



**Simposio Nacional de Enfermedades Infecciosas en
Medicina Interna**

Vulnerabilidad:

VIH/sida y Tuberculosis (TB)

Dr. Jorge Luis Valdés Fuster

Director-General's message on World TB Day

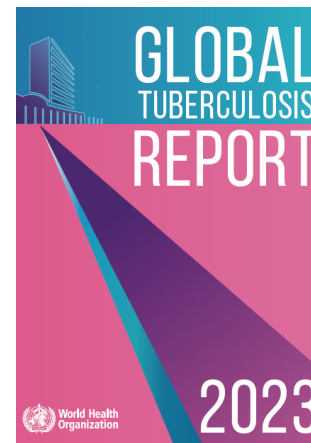
Remarks at a press briefing on World Tuberculosis Day

18 March 2013

Ladies and gentlemen,

I am pleased to brief you on the TB situation, together with WHO staff and Dr Mark Dybul, the Executive Director of the Global Fund. The Global Fund provides the vast majority of international donor funding for TB.

Twenty years ago, in 1993, WHO declared the spread of tuberculosis a global public health emergency. That unprecedented step was sparked by an explosion of cases, in rich and poor countries alike, largely fueled by the AIDS epidemic.



<https://iris.who.int/bitstream/handle/10665/373828/9789240083851-eng.pdf?sequence=1>

1,6 millones de muertes por TB

167 000 PVV



2022

740 casos nuevos TB

49 PVV

37 muertes (17)

<https://instituciones.sld.cu/ucmvc/files/2023/10/Anuario-Stat%C3%ADstico-de-Salud-2022-Ed-2023.pdf>

Costs incurred by people receiving tuberculosis treatment in low-income and middle-income countries: a meta-regression analysis



Floyd, Nicolas A Menzies



ce large economic costs, even when
ination of catastrophic costs among

Lancet Glob Health 2023;
11: e1640-47

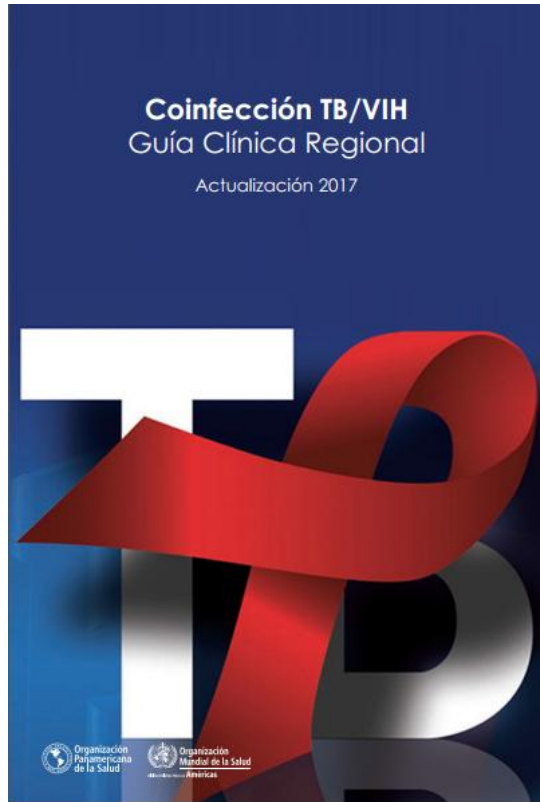
	Direct medical	Direct non-medical	Indirect	Overall
All countries*	1287 (699–2318)	2792 (1905–3892)	3261 (2117–4916)	7340 (5356–10 126)
Rifampicin-susceptible tuberculosis				
All countries*	1161 (642–2077)	2345 (1601–3246)	2820 (1846–4203)	6327 (4583–8770)
WHO world region				
African region	293 (169–487)	694 (460–995)	807 (498–1266)	1794 (1342–2431)
Region of the Americas	62 (26–135)	174 (87–313)	247 (111–506)	484 (296–792)
Eastern Mediterranean region	103 (58–176)	201 (136–283)	212 (130–348)	516 (395–684)
European region	32 (10–82)	41 (27–58)	56 (33–96)	129 (77–217)
South-East Asian region	370 (201–644)	825 (534–1210)	899 (546–1424)	2094 (1563–2795)
Western Pacific region	302 (113–743)	410 (281–562)	598 (321–1074)	1310 (790–2137)
Rifampicin-resistant tuberculosis				
All countries*	126 (58–241)	446 (304–647)	441 (271–713)	1013 (773–1355)
WHO world region				
African region	22 (12–41)	104 (63–164)	108 (60–180)	234 (178–306)
Region of the Americas	5 (2–10)	25 (14–46)	28 (13–54)	58 (43–81)
Eastern Mediterranean region	8 (4–14)	31 (19–50)	25 (13–45)	64 (46–87)
European region	40 (10–103)	104 (69–154)	110 (56–207)	254 (181–382)
South-East Asian region	27 (14–47)	119 (77–174)	99 (62–154)	245 (180–319)
Western Pacific region	24 (8–59)	63 (44–90)	71 (37–130)	158 (113–237)

Data are total costs in US\$ millions (95% uncertainty intervals). *All countries includes 135 low-income and middle-income countries analysed.

Table 4: Total direct medical costs, direct non-medical costs, and indirect costs estimated for notified tuberculosis cases in 2021, stratified by rifampicin-sensitive and rifampicin-resistant tuberculosis and region (US\$ millions)

- Se calcula que los **nuevos casos VIH** ocurren a razón de **11 por minutos y más de la mitad** ocurren en **jóvenes entre 15 y 24 años**.
- Se estima que **más de 16 000 personas se contagian cada día**, de ellos el **90 % viven en países en desarrollo**, el **40 % son mujeres** y el **50 % son de 15 a 24 años**.
- En el mundo **hay 40 millones de personas infectadas** de ellas la región más afectada es el **África subsahariana con el 70% de los casos**, seguida por el **Caribe**.
- Las **mujeres pobres** tienen más dificultad que los hombres para exigir a sus parejas que no tengan relaciones sexuales con otra persona, empleen preservativo o practiquen medidas para protegerla de la infección por VIH
- **La pobreza** puede incidir que un hombre esté predispuesto a tener numerosas parejas casuales, al impedirle tener una esposa o por abandonar el hogar en busca de trabajo.

- **Las mujeres constituyen casi dos tercios de la población analfabeta** y las tres quintas de las personas pobres del mundo. Las **mujeres que están menos alfabetizadas que los varones tienen menos capacidad para negociar con ellos la protección** y por ende estarán más expuestas a un mayor riesgo.
- Los países con **mayores poblaciones de migrantes tienden a epidemias de VIH de mayores proporciones**. Si las personas infectadas con el virus evaden técnicas de detección sistemáticas y arriban por medios ilegales son extraordinariamente difíciles a la identificación y de acceso a ellos por medios de programas para impedir que se infecten otras personas.
- En la medida que **aumente la mortalidad por el sida, habrá un numero mayor de niños huérfanos**.
- El VIH también es una amenaza para los **países ricos**, donde se desplaza la epidemia entre sus **poblaciones pobres que se estima están entre el 7 y el 17%** del total de su población.



- TB acelera la progresión de la infección por VIH a sida (muerte).
- VIH promueve la progresión a enfermedad de personas con ITBL.
- VIH disminuye población de linfocitos T - CD4+ y afecta la presentación clínica y la evolución de la TB.
- El riesgo de progresión de ITBL a enfermedad tuberculosa.
 - ✓ No VIH 5% en los primeros dos años y <5% el resto de la vida.
 - ✓ VIH+ 3 - 13% por cada año los dos primeros años y más del 30% para el resto de la vida.

Aproximadamente 1/3 PVV padecerá de TB

- VIH aumenta la tasa de recurrencia por TB.
- TB/VIH aumenta el riesgo de transmisión de TB en la comunidad.
- Favorece el desarrollo de formas de TB extrapulmonar y con baciloscopia negativa.



