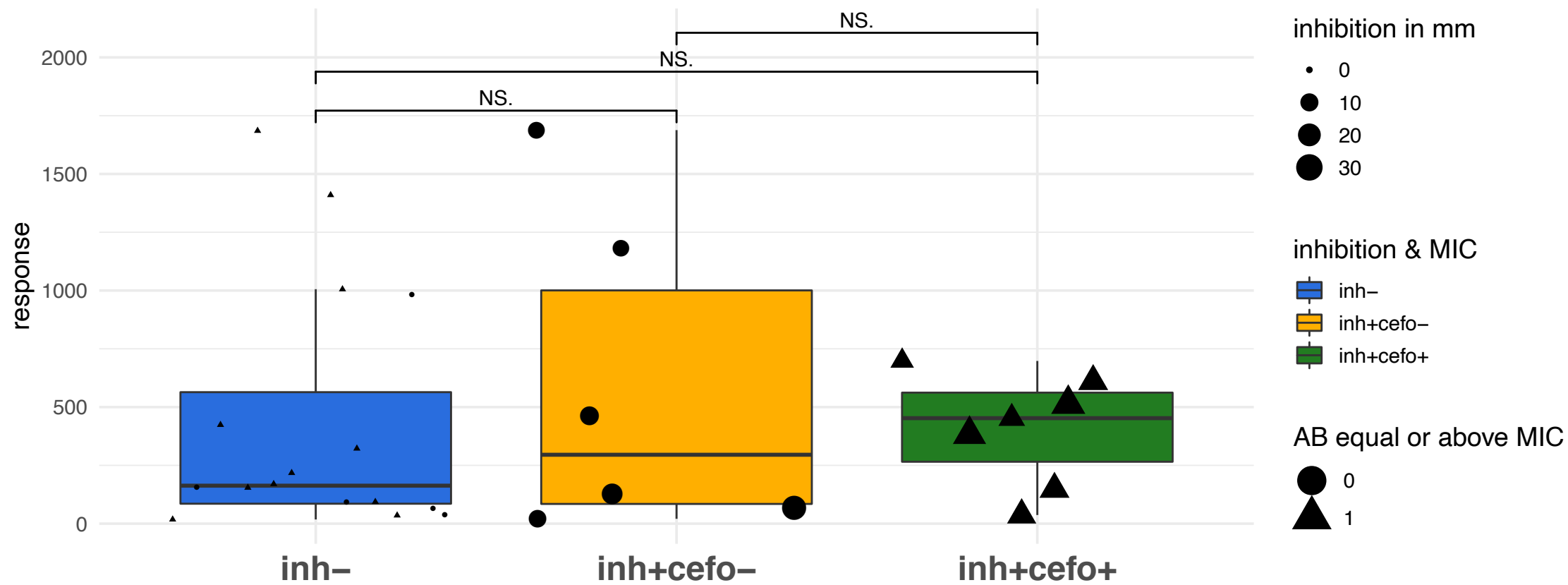
RrgC

y-axis = log₁₀-scale

A

SlrA

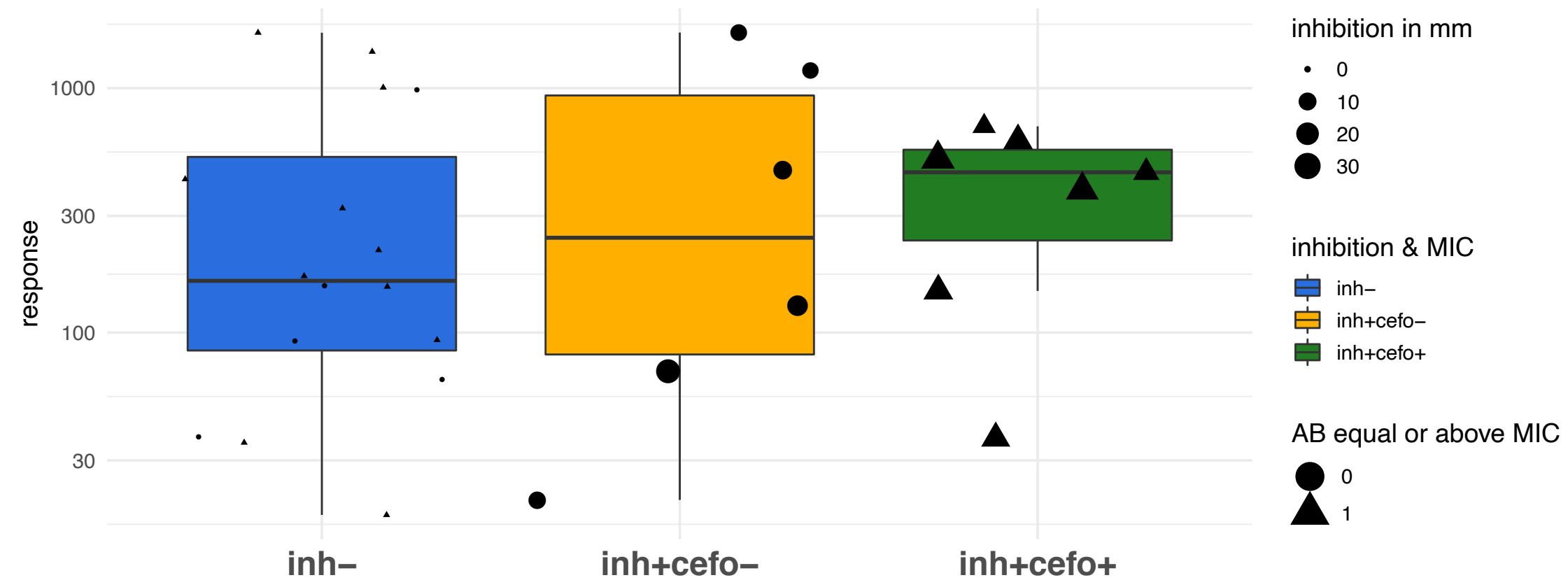
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

