

Supplementary Table 1 – Characteristics of the study participants by population.

Study sample characteristics	GRAN CANARIA (GENERAL POP.) (n=3,212)	GRAN CANARIA (VOLUNTEERS) (n=665)	TENERIFE (n=2,214)
	N (%)	N (%)	N (%)
Age distribution (years)	$P(GCgp-TF)=0.08^5$	$P(GCgp-GCv)=0.003^6$	$P(GC-TF)=0.07^7$
18-24	276 (8.6)	65 (9.8)	231 (10.4)
25-29	374 (11.6)	59 (8.9)	230 (10.4)
30-34	480 (14.9)	94 (14.1)	331 (15.0)
35-39	460 (14.3)	110 (16.5)	332 (15.0)
40-44	435 (13.5)	88 (13.2)	270 (12.2)
45-49	342 (10.6)	86 (12.9)	203 (9.2)
50-54	307 (9.6)	65 (9.8)	241 (10.9)
55-59	254 (7.9)	66 (9.9)	182 (8.2)
60-65	284 (8.8)	32 (4.8)	194 (8.8)
Level of education	$P(GCgp-TF)<0.001^5$	$P(GCgp-GCv)<0.001^6$	$P(GC-TF)<0.001^7$
None	94 (2.9)	11 (1.7)	65 (2.9)
Preschool	167 (5.2)	22 (3.3)	99 (4.5)
Primary	1610 (50.2)	301 (45.3)	771 (34.8)
Secondary	778 (24.3)	188 (28.3)	533 (24.1)
Certificate of advanced study	339 (10.6)	97 (14.6)	319 (14.4)
Bachelor's degree	190 (5.9)	42 (6.3)	358 (16.2)
Others	26 (0.8)	3 (0.5)	69 (3.1)
Missing data	8 (-)	1 (-)	0 (-)
Marital status	$P(GCgp-TF)<0.001^5$	$P(GCgp-GCv)<0.001^6$	$P(GC-TF)=0.03^7$
Single	757 (23.6)	148 (22.3)	491 (22.2)
Married/de facto partnership	2106 (65.7)	408 (61.4)	1405 (63.5)
Divorced/separated	247 (7.7)	90 (13.6)	236 (10.7)
Widowed	97 (3.0)	18 (2.7)	80 (3.6)
Missing data	5 (-)	1 (-)	2 (-)
Pregnancies	$P(GCgp-TF)=0.6^5$	$P(GCgp-GCv)=0.9^6$	$P(GC-TF)=0.6^7$
No	701 (22.2)	147 (22.6)	495 (23.0)
Yes	2450 (77.8)	504 (77.4)	1659 (77.0)
Missing data	61 (-)	14 (-)	60 (-)
Number of live births¹	$P(GCgp-TF)=0.6^5$	$P(GCgp-GCv)=0.02^6$	$P(GC-TF)=0.7^7$
0	11 (0.5)	4 (0.8)	13 (0.9)
1	669 (29.2)	120 (25.1)	448 (29.3)
2	936 (40.8)	219 (45.7)	631 (41.3)
3	440 (19.2)	72 (15.0)	277 (18.1)
4	136 (5.9)	41 (8.6)	100 (6.5)
≥5	103 (4.5)	23 (4.8)	60 (3.9)
Missing data	155 (-)	25 (-)	130 (-)
Sexually transmitted disease²	$P(GCgp-TF)=0.1^5$	$P(GCgp-GCv)=0.4^6$	$P(GC-TF)=0.2^7$
Never	3113 (96.9)	640 (96.2)	2129 (96.2)
Ever	99 (3.1)	25 (3.8)	85 (3.8)
Smoking status	$P(GCgp-TF)<0.001^5$	$P(GCgp-GCv)=0.04^6$	$P(GC-TF)<0.001^7$
Never smoked	1897 (59.1)	375 (56.4)	1171 (52.9)
Ex smoker	454 (14.1)	120 (18)	339 (15.3)
Current smoker	861 (26.8)	170 (25.6)	704 (31.8)
Previous cervical pap smears	$P(GCgp-TF)<0.001^5$	$P(GCgp-GCv)=0.02^6$	$P(GC-TF)<0.001^7$

