

# Drug-Resistant Tuberculosis

A SURVIVAL GUIDE FOR CLINICIANS 3RD EDITION 2022 UPDATES

**UCSF**  
University of California  
San Francisco



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CENTER



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# Acronyms and Abbreviations

<b>AAP</b>	American Academy of Pediatrics
<b>ADAP</b>	National AIDS Drug Assistance Program
<b>AFB</b>	acid-fast bacilli
<b>AIDS</b>	acquired immunodeficiency syndrome
<b>AII</b>	airborne infection isolation
<b>AK</b>	amikacin
<b>ALT</b>	alanine aminotransferase
<b>ANA</b>	antinuclear antibodies
<b>AMX/CLV</b>	Amoxicillin/clavulanate
<b>APHL</b>	Association of Public Health Laboratories
<b>ART</b>	antiretroviral therapy
<b>AST</b>	aspartate aminotransferase
<b>ATS</b>	American Thoracic Society
<b>ATU</b>	area of technical uncertainty
<b>BAL</b>	bronchoalveolar lavage
<b>BCG</b>	bacille Calmette-Guérin
<b>BDQ</b>	bedaquiline
<b>BMI</b>	body mass index
<b>BPaL</b>	bedaquiline, pretomanid, linezolid
<b>BPaLM</b>	bedaquiline, pretomanid, linezolid, moxifloxacin
<b>BUN</b>	blood urea nitrogen
<b>CAPD</b>	continuous ambulatory peritoneal dialysis
<b>CBC</b>	complete blood count
<b>CC</b>	critical concentration

<b>CDC</b>	Centers for Disease Control and Prevention
<b>CDPH</b>	California Department of Public Health
<b>CFZ</b>	clofazimine
<b>CITC</b>	Curry International Tuberculosis Center
<b>CLSI</b>	Clinical and Laboratory Standards Institute
<b>CM</b>	capreomycin
<b>CNS</b>	central nervous system
<b>CS</b>	cycloserine
<b>CSF</b>	cerebrospinal fluid
<b>Ct</b>	cycle threshold
<b>CXR</b>	chest x-ray
<b>DLM</b>	delamanid
<b>DM</b>	diabetes mellitus
<b>DOT</b>	directly observed therapy
<b>DRESS</b>	drug reaction with eosinophilia and systemic symptoms
<b>DR-TB</b>	drug-resistant tuberculosis
<b>DS-TB</b>	drug-sensitive tuberculosis
<b>DST</b>	drug susceptibility testing
<b>ECOFF</b>	epidemiological cutoff value
<b>eDOT</b>	electronic directly observed therapy
<b>EMB</b>	ethambutol
<b>ERS</b>	European Respiratory Society
<b>ETA</b>	ethionamide
<b>FDA</b>	Food and Drug Administration

<b>FQ</b>	fluoroquinolone
<b>GFR</b>	glomerular filtration rate
<b>GI</b>	gastrointestinal
<b>GU</b>	growth units
<b>Hb/hbg</b>	hemoglobin
<b>HEPA</b>	high efficiency particulate air
<b>HIV</b>	human immunodeficiency virus
<b>ICE</b>	U.S. Immigration and Customs Enforcement
<b>IDSA</b>	Infectious Diseases Society of America
<b>IGRA</b>	interferon gamma release assay
<b>IM</b>	intramuscular
<b>IMP/CLN</b>	imipenem/cilastatin
<b>INH</b>	isoniazid
<b>INJ</b>	interjurisdictional notification
<b>IPDMA</b>	individual patient data meta-analyses
<b>IRIS</b>	immune reconstitution inflammatory syndrome
<b>IUATLD</b>	International Union Against Tuberculosis and Lung Disease
<b>IV</b>	intravenous
<b>KM</b>	kanamycin
<b>LFT</b>	liver function test
<b>LFX</b>	levofloxacin
<b>LPA</b>	line probe assay
<b>LTBI</b>	latent tuberculosis infection
<b>LZD</b>	linezolid

<b>MAC</b>	Mycobacterium avium complex
<b>MALDI-TOF MS</b>	matrix assisted laser desorption ionization-time of flight mass spectrometry
<b>MAO</b>	monoamine oxidase
<b><i>M. bovis</i></b>	<i>Mycobacterium bovis</i>
<b>MDDR</b>	molecular detection of drug resistance
<b>MDR-TB</b>	multidrug-resistant tuberculosis (resistant to at least isoniazid and rifampin)
<b>MFX</b>	moxifloxacin
<b>MGIT</b>	Mycobacteria Growth Indicator Tube
<b>MIC</b>	minimum inhibitory concentration
<b>MIRU</b>	mycobacterial interspersed repetitive units
<b>MPM</b>	meropenem
<b>MTBC</b>	<i>Mycobacterium tuberculosis complex</i>
<b><i>M. tuberculosis</i></b>	<i>Mycobacterium tuberculosis</i>
<b>NAAT</b>	nucleic acid amplification test
<b>NIOSH</b>	National Institute for Occupational Safety and Health
<b>NNRTI</b>	non-nucleoside reverse transcriptase inhibitor
<b>NPO</b>	nothing by mouth
<b>NSAID</b>	nonsteroidal anti-inflammatory drug
<b>NTM</b>	nontuberculous mycobacteria
<b>NTSS</b>	U.S. National Tuberculosis Surveillance System
<b>OFX</b>	ofloxacin



<b>Pa/PMD</b>	pretomanid
<b>PA</b>	posteroanterior
<b>PAP</b>	patient assistance program
<b>PAS</b>	para-aminosalicylate
<b>PCR</b>	polymerase chain reaction
<b>PICC</b>	peripherally inserted central catheter
<b>PK</b>	pharmacokinetic
<b>PO</b>	by mouth
<b>PPD</b>	purified protein derivative
<b>PSQ</b>	pyrosequencing
<b>PZA</b>	pyrazinamide
<b>QFT-Plus</b>	QuantiferON®-TB Gold Plus
<b>QT</b>	the interval from the beginning of the QRS complex to the end of the T wave on an electrocardiogram
<b>RFB</b>	rifabutin
<b>RFLP</b>	restriction fragment length polymorphism
<b>RIF</b>	rifampin
<b>RIF-R</b>	rifampin resistance
<b>RPT</b>	rifapentine
<b>RRDR</b>	rifampin resistance determining region
<b>RR-TB</b>	rifampin-resistant tuberculosis
<b>SGPT</b>	serum glutamic-pyruvic transaminase
<b>SM</b>	streptomycin
<b>SOT</b>	solid organ transplant
<b>SSRI</b>	selective serotonin reuptake inhibitor

<b>TB</b>	tuberculosis
<b>TB COE</b>	Tuberculosis Center of Excellence
<b>TDM</b>	therapeutic drug monitoring
<b>tNGS</b>	targeted next generation sequencing
<b>TSH</b>	thyroid stimulating hormone
<b>TST</b>	tuberculin skin test
<b>ULN</b>	upper limits of normal
<b>vDOT</b>	video directly observed therapy
<b>WBC</b>	white blood cell
<b>WGS</b>	whole genome sequencing
<b>wgMSLT</b>	whole-genome multilocus sequence typing
<b>wgSNP</b>	whole-genome single nucleotide polymorphism
<b>WHO</b>	World Health Organization
<b>XDR-TB</b>	extensively drug-resistant tuberculosis
<b>ZN</b>	Ziehl-Neelsen