Supplementary Material 2: Modelled probabilities of elimination of transmission

Reaching Elimination of Onchocerciasis Transmission with Long-term Vector Control and Ivermectin Treatment in West Africa: The Example of Togo

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Table S7. Probability of elimination of onchocerciasis transmission (EOT) when simulating that ivermectin mass drug administration (MDA) stops in 2024, 2027 or 2030 per modelled (minimal, reference and enhanced) intervention scenarios in Savanes

Region and SIZ status • **Interventions**	**Modelled baseline endemicity**	**Probability of elimination of transmission (EOT, %)[a]** **(Number of villages following the scenario, with (BMP) or without (No BMP) recorded baseline microfilarial prevalence)**								
		2024			**2027**			**2030**		
		Minimal	**Reference**	**Enhanced**	**Minimal**	**Reference**	**Enhanced**	**Minimal**	**Reference**	**Enhanced**
Savanes SIZ • VC 1977-1993 • Annual MDA 1991-2002 • Biannual MDA from 2003	Hypoendemic	≥90 (1 BMP; 14 No BMP)								
	Mesoendemic									
	Hyperendemic	<5 (3 No BMP)	20 – 59 (4 No BMP)	60 – 89 (10 No BMP)	<5 (3 No BMP)	20 – 59 (4 No BMP)	60 – 89 (10 No BMP)	<5 (3 No BMP)	20 – 59 (4 No BMP)	60 – 89 (10 No BMP)
Savanes SIZ • VC 1977-1993 (100%)[a] • Annual MDA 1991-2002 • Biannual MDA from 2003	Hypoendemic	≥90 (3 BMP; 14 No BMP)								
	Mesoendemic									
	Hyperendemic	60 – 89 (3 No BMP)	≥90 (1 No BMP)		60 – 89 (3 No BMP)	≥90 (1 No BMP)		60 – 89 (3 No BMP)	≥90 (1 No BMP)	
Savanes non-SIZ • VC 1977-1993 • Annual MDA from 1991	Hypoendemic	≥90 (2 No BMP; 3 BMP[b])								
	Mesoendemic	60 – 89 (1 BMP[b])	≥90 (1 BMP)		60 – 89 (1 BMP[b])	≥90 (1 BMP)		60 – 89 (1 BMP[b])	≥90 (1 BMP)	
	Hyperendemic	<5 (0)								

Table S7. Continued

Region and SIZ status • Interventions	Modelled baseline endemicity	Probability of elimination of transmission (EOT, %)[a] (Number of villages following the scenario, with (BMP) or without (No BMP) recorded baseline microfilarial prevalence)								
		2024			2027			2030		
		Minimal	Reference	Enhanced	Minimal	Reference	Enhanced	Minimal	Reference	Enhanced
Savanes non-SIZ • VC 1977-1993 (100%)[a] • Annual MDA from 1991	Hypoendemic	≥90 (0)								
	Mesoendemic									
	Hyperendemic	20 – 59 (2 No BMP; 1 BMP[b])	60 – 89 (0)	≥90 (0)	20 – 59 (2 BMP; 1 BMP[b])	60 – 89 (0)	≥90 (0)	20 – 59 (2 BMP; 1 BMP[b])	60 – 89 (0)	≥90 (0)

[a]Probability of elimination of onchocerciasis transmission simulated as the proportion (%) of 100 model runs for each baseline endemicity level and intervention scenario with 0% microfilarial prevalence 50 years after stopping ivermectin MDA.

[b]Village from preparatory surveys prior to the commencement of the OCP [1,2] (not in OCP database).

BMP, baseline microfilarial prevalence; EOT, elimination of transmission; MDA, mass drug administration with ivermectin; SIZ, special intervention zone; VC, vector control by aerial larviciding of breeding sites. [a]100% vector control efficacy [3].

Table S8. Probability of elimination of onchocerciasis transmission (EOT) when simulating that ivermectin mass drug administration (MDA) stops in 2024, 2027 or 2030 per modelled (minimal, reference and enhanced) intervention scenarios in Kara

Region and SIZ status • **Interventions**	**Modelled baseline endemicity**	**Probability of elimination of transmission (EOT, %)[a]** **(Number of villages following the scenario, with (BMP) or without (No BMP) recorded baseline microfilarial prevalence)**								
		2024			**2027**			**2030**		
		Minimal	**Reference**	**Enhanced**	**Minimal**	**Reference**	**Enhanced**	**Minimal**	**Reference**	**Enhanced**
Kara SIZ • VC 1977-2007 • Annual MDA 1991-2002 • Biannual MDA from 2003	Hypoendemic	≥90 (4 BMP; 2 BMP[b]; 42 No BMP)								
	Mesoendemic									
	Hyperendemic	5 – 19 (2 BMP; 11 No BMP)	20 – 59 (2 BMP; 1 BMP[b]; 5 No BMP)	60 – 89 (2 BMP; 2 No BMP)	5 – 19 (2 BMP; 11 No BMP)	60 – 89 (2 BMP; 1 BMP[b]; 5 No BMP)	≥90 (2 BMP; 2 No BMP)	20 – 59 (2 BMP; 11 No BMP)	60 – 89 (2 BMP; 1 BMP[b]; 5 No BMP)	≥90 (2 BMP; 2 No BMP)
	Holoendemic	<5% (2 BMP; 13 No BMP)								

[a]Probability of elimination of onchocerciasis transmission simulated as the proportion (%) of 100 model runs for each baseline endemicity level and intervention scenario with 0% microfilarial prevalence 50 years after stopping ivermectin MDA.

[b]Village from preparatory surveys prior to the commencement of the OCP [1,2] (not in OCP database).

BMP, baseline microfilarial prevalence; EOT, elimination of transmission; MDA, mass drug administration with ivermectin; SIZ, special intervention zone; VC, vector control by aerial larviciding of breeding sites.

Table S9. Probability of elimination of onchocerciasis transmission (EOT) when simulating that ivermectin mass drug administration (MDA) stops in 2024, 2027 or 2030 per modelled (minimal, reference and enhanced) intervention scenarios in Centrale

Region and SIZ status • Interventions	Modelled baseline endemicity	Probability of elimination of transmission (EOT, %)[a] (Number of villages following the scenario, with (BMP) or without (No BMP) recorded baseline microfilarial prevalence)								
		2024			2027			2030		
		Minimal	Reference	Enhanced	Minimal	Reference	Enhanced	Minimal	Reference	Enhanced
Centrale SIZ • VC 1977-2007 • Annual MDA 1991-2002 • Biannual MDA from 2003	Hypoendemic	≥90 (1 No BMP)								
	Mesoendemic									
	Hyperendemic	5 – 19 (1 BMP; 3 No BMP)	60 – 89 (3 No BMP)	60 – 89 (1 BMP; 1 No BMP)	5 – 19 (1 BMP; 3 No BMP)	60 – 89 (3 No BMP)	≥90 (1 BMP; 1 No BMP)	20 – 59 (1 BMP; 3 No BMP)	60 – 89 (3 No BMP)	≥90 (1 BMP; 1 No BMP)
	Holoendemic	<5 (6 No BMP)								
Centrale non-SIZ • VC 1989-2002 • Annual MDA from 1991	Hypoendemic	≥90 (13 BMP; 8 No BMP)								
	Mesoendemic	60 – 89 (8 BMP; 11 No BMP)	≥90 (18 BMP; 2 No BMP)		60 – 89 (8 BMP; 11 No BMP)	≥90 (18 BMP; 2 No BMP)		60 – 89 (8 BMP; 11 No BMP)	≥90 (18 BMP; 2 No BMP)	
	Hyperendemic	<5 (2 No BMP)	60 – 89 (5 BMP; 3 No BMP)		<5 (2 No BMP)	60 – 89 (5 BMP; 3 No BMP)		<5 (2 No BMP)	60 – 89 (5 BMP; 3 No BMP)	

[a]Probability of elimination of onchocerciasis transmission simulated as the proportion (%) of 100 model runs for each baseline endemicity level and intervention scenario with 0% microfilarial prevalence 50 years after stopping ivermectin MDA.

BMP, baseline microfilarial prevalence; EOT, elimination of transmission; MDA, mass drug administration with ivermectin; SIZ, special intervention zone; VC, vector control by aerial larviciding of breeding sites.