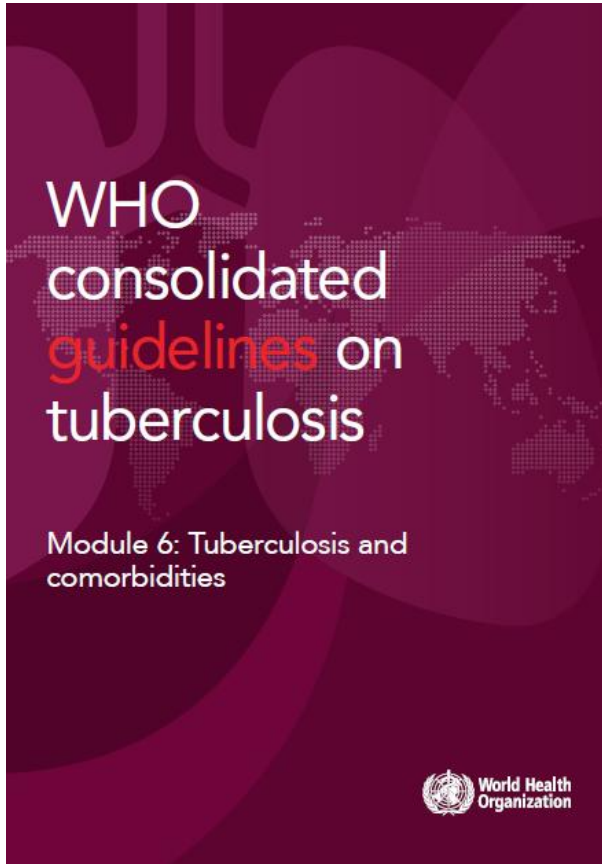
HIV

WHO consolidated guidelines on tuberculosis

Module 6: Tuberculosis and
comorbidities



<https://www.who.int/publications/i/item/9789240087002>



People living with HIV should be systematically screened for TB disease at each visit to a health facility

(strong recommendation, very low certainty of evidence)

<https://apps.who.int/iris/handle/10665/340255>

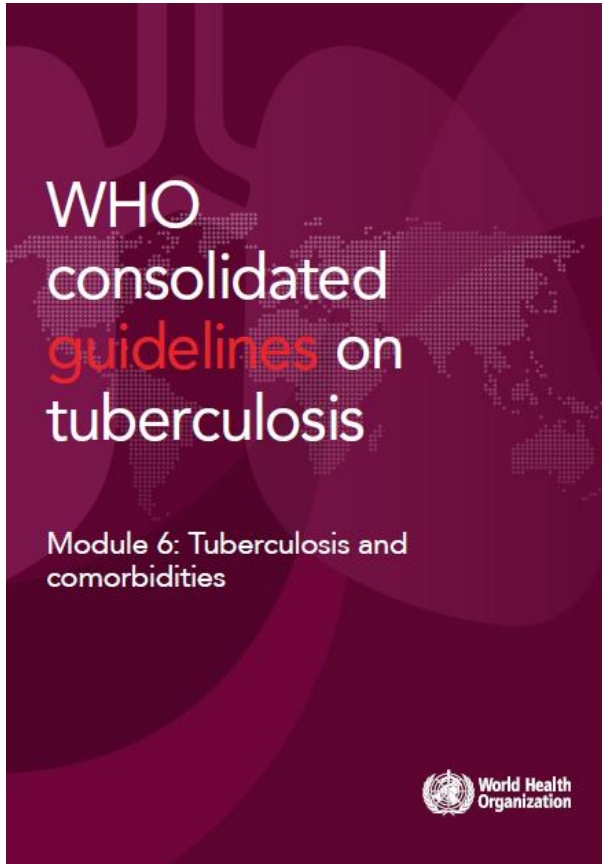
VIH/Sida = TB

TB = VIH/Sida

HIV testing services should be offered to all individuals with presumptive and diagnosed TB

(strong recommendation, low quality of evidence)

<https://apps.who.int/iris/handle/10665/44789>



Among adults and adolescents living with HIV, systematic screening for TB disease should be conducted using the WHO-recommended four symptom screen and those who report any one of the symptoms of current cough, fever, weight loss or night sweats may have TB and should be evaluated for TB and other diseases

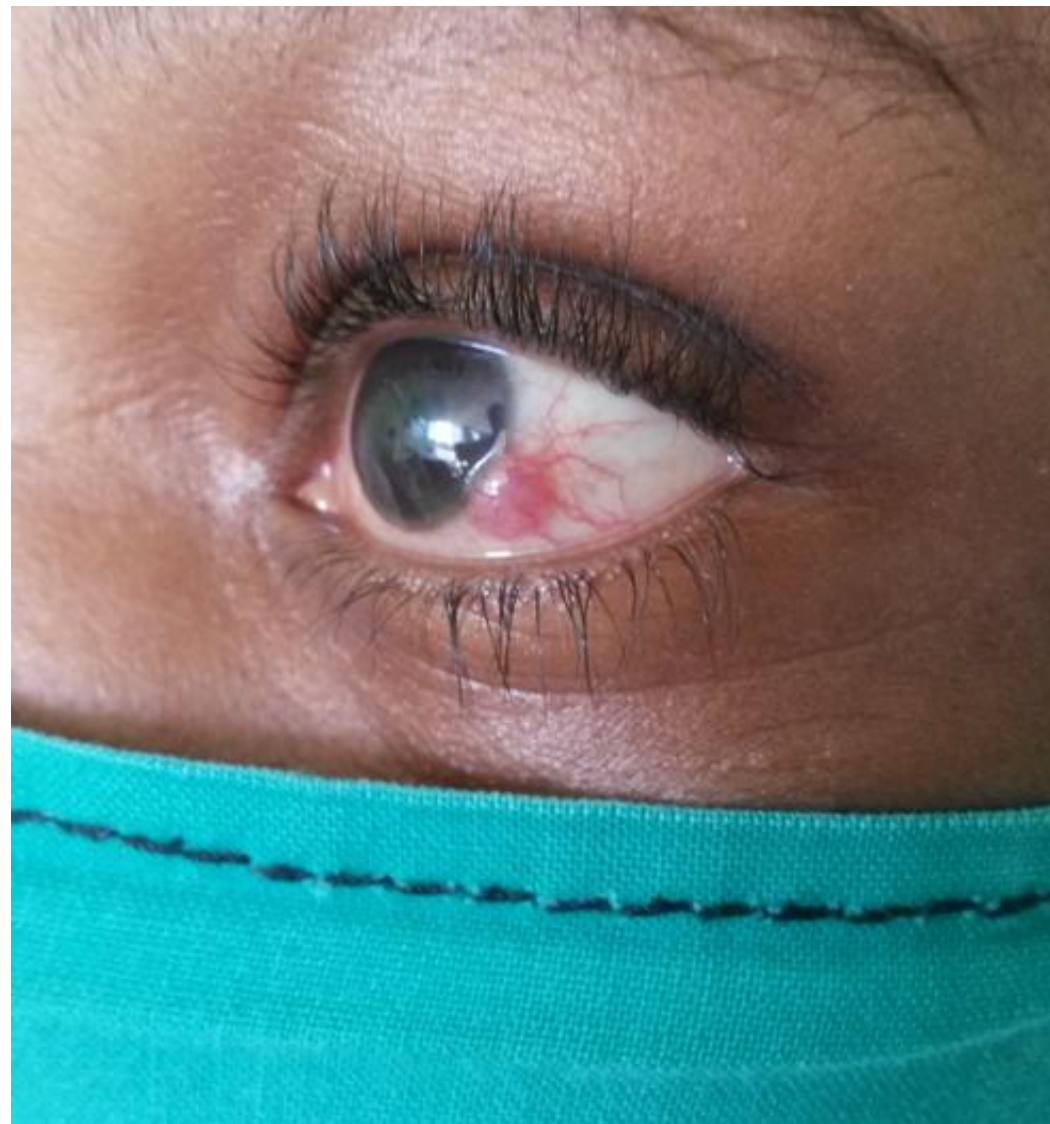
(strong recommendation, moderate certainty of evidence)