None	85 (2.6)	21 (3.2)	110 (5)
1	281 (8.7)	32 (4.8)	180 (8.1)
2-3	561 (17.5)	128 (19.2)	367 (16.6)
4-5	406 (12.6)	77 (11.6)	289 (13.1)
>5	1704 (53.1)	371 (55.8)	1198 (54.1)
Do not know	175 (5.4)	36 (5.4)	70 (3.2)
Previous cervical lesions³	$P(GCgp-TF)=0.09^5$	$P(GCgp-GCv)=0.3^6$	$P(GC-TF)=0.2^7$
No	2561 (92.9)	521 (91.7)	1755 (92.2)
Yes	190 (6.9)	47 (8.3)	148 (7.8)
Do not know	5 (0.2)	0 (0.0)	0 (0.0)
Missing data	371 (-)	76 (-)	201 (-)
Age at first sexual intercourse (years)	$P(GCgp-TF)=0.007^5$	$P(GCgp-GCv)=0.2^6$	$P(GC-TF)=0.006^7$
<15	92 (2.9)	19 (2.9)	76 (3.5)
15-16	415 (13.1)	80 (12.2)	333 (15.2)
17-18	947 (29.8)	207 (31.5)	709 (32.4)
19-20	689 (21.7)	157 (23.9)	435 (19.9)
21-25	772 (24.3)	158 (24.0)	491 (22.4)
>25	259 (8.2)	36 (5.5)	147 (6.7)
Missing data	38 (-)	8 (-)	23 (-)
Lifetime number of sexual partners	$P(GCgp-TF)<0.001^5$	$P(GCgp-GCv)=0.2^6$	$P(GC-TF)<0.001^7$
1	1922 (60.7)	377 (57.2)	933 (43.0)
2-3	755 (23.8)	154 (23.4)	662 (30.5)
4-5	250 (7.9)	68 (10.3)	296 (13.6)
6-10	172 (5.4)	42 (6.4)	191 (8.8)
11-20	49 (1.5)	13 (2.0)	64 (2.9)
>20	19 (0.6)	5 (0.8)	25 (1.2)
Missing data	45 (-)	6 (-)	43 (-)
Contraceptive methods used⁴	$P(GCgp-TF)=0.2^5$	$P(GCgp-GCv)=0.9^6$	$P(GC-TF)=0.1^7$
Oral contraceptives	2477 (77.1)	515 (77.4)	1672 (75.5)
IUD	$P(GCgp-TF)=0.2^5$	$P(GCgp-GCv)=0.008^6$	$P(GC-TF)=0.04^7$
	597 (18.6)	154 (23.2)	382 (17.3)
Condom	$P(GCgp-TF)<0.004^5$	$P(GCgp-GCv)=0.2^6$	$P(GC-TF)<0.001^7$
	2311 (71.9)	495 (74.4)	1716 (77.5)
Rhythm method/coitus interruptus	$P(GCgp-TF)=0.04^5$	$P(GCgp-GCv)=0.05^6$	$P(GC-TF)=0.1^7$
	1559 (48.5)	351 (52.8)	1139 (51.4)
Diaphragm/spermicide	$P(GCgp-TF)=0.1^5$	$P(GCgp-GCv)=0.4^6$	$P(GC-TF)=0.2^7$
	136 (4.2)	23 (3.5)	75 (3.4)
Injection/implant	$P(GCgp-TF)<0.001^5$	$P(GCgp-GCv)=0.2^6$	$P(GC-TF)<0.001^7$
	160 (5.0)	26 (3.9)	67 (3.0)
Tube ligation	$P(GCgp-TF)=0.3^5$	$P(GCgp-GCv)=0.4^6$	$P(GC-TF)=0.2^7$
	430 (13.4)	97 (14.6)	275 (12.4)
Vasectomy	$P(GCgp-TF)<0.001^5$	$P(GCgp-GCv)=0.06^6$	$P(GC-TF)<0.001^7$
	332 (10.3)	85 (12.8)	132 (6.0)

GCgp: Gran Canaria (general population); GCv: Gran Canaria (volunteers); GC: Gran Canaria (including general population and volunteers); TF: Tenerife.

¹ Among ever pregnant women. ² Includes syphilis, genital herpes, gonorrhoea, HIV (positive test), genital warts, Chlamydia, genital ulcer, others. ³ Among women with a previous pap smear. ⁴ Do not add the total of women

because a woman can use more than one contraceptive in lifetime. ⁵ P-value of Pearson's Chi-squared test between Gran Canaria (general population) and Tenerife. ⁶ P-value of Pearson's Chi-squared test between Gran Canaria (general population) and Gran Canaria (volunteers). ⁷ P-value of Pearson's Chi-squared test between Gran Canaria (general population and volunteers) and Tenerife.

Supplementary Table 2 – Prevalence of Human Papillomavirus (HPV) by age group for any type and for any high-risk type and by population.

GRAN CANARIA – GENERAL POPULATION (n=3,185)

Age group (years)	Number of tested women	Number of HPV positive women	Any HPV prevalence (%; 95% CI)	Any HR HPV prevalence ¹ (%; 95% CI)
18-24	274	64	23.4 (18.3-28.4)	21.9 (17.0-26.8)
25-29	372	81	21.8 (17.6-26.0)	19.1 (15.1-23.1)
30-34	478	74	15.5 (12.2-18.7)	12.3 (9.4-15.3)
35-39	455	42	9.2 (6.6-11.9)	6.6 (4.3-8.9)
40-44	432	45	10.4 (7.5-13.3)	9.3 (6.5-12.0)
45-49	339	37	10.9 (7.6-14.2)	8.3 (5.3-11.2)
50-54	304	20	6.6 (3.8-9.4)	4.9 (2.5-7.4)
55-59	252	14	5.6 (2.7-8.4)	4.0 (1.6-6.4)
60-65	279	28	10.0 (6.5-13.6)	5.7 (3.0-8.5)
Total	3,185	405	12.7 (11.6-13.9)	10.3 (9.3-11.4)

HPV: Human Papillomavirus; CI: Confidence Interval; HR: High-Risk.

¹ HR types includes high-risk types and possibly /probably high-risk types: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 53, 66, 67, 68, 69, 69/71, 70, 73.

GRAN CANARIA – VOLUNTEERS (n=662)

Age group (years)	Number of tested women	Number of HPV positive women	Any HPV prevalence (%; 95% CI)	Any HR HPV prevalence ¹ (%; 95% CI)
18-24	65	17	26.2 (15.5-36.8)	23.1 (12.8-33.3)
25-29	59	12	20.3 (10.1-30.6)	16.9 (7.4-26.5)
30-34	94	19	20.2 (12.1-28.3)	19.1 (11.2-27.1)
35-39	109	17	15.6 (8.8-22.4)	12.8 (6.6-19.1)
40-44	88	11	12.5 (5.6-19.4)	9.1 (3.1-15.1)
45-49	85	8	9.4 (3.2-15.6)	4.7 (0.2-9.2)
50-54	65	3	4.6 (0.0-9.7)	4.6 (0.0-9.7)
55-59	65	7	10.8 (3.2-18.3)	6.2 (0.3-12.0)
60-65	32	2	6.2 (0.0-14.6)	6.2 (0.0-14.6)
Total	662	96	14.5 (11.8-17.2)	11.8 (9.3-14.2)

HPV: Human Papillomavirus; CI: Confidence Interval; HR: High-Risk.

¹ HR types includes high-risk types and possibly /probably high-risk types: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 53, 66, 67, 68, 69, 69/71, 70, 73.

