

FIG. 1

Oxalate Degradation assay *in Vitro*

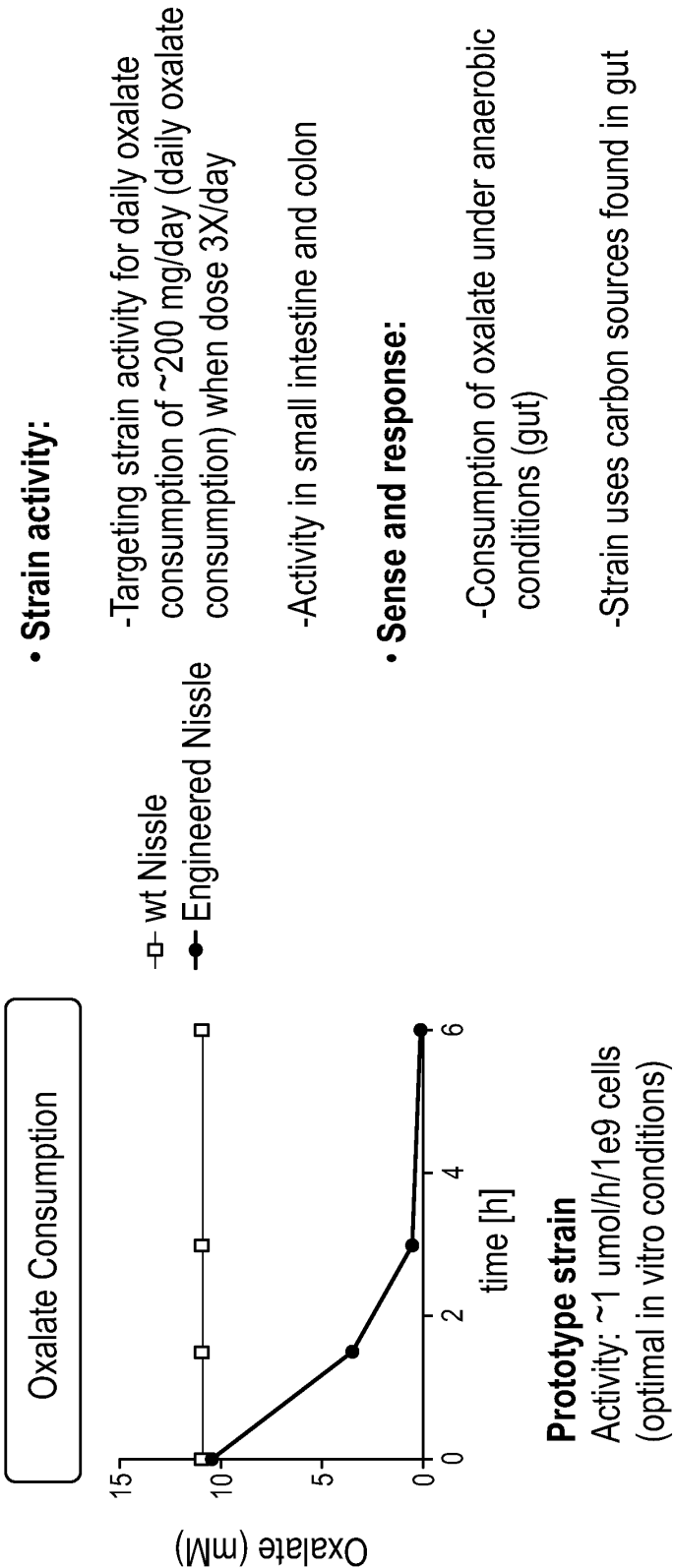


FIG. 2A

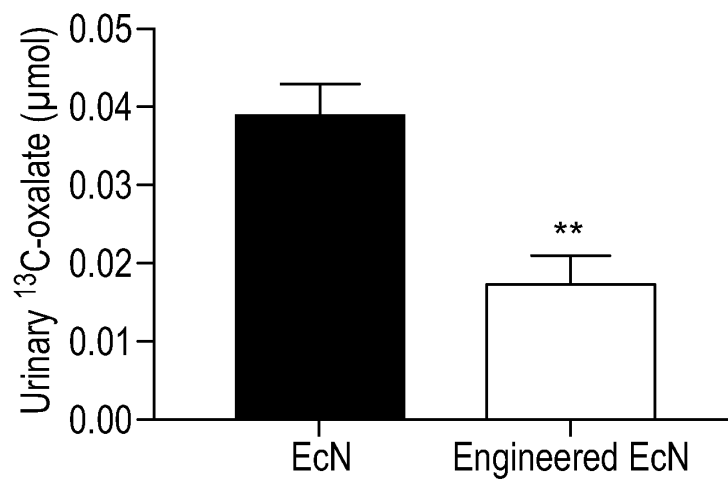
Acute  $^{13}\text{C}$ -oxalate Urinary Recovery

FIG. 2B

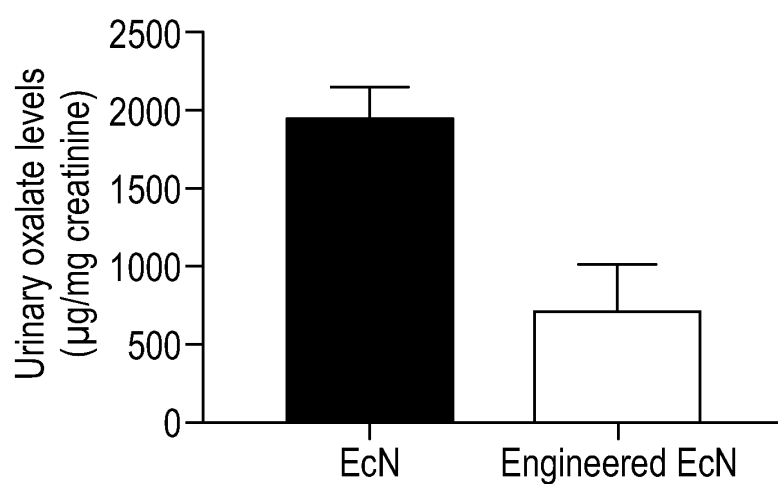
Chronic Urinary Oxalate Recovery  
(change from baseline)

