

INFECTIOUS DISEASE MOLECULAR DIAGNOSTIC TESTING

Table of Contents

1. Overview
2. Major Infectious Diseases
 - * AIDS
 - Structure and Composition
 - Classification
 - AIDS Origins
 - Animal Lentivirus Systems
 - Virus Receptors
 - HIV Infections in Humans
 - Pathogenesis and Pathology
 - CD4T Lymphocytes and Memory Cells
 - Monocytes and Macrophages
 - Lymphoid Organs
 - Neural Cells
 - Viral Coinfections
 - Clinical Findings
 - Plasma Viral Load
 - Pediatric AIDS
 - Neurologic Disease
 - Opportunistic Infections
 - Cancer
 - Immunity
 - Virus Isolation
 - Serology
 - Viral Nucleic Acid/Antigen Detection
 - Epidemiology
 - Worldwide Spread of AIDS
 - United States
 - Routes of Transmission

Table of Contents (continued)

- *DNA Probes*
 - *Overview*
 - *Quantitative PCR*
 - *In Situ PCR*
 - *Needed Improvements*
- *Viral Load/Drug Resistance Testing*
- *Genotype and Phenotype Testing*
- *Blood Banking Considerations*
- * *Adenovirus*
 - *Background*
 - *Diagnostic Tests*
 - *Vaccines and Drugs*
 - *Adeno-Associated Viruses (AAV)*
- * *Anthrax/Bacillus Anthracis*
 - *Background*
 - *Diagnostic Tests*
 - *Vaccines and Drugs*
- * *Babesiosis*
 - *Background*
- * *BEA and Other Bartonella Diseases*
 - *Background*
 - *Diagnostic Tests*
 - *Vaccines and Drugs*
- * *Chagas Disease*
 - *Background*
- * *Campylobacter*
 - *Background*
 - *Diagnostic Tests*
 - *Culture Identification*
 - *Vaccines and Drugs*
- * *Chlamydia*
 - *Background*
 - *Chlamydia psittaci*
 - *Chlmaydia pneumoniae*
 - *Chlamydia trachomatis*
 - *Diagnostic Tests*
 - *Vaccines and Drugs*
- * *Creutzfeldt-Jakob's Disease*
 - *Background*
 - *Blood Transmission*
 - *Diagnostic Tests*

Table of Contents (continued)

- Major Commercial and Academic Players
 - Bayer
 - Disease Sciences/Bio Tec Global
 - Imperial College School of Medicine
 - Ortho-Clinical Diagnostics
 - Pall
 - ProMetic Life Sciences
 - Proteome Sciences/Idexx
 - Q-One Biotech
 - Serono
 - U.S. Agricultural Research Service
- Drugs
- Vaccines
- * Cytomegalovirus
 - Background
 - Chorioretinitis
 - Gastrointestinal
 - Central Nervous System Disease
 - Diagnostic Tests
 - Vaccines and Drugs
- * Ebola Virus
 - Background
 - Epidemiology
 - Clinical Syndromes
 - Diagnostic Tests
 - Vaccines and Drugs
- * EchoVirus
 - Background
 - Acute Aseptic Meningitis
 - Encephalitis
 - Exanthems
 - Respiratory Disease
 - Myopericarditis
 - Neonatal Infections
 - Diagnostic Tests
 - Vaccines and Drugs
- * Encephalitis
 - Background
 - Diagnostic Tests
 - Vaccines and Drugs

Table of Contents (continued)

- * **Enteroviruses**
 - **Background**
 - **Diagnostic Tests**
 - **Viral Isolation and Identification**
 - **Antibody Tests**
 - **Vaccines and Drugs**
- * **Epstein-Barr Virus**
 - **Background**
 - **Diagnostic Tests**
 - **Vaccines and Drugs**
- * **Gonorrhoea**
 - **Background**
 - **Diagnostic Tests**
 - **Vaccines and Drugs**
- * **Hepatitis**
 - **Hepatitis A**
 - **Hepatitis B**
 - **Structure and Composition**
 - **Replication**
 - **Hepatitis C**
 - **Hepatitis D (Delta)**
 - **Hepatitis E**
 - **Hepatitis G**
 - **Hepatitis Infections Pathology**
 - **Clinical Findings**
 - **Laboratory Tests**
 - **Hepatitis A**
 - **Hepatitis B**
 - **Hepatitis C**
 - **Hepatitis D**
 - **Hepatitis E**
 - **Virus-Host Immune Reactions**
 - **Epidemiology**
 - **Hepatitis A**
 - **Hepatitis B**
 - **Hepatitis C**
 - **Hepatitis D (Delta)**
 - **Vaccines and Drugs**

Table of Contents (continued)