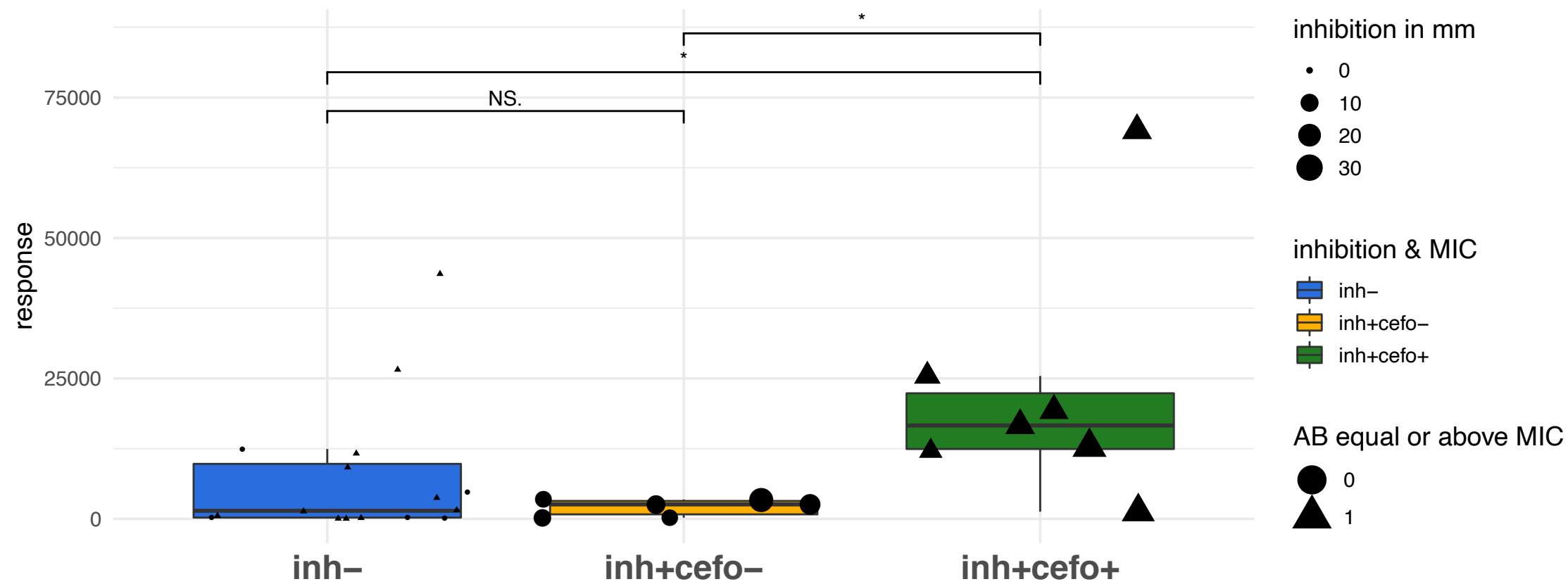
SlrA

y-axis = log₁₀-scale

A

SP_0107

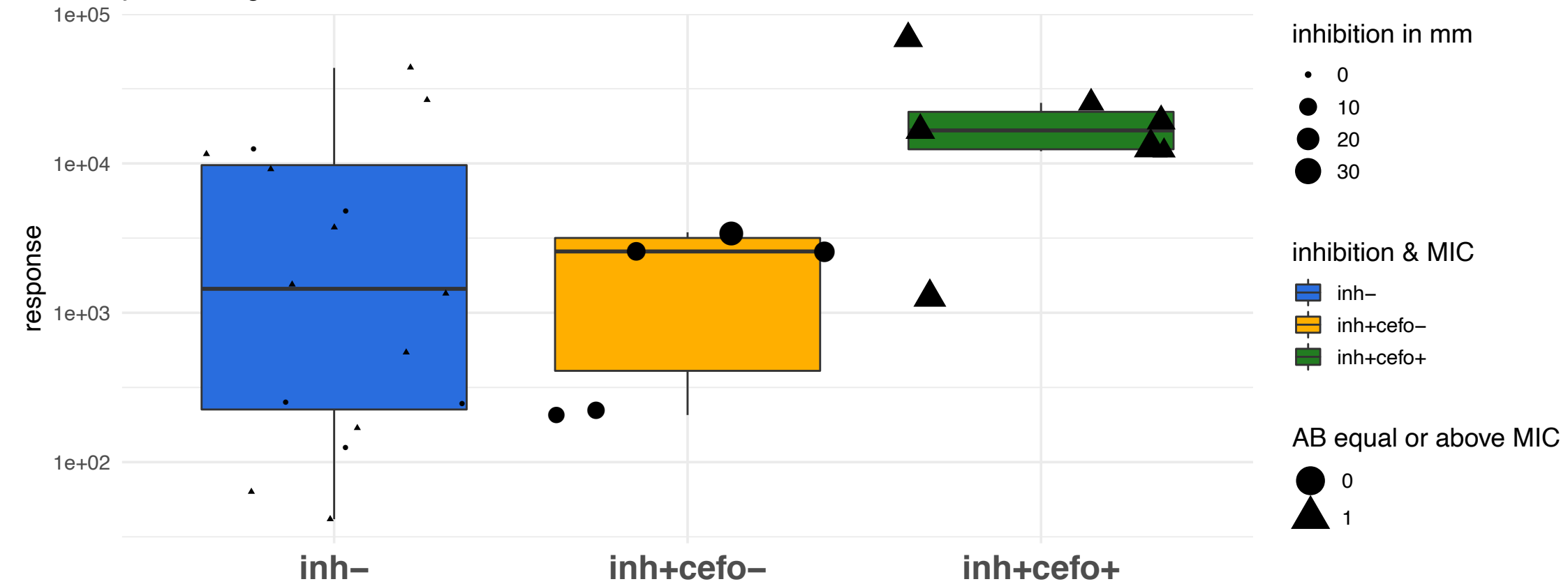
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

