Supplemental File 1. Variable categorization and selection

Variable categorization

Age was categorized into six classes: (*i*) 5-8 years, (*ii*) 9-14 years, (*iii*) 15-19 years, (*iv*) 20-29 years, (*v*) 30-49 years and (*vi*) ≥50 years.

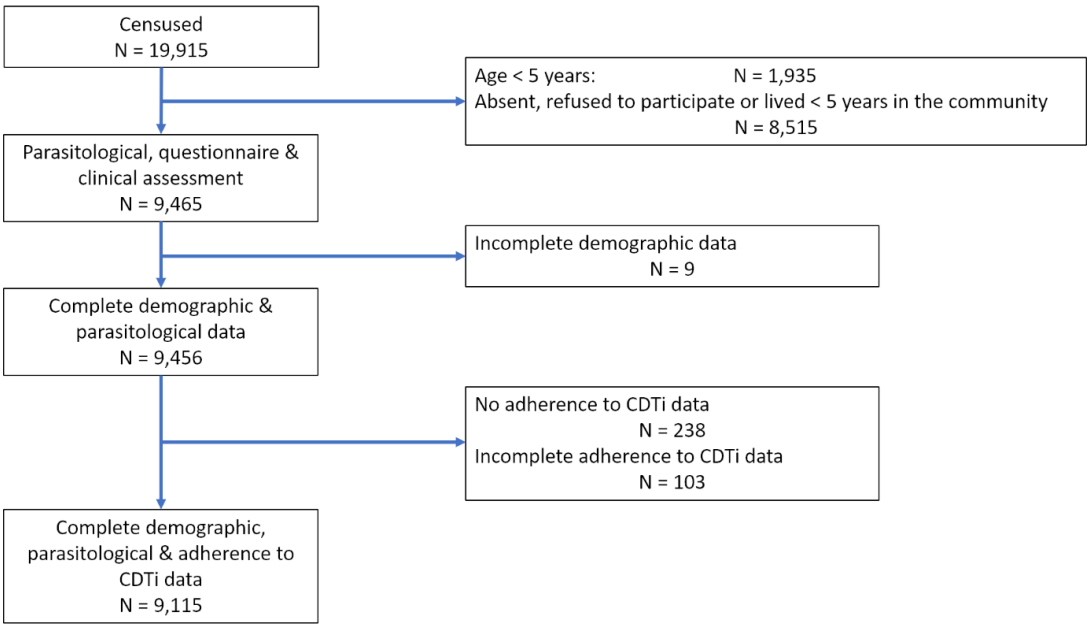
The age cut of 8 years was estimated empirically from the data as delimiting the age group with the lowest *O. volvulus* prevalence, both graphically and statistically using logistic regression. The cut at 15 years was chosen to have participants born before and after CDTI reached 65% coverage (Wanji, Kengne-Ouafo et al. 2015).

Self-reported adherence to CDTI was expressed as the proportion of rounds taken out of the maximum of rounds the person could have taken given their age, i.e. (*i*) Never taken IVM, (*ii*) taken ≤ 50% of rounds, (*iii*) taken 50-75% of rounds and (*iv*), taken ≥ 75% of rounds. Self-reported time since last IVM treatment was categorized as (*i*) IVM taken in the last year *vs.* (*ii*) any other case. For other variables original categories with frequencies below 5% were merged with similar categories.

Variable selection

Mixed-effects regression models were used to assess the association between each outcome and explanatory variables at a 15% significance level using the Likelihood Ratio Test (LRT). Various cut-offs as well as continuous forms where applicable were considered for age and variables pertaining to adherence to CDTI and albendazole treatment. The variable (and) categorization that (*i*) was associated at 15% level in the bivariate analysis, (*ii*) yielded the lowest Akaike Information Criterion (AIC), (*iii*) where applicable did not result in empty cross categories in the multivariate and (*iv*) did not yield collinearity in the multivariate model was selected for inclusion in the final multivariate model.