FIG. 3: Disease Pathogenesis

GI Based Therapies - Lowering of Systemic Oxalate

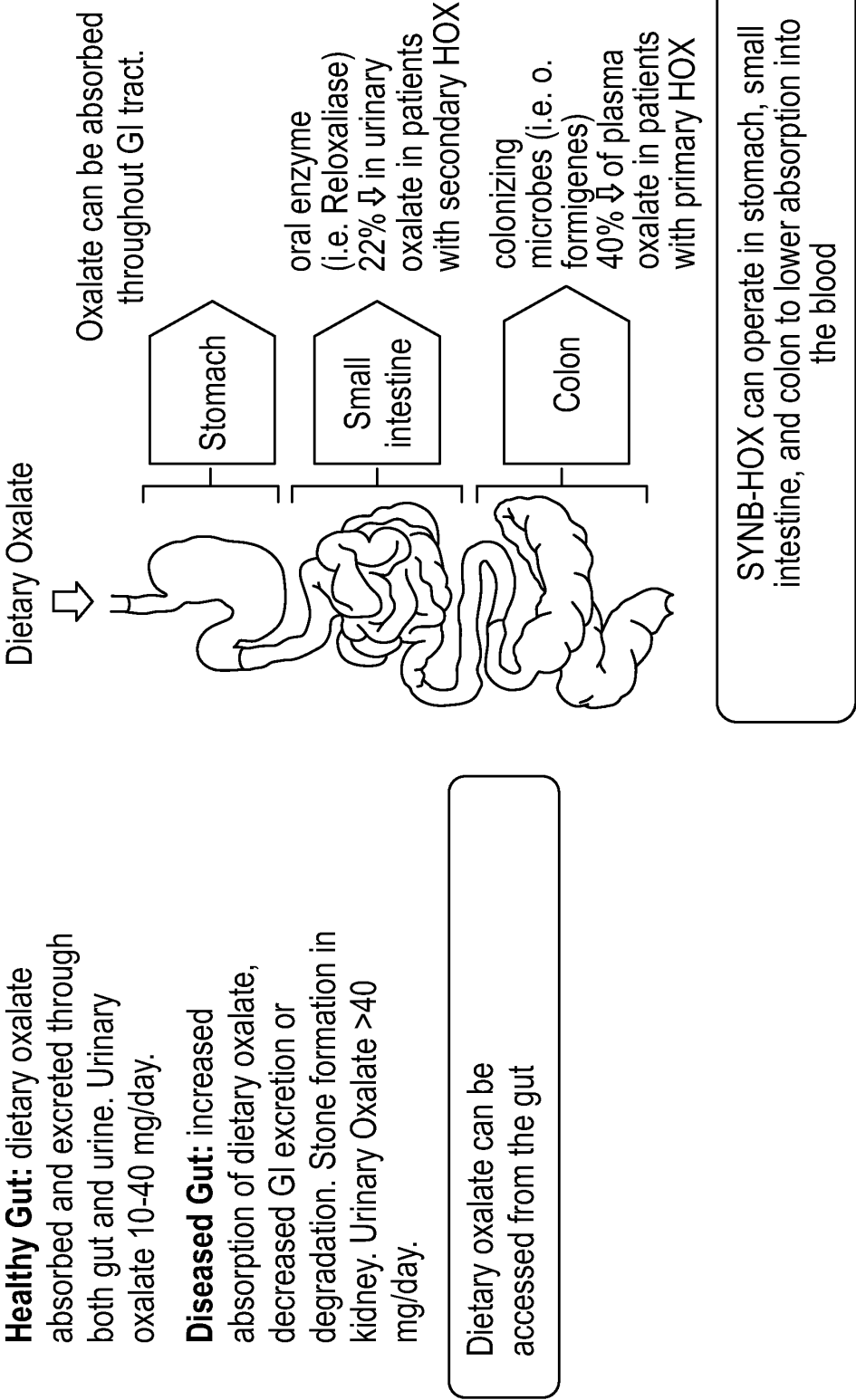


FIG. 4A: SYN8802

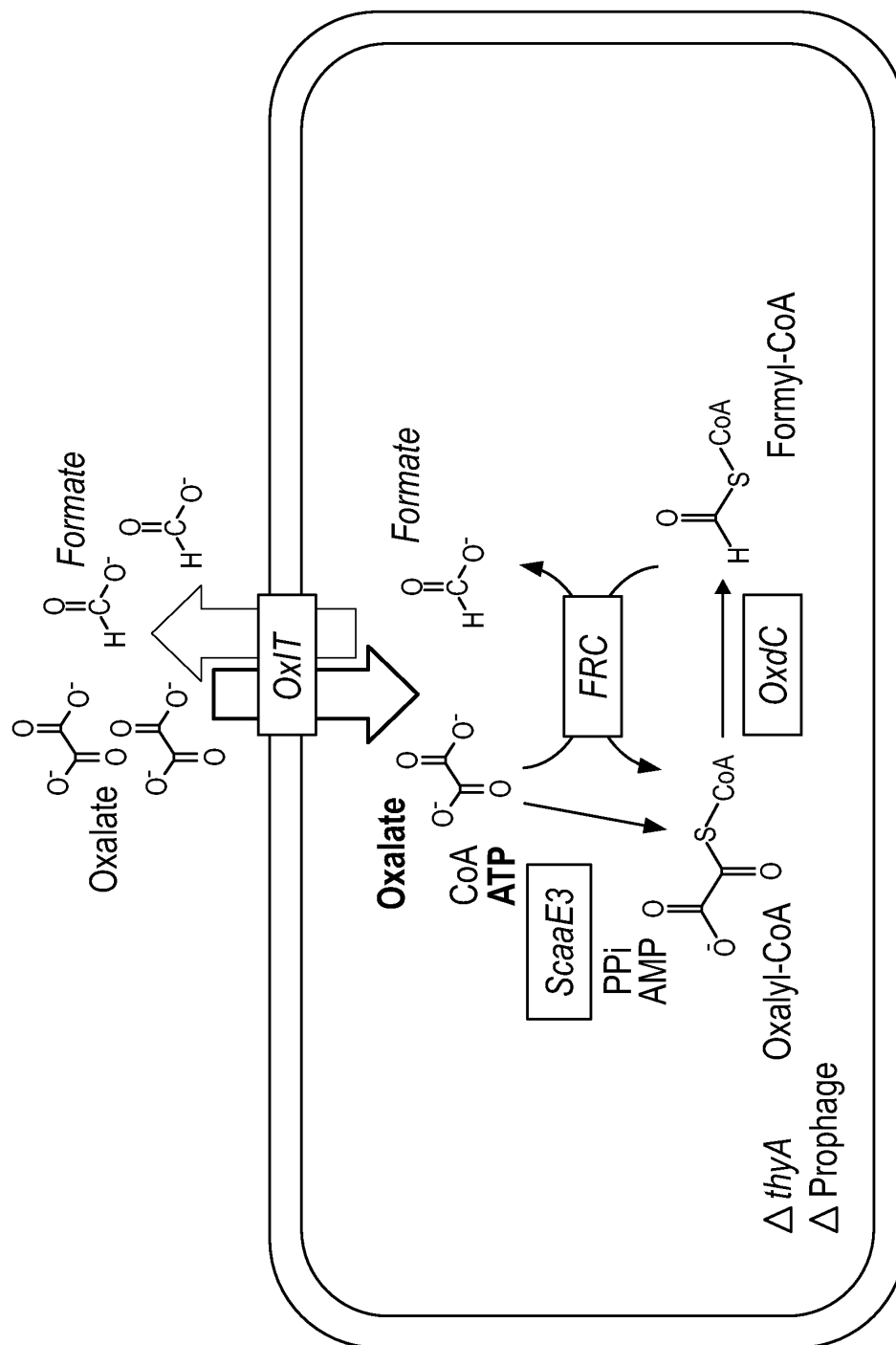


FIG. 4B: *In Vitro* Consumption of Oxalate by SYN8802

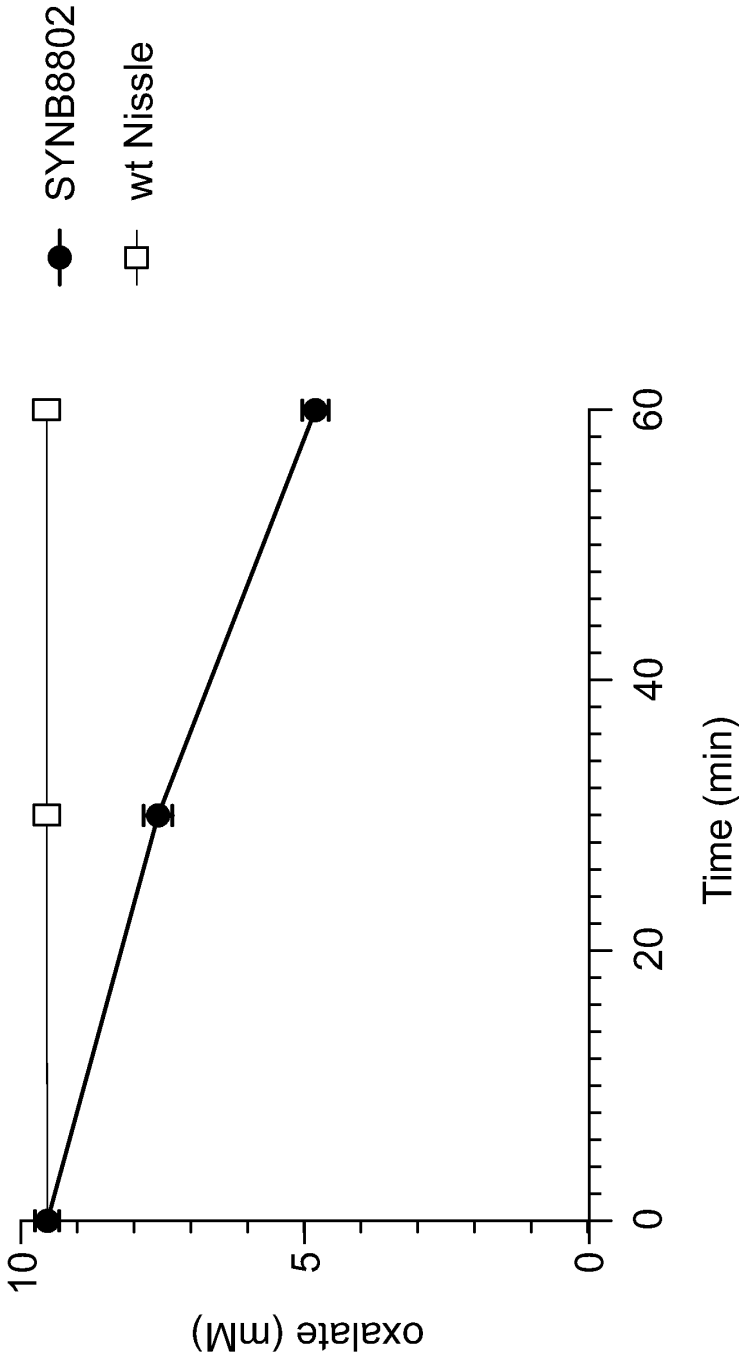
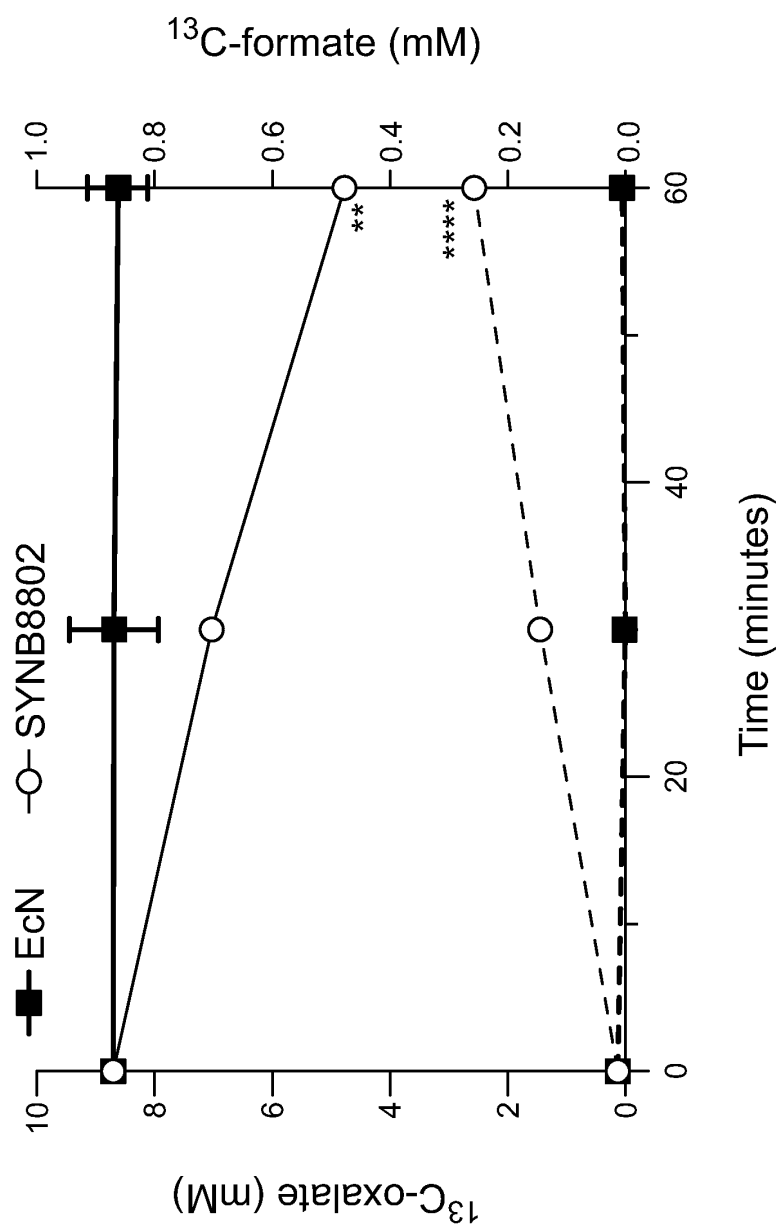


FIG. 4C



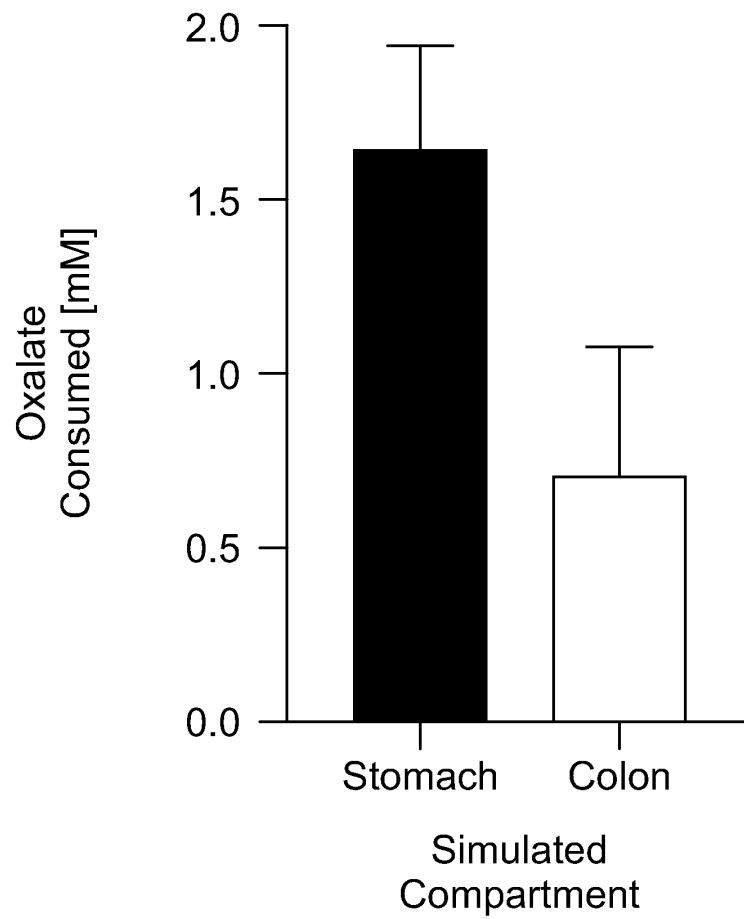


FIG. 5A

Oxalate Consumption in Mice

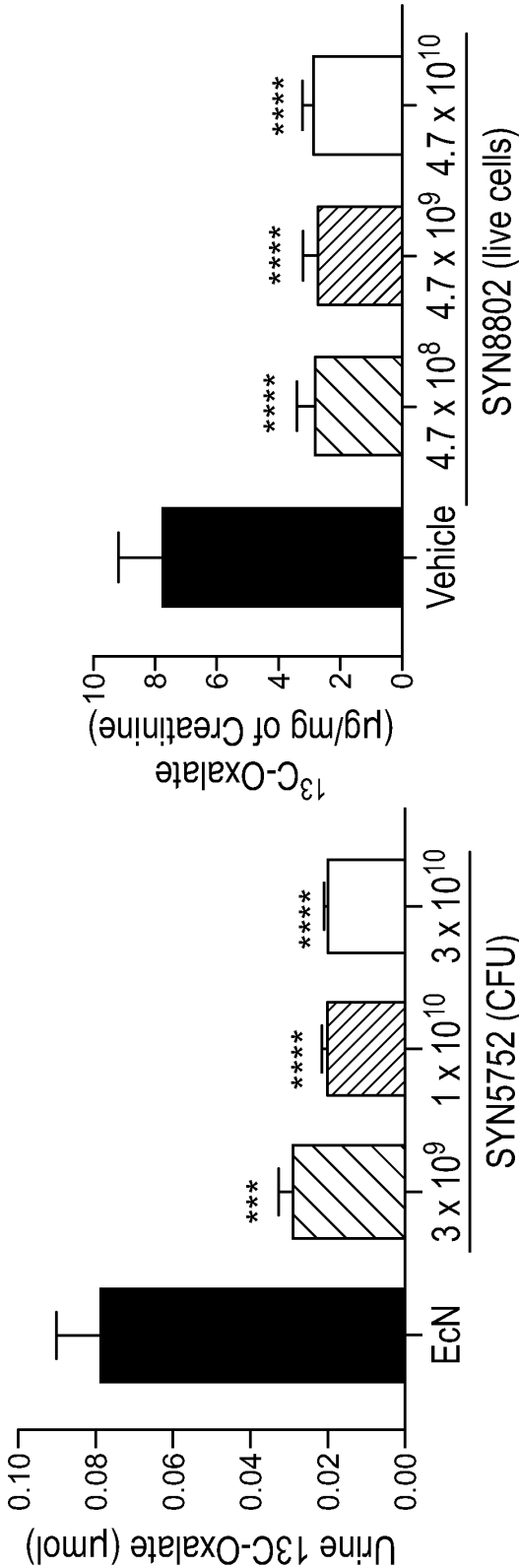
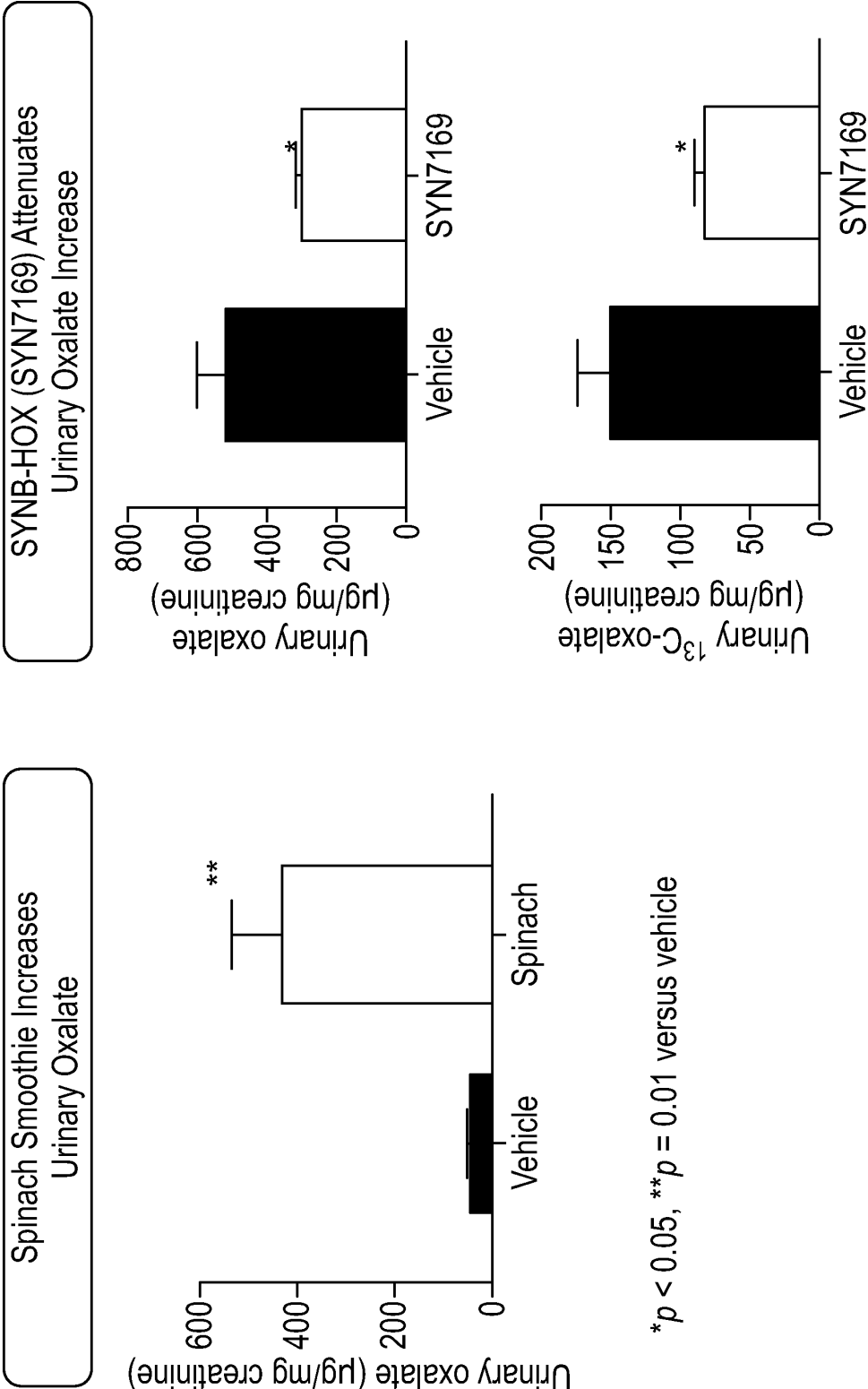