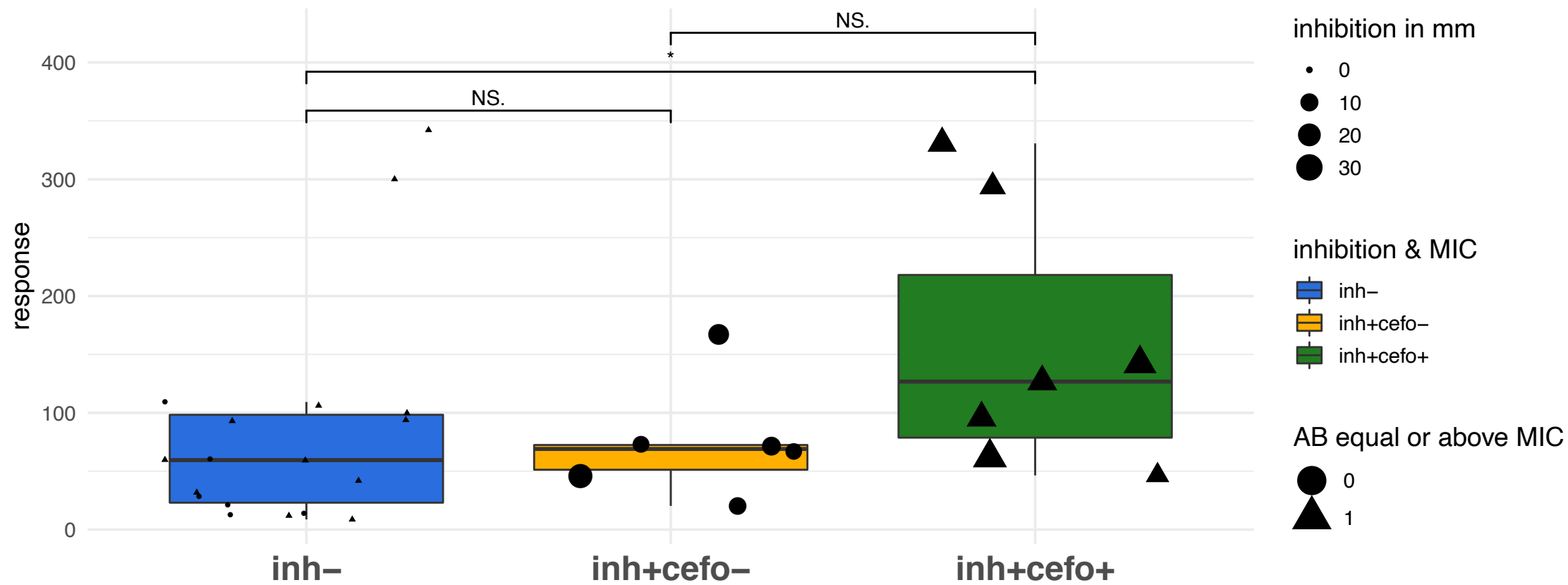
SP_0107

y-axis = log₁₀-scale

A

SP_0148

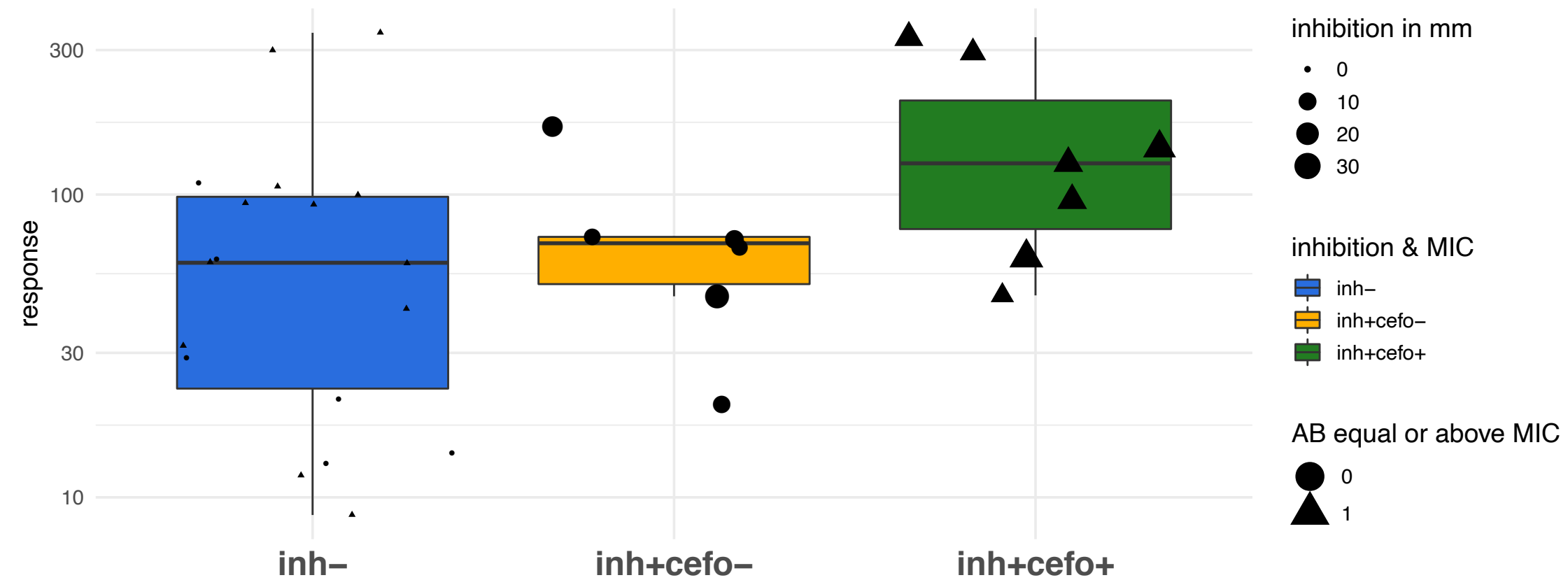
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

