Fluoroquinolone Safety Alerts and Considerations.

Systemic (by mouth, injected or inhaled) fluoroquinolones (e.g., levofloxacin, ciprofloxacin, ofloxacin, moxifloxacin) can cause serious, long-lasting (up to months or years), disabling, and potentially irreversible side effects, sometimes affecting multiple systems, organ classes and senses.

The **UK indications for systemic fluoroquinolones** have been updated (<u>MHRA Jan 2024</u>). They must only be used when other antibiotics commonly recommended for the infection are inappropriate.

Situations where other antibiotics are considered inappropriate and where a fluoroquinolone may be indicated include:

- there is resistance to other first-line antibiotics recommended for the infection.
- other first-line antibiotics are contraindicated in an individual patient.
- other first-line antibiotics have caused side effects in the patient requiring treatment to be stopped.
- treatment with other first-line antibiotics has failed.

Patients should be advised to stop fluoroquinolone treatment at the first signs of a serious adverse reaction, such as

- tendinitis or tendon rupture,
- muscle pain,
- muscle weakness,
- joint pain,
- joint swelling,
- peripheral neuropathy and
- central nervous system effects, and to contact their doctor immediately.

MHRA patient information leaflet (regular print or large print).

An MHRA reminder of the risks associated with fluoroquinolones was issued in August 2023:

- do not prescribe fluoroquinolones:
 - for non-severe or self-limiting infections, or non-bacterial conditions, for example non-bacterial (chronic) prostatitis
 - for mild to moderate infections (such as in acute exacerbation of chronic bronchitis and chronic obstructive pulmonary disease) unless other commonly recommended antibiotics are considered inappropriate
- do not prescribe ciprofloxacin or levofloxacin for uncomplicated cystitis unless other commonly recommended antibiotics are considered inappropriate.
- avoid fluoroquinolone use in patients who have previously had serious adverse reactions with a quinolone antibiotic (for example, nalidixic acid) or a fluoroquinolone antibiotic.
- prescribe fluoroquinolones with special caution for people older than 60 years and for those with renal impairment or solid-organ transplants, because they are at a higher risk of tendon injury.
- avoid use of a corticosteroid with a fluoroquinolone since coadministration could exacerbate fluoroquinolone-induced tendinitis and tendon rupture.

Prescribers should remain alert to the risk of suicidal thoughts and behaviours with use of fluoroquinolone antibiotics (MHRA Sept 2023)

Fluoroquinolones are associated with a small risk of heart valve regurgitation and aortic aneurysm and dissection (<u>MHRA Dec 2020</u>).

Please report suspected adverse drug reactions to fluoroquinolones via the <u>Yellow Card Scheme</u>.

CONTACT MICROBIOLOGY FOR SPECIFIC PATIENT ADVICE.