

**2** Name of Journal: *World Journal of Gastroenterology*

Manuscript NO: 46637

Manuscript Type: OPINION REVIEW

### Fluoroquinolones for the treatment of latent *Mycobacterium tuberculosis* infection in liver transplantation

Silva JT *et al.* Fluoroquinolones for latent tuberculosis infection in liver transplantation

Jose Tiago Silva, Rafael San-Juan, Mario Fernández-Ruiz, José María Aguado

#### Abstract

Solid organ transplantation (SOT) is the best treatment option for end-stage organ disease. Newer immunosuppressive agents have reduced the incidence of graft rejection but have increased the risk of infection, particularly due to the reactivation of latent infections due to opportunistic agents such as *Mycobacterium tuberculosis*. Active tuberculosis (TB) after SOT is a significant cause of morbidity and mortality. Most cases of posttransplant TB are secondary to reactivation of latent tuberculosis infection (LTBI) due to the effects of long-term immunosuppressive therapy. Risk minimization strategies have been developed to diagnose LTBI and initiate treatment prior to transplantation. Isoniazid with vitamin B6 supplementation is the treatment of choice. However, liver transplantation (LT) candidates and recipients have an increased risk of isoniazid-induced liver toxicity, leading to lower treatment completion rates than in other SOT populations. Fluoroquinolones (FQs) exhibit good *in vitro* antimycobacterial activity and a lower risk of drug-induced liver injury than isoniazid. In the present review, we highlight the disease burden posed by posttransplant TB and summarize the emerging clinical evidence supporting the use of FQs for the treatment of LTBI in LT recipients and candidates.

#### Match Overview

1	<b>Crossref</b> 33 words Torre-Cisneros, J., R. S. Juan, C. M. Rosso-Fernandez, J. T. Silva, A. Munoz-Sanz, P. Munoz, E. Miguez, P. Martin-Davila,	1%
2	<b>Internet</b> 31 words crawled on 02-Apr-2019 <a href="http://f6publishing.blob.core.windows.net">f6publishing.blob.core.windows.net</a>	1%
3	<b>Crossref</b> 29 words A. Bosch, F. Valour, O. Dumitrescu, J. Dumortier et al. "A practical approach to tuberculosis diagnosis and treatment in [...]"	1%
4	<b>Internet</b> 27 words crawled on 26-Nov-2017 <a href="http://journals.lww.com">journals.lww.com</a>	1%
5	<b>Crossref</b> 15 words Siba P. Raychaudhuri, Caroline T. Nguyen, Smriti K. Raychaudhuri, M. Eric Gershwin. "Incidence and nature of infectious [...]"	<1%
6	<b>Internet</b> 14 words crawled on 12-Mar-2019 <a href="http://link.springer.com">link.springer.com</a>	<1%
7	<b>Crossref</b> 13 words Tien, Vivian, Elizabeth Robilotti, Devin Callister, Aruna Subramanian, Glen Lutchman, and Dora Y. Ho. "Tolerability of Flu [...]"	<1%
8	<b>Crossref</b> 12 words Andromachi P. Michalopoulou. "Spectroscopic imaging for [...]" etection of ischemic injury in rat kidneys by use of changes i	<1%

[全部](#)[图片](#)[新闻](#)[视频](#)[购物](#)[更多](#)[设置](#)[工具](#)

找到约 68,800 条结果 (用时 0.47 秒)

## Google 学术: Fluoroquinolones for the treatment of latent Mycobacterium tuberculosis infection in liver transplantation

Mycobacterium tuberculosis infection in recipients of ... - Muñoz - 被引用次数: 284

Mycobacterial infections in solid organ transplant ... - Meije - 被引用次数: 60

Tuberculosis in solid-organ transplant recipients: ... - Aguado - 被引用次数: 217

## Tuberculosis Prophylaxis With Levofloxacin in Liver Transplant ...

<https://academic.oup.com/cid/article/60/11/1642/356254> ▾ [翻译此页](#)

作者: J Torre-Cisneros - 2015 - 被引用次数: 31 - [相关文章](#)

2015年2月25日 - The use of **quinolones** (ofloxacin, levofloxacin, moxifloxacin, gatifloxacin) for prophylaxis of **latent tuberculosis infection** could be a good alternative, but there is insufficient evidence of their efficacy and safety in **liver transplant** candidates or recipients [1], and moxifloxacin has been associated with severe ...

## Tuberculosis Prophylaxis With Levofloxacin in Liver Transplant ...

<https://academic.oup.com/cid/article-pdf/60/11/1642/.../civ156.pdf> - [翻译此页](#)

作者: J Torre-Cisneros - 2015 - 被引用次数: 31 - [相关文章](#)

2015年2月25日 - The use of **quinolones** (ofloxacin, levofloxacin, moxifloxacin, gatifloxacin) for prophylaxis of **latent tuberculosis infection** could be a good alternative, but there is insufficient evidence of their efficacy and safety in **liver transplant** candidates or re- cipients [1], and moxifloxacin has been associated with severe ...

## Tuberculosis in liver transplant recipients: A systematic ... - Rede TB

[redetb.org/attachments/article/61/493\\_Holty\\_Liv\\_Transp\\_2009.pdf](http://redetb.org/attachments/article/61/493_Holty_Liv_Transp_2009.pdf) - [翻译此页](#)

**Mycobacterium tuberculosis** (MTB) causes substantial morbidity and mortality in **liver transplant** recipients. .... **latent MTB treatment** in **liver transplant** candidates or recipients. .... **quinolone**, and 17% received drug regimens including.

