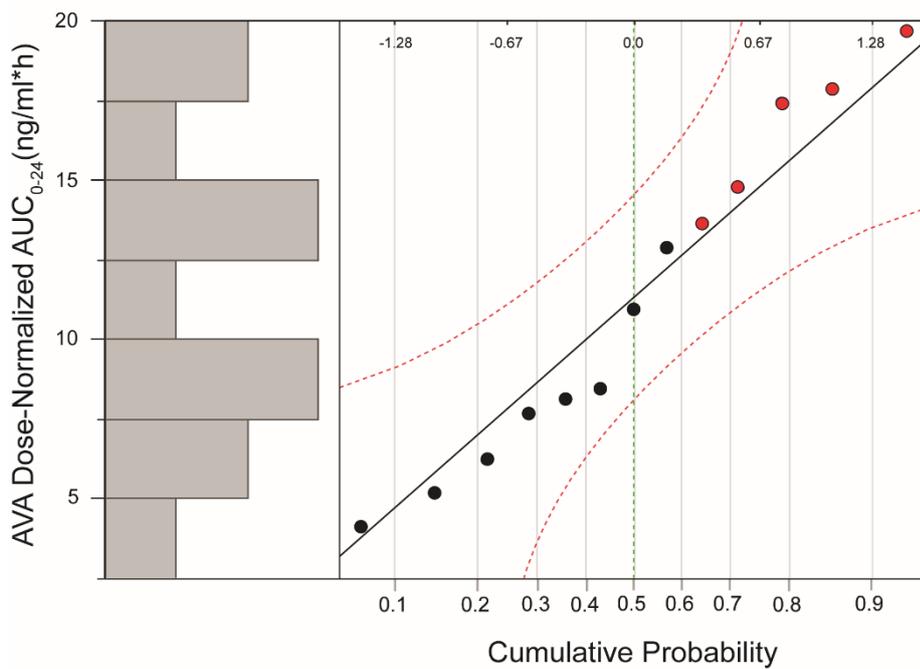
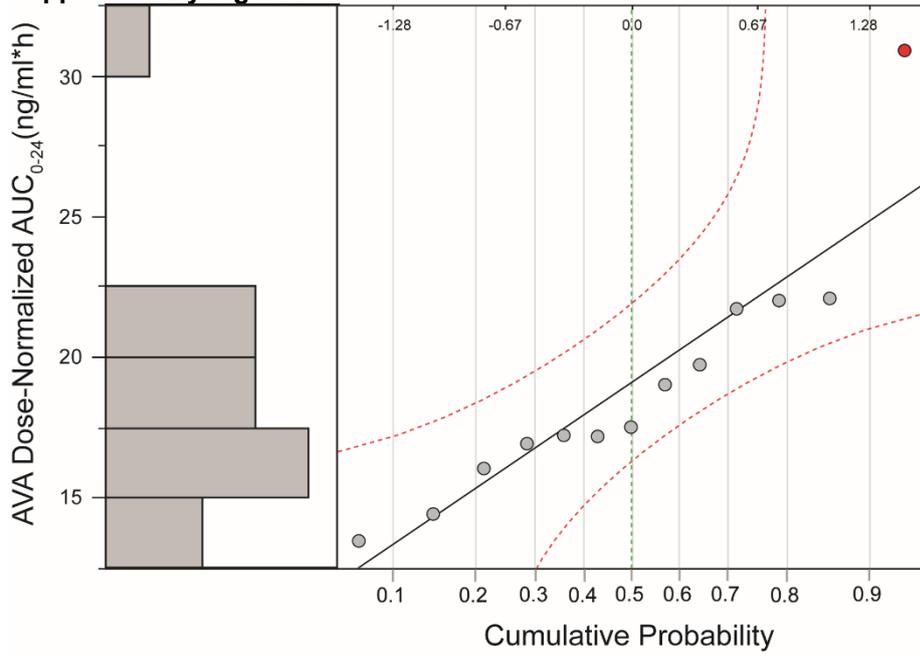


Supplementary Figures



Supplemental Figure S1. The normal distribution plots for AVA AUC₀₋₂₄ (ng/ml*h) amongst the c.521T/C and c.521T/T genotypes. Gray circles denote participants with the c.521T/C genotype (n=12). Black circles denote participants with the c.521T/T genotype (n=7). Red circles denote "high exposure subgroup" participants (c.521T/T, n=5; c.521T/C, n=1).

