

Contents

Preface	xiii
List of Contributors	xiv

PART 1 CLINICAL PRACTICE IN THE TROPICS

Section A Organ-based Chapters

1	Tropical Lung Diseases	4
	<i>Ilias C Papanikolaou</i>	
	<i>Om P Sharma</i>	
2	Cardiovascular Diseases	12
	<i>Bongani M Mayosi</i>	
	<i>John Lawrenson</i>	
3	Gastrointestinal Diseases	18
	<i>Ramnik J Xavier</i>	
	<i>Harry J Thomas</i>	
4	Hepatobiliary Diseases	28
	<i>Mark Danta</i>	
	<i>Arthur Y Kim</i>	
5	Hematologic Diseases	35
	<i>Stephen McKew</i>	
	<i>Jamilla Rajab</i>	
	<i>Imelda Bates</i>	
6	Urinary Tract Diseases	47
	<i>Chris F Heyns</i>	
7	Sexually Transmitted Infections	54
	<i>David Mabey</i>	
	<i>Philippe Mayaud</i>	
8	Tropical Dermatology	68
	<i>Arturo Saavedra</i>	
	<i>David Rosmarin</i>	
9	Ophthalmologic Diseases	77
	<i>Hugh R Taylor</i>	
	<i>Angus W Turner</i>	
10	Neurologic Diseases	84
	<i>Tom Solomon</i>	
	<i>Hadi Manji</i>	
11	Psychiatric Diseases	98
	<i>Robert C Stewart</i>	
	<i>Kinke M Lommerse</i>	
	<i>Atif Rahman</i>	

12	ENT	104
	<i>Charlotte M Chiong</i>	
	<i>Jose M Acuin</i>	
13	Diseases of the Musculoskeletal System	112
	<i>Richard A Gosselin</i>	
	<i>Jonathan J Phillips</i>	
	<i>R Richard Coughlin</i>	

Section B Skills-based Chapters

14	General Surgery in the Tropics	120
	<i>Donald E Meier</i>	
	<i>John L Tarpley</i>	
	<i>Robert Riviello</i>	
15	Oral Health and Disease in the Tropics	129
	<i>Martin H Hobdell</i>	
	<i>Tepirou Chher</i>	
16	Maternal and Newborn Health	135
	<i>Nynke R van den Broek</i>	
17	Pediatrics in a Resource-constrained Setting	141
	<i>Elizabeth M Molyneux</i>	
18	Disasters, Complex Emergencies, and Population Displacement	148
	<i>Trueman W Sharp</i>	
	<i>Charles W Beadling</i>	

Section C Service-based Chapters

19	Diagnostic Imaging in the Tropics	158
	<i>Elizabeth Joeke</i>	
	<i>Sam Kampondeni</i>	
20	Blood Transfusion in Resource-limited Settings	162
	<i>Oliver Hassall</i>	
	<i>Imelda Bates</i>	
	<i>Kathryn Maitland</i>	
21	Infection Control in the Tropics	168
	<i>Haider J Warraich</i>	
	<i>Syed Faisal Mahmood</i>	
	<i>Anita KM Zaidi</i>	
22.1	Microbiology	174
	<i>Christopher M Parry</i>	
	<i>Sharon J Peacock</i>	
22.2	Approach to the Patient with Diarrhea	179
	<i>Regina C LaRocque</i>	
	<i>Jason B Harris</i>	

Section D Topic-based Chapters

- 23 Cancer in the Tropics 186
Katie Wakeham
Robert Newton
Freddy Sitas
- 24 Heat-associated Illness 192
Michael V Callahan
- 25 Traditional Medicine 197
Gerard Bodeker
Bertrand Graz
- 26 Environmental Health Hazards in the Tropics 203
Ema G Rodrigues
David C Christiansi