Fiebre + Pérdida de Peso + Sudoración Nocturna

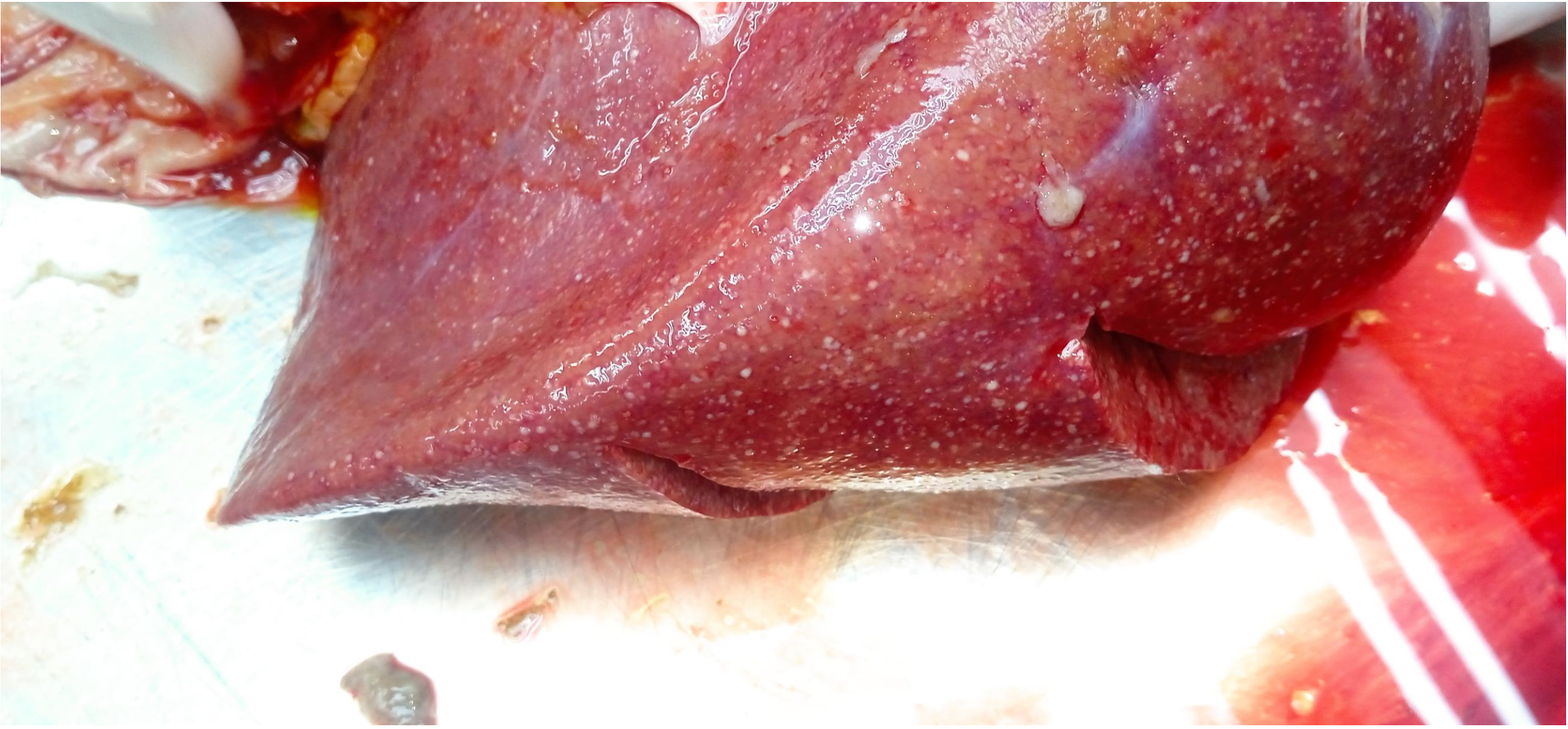
SÍNTOMAS DE FOCALIZACIÓN

WHO consolidated guidelines on tuberculosis. Module 2: screening – systematic screening for tuberculosis disease. Geneva: World Health Organization; 2021

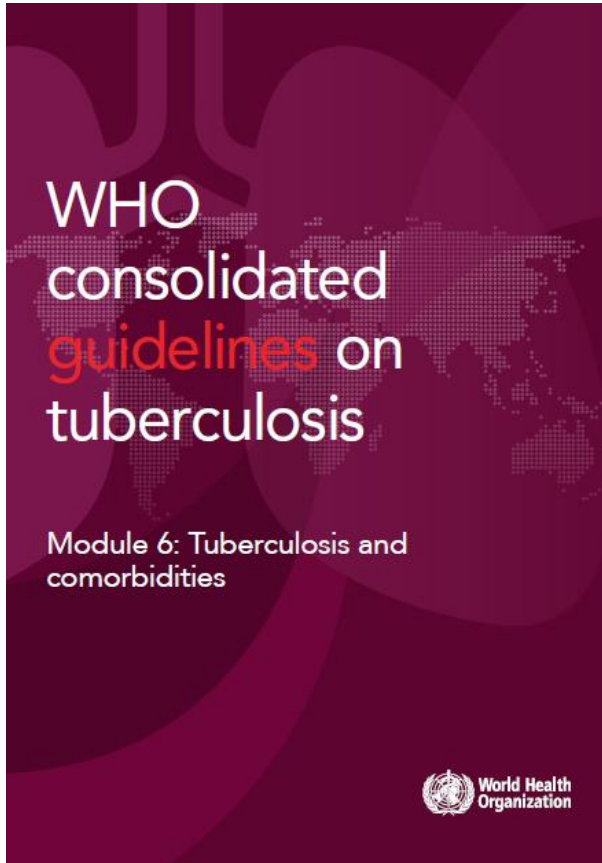
(<https://apps.who.int/iris/handle/10665/340255> , accessed 31 August 2023).











Among adults and adolescents living with HIV, C-reactive protein using a cut-off of > 5 mg/L may be used to screen for TB disease

(conditional recommendation, low certainty of evidence)

Anemia

Linfocitosis en líquidos corporales

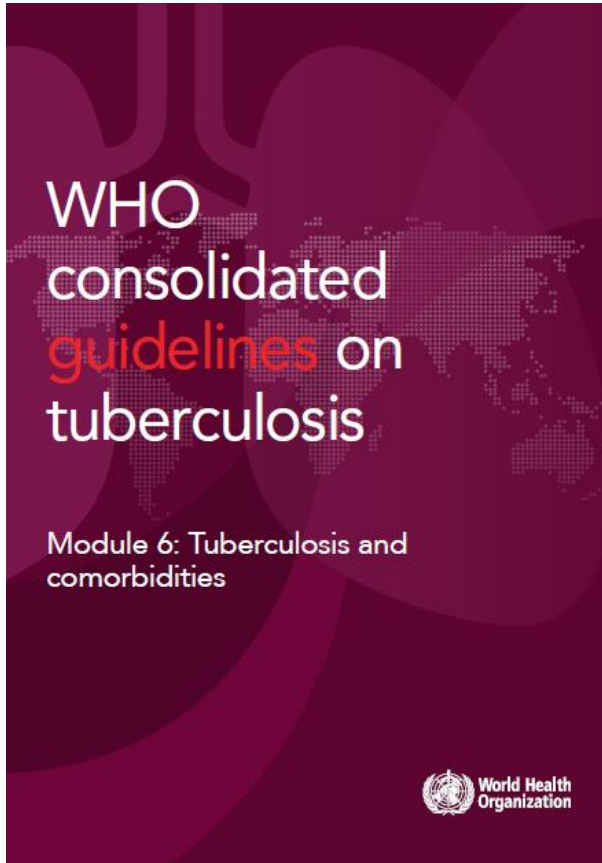
Reactantes de fase aguda

Hiperuricemia (Z) luego de iniciado el tratamiento

Función hepática y renal

WHO consolidated guidelines on tuberculosis. Module 2: screening – systematic screening for tuberculosis disease. Geneva: World Health Organization; 2021

(<https://apps.who.int/iris/handle/10665/340255> , accessed 31 August 2023).