Supplemental File 2. Study diagram



Supplemental File 3. Participant characteristics

Variable	Category	Enrolled	Not enrolled	All censused
		n (%)	n (%)	n (%)
Age	5-8	1385 (14.7)	1149 (13.5)	2534 (14.1)
	9 -14	1962 (20.8)	1254 (14.7)	3216 (17.9)
	15-29	2206 (23.3)	2994 (35.1)	5200 (28.9)
	30-49	2430 (25.7)	2142 (25.1)	4572 (25.4)
	≥50	1473 (15.6)	983 (11.5)	2456 (13.7)
Gender	Men	4577 (48.4)	4496 (52.8)	9073 (50.5)
	Women	4879 (51.6)	4026 (47.2)	8905 (49.5)
Occupation	Farmer	3946 (41.7)	3792 (44.5)	7738 (43.0)
	None, child, NA	1385 (14.7)	535 (6.3)	1920 (10.7)
	Student/Pupil	3711 (39.2)	3567 (41.9)	7278 (40.5)
	Other: worker, service, liberal	414 (4.4)	628 (7.4)	1042 (5.8)
Education attainment	No school, NA	1849 (19.6)	786 (9.2)	2635 (14.7)
	Primary or secondary school	1524 (16.1)	1517 (17.8)	3041 (16.9)
	High school and higher	6083 (64.3)	6219 (73.0)	12302 (68.4)
Ever taken Albendazole	No	2570 (27.2)	-	-
	Yes, >1 year	1222 (12.9)	-	-
	Yes, < 1 year	5409 (57.2)	-	-
	Missing, no answer	255 (2.7)	-	-
Self-reported adherence to CDTI	Never	2,203 (23.3)	-	-
	up to 50% of rounds	5073 (53.7)	-	-
	50-75% of rounds	937 (9.9)	-	-
	> 75% of rounds	951 (10.1)	-	-
	missing	292 (3.1)	-	-
Time since last treatment	Any other case	4060 (42.9)	-	-
	< 1 year	5055 (53.5)	-	-
	missing	341 (3.6)	-	-
How many times participated in CDTI	missing	292 (3.1)	-	-
		Median; IQR	-	-
		2; 4	-	-

Data were obtained from 9,456 participants aged 5 years and over in a cross-sectional survey conducted in 2017 in 20 villages of Southwest Cameroon.

Supplemental File 4. Village-level *O. volvulus* prevalence and CMFL and *L. loa* prevalence

	O. volvulus				*Loa loa*		
Community	**N**	**Prevalence**	**95%CI**	**CMFL**	**N**	**Prevalence**	**95%CI**
Bakumba	547	53.75	49.6 - 57.9	2.43	539	2.6	1.4 - 4.3
Betenge	211	53.55	46.8 - 60.3	2.79	211	2.8	1.1 - 6.1
Big Butu	544	39.71	35.6 - 43.8	1.31	538	1.5	0.6 - 2.9
Big Massaka	585	58.97	55.0 - 63.0	2.85	576	3.1	1.9 - 4.5
Big Ngwandi	1004	35.66	32.7 - 38.6	1.10	995	2.0	1.2 - 4.9
Bikoki	217	70.05	63.9 - 76.2	3.08	216	2.8	1.0 - 5.9
Boa Bakundu	1249	36.19	33.5 - 38.9	1.43	1224	3.0	2.1 - 4.1
Bombanda	335	31.34	26.4 - 36.3	1.06	328	6.4	4.0 - 9.6
Bombele	373	32.17	27.4 - 36.9	0.82	359	2.2	1.0 - 4.3
Dienyi	727	53.37	49.7 - 57.0	2.02	720	10.6	8.4 - 13.0
Kombone	805	37.64	34.3 - 41.0	1.57	800	1.8	1.0 - 2.9
Kumu Kumu	92	61.96	51.9 - 72.1	3.59	89	6.7	2.5 - 14.1
Kwa Kwa	785	41.78	38.3 - 45.2	1.57	776	2.1	1.2 - 3.3
Lifenja	122	57.38	48.5 - 66.3	3.36	121	1.7	0.2 - 5.8
Lokando	131	58.78	50.2 - 67.3	1.97	130	3.8	1.3 - 8.7
Metoko Bekondo	423	48.70	43.9 - 53.5	1.99	410	11.5	8.5 - 15.0
Nake	495	37.58	33.3 - 41.9	1.26	489	3.1	1.7 - 5.0
Njombe	221	57.92	51.4 - 64.5	2.55	221	1.4	0.3 - 3.9
Small Butu	249	75.50	70.1 - 80.9	3.24	247	4.5	2.2 - 7.8
Small Massaka	341	34.31	29.3 - 39.4	1.29	338	2.4	1.0 - 4.6