PART 2 VIRAL DISEASES

- Introduction and General Principles 214
Tom Solomon
Anna-Maria Geretti
- 27 Human Immunodeficiency Virus Infection 217
Philip J Peters
Barbara J Marston
Paul J Weidle
John T Brooks
- 27.1 HIV, Tuberculosis, Malaria and *Streptococcus pneumoniae* 248
Alison D Grant
- 28 Viral Infections with Cutaneous Lesions 251
- 28.1 Measles 251
William J Moss
- 28.2 Poxviruses 256
Catherine G Sutcliffe
Anne W Rimoin
William J Moss
- 28.3 Nonpolio Enterovirus Mucocutaneous Infections 262
Catherine G Sutcliffe
William J Moss
- 28.4 Kaposi's Sarcoma-associated Herpesvirus 265
Catherine G Sutcliffe
William J Moss
- 29 Viral Respiratory Infections 269
H Rogier van Doorn
Hongjie Yu
- 30 Viral Gastroenteritis 275
Osamu Nakagomi
Nigel A Cunliffe
- 30.1 Rotavirus 276
Osamu Nakagomi
Toyoko Nakagomi
Nigel A Cunliffe
- 30.2 Norovirus 280
Aron J Hall
Manish M Patel
Benjamin A Lopman
George E Armah
- 30.3 Enteric Adenoviruses 283
James J Gray
Gagandeep Kang
- 30.4 Astroviruses 286
Gagandeep Kang
James J Gray
- 30.5 Sapovirus 289
Osamu Nakagomi
Toyoko Nakagomi
Nigel A Cunliffe
- 31 Viral Hepatitis 290
G Thomas Strickland
Samer S El-Kamary
- 31.1 Hepatitis A 292
G Thomas Strickland
Samer S El-Kamary
- 31.2 Hepatitis B 294
G Thomas Strickland
Samer S El-Kamary
- 31.3 Hepatitis D 297
G Thomas Strickland
Samer S El-Kamary
- 31.4 Hepatitis C 298
G Thomas Strickland
Samer S El-Kamary
- 31.5 Hepatitis E 301
G Thomas Strickland
Samer S El-Kamary
- 31.6 Non-A-to-E Hepatitis 303
G Thomas Strickland
Samer S El-Kamary
- 32 Viral Febrile Illnesses 306
- 32.1 Dengue and Dengue Hemorrhagic Fever 306
Daniel H Libraty
- 32.2 Chikungunya Fever 311
Mala Chhabra
Veena Mittal
- 32.3 O'nyong Nyong Fever 314
Gregory Deye
- 32.4 Ross River Virus Disease 315
David Harley
Andreas Suhrbier
- 32.5 Oropouche Virus 317
Marcio RT Nunes
Pedro FC Vasconcelos

- 32.6 Mayaro Virus 318
Pedro FC Vasconcelos
Marcio RT Nunes
- 32.7 Sandfly Fever 320
Remi N Charrel
Xavier de Lamballerie
- 32.8 Sindbis Fever 321
Gregory Deye
- 33 Viral Hemorrhagic Fevers 323
- 33.1 Yellow Fever 323
J Erin Staples
Marc Fischer
- 33.2 Lassa Fever 325
Aulasa J Camerlin
Joseph B McCormick
- 33.3 South American Hemorrhagic Fevers 327
Slobodan Paessler
- 33.4 Ebola and Marburg Virus Infections 330
Amy L Hartman
- 33.5 Crimean-Congo Hemorrhagic Fever 334
Christine E Mathews
Susan Fisher-Hoch
- 33.6 Diseases Caused by Hantaviruses 337
Tony Schountz
- 33.7 Rift Valley Fever 340
Brian H Bird
Jean-Marc Reynes
Stuart T Nichol
- 34 Viral CNS Infections 344
- 34.1 Rabies and Related Viruses 344
Mary J Warrell
David A Warrell
- 34.2 Enteroviruses Infections that Cause Central Nervous System Disease (including Poliomyelitis) 349
Peter C McMinn
Phan Van Tu
- 34.3 Venezuelan, Eastern and Western Equine Encephalitis 353
Scott C Weaver
Angelle D LaBeaud
- 34.4 Japanese Encephalitis 358
Tom Solomon
- 34.5 West Nile Virus 366
Marc Fischer
J Erin Staples
Grant L Campbell
- 34.6 Saint Louis Encephalitis and Rocio Encephalitis 367
James J Sejvar
- 34.7 Other Arboviral Encephalitides 369
James J Sejvar
Grant L Campbell

- 34.8 Prion Disease 371
Richard Knight
Victor Javier Sanchez Gonzalez
- 34.9 Human T-Lymphotropic Virus Type I and II Infection 375
Nicholas J van Sicks
Susan LF McLellan

