Reference: FOI.ICB-2526/239

Subject: Empiric Fluoroquinolone use in Enteric Epididymo-orchitis (EO)

I can confirm that the ICB does hold some of the information requested; please see responses below:

QUESTION	RESPONSE
1. **Specimens, settings, denominators (by window and by agent).** For each figure and for the summary table, please specify (a) the specimen types included (blood cultures, GP-requested midstream urines, catheter urines, and whether A&E/hospital ward urines are included), (b) the setting split (community vs hospital-onset) for each time window (M3, Y1, Y3), and (c) the exact denominators (number of unique isolates tested) per antibiotic and per window used to calculate the reported percentages. Please also state the calendar end date anchoring each window and whether the same date range was used across all antibiotics.	This information is not held by the ICB. We advise you to contact the acute trusts directly for this information, as follows: North Bristol NHS Trust (NBT): https://www.nbt.nhs.uk/about-us/information-governance/freedom-information/request-information University Hospitals Bristol and Weston NHS Foundation Trust (UHBW): https://www.uhbw.nhs.uk/p/how-we-use-your-data/freedom-of-information-foi-requests
2. **Analytical methods (deduplication, breakpoints, definitions, error bars).** Please confirm (a) the deduplication approach (e.g., first isolate per patient per organism per period; if different, describe precisely), (b) the AST standard and version applied in each window (EUCAST vs BSAC, including year/version and how any breakpoint changes across windows were handled), (c) the operational definitions used—i.e., that "non-susceptible" = intermediate +	This information is not held by the ICB. Please refer to contact details above.

resistant and that the "% resistance" metric excludes intermediate—and (d) the error bars in Figure 1 (state whether these are SD, SE, or 95% CI and how they were calculated from the underlying counts).	
3. **Organism mix and EO-relevant subsets (to avoid proxy bias).** Please provide the organism breakdown (e.g., % **E. coli**, **Klebsiella**, **Proteus**, **Pseudomonas**) for each time window and confirm any species exclusions/inclusions. In addition, supply—if held—susceptibility outputs restricted to EO-relevant Enterobacterales in a proxy cohort (e.g., male, ≥35 years, community-onset urine), with S/I/R counts per antibiotic. If no such subset is held, please state not held.	This information is not held by the ICB. Please refer to contact details above.
4. **Clinical relevance of agents** Please identify which antibiotics in the table are considered clinically suitable for epididymal/prostatic tissue penetration (e.g., co-amoxiclav, fluoroquinolones) and which are urinary-only agents (e.g., nitrofurantoin, pivmecillinam) that should not inform EO empirical choice.	This information is not held by the ICB. Please refer to contact details above.
5. **Fluoroquinolone proxy and alternative β-lactams.** Please confirm whether ciprofloxacin results are being used as a proxy for ofloxacin (and/or levofloxacin) and provide any evidence that susceptibility equivalence holds under the breakpoints used for EO-relevant organisms (including any local cross-resistance data between fluoroquinolones). Separately, please provide susceptibility (S/I/R counts and percentages) for other tissue-penetrating oral β-lactams considered for enteric EO (e.g., cefalexin, cefuroxime), if held.	This information is not held by the ICB. Please refer to contact details above.

6. **Consultant microbiologist statement — documentary record.** Your response notes that "a consultant microbiologist reports he would expect resistance rates to be 'somewhere in between'." Please provide the contemporaneous record of this (email, memo, or minute), including the date, author, role, the datasets they reviewed (figures/tables provided to them), any quantitative basis for the "in between" estimate (e.g., stratified analyses or confidence intervals), and whether this view was reviewed/signed off within AMS/APMOC. If no formal record exists, please state not held.	Please find enclosed email trail, document 01. The author was Philip Williams, Consultant Medical Microbiologist at UHBW (University Hospitals Bristol and Weston NHS Foundation Trust). The ICB does not hold the information reviewed by this individual or any quantitative basis for this estimate. Please contact UHBW directly for this information, contact details above. The information was not signed off by a specific Committee such as AMS/APMOC but was reviewed by other clinical specialists in this area. Please refer to enclosed email trail, document 02.