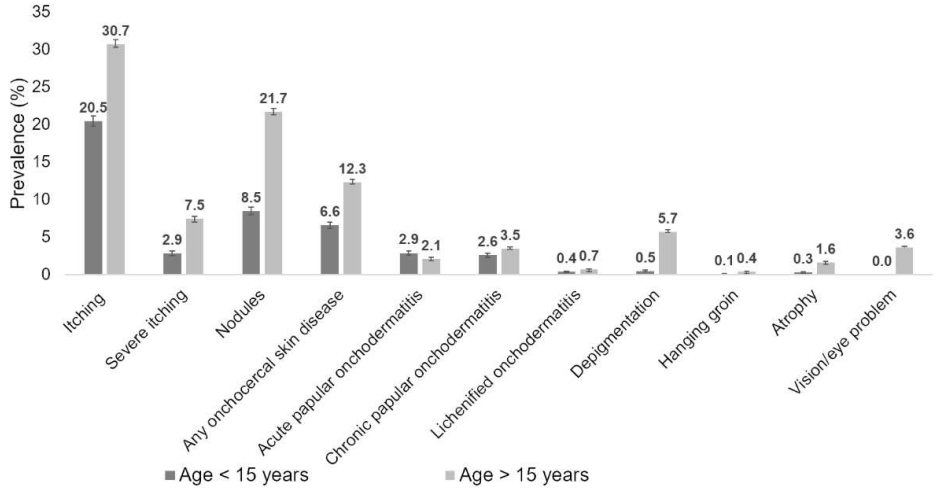
CI: confidence interval

Supplemental File 5. Unadjusted Odds Ratios for mf prevalence & intensity, and nodule prevalence (bivariate models)

		Prevalence			Infection intensity			Nodule prevalence		
Variable	**Category**	**OR**	**95% CI**	**p-value**	**IRR**	**95% CI**	**p-value**	**OR**	**95% CI**	**p-value**
Gender	Men	1.00			1.00			1.00		
	Women	**0.83**	0.76-0.90	<0.0001	**0.86**	0.81-0.91	<0.0001	**0.68**	0.61-0.75	<0.0001
Age (years)	30-49	1.00			1.00			1.00		
	5-8	**0.63**	0.54-0.72	<0.0001	**0.72**	0.65-0.81	<0.0001	**0.22**	0.17-0.27	<0.0001
	9-14	**1.47**	1.30-1.66	<0.0001	**1.39**	1.27-1.51	<0.0001	**0.39**	0.33-0.46	<0.0001
	15-29	**1.31**	1.16-1.48	<0.0001	**1.25**	1.14-1.36	<0.0001	**0.70**	0.60-0.81	<0.0001
	>=50	1.00	0.87-1.14	0.995	1.01	0.92-1.11	0.84	**1.30**	1.12-1.51	<0.0001
Self-reported adherence [(a)]	Never	1.00			1.00					
	<50%	**0.76**	0.68-0.84	<0.0001	**0.80**	0.74-0.85	<0.0001	**1.30**	1.13-1.49	<0.0001
	50-75	**0.48**	0.41-0.57	<0.0001	**0.57**	0.51-0.65	<0.0001	1.14	0.92-1.41	0.228
	>75	**0.04**	0.38-0.53		**0.56**	0.50-0.63	<0.0001	**0.77**	0.61-0.97	0.028
Time since last treatment	Any other case	1.00			1.00			1.00		
	< 1 year	**0.60**	0.55-0.65	<0.0001	**0.69**	0.65-0.73	<0.0001	**0.78**	0.70-0.87	<0.0001
Occupation	Farmer	1.00			1.00			1.00		
	No occupation, child	1.10	0.97-1.25	0.14	1.09	0.99-1.19	0.069	**0.75**	0.64-0.88	<0.0001
	Student/Pupil	1.03	0.94-1.13	0.544	1.04	0.97-1.11	0.246	**0.38**	0.33-0.43	<0.0001
	Other: worker, service, liberal	**0.70**	0.57-0.87	0.001	**0.74**	0.62-0.87	<0.0001	**0.52**	0.39-0.69	<0.0001
Education attainment	No school	1.00			1.00			1.00		
	Primary or secondary school	0.88	0.76-1.01	0.072	**0.89**	0.81-0.99	0.029	1.10	0.93-1.30	0.278
	High school and higher	0.93	0.84-1.04	0.216	0.94	0.87-1.01	0.099	**0.73**	0.63-0.83	<0.0001

OR: Odds ratio, CI: confidence interval; OR in bold are significant at 5% level.
[(a)]: self-reported adherence was expressed as the proportion of rounds taken out of the maximum rounds a person could have taken given their age.

Supplemental File 6. Prevalence of OSD and itching in participants aged below and above 15 years.