Table S10. Probability of elimination of onchocerciasis transmission (EOT) when simulating that ivermectin mass drug administration (MDA) stops in 2024, 2027 or 2030 per modelled (minimal, reference and enhanced) intervention scenario in Plateaux

Region and SIZ status • **Interventions**	**Modelled baseline endemicity**	**Probability of elimination of transmission (EOT, %)[a]** **(Number of villages following the scenario, with (BMP) or without (No BMP) recorded baseline microfilarial prevalence)**								
		2024			**2027**			**2030**		
		Minimal	**Reference**	**Enhanced**	**Minimal**	**Reference**	**Enhanced**	**Minimal**	**Reference**	**Enhanced**
Plateaux non-SIZ • VC 1989-2002 • Annual MDA from 1991	Hypoendemic	≥90 (12 BMP; 14 No BMP)								
	Mesoendemic	60 – 89 (3 BMP; 2 No BMP)	≥90 (12 BMP; 1 No BMP)		60 – 89 (3 BMP; 2 No BMP)	≥90 (12 BMP; 1 No BMP)		60 – 89 (3 BMP; 2 No BMP)	≥90 (12 BMP; 1 No BMP)	
	Hyperendemic	<5 (0)	<5 (3 No BMP)	60 – 89 (12 BMP; 6 No BMP)	<5 (0)	<5 (3 No BMP)	60 – 89 (12 BMP; 6 No BMP)	<5 (0)	<5 (3 No BMP)	60 – 89 (12 BMP; 6 No BMP)
Plateaux non-SIZ • VC 1989-2002 • Annual MDA 1991-2013 • Biannual MDA from 2014	Hypoendemic	≥90 (16 BMP; 25 No BMP)								
	Mesoendemic									
	Hyperendemic	<5 (3 No BMP)	5 – 19 (2 BMP; 2 No BMP)	60 – 89 (11 BMP; 12 No BMP)	<5 (3 No BMP)	5 – 19 (2 BMP; 2 No BMP)	60 – 89 (11 BMP; 12 No BMP)	<5 (3 No BMP)	20 – 59 (2 BMP; 2 No BMP)	≥90 (11 BMP; 12 No BMP)

[a]Probability of elimination of onchocerciasis transmission simulated as the proportion (%) of 100 model runs for each baseline endemicity level and intervention scenario with 0% microfilarial prevalence 50 years after stopping ivermectin MDA.

BMP, baseline microfilarial prevalence; EOT, elimination of transmission; MDA, mass drug administration with ivermectin; SIZ, special intervention zone; VC, vector control by aerial larviciding of breeding sites.

Table S11. Probability of elimination of onchocerciasis transmission (EOT) when simulating that ivermectin mass drug administration (MDA) stops in 2014 or 2020 per modelled (minimal, reference and enhanced) intervention scenario in Maritime

Region and SIZ status Interventions	Modelled baseline endemicity	Probability of elimination of transmission (EOT, %)[a] (Number of villages following the scenario, with (BMP) or without (No BMP) recorded baseline microfilarial prevalence)					
		2014			2020		
		Minimal	Reference	Enhanced	Minimal	Reference	Enhanced
Maritime non-SIZ	Hypoendemic	≥90 (6 BMP; 23 No BMP)					
• VC 1989-2002 • Annual MDA from 1991	Mesoendemic	20 – 59 (0)	≥90 (0)		60 – 89 (3 No BMP)	≥90 (0)	
	Hyperendemic	<5 (0)		20 – 59 (0)	<5 (0)		20 – 59 (6 No BMP)

[a]Probability of elimination of onchocerciasis transmission simulated as the proportion (%) of 100 model runs for each baseline endemicity level and intervention scenario with 0% microfilarial prevalence 50 years after stopping ivermectin MDA.

BMP, baseline microfilarial prevalence; EOT, elimination of transmission; MDA, mass drug administration with ivermectin; SIZ, special intervention zone; VC, vector control by aerial larviciding of breeding sites.

Table S12. Probability of elimination of onchocerciasis transmission (EOT) when simulating that ivermectin mass drug administration (MDA) stops in 2024, 2027 or 2030 per modelled (minimal, reference and enhanced) intervention scenario in Maritime

<table>
<tr><th rowspan="3">Region and SIZ status

Interventions</th><th rowspan="3">Modelled baseline endemicity</th><th colspan="9">Probability of elimination of transmission (EOT, %)[a]
(Number of villages following the scenario, with (BMP) or without (No BMP) recorded baseline microfilarial prevalence)</th></tr>
<tr><th colspan="3">2024</th><th colspan="3">2027</th><th colspan="3">2030</th></tr>
<tr><th>Minimal</th><th>Reference</th><th>Enhanced</th><th>Minimal</th><th>Reference</th><th>Enhanced</th><th>Minimal</th><th>Reference</th><th>Enhanced</th></tr>
<tr><td>Maritime non-SIZ

• VC 1989-2002
• Annual MDA from 1991</td><td>Hypoendemic</td><td colspan="9">≥90
(0)</td></tr>
<tr><td></td><td>Mesoendemic</td><td colspan="2">60 – 89
(0)</td><td>≥90
(0)</td><td colspan="2">60 – 89
(0)</td><td>≥90
(0)</td><td colspan="2">≥90
(0)</td></tr>
<tr><td></td><td>Hyperendemic</td><td colspan="2"><5
(0)</td><td>60 – 89
(1 BMP;
2 No BMP)</td><td colspan="2"><5
(0)</td><td>60 – 89
(1 BMP;
2 No BMP)</td><td colspan="2"><5
(0)</td><td>60 – 89
(1 BMP;
2 No BMP)</td></tr>
</table>

[a]Probability of elimination of onchocerciasis transmission simulated as the proportion (%) of 100 model runs for each baseline endemicity level and intervention scenario with 0% microfilarial prevalence 50 years after stopping ivermectin MDA.

BMP, baseline microfilarial prevalence; EOT, elimination of transmission; MDA, mass drug administration with ivermectin; SIZ, special intervention zone; VC, vector control by aerial larviciding of breeding sites.

Text S8. Villages projected not to reach elimination of onchocerciasis transmission (EOT) if ivermectin MDA stops in 2027, per region and special intervention zone (SIZ) status

Tables S13-S18 (villages with recorded BMP estimates) and Tables S19-S24 (villages without recorded BMP estimates) provide details, by region, prefecture and river basin, of villages for which EPIONCHO-IBM projects that elimination of onchocerciasis transmission (EOT) may not be achieved if ivermectin MDA stops in 2027 (i.e., with predicted EOT probability <90%). (For calculation of EOT probabilities see Main Text and Tables S7-S12.) These villages could be prioritised for focused pre-stop or stop-MDA surveys to evaluate their progress and obtain a more complete assessment of the epidemiological situation in the region towards the 2030 elimination goals. For example, in Plateaux non-SIZ, the formerly hyperendemic village of Kokote (Mono River Basin) had a sharp prevalence decline from 76% in 1977 to 56% in 1990 and to 2% in 2000. A survey in 2007, and a small survey (51 individuals) in 2014, detected no positive cases. However, a larger survey (253 individuals), also in 2014, identified one positive case, suggesting residual transmission. This finding is consistent with model outputs (Figure 5E of the Main Text), with an EOT probability of 60–89% (Table S17).

S8.1. Villages with recorded baseline microfilarial prevalence estimates (with BMP)

Table S13. Villages in Savanes not included in the special intervention zone (non-SIZ)

Village	**Prefecture**	**Modelled prevalence trends followed by villages** (intervention scenario)	**Latest parasitological survey**		**EOT probability (%) if MDA stops in 2027**
			Year	**Microfilarial prevalence (%)** (95% CI)	
White Volta/Oti River Basin					
Samomoni[a,b]	Tône	Hyperendemic with 100% vector control (minimal)	2015	0.8 (0.1–5.2)	20–59
Koundjouaré[b]	Kpendjal	Hyperendemic with 100% vector control (minimal)	2001	0.1 (0.0–0.3)	20–59

[a]Recorded in a baseline survey prior to the start of the Onchocerciasis Control Programme in West Africa [1,2].
[b]For these two villages the model indicates an EOT probability of 20-59%; surveys conducted in the 2000s showed residual prevalence, which along with model simulations, suggest that prevalence may have been sustained over time if EOT was not achieved by the mid-1990s, when VC stopped.

Table S14. Villages in Kara included in the special intervention zone (SIZ)

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Kara River Basin					
Kpesside	Kozah	Hyperendemic (minimal)	2014	1.4 (0.5–3.9)	5–19
Leon	Doufelgou	Hyperendemic (reference)	2011	0.0 (0.0–1.4)	60–89
Kéran River Basin					
Unknown[a]	Binah or Bimah	Hyperendemic (reference)	1970	>70%	60–89
Tchitchira[b]	Kéran	Holoendemic (enhanced)	2015	8.2 (5.1–12.9)	<5
Titira[c]	Kéran	Holoendemic (enhanced)	2006	1.6 (0.5–4.6)	<5
Mô River Basin					
Bangan[b]	Bassar	Hyperendemic (reference)	2011	2.5 (1.2–5.4)	60–89
Mô-village or Mo-village	Bassar	Hyperendemic (minimal)	2015	7.0 (4.2–11.7)	5–19

[a]Recorded in a baseline survey prior to the start of the Onchocerciasis Control Programme in West Africa [1,2].
[b]In 2015, prevalence of *O. volvulus* infection in *Simulium damnosum* sensu lato was 0.1% (95% CI: 0.03-0.5%) in Bangan and 1.0% (95% CI: 0.9-2.1%) in Tchitchira [4].
[c]In Tititra, annual biting rates decreased from 25,000 bites/person/year before control to 10,000-15,000 [5].

