

1 **SUPPLEMENT TO:**

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3 **Spontaneous clearance of anogenital and pharyngeal *Neisseria gonorrhoeae*: Results from the**

4 **NABOGO trial**

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6 W. Jongen, on behalf of the New AntiBiotic treatment Options for uncomplicated GOnorrhoea

7 (NABOGO) trial

SupplementaryTabFig_Manuscript_Spontaneous_clearance_NG_BTeker_28may22_v10

Caption to figure

Supplementary Figure 1: Flow chart of the inclusion in the study and the anatomical locations of Ng infections, NABOGO trial, Amsterdam, the Netherlands, September 18th 2017 to June 5th 2020

Note 1: Patients with a single Ng infection: 120 anal Ng, 0 pharyngeal Ng, 10 vaginal Ng, 8 urethral Ng.

Note 2: Patients with a double Ng infection: 80 anal and pharyngeal Ng, 2 anal and vaginal Ng, 10 anal and urethral Ng, 1 pharyngeal and vaginal Ng, 0 pharyngeal and urethral Ng.

Note 3: Patients with a triple Ng infection: 0 anal, pharyngeal, and vaginal Ng, 10 anal, pharyngeal, and urethral Ng.

Note 4: Exclusion criteria were: suspicion of a complicated Ng infection (e.g. pelvic inflammatory disease or epididymitis), another (sexually transmitted) infection or suspicion of another infection for which antimicrobial therapy was indicated, pregnancy, having a wish to become pregnant or breastfeeding, not being able to read/understand Dutch or English, a newly diagnosed HIV infection, an HIV infection with a CD4+ cell-count <200 cells/ μ L, known allergy or adverse reactions to ceftriaxone, ertapenem, gentamicin or fosfomycin, renal impairment, liver cirrhosis, congestive heart failure, myasthenia gravis, hearing loss or balance disorder, concurrent use of systemic antibacterial antimicrobials other than nitrofurantoin or metronidazole (currently or in the two weeks prior to study enrolment), systemic immunosuppressive drugs, valproic acid, or metoclopramide, and previous enrolment in the study.

Supplementary Table 1: Determinants of spontaneous clearance in patients with an anal Ng infection. Results of the univariable and multivariable logistic regression analyses, NABOGO trial, Amsterdam, the Netherlands, September 18th 2017 to June 5th 2020

	Univariable logistic regression			Multivariable logistic regression		
	OR	95% CI	p-value	aOR	95% CI	p-value
Time (in days) between T₋₁- and T₀-visit	1.06	(0.99-1.12)	0.088	1.06	(0.99-1.13)	0.110
Demographics						
Age, per 10-year increase	0.84	(0.59-1.20)	0.338			
Age						
< 30 years	REF		0.254	REF		
30 - 39 year	0.50	(0.20-1.30)		0.52	(0.19-1.44)	0.209
≥ 40 years	0.56	(0.22-1.38)		0.86	(0.30-2.50)	0.782
Gender identity						
Male	REF		0.007			
Female or transgender	8.86	(1.88- 41.68)				
Ethnicity						
Dutch	REF		0.129			
Non-Dutch	1.81	(0.85-3.86)				
Highest education level						
None/primary/secondary	REF		0.450			
College/university	0.85	(0.34-2.13)				
Other	0.29	(0.03-2.59)				
Health						
HIV status						
HIV-negative + no PrEP-user	REF		0.176	REF		
HIV-negative + PrEP-user	0.42	(0.16-1.10)		0.62	(0.21-1.84)	0.394
HIV-positive	0.69	(0.26-1.87)		0.97	(0.30-3.13)	0.962
Antibiotic use¹						
No	REF		0.862			
Yes	0.90	(0.29-2.84)				
Sexual behaviour						
Sexual risk group						
MSM	REF		0.007			
MSW, Women, TGP	8.86	(1.88-41.68)				
No. of sexual partner(s)^{2, 3}	0.42	(0.26-0.70)	<0.001			
No. of sexual partner(s), in tertiles						
≤ 5 partners	REF		0.001	REF		
6-15 partners	0.25	(0.10-0.64)		0.26	(0.10-0.67)	0.006
≥ 16 partners	0.21	(0.07-0.61)		0.23	(0.08-0.75)	0.014