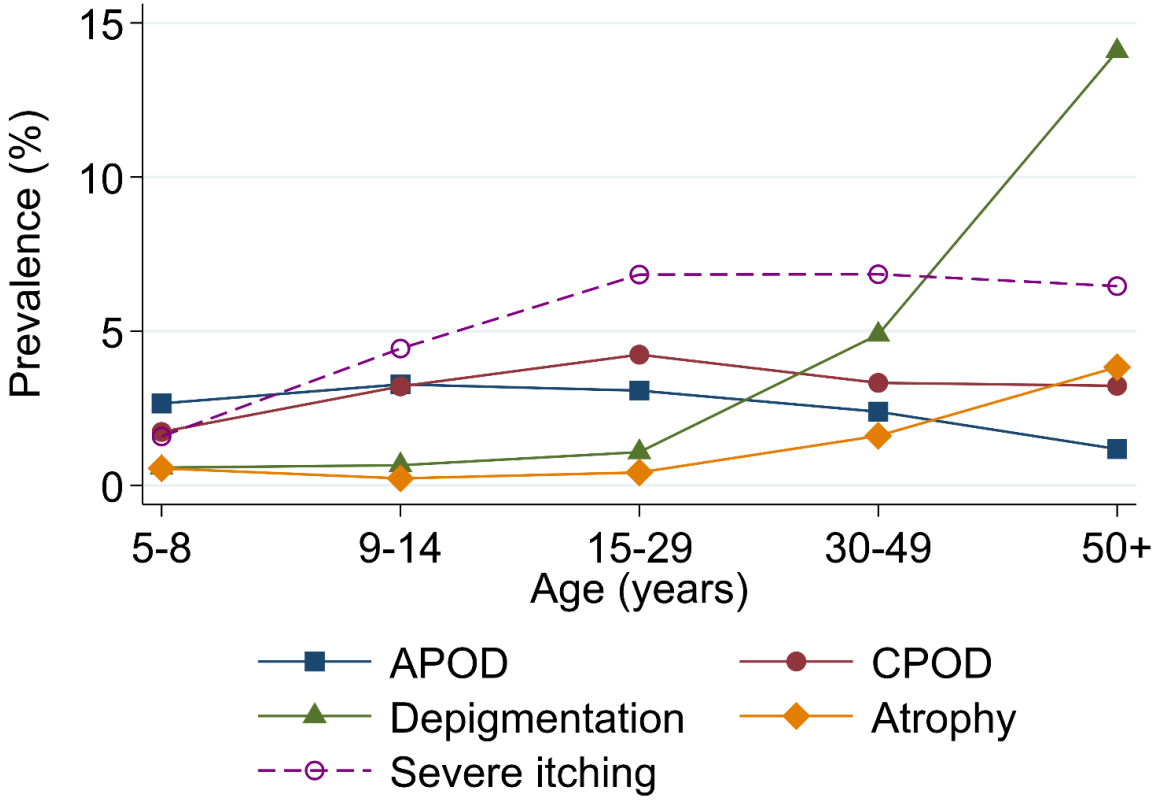
Data were obtained from a 2017 cross-sectional survey of 9,456 participants aged 5 years and over living in 20 communities of Southwest Cameroon.

Supplemental File 7. Association between OSD, adherence to CDTI and *O. volvulus* infection (adjusted ORs / multivariate model)