GRAN CANARIA (n=3,847)

Age group (years)	Number of tested women	Number of HPV positive women	Any HPV prevalence (%; 95% CI)	Any HR HPV prevalence ¹ (%; 95% CI)
18-24	339	81	23.9 (19.4-28.4)	22.1 (17.7-26.5)
25-29	431	93	21.6 (17.7-25.5)	18.8 (15.1-22.5)
30-34	572	93	16.3 (13.2-19.3)	13.5 (10.7-16.3)
35-39	564	59	10.5 (7.9-13.0)	7.8 (5.6-10.0)
40-44	520	56	10.8 (8.1-13.4)	9.2 (6.7-11.7)
45-49	424	45	10.6 (7.7-13.5)	7.5 (5.0-10.1)
50-54	369	23	6.2 (3.8-8.7)	4.9 (2.7-7.1)
55-59	317	21	6.6 (3.9-9.4)	4.4 (2.2-6.7)
60-65	311	30	9.6 (6.4-12.9)	5.8 (3.2-8.4)
Total	3,847	501	13.0 (12.0-14.1)	10.6 (9.6-11.6)

HPV: Human Papillomavirus; CI: Confidence Interval; HR: High-Risk.

¹ HR types includes high-risk types and possibly /probably high-risk types: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 53, 66, 67, 68, 69, 69/71, 70, 73.

TENERIFE (n=2,163)

Age group (years)	Number of tested women	Number of HPV positive women	Any HPV prevalence (%; 95% CI)	Any HR HPV prevalence ¹ (%; 95% CI)
18-24	226	70	31.0 (24.9-37.0)	26.5 (20.8-32.3)
25-29	224	52	23.2 (17.7-28.7)	21.4 (16.1-26.8)
30-34	322	68	21.1 (16.7-25.6)	18.3 (14.1-22.5)
35-39	326	37	11.3 (7.9-14.8)	8.3 (5.3-11.3)
40-44	263	23	8.7 (5.3-12.2)	7.2 (4.1-10.4)
45-49	198	14	7.1 (3.5-10.6)	6.1 (2.7-9.4)
50-54	238	20	8.4 (4.9-11.9)	5.0 (2.3-7.8)
55-59	178	21	11.8 (7.1-16.5)	7.3 (3.5-11.1)
60-65	188	14	7.4 (3.7-11.2)	5.9 (2.5-9.2)
Total	2,163	319	14.7 (13.3-16.2)	12.1 (10.7-13.4)

HPV: Human Papillomavirus; CI: Confidence Interval; HR: High-Risk.

¹ HR types includes high-risk types and possibly /probably high-risk types: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 53, 66, 67, 68, 69, 69/71, 70, 73.

Supplementary Table 3 – Overall prevalence and age-specific prevalence of cervical HPV infections by any HPV type, any hr HPV type, HPV types 6/11/16/18/31/33/45/52/58 and HPV types 16/18 (n=6,010 women).

Age group (years)	Any HPV prevalence (%; 95% CI)	Any HR HPV prevalence ¹ (%; 95% CI)	Prevalence of HPV 6/11/16/18/31/33/45/52/58 (%; 95% CI)	Prevalence of HPV 16/18 (%; 95% CI)
18-24	26.7 (23.1-30.4)	23.9 (20.4-27.4)	17.3 (14.2-20.5)	10.8 (8.2-13.4)
25-29	22.1 (19.0-25.3)	19.7 (16.6-22.7)	13.9 (11.2-16.5)	8.7 (6.5-10.9)
30-34	18.0 (15.5-20.5)	15.2 (12.9-17.6)	10.4 (8.4-12.4)	5.0 (3.6-6.5)
35-39	10.8 (8.7-12.8)	8.0 (6.2-9.8)	5.8 (4.3-7.4)	3.6 (2.4-4.8)
40-44	10.1 (8.0-12.2)	8.6 (6.6-10.5)	5.4 (3.8-6.9)	3.3 (2.1-4.6)
45-49	9.5 (7.2-11.8)	7.1 (5.1-9.1)	3.5 (2.1-5.0)	2.6 (1.3-3.8)
50-54	7.1 (5.0-9.1)	4.9 (3.2-6.7)	2.3 (1.1-3.5)	1.0 (0.2-1.8)
55-59	8.5 (6.0-10.9)	5.5 (3.5-7.5)	3.2 (1.7-4.8)	1.2 (0.2-2.2)
60-65	8.8 (6.3-11.3)	5.8 (3.8-7.9)	3.2 (1.7-4.8)	2.4 (1.1-3.7)
Total	13.6 (12.8-14.5)	11.1 (10.3-11.9)	7.4 (6.7-8.0)	4.3 (3.8-4.9)

HPV: Human Papillomavirus; HR: High-Risk; CI: Confidence Interval.

¹ HR HPV types includes high-risk types and possibly /probably high-risk types: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 53, 66, 67, 68, 69, 69/71, 70, 73.

Supplementary Table 4 – Human Papillomavirus (HPV) type-specific distribution of the most common types (n=6,010 women) by cytology result.