Among adults and adolescents living with HIV, chest X-ray may be used to screen for TB disease

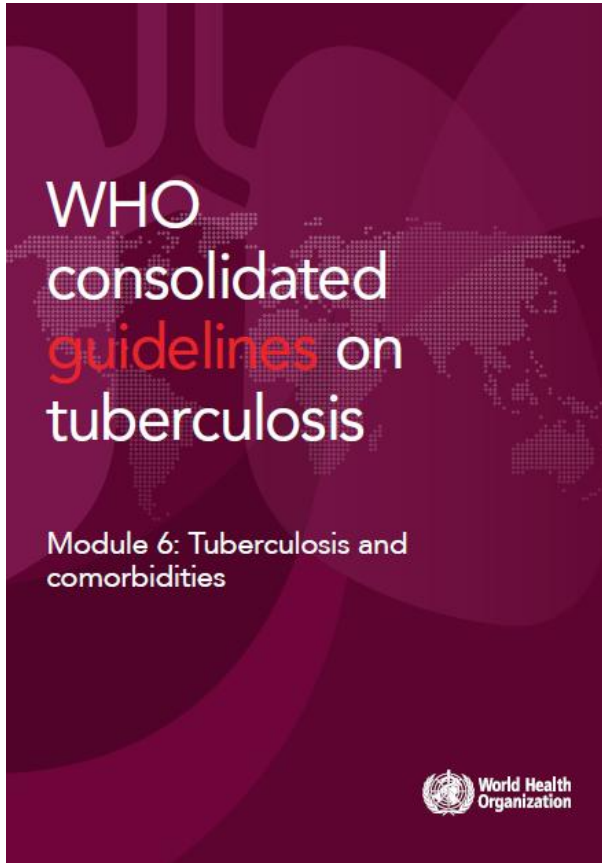
(conditional recommendation, moderate certainty of evidence)

Among individuals aged 15 years and older in populations in which TB screening is recommended, computeraided detection software programmes may be used in place of human readers for interpreting digital chest X-rays for screening and triage for TB disease

(conditional recommendation, low certainty of evidence)

WHO consolidated guidelines on tuberculosis. Module 2: screening – systematic screening for tuberculosis disease. Geneva: World Health Organization; 2021

(<https://apps.who.int/iris/handle/10665/340255> , accessed 31 August 2023).



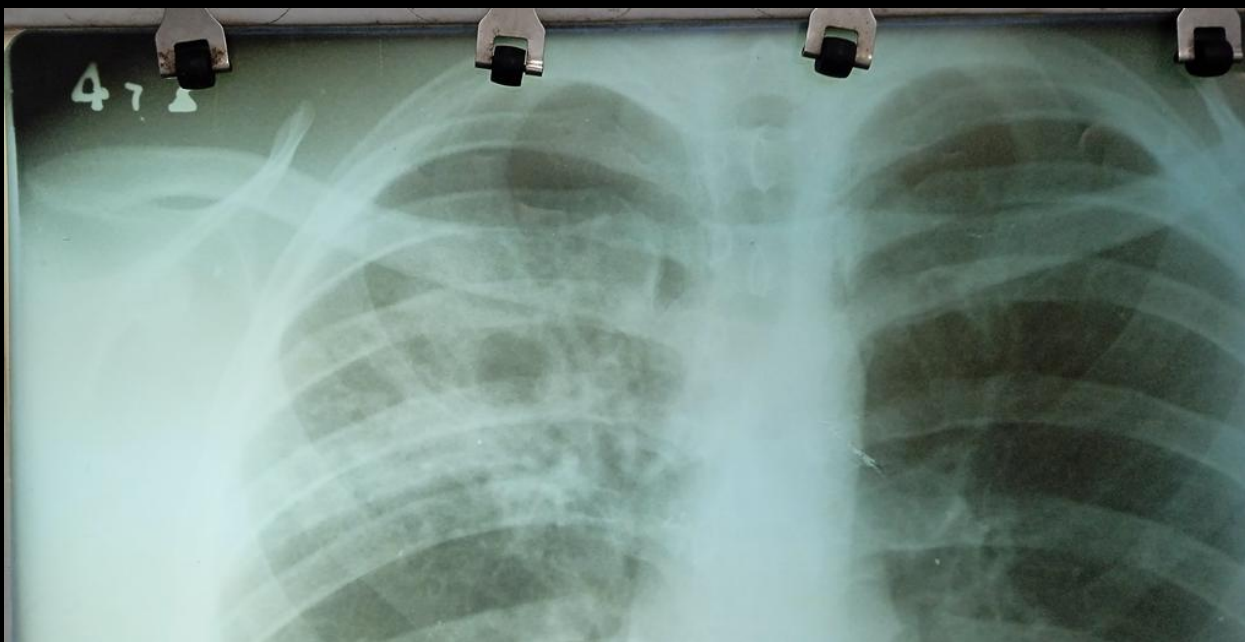
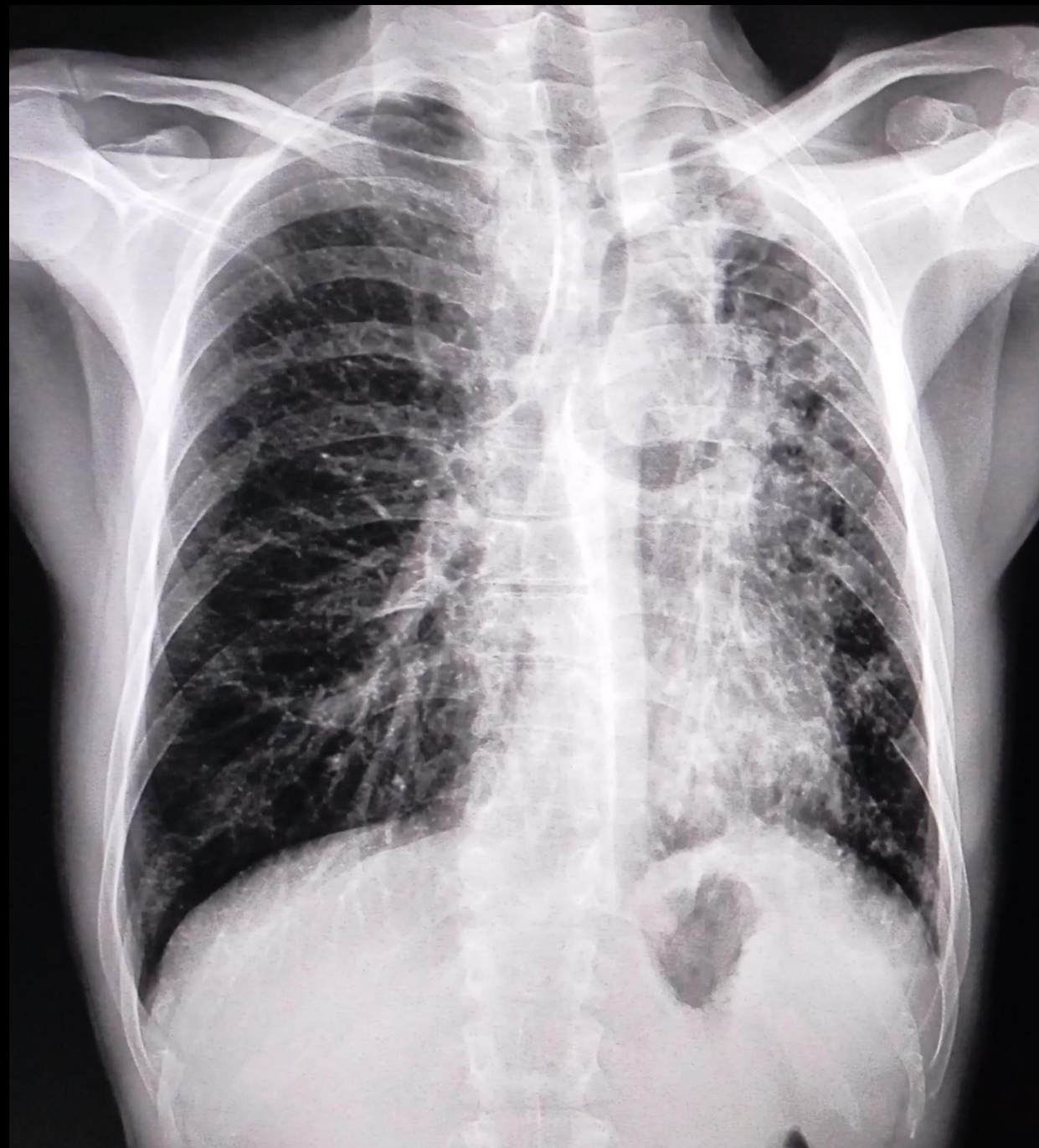
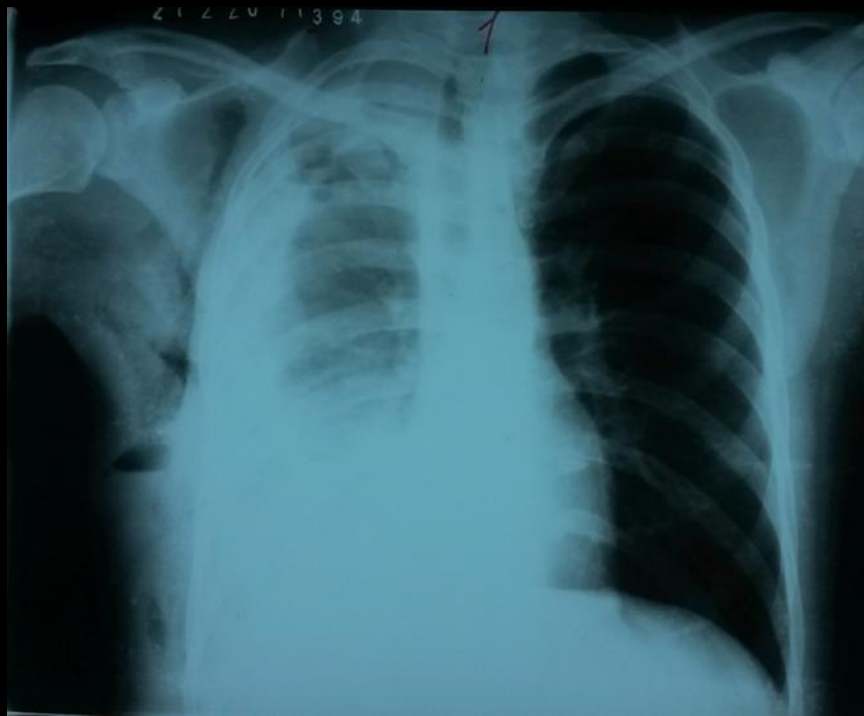
Chest radiography may be offered to people living with HIV on ART, and preventive treatment be given to those with no abnormal radiographic findings