		APOD			CPOD			Depigmentation			Atrophy		
Variable	Category	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value	OR	95% CI	p-value
O. volvulus infection status	-	n.a.			n.a.			n.a.			1.28	0.85-1.94	0.241
O. volvulus mf load	-	n.a.			n.a.			**1.01**	1.00-1.01	0.001	n.a.		
Number of nodules	-	**1.18**	1.03-1.34	0.014	**1.12**	1.00-1.25	0.047	**1.45**	1.27-1.66	<0.0001	1.08	0.92-1.27	0.319
Number of nodules, squared	-	n.a.			n.a.			**0.99**	0.97-1.00	0.043	n.a.		
Age (years)	30-49	1.00			1.00			1.00			1.00		
	5-8	1.12	0.58-2.14	0.735	**0.51**	0.28-0.93	0.027	**0.11**	0.04-1.29	<0.0001	0.35	0.10-1.12	0.089
	9-14	1.39	0.78-2.48	0.259	0.96	0.59-1.58	0.886	**0.12**	0.05-0.30	<0.0001	**0.13**	0.03-0.53	0.004
	15-29	1.30	0.82-2.07	0.264	1.29	0.89-1.86	0.174	**0.20**	0.12-0.36	<0.0001	**0.25**	0.10-0.62	0.003
	≥50	**0.48**	0.27-0.87	0.015	0.97	0.66-1.44	0.881	**3.39**	2.61-4.40	<0.0001	**2.51**	1.56-4.05	<0.0001
Gender	Men	1.00			1.00			1.00			1.00		
	Women	1.18	0.89-1.55	0.251	0.95	0.74-1.20	0.644	0.82	0.65-1.04	0.106	0.93	0.62-1.41	0.742
Self-reported adherence [(a)]	Never	1.00			1.00			1.00			1.00		
	up to 50% of rounds	**1.79**	1.14-2.82	0.011	1.18	0.82-1.69	0.374	0.81	0.59-1.11	0.198	0.99	0.58-1.73	0.999
	50-75% of rounds	**2.36**	1.28-4.36	0.006	1.33	0.78-2.25	0.292	0.80	0.50-1.27	0.345	0.87	0.38-2.01	0.749
	> 75% of rounds	**2.20**	1.20-4.03	0.011	1.63	0.96-2.78	0.07	0.64	0.36-1.15	0.136	0.48	0.15-1.54	0.255
Time since last treatment	Any other case	1.00			1.00			1.00			1.00		
	< 1 year	0.73	0.51-1.04	0.08	0.76	0.56-1.03	0.077	0.86	0.65-1.14	0.298	0.75	0.45-1.24	0.260
Occupation	Farmer	1.00			1.00			1.00			1.00		
	No occupation, child, N/A	0.91	0.47-1.78	0.787	1.43	0.88-2.32	0.144	0.77	0.54-1.10	0.153	0.82	0.43-1.57	0.555
	Student/Pupil	1.31	0.78-2.20	0.315	1.04	0.67-1.60	0.858	0.86	0.42-1.77	0.676	1.27	0.43-3.71	0.662
	Other: worker, service, liberal	0.67	0.28-1.58	0.356	1.34	0.78-2.29	0.29	1.11	0.63-1.98	0.714	1.08	0.38-3.07	0.884
Education attainment	No school	1.00			1.00			1.00			1.00		
	Primary or secondary school	0.70	0.35-1.40	0.314	0.83	0.49-1.40	0.477	**0.39**	0.26-0.57	<0.0001	0.56	0.28-1.10	0.092
	High school and higher	0.83	0.45-1.53	0.557	1.10	0.70-1.72	0.686	**0.60**	0.45-0.82	0.001	0.61	0.35-1.07	0.083

APOD: acute papular onchodermatitis, CPOD: chronic papular onchodermatitis; n.a.: non-applicable
OR: Odds ratio, CI: confidence interval; OR in bold are significant at 5% level
[(a)]: self-reported adherence was expressed as the proportion of rounds taken out of the maximum rounds a person could have taken given their age
No models were run for lichenified onchodermatitis and hanging groin due to the small sample size (58 lichenified onchodermatitis and 31 hanging groin cases, respectively).

Supplemental File 8. Marginal predictions of OSD and itching prevalence by age group.



Marginal predictions obtained with the multivariate models presented in SupplementalSupplemental File 7 (OSD) and SupplementalSupplemental File 10 (severe itching). Data were obtained from a 2017 cross-sectional survey of 9,115 (9,094 for severe itching due to missing data for albendazole treatment) participants aged 5 years and over living in 20 communities of Southwest Cameroon.

Supplemental File 9. Unadjusted Odds Ratio for skin disease and severe itching (unadjusted odds ratio / bivariate models)