HPV type	NORMAL CYTOLOGY (n=5,693)			ABNORMAL CYTOLOGY (n=317)		
	Number of HPV positive women	HPV prevalence among all women (%; 95% CI)	HPV prevalence among positive women (%; 95% CI)	Number of HPV positive women	HPV prevalence among all women (%; 95% CI)	HPV prevalence among positive women (%; 95% CI)
Any HPV types	601	10.6 (9.8-11.4)	-	219	69.1 (64.0-74.2)	-
Single types	260	4.6 (4.0-5.1)	43.3 (39.3-47.2)	99	31.2 (26.1-36.3)	45.2 (38.6-51.8)
<i>HR HPV types</i> ¹						
16	56	1.0 (0.7-1.2)	9.3 (7.0-11.6)	19	6.0 (3.4-8.6)	8.7 (4.9-12.4)
51	22	0.4 (0.2-0.5)	3.7 (2.2-5.2)	12	3.8 (1.7-5.9)	5.5 (2.5-8.5)
53	21	0.4 (0.2-0.5)	3.5 (2.0-5.0)	7	2.2 (0.6-3.8)	3.2 (0.9-5.5)
31	14	0.2 (0.1-0.4)	2.3 (1.1-3.5)	2	0.6 (0.2-1.5)	0.9 (0.3-2.2)
59	8	0.1 (0.0-0.2)	1.3 (0.4-2.2)	6	1.9 (0.4-3.4)	2.7 (0.6-4.9)
33	10	0.2 (0.1-0.3)	1.3 (0.4-2.2)	1	0.3 (0.3-0.9)	0.5 (0.4-1.3)
68	4	0.1 (0.0-0.1)	0.7 (0.0-1.3)	7	2.2 (0.6-3.8)	3.2 (0.9-5.5)
70	7	0.1 (0.0-0.2)	1.2 (0.3-2.0)	4	1.3 (0.0-2.5)	1.8 (0.1-3.6)
66	10	0.2 (0.1-0.3)	1.7 (0.6-2.7)	-	-	-
52	6	0.1 (0.0-0.2)	1.0 (0.2-1.8)	3	0.9 (0.1-2.0)	1.4 (0.2-2.9)
58	4	0.1 (0.0-0.1)	0.7 (0.0-1.3)	5	1.6 (0.2-2.9)	2.3 (0.3-4.3)
18	7	0.1 (0.0-0.2)	1.2 (0.3-2.0)	1	0.3 (0.3-0.9)	0.5 (0.4-1.3)
56	3	0.1 (0.0-0.1)	0.5 (0.0-1.1)	4	1.3 (0.0-2.5)	1.8 (0.1-3.6)
35	3	0.1 (0.0-0.1)	0.5 (0.0-1.1)	2	0.6 (0.2-1.5)	0.9 (0.3-2.2)
39	3	0.1 (0.0-0.1)	0.5 (0.0-1.1)	2	0.6 (0.2-1.5)	0.9 (0.3-2.2)
73	3	0.1 (0.0-0.1)	0.5 (0.0-1.1)	1	0.3 (0.3-0.9)	0.5 (0.4-1.3)
45	2	0.0 (0.0-0.1)	0.3 (0.0-0.8)	1	0.3 (0.3-0.9)	0.5 (0.4-1.3)

	67	2	0.0 (0.0-0.1)	0.3 (0.0-0.8)	-	-	-
	69	1	0.0 (0.0-0.1)	0.2 (0.0-0.5)	-	-	-
	69/71	1	0.0 (0.0-0.1)	0.2 (0.0-0.5)	-	-	-
LR HPV types²							
	42	11	0.2 (0.1-0.3)	1.8 (0.8-2.9)	6	1.9 (0.4-3.4)	2.7 (0.6-4.9)
	84	10	0.2 (0.1-0.3)	1.7 (0.6-2.7)	2	0.6 (0.2-1.5)	0.9 (0.3-2.2)
	62	9	0.2 (0.1-0.3)	1.5 (0.5-2.5)	2	0.6 (0.2-1.5)	0.9 (0.3-2.2)
	61	8	0.1 (0.0-0.2)	1.3 (0.4-2.2)	2	0.6 (0.2-1.5)	0.9 (0.3-2.2)
	6	8	0.1 (0.0-0.2)	1.3 (0.4-2.2)	1	0.3 (0.3-0.9)	0.5 (0.4-1.3)
	55	2	0.0 (0.0-0.1)	0.3 (0.0-0.8)	7	2.2 (0.6-3.8)	3.2 (0.9-5.5)
	81	7	0.1 (0.0-0.2)	1.2 (0.3-2.0)	2	0.6 (0.2-1.5)	0.9 (0.3-2.2)
	89	5	0.1 (0.0-0.2)	0.8 (0.1-1.6)	-	-	-
	54	4	0.1 (0.0-0.1)	0.7 (0.0-1.3)	-	-	-
	11	2	0.0 (0.0-0.1)	0.3 (0.0-0.8)	-	-	-
	43	2	0.0 (0.0-0.1)	0.3 (0.0-0.8)	-	-	-
	72	2	0.0 (0.0-0.1)	0.3 (0.0-0.8)	-	-	-
	83	2	0.0 (0.0-0.1)	0.3 (0.0-0.8)	-	-	-
	40	1	0.0 (0.0-0.1)	0.2 (0.0-0.5)	1	0.3 (0.3-0.9)	0.5 (0.4-1.3)
X		24	0.4 (0.3-0.6)	4.0 (2.4-5.6)	4	1.3 (0.0-2.5)	1.8 (0.1-3.6)
Multiple types		317	5.6 (5.0-6.2)	52.7 (48.8-56.7)	116	36.6 (31.3-41.9)	53.0 (46.4-59.6)
Number of multiple types							
	2 types	153	2.7 (2.3-3.1)	25.5 (22.0-28.9)	50	15.8 (11.8-19.8)	22.8 (17.3-28.4)
	3 types	81	1.4 (1.1-1.7)	13.5 (10.7-16.2)	34	10.7 (7.3-14.1)	15.5 (10.7-20.3)
	4 types	57	1.0 (0.7-1.3)	9.5 (7.1-11.8)	16	5.0 (2.6-7.5)	7.3 (3.9-10.8)
	5 or more types	26	0.5 (0.3-0.6)	4.3 (2.7-6.0)	16	5.0 (2.6-7.5)	7.3 (3.9-10.8)
Most frequent combinations							
	16 with others	113	2.0 (1.6-2.3)	18.8 (15.7-21.9)	40	12.6 (9.0-16.3)	18.3 (13.1-23.4)

