

Letterkenny University Hospital - LUH Antimicrobial Prescribing Policy/Guidelines: Fluoroquinolone Warning

Systemic **fluoroquinolones** (by mouth, injection, or inhalation) e.g. ciprofloxacin and levofloxacin can very rarely cause long-lasting (up to months or years), disabling, and potentially irreversible **adverse effects**, sometimes affecting multiple systems and organs e.g. tendons, muscles, joints, nerves and aorta.

- The risk of **tendinopathy** is increased in elderly patients or those with concomitant steroid use, renal disease, or post-transplant (heart/lung/kidney). Tendon damage can occur within 48hours of commencing treatment or effects can be delayed for several months after stopping.
- Fluoroquinolone use is also associated with **QTc prolongation** (which can lead to torsades de pointes and ventricular fibrillation), **C. difficile** colitis, **aortic aneurysm** rupture/dissections and **heart valve regurgitation** /incompetence.
- Fluoroquinolones can **lower the seizure threshold** and are not recommended in patients with a history of seizures/epilepsy.
- Fluoroquinolones can cause an **exacerbation of Myasthenia Gravis**.
- See the Summary of Product Characteristics via the [HPRA website](#) for full product information.

Patients should be informed to stop treatment with a fluoroquinolone antibiotic at the first sign of a side effect involving muscles, tendons or bones (such as inflamed or torn tendon, muscle pain or weakness, and joint pain or swelling) or the nervous system (such as feeling pins and needles, tiredness, depression, confusion, suicidal thoughts, sleep disorders, vision and hearing problems, and altered taste and smell).

References:

European Medicines Agency 5 October 2021: [Fluoroquinolone and quinolone antibiotics: PRAC recommends new restrictions on use following review of disabling and potentially long-lasting side effect](#) [Accessed June 2024]

Summary of Product Characteristics Ciprofloxacin (Ciproxin) 500mg film coated tablets [Accessed 05/06/24]

[Fluoroquinolone Warnings - HSE.ie](#)

Medicines and Healthcare products Regulatory Agency (MHRA) 21 March 2019: [Fluoroquinolone antibiotics: new restrictions and precautions for use due to very rare reports of disabling and potentially long-lasting or irreversible side effects](#) [Accessed June 2024]