(conditional recommendation, low certainty in the estimates of effect)

Tener en cuenta valor de CD4

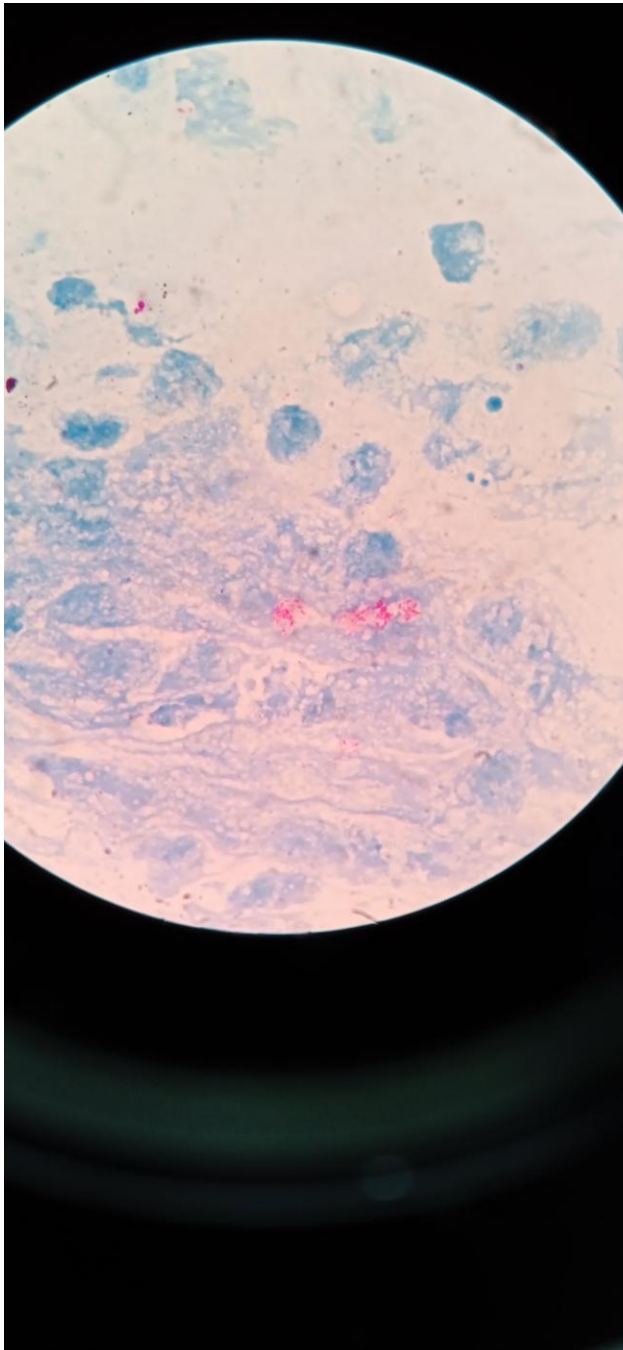
WHO consolidated guidelines on tuberculosis. Module 1: prevention – tuberculosis preventive treatment. Geneva: World Health Organization; 2020