51 with others	56	1.0 (0.7-1.2)	9.3 (7.0-11.6)	22	6.9 (4.1-9.7)	10.0 (6.1-14.0)
53 with others	50	0.9 (0.6-1.1)	8.3 (6.1-10.5)	31	9.8 (6.5-13.0)	14.2 (9.5-18.8)
31 with others	38	0.7 (0.5-0.9)	6.3 (4.4-8.3)	16	5.0 (2.6-7.5)	7.3 (3.9-10.8)
42 with others	42	0.7 (0.5-1.0)	7.0 (5.0-9.0)	17	5.4 (2.9-7.8)	7.8 (4.2-11.3)
6 with others	16	0.3 (0.1-0.4)	2.7 (1.4-3.9)	9	2.8 (1.0-4.7)	4.1 (1.5-6.7)
18 with others	36	0.6 (0.4-0.8)	6.0 (4.1-7.9)	6	1.9 (0.4-3.4)	2.7 (0.6-4.9)
33 with others	17	0.3 (0.2-0.4)	2.8 (1.5-4.2)	3	0.9 (0.0-2.0)	1.4 (0.0-2.9)
59 with others	50	0.9 (0.6-1.1)	8.3 (6.1-10.5)	17	5.4 (2.9-7.8)	7.8 (4.2-11.3)
39 with others	27	0.5 (0.3-0.7)	4.5 (2.8-6.1)	10	3.2 (1.2-5.1)	4.6 (1.8-7.3)
35 with others	13	0.2 (0.1-0.4)	2.2 (1.0-3.3)	6	1.9 (0.4-3.4)	2.7 (0.6-4.9)
52 with others	40	0.7 (0.5-0.9)	6.7 (4.7-8.6)	14	4.4 (2.2-6.7)	6.4 (3.2-9.6)
56 with others	29	0.5 (0.3-0.7)	4.8 (3.1-6.5)	14	4.4 (2.2-6.7)	6.4 (3.2-9.6)
58 with others	32	0.6 (0.4-0.8)	5.3 (3.5-7.1)	10	3.2 (1.2-5.1)	4.6 (1.8-7.3)
62 with others	37	0.6 (0.4-0.9)	6.2 (4.2-8.1)	9	2.8 (1.0-4.7)	4.1 (1.5-6.7)
61 with others	29	0.5 (0.3-0.7)	4.8 (3.1-6.5)	15	4.7 (2.4-7.1)	6.8 (3.5-10.2)
66 with others	38	0.7 (0.5-0.9)	6.3 (4.4-8.3)	12	3.8 (1.7-5.9)	5.5 (2.5-8.5)
45 with others	24	0.4 (0.3-0.6)	4.0 (2.4-5.6)	10	3.2 (1.2-5.1)	4.6 (1.8-7.3)
68 with others	22	0.4 (0.2-0.5)	3.7 (2.2-5.2)	10	3.2 (1.2-5.1)	4.6 (1.8-7.3)
54 with others	34	0.6 (0.4-0.8)	5.7 (3.8-7.5)	14	4.4 (2.2-6.7)	6.4 (3.2-9.6)
70 with others	11	0.2 (0.1-0.3)	1.8 (0.8-2.9)	4	1.3 (0.0-2.5)	1.8 (0.1-6.3)
84 with others	30	0.5 (0.3-0.7)	5.0 (3.3-6.7)	8	2.5 (0.8-4.3)	3.7 (1.2-6.1)
55 with others	11	0.2 (0.1-0.3)	1.8 (0.8-2.9)	7	2.2 (0.6-3.8)	3.2 (0.9-5.5)
11 with others	6	0.1 (0.0-0.2)	1.0 (0.2-1.8)	2	0.6 (0.0-1.5)	0.9 (0.3-2.2)
81 with others	19	0.3 (0.2-0.5)	3.2 (1.8-4.6)	9	2.8 (1.0-4.7)	4.1 (1.5-6.7)
40 with others	10	0.2 (0.1-0.3)	1.7 (0.6-2.7)	-	-	-
89 with others	32	0.6 (0.4-0.8)	5.3 (3.5-7.1)	14	4.4 (2.2-6.7)	6.4 (3.2-9.6)
67 with others	9	0.2 (0.1-0.3)	1.5 (0.5-2.5)	4	1.3 (0.0-2.5)	1.8 (0.1-3.6)

69 with others	5	0.1 (0.0-0.2)	0.8 (0.1-1.6)	-	-	-
73 with others	16	0.3 (0.1-0.4)	2.7 (1.4-3.9)	7	2.2 (0.6-3.8)	3.2 (0.9-5.5)
83 with others	9	0.2 (0.1-0.3)	1.5 (0.5-2.5)	6	1.9 (0.4-3.4)	2.7 (0.6-4.9)
43 with others	0	0.0 (0.0-0.0)	0.0 (0.0-0.0)	-	-	-
72 with others	4	0.1 (0.0-0.1)	0.7 (0.0-1.3)	4	1.3 (0.0-2.5)	1.8 (0.1-3.6)
69/71 with others	2	0.0 (0.0-0.1)	0.3 (0.0-0.8)	-	-	-
71 with others	6	0.1 (0.0-0.2)	1.0 (0.2-1.8)	3	0.9 (0.0-2.0)	1.4 (0.0-2.9)
74 with others	5	0.1 (0.0-0.2)	0.8 (0.1-1.6)	1	0.3 (0.0-0.9)	0.5 (0.0-1.3)
64 with others	1	0.0 (0.0-0.1)	0.2 (0.0-0.5)	1	0.3 (0.0-0.9)	0.5 (0.0-1.3)
82 with others	10	0.2 (0.1-0.3)	1.7 (0.6-2.7)	3	0.9 (0.0-2.0)	1.4 (0.0-2.9)
Combinations of vaccine types						
6/11 ³	31	0.5 (0.4-0.7)	5.2 (3.4-6.9)	12	3.8 (1.7-5.9)	5.5 (2.5-8.5)
16/18 ³	199	3.5 (3.0-4.0)	33.1 (29.3-36.9)	62	19.6 (15.2-23.9)	28.3 (22.3-34.3)
6/11/16/18 ³	225	4.0 (3.4-4.5)	37.4 (33.6-41.3)	72	22.7 (18.1-27.3)	32.9 (26.7-39.1)
6/11/16/18/31/33/45/52/58 ³	334	5.9 (5.3-6.5)	55.6 (51.6-59.5)	110	34.7 (29.5-39.9)	50.2 (43.6-56.9)

HPV: Human Papillomavirus; HR: High-Risk; LR: Low-Risk; CI: Confidence Interval.