Abbreviations: aOR, adjusted odds ratio; CI, confidence interval; HIV, human immunodeficiency virus; MSM, Men who have sex with men; MSW, Men who have sex with women; NABOGO, New AntiBiotic treatment Options for uncomplicated Gonorrhoea; Ng, *Neisseria gonorrhoeae*; OR, odds ratio; PrEP, pre-exposure prophylaxis; REF, reference; TGP, transgender person

Note 1: spontaneous clearance could not be assessed in one anal Ng infection due to invalid NAAT result at T₀

1. In the preceding 3 months before T₋₁.

2. In the preceding 6 months before T₋₁.

3. OR per (log+1) increase in no. of sexual partners.

41 **Supplementary Table 2:** Determinants of spontaneous clearance in patients with a pharyngeal Ng infection.
42 Results of the univariable and multivariable logistic regression analyses, NABOGO trial, Amsterdam, the

	Univariable logistic regression			Multivariable logistic regression		
	<i>OR</i>	<i>95% CI</i>	<i>p-value</i>	<i>aOR</i>	<i>95% CI</i>	<i>p-value</i>
Time (in days) between T₋₁- and T₀-visit	1.13	(1.01-1.27)	0.027	1.17	(1.03-1.34)	0.014
<i>Demographics</i>						
Age, per 10-year increase	0.99	(0.56-1.73)	0.969			
Age						
< 30 years	REF		0.699	REF		
30 - 39 year	0.59	(0.16-2.13)		0.66	(0.16-2.70)	0.563
≥ 40 years	0.92	(0.24-3.43)		1.71	(0.30-9.58)	0.544
Gender identity²						

43 Netherlands, September 18th 2017 to June 5th 2020
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Male	REF		N.E. ¹			
Female or transgender	N.E. ¹	N.E. ¹				
Ethnicity						
Dutch	REF		0.403			
Non-Dutch	0.60	(0.18-2.04)				
Highest education level³						
None/primary/secondary	REF		N.E. ¹			
College/university	N.E. ¹	N.E. ¹				
Other	N.E. ¹	N.E. ¹				
Health						
HIV status						
HIV-negative + no PrEP-user	REF		0.164	REF		
HIV-negative + PrEP-user	0.30	(0.06-1.45)		0.17	(0.03-1.10)	0.063
HIV-positive	1.54	(0.34-6.86)		0.71	(0.11-4.67)	0.721
Antibiotic use⁴						
No	REF		0.390			
Yes	1.96	(0.44-8.71)				
Sexual behaviour						
Sexual risk group⁵						
MSM	REF		N.E. ¹			
MSW, Women, TGP	N.E. ¹	N.E. ¹				
No. of sexual partner(s)^{6, 7}	0.74	(0.39-1.39)	0.350			
No. of sexual partner(s), in tertiles						
≤ 5 partners	REF		0.040	REF		
6-15 partners	0.20	(0.05-0.86)		0.12	(0.02-0.65)	0.014
≥ 16 partners	0.85	(0.25-2.91)		1.13	(0.24-5.42)	0.879

Abbreviations: aOR, adjusted odds ratio; CI, confidence interval; HIV, human immunodeficiency virus; MSM, Men who have sex with men; MSW, Men who have sex with women; NABOGO, New AntiBiotic treatment Options for uncomplicated Gonorrhoea; Ng, *Neisseria gonorrhoeae*; N.E., not estimable; OR, odds ratio; PrEP, pre-exposure prophylaxis; REF, reference; TGP, transgender person

1. Not estimable as one of the cells has zero observations

2. Gender was not taken into account as no females or transgender persons spontaneously cleared a pharyngeal Ng infection

3. Education level was not taken into account as no persons with none, primary and secondary education level spontaneously cleared a pharyngeal Ng

4. In the preceding 3 months before T₁

5. Sexual risk group was not taken into account as no MSW, women, and TGP spontaneously cleared a pharyngeal Ng

6. In the preceding 6 months before T₁.

7. OR per (log+1) increase in no. of sexual partners.