

Preface ix

Acknowledgments x

Section A: Pharmacology Guidelines

- **1 Understanding Minimum Inhibitory Concentrations (MICs) 1**
- **2 Static versus Cidal Antibiotics 1**
- **3 In Vitro versus In Vivo Efficacy 2**
- **4 Approaching Infectious Disease Cases 2**
- **5 Why Antibiotics Fail 4**
- **6 Adjusting Doses in Renal Failure 5**
- **7 Pregnancy Risk Categories 6**
- **8 Lactation Guidelines: Penetration of Drugs into Milk 7**
- **9 Safe Writing Skills 7**
- **10 Basic Math Skills 8**

Section B: Empiric Therapy Pending Diagnostic Results

- **11 Arthritis Osteomyelitis 9**
- **12 Bacteremia and Sepsis 10**
- **13 Central Nervous System Infections (Meningitis) 11**
- **14 Endocarditis (Bacterial) 12**
- **15 Intra-Abdominal Infections 13**
- **16 Neonatal Infections 14**
- **17 Infections Associated with Neutropenia 15**
- **18 Otitis Externa and Otitis Media 15**
- **19 Pancreatitis 16**
- **20 Peritonitis and Abscesses 17**
- **21 Pneumonia/Bronchitis 18**
- **22 Prostatitis 19**
- **23 Pyothorax Infections 20**
- **24 Sinus Infections 20**
- **25 Skin and Soft Tissue Infections 21**
- **26 Urinary Tract Infections 22**

Section C: Therapy of Established Infections

- **27 Acanthamoeba 25**
- **28 Acinetobacter 26**
- **29 Actinomyces 27**
- **30 Adenovirus (Infectious Canine Hepatitis) 28**
- **31 Aelurostrongylus Abstrusus (Feline Lungworm) 29**
- **32 Anaerobic Species (Bacteroides and Prevotella) 30**
- **33 Anaplasma Species 30**
- **34 Ancylostoma Species (Hookworms) 31**

- 35 *Ascaris* Species (Roundworms) 32
- 36 *Aspergillus* Species 33
- 37 *Babesia* Species 35
- 38 *Bartonella* Species (Cat Scratch Disease) 36
- 39 Blastomycosis 37
- 40 *Bordetella Bronchiseptica* (Kennel Cough) 38
- 41 *Borrelia Burgdorferi* (Lyme Disease) 39
- 42 *Brucella* (Canine Brucellosis) 40
- 43 Calicivirus 42
- 44 *Campylobacter* Species 43
- 45 *Candida* Species 43
- 46 Canine Influenza Virus (CIV) 44
- 47 *Capillaria Aerophila* (Lungworm) 45
- 48 Cestode Species (Tapeworms) 46
- 49 *Cheyletiella* Species (Walking Dandruff) 47
- 50 *Chlamydia* Species 48
- 51 *Citrobacter* Species 49
- 52 *Clostridium Difficile* 50
- 53 *Clostridium Tetani/Botulinum* 51
- 54 Coccidiomycosis 52
- 55 *Corynebacterium* Species 53
- 56 Coxiellosis Species (Q Fever) 54
- 57 *Cryptococcus* Species 55
- 58 *Cryptosporidium* Species 56
- 59 *Ctenocephalides* Species (Fleas) 56
- 60 *Cuterebra* Species (Botfly Larvae) 57
- 61 *Cytauxzoon Felis* 59
- 62 Dematiaceous Fungi (Phaeohyphomycosis Chromoblastomycosis) 59
- 63 *Demodex Canis/Felis* (Red Mange) 60
- 64 Dermatophytosis 61
- 65 *Dipylidium Caninum* (Flea Tapeworm) 62
- 66 *Dirofilaria Immitis* (Heartworm) 63
- 67 Distemper (Canine) 64
- 68 *Ehrlichia* Species 65
- 69 *Entamoeba Histolytica* 66
- 70 *Enterobacter* Species 67
- 71 *Enterococcus* 68
- 72 *Erysipelothrix* Species 69
- 73 *Escherichia Coli* (Enterotoxigenic/Enterohemorrhagic) 70
- 74 *Escherichia Coli* (Nonenterohemorrhagic) 71
- 75 Feline Coronavirus (Feline Infectious Peritonitis: FIP) 72
- 76 Feline Immunodeficiency Virus (FIV) 73
- 77 Feline Leukemia Virus (FeLV) 74
- 78 Feline Panleukopenia Virus 75
- 79 *Francisella Tularensis* (Tularemia) 75
- 80 *Fusarium* Species 76

