

Communication

Antibiotic Resistance and Genotypes of *Mycoplasma genitalium* during a Resistance-Guided Treatment Regime in a German University Hospital

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Table S1. Designation of *M. genitalium* strains based on *mgpB* typing.

Proposed Type Description	References
1–160	[1]
161–183	[2]
184–189	[3]
190–208	[4]
209–212	[5]
213–230	[6]
231–237	Present study

Table S2. Sequences of new *mgpB* types.

Type 231 (patients #1, 42, 57)

ACTTGAAACAATAACAACTTCTCTCACTAAAGATTACTGGAGAGAACCCAGGATCATT-
 GGATTAGTAAGAACCAAATGACAACTTAACATCGCAAGTGTACAAAGAATGTTAGTGATGATAATCTCA
 AGTATCTCAATACTGTTGAGAAATACCTTGATGGTCAGCAAAACTTT-
 GCAATCAGAAGGTATGATAACACCGTAGAGCTTATATGATATTAACCTAGCAAAAATGGAAAACCCCTCAA
 CGG

Type 232 (patient #10)

ACTTGAAACAATAACAACCTTCTCTCACTAAAGATTACTGGAGAGAACCCAGGATCATT-
GGATTAGTAAGAAGCCAAAATGACAACTTAAATATTCAAATGTTATTACAAAGAATAATGTTAGGGTATA
ATCTCAAGTATCTCAATGATGTTGAGAAATACCTGATGGTCAGCAAAACTT-
GCAATCAGAAGGTATGATAACAACCGTAGAGCTTATATGATATTAACCTAGCAAAAATGGAAAACCCCTCAA
CGG

Type 233 (patients #18, 43)

ACTTGAAACAATAACAACCTTCTCTCACTGAAGATTACTGGAGAGAACCCAGGATCATT-
GGACTAGTAAGAAGCCAAAATGAGAACTTAAACATCGCAAGTGTACAAAGGATGGTAATGGTATAATCTC
AAGTATCTTAATGCTGTTGAGAAACTACCTGATGGTCAGCAAAACTT-
GCAATCAGAAGGTATGATAACAACCGTAGAGCTTATATGATATTAACCTAGCAAAAATGGAAAACCCCTCAA
CGG

Type 234 (patient #22)

ACTTGAAACAATAACAACCTTCTCTCACTAAAGATTACTGGAGAGAACCCAGGATCATT-
GGATTAGTAAGAAGCCAAAATGACAACTTAAACATCGCAAGTGTACAAAGAATGTTAGTGATGATAATCTC
AGTATCTTAATTCTGTTGAGAAATACCTGATGGTCAGCAAAACTT-
GCAATCAGAAGGTATGATAACAACCGTAGAGCTTATATGATATTAACCTAGCAAAAATGGAAAACCCCTCAA
CGG

Type 235 (patient #31)

ACTTGAAACAATAACAACCTTCTCTCACTGAAGATTACTGGAGAGAACCCAGGATCATT-
GGACTAGTAAGAAGCCAAAATGAGAACTTAAACATCGCAAGTGTACAAAGAATAGTAGTGATGATAATCTC
AAGTATCTTAATGCTGTTGAGAAACTACCTGATGGTCAGCAAAACTT-
GCAATCAGAAGGTATGATAACAACCGTAGAGCTTATATGATATTAACCTAGCAAAAATGGAAAACCCCTCAA
CGG

Type 236 (patient #35)

ACTTGAAACAATAACAACCTTCTCTCACTAAAGATTACTGGAGAGAACCCAGGATCATT-
GGACTAGTAAGAAGCCAAAATGAGAACTTAAACATCGCAAGTGTACAAAGAATGGTAGTGATGATAATCTC

AAGTATCTTAATGCTGTTGAGAAGTACCTGATGGTCAGCAAAACTT-

GCAATCAGAAGGTATGATAACAACCGTAGAGCTTATATGATATTAACTTAGCAAAAATGGAAAACCCCTCAA

CGG

Type 237 (patient #51)

ACTTGAAACAATAACAACCTCTCTCACTAAAGATTACTGGAGAAAACCCAGGATCATT-

GGACTAGTAAGAACGCAAAATGAGAACITAAACATCGCAAGTGTACAAAGAATGATAGTGTGATAATCTC

AAGTATCTTAATGCTGTTGAGAAATACCTGATGGTCAGCAAAACTT-

GCAATCAGAAGGTATGATAACAACCGTAGAGCTTATATGATATTAACTTAGCAAAAATGGAAAACCCCTCAA

CGG

References

1. Dumke R, Rust M, Glaunsinger T. *MgpB* types among *Mycoplasma genitalium* strains from men who have sex with men in Berlin, Germany, 2016–2018. *Pathogens* **2019**, *20*, 9:12.
2. Guiraud J, Lounnas M, Boissière A, Le Roy C, Elguero E, Banuls AL, Bébéar C, Godreuil S, Pereyre S. Lower *mgpB* diversity in macrolide-resistant *Mycoplasma genitalium* infecting men visiting two sexually transmitted infection clinics in Montpellier, France. *J. Antimicrob. Chemother.* **2021**, *76*, 43–47.
3. Laumen JGE, van Alphen LB, Maduna LD, Hoffman CM, Klausner JD, Medina-Marino A, Kock MM, Peters RPH. Molecular epidemiological analysis of *Mycoplasma genitalium* shows low prevalence of azithromycin resistance and a well-established epidemic in South Africa. *Sex. Transm. Infect.* **2021**, *97*, 152–156.
4. Fernández-Huerta M, Serra-Pladell J, Esperalba J, Moreno-Mingorance A, Fernández-Naval C, Barberá MJ, Aparicio D, Pich OQ, Pumarola T, Jensen JS, Espasa M. Single-locus-sequence-based typing of the *mgpB* gene reveals transmission dynamics in *Mycoplasma genitalium*. *J. Clin. Microbiol.* **2020**, *58*, e01886–19.
5. Plummer EL, Murray GL, Bodiyabadi K, Su J, Garland SM, Bradshaw CS, Read TRH, Tabrizi SN, Danielewski JA. A custom amplicon sequencing approach to detect resistance associated mutations and sequence types in *Mycoplasma genitalium*. *J. Microbiol. Methods* **2020**, *179*, 106089.
6. Sweeney EL, Tickner J, Bletchly C, Nimmo GR, Whiley DM. Genotyping of *Mycoplasma genitalium* suggests *de novo* acquisition of antimicrobial resistance in Queensland, Australia. *J. Clin. Microbiol.* **2020**, *58*, e00641–20.