

## APPENDIX

**Accuracy:** The extent to which an experimentally determined value agree with the true value.

**AUC (Area under the curve):** The AUC is the measure of the total amount of intact drug absorbed that reaches the systemic circulation. It is calculated from the integral of total area under the concentration-time curve, from time zero to infinity. The AUC symbol may be qualified by specific time ( $AUC_{0-12}$ ), time of last quantifiable concentration ( $AUC_{0-t}$ ), or infinity ( $AUC_{0-\infty}$ ). AUC is calculated from observed data at specific time points. The unit of AUC is a unit of drug concentration multiplied by time (e.g., ng.h/ml).

**Bioavailability:** The rate and extent of administered dose of drug which reaches the systemic circulation.

**Calibration standard:** A biological matrix to which a known amount of analyte has been added or spiked. Calibration standard are used to construct calibration curves from which the concentrations of analytes in quality control and in unknown study samples are determined.

**Elimination half-life ( $t_{1/2}$ ):**  $t_{1/2}$  is the time taken for the amount of drug in the body (or the plasma concentration) to fall by half. The unit for  $t_{1/2}$  is the unit of time (e.g., h, min).

**Internal standard (IS):** Test compound (s) (e.g. structurally analog, stable labeled compound) added to both calibration standards and samples at known and constant concentration of facilitate quantification of the target analyte (s).

**Maximum serum concentration ( $C_{\max}$ ):**  $C_{\max}$  represent the maximal or the peak serum drug concentration after drug administration. The unit for  $C_{\max}$  is a concentration unit (e.g., ng/mL)

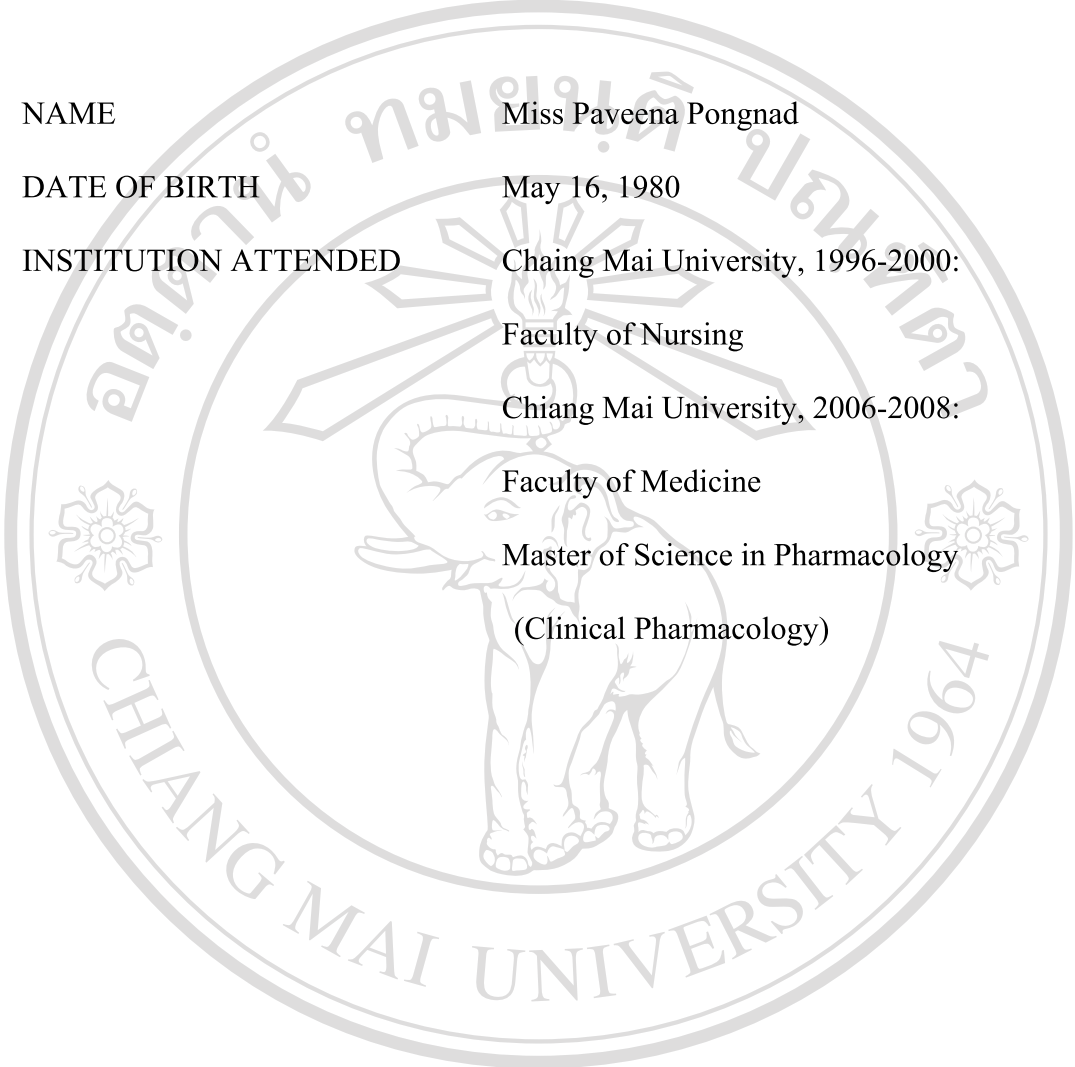
**Pharmacokinetics:** Pharmacokinetics is one of the two basic areas of pharmacology, in addition to pharmacodynamics. It deals with the quantification of the process of drug absorption, distribution, biotransformation, and excretion. These factors, coupled with prescribed drug dose, determine the time course of drug concentration *in vivo*. Pharmacokinetics studies of drug are clinically useful to predict the intensity of drug effects if the relationship exists between the drug concentrations and pharmacologic or toxic effects of drugs.

**Precision:** The closeness of agreement of values obtained in analysis of replicate samples of the sample specimen, usually indicated by the coefficient of variation.

**Stability:** The chemical stability of an analyte in a given matrix under specific condition for given time intervals.

**Standard curve:** The relationship between the experiment response value and analytical concentration (also called a calibration curve).

**The time to reach the maximal serum concentration ( $T_{\max}$ ):** The time after drug administration at which  $C_{\max}$  is observed.

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