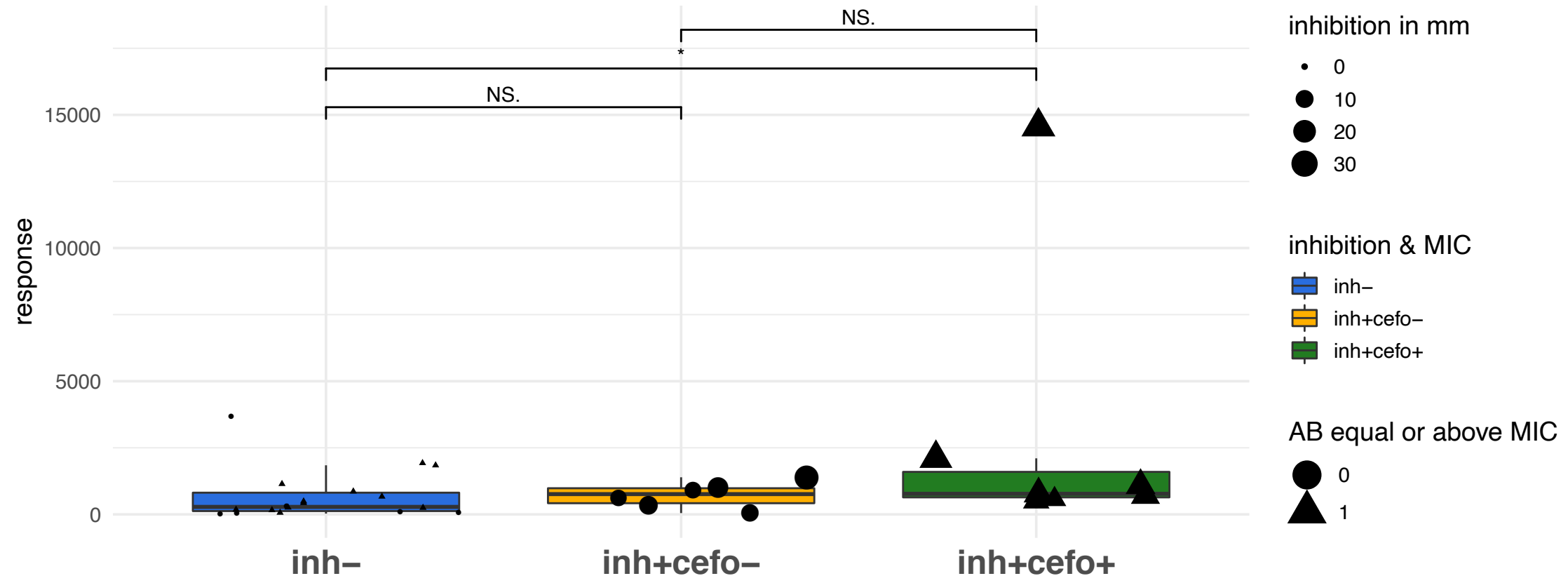
SP_0148

y-axis = log₁₀-scale

A

SP_0191

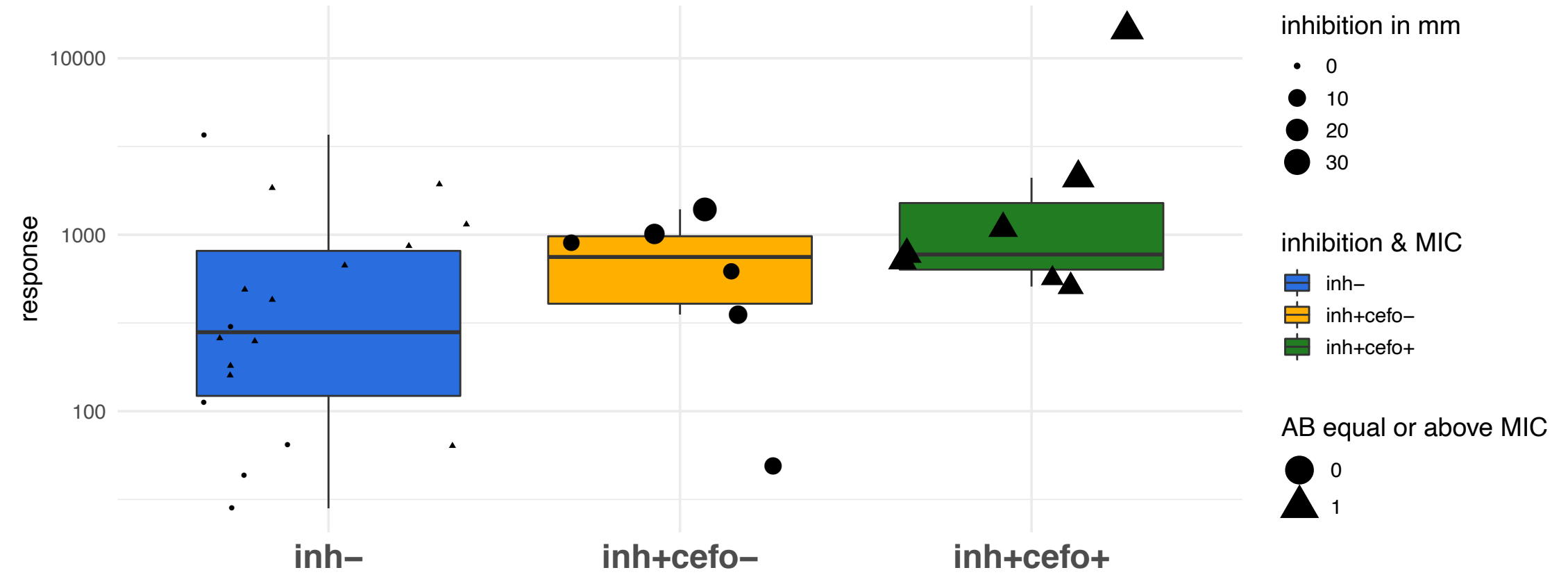
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