Table S15. Villages in Centrale included in the special intervention zone (SIZ)

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Mô River Basin					
Bouzalo[a,b]	Tchaoudjo	Hyperendemic (reference)	1993	7.5 (5.3–10.5)	60–89
Sagbadai	Tchaoudjo	Hyperendemic (minimal)	2007	1.8 (0.3–9.5)	5–19

[a]In 2015, the prevalence of *O. volvulus* infection in in *Simulium damnosum* sensu lato was 0.5% (95% CI: 0.2-1.3%%) in Bouzalo [4]. In 2018-2019, the prevalence was 0.6% [6] (calculated with the methodology presented in Katholi et al. [7]). [b]In Bouzalo, annual biting rates decreased from over 40,000 bites/person/year before vector control to 30,000. The vector control extension during the Southern Extension of the OCP further decreased this to 10,000-15,000. In Tititra, annual biting rates decreased from 25,000 bites/person/year before vector control to 10,000-15,000 [5].

Table S16. Villages in Centrale not included in the special intervention zone (non-SIZ)

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Anié River Basin (Mono)					
Agodeka[a]	Blitta	Hyperendemic (enhanced)	2012	0.0 (0.0–2.2)	60–89
Didjaré-Edjaré Kopé/Katakpui Kopé (Pagala)	Blitta	Mesoendemic (minimal)	2014	0.3 (0.1–1.9)	60–89
Gnama-Gnama	Blitta	Hyperendemic (enhanced)	2012	0.0 (0.0–5.4)	60–89
Kpawa (Pagala)	Blitta	Hyperendemic (enhanced)	2013	0.0 (0.0–1.3)	60–89
Niama-Niama (Pagala)	Blitta	Hyperendemic (enhanced)	2006	2.6 (0.9–7.5)	60–89
N'Djavezi/Fazao	Sotouboua	Mesoendemic (minimal)	2014	0.0 (0.0–3.8)	60–89
Tigbada	Sotouboua	Mesoendemic (minimal)	2013	1.0 (0.3–3.5)	60–89
Asukawkaw River Basin					
Abossoumkopé[a]	Blitta	Hyperendemic (enhanced)	2013	0.0 (0.0–6.1)	60–89
Landa-Mono River Basin (Mono)					
Bodowda	Sotouboua	Mesoendemic (minimal)	2013	0.0 (0.0–4.5)	60–89
Laoude/Somieda-Laoude	Sotouboua	Mesoendemic (minimal)	2013	0.6 (0.1–3.3)	60–89
Sessaro	Sotouboua	Mesoendemic (minimal)	2014	0.3 (0.1–1.9)	60–89
Souroutawi	Tchamba	Mesoendemic (minimal)	2013	0.3 (0.1–1.7)	60–89
Mono River Basin (Aou)					
Aou-Losso	Tchaoudjo	Mesoendemic (minimal)	2013	0.6 (0.1–3.1)	60–89

[a]Villages with the latest two (Agodeka) or three (Abossoumkopé) surveys with 0% prevalence [8].

Table S17. Villages in Plateaux not included in the special intervention zone (non-SIZ)

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Amou River Basin (Mono)					
Otsanani-Adedakope	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2012	1.2 (0.3–3.5)	60–89
Anié River Basin (Mono)					
Alamassou	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2012	0.0 (0.0–1.5)	60–89
Anani/Dogo Kopé	Akébou	Hyperendemic (enhanced) under annual CDTI	2012	1.0 (0.4–3.0)	60–89
Gnamassilé	Amou	Hyperendemic (enhanced) under biannual CDTI since 2014	2014	0.0 (0.0–2.7)	60–89
Illougba	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2007	0.0 (0.0–1.9)	60–89
Kamalo-Kopé[a]	Anié	Hyperendemic (enhanced) under annual CDTI	2007	0.0 (0.0–2.9)	60–89
Konigbo	Anié	Hyperendemic (enhanced) under annual CDTI	2012	0.0 (0.0–1.1)	60–89
Wawa/Asukawkaw River Basin					
Kemedisso	Wawa	Mesoendemic (minimal) under annual CDTI	2007	0.0 (0.0–4.5)	60–89
Kra River Basin (Mono)					
Kokpli	Haho	Hyperendemic (enhanced) under biannual CDTI since 2014	2006	1.0 (0.3–3.4)	60–89
Mono River Basin					
Aglamassoe/ Tététou	Moyen-Mono	Mesoendemic (minimal) under annual CDTI	2014	0.0 (0.0–10.7)	60–89
Alabade Atsoude	Est-Mono	Hyperendemic (enhanced) under annual CDTI	2013	0.0 (0.0–1.9)	60–89

Table S17. Continued

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Mono River Basin (continued)					
Atome	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2015	0.4 (0.1–2.3)	60–89
Aroukakopé (Amou-Oblo)	Est-Mono	Hyperendemic (enhanced) under annual CDTI	2011	0.0 (0.0–2.5)	60–89
Diome (Tététou)	Moyen-Mono	Hyperendemic (enhanced) under annual CDTI	1977	77.0 (71.8–81.4)	60–89
Fedigbe or Fétigbé	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2007	0.0 (0.0–1.8)	60–89
Game-Ekeme	Moyen-Mono	Hyperendemic (enhanced) under annual CDTI	2011	0.0 (0.0–5.8)	60–89
Game-Togbuihoe	Moyen-Mono	Hyperendemic (enhanced) under annual CDTI	2011	0.0 (0.0–4.8)	60–89
Kokote[b]	Est-Mono	Hyperendemic (enhanced) under annual CDTI	2014	0.4 (0.1–2.2)	60–89
Kpodji (Tététou)	Haho	Hyperendemic (reference) under biannual CDTI since 2014	2014	17.5 (9.8–29.4)	5–19
Kpogandi[a]	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2013	0.0 (0.0–2.9)	60–89
Onia-Kopé	Est-Mono	Hyperendemic (enhanced) under annual CDTI	1977	75.2 (67.5–81.6)	60–89
Safou-Kopé Atiba (Amou-Oblo)	Ogou	Hyperendemic (reference) under biannual CDTI since 2014	2014	4.1 (1.4–11.4)	5–19
Siyime (Tététou)	Haho	Mesoendemic/Hyper-endemic (reference) under biannual CDTI since 2014	2015	2.9 (1.2–6.6)	5–19

Table S17. Continued

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Mono River Basin (continued)					
Tchagri	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2012	0.0 (0.0–1.0)	60–89
Tététou or Tetetou	Haho	Hyperendemic (enhanced) under biannual CDTI since 2014	2002	0.0 (0.0–1.6)	60–89
Ogou River Basin (Mono)					
Ateoue	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2000	4.1 (2.3–7.2)	60–89
Wawa River Basin (Gban-Houa)[c]					
Dayes-Dodzi (Djodji)/ Kessibo-Dzodzi[d]	Wawa	Hyperendemic (enhanced) under annual CDTI	2000	2.2 (0.7–5.8)	60–89
Zio River Basin (Volta Lac-East)					
Tokpo	Agou	Hyperendemic (enhanced) under annual CDTI	2014	0.0 (0.0–2.4)	60–89

CDTI: Community-directed treatment with ivermectin

[a]Villages with the latest two (Kpogandji) or four (Kamalo-Kopé) surveys with 0% prevalence [8].

[b]Kokote is located around the Kpessi vector capture point of the Mono River Basin (Supplementary Material 1, Table S4). In contrast to the modelled projections followed by most hypoendemic villages in Plateaux, the village of Babame, also in Kpessi, had a microfilarial prevalence of 0.6% (95%CI: 0.1–3.4%) in 2014 [8].

[c]In locations where the Djodji form of *Simulium sanctipauli* was present, recent data indicate still high biting rates following its elimination, by other species in the *damnosum* complex [9,10].

[d]Vector control started earlier, in 1981, in this village's river basin to eliminate the Djodji form of *Simulium sanctipauli* [11], preceding its first survey, in which hyperendemicity was determined.

