

Figure S1. PCA score plots of NSG and humanized mice with dengue infection.



Figure S2. Pearson correlation analysis reveals correlation of reconstitution levels with two nucleosides in humanized mice. A. Negative correlation between reconstitution levels and cytidine (r= -0.64; p=0.002). B. Negative correlation between reconstitution levels and deoxycytidine (r= -0.61; p=0.003).



Figure S3. Scatter plots of differential metabolites in NSG mice with dengue infection. A. elevated change trend of hypoxanthine. **B.** elevated change trend of deoxycytidine. **C.** decreased change trend of PE (36:2). **D.** decreased change trend of LPE (16:0). **E.** decreased change trend of PC (38:6). * p < 0.05, ** p < 0.01, *** p < 0.001 by test Kruskal-Wallis test. The statistical comparison was with control levels. LPE, lysophosphatidylethanolamine; PE, phosphatidylethanolamine; PC, phosphatidylcholine.

	Total	Expected	Hits	Raw p	-log(p)	Holm adjust	FDR	Impact
Glycerophospholipid metabolism	39	0.23	3	1.27E-03	6.67E + 00	1.01E-01	1.01E-01	0.23
Pyrimidine metabolism	60	0.35	3	4.41E-03	5.42E + 00	3.48E-01	1.76E-01	0.03
Biotin metabolism	11	0.06	1	6.23E-02	2.78E + 00	1.00E + 00	1.00E+00	0.00
Aminoacyl-tRNA biosynthesis	75	0.44	2	6.85E-02	2.68E + 00	1.00E+00	1.00E+00	0.06
Glycosylphosphatidylinositol(GPI)-	14	0.08	1	7.86E-02	2.54E + 00	1.00E + 00	1.00E+00	0.04
anchor biosynthesis								
Linoleic acid metabolism	15	0.09	1	8.40E-02	2.48E + 00	1.00E + 00	1.00E + 00	0.00
Taurine and hypotaurine metabolism	20	0.12	1	1.11E-01	2.20E+00	1.00E + 00	1.00E+00	0.00
Sphingolipid metabolism	25	0.15	1	1.36E-01	1.99E + 00	1.00E + 00	1.00E + 00	0.01
alpha-Linolenic acid metabolism	29	0.17	1	1.56E-01	1.85E + 00	1.00E + 00	1.00E + 00	0.00
Lysine biosynthesis	32	0.19	1	1.71E-01	1.76E + 00	1.00E + 00	1.00E + 00	0.10
Phenylalanine metabolism	45	0.26	1	2.33E-01	1.46E + 00	1.00E + 00	1.00E + 00	0.00
Primary bile acid biosynthesis	47	0.27	1	2.42E-01	1.42E + 00	1.00E + 00	1.00E + 00	0.01
Lysine degradation	47	0.27	1	2.42E-01	1.42E + 00	1.00E + 00	1.00E + 00	0.15
Arachidonic acid metabolism	62	0.36	1	3.07E-01	1.18E + 00	1.00E + 00	1.00E + 00	0.00
Arginine and proline metabolism	77	0.45	1	3.66E-01	1.00E + 00	1.00E + 00	1.00E + 00	0.10
Tryptophan metabolism	79	0.46	1	3.74E-01	9.83E-01	1.00E + 00	1.00E + 00	0.01
Purine metabolism	92	0.54	1	4.21E-01	8.64E-01	1.00E + 00	1.00E+00	0.01

Figure S4. Pathway analysis of humanized mice with dengue infection using Metaboanalyst.