## "Efficacy and Safety of Levofloxacin vs Isoniazid in Latent Tuberculosis

...



全部 新闻 图片 视频 购物 更多 设置 工具

找到约 63,300 条结果 (用时 0.52 秒)

Google 学术: Fluoroquinolones for the treatment of latent Mycobacterium tuberculosis infection in liver transplantation

- Mycobacterium tuberculosis infection in recipients of ... - Muñoz - 被引用次数: 300
- Mycobacterial infections in solid organ transplant ... - Meije - 被引用次数: 64
- Tuberculosis in solid-organ transplant recipients: ... - Aguado - 被引用次数: 228

其他用户还问了以下问题

- What is the best treatment for latent TB?
- How is latent TB treated?
- Which anti TB drug is most hepatotoxic?
- Can TB cause liver failure?

反馈

Tuberculosis Prophylaxis With Levofloxacin in Liver Transplant ...

https://academic.oup.com/cid/article/60/11/1642/356254 翻译此页

作者: J Torre-Cisneros - 2015 - 被引用次数: 32 - 相关文章

2015年2月25日 - The use of quinolones (ofloxacin, levofloxacin, moxifloxacin, gatifloxacin) for prophylaxis of latent tuberculosis infection could be a good alternative, but there is insufficient evidence of their efficacy and safety in liver transplant candidates or recipients [1], and moxifloxacin has been associated with severe



时间不限

2019以来

2018以来

2015以来

自定义范围...

按相关性排序

按日期排序

不限语言

中文网页

简体中文网页

☒ 包括专利

☐ 包含引用

☒ 创建快讯

# **Mycobacterium tuberculosis** Infection in Recipients of Solid Organ Transplants

[HTML] oup.com

P Muñoz, C Rodríguez, E Bouza - *Clinical infectious diseases*, 2005 - academic.oup.com

... Prophylaxis against **latent tuberculosis** is the main approach to **treatment**, but many issues remain ... hindered by the difficulty of identifying proper candidates for **treatment** and by ... The frequency of **Mycobacterium tuberculosis disease** among recipients of SOTs in most developed ...

☆ 99 被引用次数: 300 相关文章 所有 11 个版本

## **Mycobacterial infections** in solid organ transplant recipients

[PDF] wiley.com

..., ESCMID Study Group of Infection in ... - ... and Infection, 2014 - Wiley Online Library

... Other drugs such as **fluoroquinolones** may also be considered for LTBI **treatment**, although adverse effects associated ... Alternatively, pyrazinamide could be replaced with a **fluoroquinolone** ... TB who remain culture-positive after 2 months require 12–18 months of **treatment** [34,36 ...

☆ 99 被引用次数: 64 相关文章 所有 9 个版本

... organ **transplant** recipients: consensus statement of the group for the study of **infection in transplant** recipients (GESITRA) of the Spanish Society of **Infectious Diseases** ...

[PDF] oup.com

JM Aguado, J Torre-Cisneros, J Fortún... - ... *infectious diseases*, 2009 - academic.oup.com

... **Tuberculosis** in Solid-Organ **Transplant** Recipients: Consensus Statement of the Group for the Study of **Infection in Transplant** Recipients (GESITRA) of the Spanish Society of **Infectious Diseases** and Clinical Microbiology. José ...

☆ 99 被引用次数: 228 相关文章 所有 12 个版本

**Tuberculosis** prophylaxis with levofloxacin in **liver transplant** patients is associated with a high incidence of tenosynovitis: safety analysis of a multicenter randomized ...

[HTML] oup.com

..., E Cordero, M Montejo, M Blanes... - ... *Infectious Diseases*, 2015 - academic.oup.com

... **Tuberculosis** Prophylaxis With Levofloxacin in **Liver Transplant** Patients Is Associated ... Search for other works by this author on: Oxford Academic. PubMed. Google Scholar. Rafael San-Juan Clara M. Rosso-Fernández. 3Hospital Universitario Virgen del Rocío, Sevilla ...

☆ 99 被引用次数: 32 相关文章 所有 9 个版本

## **Mycobacterium tuberculosis** infection in transplant recipients: early diagnosis and treatment of resistant tuberculosis

JEC Holty, RR Sista - *Current opinion in organ transplantation*, 2009 - journals.lww.com

Purpose of review To provide a better understanding and summarize recent advances in the diagnosis.

☆ 99 被引用次数: 39 相关文章 所有 6 个版本

## **Mycobacterium tuberculosis** infection in solid organ transplant recipients: experience from a single center in China

XF Zhang, Y Lv, WJ Xue, B Wang, C Liu, PX Tian... - *Transplantation* ..., 2008 - Elsevier

... **Fluoroquinolones** are effective and safe for posttransplantation TB **treatment** ... DL Paterson **Mycobacterium tuberculosis infection** in solid organ **transplant** recipients: impact and implications for **management** ... 4 N. Benito, O. Sued, A. Moreno, et al. **Diagnosis and treatment** ...

☆ 99 被引用次数: 55 相关文章 所有 4 个版本