Remington Education

Pharmaceutics

Shelley Chambers Fox





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Preface

This text is written to provide students studying for a doctorate in pharmacy with an overview of pharmaceutics that connects this science to the practice of pharmacy. The presentation that follows is a result of the judicious consideration of the subject matter of pharmaceutics in light of what today's pharmacists do and what future pharmacists will do in their practices. These carefully selected, essential principles are presented in concise form accompanied by examples of their application.

The first six chapters present the fundamental principles relating to the behavior of solids, solutions and dispersed systems, solubility, stability, and the processes that move drugs from the dosage form to the portion of the body where the drug's receptor is located. The reader is introduced to the scientific basis of generic substitution in the chapter on bioavailability and bioequivalence. The remaining chapters present drug delivery organized by route of administration.

Each chapter reinforces the same basic principles of dosage form design: drug chemistry considerations, materials and methods to prepare a dosage form with the desired qualities and characteristics of the route in which these systems are administered to deliver a drug to its receptors.

I am grateful to my students whose intelligence and enthusiasm have shaped my teaching, and to my husband, Larry Fox, for his energetic support of this project.

About the author

Shelley Chambers Fox is a registered pharmacist with experience in pharmacy practice and academia. Dr Chambers received a bachelor of pharmacy and PhD from Washington State University where her graduate work was supported by an American Foundation for Pharmaceutical Education fellowship. She has taught pharmaceutics and extemporaneous compounding at Washington State University since 1991. Dr Chambers' scholarly interests include peptide chemistry and, more recently, quality assurance for compounded products and the development of methods to improve pharmacy education. In 2012 she was recognized with the Washington State University Distinguished Teaching Award. Dr Chambers lives on a small farm in eastern Washington State with her husband, a dairy scientist, and some of his dairy cow subjects.

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Contents

Preface	xv
About the author	
Acknowledgments	xix
1 Introduction to dosage form design	1
Introduction	1
Properties of the drug	2
Qualities of the ideal dosage form	3
Pharmaceutical necessities	6
Properties of the routes of administration	8
Routes of administration	8
Parenteral routes	11
Enteral routes	11
Rectal and vaginal routes	12
Drugs applied to the skin	12
Inhalation routes: nasal and lung	12
Liberation, absorption, distribution, metabolism and elimination	
(LADME)	12
Drug liberation	13
Drug absorption and patterns of drug release	14
Drug distribution	15
Drug elimination	15
2 Intermolecular forces and the physical and pharmaceutical	al
properties of drugs	23
Introduction	24
Solid state, forces between ions and molecules, and physical	
properties of drugs	24
Types of attractive forces	24
Repulsive forces	25
Melting point	26

	Polymorphs	26
	Crystalline habit	28
	Solvates	28
	Cocrystals	28
	Amorphous solids	29
	Drug salts	30
	Drug derivatives	31
	Surface interactions and the pharmaceutical properties of drugs	31
	Particle size	31
	Adsorption	33
	Hygroscopicity and deliquescence	34
	Particle interactions and surface energy	35
	Powder flow and its improvement	35
	Solubility and dissolution	36
	Melting point, solubility and dissolution rate	37
	Predicting water solubility from desirable drug-water	en (TTC
	interactions	38
	Partitioning behavior of drug molecules: Log <i>P</i>	39
	Measurement of solubility	40
	Methods of expressing solubility	41
	Dissolution of solids	41
3	Dispersed systems	47
	Introduction	47
	Behavior of molecular solutions, colloidal dispersions, and	
	coarse dispersions	48
	Colloidal dispersions	48
	Coarse dispersions	51
	Interfacial (surface) behavior of the dispersed phase	52
	Flow and viscosity	61
	Newtonian flow	62
	Non-Newtonian flow	62
	Gels	64
4	Properties of solutions and manipulation of solubility	69
	Introduction	70
	Why solubility is important	70
	Colligative properties of molecular solutions	70