FIG. 5B

FIG. 5C

\* $p < 0.05$ , \*\*\* $p = 0.0001$ , \*\*\*\* $p < 0.0001$  versus EcN

FIG. 6: SYNB-HOX Attenuates Urinary Oxalate Increase in Healthy Monkeys



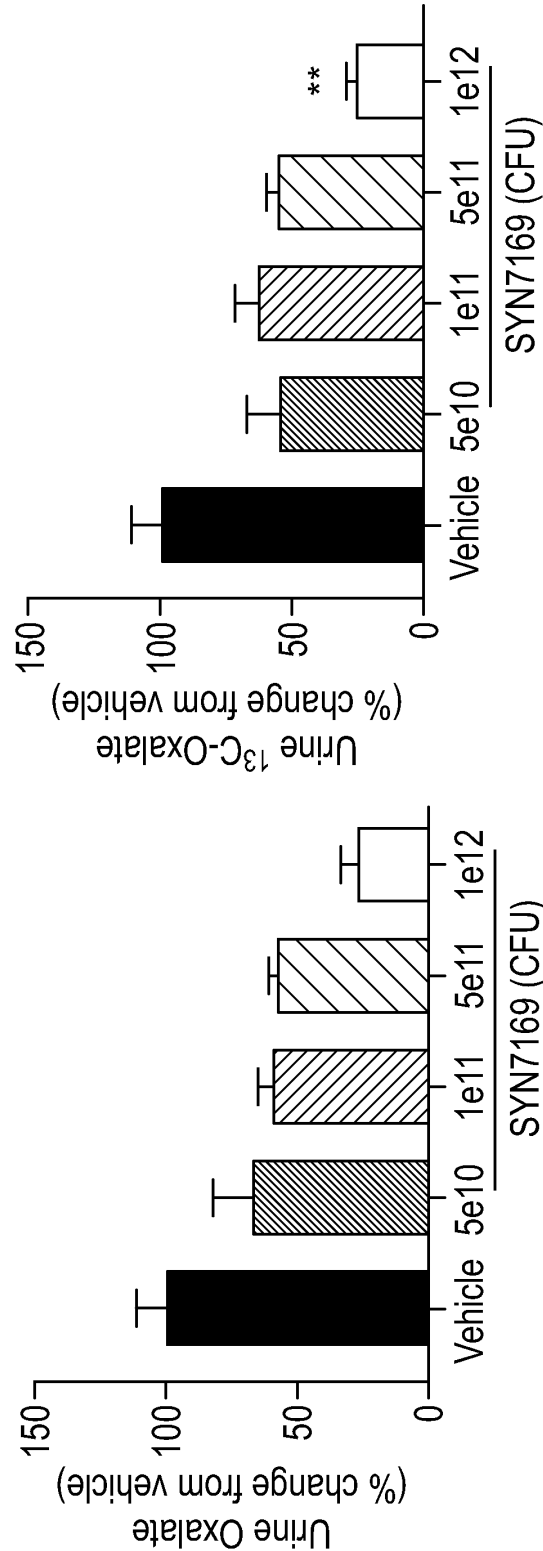
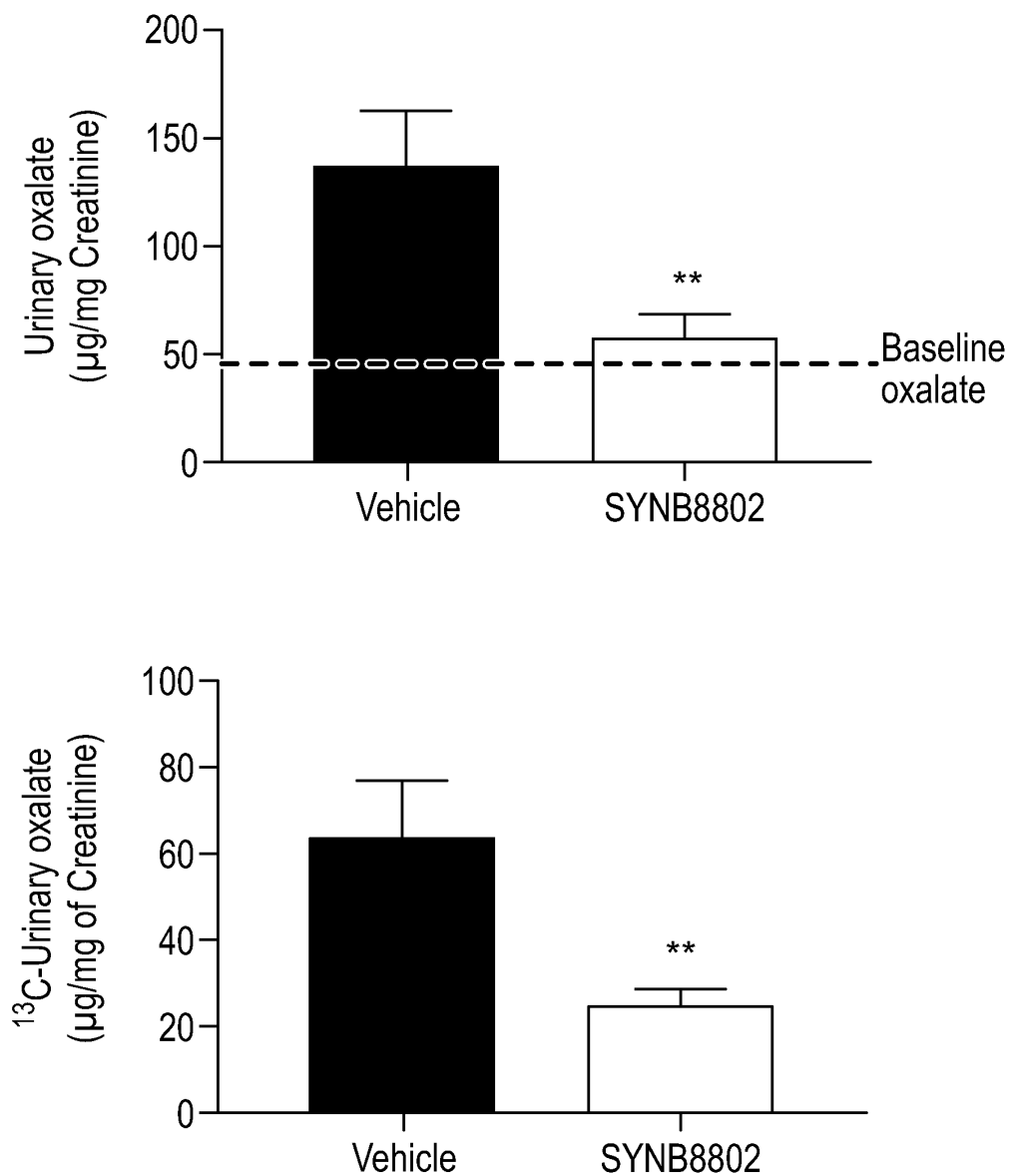


FIG. 7B

FIG. 7A

\*  $p < 0.05$ , \*\*  $p = 0.01$  versus vehicle

FIG. 7C: Consumption of oxalate and  $^{13}\text{C}$ -oxalate in the GI tract of cynomolgus monkeys with acute hyperoxaluria