PART 3 BACTERIAL INFECTIONS

Section A Infections of the Eye & Throat

- 35 Trachoma and Inclusion Conjunctivitis 384
Hugh R Taylor
Anu Mathew
- 35.1 Trachoma 384
Hugh R Taylor
Anu Mathew
- 35.2 Inclusion Conjunctivitis 389
Hugh R Taylor
Anu Mathew
- 36 Group A *Streptococcus* 391
Thomas L Snelling
Jonathan R Carapetis
- 37 Diphtheria 402
Tejpratap SP Tiwari

Section B Respiratory Tract Infections

- 38 Bacterial Pneumonia 408
W Abdullah Brooks
- 39 Tuberculosis 416
Sonya S Shin
Kwonjune J Seung
- 40 Pertussis 433
Kevin Forsyth

Section C Gastrointestinal Tract Infections

- 41 *Helicobacter pylori* Infection 438
Caroline M den Hoed
Ernst J Kuipers
- 42 *Escherichia coli* Diarrhea 442
Jorge J Velarde
Myron M Levine
James P Nataro
- 43 Cholera and Other *Vibrios* 448
Debasish Saha
Regina C LaRocque
- 44 Shigellosis 454
Michael L Bennis
Wasif Ali Khan

- 45 Nontyphoid *Salmonella* Disease 462
Melita A Gordon
Nicholas A Feasey
Stephen M Graham
- 46 *Campylobacter* Infections 468
Paola J Maurtua-Neumann
Richard A Oberhelman
- 47 Miscellaneous Bacterial Enteritides 471
- 47.1 *Yersinia enterocolitica* 471
Farah Naz Qamar
Anita KM Zaidi
- 47.2 *Clostridium* Infections 472
S Asad Ali
Anita KM Zaidi
- 47.3 *Aeromonas* 474
Farah Naz Qamar
Anita KM Zaidi

Section D Sexually Transmitted Diseases

- 48 Chlamydial Infections 478
David Mabey
Rosanna Peeling
- 49 Lymphogranuloma Venereum 481
August Stich
- 50 Gonorrhea 484
Ronald C Ballard
- 51 Chancroid 488
Allan R Ronald
- 52 Granuloma Inguinale 491
John Richens
- 53 Syphilis and the Endemic Treponematoses 494
David Mabey
John Richens

Section E Infections Causing Neurologic Manifestations

- 54 Acute Bacterial Meningitis 502
Rathi Guhadasan
Enitan D Carrol
- 55 Tetanus 508
Guy E Thwaites
C Louise Thwaites
- 56 Botulism 511
Stephen J Aston
Nicholas J Beeching

Section F Infections of Skin and Soft Tissues

Bacterial Skin and Soft Tissue Infections in the Tropics 516
Aisha Sethi

- 57 Leprosy 519
Diana NJ Lockwood
Saba Lambert
- 58 Buruli Ulcer 525
Mark H Wansbrough-Jones
Richard O Phillips
- 59 *Mycobacterium marinum* Infection 528
Francisco Vega-López
- 60 Anthrax 530
Arthur M Friedlander
Nicholas J Vietri

Section G Febrile Systemic Syndromes with or without Lymphadenopathy

- 61 Epidemic Louse-borne Typhus 536
Aurélié Renvoisé
Didier Raoult
- 62 Murine Typhus 539
Achilleas Gikas
- 63 Scrub Typhus 542
Paul N Newton
Nicholas PJ Day
- 64 Tick-Borne Spotted Fever Rickettsioses 546
Cristina Socolovschi
Philippe Parola
Didier Raoult
- 65 Rickettsialpox 553
Christopher D Paddock
- 66 Q Fever 558
Matthieu Million
Didier Raoult
- 67 Trench Fever 561
Barbara Doudier
Philippe Brouqui
- 68 Bartonellosis: Carrion's Disease and Other *Bartonella* Infections 564
Ciro Maguina
Eloy E. Ordaya
- 69 Typhoid and Paratyphoid (Enteric) Fever 568
Jason B Harris
W Abdullah Brooks
- 70 Brucellosis 577
Georgios Pappas
- 71 Melioidosis and Glanders 580
Nicholas J White
- 72 Plague 584
Michel Drancourt
- 73 Tularemia 591
Max Maurin
- 74 Leptospirosis 597
George Watt