The information provided in this response is accurate as of 14 November 2025 and has been approved for release by Dr Joanne Medhurst, Chief Medical Officer for NHS Bristol, North Somerset and South Gloucestershire ICB.

[redacted]

From: [redacted] (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C)
Sent: 06 November 2025 16:25
To: foi (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C)
Subject: 2526/239

[redacted]
The first Email with the graphs and micro interperatation.
[redacted]

From: Philip Williams
Sent: 17 September 2025 16:09
To: [redacted] (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C)
Subject: recent antibiograms

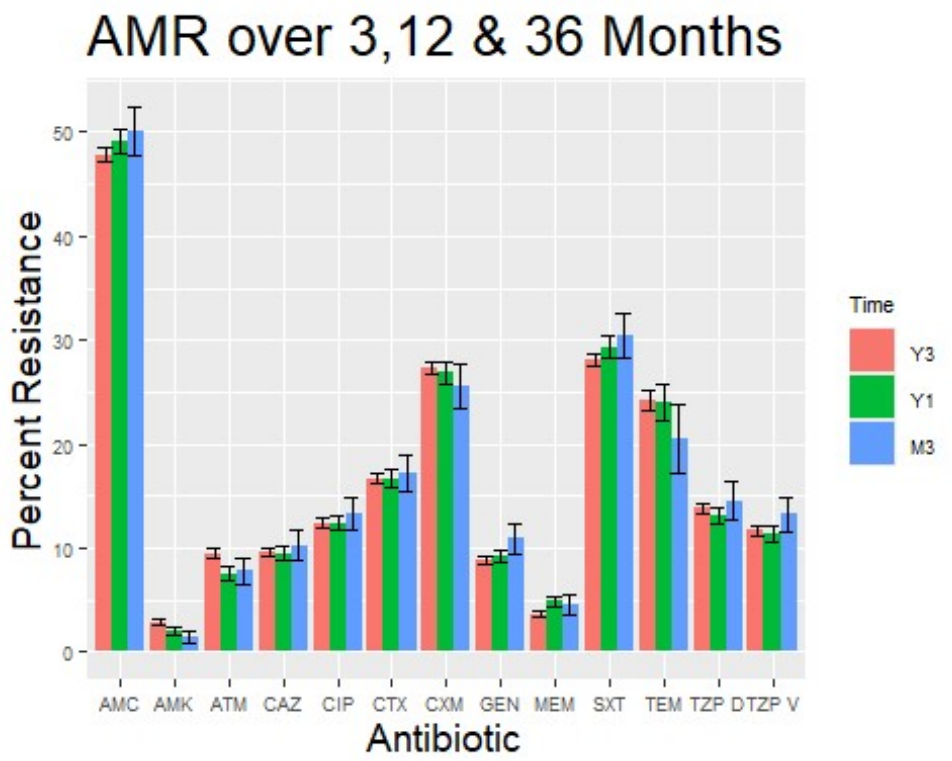
Hi [redacted]

I'm sending you are most recent antibiograms for blood cultures, GP urine samples and hospital urine samples.

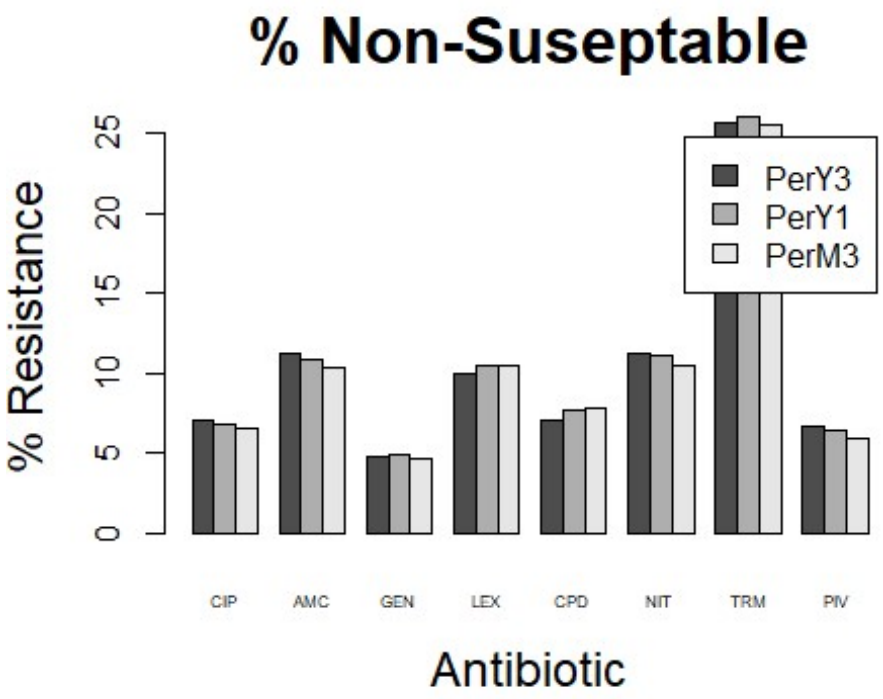
As you can see resistance rates for ciprofloxacin are noticably lower than for coamoxiclav. We don't get samples for
epidiymo-orchitis, but the relevant resistance rates are likely to be somewhere in between.