¹ HR types includes high-risk types and possibly /probably high-risk types: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 53, 66, 67, 68, 69, 69/71, 70, 73. ² LR types includes: 6, 11, 40, 42, 43, 54, 55, 61, 62, 72, 81, 83, 84, 89. ³ One or more of the vaccine types are concerned.

Supplementary Table 5 – Human Papillomavirus (HPV) type-specific distribution of the most common types (n=6,010 women) by result of abnormal cytology.

HPV type	ASCUS (n=214)			LSIL (n=91)			HSIL+ (n=12)		
	Number of HPV positive women	HPV prevalence among all women (%; 95% CI)	HPV prevalence among positive women (%; 95% CI)	Number of HPV positive women	HPV prevalence among all women (%; 95% CI)	HPV prevalence among positive women (%; 95% CI)	Number of HPV positive women	HPV prevalence among all women (%; 95% CI)	HPV prevalence among positive women (%; 95% CI)
Any HPV type	130	60.7 (54.2-67.3)	-	79	86.8 (79.9-93.8)	-	10	83.3 (62.2-100.0)	-
Single types	66	30.8 (24.7-37.0)	50.8 (42.2-59.4)	29	31.9 (22.3-41.4)	36.7 (26.1-47.3)	4	33.3 (6.7-60.0)	40.0 (9.6-70.4)
<i>HR HPV types</i> ¹									
16	13	6.1 (2.9-9.3)	10.0 (4.8-15.2)	4	4.4 (0.2-8.6)	5.1 (0.2-9.9)	2	16.7 (0.0-37.8)	20.0 (0.0-44.8)
51	6	2.8 (0.6-5.0)	4.6 (1.0-8.2)	5	5.5 (0.8-10.2)	6.3 (1.0-11.7)	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)
53	5	2.3 (0.3-4.4)	3.8 (0.5-7.2)	2	2.2 (0.0-5.2)	2.5 (0.0-6.0)	-	-	-
31	2	0.9 (0.0-2.2)	1.5 (0.0-3.7)	-	-	-	-	-	-
59	5	2.3 (0.3-4.4)	3.8 (0.5-7.2)	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	-	-	-
33	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	-	-	-	-	-	-
68	5	2.3 (0.3-4.4)	3.8 (0.5-7.2)	2	2.2 (0.0-5.2)	2.5 (0.0-6.0)	-	-	-
70	2	0.9 (0.0-2.2)	1.5 (0.0-3.7)	2	2.2 (0.0-5.2)	2.5 (0.0-6.0)	-	-	-
66	-	-	-	-	-	-	-	-	-
52	2	0.9 (0.0-2.2)	1.5 (0.0-3.7)	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	-	-	-
58	3	1.4 (0.0-3.0)	2.3 (0.0-4.9)	2	2.2 (0.0-5.2)	2.5 (0.0-6.0)	-	-	-
18	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	-	-	-	-	-	-
56	2	0.9 (0.0-2.2)	1.5 (0.0-3.7)	2	2.2 (0.0-5.2)	2.5 (0.0-6.0)	-	-	-
35	2	0.9 (0.0-2.2)	1.5 (0.0-3.7)	-	-	-	-	-	-
39	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	-	-	-
73	-	-	-	-	-	-	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)

	45	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	-	-	-	-	-	-
	67	-	-	-	-	-	-	-	-	-
	69	-	-	-	-	-	-	-	-	-
	69/71	-	-	-	-	-	-	-	-	-
	LR HPV types²									
	42	3	1.4 (0.0-3.0)	2.3 (0.0-4.9)	3	3.3 (0.0-7.0)	3.8 (0.0-8.0)	-	-	-
	84	2	0.9 (0.0-2.2)	1.5 (0.0-3.7)	-	-	-	-	-	-
	62	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	-	-	-
	61	2	0.9 (0.0-2.2)	1.5 (0.0-3.7)	-	-	-	-	-	-
	6	-	-	-	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	-	-	-
	55	7	3.3 (0.9-5.7)	5.4 (1.5-9.3)	-	-	-	-	-	-
	81	-	-	-	2	2.2 (0.0-5.2)	2.5 (0.0-6.0)	-	-	-
	89	-	-	-	-	-	-	-	-	-
	54	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	43	-	-	-	-	-	-	-	-	-
	72	-	-	-	-	-	-	-	-	-
	83	-	-	-	-	-	-	-	-	-
	40	-	-	-	-	-	-	-	-	-
	X	3	1.4 (0.0-3.0)	2.3 (0.0-4.9)	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	-	-	-
	Multiple types	61	28.5 (22.5-34.6)	46.9 (38.3-55.5)	49	53.8 (43.6-64.1)	62.0 (51.3-72.7)	6	50.0 (21.7-78.3)	60.0 (29.6-90.4)
	Number of multiple types									
	2 types	28	13.1 (8.6-17.6)	21.5 (14.5-28.6)	20	22.0 (13.5-30.5)	25.3 (15.7-34.9)	2	16.7 (0.0-37.8)	20.0 (0.0-44.8)
	3 types	19	8.9 (5.1-12.7)	14.6 (8.5-20.7)	12	13.2 (6.2-20.1)	15.2 (7.3-23.1)	3	25.0 (0.5-49.5)	30.0 (1.6-58.4)
	4 types	9	4.2 (1.5-6.9)	6.9 (2.6-11.3)	7	7.7 (2.2-13.2)	8.9 (2.6-15.1)	0	0.0 (0.0-0.0)	0.0 (0.0-0.0)
	5 or more types	5	2.3 (0.3-4.4)	3.8 (0.5-7.2)	10	11.0 (4.6-17.4)	12.7 (5.3-20.0)	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)