- 75 Relapsing Fever and Borreliosis 602
Michel Drancourt

PART 4 THE MYCOSES

- 76 General Principles 608
Roderick J Hay
- 77 Superficial Mycoses 610
Roderick J Hay
- 77.1 Dermatophyte Infection (Ringworm, Tinea) 610
Roderick J Hay
- 77.2 Superficial Candidiasis 612
Roderick J Hay
- 77.3 Pityriasis (Tinea) Versicolor 613
Roderick J Hay
- 77.4 Other Superficial Mycoses 614
Roderick J Hay
- 78 Subcutaneous Mycoses: General Principles 616
Roderick J Hay
- 78.1 Mycetoma (Maduromycosis, Madura foot) 616
Roderick J Hay
- 78.2 Sporotrichosis 618
Roderick J Hay
- 78.3 Chromoblastomycosis 619
Roderick J Hay
- 78.4 Rhinosporidiosis 620
Roderick J Hay
- 78.5 Entomophthoromycosis caused by *Basidiobolus* 620
Roderick J Hay
- 78.6 Entomophthoromycosis caused by *Conidiobolus* 620
Roderick J Hay
- 78.7 Other Subcutaneous Mycoses 621
Roderick J Hay
- 79 Protothecosis 623
Ann M Nelson
Ronald C Neafie
- 80 Histoplasmosis 625
Eileen E Navarro
Thomas J Walsh
Roderick J Hay
- 81 Coccidioidomycosis 629
Gregory M Anstead
John R Graybill
- 82 Blastomycosis 634
Keyur S Vyas
Robert W Bradsher Jr
- 83 Paracoccidioidomycosis 637
Ricardo Negroni

- 84 Cryptococcosis 641
Françoise Dromer
Olivier Lortholary
- 85 Penicilliosis Marneffeii 644
Khuanchai Supparatpinyo
- 86 *Pneumocystis* Pneumonia 647
Powel Kazanjian
- 87 Treatment of Systemic Mycoses 650
Edward C Oldfield III

PART 5 PROTOZOAL INFECTIONS

- 88 General Principles 656
Alan J Magill

Section A Intestinal and Genital Infections

- 89 *Entamoeba histolytica* (Amebiasis) 660
Eric Houpt
Chien-Ching Hung
- 90 Giardiasis 668
Rodney D Adam
- 91 Cryptosporidiosis 673
Lihua Xiao
Jeffrey K Griffiths
- 92 Cyclosporiasis 680
David R Shlim
Bradley A Connor
- 93 *Cystoisospora belli* (syn. *Isospora belli*) 683
Rebecca Dillingham
Eric R Houpt
- 94 Miscellaneous Intestinal Protozoa 685
Lynne S Garcia
- 94.1 Balantidiasis 685
Lynne S Garcia
- 94.2 *Dientamoeba fragilis* 687
Lynne S Garcia
- 94.3 *Entamoeba polecki* 688
Lynne S Garcia
- 94.4 *Blastocystis hominis* 688
Lynne S Garcia
- 94.5 Non-pathogenic Intestinal Protozoa 689
Lynne S Garcia
- 95 Trichomoniasis 691
Michael F Rein

Section B Infections of the Blood and Reticuloendothelial System

- 96 Malaria 696
Terrie Taylor
Tsiri Agbenyega

- 97 African Trypanosomiasis 718
Sanjeev Krishna
August Stich
- 98 American Trypanosomiasis (Chagas Disease) 725
Rogelio López-Vélez
Francesca F Norman
Caryn Bern
- 99 Leishmaniasis 739
Alan J Magill
- 99.1 Leishmaniasis: General Principles 739
Alan J Magill
- 99.2 Visceral Leishmaniasis (Kala-azar) 743
Alan J Magill
- 99.3 Cutaneous Leishmaniasis of the Old World 751
Alan J Magill
- 99.4 Cutaneous Leishmaniasis of the New World 755
Alan J Magill
- 100 Babesiosis 761
Edouard Vannier
Peter J Krause

Section C Tissue Infection

- 101 Toxoplasmosis 766
Luc Paris
- 102 Pathogenic and Opportunistic Free-living Ameba Infections 776
Govinda S Visvesvara
- 103 Sarcocystosis 780
Benjamin M Rosenthal
- 104 Microsporidiosis 784
Louis M Weiss
- 105 Miscellaneous Tissue Protozoa 791
Edward T Ryan