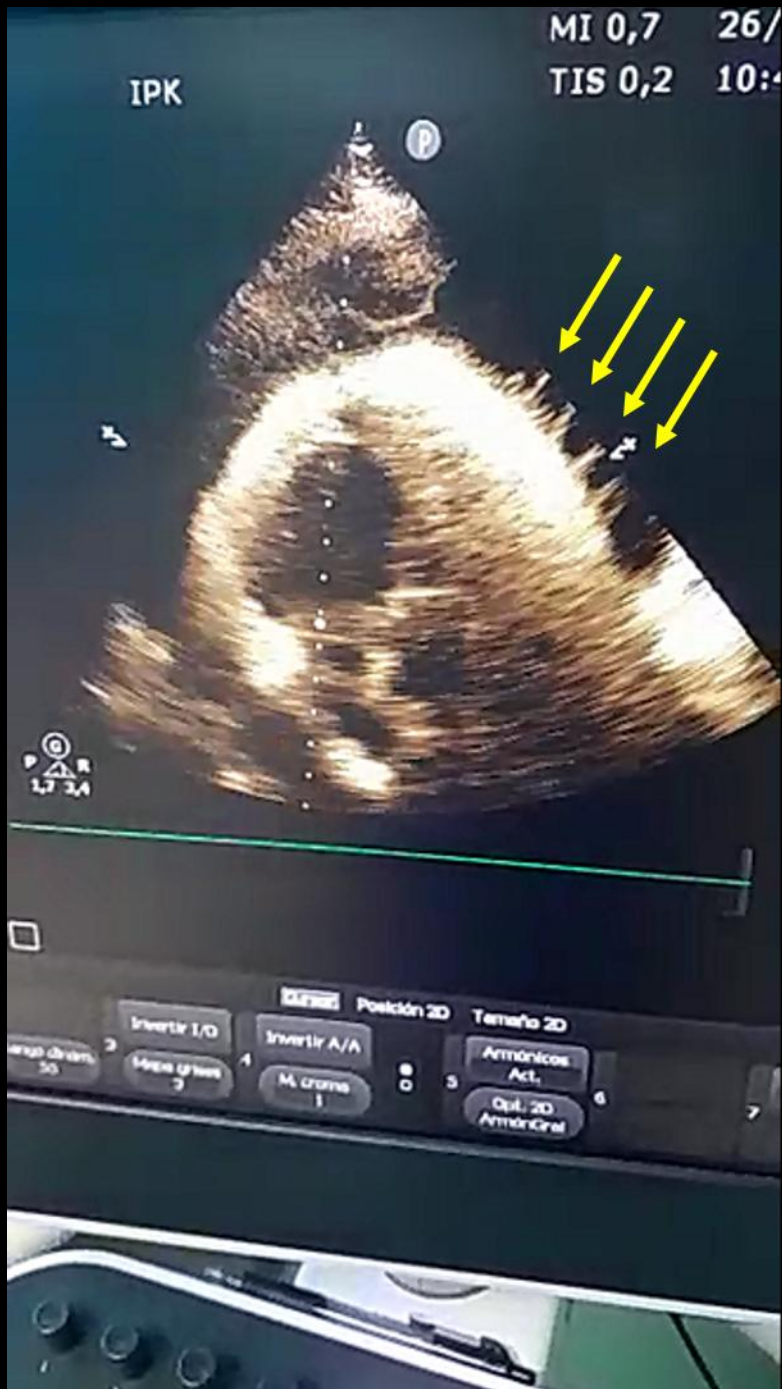
(<https://apps.who.int/iris/handle/10665/331170> , accessed 31 August 2023).



Rhodococcus equi

OTT 16, 2023 by ADMIN in IMAGING



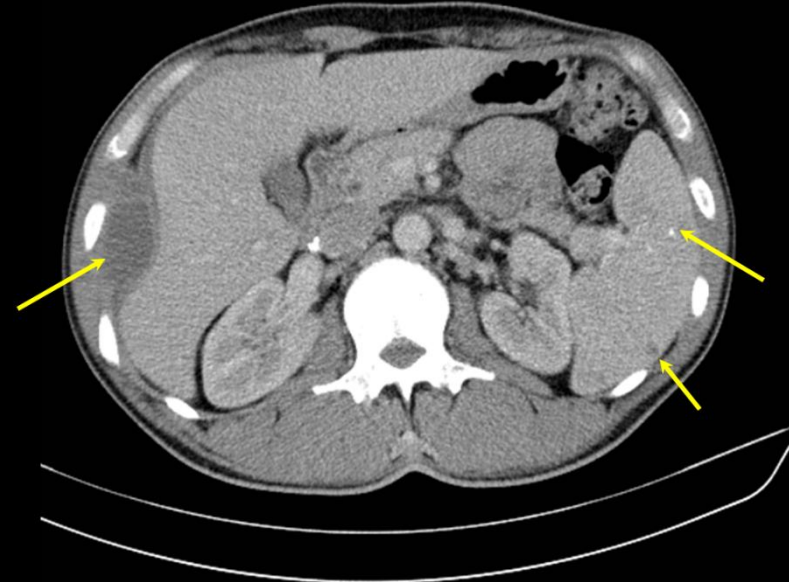


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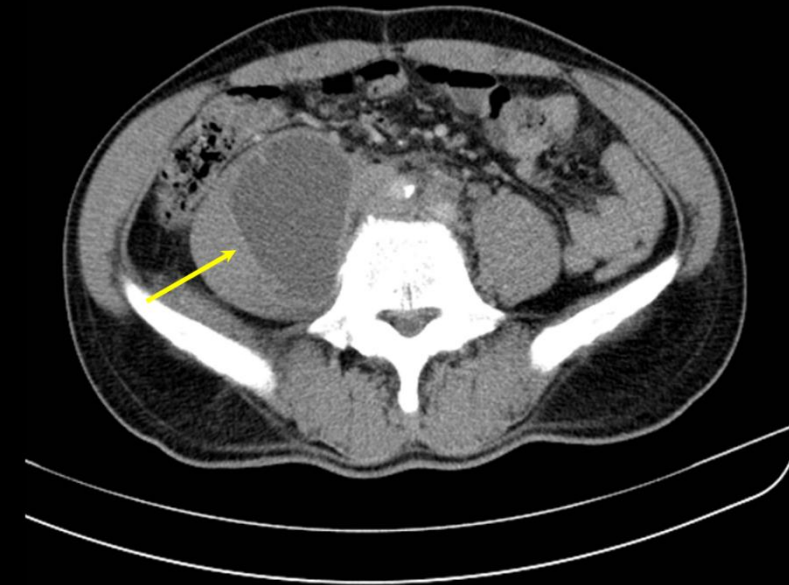


10cm

W: 31%

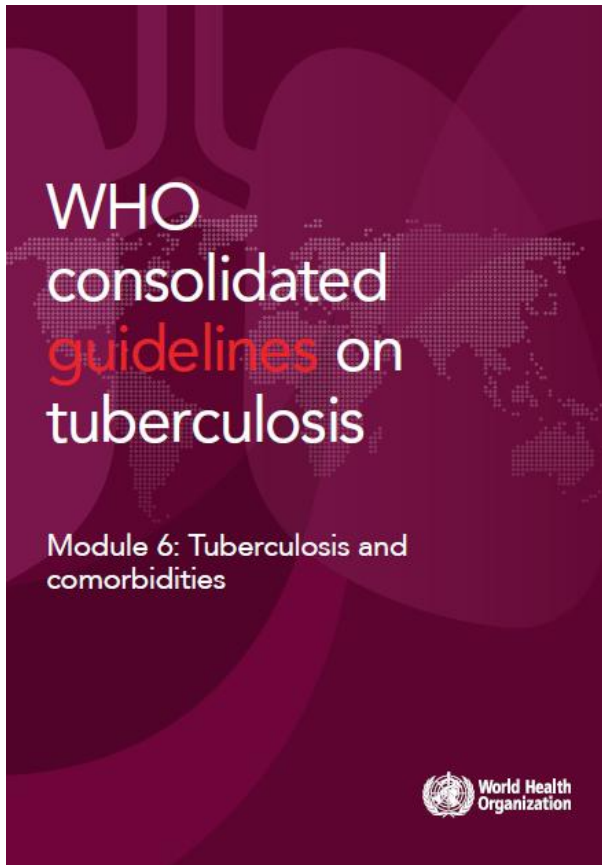
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48 IMA

