

Appendix: Comprehensive List of PK Parameters

Single Dose PK Parameters (blood, plasma, or serum)

PK Parameter	Definition of PK Parameter
AUCinf	Area under the plasma concentration-time curve from time zero extrapolated to infinity
AUCall	Area under the plasma concentration-time curve from zero to the time of the last sampling time point
AUC0-t	Area under the concentration-time curve from zero to a definite time t
AUClast	Area under the concentration-time curve from zero to the last concentration quantifiable concentration
AUC%Extrap	Area under the concentration-time curve extrapolated from last measurable concentration to infinity in % of the total AUC
C	Plasma or serum concentration
Cu	Unbound plasma concentration
CL	Total plasma, serum or blood clearance of drug after intravenous administration
CL/F	Apparent total plasma, serum or blood clearance of drug after extravascular administration
CLint	Intrinsic clearance – maximum elimination capacity of the liver
CLcr	Creatinine clearance
CLm	Metabolic clearance
Clast	Last analytically quantifiable plasma or serum concentration
Cmax	Maximum observed plasma or serum concentration
D	Dose administered
f	Fraction of the administered dose systemically available
F	Absolute bioavailability, systemic availability in %
frel	Relative systemic exposure in comparison to a reference formulation or route of administration (not iv)
Frel	Relative bioavailability in %
Frel (AUCinf)	$(AUC_{inf \text{ test}})/(AUC_{inf \text{ reference}})*100$
Frel (Cmax)	$(C_{max \text{ test}})/(C_{max \text{ reference}})*100$
fm	Fraction of the bioavailable dose which is metabolized
fu	Fraction of unbound (not protein-bound) drug in plasma or serum
λ_z	Terminal elimination-phase rate constant
LLOQ	Lower limit of quantification
MAT	Mean absorption time
MDT	Mean dissolution time
MRT	Mean residence time (of the unchanged drug in the systemic circulation)
$t_{1/2}$	Terminal elimination half-life
tlag	Lag-time (time delay between drug administration and first observed concentration above LLOQ in plasma)
Tlast	Time of last analytically quantifiable concentration
Tmax	Observed time to reach Cmax
Vss	Apparent volume of distribution at equilibrium determined after intravenous administration
Vz	Volume of distribution during terminal elimination phase after intravenous administration
Vz/F	Apparent volume of distribution during terminal elimination phase after extravascular administration

Appendix: Comprehensive List of PK Parameters (continued)

Multiple Dose PK Parameters (at steady state; blood, plasma, or serum)

PK Parameter	Definition of PK Parameter
AUC _τ AUC _{tau} AUC _{ss}	Area under the concentration-time curve during a dosing interval at steady state
AUCF%	Percent fluctuation of the concentrations determined from areas under the curve
C _{avg} C _{avg,ss}	Average plasma or serum concentration at steady state
C _{max} C _{max,ss}	Maximum observed plasma or serum concentration during a dosing interval at steady state
C _{min} C _{min,ss}	Minimum observed plasma or serum concentration during a dosing interval at steady state
C _{trough}	Measured concentration at the end of a dosing interval at steady state (taken directly before next administration)
DM	Maintenance dose
% Fluctuation	Fluctuation in plasma concentrations at steady-state calculated as $(C_{max,ss} - C_{min,ss}) / C_{avg,ss}$
R _{acc} or Accum Ratio or Accumulation Ratio	Accumulation ratio calculated from AUC _T at steady state and AUC _T after single dosing
T _{max} T _{max,ss}	Time to reach the observed maximum (peak) concentration at steady state
τ	Dosing interval