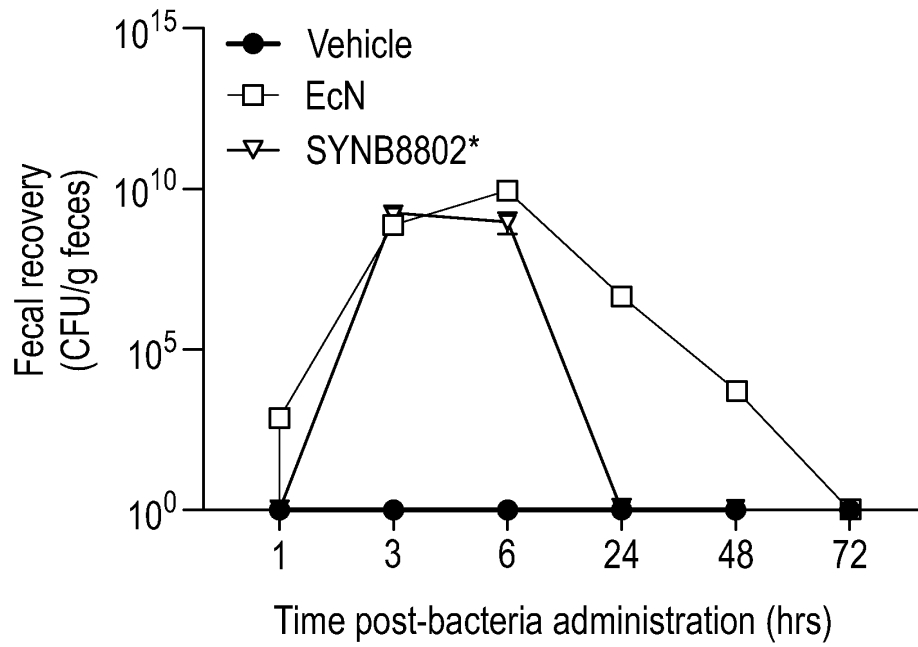


FIG. 8A

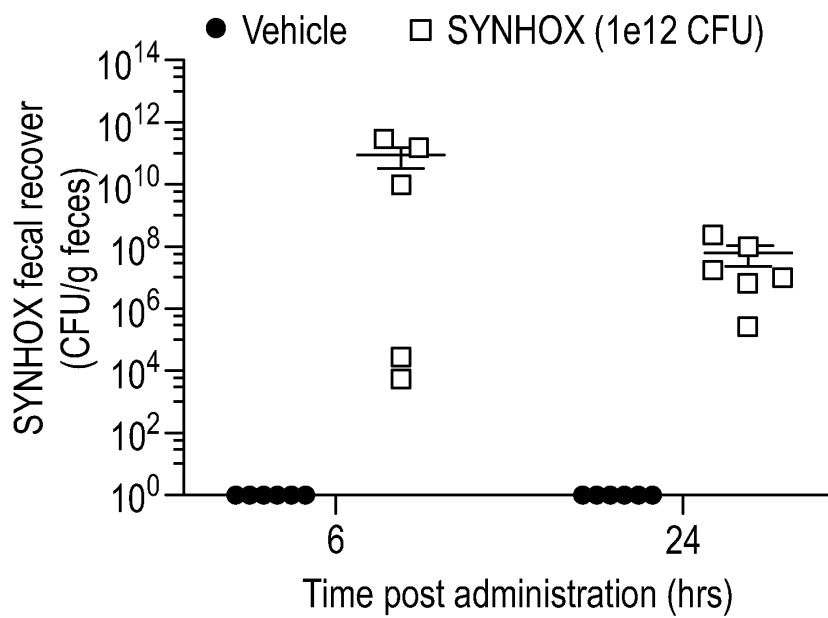
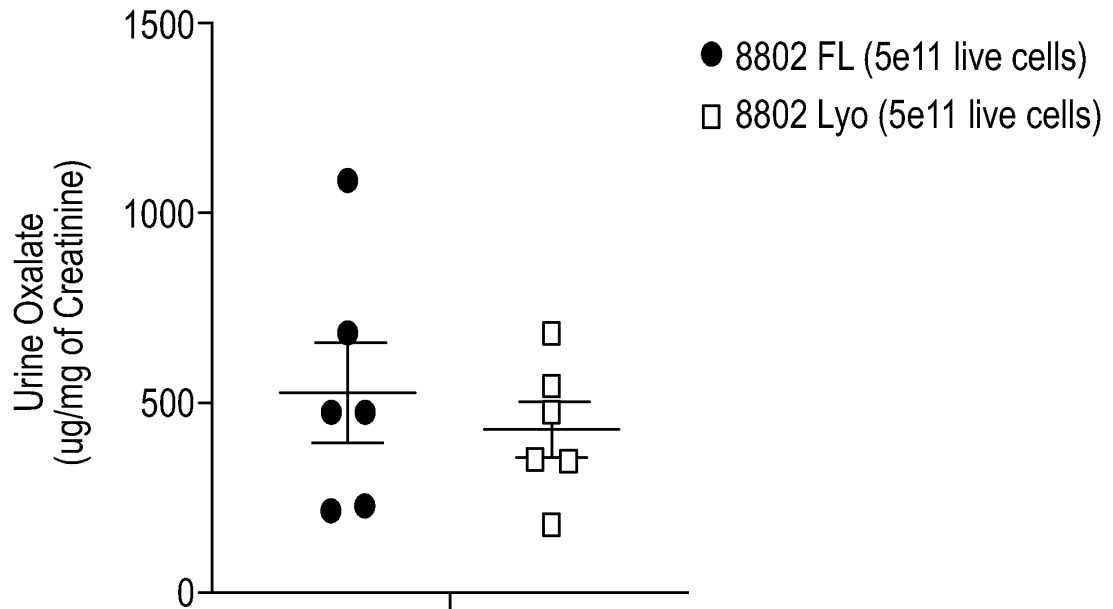


FIG. 8B

**FIG. 9**

NHP HOX#9 Urine Oxalate



NHP HOX#9 13C2 Oxalate

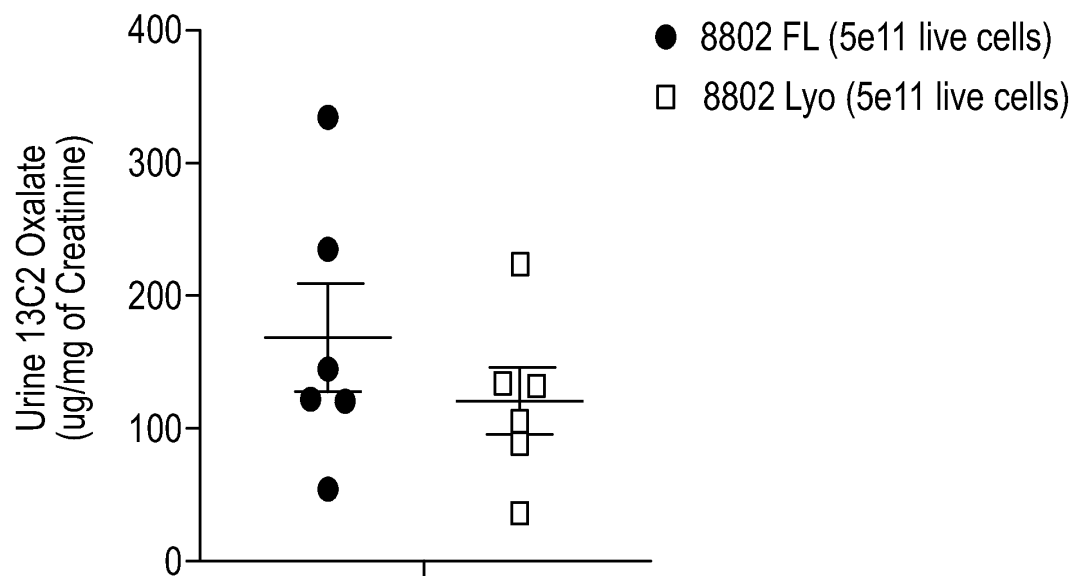


FIG. 10: SYN-HOX Consumes <sup>13</sup>C-Oxalate in Mice

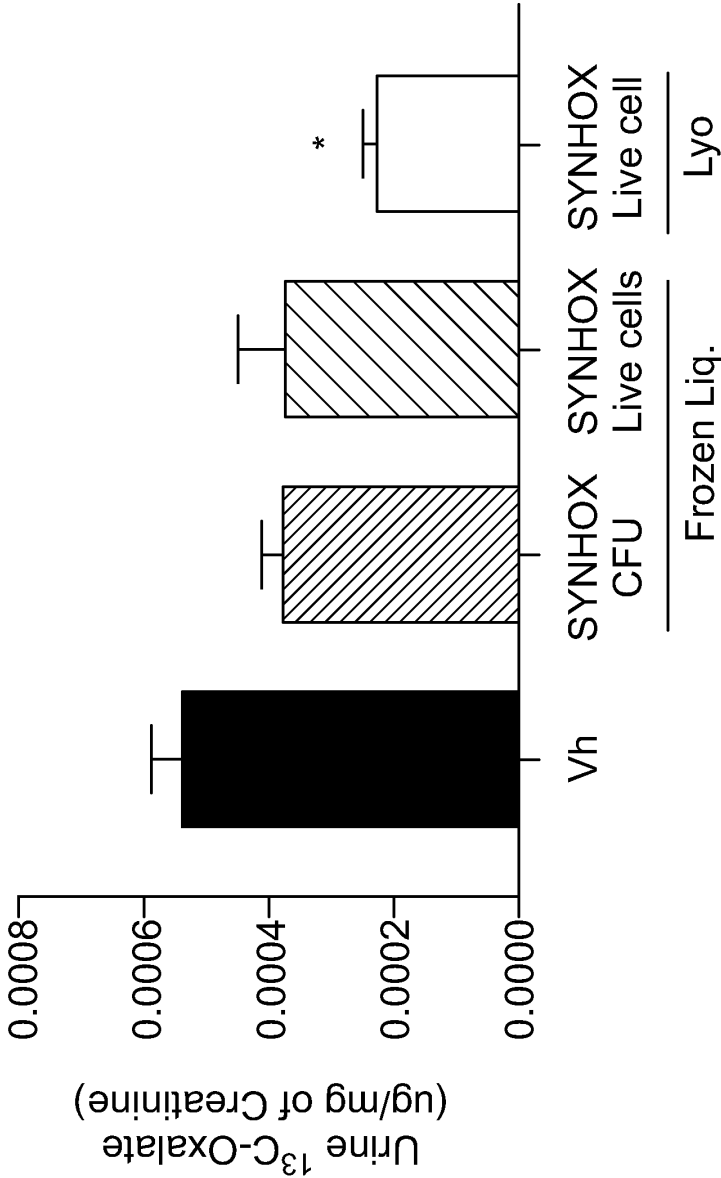
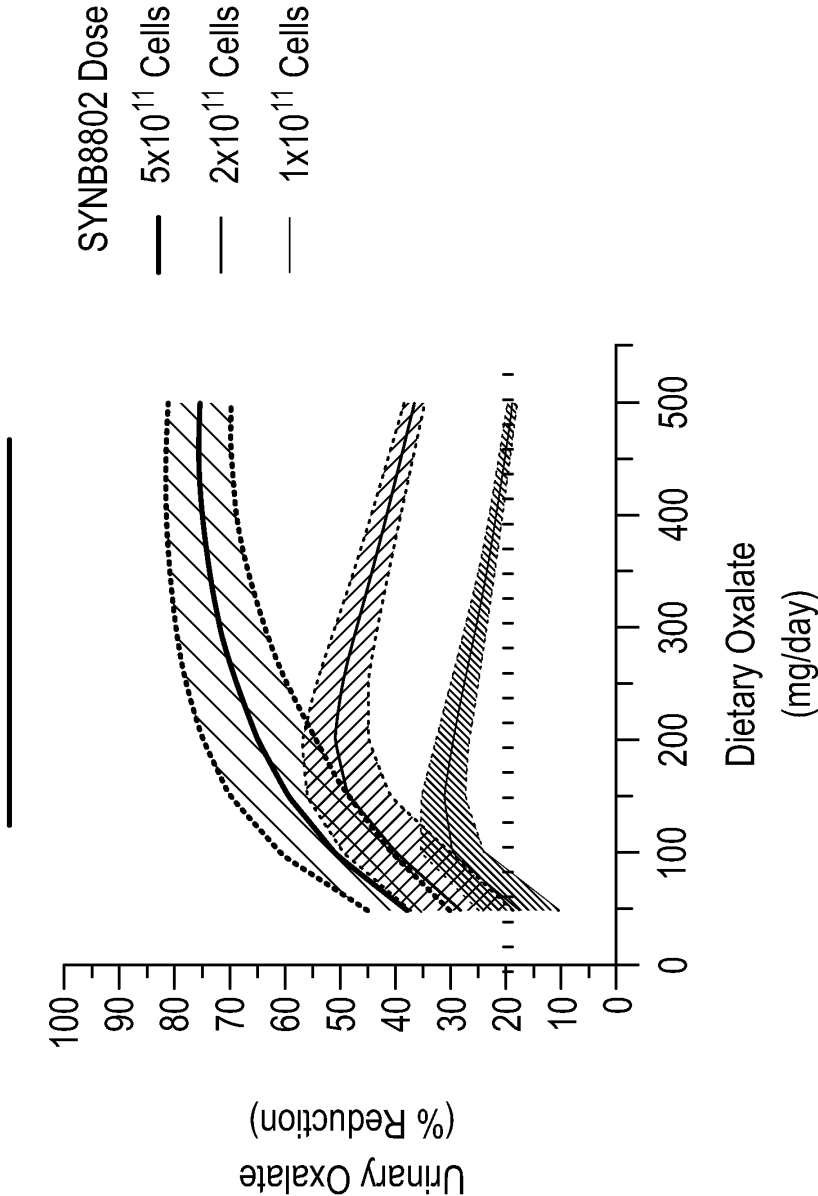