Table S18. Villages in Maritime not included in the special intervention zone (non-SIZ)

Village	**Prefecture**	**Modelled prevalence trends followed by villages** (intervention scenario)	**Latest parasitological survey**		**EOT probability (%) if MDA stops in 2027**
			Year	**Microfilarial prevalence (%)** (95% CI)	
Yoto/Haho River Basin					
Yoto-Kopé	Yoto	Hyperendemic (enhanced)	2005	0.0 (0.0–2.5)	60–89

S8.2. Villages without recorded baseline microfilarial prevalence (without BMP)

Table S19. Villages in Savanes included in the special intervention zone (SIZ)

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Oti River Basin					
Bonsougou	Oti	Hyperendemic (enhanced)	2007	0.0 (0.0–3.8)	60–89
Boutchakou	Oti	Hyperendemic (enhanced)	2015	0.8 (0.1–4.3)	60–89
Djandjatie	Oti	Hyperendemic (enhanced)	2011	0.6 (0.1–3.5)	60–89
Koukoumbou	Oti	Hyperendemic (minimal)	2015	3.7 (1.3–10.2)	<5
Kpatibori	Oti	Hyperendemic (minimal)	2014	9.1 (2.6–27.8)	<5
Kpintidjouaga	Kpendjal	Hyperendemic (enhanced)	2011	0.4 (0.1–2.1)	60–89
Moukaga	Kpendjal	Hyperendemic (enhanced)	2006	0.0 (0.0–4.4)	60–89
Naboli	Oti	Hyperendemic (enhanced)	2015	0.0 (0.0–2.6)	60–89
Nambossi	Oti	Hyperendemic (enhanced)	2011	0.4 (0.1–2.0)	60–89
Nassiele	Kpendjal	Hyperendemic (enhanced)	2006	1.3 (0.2–7.0)	60–89
Natoundjenga	Kpendjal	Hyperendemic (enhanced)	2011	0.0 (0.0–2.9)	60–89
Natounkpargou	Kpendjal	Hyperendemic with 100% vector control (enhanced)	2011	0.0 (0.0–1.6)	60–89
Pancerys[a]	Kpendjal	Hyperendemic (reference)	2015	1.5 (0.6–3.9)	20–59
Poporkou	Oti	Hyperendemic with 100% vector control (enhanced)	2015	0.0 (0.0–2.3)	60–89

[a]In 2015, the prevalence of *O. volvulus* infection in *Simulium damnosum* sensu lato was 0.2% (95% CI: 0.03-1.3%) in Pancerys [4].

Table S19. Continued

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Oti River Basin					
Simbo[a]	Oti	Hyperendemic (reference)	2011	2.0 (0.7–5.7)	20–59
Sougtangou	Kpendjal	Hyperendemic (reference)	2011	1.3 (0.4–4.5)	20–59
Tchountchonga[a]	Oti	Hyperendemic (reference)	2011	0.5 (0.1–3.0)	20–59
Tchri[a]	Oti	Hyperendemic (minimal)	2015	1.0 (0.2–5.7)	<5
Yiyingou	Oti	Hyperendemic (enhanced)	2011	1.1 (0.4–3.1)	60–89
Oti-Pendjari River Basin / Volta Blanche (White Volta)					
Lokpano	Tandjouaré	Hyperendemic with 100% vector control (enhanced)	2014	0.5 (0.1–2.7)	60–89

[a]Villages for which it has been reported that the epidemiological situation was unsatisfactory, and may have received biannual CDTI in the late 1990's for approximately 2 years [12].

Table S20. Villages in Kara included in the special intervention zone (SIZ)

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Oti River Basin					
Kpabte	Doufelgou	Hyperendemic (reference)	2006	4.9 (2.8–8.5)	60–89
Possao	Dankpen	Hyperendemic (minimal)	2014	1.1 (0.4–3.2)	5–19
Kara River Basin					
Aho-Lao	Kozah	Holoendemic (enhanced)	2000	22.8 (18.8–27.4)	<5
Djamde Kawa	Kozah	Hyperendemic (minimal)	2011	0.6 (0.1–3.1)	5–19
Kadjol II	Dankpen	Hyperendemic (minimal)	2014	0.5 (0.1–2.6)	5–19
Kawa-Bassar	Bassar	Hyperendemic (reference)	2015	0.0 (0.0–2.7)	60–89
Koulwere	Doufelgou	Hyperendemic (minimal)	2015	1.7 (0.6–4.9)	5–19
Sakponé	Dankpen	Hyperendemic (minimal)	2014	0.7 (0.2–2.3)	5–19
Sekou-Bas	Dankpen	Hyperendemic (reference)	2014	0.4 (0.1–2.2)	60–89
Sikan[a]	Dankpen	Holoendemic (enhanced)	2014	1.2 (0.5–3.0)	<5
Tchakassou	Bassar	Holoendemic (enhanced)	2015	4.2 (2.4–7.2)	<5
Touguel	Dankpen	Holoendemic (enhanced)	2014	1.0 (0.3–2.8)	<5
Wassi	Bassar	Holoendemic (reference)	2014	27.0 (18.2–38.1)	<5
Kerán River Basin					
Goulbi	Kéran	Holoendemic (enhanced)	2015	9.9 (5.9–16.1)	<5
Hourta	Kéran	Hyperendemic (minimal)	2015	2.3 (0.6–7.8)	5–19
Koffi-Ferme	Kéran	Holoendemic (enhanced)	2014	5.4 (1.8–14.6)	<5
Koutantagou/ Koutantagou & Tapount	Kéran	Hyperendemic (minimal)	2015	1.9 (0.3–9.8)	5–19

Table S20. Continued

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Kerán River Basin (continued)					
Koutougou Solla	Kéran	Holoendemic (enhanced)	2015	13.6 (7.8–22.7)	<5
Kpantiiyagou	Kéran	Holoendemic (enhanced)	2015	7.7 (4.5–12.9)	<5
Narita / Pesside	Kéran	Holoendemic (enhanced)	2014	6.5 (3.3–12.3)	<5
Sola	Kéran	Holoendemic (enhanced)	2000	41.8 (32.2–52.0)	<5
Tchitchira Ferme	Kéran	Holoendemic (reference)	2002	59.0 (42.3–74.5)	<5
Wasite & Pesside Ferme/Wassite	Kéran	Holoendemic (reference)	2004	16.3 (11.6–22.4)	<5
Wartema	Kéran	Hyperendemic (minimal)	2002	25.5 (17.8–35.2)	5–19
Mô River Basin					
Dandjessi	Bassar	Hyperendemic (minimal)	2012	3.0 (1.5–6.1)	5–19
Katcha-Konkomba	Bassar	Hyperendemic (minimal)	2015	4.3 (2.3–7.7)	5–19
Kissafo	Bassar	Hyperendemic (minimal)	2012	3.3% 1.9–5.8)	5–19
Madjatom[b]	Bassar	Hyperendemic (minimal)	2015	0.7 (0.1–3.7)	5–19
Saboundi	Bassar	Hyperendemic (minimal)	2015	1.5 (0.3–5.7)	5–19

[a]Vector control was very effective in Sikan, bringing the annual transmission potential to 0 in 2006 [5]. Ivermectin treatment coverage was reported at 90% of total population in 2003 [13].

[b]Surveys with consistently low prevalence for 15 years [8].

Table S21. Villages in Centrale included in the special intervention zone (SIZ)

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Mô River Basin					
Agbamassoumou	Sotouboua	Hyperendemic (reference)	2012	0.0 (0.0–1.5)	60–89
Assawoh-Koura	Sotouboua	Holoendemic (enhanced)	2015	10.3 (5.7–18.0)	<5
Banda	Sotouboua	Holoendemic (enhanced)	2015	4.4 (2.3–8.5)	<5
Batto	Sotouboua	Holoendemic (minimal)	2014	32.7 (21.2–46.6)	<5
Dantchessi	Sotouboua	Hyperendemic (minimal)	2006	8.5 (5.0–14.0)	5–19
Koida or Kouida	Sotouboua	Holoendemic (enhanced)	2015	5.8 (3.5–9.6)	<5
Moussoukoudjou	Sotouboua	Hyperendemic (reference)	2006	3.0 (1.0–8.5)	60–89
Naboun-Koura	Sotouboua	Hyperendemic (reference)	2009	0.6 (0.1–3.1)	60–89
Sakpagninga	Sotouboua	Holoendemic (enhanced)	2003	15.8 (9.4–25.0)	<5
Tchakpissi	Sotouboua	Holoendemic (enhanced)	2015	10.5 (4.2–24.1)	<5
Tchatou Koura	Sotouboua	Hyperendemic (minimal)	2015	3.3 (1.5–7.1)	5–19
Tchetchekou	Sotouboua	Hyperendemic (minimal)	2015	3.5 (1.6–7.4)	5–19

Table S22. Villages in Centrale not included in the special intervention zone (non-SIZ)