Best wishes

Philip



Gram negative antibiogram from Blood Cultures.

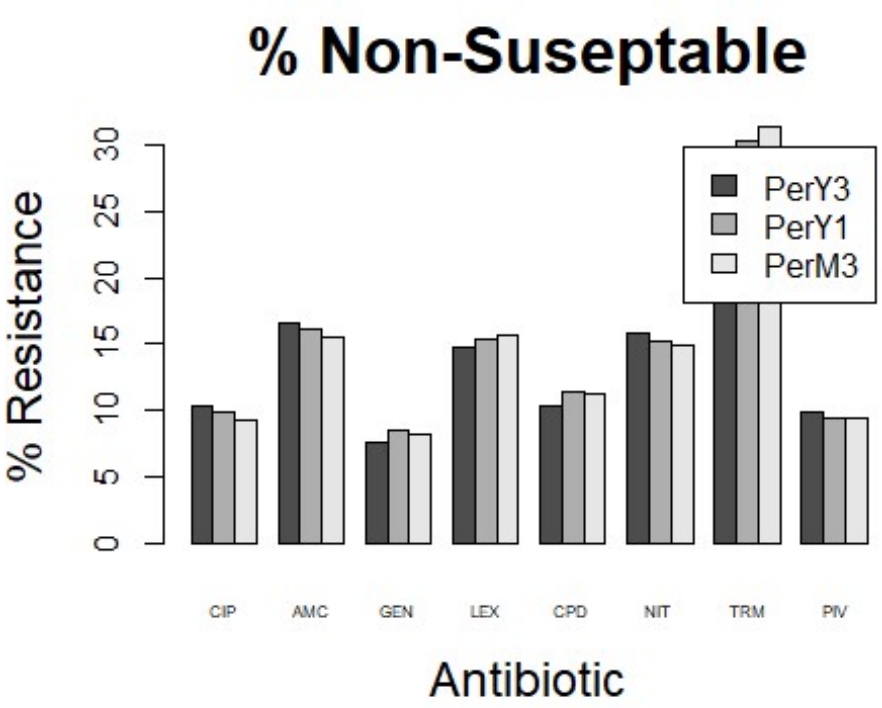


% Resistance All Locations Over 3,12 and 36 Months

Name	Short	NumY3	PerY3	NumY1	PerY1	NumM3	PerM3
Ciprofloxacin	CIP	133963	7.02	46540	6.73	11649	6.49
Coamoxiclav	AMC	132371	11.20	44870	10.82	11268	10.29
Gentamicin	GEN	134038	4.74	46548	4.90	11653	4.69
Cefalexin	LEX	132329	9.91	44901	10.47	11235	10.50

Name	Short	NumY3	PerY3	NumY1	PerY1	NumM3	PerM3
Cefpodoxime	CPD	132480	7.04	44967	7.73	11275	7.80
Nitrofurantoin	NIT	132531	11.28	44969	11.08	11275	10.45
Trimethoprim	TRM	132498	25.73	44958	26.04	11272	25.56
Pivmecillinam	PIV	132477	6.70	44966	6.42	11277	5.94

