# Physiology

## Demography of Sick adults 400mg sd vs. simulated Sick Adult Population

Figure : Distribution of age for simulated Sick Adult Population.



Figure : Distribution of body weight for simulated Sick Adult Population.



Figure : Distribution of body height for simulated Sick Adult Population.



Figure : Distribution of BMI for simulated Sick Adult Population.



Figure : Distribution of body surface area for simulated Sick Adult Population.



Figure : Distribution of gender for simulated Sick Adult Population.



## Demography of Healthy adults 400mg sd vs. simulated Healthy Adult Population

Figure : Distribution of age for simulated Healthy Adult Population.



Figure : Distribution of body weight for simulated Healthy Adult Population.



Figure : Distribution of body height for simulated Healthy Adult Population.



Figure : Distribution of BMI for simulated Healthy Adult Population.



Figure : Distribution of body surface area for simulated Healthy Adult Population.



Figure : Distribution of gender for simulated Healthy Adult Population.



# Pkparameter

## PK parameter of Raltegravir

### Cmax

Figure : Cmax of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : Cmax of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of Cmax of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Cmax [µg/l]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 2170.07 | 2890.76 | 3518.52 | 4223.81 | 5208.24 | 3588.82 | 933.06 | 3464.35 | 0.28 |
| **Healthy adults 400mg sd** | 2491.37 | 3024.72 | 3833.93 | 4453.89 | 5322.23 | 3812.11 | 909.05 | 3703.45 | 0.25 |

### Cmax norm

Figure : Cmax norm of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : Cmax norm of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of Cmax norm of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Cmax norm [kg/l]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.38 | 0.49 | 0.60 | 0.72 | 0.83 | 0.61 | 0.15 | 0.59 | 0.26 |
| **Healthy adults 400mg sd** | 0.35 | 0.53 | 0.62 | 0.71 | 0.85 | 0.62 | 0.14 | 0.60 | 0.24 |

### tmax

Figure : tmax of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : tmax of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of tmax of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Tmax [h]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.50 | 0.65 | 0.80 | 0.95 | 1.05 | 0.79 | 0.18 | 0.77 | 0.24 |
| **Healthy adults 400mg sd** | 0.53 | 0.60 | 0.75 | 0.88 | 1.08 | 0.76 | 0.17 | 0.74 | 0.23 |

### CtEnd

Figure : CtEnd of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : CtEnd of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of CtEnd of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **CtEnd [µg/l]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 21.02 | 26.70 | 33.80 | 48.59 | 89.50 | 42.52 | 26.89 | 37.37 | 0.50 |
| **Healthy adults 400mg sd** | 20.02 | 26.23 | 32.62 | 44.74 | 100.01 | 41.00 | 28.37 | 35.86 | 0.49 |

### AUClast

Figure : AUClast of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : AUClast of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of AUClast of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **AUClast [µg\*h/l]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 6605.82 | 8021.28 | 9559.78 | 12089.12 | 15359.84 | 10032.68 | 2669.60 | 9693.97 | 0.27 |
| **Healthy adults 400mg sd** | 6603.74 | 8223.13 | 9760.54 | 11853.28 | 15888.00 | 10257.53 | 2720.04 | 9917.85 | 0.26 |

### AUClast norm

Figure : AUClast norm of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : AUClast norm of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of AUClast norm of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **AUClast norm [kg\*h/l]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 1.08 | 1.33 | 1.60 | 2.01 | 2.76 | 1.72 | 0.54 | 1.65 | 0.30 |
| **Healthy adults 400mg sd** | 1.01 | 1.36 | 1.57 | 1.98 | 2.50 | 1.68 | 0.45 | 1.62 | 0.28 |

### AUCinf

Figure : AUCinf of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : AUCinf of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of AUCinf of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **AUCinf [µg\*h/l]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 7016.08 | 8564.96 | 10105.45 | 12824.73 | 16054.00 | 10623.25 | 2755.50 | 10288.34 | 0.26 |
| **Healthy adults 400mg sd** | 7045.52 | 8615.76 | 10604.55 | 12531.41 | 16576.68 | 10889.30 | 2831.51 | 10536.57 | 0.26 |

### AUCinf norm

Figure : AUCinf norm of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : AUCinf norm of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of AUCinf norm of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **AUCinf norm [kg\*h/l]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 1.17 | 1.43 | 1.66 | 2.13 | 2.88 | 1.83 | 0.56 | 1.75 | 0.29 |
| **Healthy adults 400mg sd** | 1.07 | 1.47 | 1.71 | 2.11 | 2.60 | 1.78 | 0.47 | 1.72 | 0.27 |

### MRT

Figure : MRT of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : MRT of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of MRT of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **MRT [h]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 4.38 | 4.81 | 5.28 | 5.99 | 10.42 | 6.07 | 2.78 | 5.74 | 0.30 |
| **Healthy adults 400mg sd** | 4.25 | 4.77 | 5.13 | 5.65 | 12.82 | 5.98 | 3.12 | 5.58 | 0.33 |

### Thalf

Figure : Thalf of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : Thalf of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of Thalf of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Thalf [h]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 5.23 | 7.72 | 8.96 | 10.99 | 16.46 | 9.62 | 3.19 | 9.18 | 0.31 |
| **Healthy adults 400mg sd** | 6.34 | 8.06 | 9.51 | 11.34 | 16.38 | 10.05 | 3.10 | 9.65 | 0.28 |

### CL

Figure : CL of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : CL of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of CL of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **CL [ml/min/kg]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 5.80 | 7.82 | 10.02 | 11.62 | 14.21 | 9.91 | 2.72 | 9.53 | 0.29 |
| **Healthy adults 400mg sd** | 6.40 | 7.88 | 9.77 | 11.33 | 15.62 | 10.05 | 2.78 | 9.70 | 0.27 |

### Vss

Figure : Vss of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : Vss of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of Vss of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Vss [ml/kg]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 1943.85 | 2535.85 | 3238.75 | 3858.09 | 6701.23 | 3592.19 | 2126.19 | 3278.98 | 0.40 |
| **Healthy adults 400mg sd** | 2041.95 | 2565.38 | 3040.82 | 3595.30 | 8114.22 | 3539.45 | 1827.93 | 3248.12 | 0.39 |

### Vd

Figure : Vd of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a linear scale.