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Anié River Basin (Mono) / Asukawkaw					
Agbandi-Mono	Blitta	Hyperendemic (enhanced)	2015	0.3 (0.1–1.8)	60–89
Yeloum Bagnan	Blitta	Hyperendemic (enhanced)	2012	1.3 (0.5–3.9)	60–89
Katchalikadi	Sotouboua	Hyperendemic (enhanced)	2012	1.6 (0.5–5.7)	60–89
Kpeida	Sotouboua	Mesoendemic (minimal)	2013	0.0 (0.0–2.0)	60–89
Okou-Kopé	Blitta	Mesoendemic (minimal)	2012	0.0 (0.0–3.0)	60–89
Panlao	Sotouboua	Mesoendemic (minimal)	2013	0.0 (0.0–1.9)	60–89
Yovo-Kopé	Blitta	Mesoendemic (minimal)	2012	0.0 (0.0–2.5)	60–89
Mono River Basin					
Akawolo	Tchamba	Mesoendemic (minimal)	2011	0.0 (0.0–1.6)	60–89
Kpambouré (Aou)	Sotouboua	Mesoendemic (minimal)	2002	3.3 (1.8–5.9)	60–89
Oudjomboi	Tchamba	Mesoendemic (minimal)	2011	0.5 (0.1–2.5)	60–89
Sada-Mono	Sotouboua	Mesoendemic (minimal)	2002	4.5 (2.7–7.2)	60–89
Ogou River Basin (Mono)					
Blou-Elavagnon	Tchamba	Mesoendemic (minimal)	2011	0.4 (0.1–2.5)	60–89
Ogouda & Sombo	Tchamba	Hyperendemic (reference)	2015	3.5 (1.2–9.7)	60–89
Soukounde	Tchamba	Mesoendemic (minimal)	2011	0.0 (0.0–4.2)	60–89
Talaba	Tchamba	Mesoendemic (minimal)	2011	0.0 (0.0–2.7)	60–89
Kpaza Koue River Basin					
Takade	Sotouboua	Hyperendemic (minimal)	2015	14.5 (10.7–19.2)	<5

Table S23. Villages in Plateaux not included in the special intervention zone (non-SIZ)

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Amou River Basin (Mono)					
Amoutchou	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2012	1.5 (0.5–4.4)	60–89
Amouto (Amou-Oblo)	Haho	Hyperendemic (reference) under biannual CDTI since 2014	2012	2.7 (1.1–6.0)	5–19
Atinkpassa	Ogou	Hyperendemic (reference) under biannual CDTI since 2014	2017	3.4 (1.2–9.6)	5–19
Glelou & Omouva	Amou	Hyperendemic (enhanced) under biannual CDTI since 2014	2011	1.3 (0.5–3.8)	60–89
Igbowou-Amou[a]	Amou	Hyperendemic (minimal) under biannual CDTI since 2014	2017	6.9 (3.2–14.2)	<5
Ilekohan	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2012	1.2 (0.3–4.2)	60–89
Kpati Copé[a]	Amou	Hyperendemic (minimal) under biannual CDTI since 2014	2017	6.7 (3.1–13.9)	<5
Tsokple or Tchokple[a]	Amou	Hyperendemic (minimal) under biannual CDTI since 2014	2017	12.4 (7.2–20.4)	<5
Anié River Basin (Mono)					
Atewe-Zongo	Anié	Hyperendemic (enhanced) under annual CDTI	2015	0.5 (0.1–2.9)	60–89
Pidina	Amou	Hyperendemic (enhanced) under biannual CDTI since 2014	2014	0.7 (0.1–3.6)	60–89
Tchékélé	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2013	0.5 (0.1–3.0)	60–89

[a]Anti-OvAg seroprevalence in children under 15 years of age was 52.9% (9/17) in Igbowou-Amou, 60% (15/25) in Kpati Copé, and 48.4% (15/31) in Tsokple [14].

Table S23. Continued

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Deveho River Basin (Mono) / Zio River Basin					
Tutu Zionou[a]	Kpélé	Hyperendemic (reference) under annual CDTI	2017	2.5 (0.7–8.8)	<5
Menou (or Menu) River Basin					
Ahlon Dzindzi	Wawa	Mesoendemic (minimal) under annual CDTI	2008	0.5 (0.1–2.8)	60–89
Denou Bumuebi	Danyi	Hyperendemic (enhanced) under biannual CDTI since 2014	2008	2.2 (0.7–6.2)	60–89
Guin Kopé	Wawa	Hyperendemic (reference) under annual CDTI	2008	5.3 (3.3–8.4)	<5
Odomi Abra	Wawa	Hyperendemic (reference) under annual CDTI	2008	6.7 (4.2–10.6)	<5
S. Outouala	Danyi	Hyperendemic (enhanced) under biannual CDTI since 2014	2008	3.6 (1.7–7.8)	60–89
Mono River Basin					
Glive	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2012	2.4 (0.7–8.5)	60–89
Hetre	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2012	0.6 (0.1–3.2)	60–89
Moba Kopé	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2013	1.2 (0.3–4.2)	60–89
Tanago	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2012	1.1 (0.2–6.0)	60–89
Toigbo	Ogou	Hyperendemic (enhanced) under biannual CDTI since 2014	2005	6.9 (4.5–10.5)	60–89

[a]The only other surveyed village (Kouma-Kunda) from the Deveho (Mono) River Basin was classified as hypoendemic at baseline. In contrast to the model projections followed by most of the other hypoendemic villages in Plateaux, this village recorded a microfilarial prevalence of 1.3% (95%CI: 0.2–5.2%) in 2014 [8].

Table S23. Continued

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Todje (or Todzie) River Basin					
Ananivikodzi	Agou	Hyperendemic (enhanced) under annual CDTI	2000	0.0 0.0–8.8)	60–89
Klo-Mayondi	Kloto	Hyperendemic (reference) under annual CDTI	2000	16.4 (12.5–21.3)	<5
Kpime-Seva (Tététou)	Kloto	Hyperendemic (reference) under annual CDTI	2000	12.5 (8.6–17.6)	<5
Nyive	Kloto	Hyperendemic (reference) under annual CDTI	2004	7.1 (4.1–12.0)	<5
Tome	Agou	Mesoendemic (minimal) under annual CDTI	2001	4.3 (2.4–7.5)	60–89
Wawa/Asukawkaw River Basin					
Sukul-Kpodji	Wawa	Hyperendemic (enhanced) under annual CDTI	2014	0.7 (0.1–4.1)	60–89

Table S24. Villages in Maritime not included in the special intervention zone (non-SIZ)

Village	Prefecture	Modelled prevalence trends followed by villages (intervention scenario)	Latest parasitological survey		EOT probability (%) if MDA stops in 2027
			Year	Microfilarial prevalence (%) (95% CI)	
Haho River Basin (Mono)					
Afangadji[a]	Yoto	Hyperendemic (enhanced)	2017	1.3 (0.2–7.1)	60–89
Togba	Yoto	Hyperendemic (enhanced)	2015	0.6 (0.1–3.5)	60–89
Mono River Basin					
Afomonou	Bas-Mono	Mesoendemic (minimal)	2012	0.9 (0.2–4.9)	60–89
Dzrekpon/Djrekpon	Yoto	Hyperendemic (enhanced)	2015	1.6 (0.3–8.9)	60–89
Gbandidi	Bas-Mono	Mesoendemic (minimal)	2012	0.6 (0.1–3.1)	60–89
Gogokondji	Yoto	Hyperendemic (enhanced)	2017	0.0 (0.0–9.6)	60–89
Lakata-Kondji	Yoto	Hyperendemic (enhanced)	2015	0.0 (0.0–5.7)	60–89
Mawussou	Yoto	Hyperendemic (enhanced)	2015	1.2 (0.2–6.7)	60–89
Zio River Basin					
Afokonou	Zio	Mesoendemic (minimal)	2015	0.0 (0.0–5.7)	60–89
Kayido	Avé	Hyperendemic (reference) or Hyperendemic (enhanced)	2012	3.6 (1.0–12.3)	<5 or 60–89
Konta & Agbatehi	Avé	Hyperendemic (enhanced)	2012	2.4 (1.0–5.4)	60–89

CDTI: Community-directed treatment with ivermectin.

[a]In 2020-2023, stop-MDA surveys in Afangadji indicated active transmission [15].

Text S9. Calculation of prefecture-level likelihood of reaching elimination of onchocerciasis transmission

The term "likelihood" is employed here as a categorical variable ('very likely', 'likely', 'possibly', 'unlikely' and 'very unlikely') to denote the range of joint elimination of transmission (EOT) probabilities, rather than referring to the formal statistical notion of likelihood used in inferential analyses. To calculate the likelihood of reaching EOT for each prefecture, we multiplied village-level EOT probabilities (for surveyed villages) using midpoint values across the village-level EOT probability ranges (Table S25).