Most frequent combinations

16 with others	16	7.5 (4.0-11.0)	12.3 (6.7-18.0)	22	24.2 (15.4-33)	27.8 (18-37.7)	2	16.7 (0.0-37.8)	20.0 (0.0-44.8)
51 with others	12	5.6 (2.5-8.7)	9.2 (4.3-14.2)	9	9.9 (3.8-16.0)	11.4 (4.4-18.4)	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)
53 with others	16	7.5 (4.0-11.0)	12.3 (6.7-18.0)	14	15.4 (8.0-22.8)	17.7 (9.3-26.1)	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)
31 with others	7	3.3 (0.9-5.7)	5.4 (1.5-9.3)	6	6.6 (1.5-11.7)	7.6 (1.8-13.4)	3	25.0 (0.5-49.5)	30.0 (1.6-58.4)
42 with others	9	4.2 (1.5-6.9)	6.9 (2.6-11.3)	7	7.7 (2.2-13.2)	8.9 (2.6-15.1)	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)
6 with others	5	2.3 (0.3-4.4)	3.8 (0.5-7.2)	4	4.4 (0.2-8.6)	5.1 (0.2-9.9)	-	-	-
18 with others	2	0.9 (0.0-2.2)	1.5 (0.0-3.7)	4	4.4 (0.2-8.6)	5.1 (0.2-9.9)	-	-	-
33 with others	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	2	2.2 (0.0-5.2)	2.5 (0.0-6.0)	-	-	-
59 with others	8	3.7 (1.2-6.3)	6.2 (2.0-10.3)	8	8.8 (3.0-14.6)	10.1 (3.5-16.8)	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)
39 with others	8	3.7 (1.2-6.3)	6.2 (2.0-10.3)	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)
35 with others	3	1.4 (0.0-3.0)	2.3 (0.0-4.9)	2	2.2 (0.0-5.2)	2.5 (0.0-6.0)	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)
52 with others	4	1.9 (0.1-3.7)	3.1 (0.1-6.0)	8	8.8 (3.0-14.6)	10.1 (3.5-16.8)	2	16.7 (0.0-37.8)	20.0 (0.0-44.8)
56 with others	6	2.8 (0.6-5.0)	4.6 (1.0-8.2)	8	8.8 (3.0-14.6)	10.1 (3.5-16.8)	-	-	-
58 with others	5	2.3 (0.3-4.4)	3.8 (0.5-7.2)	5	5.5 (0.8-10.2)	6.3 (1.0-11.7)	-	-	-
62 with others	5	2.3 (0.3-4.4)	3.8 (0.5-7.2)	4	4.4 (0.2-8.6)	5.1 (0.2-9.9)	-	-	-
61 with others	7	3.3 (0.9-5.7)	5.4 (1.5-9.3)	8	8.8 (3.0-14.6)	10.1 (3.5-16.8)	-	-	-
66 with others	6	2.8 (0.6-5.0)	4.6 (1.0-8.2)	6	6.6 (1.5-11.7)	7.6 (1.8-13.4)	-	-	-
45 with others	3	1.4 (0.0-3.0)	2.3 (0.0-4.9)	4	4.4 (0.2-8.6)	5.1 (0.2-9.9)	3	25 (0.5-49.5)	30.0 (1.6-58.4)
68 with others	6	2.8 (0.6-5.0)	4.6 (1.0-8.2)	3	3.3 (0.0-7.0)	3.8 (0.0-8.0)	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)
54 with others	8	3.7 (1.2-6.3)	6.2 (2.0-10.3)	4	4.4 (0.2-8.6)	5.1 (0.2-9.9)	-	-	-
70 with others	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	3	3.3 (0.0-7.0)	3.8 (0.0-8.0)	-	-	-
84 with others	4	1.9 (0.1-3.7)	3.1 (0.1-6.0)	4	4.4 (0.2-8.6)	5.1 (0.2-9.9)	-	-	-
55 with others	4	1.9 (0.1-3.7)	3.1 (0.1-6.0)	3	3.3 (0.0-7.0)	3.8 (0.0-8.0)	-	-	-
11 with others	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	-	-	-
81 with others	6	2.8 (0.6-5.0)	4.6 (1.0-8.2)	3	3.3 (0.0-7.0)	3.8 (0.0-8.0)	-	-	-

40 with others	-	-	-	-	-	-	-	-	-
89 with others	8	3.7 (1.2-6.3)	6.2 (2.0-10.3)	6	6.6 (1.5-11.7)	7.6 (1.8-13.4)	-	-	-
67 with others	3	1.4 (0.0-3.0)	2.3 (0.0-4.9)	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	-	-	-
69 with others	-	-	-	-	-	-	-	-	-
73 with others	3	1.4 (0.0-3.0)	2.3 (0.0-4.9)	4	4.4 (0.2-8.6)	5.1 (0.2-9.9)	0	0.0 (0.0-0.0)	0.0 (0.0-0.0)
83 with others	5	2.3 (0.3-4.4)	3.8 (0.5-7.2)	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	-	-	-
43 with others	-	-	-	-	-	-	-	-	-
72 with others	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	3	3.3 (0.0-7.0)	3.8 (0.0-8.0)	-	-	-
69/71 with others	-	-	-	-	-	-	-	-	-
71 with others	2	0.9 (0.0-2.2)	1.5 (0.0-3.7)	1	1.1 (0.0-3.2)	1.3 (0.0-3.7)	-	-	-
74 with others	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	-	-	-	-	-	-
64 with others	1	0.5 (0.0-1.4)	0.8 (0.0-2.3)	-	-	-	-	-	-
82 with others	2	0.9 (0.0-2.2)	1.5 (0.0-3.7)	-	-	-	1	8.3 (0.0-24.0)	10.0 (0.0-28.6)
Combinations of vaccine types									
6/11 ³	6	2.8 (0.6-5.0)	4.6 (1.0-8.2)	6	6.6 (1.5-11.7)	7.6 (1.8-13.4)	-	-	-
16/18 ³	31	14.5 (9.8-19.2)	23.8 (16.5-31.2)	27	29.7 (20.3-39.1)	34.2 (23.7-44.6)	4	33.3 (6.7-60.0)	40.0 (9.6-70.4)
6/11/16/18 ³	37	17.3 (12.2-22.4)	28.5 (20.7-36.2)	31	34.1 (24.3-43.8)	39.2 (28.5-50.0)	4	33.3 (6.7-60.0)	40.0 (9.6-70.4)
6/11/16/18/31/33/45/52/58 ³	57	26.6 (20.7-32.6)	43.8 (35.3-52.4)	45	49.5 (39.2-59.7)	57.0 (46.0-67.9)	8	66.7 (40.0-93.3)	80.0 (55.2-100.0)

HPV: Human Papillomavirus; HR: High-Risk; LR: Low-Risk; CI: Confidence Interval.