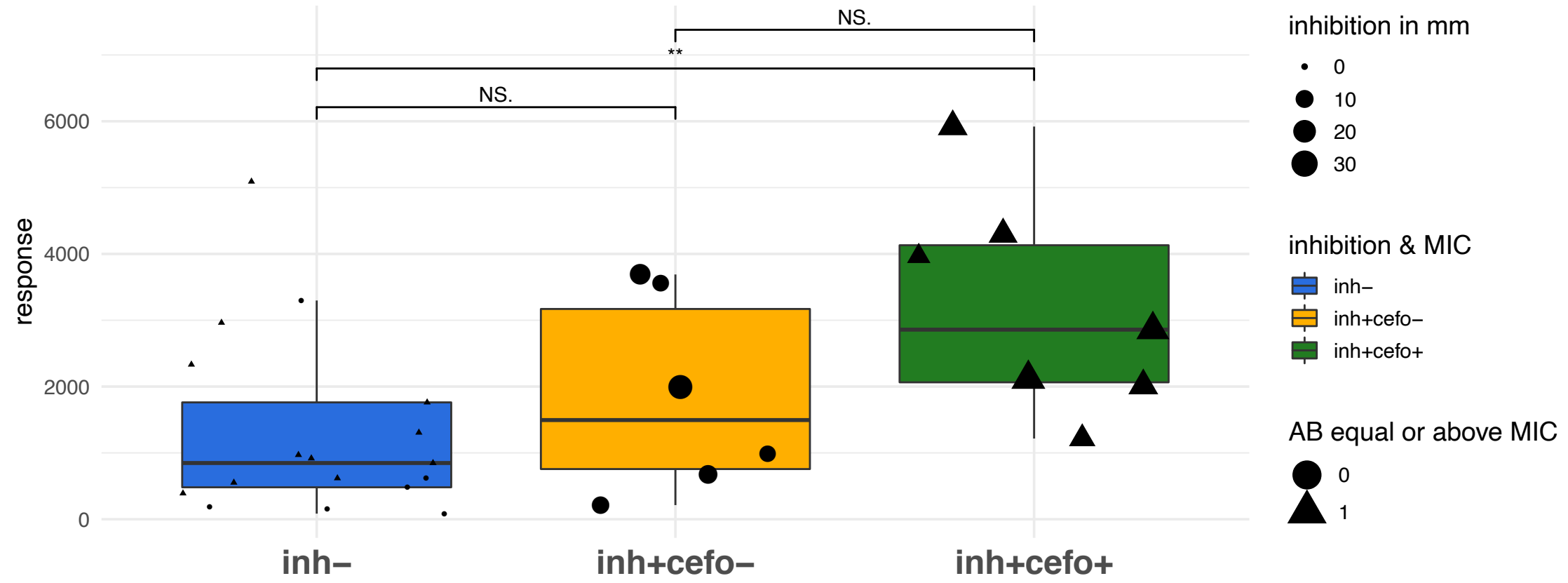
SP_0191

y-axis = log₁₀-scale

A

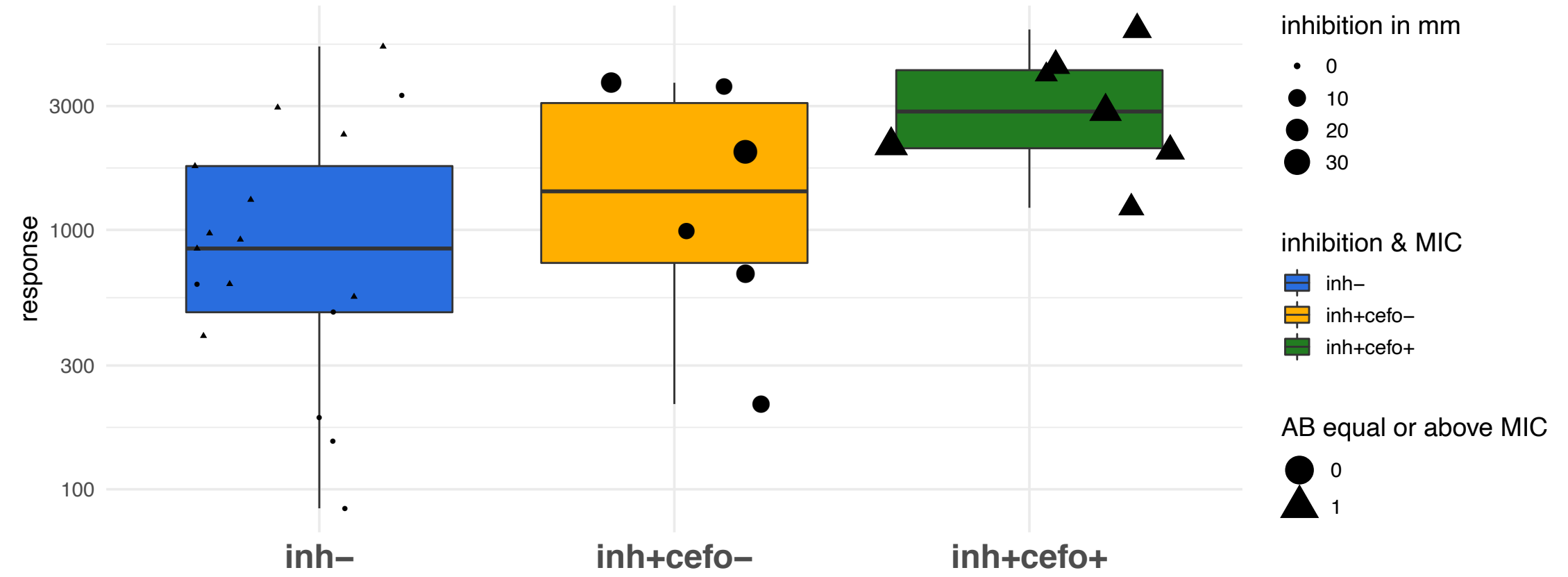
SP_1069

unpaired wilcoxon test



B

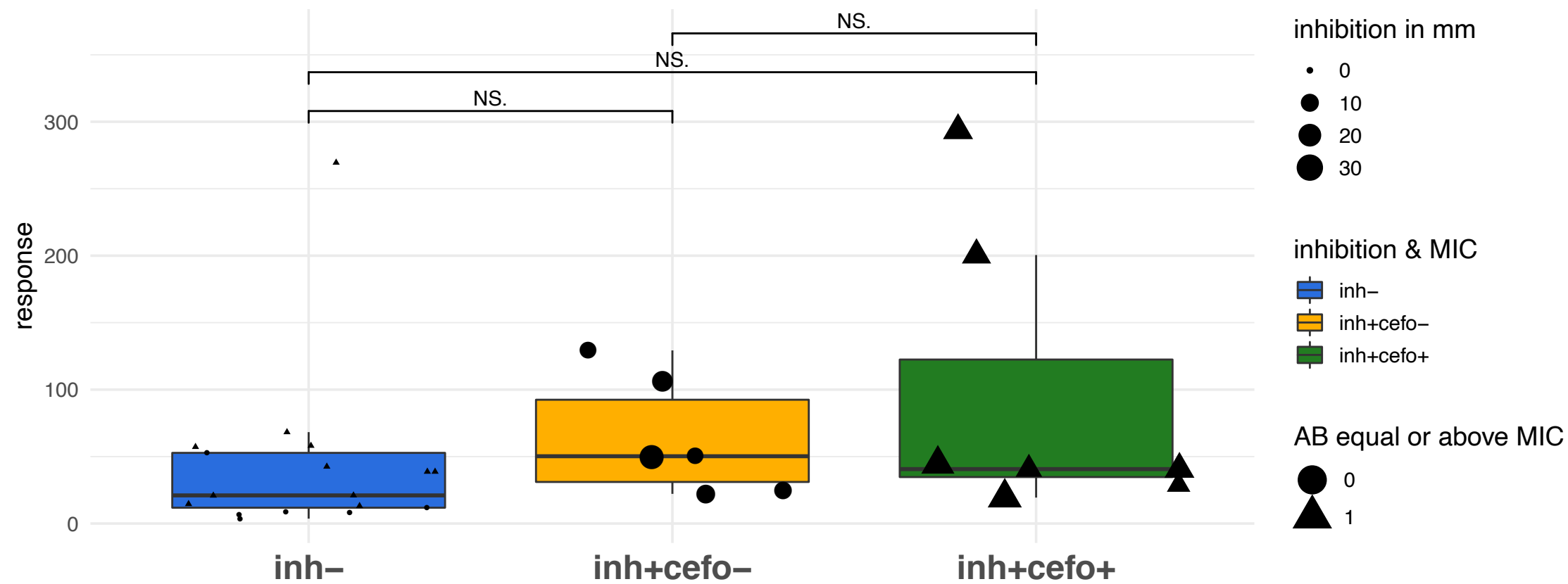
SP_1069

y-axis = log₁₀-scale

A

SP_1992

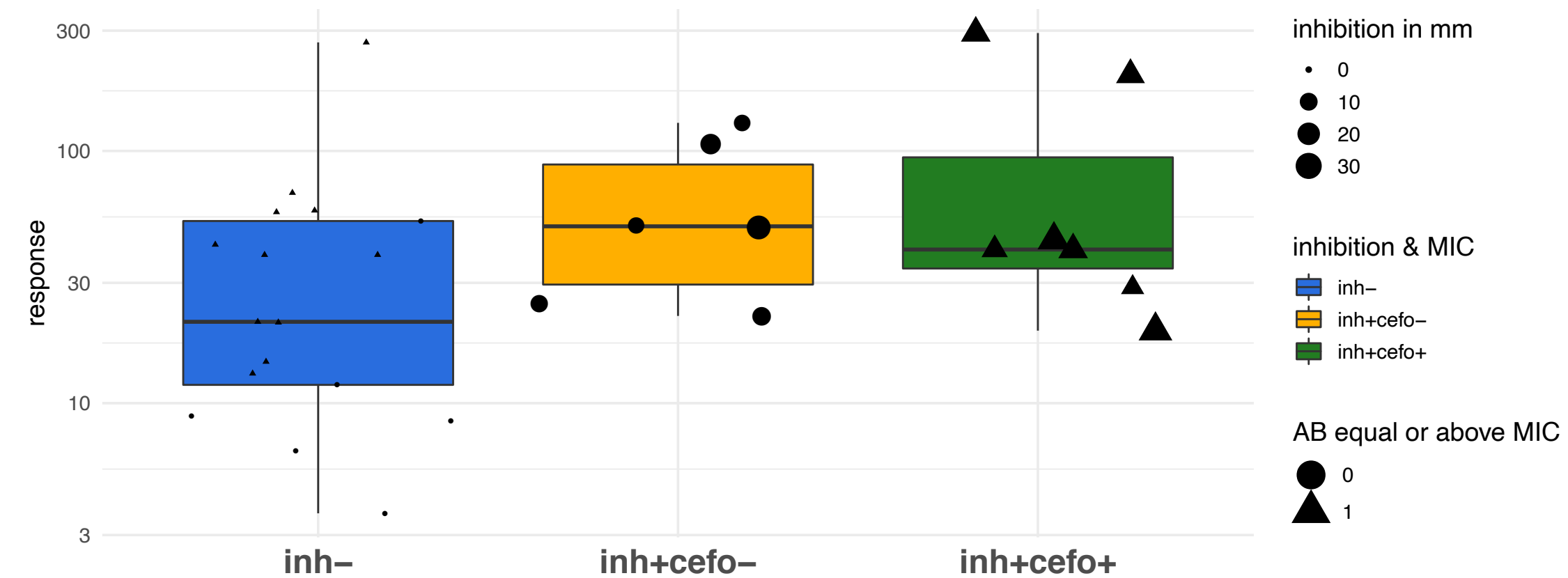
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