Table S25. Assigned midpoint values for village-level EOT probability ranges

EOT probability range per village (%)	Midpoint value (%)
<5	2.5
5–19	12.0
20–59	39.5
60–89	74.5
≥90	100.0[a]

[a]For the ≥90% EOT probability, a value of 100.0 was used in the calculation of the prefecture-level EOT likelihood. Most villages projected to reach ≥90% EOT probabilities have values close to 100%; therefore, this approach prevents underestimating the overall likelihood in prefectures that have many villages with high EOT probabilities.

Each village's midpoint was used to calculate the joint EOT probability for the entire prefecture, by multiplying the midpoint probabilities (Table S25) of *all* surveyed villages within that prefecture (i.e., with or without recorded baseline microfilarial prevalence). This approach assumes independence of EOT probabilities across villages within prefectures, and across prefectures, as EPIONCHO-IBM models closed populations (i.e., not considering movement between villages or prefectures of humans or flies),

$$P_j = \prod_{i=1}^{i=n_j} P_{i,j}$$

Where P_j is the joint EOT probability for prefecture j ($j = 1, \dots, 34$) and $P_{i,j}$ the midpoint EOT probability for village i in prefecture j. The calculated joint EOT probabilities for each prefecture were assigned to one of the five likelihood categories (Table S26).

Table S26. Definitions of prefecture-level EOT likelihood categories

EOT likelihood category	Probability range	Description
Very likely	≥90.00%	Very high probability of reaching EOT, with all surveyed villages being projected to reach ≥90% EOT probability
Likely	50.00–89.99%	High probability of reaching EOT, with most surveyed villages being projected to reach ≥90% EOT probability
Possibly	5.00–49.99%	Moderate probability of reaching EOT, with most surveyed villages being projected to reach at least 60–89% EOT probability
Unlikely	0.01–4.99%	Low probability of reaching EOT, reflecting the presence of surveyed villages with projected <20% EOT probability
Very unlikely	<0.01%	Very low probability of reaching EOT, indicating the presence of several surveyed villages with projected <5% EOT probability

Tables S27-S29 present prefecture-specific EOT likelihood categories when simulating that ivermectin MDA stops in 2024, 2027 or 2030, indicating the total number of surveyed villages per prefecture and the number of villages for each midpoint value. Extending treatment to 2027 slightly improves the EOT likelihood for the prefectures in Kara, although it does only alter the overall likelihood categories for Doufelgou from 'Unlikely' to 'Possibly' and for Binah (from 'Possibly' to 'Likely') (Table S28). Extending treatment to 2030 increases somewhat the EOT likelihood for Dankpen prefecture (from 'Very unlikely' to 'Unlikely') (Table S29). Under biannual MDA, extending treatment to 2030 improves the likelihood for Plateaux prefectures, with Haho and Ogou prefectures changing from 'Unlikely' to 'Possibly', and with Danyi prefecture changing from 'Possibly' to 'Very likely'. The villages within each prefecture with projected EOT probabilities <90% if MDA stops in 2027 are presented in Tables S13-S18 (for villages with recorded BMP estimates) and Tables S19-S24 (for those without recorded BMP estimates). As the calculation of joint EOT probabilities is strongly dependent on the number of surveyed villages in each prefecture, Figure 7 of the Main Text also shows, as pie-charts, the proportions of surveyed villages in each prefecture according to their projected EOT probability ranges if ivermectin MDA stops in 2027. The size of the pie-charts reflects the number of surveyed villages.

Table S27. Prefecture-level likelihood of reaching EOT when simulating that ivermectin MDA stops in 2024

Region Prefecture	**No. villages**	**Midpoint value (%)** (EOT probability range per village, %)					**Joint EOT probability (%)**	**EOT likelihood category**
		2.5% (<5%)	**12.0%** (5–19%)	**39.5%** (20–59%)	**74.5%** (60–89%)	**100.0** (≥90%)		
Savanes								
Kpendjal, including Kpendjal-Ouest	9	0	0	3	5	1	1.4	Unlikely
Oti, including Oti-Sud	29	3	0	2	7	17	<0.01	Very unlikely
Tandjoaré or Tandjouaré	5	0	0	0	1	4	74.5	Likely
Tône, including Cinkassé	6	0	0	2	0	4	15.6	Possibly
Kara								
Assoli	3	0	0	0	0	3	≥90	Very likely
Bassar	17	2	8	0	0	7	<0.01	Very unlikely
Binah or Bimah	4	0	0	1	0	3	39.5	Possibly
Dankpen	19	2	3	1	1	12	<0.01	Very unlikely
Doufelgou	5	0	1	2	1	1	1.4	Unlikely
Kéran	13	10	3	0	0	0	<0.01	Very unlikely
Kozah	27	1	2	0	1	23	0.03	Unlikely

Table S27. Continued

Region Prefecture	**No. villages**	**Midpoint value (%)** (EOT probability range per village, %)					**Joint EOT probability (%)**	**EOT likelihood category**
		2.5% (<5%)	**12.0%** (5–19%)	**39.5%** (20–59%)	**74.5%** (60–89%)	**100.0** (≥90%)		
Centrale								
Blitta	28	0	0	0	10	18	5.3	Possibly
Sotouboua, including Mô	34	7	3	0	14	10	<0.01	Very unlikely
Tchamba	16	0	0	0	7	9	12.7	Possibly
Tchaoudjo or Tchaudjo	8	0	1	0	2	5	6.7	Possibly
Plateaux								
Agou	13	0	0	0	3	10	30.8	Possibly
Akébou	2	0	0	0	1	1	74.5	Likely
Amou	8	3	0	0	3	2	<0.01	Very unlikely
Anié	12	0	0	0	3	9	41.4	Possibly
Danyi	5	0	0	0	2	3	55.5	Likely
Est-Mono	15	0	0	0	4	11	30.8	Possibly
Haho	21	0	3	0	3	15	0.07	Unlikely
Kloto	5	3	0	0	0	2	<0.01	Very unlikely

Table S27. Continued

Region Prefecture	**No. villages**	**Midpoint value (%)** (EOT probability range per village, %)					**Joint EOT probability (%)**	**EOT likelihood category**
		2.5% (<5%)	**12.0%** (5–19%)	**39.5%** (20–59%)	**74.5%** (60–89%)	**100.0** (≥90%)		
Plateaux (continued)								
Kpélé	2	1	0	0	0	1	2.5	Unlikely
Moyen-Mono	6	0	0	0	4	2	30.8	Possibly
Ogou	37	0	2	0	16	19	0.01	Unlikely
Wawa	10	2	0	0	4	4	0.02	Unlikely
Maritime								
Avé[a]	5	0	0	1	1	3	29.4	Possibly
Bas-Mono, includes areas previously from Lacs[a]	2	0	0	0	2	0	55.5	Likely
Golfe, including Lomé and Agoè-Nyivé[a]	0	0	0	0	0	0	–	Non-endemic
Lacs[b]	0	0	0	0	0	0	–	Non-endemic
Vo[a]	0	0	0	0	0	0	–	Non-endemic
Yoto[a]	22	0	0	4	3	15	1.0	Unlikely
Zio[a]	12	0	0	0	1	11	74.5	Likely

[a]In all of Maritime, excepting the endemic villages in the Haho River Basin (Mono) of Yoto Prefecture, control interventions may have stopped earlier than 2024 [15].

Table S28. Prefecture-level likelihood of reaching EOT when simulating that ivermectin MDA stops in 2027

Region Prefecture	**No. villages**	**Midpoint value (%)** (EOT probability range per village, %)					**Joint EOT probability (%)**	**EOT likelihood category**
		2.5% (<5%)	**12.0%** (5–19%)	**39.5%** (20–59%)	**74.5%** (60–89%)	**100.0** (≥90%)		
Savanes								
Kpendjal, including Kpendjal-Ouest	9	0	0	3	5	1	1.4	Unlikely
Oti, including Oti-Sud	29	3	0	2	7	17	<0.01	Very unlikely
Tandjoaré or Tandjouaré	5	0	0	0	1	4	74.5	Likely
Tône, including Cinkassé	6	0	0	2	0	4	15.6	Possibly
Kara								
Assoli	3	0	0	0	0	3	≥90	Very likely
Bassar	17	2	6	0	2	7	<0.01	Very unlikely
Binah or Bimah	4	0	0	0	1	3	74.5	Likely
Dankpen	19	2	3	0	1	13	<0.01	Very unlikely
Doufelgou	5	0	1	0	2	2	6.7	Possibly
Kéran	13	10	3	0	0	0	<0.01	Very unlikely
Kozah	27	1	2	0	0	24	0.04	Unlikely