		APOD			CPOD			Depigmentation			Atrophy			Severe itching		
Variable	Category	OR	95%CI	p-value	OR	95%CI	p-value	OR	95%CI	p-value	OR	95%CI	p-value	OR	95%CI	p-value
O. volvulus infection status	NA	1.06	0.81-1.38	0.677	1.08	0.86-1.37	0.510	1.42	1.14-1.76	0.001	1.44	0.98-2.13	0.060	0.98	0.82-1.17	0.799
mf load (nb/snip)	NA	1.00	1.00-1.01	0.189	1.00	1.00-1.01	0.461	1.01	1.00-1.01	<0.0001	1.00	0.99-1.01	0.88	1.00	1.00-1.01	0.037
Nodule number	NA	1.11	0.97-1.26	0.13	1.13	1.02-1.26	0.024	1.53	1.41-1.66	<0.0001	1.23	1.08-1.41	0.002	1.16	1.07-1.26	<0.0001
Gender	Men	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA
	Women	1.12	0.86-1.47	0.386	0.96	0.76-1.21	0.751	0.95	0.77-1.17	0.648	1.08	0.74-1.58	0.701	1.27	1.07-1.52	0.007
Age (years)	30-49	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA		NA	NA
	5-8	1.21	0.78-1.89	0.394	0.57	0.36-0.90	0.016	0.10	0.04-0.23	<0.0001	0.37	0.16-0.84	0.018	0.16	0.10-0.27	<0.0001
	9-14	1.55	1.06-2.26	0.024	1.01	0.72-1.41	0.973	0.11	0.06-0.21	<0.0001	0.14	0.05-0.40	<0.0001	0.47	0.36-0.62	<0.0001
	15-29	1.38	0.95-2.02	0.093	1.28	0.94-1.75	0.117	0.20	0.12-0.32	<0.0001	0.26	0.12-0.57	0.001	0.86	0.69-1.08	0.206
	>=50	0.55	0.32-0.95	0.033	0.96	0.66-1.40	0.845	4.02	3.14-5.13	<0.0001	2.81	1.81-4.36	<0.0001	1.02	0.80-1.30	0.89
Self-reported adherence [(a)]	Never	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA		NA	NA
	<50%	1.42	0.99-2.04	0.058	1.17	0.87	0.313	0.94	0.73-1.21	0.628	0.91	0.58-1.43	0.688	1.69	1.33-2.15	<0.0001
	50-75	1.56	0.93-2.60	0.091	1.13	0.72	0.586	1.08	0.74-1.58	0.701	0.92	0.46-1.88	0.829	1.60	1.13-2.27	0.009
	>75	1.65	0.99-2.76	0.055	1.13	0.72	0.595	0.50	0.30-0.82	0.006	0.35	0.12-1.01	0.051	1.55	1.09-2.20	0.014
Time since last treatment	Any other case	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA		NA	NA
	< 1 year	1.11	0.84-1.46	0.471	0.87	0.69	0.268	0.62	0.50-0.77	<0.0001	0.56	0.38-0.84	0.005	1.07	0.89-1.28	0.471
Occupation	Farmer	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA		NA	NA
	No occupation, child	1.18	0.77-1.81	0.446	1.31	0.94	0.11	0.68	0.51-0.91	0.008	0.83	0.50-1.38	0.473	0.84	0.66-1.07	0.169
	Student/Pupil	1.71	1.27-2.31	<0.0001	0.95	0.73	0.703	0.07	0.05-0.12	<0.0001	0.18	0.10-0.33	<0.0001	0.43	0.35-0.54	<0.0001
	Other: worker, service, liberal	0.89	0.40-1.94	0.763	1.35	0.80	0.26	0.46	0.26-0.79	0.005	0.53	0.19-1.47	0.221	0.64	0.41-1.00	0.049
Education attainment	No school	1.00	NA	NA	1.00	NA	NA	1.00	NA	NA		NA	NA		NA	NA
	Primary or secondary school	0.86	0.52-1.42	0.554	0.76	0.51	0.174	0.40	0.29-0.56	<0.0001	0.49	0.27	0.016	1.01	0.77	0.967
	High school and higher	1.31	0.91-1.88	0.142	0.89	0.67	0.414	0.31	0.24-0.39	<0.0001	0.32	0.21	<0.0001	0.71	0.57	0.002

APOD: acute papular onchodermatitis; CPOD: chronic papular onchodermatitis;
OR: odds ratio, CI: confidence interval; NA: not applicable; OR in bold are significant at 5% level.
(a): self-reported adherence was expressed as the proportion of rounds taken out of the maximum rounds a person could have taken given their age.