- * *Herpes Simplex Virus*
 - *Background*
 - *Diagnostic Tests*
 - *Vaccines and Drugs*
- * *Legionella*
 - *Background*
 - *Diagnostic Tests*
 - *Vaccines and Drugs*
- * *Lyme Disease*
 - *Background*
 - *Clinical Description*
 - *Clinical Case Definition*
 - *Laboratory Criteria for Diagnosis*
 - *Case Classification*
 - *Diagnostic Tests*
 - *Vaccines and Drugs*
- * *Malaria*
- * *Mycoplasma*
 - *Background*
 - *Ureaplasma Urealyticum & Mycoplasma Hominis*
 - *Diagnostic Tests*
 - *Vaccines and Drugs*
- * *Papillomaviruses/HPV*
 - *Background*
 - *HPV in Cancer*
 - *Cervical Neoplasm*
 - *Diagnostic Tests*
 - *Vaccines and Drugs*
 - *Prevention*
- * *Parvovirus B19*
 - *Background*
 - *Microbiology*
 - *Epidemiology*
 - *Clinical Syndromes*
 - *Erythema Infectiosum (Slapped Cheek)*
 - *Adult Polyarthropathy*
 - *Transient Aplastic Crisis*
 - *Transient Pancytopenia*

Table of Contents (continued)

- Red Cell Aplasia in Immunocompromised
 - Perinatal Infections
- Diagnostic Test
- Vaccines and Drugs
- * **Pneumonia**
 - Background
 - Diagnostic Tests
 - Vaccines and Drugs
- * **Polyomaviruses**
 - Background
 - Diagnostic Tests
 - Vaccines and Drugs
- * **Salmonellosis**
 - Background
 - Diagnostic Tests
 - Vaccines and Drugs
- * **Shigellosis**
 - Background
 - Diagnostic Tests
 - Vaccines and Drugs
- * **Streptococci**
 - Background
 - Diagnostic Tests
 - Vaccines and Drugs
 - Group A Streptococci
 - Group B Streptococci
- * **Toxoplasmosis**
 - Background
 - Diagnostic Tests
 - Vaccines and Drugs
- * **Tuberculosis**
 - Background
 - Diagnostic Tests
 - Microscopic Characteristics
 - Cultural Characteristics
 - Skin Tests
 - MDRTB
 - Vaccines and Drugs

Table of Contents (continued)

- * **West Nile Virus**
 - **Background**
 - **Clinical Syndromes**
 - **Diagnostic Tests**
 - **Vaccines and Drugs**
 - * **Yersinia**
 - **Background**
 - **Diagnostic Tests**
 - **Vaccines and Drugs**
3. **Antibiotic Susceptibility**

List of Tables

- Table 1: Major Companies Developing or Marketing AIDS Molecular Diagnostic and other Direct Identification Tests*
- Table 2: Major Companies Developing or Marketing Adenovirus Molecular Diagnostic and other Direct Identification Tests*
- Table 3: Major Companies Developing or Marketing Campylobacter Molecular Diagnostic and Other Direct Identification Tests*
- Table 4: Major Companies Developing or Marketing Chlamydia Molecular Diagnostic and other Direct Identification Tests*
- Table 5: Major Companies Developing or Marketing CMV Molecular Diagnostic and other Direct Identification Tests*
- Table 6: Major Companies Developing or Marketing EBV Molecular Diagnostic and other Direct Identification Tests*
- Table 7: Major Companies Developing or Marketing Gonorrhoea Molecular Diagnostic and other Direct Identification Tests*
- Table 8: Major Companies Developing or Marketing Hepatitis Molecular Diagnostic and other Direct Identification Tests*
- Table 9: Major Companies Developing or Marketing Herpes Molecular Diagnostic and other Direct Identification Tests*
- Table 10: Major Companies Developing or Marketing Legionella Molecular Diagnostic and other Direct Identification Tests*

List of Tables (continued)

- Table 11: Major Companies Developing or Marketing Lyme Disease Molecular Diagnostic and Other Direct Identification Tests
- Table 12: Major Companies Developing or Marketing Mycoplasma Molecular Diagnostic and other Direct Identification Tests
- Table 13: Major Companies Developing or Marketing Papilloma Virus Molecular Diagnostic and Other Direct Identification Tests
- Table 14: Major Companies Developing or Marketing Pneumonia Molecular Diagnostic and other Direct Identification Tests
- Table 15: Major Companies Developing or Marketing Salmonella Molecular Diagnostic and other Direct Identification Tests
- Table 16: Major Companies Developing or Marketing Shigella Molecular Diagnostic and other Direct Identification Tests
- Table 17: Major Companies Developing or Marketing Streptococci Molecular Diagnostic and Other Direct Identification Tests
- Table 18: Major Companies Developing or Marketing Toxoplasmosis Molecular Diagnostic and Other Direct Identification Tests
- Table 19: Major Companies Developing or Marketing Tuberculosis Molecular Diagnostic and Other Direct Identification Tests