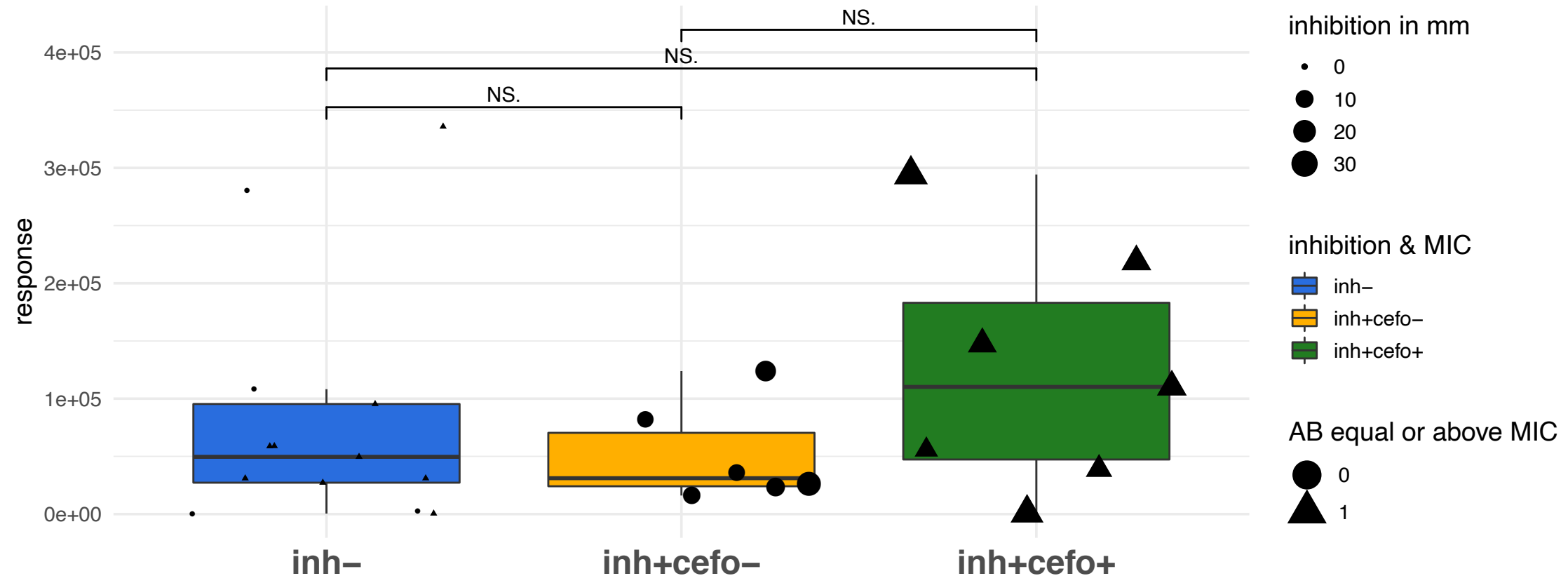
SP_1992

y-axis = log₁₀-scale

A

SP_2063

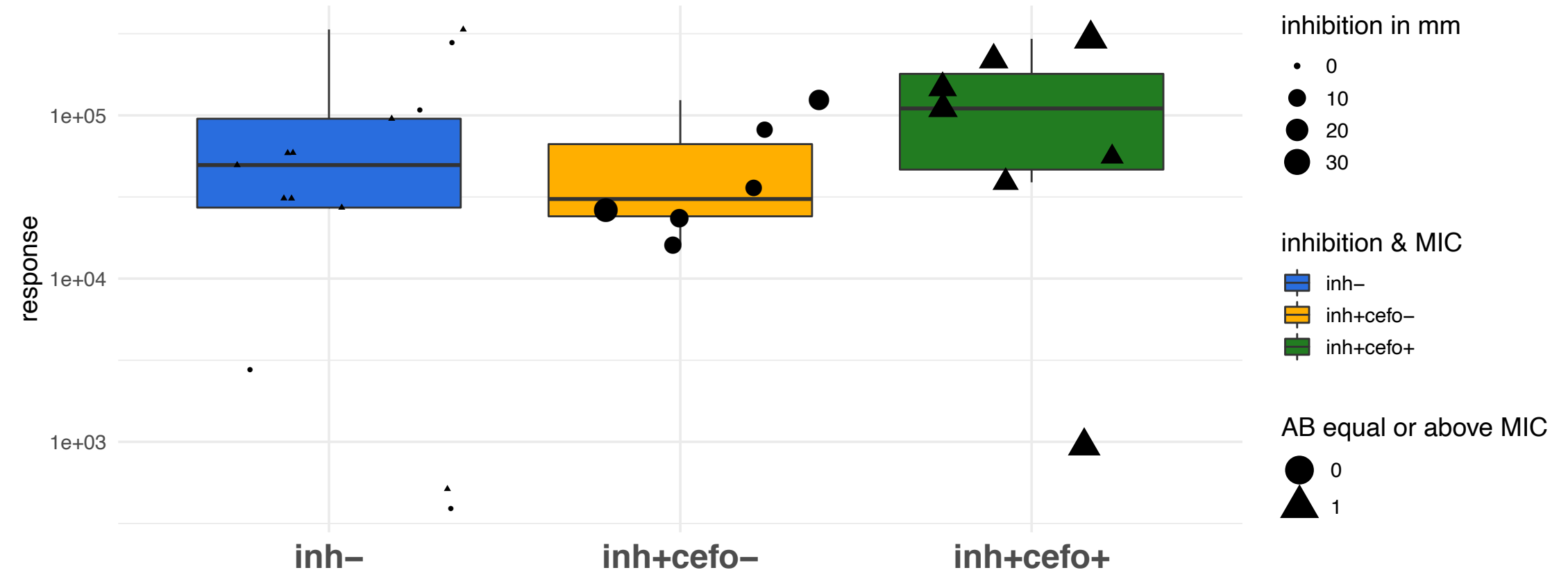
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