FIG. 11A: Modeling of Oxalate Lowering  
by SYN8-8802



Most patients consume <300 mg oxalate per day from diet

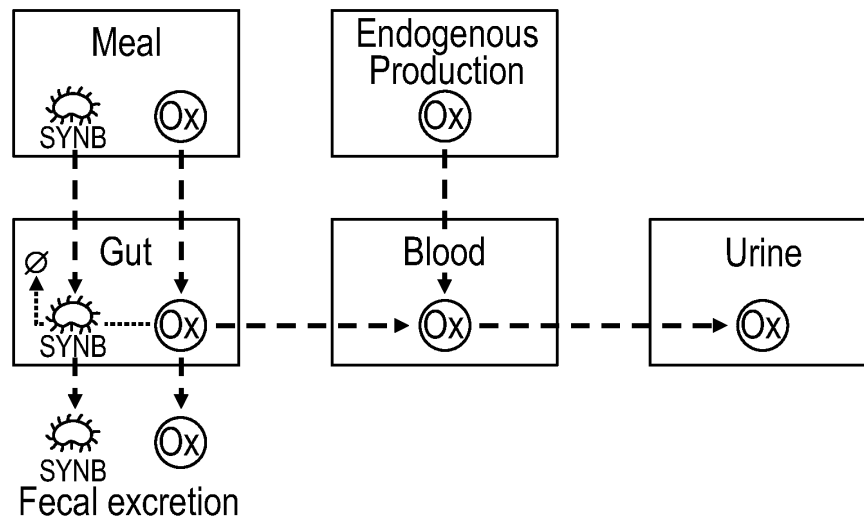


FIG. 11B

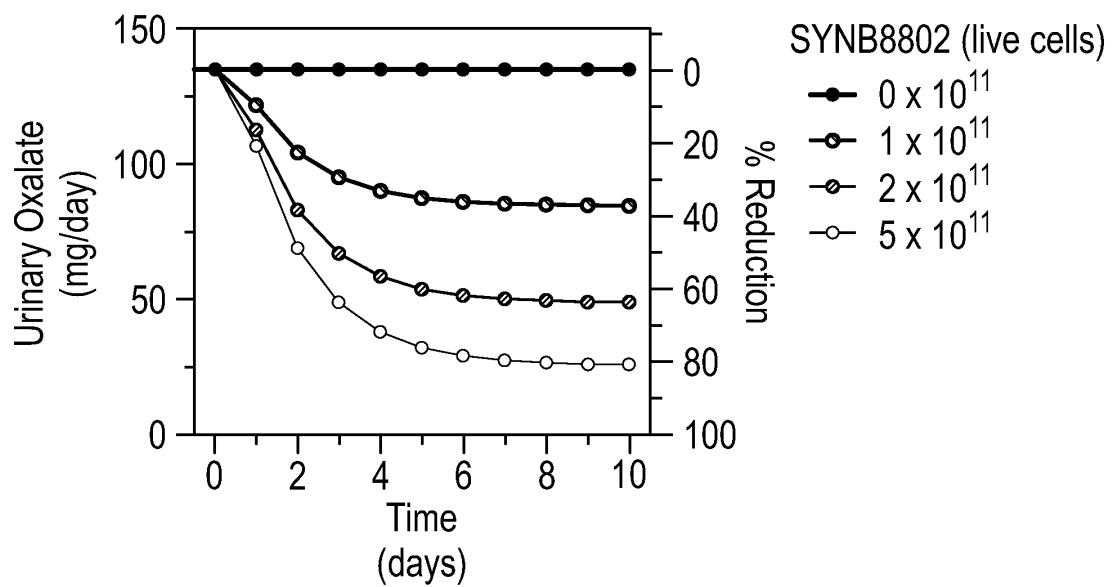
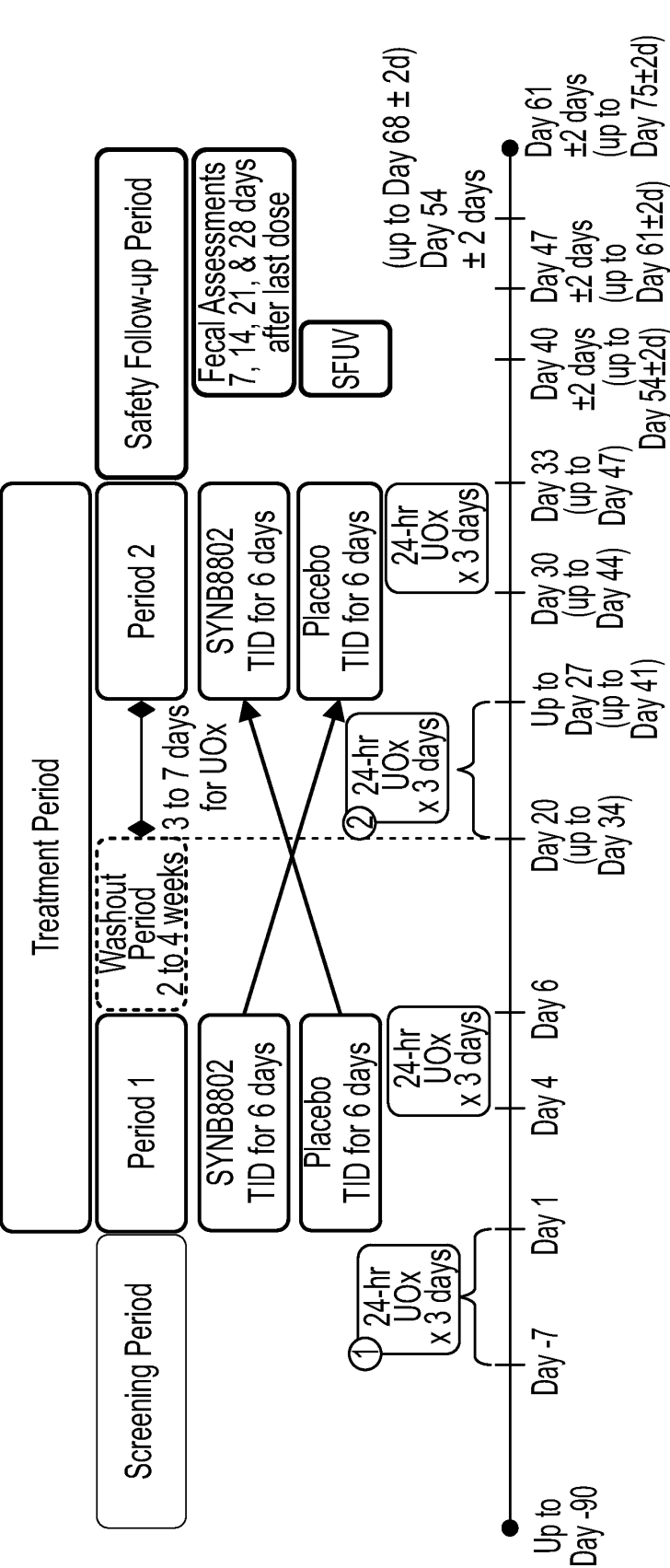


FIG. 11C

FIG. 12

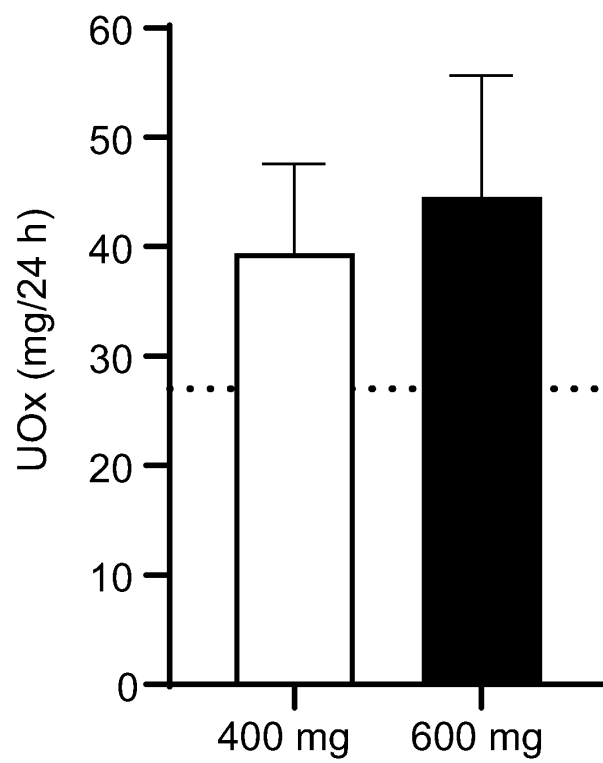


TID = three times per day; SFUV = Safety Follow-up Visit; UOx = urinary oxalate

- ① Three 24-hour UOx assessments are required between Day -7 and Day 1. These collections do not need to occur on consecutive days.
- ② Three 24-hour UOx assessments are required within 7 days of the first dose of IMP in Period 2. These collections do not need to occur on consecutive days.

NOTE: In this example, the Washout Period is depicted as 2 weeks and the UOx assessments before Period 2 are spread out over 7 days. The Washout Period must be at least 2 weeks but may be as long as 4 weeks. The three 24-hour UOx assessments performed after the Washout Period and before Period 2, as stated above, are required within 7 days of the first dose of IMP in Period 2 and do not need to occur on consecutive days.

FIG. 13



Baseline Urinary Oxalate after HOLC diet

Dose-responsive and reproducible Uox lowering demonstrated  
Efficacy Analysis (% Change from Baseline in 24h UOxover Pbo)

FIG. 14A 600mg Daily Oxalate      FIG. 14B 400mg Daily Oxalate

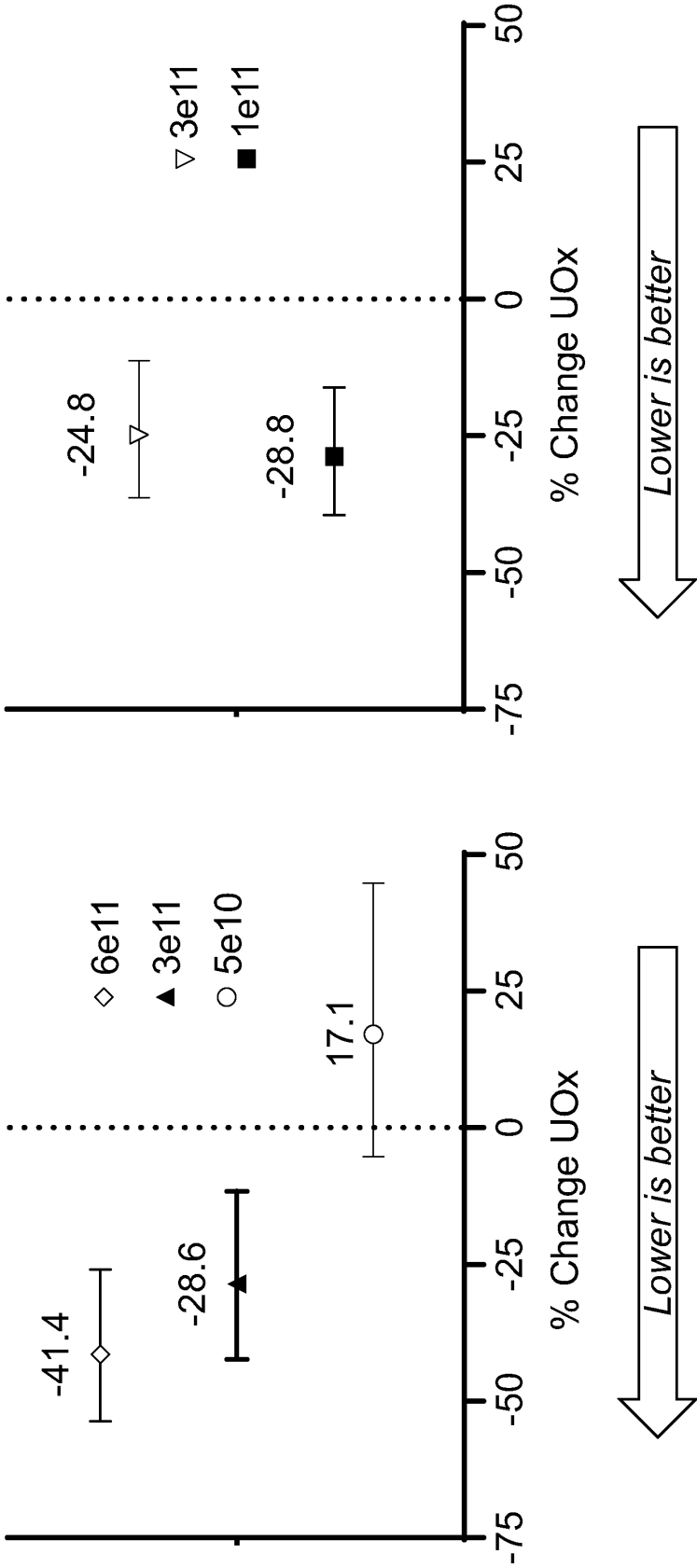


FIG. 15A

SYNB8802 3e11 live cells dose  
advancing to Ph1B in patients

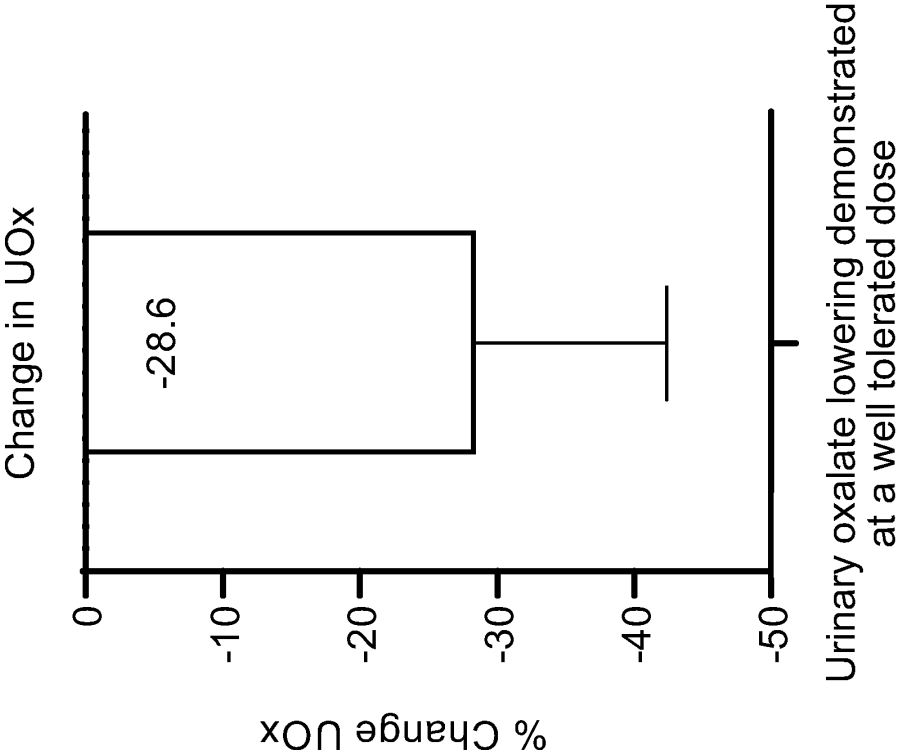


FIG. 15B

SYNB8802 3e11 live cells dose  
advancing to Ph1B in patients

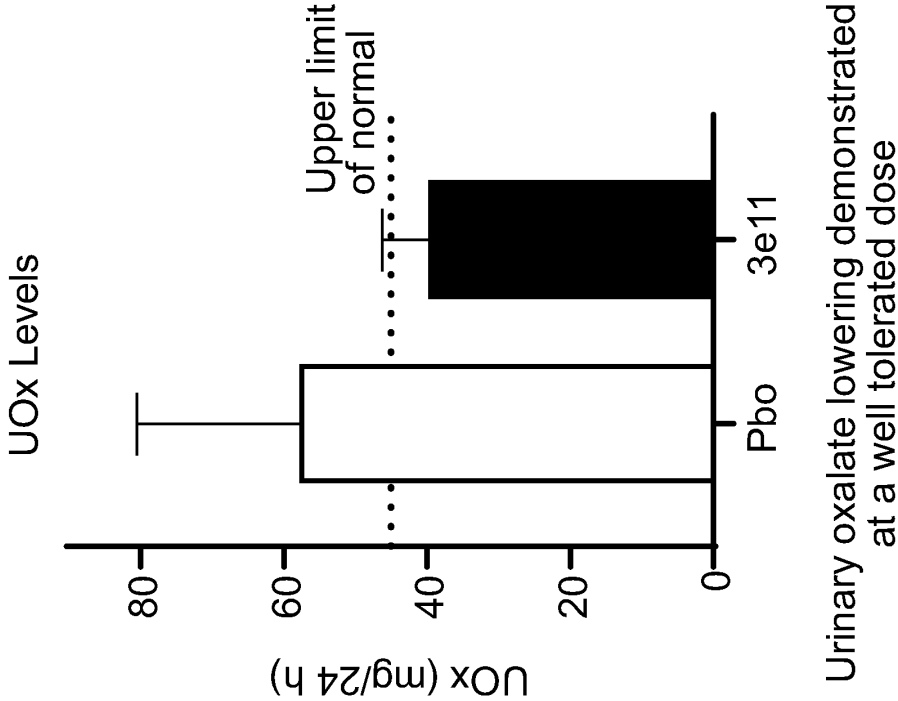
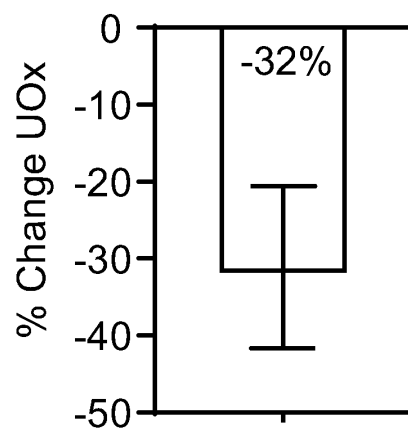


