Methods A non-inferiority, open-label, single center RCT was conducted in Prague, Czech Republic. Patients, 18–75 years of age, diagnosed with uncomplicated rectal or pharyngeal gonorrhea by nucleic acid amplification test (NAAT) (GeneProof) were randomized to treatment with gentamicin 240 mg intramuscularly plus azithromycin 2 g orally or ceftriaxone 500 g intramuscularly plus azithromycin 2 g orally. The primary outcome was negative culture and negative NAAT, i.e., one week and three weeks, respectively, after treatment.

Results Both clinical and microbiological cure was achieved by 100% of patients in the gentamicin+azithromycin arm (n=68; 40 rectal, 14 pharyngeal, and 14 infections in both localizations) and ceftriaxone+azithromycin arm (n=66; 36 rectal, 14 pharyngeal, and 16 infections in both localizations). Administration of gentamicin was significantly less painful than ceftriaxone according to the visual analog score (p<0.001). Gastrointestinal adverse events were slightly more common in ceftriaxone arm (50.0%) than in gentamicin arm (41.2%), but in most (64%) cases they were mild.

Conclusion Both gentamicin+azithromycin and ceftriaxone+azithromycin were 100% effective for treatment of rectal and pharyngeal gonorrhea. Gentamicin 240 mg plus azithromycin 2 g appears to be an effective alternative for treatment of both urogenital and extragenital gonorrhea in case of ceftriaxone resistance, allergy, or unavailability.

Disclosure No significant relationships.