GP Urine samples



% Resistance All Locations Over 3,12 and 36 Months

Name	Short	NumY3	PerY3	NumY1	PerY1	NumM3	PerM3
Ciprofloxacin	CIP	35691	10.30	12975	9.79	3459	9.16
Coamoxiclav	AMC	33594	16.60	12042	16.06	3200	15.56
Gentamicin	GEN	36231	7.50	12990	8.45	3460	8.21
Cefalexin	LEX	33569	14.71	12047	15.41	3195	15.62
Cefpodoxime	CPD	33610	10.32	12058	11.31	3201	11.15
Nitrofurantoin	NIT	33617	15.77	12057	15.20	3201	14.87
Trimethoprim	TRM	33618	29.39	12056	30.26	3200	31.34
Pivmecillinam	PIV	33607	9.80	12055	9.45	3200	9.34

Hospital urine samples

[redacted]

From: [redacted] (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C)
Sent: 06 November 2025 16:23
To: foi (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C)
Subject: 2526/239

[redacted]
Here is the Email trail regarding 'expect EO to be somewhere in between'.
[redacted]

From: [redacted]
Sent: 30 September 2025 14:26
To: [redacted] (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C) ; [redacted] ; [redacted] ; [redacted]
Subject: RE: [EXTERNAL] RE: Freedom of information request [redacted] related to the MHRA alert for Fluroquinolones and Epidiymo-orchitis

> This message originated outside of NHSmail from a securely accredited DCB1596 domain. This can be considered a trusted and verified domain however use caution when opening email from an unrecognised sender.

Thanks [redacted].

Yes I am also happy with this statement.
AMC is co-amoxiclav.

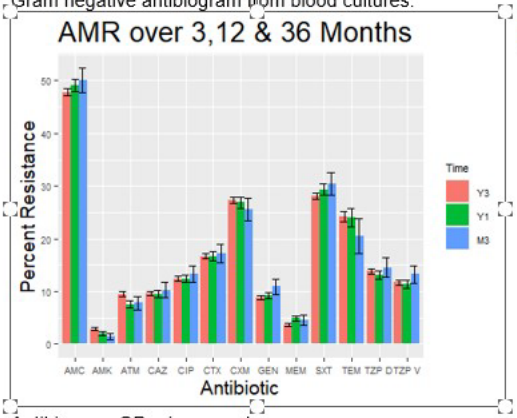
BW
[redacted]

From: [redacted] (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C) [redacted]
Sent: 30 September 2025 10:52
To: [redacted]
Subject: [EXTERNAL] RE: Freedom of information request [redacted] related to the MHRA alert for Fluroquinolones and Epidiymo-orchitis

> This message originated from outside of the North Bristol NHS Trust email system. Please do not click links or open attachments unless you recognise the sender and know the content is safe.

Thanks both,
[redacted] Could you confirm you are happy with the statement below? [redacted]

I've got my self a bit confused by the antibiograms and amoxicillin/co-amoxiclav. Does AMC stand for co-amoxiclav and not amoxicillin?

5. **Audit / monitoring** a. Any **audits** or **retrospective reviews** of **fluoroquinolone prescribing for EO in primary care** since 1 Jan 2024 (protocol/method, findings, actions). If none, please confirm "none held". b. Any **local microbiology/antibiogram summaries** cited to justify retaining fluoroquinolones for **enteric** EO (if held centrally for guideline decisions).	a) Review of patients on long term fluroquinolones in primary care. Practices completed this review. Outcomes were not collated. b) Gram negative antibiogram from blood cultures:  Antibiogram GP urine samples

Thanks
[redacted]

From: [redacted]
Sent: 30 September 2025 10:45
To: [redacted] (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C) [redacted]; [redacted]
Subject: Re: Freedom of information request [redacted] related to the MHRA alert for Fluroquinolones and Epidiymo-orchitis

This message originated outside of NHSmail from a securely accredited DCB1596 domain. This can be considered a trusted and verified domain however use caution when opening email from an unrecognised sender.