FIG. 16

SYNB8802 % Change from pbo UOx

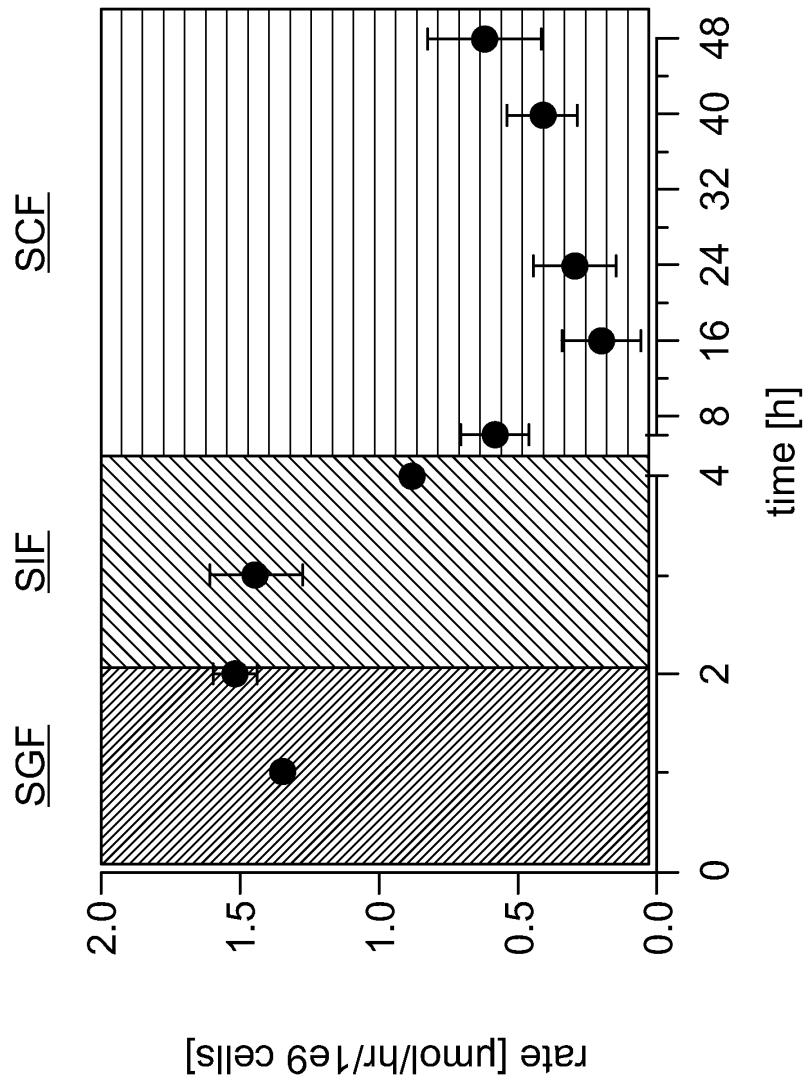


HV Cohort

LS Mean % change over pbo +/- SEM

3e11 dose advancing to Part B, EH patients

FIG. 17



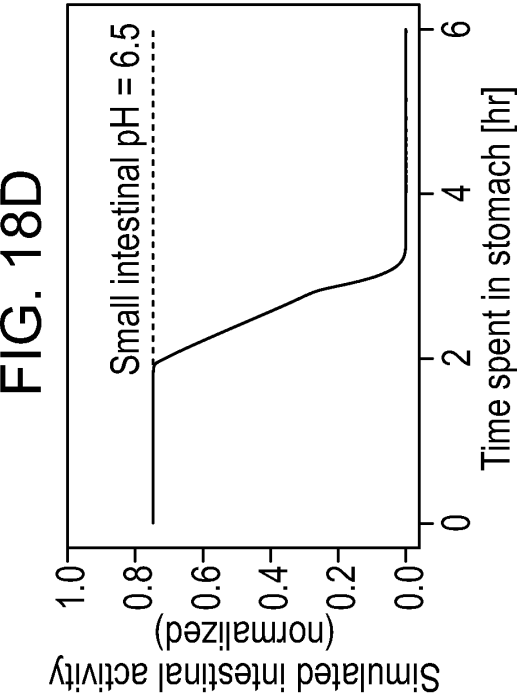
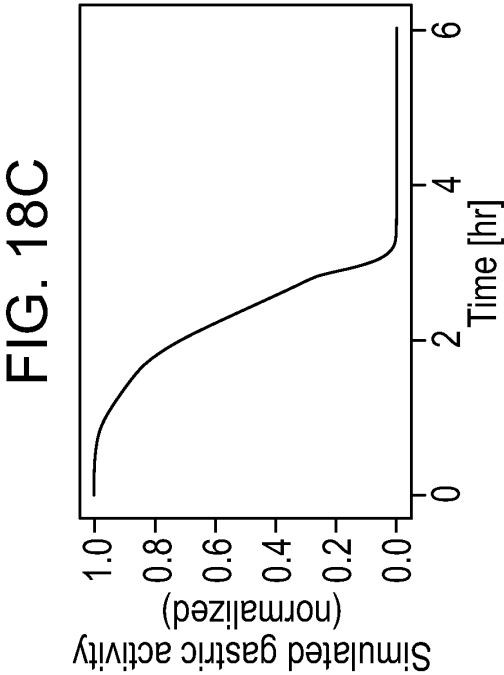
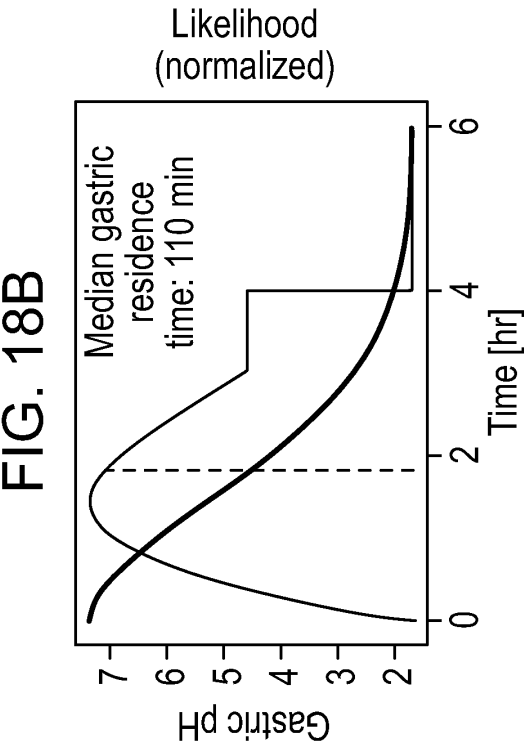
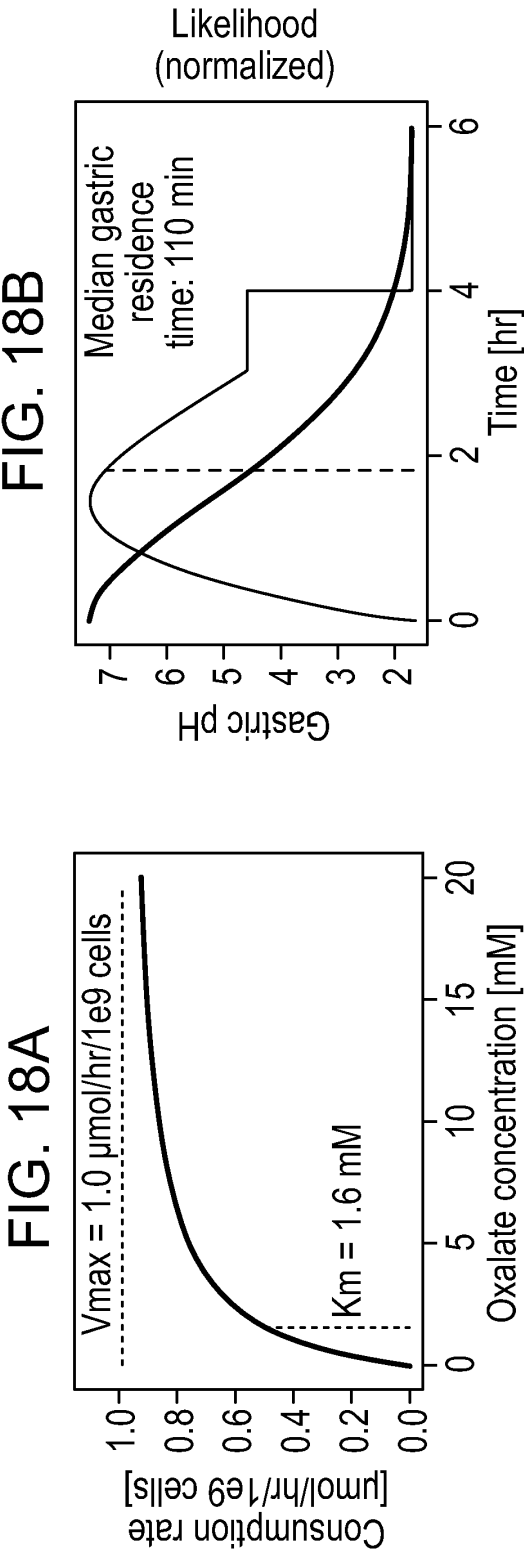