R



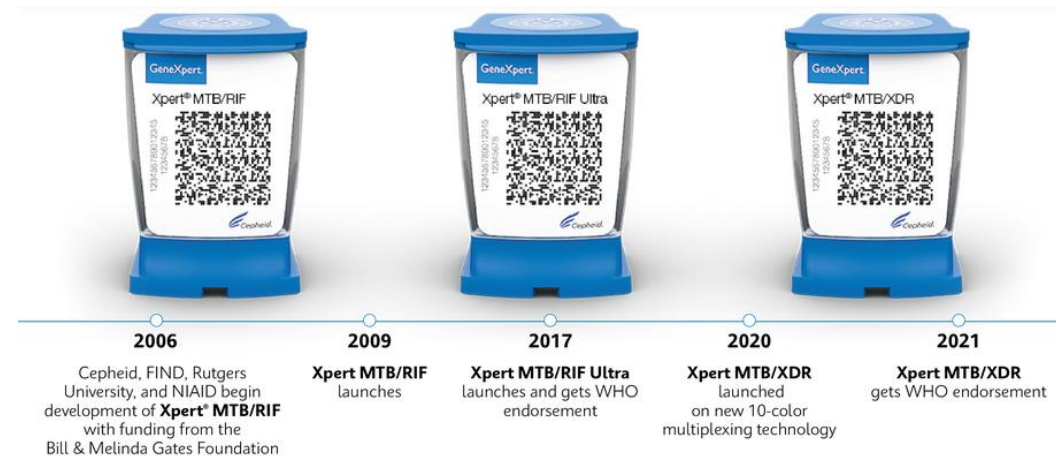
10cm

SL 5/ p0.6/ FpR 7.2
mAs 146



Among adults and adolescents living with HIV, molecular WHO-recommended rapid diagnostic tests may be used to screen for TB disease

(conditional recommendation, moderate certainty of evidence)



WHO consolidated guidelines on tuberculosis. Module 2: screening – systematic screening for tuberculosis disease. Geneva: World Health Organization; 2021

(<https://apps.who.int/iris/handle/10665/340255> , accessed 31 August 2023).

MUESTRA

LAM

BACILOSCOPIAS

**TÉCNICAS
MOLECULARES**

CULTIVOS

PSD

Biopsia

Ziehl-Neelsen

Xpert MTB/RIF

Sólido

Fenotípicas

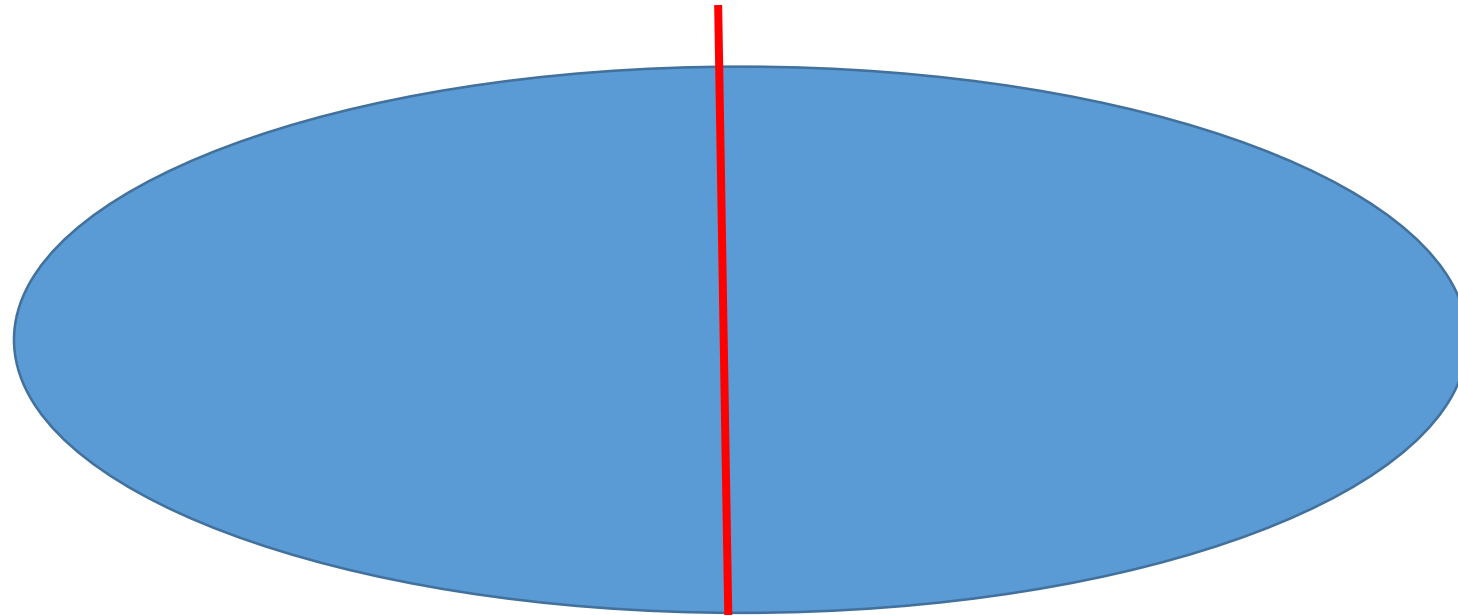
MI-LED

Xpert MTB/RIF Ultra

Líquido

Genotípicas

Exéresis de Ganglio Linfático

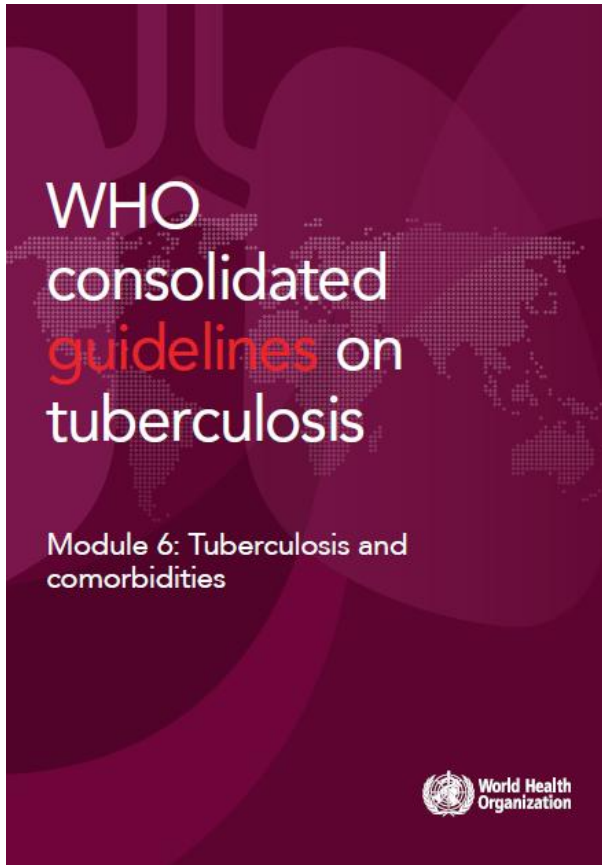


Conservar en Solución de NaCl 0.9%
Refrigerar en conservación

- Cultivo
- Pruebas moleculares

Conservar en Formol 10%

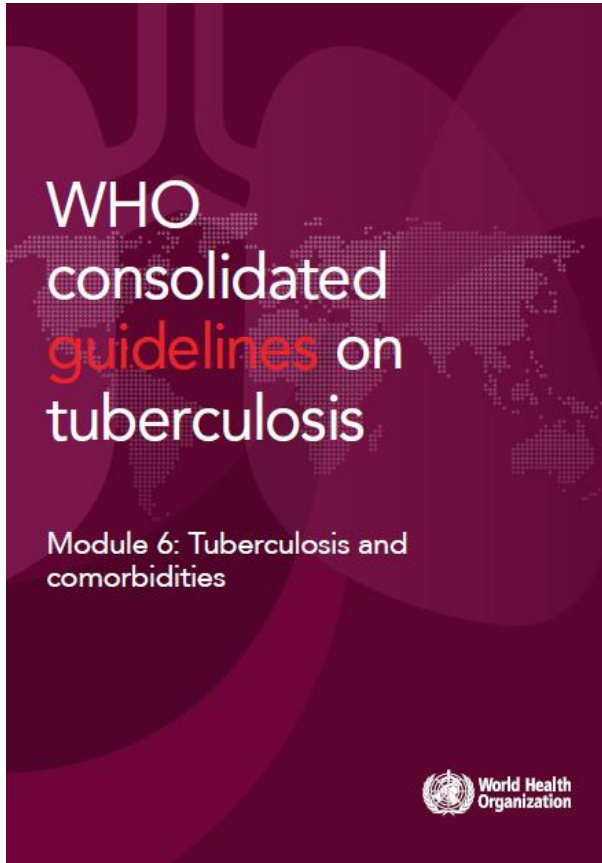
- Estudio Anatomopatológico
 - Pruebas moleculares