PART 6 HELMINTHIC INFECTIONS

- 106 General Principles 794
G Thomas Strickland
David R Hill

Section A Intestinal Nematode Infections

- 107 Nematodes Limited to the Intestinal Tract (*Enterobius vermicularis*, *Trichuris trichiura*, *Capillaria philippinensis* and *Trichostrongylus* spp.) 798
Donald AP Bundy
Edward S Cooper
Simon Brooker
- 108 Intestinal Nematodes: Ascariasis 804
Donald AP Bundy
Nilanthi DeSilva
Simon Brooker

- 109 Hookworm and *Strongyloides* Infections 808
Peter J Hotez
Robert H Gilman

Section B Filarial Infections

- 110 Lymphatic Filariasis 816
LeAnne M Fox
Christopher L King
- 111 Loiasis 823
Amy D Klion
- 112 Onchocerciasis 827
Philip J Cooper
Thomas B Nutman
- 113 Miscellaneous Filariae 835
Amy D Klion

Section C Other Tissue Nematode Infections

- 114 Dracunculiasis 842
Ernesto Ruiz-Tiben
- 115 Trichinellosis 846
Fabrizio Bruschi
K Darwin Murrell
- 116 Toxocariasis 850
Dana M Woodhall
- 117 Gnathostomiasis 853
Paron Dekumyoy
Dorn Watthanakulpanich
- 118 Eosinophilic Meningitis (*Angiostrongylus cantonensis*, *Parastrongylus cantonensis*) 856
Yupaporn Wattanagoon
John H Cross (deceased)
- 119 Abdominal Angiostrongyliasis 859
Pedro Morera
- 120 Cutaneous Larva Migrans 862
Susan P Montgomery
- 121 Anisakidosis 864
Davidson H Hamer

Section D Trematode Infections

- 122 Schistosomiasis 868
Bruno Gryseels
G Thomas Strickland
- 123 Intestinal Fluke Infections 884
Yupaporn Wattanagoon
Danai Bunnag
- 124 Liver Fluke infections 887
Yupaporn Wattanagoon
Danai Bunnag
- 124.1 Opisthorchiasis and Clonorchiasis 887
Yupaporn Wattanagoon
Danai Bunnag

- 124.2 Fascioliasis 889
Yupaporn Wattanagoon
Danai Bunnag
- 124.3 Dicrocoeliasis and Eurytremiasis 890
Yupaporn Wattanagoon
Danai Bunnag
- 125 Paragonimiasis 892
Yupaporn Wattanagoon
Danai Bunnag

Section E Cestode Infections

- 126 Tapeworm Infections 896
Joseph D Mega
Gerson Galdos-Cardenas
Robert H Gilman
- 126.1 Taeniasis 896
Joseph D Mega
Gerson Galdos-Cardenas
Robert H Gilman
- 126.2 Diphyllbothriasis 899
Joseph D Mega
Gerson Galdos-Cardenas
Robert H Gilman
- 126.3 Hymenolepiasis 900
Joseph D Mega
Gerson Galdos-Cardenas
Robert H Gilman
- 126.4 Dipylidiasis 900
Joseph D Mega
Gerson Galdos-Cardenas
Robert H Gilman
- 127 Larval Cestode Infections (Cysticercosis) 903
Hector H Garcia
Robert H Gilman
- 128 Cystic Echinococcosis 908
Pedro L Moro
Peter M Schantz
- 129 Alveolar Echinococcosis (Alveolar Hydatid Disease) 913
Pedro L Moro
Peter M Schantz
- 130 Polycystic Echinococcosis (Polycystic Hydatid Disease) 915
Pedro L Moro
Peter M Schantz
- 131 Sparganosis 917
Meredith L Holtz
Robert H Gilman
- 132 Coenuriasis 921
Rachel B Webman
Robert H Gilman