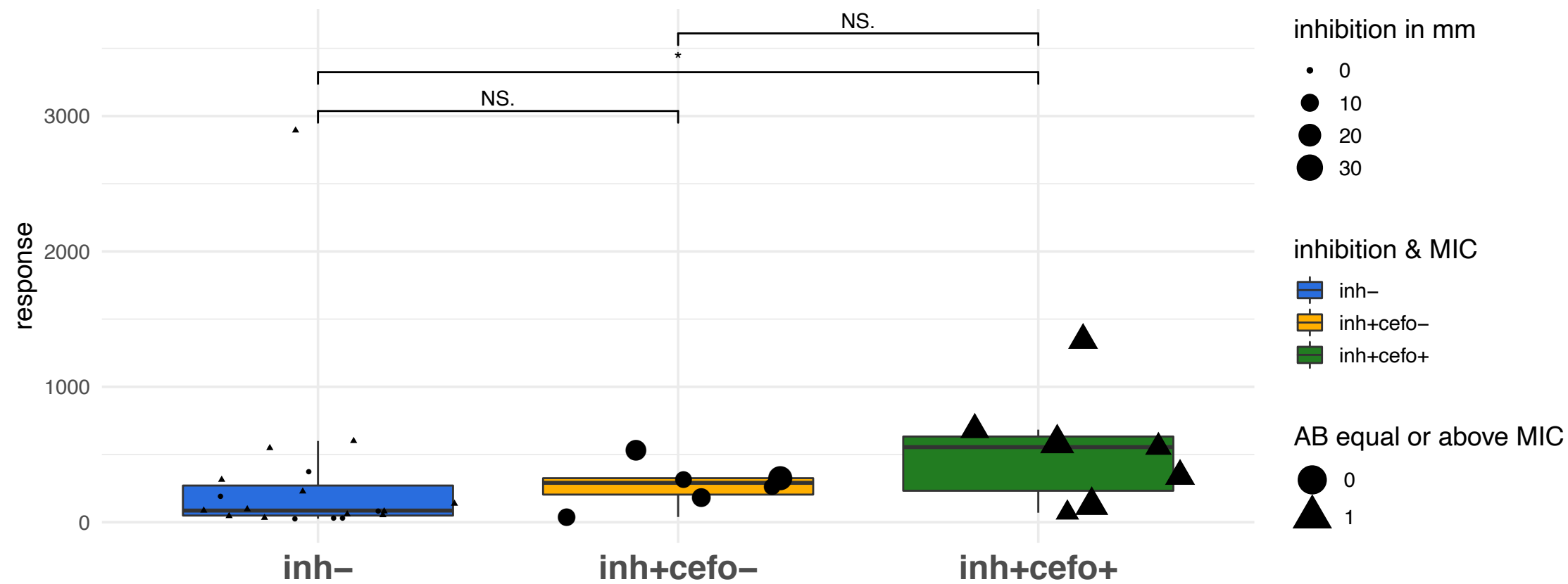
SP_2063

y-axis = log₁₀-scale

A

Sp0899

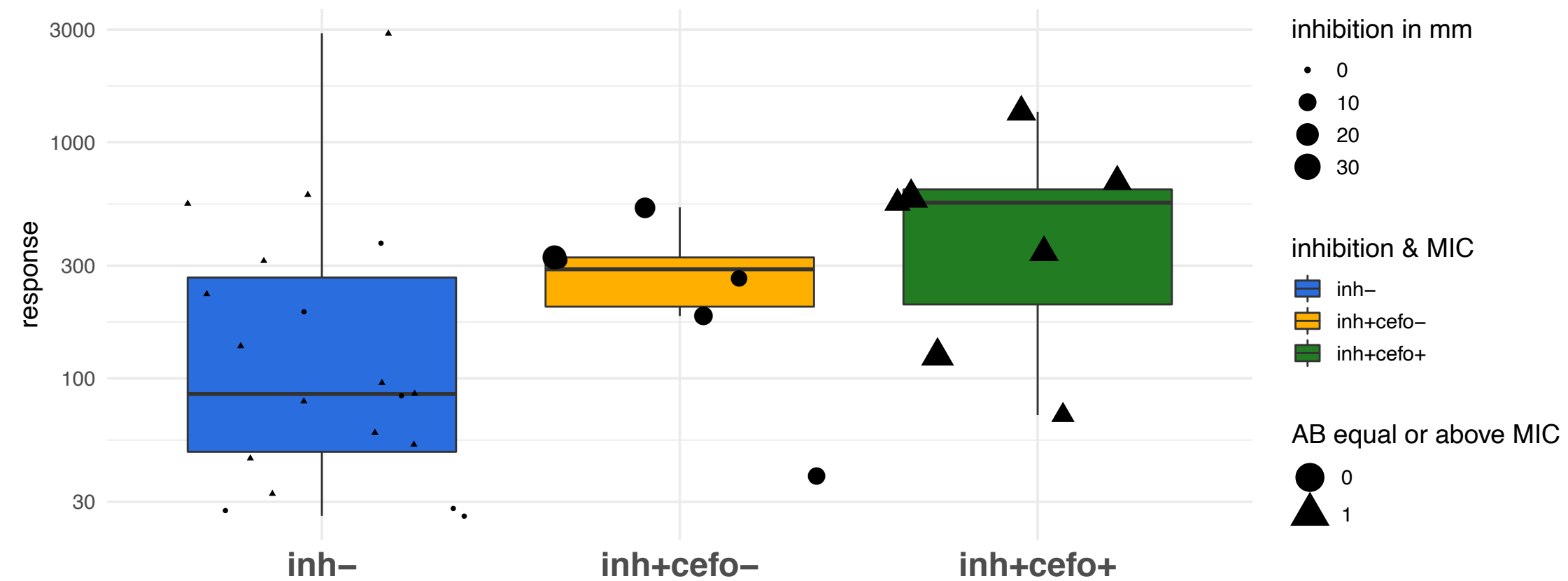
unpaired wilcoxon test



NS >0.05, * <0.05, ** <0.01, *** <0.001

B

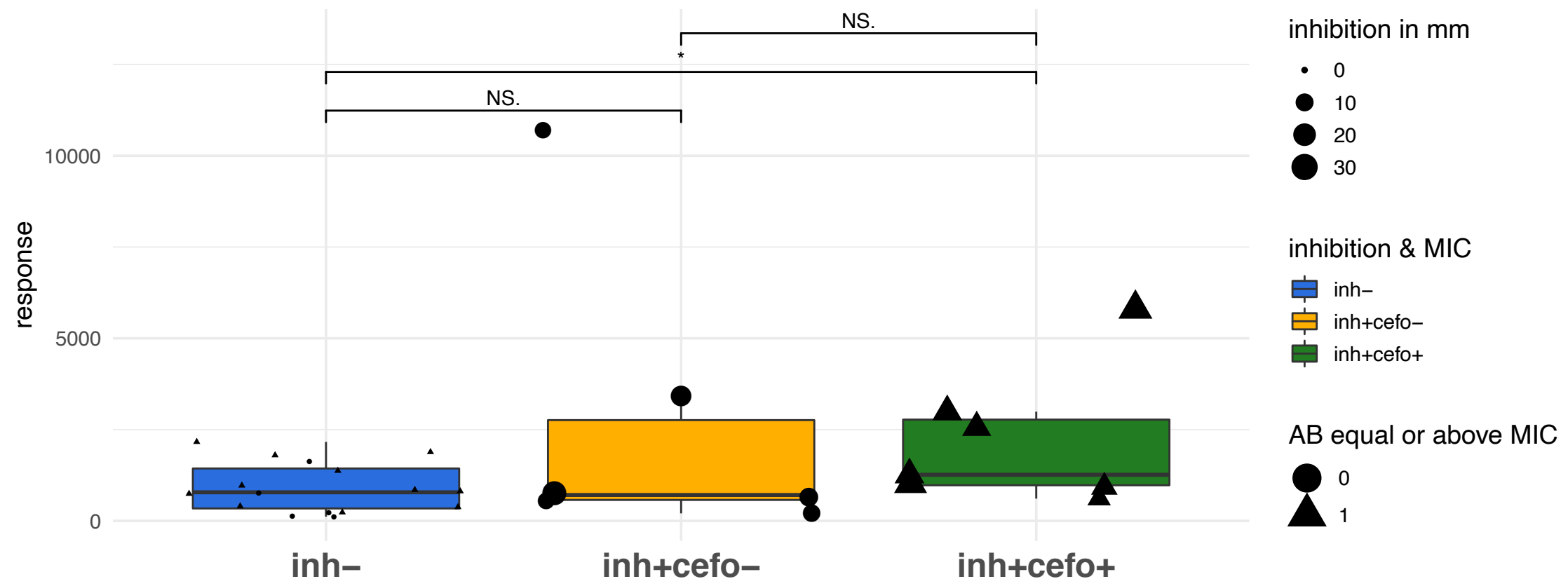
Sp0899

y-axis = log₁₀-scale

A

TrxB

unpaired wilcoxon test



B

TrxB

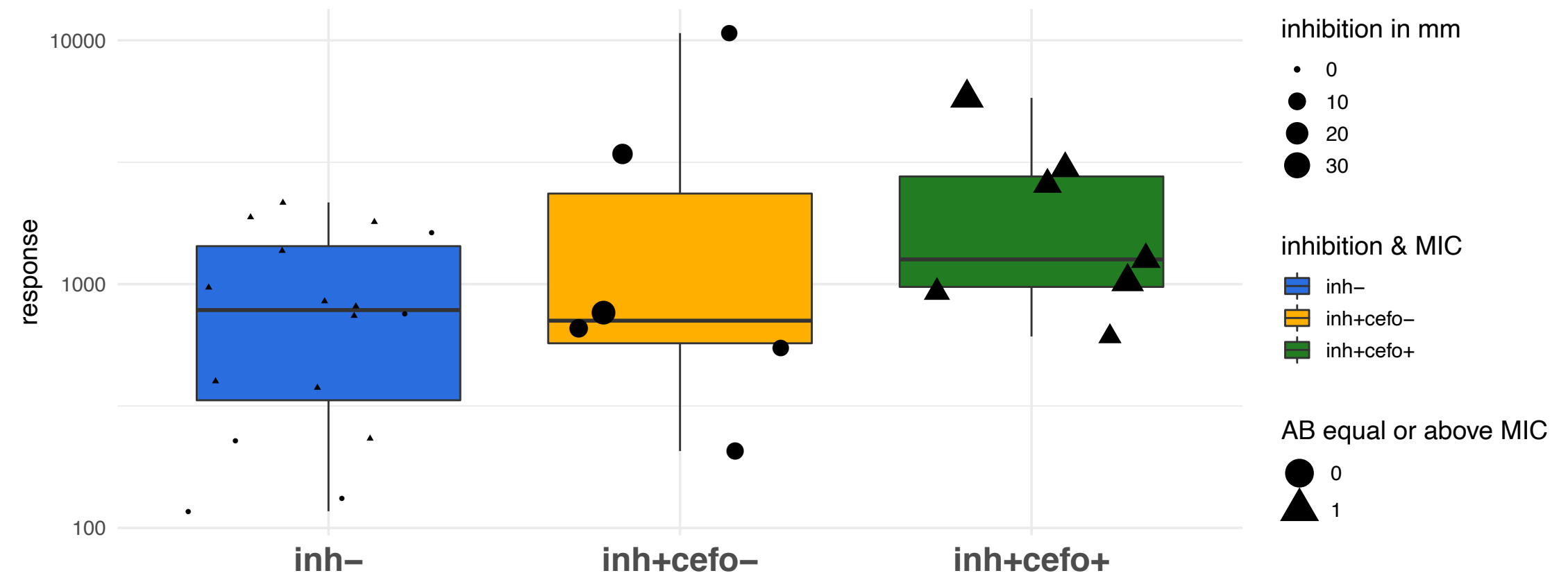
y-axis = log₁₀-scale

FIG S5 Individual boxplot graphs of quantified IgG levels against the respective pneumococcal antigens. The Luminex xMAP technology and xMAPr app were used to quantify the levels of sputum IgGs specific for 55 *S. pneumoniae* antigens. The sizes of the symbols in the boxplots are proportional with the previously measured diameters of pneumococcal growth inhibition zones in mm (1). The colours of the boxes refer to the PLS-identified sputum sample groups as in Fig. 1A. The symbol shape indicates whether the quantified cefotaxime concentration was below (circle, 0), or equal/above (triangle, 1) the MIC for *S. pneumoniae* TIGR4. (A) Boxplot showing the response for a particular antigen on a non-log scale and the statistical outcome of the respective Wilcoxon rank sum test. (B) Boxplot with the response for a particular antigen on a \log_{10} scale.

References

1. Seinen J, Dieperink W, Mekonnen SA, Lisotto P, Harmsen HJM, Hiemstra B, Ott A, Schultz D, Lalk M, Oswald S, Hammerschmidt S, de Smet A, van Dijk JM. 2019. Heterogeneous antimicrobial activity in broncho-alveolar aspirates from mechanically ventilated intensive care unit patients. *Virulence* 10:879-891.