Contents	Vii
Contents	V 1

	The osmotic pressure of drug solutions	72
	Solute structure and number of dissolved particles	73
	Osmolality and osmolarity	75
	Tonicity and isotonicity	76
	Calculating tonicity of drug solutions using E value	76
	E value	77
	USP volume	79
	Manipulation of solubility	80
	Solubility and pH	80
	Predicting whether a drug will be water soluble or membrane	
	soluble at a given pH	87
	Manipulation of solubility with cosolvents	92
	Solid state manipulation	94
	Solubilizing agents	94
5	Chemical stability of drugs	107
	Introduction	107
	Common pathways of drug degradation	108
	Small drug molecules	108
	Hydrolysis	108
	Oxidation	110
	Photolysis	113
	Racemization	115
	Protein drug degradation	116
	Protein drug molecules	116
	DNA and RNA molecules	117
	Rates of drug degradation reactions	118
	Rate of drug degradation	119
	Shelf life	123
	Factors that affect shelf life	125
	Managing chemical stability problems	129
	Formulation changes	129
	Storage conditions	131
	Packaging	132
6	Drug travel from dosage form to receptor	141
	Introduction	141
	Physicochemical factors	142

	Water solubility	143
	Log P	143
	Log D	144
	pH/pK _a	144
	Molecular weight	145
	Biological factors	145
	Membrane structure and transport mechanisms	145
	Movement of drugs across membranes	147
	Passive diffusion	147
	Drug transporters	148
	Endocytosis and transcytosis	148
	Receptor mediated cytosis	150
	Permeability of absorptive membranes	150
	Blood flow, tissue perfusion, and other modes of distribution	150
	Tissue and plasma protein binding	151
	Drug metabolism	152
	Management of drug interactions	154
	Dosage form factors	154
	Release from the dosage form	155
	Release of drug by dissolution	155
	Release of drug by diffusion	155
	Dosage form design	156
	Patient factors	158
	Following a drug from administration to elimination	159
7	Bioavailability, bioequivalence and the Biopharmaceutical	
	Classification System	169
	Introduction	169
	Pharmaceutical equivalence + bioequivalence = therapeutic	
	equivalence	170
	Bioavailability	171
	Dissolution rate data	173
	Bioequivalence of systemically available drug products	173
	Bioequivalence of products that produce local effects	174
	Using the FDA Orange Book	175
	Biopharmaceutical Classification System	177
	Water solubility revisited	179
	Permeability and human intestinal absorption	180

	Biopharmaceutical Drug Disposition Classification System	181
8	Parenteral drug delivery	189
	Introduction	190
	Characteristics of parenteral administration routes	190
	Intravenous route	190
	Intramuscular injection	193
	Subcutaneous injection	194
	Intradermal administration	194
	Intra-arterial administration	195
	Injection into the central nervous system	195
	Intra-articular administration	195
	Drug properties	195
	Parenteral dosage forms	196
	Design of parenteral dosage forms	196
	Release characteristics	197
	Immediate release dosage forms	198
	Sustained release dosage forms	202
	Preparation and handling of parenteral products	203
	Industrial processes	203
	Preparation of sterile products in the pharmacy	204
	Quality assurance	205
	Parenteral stability/compatibility	207
	Beyond-use dates for parenteral products	207
	Types of incompatibilities	208
	Parenteral compatibility checklist	212
	Patient counseling	214
	Intradermal injections	214
	Subcutaneous injections	215
	Intramuscular injections	216
9	Delivery of biopharmaceuticals and the use of novel carrier	
	systems	225
	Introduction	225
	Physicochemical and biological properties	226
	Peptide and protein drugs	226
	Oligonucleotide and transgene drugs	228
	Movement from administration site to target	230

	Design of delivery systems	231
	Polymer based systems	233
	Liposomes and lipoplexes	238
	Viral vectors	241
	Passive targeting	243
	Active targeting	243
	Biosimilars	245
10	Drug delivery to the eye	249
	Introduction	249
	Characteristics of the ophthalmic route	250
	Drug travel from dosage form to target	250
	Drug properties and the eye	254
	Dosage forms for the ophthalmic route	256
	Design of dosage forms for the anterior segment	256
	Design of dosage forms for the posterior segment	258
	Ingredients	260
	Preparation	260
	Quality evaluation and assurance	261
	Counseling patients	261
	Administration to the front of the eye	261
	Solutions, suspensions and gel forming solutions	262
	Ophthalmic ointment and gels	263
11	Drug delivery to and from the oral cavity	267
	Introduction	267
	Characteristics of the oral cavity route	268
	Drug travel from dosage form to target	269
	Drug properties and the oral cavity	270
	Oral cavity dosage forms	27
	Design	27
	Ingredients	272
	Dosage forms for local treatment of the mouth	274
	Dosage forms for systemic targets	277
	Quality evaluation and assurance	278
	Counseling patients	279
	Solutions and suspensions	279
	Pastes and gels	279