Figure : Vd of Raltegravir shown as box whisker plot, which indicate the 5th, 25th, 50th, 75th, and 95th percentiles in a logarithmic scale.



Table -:Percentile of Vd of Raltegravir.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Vd [ml/kg]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 3612.28 | 5910.83 | 7500.63 | 10552.35 | 16212.23 | 8465.13 | 4277.77 | 7567.89 | 0.50 |
| **Healthy adults 400mg sd** | 4115.50 | 5974.29 | 8186.87 | 10743.88 | 15233.47 | 8799.38 | 3606.14 | 8105.17 | 0.43 |

## PK parameter of Raltegravir as fraction of healthy adults 400mg sd

### Cmax

Figure : Cmax of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : Cmax of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of Cmax of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Cmax [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.51 | 0.71 | 0.93 | 1.26 | 1.68 | 1.01 | 0.42 | 0.94 | 0.42 |

### Cmax norm

Figure : Cmax norm of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : Cmax norm of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of Cmax norm of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Cmax norm [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.53 | 0.76 | 0.96 | 1.27 | 1.84 | 1.04 | 0.39 | 0.98 | 0.38 |

### tmax

Figure : tmax of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : tmax of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of tmax of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Tmax [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.62 | 0.82 | 1.06 | 1.27 | 1.83 | 1.10 | 0.37 | 1.04 | 0.35 |

### CtEnd

Figure : CtEnd of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : CtEnd of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of CtEnd of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **CtEnd [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.36 | 0.69 | 0.99 | 1.51 | 3.07 | 1.28 | 0.92 | 1.04 | 0.73 |

### AUClast

Figure : AUClast of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : AUClast of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of AUClast of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **AUClast [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.55 | 0.74 | 1.00 | 1.26 | 1.74 | 1.04 | 0.38 | 0.98 | 0.38 |

### AUClast norm

Figure : AUClast norm of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : AUClast norm of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of AUClast norm of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **AUClast norm [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.56 | 0.74 | 1.04 | 1.32 | 1.86 | 1.10 | 0.41 | 1.02 | 0.41 |

### AUCinf

Figure : AUCinf of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : AUCinf of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of AUCinf of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **AUCinf [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.55 | 0.74 | 1.01 | 1.22 | 1.75 | 1.04 | 0.37 | 0.98 | 0.36 |

### AUCinf norm

Figure : AUCinf norm of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : AUCinf norm of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of AUCinf norm of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **AUCinf norm [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.58 | 0.76 | 1.04 | 1.31 | 1.85 | 1.09 | 0.42 | 1.02 | 0.40 |

### MRT

Figure : MRT of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : MRT of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of MRT of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **MRT [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.44 | 0.86 | 1.01 | 1.20 | 1.89 | 1.14 | 0.61 | 1.03 | 0.48 |

### Thalf

Figure : Thalf of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : Thalf of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of Thalf of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Thalf [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.50 | 0.77 | 0.92 | 1.14 | 2.22 | 1.03 | 0.45 | 0.95 | 0.41 |

### CL

Figure : CL of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : CL of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of CL of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **CL [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.54 | 0.76 | 0.96 | 1.32 | 1.72 | 1.06 | 0.41 | 0.98 | 0.40 |

### Vss

Figure : Vss of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : Vss of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of Vss of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Vss [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.38 | 0.71 | 1.01 | 1.36 | 2.42 | 1.19 | 0.98 | 1.01 | 0.59 |

### Vd

Figure : Vd of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a linear scale.



Figure : Vd of Raltegravir shown as box whisker plot, which indicate the 5, 25, 50, 75, and 95 percentiles in a logarithmic scale.



Table -:Percentile of Vd of Raltegravir normalized to individuals of Healthy adults 400mg sd.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | |
| **Vd [fraction of healthy adults 400mg sd]** |  |  |  |  |  |  |  |  |  |
|  | 5th prctl. | 25th prctl. | 50th prctl. | 75th prctl. | 95th prctl. | arith. mean | std | geo. mean | geo. CV |
| **Sick adults 400mg sd** | 0.40 | 0.59 | 0.95 | 1.36 | 2.48 | 1.10 | 0.74 | 0.93 | 0.61 |

# Timeprofile

## Time profiles for Healthy adults 400mg sd

### Time profiles of Raltegravir

Figure : Time profiles of Raltegravir for Healthy adults 400mg sd. Time profiles are plotted in a linear scale.



Figure : Time profiles of Raltegravir for Healthy adults 400mg sd. Time profiles are plotted in a logarithmic scale.



## Time profiles for Sick adults 400mg sd

### Time profiles of Raltegravir

Figure : Time profiles of Raltegravir for Sick adults 400mg sd compared to simulated Raltegravir for Healthy adults 400mg sd. Time profiles are plotted in a linear scale.



Figure : Time profiles of Raltegravir for Sick adults 400mg sd compared to simulated Raltegravir for Healthy adults 400mg sd. Time profiles are plotted in a logarithmic scale.