Supplemental Table S1. Pharmacokinetic parameters amongst the entire cohort.

| | AVA | AVL | 2-OH AVA | 2-OH AVL |
|-------------------------------|------------------|----------------|---------------|-----------------|
| Cmax (ng/ml) | 2.2 (1.6-3.5) | 0.9 (0.7-1.2) | 0.7 (0.5-1.0) | 1.1 (0.8-1.6) |
| AUC ₀₋₂₄ (ng/ml*h) | 17.1 (11.5-19.7) | 8.7 (4.0-15.0) | 6.4 (4.8-9.4) | 14.5 (5.5-24.1) |

Data expressed as median (IQR).

Supplemental Table S2. Correlations between demographic parameters and systemic exposure

| | AVA | AVL | 2-OH AVA | 2-OH AVL |
|--------------------------|--------------|----------------|--------------|-----------------|
| Age (yr) | 0.10 (0.60) | -0.44 (0.02) | 0.33 (0.09) | -0.41 (0.03) |
| Height (cm) | -0.07 (0.73) | -0.61 (<0.001) | 0.10 (0.60) | -0.60 (<0.001) |
| Height (Z-Score) | -0.22 (0.23) | 0.07 (0.72) | -0.33 (0.09) | 0.06 (0.74) |
| Weight (kg) | 0.09 (0.63) | -0.68 (<0.001) | 0.10 (0.59) | -0.81 (<0.0001) |
| Weight (Z-score) | 0.20 (0.33) | -0.39 (0.04) | 0.03 (0.89) | -0.57 (0.001) |
| BMI (kg/m ²) | 0.14 (0.53) | -0.57 (0.001) | 0.09 (0.65) | -0.73 (<0.0001) |
| BMI (Z-score) | 0.28 (0.14) | -0.28 (0.15) | 0.12 (0.54) | -0.48 (0.009) |

Data expressed as correlation coefficient R values and (p-values).

Supplement Table S3. Atorvastatin and atorvastatin analyte parameters stratified by demographic and developmental parameters

| | AVA AUC ₀₋₂₄ (ng/ml*h) | AVL AUC ₀₋₂₄ (ng/ml*h) | 2-OH AVA AUC ₀₋₂₄ (ng/ml*h) | 2-OH AVL AUC ₀₋₂₄ (ng/ml*h) |
|---------------------|---|---|--|--|
| Gender | | | | |
| Female | 15.7 (± 6.0) | 12.1 (± 9.3) | 7.3 (± 2.8) | 18.0 (± 12.1) |
| Male | 17.1 (± 8.7) | 10.7 (± 9.5) | 7.0 (± 3.5) | 15.7 (± 13.2) |
| p value | 0.56 | 0.76 | 0.56 | 0.53 |
| Ethnicity | | | | |
| White, non-Hispanic | 15.0 (± 6.1) | 10.0 (± 7.7) | 6.9 (± 2.7) | 16.4 (± 12.9) |
| White, Hispanic | 18.7 (± 9.4) | 13.2 (± 11.9) | 7.6 (± 4.0) | 17.2 (± 13.8) |
| African-American | 14.0 (± 0.7) | 11.4 (± 1.1) | 6.1 (± 0.1) | 16.7 (± 2.7) |
| p value | 0.26 | 0.72 | 0.96 | 0.89 |
| Tanner | | | | |
| Breast/Testicular | | | | |
| Stage 1 | N/A | N/A | N/A | N/A |
| Stage 2 | 17.9 (± 11.2) | 23.3 (± 11.5) | 6.0 (± 2.0) | 31.9 (± 13.5) |
| Stage 3 | 19.1 | 17.3 | 6.0 | 23.4 |
| Stage 4 | 9.2 (± 5.6) | 7.9 (± 6.2) | 4.7 (± 2.1) | 13.4 (± 10.6) |
| Stage 5 | 17.5 (± 6.2) | 8.5 (± 6.5) | 8.1 (± 3.3) | 12.9 (± 9.9) |
| p value | 0.20 | 0.04 | 0.13 | 0.05 |
| Pubic | | | | |
| Stage 1 | 8.5 | 15.4 | 5.1 | 39.2 |

| | | | | |
|---------|-------------------|-------------------|------------------|--------------------|
| Stage 2 | 23.0 (\pm 8.5) | 27.7 (\pm 7.9) | 6.7 (\pm 1.9) | 32.7 (\pm 11.1) |
| Stage 3 | 8.1 | 7.8 | 4.1 | 12.7 |
| Stage 4 | 6.4 (\pm 1.3) | 5.0 (\pm 2.5) | 3.6 (\pm 0.1) | 8.5 (\pm 5.8) |
| Stage 5 | 17.5 (\pm 6.0) | 8.9 (\pm 6.6) | 8.0 (\pm 3.3) | 13.7 (\pm 10.2) |
| p value | 0.02 | 0.02 | 0.04 | 0.05 |

All data expressed as mean (\pm SD); Kruskal-Wallis test used for all analyses.