Adults and adolescents living with HIV who are screened for TB according to a clinical algorithm and who report any of the symptoms of current cough, fever, weight loss or night sweats may have active TB and should be evaluated for TB and other diseases and offered preventive treatment if active TB is excluded

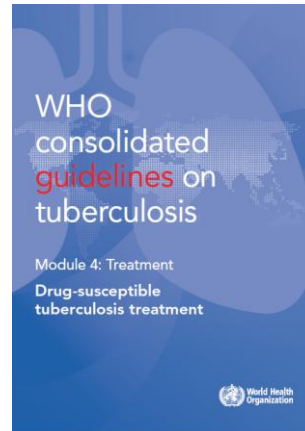
(strong recommendation, moderate certainty in the estimates of effect)

Tratamiento preventivo solo si se excluye TB activa



It is recommended that TB patients who are living with HIV should receive at least the same duration of daily TB treatment as HIV-negative TB patients

(strong recommendation, high certainty of evidence)



2HREZ/4HR

Frecuencia diaria

No recomendados esquemas de tres dosis semanales

WHO consolidated guidelines on tuberculosis. Module 4: treatment – drug-susceptible tuberculosis treatment. Geneva: World Health Organization; 2022

(<https://apps.who.int/iris/handle/10665/353829> , accessed 31 August 2023).

ITBL

- H diaria 6-9 meses. Cualquier esquema ARV.
- HP 1 dosis semanal por 3 meses:
 - EFV 600mg diarios
 - Raltegravir 400mg cada 12h (ABC+3TC / TDF+FTC)
 - Dolutegravir 50mg diarios (Si 50mg son apropiados)
- HP diario por 1 mes
 - EFV 600mg diarios (ABC+3TC / TDF+FTC)

TB Activa

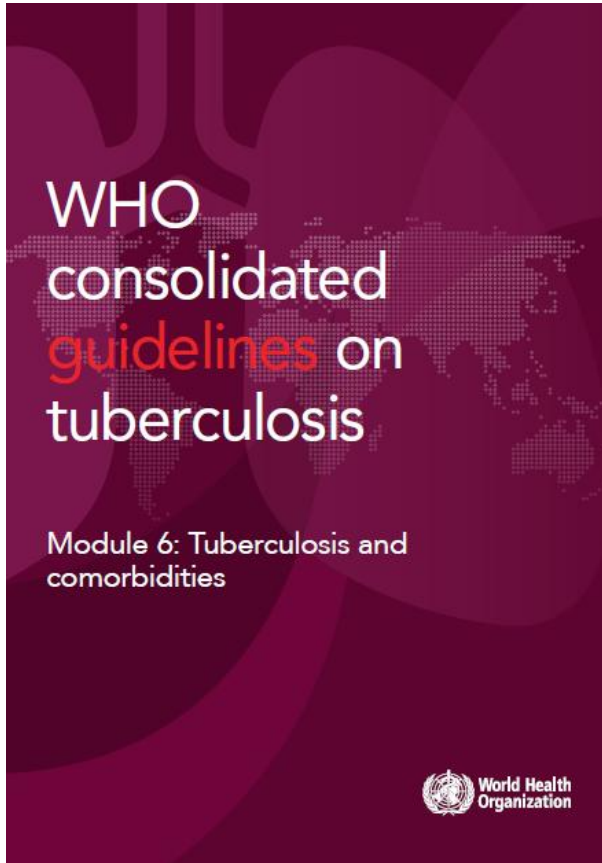
- CD4 <50 cel/ μ l (2 semanas)
- CD4 $\geq$ 50 cel/ μ l (8 semanas)
- Meningitis TB lo antes posible con seguimiento estrecho por alta mortalidad.

Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents with HIV



Developed by the HHS Panel on Antiretroviral Guidelines for Adults and Adolescents—A Working Group of the NIH Office of AIDS Research Advisory Council (OARAC)

<https://clinicalinfo.hiv.gov/sites/default/files/guidelines/documents/adult-adolescent-arv/guidelines-adult-adolescent-arv.pdf>

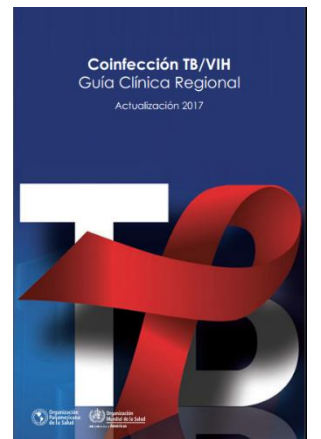


Routine co-trimoxazole prophylaxis should be given to all people living with HIV with active TB disease regardless of CD4 cell count

(strong recommendation, high-certainty evidence)

Consolidated guidelines on HIV prevention, testing, treatment, service delivery and monitoring: recommendations for a public health approach, 2021 update. Geneva: World Health Organization; 2021 (<https://apps.who.int/iris/handle/10665/342899> , accessed 31 August 2023).

TMP/SMX (960mg) 1 tab diaria



https://iris.paho.org/bitstream/handle/10665.2/34855/9789275319857_spa.pdf?sequence=5&isAllowed=y

Interim Guidance: 4-Month Rifapentine-Moxifloxacin Regimen for the Treatment of Drug-Susceptible Pulmonary Tuberculosis — United States, 2022

Wendy Carr, PhD¹; Ekaterina Kurbatova, MD¹; Angela Starks, PhD¹; Neela Goswami, MD¹; Leeanna Allen, MPH¹; Carla Winston, PhD¹

Summary

On May 5, 2021, CDC's Tuberculosis Trials Consortium and the National Institutes of Health (NIH)–sponsored AIDS Clinical Trials Group (ACTG) published results from a randomized controlled trial indicating that a 4-month regimen containing rifapentine (RPT), moxifloxacin (MOX), isoniazid (INH), and pyrazinamide (PZA) was as effective as the standard 6-month regimen for tuberculosis (TB) treatment (*1*). On the basis of these findings, CDC recommends the 4-month regimen as a treatment option for U.S. patients aged ≥12 years with drug-susceptible pulmonary TB and provides implementation considerations for this treatment regimen.

framework was not applicable because this regimen has not been compared in other studies. A CDC writing group reviewed the evidence and drafted guidance for comments from external TB subject matter experts and for presentation for public comment. Comments were addressed by developing content to be published at <https://www.cdc.gov/tb/topic/treatment/tbdisease.htm>.

INSIDE

290 Use of Ebola Vaccine: Expansion of Recommendations of the Advisory Committee on Immunization Practices To Include

https://www.cdc.gov/mmwr/volumes/71/wr/mm7108a1.htm?s_cid=mm7108a1_w

Mayores de 12 años

Más de 40 Kg de peso

TB pulmonar

VIH con CD4 ≥100 cells/μL

8w PMHZ/9w PMH (119 dosis)



Dr Tedros Adhanom Ghebreyesus
Director-General
World Health Organization

“ For millennia, our ancestors have suffered and died with tuberculosis, without knowing what it was, what caused it, or how to stop it. Today, we have knowledge and tools they could only have dreamed of. We have political commitment, and we have an opportunity that no generation in the history of humanity has had: the opportunity to write the final chapter in the story of TB. ”

GRACIAS



Centro Colaborador de la OPS/OMS
para la Eliminación de la Tuberculosis



INSTITUTE
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MEDICINE
ANTWERP



MINISTERIO
DE SALUD PÚBLICA
República de Cuba