FIG. 19A

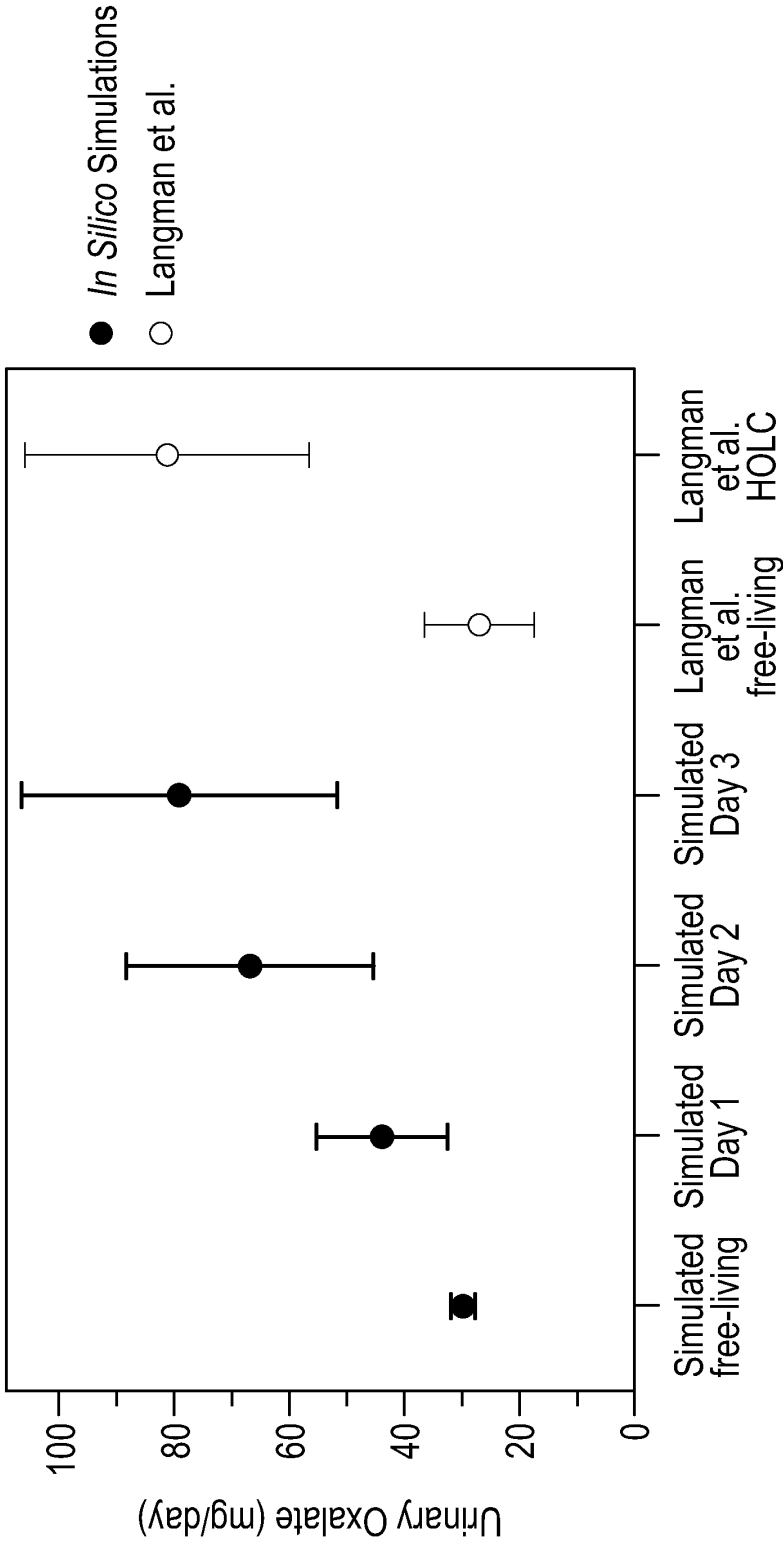
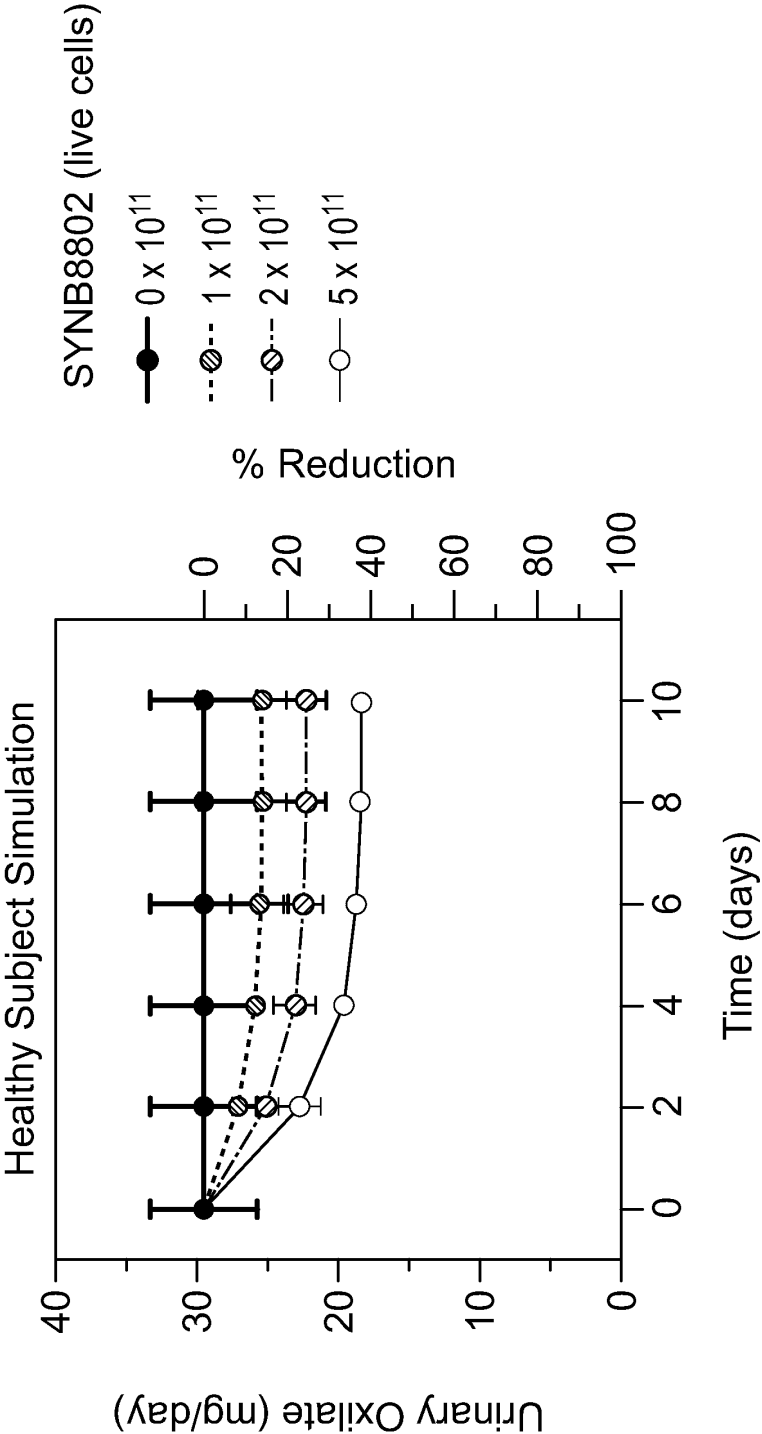


FIG. 19B



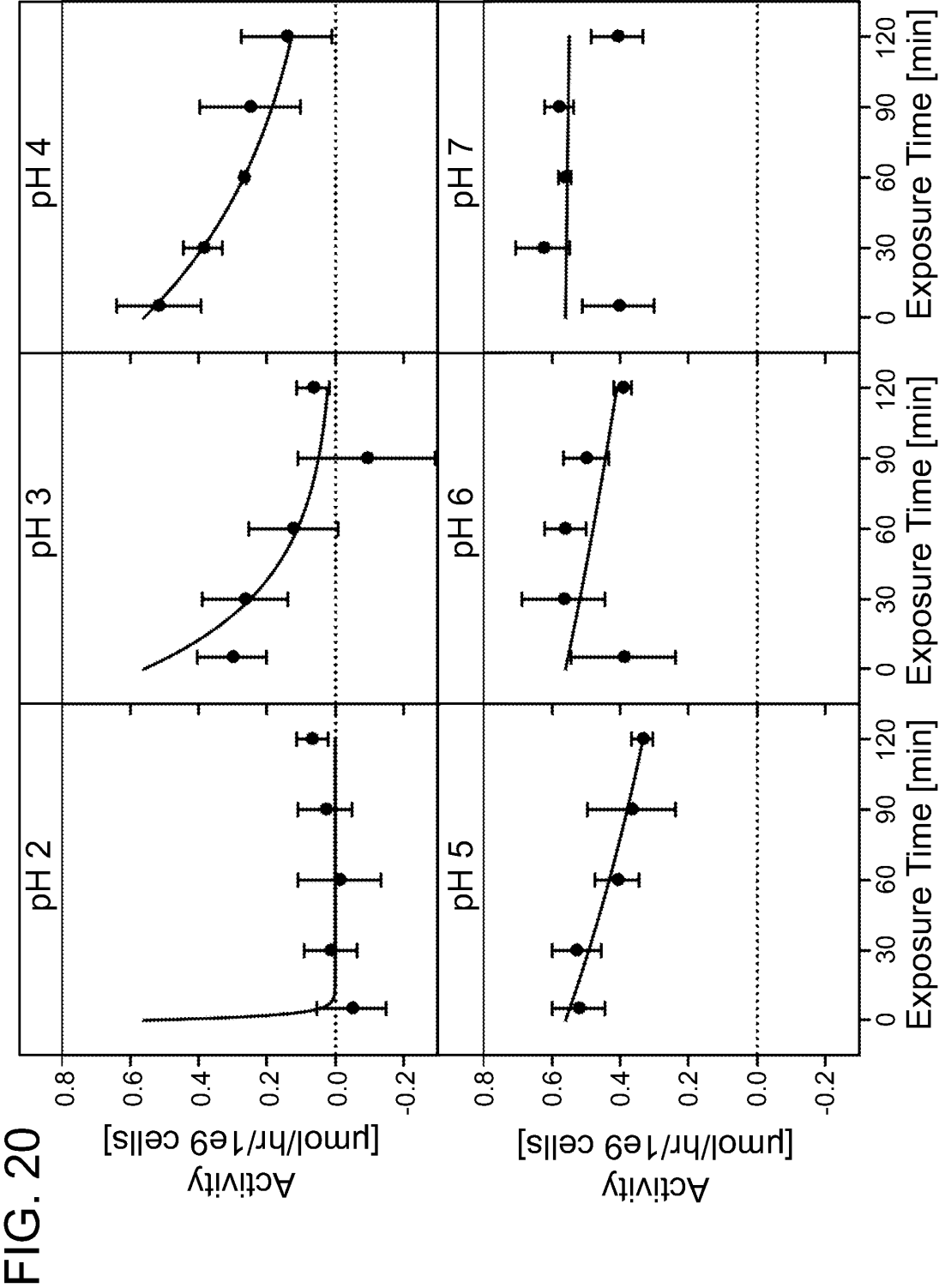
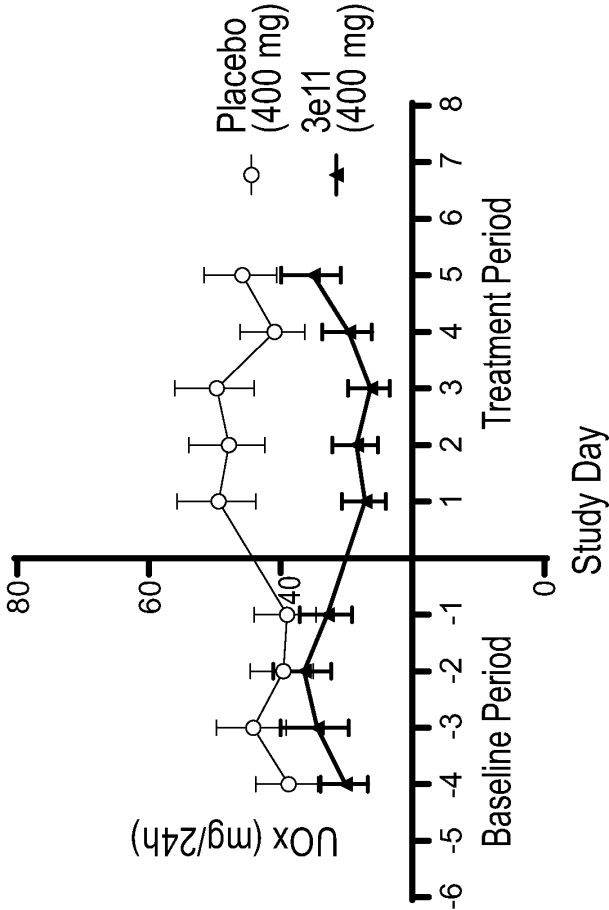


FIG. 21A  
400 mg Oxalate Diet

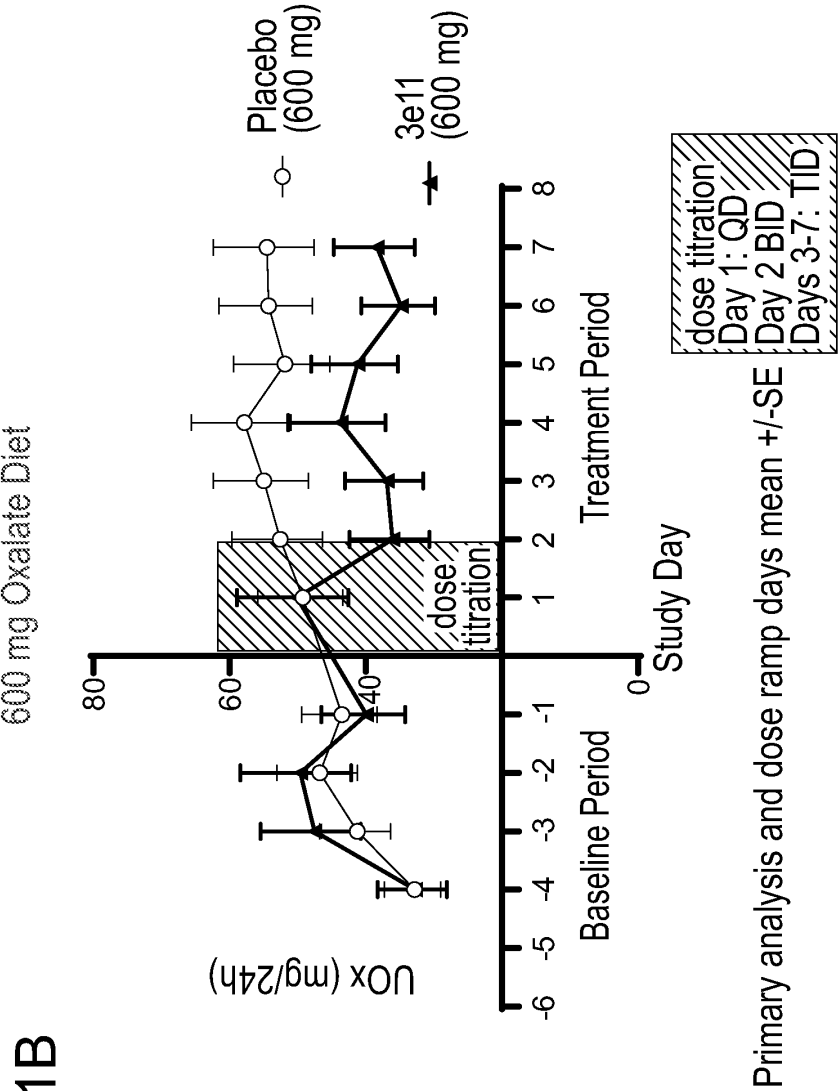


Primary analysis, mean +/-SE

Dietary hyperoxaluria reaches steady state after  
6 days of diet (on Day 2 of dosing)