PART 7 POISONOUS AND TOXIC PLANTS AND ANIMALS

- 133 Poisonous Plants and Aquatic Animals 924
David A Warrell
Hans Persson
Michael Eddleston
- 133.1 Poisonous Aquatic Animals 924
David A Warrell
- 133.2 Fish Poisoning: Gastrointestinal and Neurotoxic Syndromes 925
David A Warrell
- 133.3 Mushroom Poisoning 927
Hans Persson
- 133.4 Poisoning by Plants 931
Hans Persson
- 133.5 Plant Cardiac Glycoside Poisoning 935
Michael Eddleston
- 134 Animals Hazardous to Humans 938
David A Warrell
- 134.1 Venomous Marine Animals 938
David A Warrell
- 134.2 Leeches (Phylum Annelida, Class Hirudinea) 941
David A Warrell
- 134.3 Fish Capable of Inflicting Serious Trauma 942
David A Warrell
- 134.4 Lizards 947
David A Warrell
- 134.5 Snakes 949
David A Warrell
- 134.6 Bats 959
David A Warrell
- 135 Pentastomiasis 966
David A Warrell
- 136 Injurious Arthropods 969
David A Warrell
- 136.1 Hypersensitization and Anaphylaxis Caused by Stings of Hymenopteran Insects (Bees, Wasps, Yellow Jackets, Hornets, Ants) 970
David A Warrell
- 136.2 Bites by Other Insects Resulting in Irritation, Allergy and Transmission of Infections 971
David A Warrell
- 136.3 Invasive Larvae of Flies (Myiasis) and Fleas (Tungiasis) 972
David A Warrell
- 136.4 Superficial Infestations by Ectoparasitic Arthropods: Fleas, Lice, Mites and Ticks 974
David A Warrell
- 136.5 Envenoming by Arthropods 977
David A Warrell

PART 8 NUTRITIONAL PROBLEMS AND DEFICIENCY DISEASES

- 137 General Principles 988
Benjamin Caballero
Wafaie Fawzi
- 138 Protein-energy Malnutrition in Children 989
Tahmeed Ahmed
M Iqbal Hossain
Munirul Islam
AM Shamsir Ahmed
M Jobayer Chisti
- 139 Vitamin Deficiencies 997
Jeffrey K Griffiths
- 140 Mineral Deficiencies 1003
Anuraj H Shankar

PART 9 VECTOR TRANSMISSION OF DISEASES AND ZONOSSES

- 141 Arthropods in Disease Transmission 1012
Duane J Gubler

PART 10 THE SICK RETURNING TRAVELER

- 142 General Principles 1018
David R Hill
- 143 Fever in the Returned Traveler 1021
Victoria Johnston
Michael Brown
- 144 Malaria in Returned Traveler 1032
David G Lalloo
- 145 Screening the Asymptomatic Long-term Traveler 1037
Vanessa Field
- 146 Persistent Diarrhea in the Returned Traveler 1041
Stephen G Wright
- 147 Skin Lesions in Returning Travelers 1044
Eric Caumes
- 148 Eosinophilia in Migrants and Returned Travelers: A Practical Approach 1050
Anna M Checkley
Christopher JM Whitty
- 149 Immigrant Medicine 1057
Sandra K Schumacher
Elizabeth D Barnett
- 150 International Adoption 1061
Cynthia R Howard
- 151 Medical Tourism 1066
Stephen T Green
- 152 Transplant Patients and Tropical Diseases 1069
Neha Nanda
Frank J Bia

- 153 Delusional Parasitosis 1074
Kathryn N Suh
Jay S Keystone

PART 11 LABORATORY DIAGNOSIS OF PARASITIC DISEASES

- 154 General Principles 1080
John H Cross (deceased)
Brett E Swierczewski
- 154.1 Preparation of Samples for Morphologic Diagnosis of Parasites in Stool and Urine Specimens 1080
John H Cross (deceased)
Brett E Swierczewski
- 154.2 Examination of Blood, Other Body Fluids, Tissues and Sputum 1082
Brett E Swierczewski
John H Cross (deceased)

PART 12 DRUGS USED IN TROPICAL MEDICINE

- Mebendazole 1086
Allyson K Bloom
Edward T Ryan
- Albendazole 1088
Allyson K Bloom
Edward T Ryan
- Anti-Tuberculosis Drugs 1090
Sonya S Shin
Kwonjune J Seung
- Diethylcarbamazine (DEC) 1098
LeAnne M Fox
Amy D Klion
- Ivermectin 1100
Philip J Cooper
Thomas B Nutman
- Pentavalent Antimony 1102
Alan J Magill
- Pentamidine 1104
Allyson K Bloom
Edward T Ryan
- Nitazoxanide 1106
Allyson K Bloom
Edward T Ryan
- Dapsone 1108
Allyson K Bloom
Edward T Ryan