Hi [redacted]

Agree with [redacted] and statement

Just to double check [redacted] happy too [redacted]

BW
[redacted]

From: [redacted]
Sent: 30 September 2025 10:11
To: [redacted] (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C) [redacted]; [redacted]
Subject: RE: Freedom of information request [redacted] related to the MHRA alert for Fluroquinolones and Epidiymo-orchitis

Hi [redacted]

I think I would say I **would expect** the resistance rates to be somewhere in between, the point being we don't know what they are.

Is it co-amoxiclav not amoxicillin?

Otherwise, I completely agree with this statement.

[redacted]

From: [redacted] (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C) [redacted]
Sent: 30 September 2025 10:02
To: [redacted]
Subject: FW: Freedom of information request [redacted] related to the MHRA alert for Fluroquinolones and Epidiymo-orchitis

Hello
Following on from my Email below please could you confirm you are in agreement with the statement below – [redacted] re our response to the fluroquinolone alert:

Microbiologists and antimicrobial pharmacists from Bristol, North Somerset and South Gloucestershire met in February 2024 to review the primary care antibiotics guidelines where fluroquinolones were included to ensure they were only recommended when appropriate in line with the alert.
At the meeting it was agreed a fluroquinolone remained the most appropriate treatment for epidymo-orchitis due to local resistance rates. As can be seen in the antibiograms shared on the freedom of information (section 5) request resistance rates for amoxicillin (AMC) are significantly higher than ciprofloxacin (CIP) for gram negative infections from blood cultures as well as being higher for GP urine samples. Samples are not specifically collated for epidiymo-orchitis however a consultant microbiologist reports resistance rates would be 'some where in between'. Therefore, it was agreed the most successful treatment for epidiymo-orchitis remains a quinolone and the use follows the MHRA alert which states: 'situations in which other antibiotics are considered to be inappropriate and were a fluroquinolone may be indicated are where – there is resistance to other first-line antibiotics recommended for the infection.' Therefore. the use of ofloxacin for epidimo-orchitis follows this recommendation. This is also in line with the NICE clinical knowledge summary on epidiymo-orchitis (which gives reference to the alert) and the British Association for Sexual Health and HIV guidelines (this was written prior to the MHRA alert).

Many thanks
[redacted]

From: [redacted] (NHS BRISTOL, NORTH SOMERSET AND SOUTH GLOUCESTERSHIRE ICB - 15C)
Sent: 17 September 2025 14:46
To: [redacted]
Subject: Freedom of information request [redacted] related to the MHRA alert for Fluroquinolones and Epidiymo-orchitis

Hello

I have had a FOI request [redacted]

Attached it the FOI request (with my start of completion) [redacted]

As you will see the FOI relates to the response to the MHRA fluroquinolone alert, it specifically relates to the response in primary care [redacted]

We met on 28th February 24 to discuss the impact of the MHRA alert on the primary care guidelines (I think [redacted] were at the meeting), but unfortunately I can't see any written documentation following this, but I will keep checking.
This was following a microbiology meeting [redacted] which [redacted] sent notes from on 15th Feb 24:

. Genito-urinary:

- Epididymo-orchitis >35 & Prostatitis – oral switch cipro -> 1ST line – cipro; 2nd line – co-trim if sensitive
- PID outpt - ofloxacin + MTZ -> 1st line – ceftriaxone 1g IM stat + metro doxy; 2nd line – ofloxacin + metro
- Pyelonephritis non-preg – 1st line, CAUTI – if eGFR add "if sensitivities are available switch to an appropriate oral antibiotic instead of cipro"

If you have any further documentation from either of these meetings please could you share with me?

Question 5b asks – any local microbiology/ antibiogram summaries cited to justify retaining fluroquinolones for enteric EO (if held centrally for guideline decisions) – do you hold any of these? If we don't have already we should not be accessing now just stating not held. [redacted]

[redacted]

Many thanks for your help in me forming the response.

Best wishes

[redacted]

[redacted]
Principal Medicines Optimisation Pharmacist (Antimicrobial Stewardship Lead)

[redacted]

NHS Bristol, North Somerset and South Gloucestershire ICB
Floor 2, North Wing, 100 Temple Street, Bristol, BS1 6AG

[redacted]
Website: bnssg.icb.nhs.uk

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