SYNB8802 3e11 dose  
T1D normalizes UOx levels

FIG. 21B



Primary analysis and dose ramp days mean  $\pm$  SE

Dietary hyperoxaluria reaches steady state after 6 days of diet (on Day 2 of dosing)

SYNB8802 3e11 dose  
TID normalizes UOx levels

FIG. 22

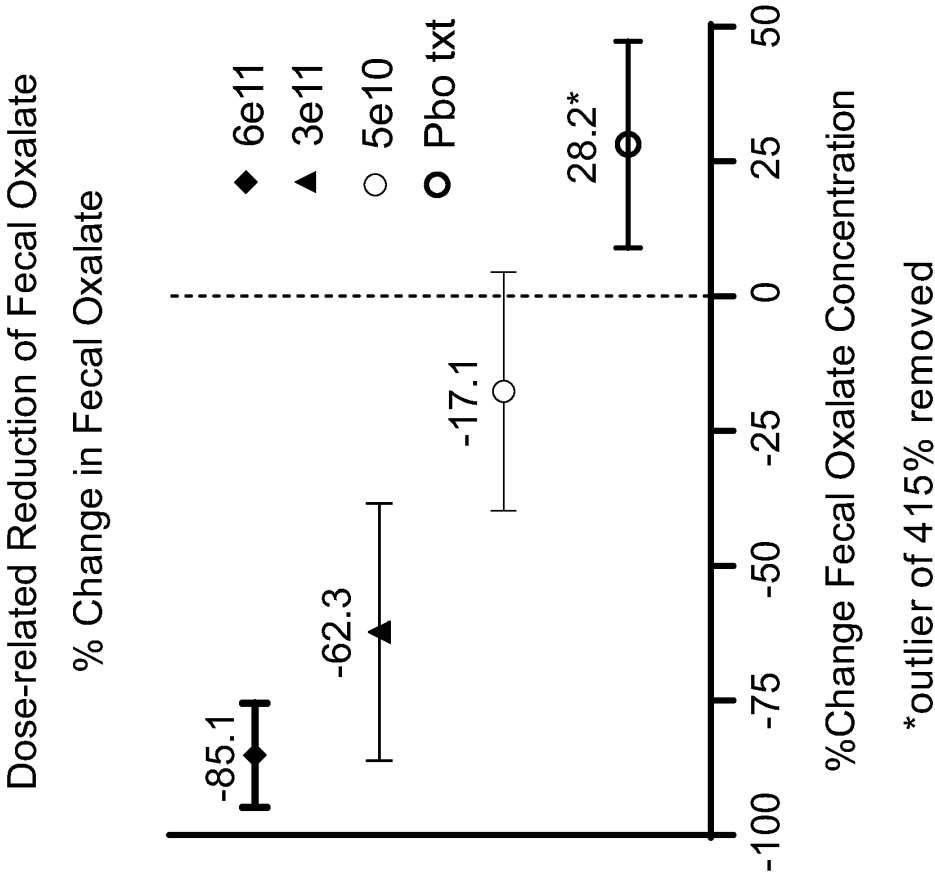


FIG. 23  
Part 1a Study Design

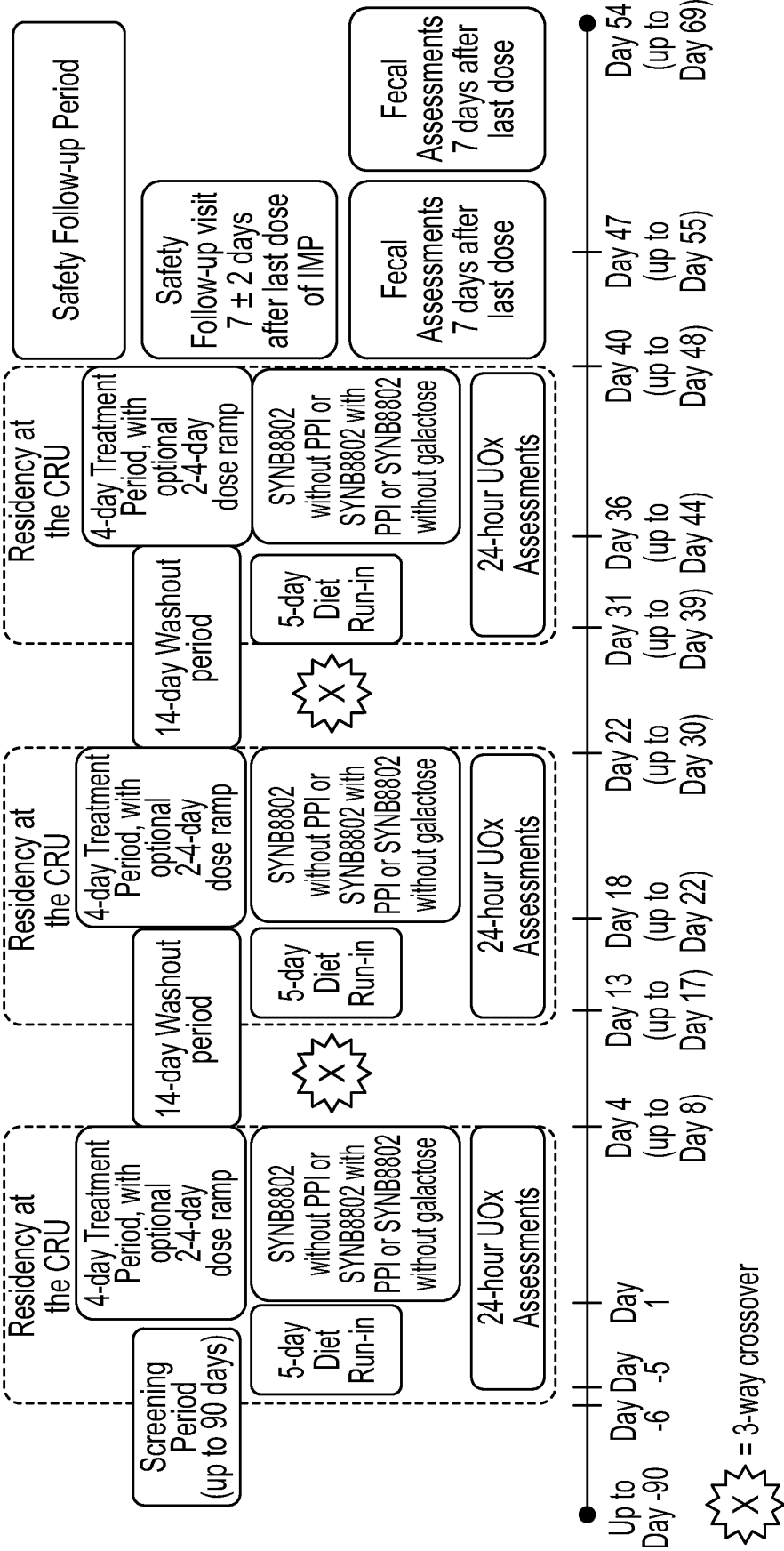


FIG. 24

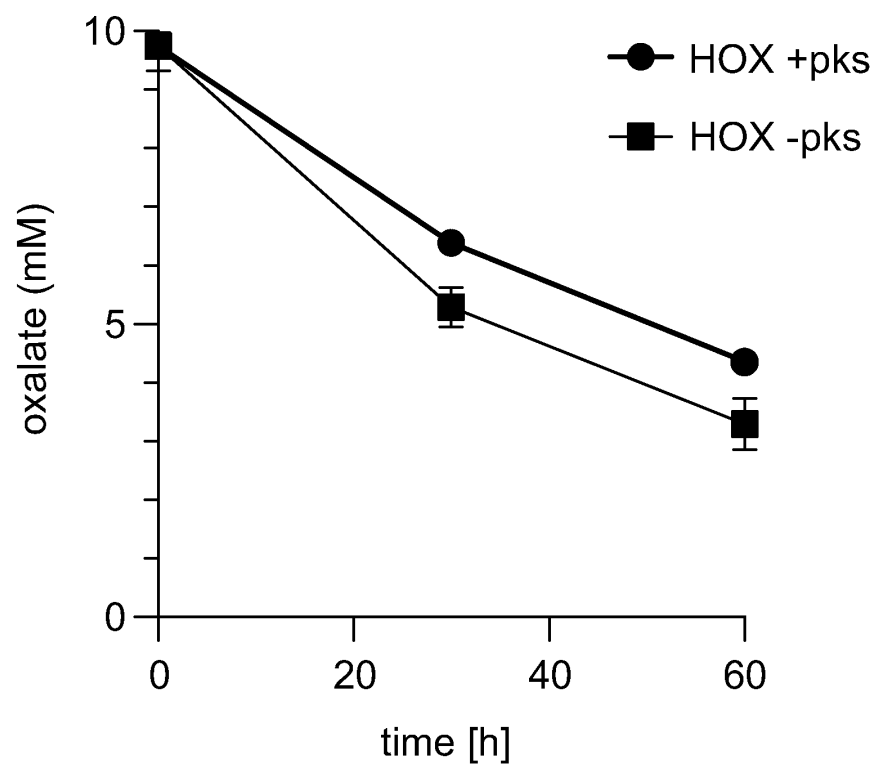
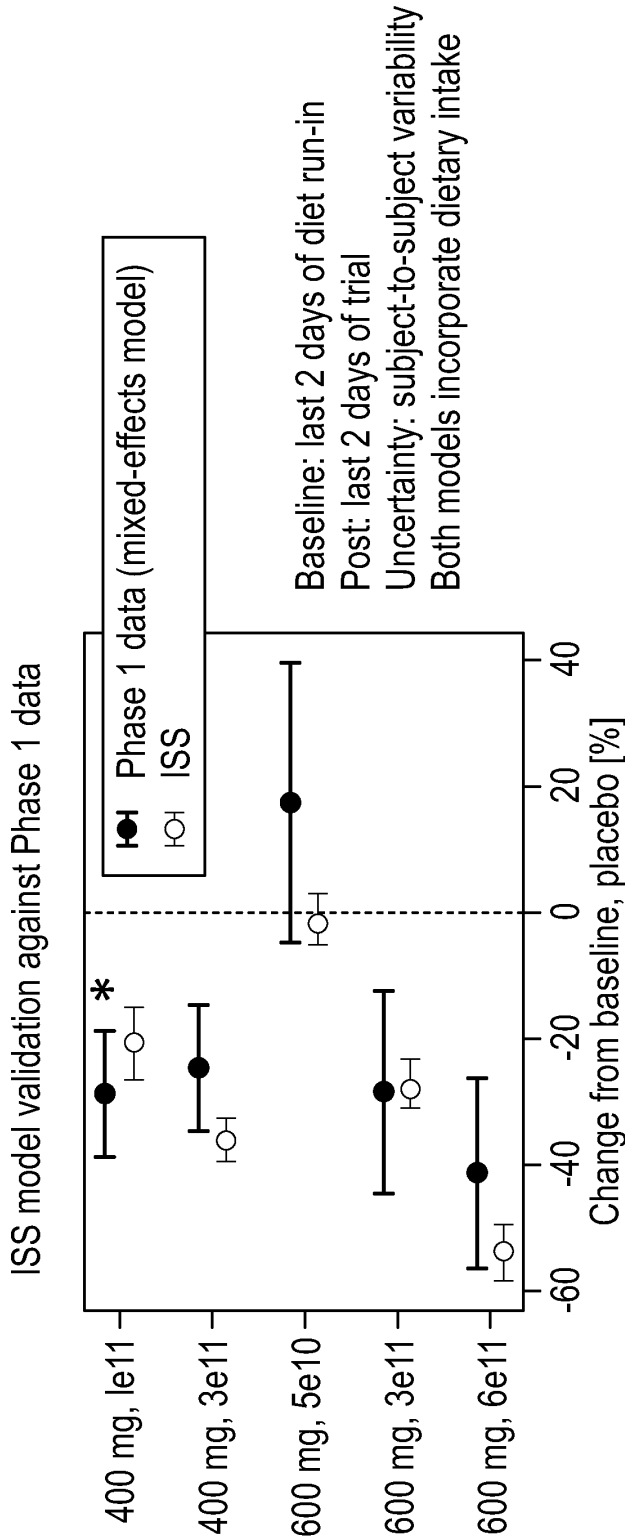


FIG. 25



\* Cohort 1: inconsistent adherence to target dietary intake

$$100 * \left( \frac{\text{Treatment post}}{\text{Treatment baseline}} * \frac{\text{Placebo baseline}}{\text{Placebo post}} - 1 \right)$$

FIG. 26