Table S28. Continued

Region Prefecture	**No. villages**	**Midpoint value (%)** (EOT probability range per village, %)					**Joint EOT probability (%)**	**EOT likelihood category**
		2.5% (<5%)	**12.0%** (5–19%)	**39.5%** (20–59%)	**74.5%** (60–89%)	**100.0** (≥90%)		
Centrale								
Blitta	28	0	0	0	10	18	5.3	Possibly
Sotouboua, including Mô	34	7	3	0	14	10	<0.01	Very unlikely
Tchamba	16	0	0	0	7	9	12.7	Possibly
Tchaoudjo or Tchaudjo	8	0	1	0	2	5	6.7	Possibly
Plateaux								
Agou	13	0	0	0	3	10	30.8	Possibly
Akébou	2	0	0	0	1	1	74.5	Likely
Amou	8	3	0	0	3	2	<0.01	Very unlikely
Anié	12	0	0	0	3	9	41.4	Possibly
Danyi	5	0	0	0	2	3	55.5	Likely
Est-Mono	15	0	0	0	4	11	30.8	Possibly
Haho	21	0	3	0	3	15	0.07	Unlikely
Kloto	5	3	0	0	0	2	<0.01	Very unlikely

Table S28. Continued

Region Prefecture	**No. villages**	**Midpoint value (%)** (EOT probability range per village, %)					**Joint EOT probability (%)**	**EOT likelihood category**
		2.5% (<5%)	**12.0%** (5–19%)	**39.5%** (20–59%)	**74.5%** (60–89%)	**100.0** (≥90%)		
Plateaux (continued)								
Kpélé	2	1	0	0	0	1	2.5	Unlikely
Moyen-Mono	6	0	0	0	4	2	30.8	Possibly
Ogou	37	0	2	0	16	19	0.01	Unlikely
Wawa	10	2	0	0	4	4	0.02	Unlikely
Maritime								
Avé[a]	5	0	0	1	1	3	29.4	Possibly
Bas-Mono, includes areas previously from Lacs[a]	2	0	0	0	2	0	55.5	Likely
Golfe, including Lomé and Agoè-Nyivé[a]	0	0	0	0	0	0	–	Non-endemic
Lacs[a]	0	0	0	0	0	0	–	Non-endemic
Vo[a]	0	0	0	0	0	0	–	Non-endemic
Yoto[a]	22	0	0	4	3	15	1.0	Unlikely
Zio[a]	12	0	0	0	1	11	74.5	Likely

[a]In all of Maritime, excepting the endemic villages in the Haho River Basin (Mono) of Yoto Prefecture, control interventions may have stopped earlier than 2024 [15].

Table S29. Prefecture-level likelihood of reaching EOT when simulating that ivermectin MDA stops in 2030

Region Prefecture	**No. villages**	**Midpoint value (%)** (EOT probability range per village, %)					**Joint EOT probability (%)**	**EOT likelihood category**
		2.5% (<5%)	**12.0%** (5–19%)	**39.5%** (20–59%)	**74.5%** (60–89%)	**100.0** (≥90%)		
Savanes								
Kpendjal, including Kpendjal-Ouest	9	0	0	3	5	1	1.4	Unlikely
Oti, including Oti-Sud	29	3	0	2	7	17	<0.01	Very unlikely
Tandjoaré or Tandjouaré	5	0	0	0	1	4	74.5	Likely
Tône, including Cinkassé	6	0	0	2	0	4	15.6	Possibly
Kara								
Assoli	3	0	0	0	0	3	≥90	Very likely
Bassar	17	2	0	6	2	7	<0.01	Very unlikely
Binah or Bimah	4	0	0	0	1	3	74.5	Likely
Dankpen	19	2	0	3	1	13	0.01	Unlikely
Doufelgou	5	0	0	1	2	2	19.2	Possibly
Kéran	13	10	0	3	0	0	<0.01	Very unlikely
Kozah	27	1	0	2	0	24	0.30	Unlikely

Table S29. Continued

Region Prefecture	**No. villages**	**Midpoint value (%)** (EOT probability range per village, %)					**Joint EOT probability (%)**	**EOT likelihood category**
		2.5% (<5%)	**12.0%** (5–19%)	**39.5%** (20–59%)	**74.5%** (60–89%)	**100.0** (≥90%)		
Centrale								
Blitta	28	0	0	0	10	18	5.3	Possibly
Sotouboua, including Mô	34	7	0	3	14	10	<0.01	Very unlikely
Tchamba	16	0	0	0	7	9	12.7	Possibly
Tchaoudjo or Tchaudjo	8	0	1	0	2	5	6.7	Possibly
Plateaux								
Agou	13	0	0	0	3	10	30.8	Possibly
Akébou	2	0	0	0	1	1	74.5	Likely
Amou	8	3	0	0	0	5	<0.01	Very unlikely
Anié	12	0	0	0	3	9	41.4	Possibly
Danyi	5	0	0	0	0	5	≥90	Very likely
Est-Mono	15	0	0	0	4	11	30.8	Possibly
Haho	21	0	0	3	0	18	6.2	Possibly
Kloto	5	3	0	0	0	2	<0.01	Very unlikely

Table S29. Continued

Region Prefecture	**No. villages**	**Midpoint value (%)** (EOT probability range per village, %)					**Joint EOT probability (%)**	**EOT likelihood category**
		2.5% (<5%)	**12.0%** (5–19%)	**39.5%** (20–59%)	**74.5%** (60–89%)	**100.0** (≥90%)		
Plateaux (continued)								
Kpélé	2	1	0	0	0	1	2.5	Unlikely
Moyen-Mono	6	0	0	0	4	2	30.8	Possibly
Ogou	37	0	0	2	0	35	15.6	Possibly
Wawa	10	2	0	0	4	4	0.02	Unlikely
Maritime								
Avé[a]	5	0	0	1	1	3	29.4	Possibly
Bas-Mono, includes areas previously from Lacs[a]	2	0	0	0	2	0	55.5	Likely
Golfe, including Lomé and Agoè-Nyivé[a]	0	0	0	0	0	0	–	Non-endemic
Lacs[a]	0	0	0	0	0	0	–	Non-endemic
Vo[a]	0	0	0	0	0	0	–	Non-endemic
Yoto[a]	22	0	0	4	3	15	1.0	Unlikely
Zio[a]	12	0	0	0	1	11	74.5	Likely

[a]In all of Maritime, excepting the endemic villages in the Haho River Basin (Mono) of Yoto Prefecture, control interventions may have stopped earlier than 2024 [15].

Reported ivermectin treatment coverage of total population (%) per region and prefecture from 1991 to 2018 in Togo

Table S30. Reported coverage (% of total population) of ivermectin MDA for 1991-2018 in Savanes

Year	Prefecture				
	Cinkassé	Kpendjal	Oti	Tandjouaré	Tône
1991	0	0	0	0	0
1992	0	0	0	0	0
1993	0	NA	0	NA	NA
1994	0	NA	0	NA	NA
1995	0	NA	82.1	NA	NA
1996	0	NA	NA	NA	NA
1997	0	0	0	0	0
1998	0	NA	NA	NA	NA
1999	0	NA	NA	NA	NA
2000	0	69.8	70.3	79.0	68.0
2001	72.7	69.1	73.5	77.6	73.1
2002	NA	72.0	76.1	81.9	76.8
2003	NA	70.3	74.6	77.7	75.5
2004	NA	69.5	73.5	78.1	81.6
2005	NA	69.5	73.5	78.1	83.4
2006	NA	83.9	80.8	63.4	84.0
2007	NA	83.7	83.9	83.6	84.4
2008	NA	85.1	84.6	85.0	85.0
2009	NA	85.1	84.9	85.7	84.1
2010	NA	81.3	85.3	85.0	84.8
2011	NA	85.0	83.7	85.4	79.8
2012	NA	84.9	83.5	85.5	68.0
2013	80.5	83.0	80.8	85.9	82.6
2014	80.3	83.3	81.3	82.4	77.6
2015	81.7	85.1	82.2	83.0	81.5
2016	81.4	83.3	82.5	83.2	83.4
2017	81.7	82.3	80.7	79.2	82.7
2018	80.5	82.2	80.3	82.0	84.5

Some parts of Savanes may have started receiving ivermectin MDA in 1988-1990 [4]. Coverage data from [4,8].