Supplemental File 10. Factors and symptoms associated with severe itching (adjusted ORs / multivariate model)

Variable	Category	OR	95%CI	p-value
Infection intensity (mf load)		1.00	1.00-1.01	0.057
Presence of nodules	No	1.00		
	Yes	1.23	0.98-1.55	0.074
Age (years)	30-49	1.00		
	5-8	**0.21**	0.11-0.37	<0.0001
	9-14	**0.60**	0.40-0.89	0.012
	15-29	0.99	0.75-1.30	0.918
	≥50	0.94	0.72-1.24	0.66
Sex	Men	1.00		
	Women	**1.28**	1.06-1.55	0.01
Self-reported adherence [(a)]	Never	1.00		
	up to 50% of rounds	**1.40**	1.01-1.93	0.041
	50-75% of rounds	1.35	0.87-2.11	0.18
	> 75% of rounds	**2.06**	1.32-3.23	0.002
Time since last treatment	Any other case	1.00		
	< 1 year	1.03	0.74-1.42	0.866
APOD	No	1.00		
	Yes	**3.79**	2.58-5.56	<0.0001
CPOD	No	1.00		
	Yes	**6.63**	4.91-8.96	<0.0001
LOD	No	1.00		
	Yes	**8.11**	4.42-14.87	<0.0001
Depigmentation	No	1.00		
	Yes	1.40	0.95-2.04	0.086
Atrophy	No	1.00		
	Yes	1.14	0.56-2.35	0.717
Hanging groin	No	1.00		
	Yes	1.20	0.34-4.30	0.779
Non-onchocercal skin disease [(b)]	No	1.00		
	Yes	1.41	0.88-2.26	0.149
Occupation	Farmer	1.00		
	No occupation, child, N/A	1.01	0.71-1.43	0.972
	Student/Pupil	0.79	0.56-1.13	0.198
	Other [(c)]	0.68	0.42-1.10	0.114
Education attainment	No school	1.00		
	Primary or secondary	0.97	0.68-1.40	0.889
	≥ High school	0.94	0.68-1.30	0.721
Taken albendazole	Never	1.00		
	Yes, > 1 year ago	0.82	0.59-1.13	0.229
	Yes, < 1 year ago	0.83	0.63-1.10	0.202

OR: Odds ratio, CI: confidence interval; OR in bold are significant at 95% level.
APOD: acute papular onchodermatitis; CPOD: chronic papular onchodermatitis, LOD: lichenified onchodermatitis;
[(a)] self-reported adherence was expressed as the proportion of rounds taken out of the maximum rounds a person could have taken given their age.
[(b)] non-onchocercal skin diseases included scabies, pyoderma and dermatophytes.
[(c)] occupation classified as "other" included small businesses, workers, civil servants and liberal professions
Results were obtained by a multivariate mixed logistic regression model and data from a cross-sectional survey conducted in 2017 among 9,115 participants with complete data living in 20 communities of Southwest Cameroon.

Supplemental File 11. Participants in the qualitative assessments

	Community members who accepted IVM		Community members who refused IVM		Community Drug Distributors	
Age (years)	Men	Women	Men	Women	Men	Women
15-20	2	1	1	2	0	0
21-30	2	2	1	4	4	3
31-40	2	2	2	3	8	4
41-50	2	3	1	1	1	3
51-60	2	3	0	0	2	0
60+	2	1	0	1	1	0
Sub totals 1	12	12	5	11	16	10
Sub totals 2	24		16		26	
Total	66					

Supplemental File 12. Perceived adverse events of Ivermectin

Reported adverse event	Perceived causes of adverse events	Consequences of adverse events	Prevention and Management of adverse events
• Swelling • Increased itching Making other diseases worse especially hernias and epilepsy *'Because there was a man who was having hernia. The hernia was not yet visible.. It was just hiding in his body but immediately he took Mectizan, the hernia became worse until he couldn't walk'*. (Community member, woman, aged 15-20 years) • Infertility • Miscarriage *'I was refusing to drink Mectizan because*) *they said it aborts pregnancies, I feared drinking the Mectizan; I said I will never drink Mectizan, I was scared'* (Community member, woman, aged -31-40 years) • Boils • Rashes • Death	• Meeting unknown disease in the body • Meeting filaria in the body • Witchcraft	• Having economic expense due to needing operation to treat hernias • Economic costs of missing work • Economic costs of getting treatment from a pharmacy • Being a burden on your family • Being unable to socially interact due to side effects (especially itching or mobility problems) *It makes me to feel uncomfortable when I want to sit with my friends… Because I cannot go and sit amongst my friends and be scratching my skin* (Community member, man, aged 15-20)	• Taking Mectizan as a lotion *'Because when they swallow it they have rashes and their arms or legs get swollen. So they prefer to put it in their lotion to avoid the side effects.*' (Community member, man, aged 15-20 years) • 'Cooler' for minor symptoms *'Some people are afraid, but I do my best to enlighten them saying, if they drink it and it leads to fever, what I can give them to cool the fever is Paracetamol and that is what we were taught but if the effects are more than me to handle, I can send them to the health centre'.* (CDD, man, aged 31-40 years) • Grinded gentamicin for boils • Traditional medicine *'There are traditional medicines that they used, There are traditional medicines that they used, dropping it in the eyes. There are others who use just the Gentamicin eye drop'* (CDD, man, aged 21-30 years) • 'Medicated soap' • Bathing • Treating the 'sickness' that it has provoked. • Surgery • Hospital/clinic visit

CDD: Community Drug Distributor.