- 81 Giardia Species 77
- 82 Helicobacter Species 78
- 83 Hepatozoon Americanum/Canis (Hepatozoonosis) 79
- 84 Herpes Virus (Canine) 80
- 85 Histoplasma Capsulatum 80
- 86 Hyalohyphomycosis (Paecilomyces/Scedosporium) 81
- 87 Isospora Species 82
- 88 Klebsiella Species 83
- 89 Leishmaniosis 84
- 90 Leptospira Species 85
- 91 Lice 86
- 92 Malassezia 87
- 93 Microsporidia 88
- 94 Mucor Species 89
- 95 Mycobacterium Species 90
- 96 Mycoplasma Species 91
- 97 Myiasis (Maggots) 92
- 98 Neospora Caninum 92
- 99 Neorickettsia Helminthoeca 93
- 100 Nocardia Species 94
- 101 Otodectes Cynotis (Otodectic Mange) 95
- 102 Papilloma Virus 96
- 103 Paragonimus Species (Liver Flukes) 97
- 104 Parvovirus 97
- 105 Pasteurella Species 98
- 106 Poxvirus 99
- 107 Proteus Species 100
- 108 Prototheca Species 101
- 109 Pseudomonas Aeruginosa 102
- 110 Pseudorabies (Aujeszky's Disease) 103
- 111 Rabies Virus 104
- 112 Rhodococcus Equi 104
- 113 Rickettsia Rickettsii (Rocky Mountain Spotted Fever) 105
- 114 Salmonella Species 106
- 115 Sarcoptes Scabiei (Sarcoptic Mange) 107
- 116 Serratia Species 108
- 117 Shigella Species 109
- 118 Sporothrix Species 110
- 119 Staphylococcus Species 111
- 120 Streptococcus Species 112
- 121 Strongyloides Species (Threadworms) 113
- 122 Toxocara Canis/Cati 114
- 123 Toxoplasma Gondii (Toxoplasmosis) 115
- 124 Trichomonas Species 115
- 125 Yersinia Pestis (Plague) 116

Section D: Antibiotics

- 126 Amikacin 118
- 127 Amoxicillin 120
- 128 Ampicillin 122
- 129 Azithromycin 124
- 130 Cefadroxil 126
- 131 Cefazolin 128
- 132 Cefdinir 130
- 133 Cefepime 132
- 134 Cefotaxime 134
- 135 Cefovecin 136
- 136 Cefoxitin 138
- 137 Cefpodoxime 140
- 138 Ceftazidime 142
- 139 Ceftiofur 143
- 140 Cefuroxime 145
- 141 Cephalexin 147
- 142 Chloramphenicol 149
- 143 Ciprofloxacin 151
- 144 Clarithromycin 153
- 145 Clavamox 155
- 146 Clindamycin 157
- 147 Dicloxacillin 159
- 148 Doxycycline 161
- 149 Enrofloxacin 163
- 150 Erythromycin 166
- 151 Florfenicol 168
- 152 Gentamicin 170
- 153 Imipenem and Cilastatin 172
- 154 Linezolid 174
- 155 Marbofloxacin 176
- 156 Meropenem 178
- 157 Metronidazole 180
- 158 Minocycline 182
- 159 Nitrofurantoin 185
- 160 Orbifloxacin 187
- 161 Oxytetracycline 189
- 162 Penicillin 191
- 163 Pradofloxacin 193
- 164 Rifampin 195
- 165 Potentiated Sulfas 197
- 166 Timentin 200
- 167 Tobramycin 202
- 168 Tylosin 204
- 169 Unasyn 206

- 170 Vancomycin 208
- 171 Zosyn 211

Section E: Antifungal Agents

- 172 Amphotericin B 221
- 173 Caspofungin 224
- 174 Clotrimazole 226
- 175 Enilconazole 228
- 176 Fluconazole 230
- 177 Flucytosine 232
- 178 Itraconazole 234
- 179 Ketoconazole 237
- 180 Posaconazole 239
- 181 Terbinafine 241
- 182 Voriconazole 243

Section F: Antiparasitic Agents

- 183 Albendazole 247
- 184 Atovaquone 249
- 185 Fenbendazole 251
- 186 Fipronil 253
- 187 Imidacloprid 255
- 188 Imidocarb Dipropionate 257
- 189 Ivermectin 259
- 190 Lufenuron 262
- 191 Meglumine Antimoniate 263
- 192 Melarsomine 265
- 193 Miltefosine 268
- 194 Milbemycin Oxime 269
- 195 Moxidectin 272
- 196 Nitazoxanide 274
- 197 Nitenpyram 276
- 198 Ponazuril (Toltrazuril Sulfone) 278
- 199 Praziquantel 280
- 200 Primaquine Phosphate 282
- 201 Pyrantel Pamoate 283
- 202 Ronidazole 285
- 203 Selamectin 287
- 204 Spinosid 289
- 205 Sulfadimethoxine 291
- 206 Tinidazole 294

Section G: Antiviral Agents

- 207 Acyclovir 297
- 208 Famciclovir 299
- 209 Cidofovir 301
- 210 Idoxuridine 302
- 211 Oseltamivir 304
- 212 Vidarabine 306
- 213 Zidovudine 307

Index 310