Table S31. Reported coverage (% of total population) of ivermectin MDA for 1991-2018 in Kara

Year	Prefecture						
	Assoli	**Bassar**	**Binah**	**Dankpen**	**Doufelgou**	**Kéran**	**Kozah**
1991	0	0	0	0	0	55.7	60.9
1992	65.2	63.5	68.2	0	65.9	59.6	71.5
1993	50.1	58.4	62.5	0	54.1	53.6	66.0
1994	NA	64.4	71.2	0	66.4	59.3	61.4
1995	82.5	73.0	71.5	64.1	71.9	73.0	76.5
1996	73.7	73.8	75.8	NA	77.4	75.5	82.6
1997	0	0	0	0	0	0	0
1998	83.9	79.8	87.7	80.4	81.8	71.8	75.9
1999	69.3	74.3	76.1	79.9	80.7	86.7	73.8
2000	66.4	69.4	79.3	75.5	77.8	77.5	75.6
2001	77.2	76.1	77.5	75.7	75.1	80.3	72.6
2002	80.7	85.0	77.6	75.2	82.4	79.7	80.0
2003	87.8	87.5	87.7	85.3	86.3	86.3	82.6
2004	87.1	86.3	86.9	85.6	84.4	85.7	85.7
2005	85.0	86.4	86.6	82.2	85.9	85.8	85.8
2006	85.8	86.5	85.3	85.8	85.6	85.5	87.0
2007	85.1	85.0	83.5	85.9	86.3	84.9	86.5
2008	86.8	84.5	84.8	85.3	86.3	85.6	86.7
2009	87.0	86.7	87.2	84.8	87.1	85.5	86.9
2010	86.2	80.4	86.9	83.8	86.6	85.4	83.8
2011	83.6	85.5	85.3	84.8	88.2	85.4	85.7
2012	85.9	83.7	83.3	85.2	85.8	85.6	85.3
2013	86.4	85.3	86.4	83.8	85.6	85.0	86.4
2014	81.9	79.9	82.5	81.2	77.9	85.1	79.1
2015	85.6	82.1	85.1	80.4	83.7	85.2	83.9
2016	82.2	82.4	85.2	80.8	81.5	82.7	82.6
2017	80.8	82.3	83.2	78.9	82.6	83.7	80.4
2018	81.6	81.8	84.8	78.1	81.1	81.5	84.7

Some parts of Kara may have started receiving ivermectin MDA in 1988-1990 [4]. Coverage data from [4,8].

Table S32. Reported coverage (% of total population) of ivermectin MDA for 1991-2018 in Centrale

Year	Prefecture			
	Blitta	Sotouboua	Tchamba	Tchaoudjo
1991	62.8	59.3	62.1	57.6
1992	73.1	NA	NA	NA
1993	67.2	67.4	69.3	71.7
1994	58.6	54.8	59.8	58.5
1995	75.9	68.9	84.1	81.7
1996	82.6	81.5	87.9	86.8
1997	0	0	0	0
1998	NA	NA	NA	NA
1999	NA	NA	NA	NA
2000	73.7	72.1	75.4	68.5
2001	77.1	72.2	72.5	73.1
2002	76.3	72.2	72.9	75.8
2003	82.0	82.5	82.3	85.9
2004	83.3	84.0	85.8	86.4
2005	84.5	85.3	81.9	85.2
2006	85.8	79.4	84.0	84.5
2007	88.7	82.4	87.3	85.5
2008	88.3	86.1	86.6	85.7
2009	88.3	85.8	86.8	85.8
2010	86.4	81.8	80.1	84.2
2011	87.1	86.1	75.7	84.6
2012	85.2	59.4	89.3	84.7
2013	89.5	83.4	82.3	85.2
2014	76.6	83.6	74.5	80.3
2015	86.4	84.0	82.8	85.5
2016	84.4	84.0	82.6	84.6
2017	86.4	84.9	81.9	83.5
2018	82.5	85.8	NA	88.7

Coverage data from [4,8].

Table S33. Reported coverage (% of total population) of ivermectin MDA for 1991-2018 in Plateaux

Year	Prefecture											
	Agou	Akébou	Amou	Anié	Danyi	Est-Mono	Haho	Kloto	Kpélé	Moyen-Mono	Ogou	Wawa
1991	41.3	0	0	51.5	0	54.3	0	0	0	0	54.1	0
1992	NA	0	59.3	NA	0	73.3	0	0	0	0	66.0	91.3
1993	46.2	62.9	57.5	64.8	62.8	66.8	55.7	70.7	64.3	66.0	58.8	62.7
1994	72.1	65.7	59.7	45.4	67.7	58.2	68.1	75.0	74.7	60.3	60.7	64.9
1995	71.5	NA	76.4	69.7	83.9	79.0	73.0	63.0	NA	76.7	75.1	78.2
1996	78.2	81.6	80.7	80.8	90.4	80.5	19.1	74.2	NA	NA	80.0	75.8
1997	0	0	0	0	0	0	0	0	0	0	0	0
1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2000	53.7	NA	67.1	70.1	63.4	47.5	71.8	67.7	NA	71.0	55.4	62.4
2001	56.5	74.3	68.9	NA	73.3	50.6	68.3	73.3	76.5	77.1	65.6	58.1
2002	74.0	NA	73.8	NA	75.2	72.8	78.8	76.9	NA	73.7	76.1	73.6
2003	79.9	NA	77.9	NA	78.7	74.9	79.9	81.4	NA	80.5	74.0	70.9
2004	85.0	NA	81.4	NA	81.3	80.3	81.1	86.0	NA	85.1	84.1	80.7
2005	85.1	NA	85.9	NA	84.5	84.2	83.2	86.0	NA	85.5	83.1	81.1
2006	84.9	NA	85.1	NA	85.1	85.4	85.1	85.7	NA	85.6	83.7	85.5
2007	85.2	NA	85.6	NA	85.4	83.7	85.2	85.3	NA	84.2	85.6	85.2
2008	85.2	NA	85.4	NA	85.3	85.2	85.8	85.7	NA	86.0	87.0	84.8
2009	85.5	NA	86.9	NA	84.8	85.7	86.0	85.9	NA	88.1	85.2	85.3
2010	86.6	NA	85.7	NA	85.8	85.0	86.5	86.0	NA	85.7	85.3	85.1
2011	81.5	NA	84.5	NA	83.0	78.2	79.1	84.0	NA	81.5	83.8	80.5
2012	89.1	NA	84.2	NA	82.7	81.1	79.4	83.4	NA	84.8	82.2	81.2
2013	85.0	79.9	81.7	84.1	82.5	82.1	82.6	84.0	84.1	83.6	84.1	80.2
2014	93.0	83.7	81.0	84.7	82.9	80.4	83.8	82.6	83.6	82.6	82.4	69.8
2015	83.9	82.4	81.4	83.6	84.4	76.7	85.0	84.7	84.3	82.3	78.3	80.6
2016	84.0	85.3	83.5	82.7	83.9	81.1	84.0	85.4	85.8	83.0	82.4	85.3
2017	84.4	85.8	79.5	77.5	86.2	82.2	83.8	84.8	85.5	82.0	82.4	85.4
2018	NA	NA	79.8	NA	86.0	NA	85.7	87.5	NA	NA	83.3	NA

Coverage data from [4,8].

Table S34. Reported coverage (% of total population) of ivermectin MDA for 1991-2018 in Maritime

Year	Prefecture						
	Avé	Bas-Mono	Golfe	Lacs	Vo	Yoto	Zio
1991	0	0	0	0	NA	0	0
1992	0	0	0	0	NA	0	0
1993	68.6	69.6	65.8	85.7	NA	63.7	61.4
1994	57.3	59.3	47.5	62.7	NA	59.8	70.7
1995	NA	75.6	80.4	NA	NA	NA	72.3
1996	NA	74.8	83.5	NA	NA	19.1	70.8
1997	0	0	0	0	NA	0	0
1998	NA	NA	NA	NA	NA	NA	NA
1999	NA	NA	NA	NA	NA	NA	NA
2000	65.2	72.0	NA	NA	NA	60.8	64.3
2001	62.7	74.0	75.3	85.8	NA	64.1	76.6
2002	79.6	NA	NA	76.5	NA	79.5	80.2
2003	78.3	NA	NA	74.2	NA	81.4	85.3
2004	86.7	NA	NA	86.5	NA	89.2	85.3
2005	86.1	NA	NA	87.2	NA	88.4	85.4
2006	86.7	NA	NA	88.9	NA	85.8	85.4
2007	82.8	NA	NA	82.7	NA	80.4	85.6
2008	85.5	NA	NA	84.5	NA	86.7	85.4
2009	87.6	NA	NA	88.0	NA	86.2	85.5
2010	85.9	NA	NA	87.0	NA	87.9	85.3
2011	84.1	NA	NA	82.0	NA	78.7	84.6
2012	58.0	NA	NA	82.8	NA	85.8	77.8
2013	85.7	83.6	NA	NA	NA	84.6	81.8
2014	82.8	79.1	NA	NA	NA	81.7	78.3
2015	84.0	83.0	NA	NA	NA	81.6	81.7
2016	84.1	84.9	2.4	NA	NA	80.8	81.7
2017	NA	0	NA	NA	NA	NA	NA
2018	NA	0	NA	NA	NA	NA	NA

Coverage data from [4,8].

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