Supplemental File 13. STROBE Statement

	Item No	Recommendation
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract In the abstract
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found.
Introduction		
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported Page 6. All introduction except last sentence.
Objectives	3	State specific objectives, including any prespecified hypotheses Page 6-7. Last sentence of the introduction.
Methods		
Study design	4	Present key elements of study design early in the paper Methods, section #1 "Study design and participants". Page 7
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection Methods, section #1 "Study design and participants". Page 7 Data collection: Methods, section #2 "Parasitological and questionnaire data"; section #3, "Onchocerciasis clinical assessments"; section #4 "Semi-structured qualitative interviews". Page 7-8.
Participants	6	Give the eligibility criteria, and the sources and methods of selection of participants. Methods, section #1 "Study design and participants"; section #4 "Semi-structured qualitative interviews". Page 7-8.
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable. Methods, section #2 "Parasitological and questionnaire data" Page7.; section #3, "Onchocerciasis clinical assessments" Page 8; section 6 "Statistical analysis"; Page 9-10. Supplemental file 1.
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group. Methods, section #2 "Parasitological and questionnaire data" Page 7; section #3, "Onchocerciasis clinical assessments"; Page 8. section #4 "Semi-structured qualitative interviews". Page 8.
Bias	9	Describe any efforts to address potential sources of bias Methods section 6 "Statistical analysis" Page 9-10; Supplemental file 1. Results section 1 "Study population and participation in the baseline survey", paragraph 2. Page 11.
Study size	10	Explain how the study size was arrived at Results section#1 "Study population and participation in the baseline survey", paragraph 1. Page 10. Supplemental File 2. Study diagram.
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why Methods section 6 "Statistical analysis" Page 9-10. Supplemental file 1. Results section 1, paragraph 2" Page 11.
Statistical methods	12	*(a)* Describe all statistical methods, including those used to control for confounding Methods section 6 "Statistical analysis" Page 9-10.; Supplemental file 1
		(*b*) Describe any methods used to examine subgroups and interactions Methods section 6 "Statistical analysis" Page 9-10.
		(c) Explain how missing data were addressed Methods section 6 "Statistical analysis" Page 9-10.; Supplemental file 1. Results section 1, paragraph 2" Page 11.
		(*d*) If applicable, describe analytical methods taking account of sampling strategy
		(*e*) Describe any sensitivity analyses

		Results section 1 "Study population and participation in the baseline survey" paragraph 2, Page 11; Supplemental file 1.
Results		
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed. Results section 1 "Study population and participation in the baseline survey", paragraph 1, Page 10-11. Supplemental File 2 & 3.
		(b) Give reasons for non-participation at each stage Results section 1 "Study population and participation in the baseline survey", paragraph 1, Page 10. Supplemental File 2.
		(c) Consider use of a flow diagram Supplemental File 2
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders. Supplemental File 3. Figure 2.
		Indicate number of participants with missing data for each variable of interest Supplemental File 3
Outcome data	15*	Report numbers of outcome events or summary measures Results, Section #2, "*O. volvulus* infection levels, adherence to CDTI and prevalence of *Loa loa*", Page 11; Section #4 "Prevalence of disease", Page 14.; Supplemental Files 4 & 6.
Main results	16	Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included Unadjusted estimates: Supplemental Files 5 & 9. Confounder adjusted estimates: Table 1, Supplemental Files 7 & 10.
		Report category boundaries when continuous variables were categorized Tables 2, 3 and 4. Supplemental Tables 2 & 3.
		If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period
Other analyses	17	Report other analyses done—e.g. analyses of subgroups and interactions, and sensitivity analyses Results section 1 "Study population and participation in the baseline survey", paragraph 2. Page 11.
Discussion		
Key results	18	Summarise key results with reference to study objectives Done throughout the discussion. Page 20-25
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias Paragraph "Limitations". Page24
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence Done for each specific topic of the discussion. Page 20-25
Generalisability	21	Discuss the generalisability (external validity) of the study results Conclusion page 25
Other information		
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based Footnote on Funding Page 31.