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INTERNATIONAL UNION AGAINST SEXUALLY TRANSMITTED INFECTIONS
EUROPE

IUSTI-Europe Statement on Spectinomycin

Following a survey conducted by IUSTI-Europe in 38 countries of the Europe region, answers were received from 31 IUSTI-Europe National Representatives (78,9%) with the following results:

-Spectinomycin is still registered in Belgium, Cyprus, France, Latvia and Rep. of Moldova. However, Spectinomycin is no longer distributed in Belgium, Cyprus, France, Ireland, Latvia and Rep. of Moldova.

-Spectinomycin is available in Russia. The average price of one 2g vial of Spectinomycin is less than 10 EUR.

-For special selected cases Spectinomycin can be available in some countries - *e.g.* Sweden, Romania, after a documented "special need" request is submitted to local authorities.

Spectinomycin is recommended for the treatment of gonococcal infections by the **2020 European guideline for the diagnosis and treatment of gonorrhoea in adults** [1] when the patient has a history of severe hypersensitivity (e.g. anaphylaxis) to any beta-lactam antimicrobial (penicillins, cephalosporins, monobactams or carbapenems); in genital, anorectal and oropharyngeal gonococcal infection when ceftriaxone resistance is identified; for disseminated gonococcal infection and for gonococcal infections in pregnancy or when breastfeeding.

Spectinomycin was reported in recent scientific journal papers as effective treatment for *Neisseria gonorrhoeae* isolates in Kyrgyzstan Central Asia [2], Belarus [3], China [4], [5], [6], Vietnam [7], Spain [8] and South Africa [9]. In the European Union/European Economic Area (EU/EEA) the surveillance of *Neisseria gonorrhoeae* antimicrobial susceptibility has been co-ordinated by the European Centre for Disease Prevention and Control (ECDC) since 2009.

IUSTI Europe is a non-profit association registered in Estonia (Registration code 80279996) and it is an autonomous branch of IUSTI founded in 1923 as a global organization for international cooperation in the control of STIs.
IUSTI is an Official Non-Governmental Organisation in Consultative Status with WHO and on the Roster of the United Nations Economic and Social Council.

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Gentamicin and spectinomycin were removed from the routine antimicrobial panel in 2014 as these antimicrobials are not in routine use. These are only tested in 'snapshot' studies every three years, with the most recent 'snapshot' study in 2019. No resistance to spectinomycin (MIC>64 mg/L) was detected in 2019 (2898 isolates tested) or in any previous year of Euro-GASP [10].

Based on the existing scientific data regarding preserved antimicrobial susceptibility of *N. gonorrhoea* to spectinomycin, **IUSTI-Europe considers that spectinomycin should be available for the above-mentioned situations.** This is moreover needed in the context on decreasing azithromycin susceptibility combined with the continued detection of ceftriaxone resistance of *N. gonorrhoea* in Europe [10].

IUSTI-Europe and its members should:
-interact with relevant national and international authorities to promote IUSTI-Europe guidelines recommendations;

-organize educational programs on the management of gonococcal infections based on the content of evidence-based guidelines;

-support the research and development of efficient treatment of gonococcal infections;

-periodically review the Shortages Catalogue of the European Medicines Agency (available at: https://www.ema.europa.eu/en/human-regulatory/post-authorisation/availability-medicines/shortages-catalogue) and make suggestions to the national competent authorities;

-recommend that a stock of spectinomycin should be held by an appropriate EU agency, and available on request.

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References

1. Unemo M, Ross JD, Serwin AB, Gomberg M, Cusini M, Jensen JS. 2020 European guideline for the diagnosis and treatment of gonorrhoea in adults. International journal of STD & AIDS. 2020 Oct 29:0956462420949126.

2. Karymbaeva S, Boiko I, Jacobsson S, Mamaeva G, Ibraeva A, Usupova D, Golparian D, Unemo M. Antimicrobial resistance and molecular epidemiological typing of Neisseria gonorrhoeae isolates from Kyrgyzstan in Central Asia, 2012 and 2017. BMC Infect Dis. 2021 Jun 12;21(1):559. doi: 10.1186/s12879-021-06262-w. PMID: 34118893; PMCID: PMC8195719.

3. Aniskevich A, Shimanskaya I, Boiko I, Golubovskaya T, Golparian D, Stanislavova I, Jacobsson S, Adaskevich A, Unemo M. Antimicrobial resistance in Neisseria gonorrhoeae isolates and gonorrhoea treatment in the Republic of Belarus, Eastern Europe, 2009-2019. BMC Infect Dis. 2021 Jun 2;21(1):520. doi: 10.1186/s12879-021-06184-7. PMID: 34078300; PMCID: PMC8173742.

4. Le W, Su X, Lou X, Li X, Gong X, Wang B, Genco CA, Mueller JP, Rice PA. Susceptibility Trends of Zoliflodacin against Multidrug-Resistant *Neisseria gonorrhoeae* Clinical Isolates in Nanjing, China, 2014 to 2018. Antimicrob Agents Chemother. 2021 Feb 17;65(3):e00863-20. doi: 10.1128/AAC.00863-20. PMID: 33318010; PMCID: PMC8092536.

5. Dong Y, Yang Y, Wang Y, Martin I, Demczuk W, Gu W. Shanghai *Neisseria gonorrhoeae* Isolates Exhibit Resistance to Extended-Spectrum Cephalosporins and Clonal Distribution. Front Microbiol. 2020 Oct 6;11:580399. doi: 10.3389/fmicb.2020.580399. PMID: 33123111; PMCID: PMC7573285.

6. Wang F, Liu JW, Li YZ, Zhang LJ, Huang J, Chen XS, Chen SC, Yin YP. Surveillance and molecular epidemiology of Neisseria gonorrhoeae isolates in Shenzhen, China, 2010-2017. J Glob Antimicrob Resist. 2020 Dec;23:269-274. doi: 10.1016/j.jgar.2020.08.013. Epub 2020 Sep 2. PMID: 32889143.

7. Adamson PC, Van Le H, Le HHL, Le GM, Nguyen TV, Klausner JD. Trends in antimicrobial resistance in Neisseria gonorrhoeae in Hanoi, Vietnam, 2017-2019. BMC Infect Dis. 2020 Nov 5;20(1):809. doi: 10.1186/s12879-020-05532-3. PMID: 33153450; PMCID: PMC7643326.

8. Salmerón P, Viñado B, El Ouazzani R, Hernández M, Barbera MJ, Alberny M, Jané M, Larrosa N, Pumarola T, Hoyos-Mallecot Y, Serra-Pladevall J. Antimicrobial susceptibility of *Neisseria gonorrhoeae* in Barcelona during a five-year period, 2013 to 2017. Euro Surveill. 2020 Oct;25(42):1900576. doi: 10.2807/1560-7917.ES.2020.25.42.1900576. PMID: 33094716; PMCID: PMC7651876.

9. Maduna LD, Kock MM, van der Veer BMJW, Radebe O, McIntyre J, van Alphen LB, Peters RPH. Antimicrobial Resistance of Neisseria gonorrhoeae Isolates from High-Risk Men in Johannesburg, South Africa. Antimicrob Agents Chemother. 2020 Oct 20;64(11):e00906-20. doi: 10.1128/AAC.00906-20. PMID: 32868325; PMCID: PMC7577157.

10. European Centre for Disease Prevention and Control. Gonococcal antimicrobial susceptibility surveillance in Europe – Results summary 2019. Stockholm: ECDC; 2021