¹ HR types includes high-risk types and possibly /probably high-risk types: 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 53, 66, 67, 68, 69, 69/71, 70, 73. ² LR types includes: 6, 11, 40, 42, 43, 54, 55, 61, 62, 72, 81, 83, 84, 89. ³ One or more of the vaccine types are concerned.

Supplementary Table 6 – Crude and multivariate analyses of the association between cervical High-Risk Human Papillomavirus (HR HPV) infection and selected subjects' characteristics (n=5,858 women).

Study sample characteristics		Number of HR HPV positive women / number of HPV tested women (negative + HR HPV positive)	HPV prevalence (%)	Adjusted model ¹ POR (95% CI)
Population				
	Gran Canaria	407 / 3,753	10.8	1.0 (ref)
	Tenerife	261 / 2,105	12.4	1.0 (0.8-1.2)
Age distribution (years)				
	18-24	135 / 549	24.6	2.9 (1.7-4.8)
	25-29	129 / 639	20.2	2.2 (1.3-3.5)
	30-34	136 / 869	15.7	1.7 (1.0-2.7)
	35-39	71 / 865	8.2	0.9 (0.5-1.4)
	40-44	67 / 771	8.7	1.0 (0.6-1.6)
	45-49	44 / 607	7.2	0.8 (0.5-1.3)
	50-54	30 / 594	5.1	0.6 (0.4-1.1)
	55-59	27 / 480	5.6	0.8 (0.5-1.4)
	60-65	29 / 484	6.0	1.0 (ref)
	<i>p-value for trend</i>			<i>p<0.001</i>
Level of education				
	None / Preschool	29 / 438	6.6	1.0 (ref)
	Primary	246 / 2,588	9.5	0.9 (0.6-1.5)
	Secondary	201 / 1,437	14.0	0.9 (0.5-1.3)
	University or higher	178 / 1,296	13.7	0.9 (0.5-1.4)
	Others	13 / 90	14.4	0.8 (0.4-1.8)
	Missing data	1 / 9	-	-
	<i>p-value for trend (excluding others)</i>			<i>p=0.3</i>
Marital status				
	Single	283 / 1,333	21.2	1.5 (1.2-1.9)
	Married/de facto partnership	267 / 3,792	7.0	1.0 (ref)
	Divorced/separated	99 / 541	18.3	2.0 (1.5-2.7)
	Widowed	18 / 184	9.8	1.8 (1.0-3.1)
	Missing data	1 / 8	-	-
Number of live births				
	No ²	240 / 1,307	18.4	1.0 (ref)
	1	137 / 1,202	11.4	0.9 (0.7-1.2)
	2	136 / 1,725	7.9	1.0 (0.8-1.4)
	3	53 / 754	7.0	1.1 (0.7-1.6)
	≥4	27 / 448	6.0	1.0 (0.6-1.7)
	Missing data	75 / 422	-	-
Smoking status				
	Never smoked	298 / 3,324	9.0	1.0 (ref)
	Ex smoker	102 / 876	11.6	1.2 (0.9-1.5)

	Current smoker	268 / 1,658	16.2	1.3 (1.1-1.6)
Age at first sexual intercourse (years)				
	<15	35 / 179	19.6	1.0 (0.5-1.8)
	15-16	136 / 787	17.3	1.0 (0.6-1.6)
	17-18	235 / 1,797	13.1	1.0 (0.6-1.6)
	19-20	118 / 1,241	9.5	1.0 (0.6-1.5)
	21-25	112 / 1,368	8.2	1.2 (0.7-1.8)
	>25	26 / 418	6.2	1.0 (ref)
	Missing data	6 / 68	-	-
	<i>p-value for trend</i>			<i>p=0.6</i>
Lifetime number of sexual partners				
	1	160 / 3,135	5.1	1.0 (ref)
	2-3	224 / 1,495	15.0	2.3 (1.9-2.9)
	4-5	124 / 596	20.8	3.1 (2.3-4.0)
	6-10	100 / 376	26.6	4.1 (3.0-5.6)
	11-20	36 / 121	29.8	4.6 (2.9-7.3)
	>20	16 / 47	34.0	7.1 (3.7-13.6)
	Missing data	8 / 88	-	-
	<i>p-value for trend</i>			<i>p<0.001</i>
Use of oral contraceptives				
	Never	126 / 1,366	9.2	1.0 (ref)
	Ever	542 / 4,492	12.1	1.2 (0.97-1.5)
Rhythm method/coitus interruptus				
	Never	316 / 2,933	10.8	1.0 (ref)
	Ever	352 / 2,925	12.0	1.1 (0.96-1.4)
Previous cervical lesions				
	No	527 / 4,868	10.8	1.0 (ref)
	Yes	70 / 364	19.2	1.5 (1.1-2.0)
	Missing data ³	71 / 626	-	-
Genital warts				
	Never	633 / 5,744	11.0	1.0 (ref)
	Ever	35 / 114	30.7	2.0 (1.3-3.2)

¹ Adjusted model: adjusted for age group, population, level of education, marital status, smoking habits, lifetime number of sexual partners, previous cervical lesions, and ever had genital warts. ² Includes women who were pregnant but had 0 live births. ³ Includes "Do not know" in the "Missing data" category. ⁴ Includes syphilis, genital herpes, gonorrhoea, HIV (positive test), genital warts, Chlamydia, genital ulcer, others. ⁵ Excludes ever had genital warts in the adjustment.