Supplemental Table 1. Balance by arm on selected enrollment characteristics for the ITT cohort

Variable	F	IPV arm	Havri	x arm	P (chi square)
	n	%	n	%	
Total randomized	3727	49.9	3739	50.1	0.89
Age					
18-19	1193	32.0	1244	33.3	0.39
20-21	946	25.4	905	24.2	
22-23	818	22.0	848	22.7	
24-25	770	20.7	742	19.8	
Study clinic:					
Liberia	675	18.1	698	18.7	0.44
Nicoya	660	17.7	637	17.0	
Santa cruz	634	17.0	577	15.4	
Cañas	746	20.0	786	21.0	
La Cruz	220	5.9	245	6.6	
Tilaran	252	6.8	255	6.8	
Puntarenas	540	14.5	541	14.5	
HPV 16		-		-	
Not tested	776	20.8	819	21.9	0.05
Negative	2729	73.2	2654	71.0	
Positive	222	6.0	266	7.1	
HPV 18					
Not tested	776	20.8	819	21.9	0.52
Negative	2856	76.6	2827	75.6	0.02
Positive	95	2.6	93	2.5	
HPV 31, 33, 45					
Not tested	776	20.8	819	21.9	0.51
Negative	2727	73.2	2694	72.1	0.01
Positive	224	6.0	226	6.0	
Any oncogenic HPV		0.0		0.0	
Not tested	776	20.8	819	21.9	
Negative	1909	51.2	1878	50.2	0.50
Positive	1042	28.0	1042	27.9	
Cytology*			-	-	
Not tested / No result	790	21.2	833	22.3	0.40
Normal	2492	66.9	2497	66.8	
LSIL (inc ASCUS +)	385	10.3	359	9.6	
HSIL	60	1.6	50	1.3	
Total visits post enrollment:		-	-	-	
0-1	205	5.5	202	5.4	
2-3	210	5,6	207	5.5	0.17
4-5	2136	57.3	2050	54.8	
6-7	728	19.5	779	20.8	
8+	448	12.0	501	13.4	
Person time FITT (HPV 16, 18)					
<10 mo	232	6.2	217	5.8	
10-<22 mo	182	4.9	196	5.2	0.25
22-<34 mo	135	3.6	175	4.7	
34-<46 mo	1037	27.8	1028	27.5	
46-<58 mo	2052	55.1	2027	54.2	
58+ mo	89	2.4	96	2.6	

## Supplemental Table 2. Vaccine efficacy against 1 year persistence with individual HPV types (ATP analysis)

Arm	Number of women	Number of women with events	Rate per 100 women	(95% CI)	Rate reduction/ 100 women	(95% CI)	Vaccine Efficacy	(95% CI)
			A9	species				
			ŀ	IPV 16				
Vaccine	2464	8	0.3	(0.2, 0.6)				
Control	2452	59	2.4	(1.9, 3.1)	2.1	(1.6, 2.4)	86.5%	(72.9, 94.0)
			ŀ	IPV 31				
Vaccine	2525	21	0.8	(0.5, 1.2)				
Control	2546	39	1.5	(1.1, 2.1)	0.7	(0.1, 1.2)	45.7%	(8.2, 68.6)
				IPV 33				
Vaccine	2596	8	0.3	(0.1, 0.6)				
Control	2645	13	0.5	(0.3, 0.8)	0.2	(-0.2,0.5)	37.3%	(-51.4, 75.3)
				IPV 35				
Vaccine	2593	11	0.4	(0.2, 0.7)				
Control	2631	13	0.5	(0.3, 0.8)	0.1	(-0.3,0.4)	14.1%	(-94.0, 62.5)
			ŀ	IPV 52				
Vaccine	2456	60	2.4	(1.9, 3.1)				
Control	2505	51	2.0	(1.5, 2.6)	-0.4	(-1.2,0.4)	-20.0%	(-74.9, 17.4)
			F	IPV 58				
Vaccine	2551	23	0.9	(0.6, 1.3)				
Control	2595	22	0.8	(0.5, 1.3)	-0.1	(-0.6,0.5)	-6.3	(-92.4, 41.1)
			A7	species				
			ŀ	IPV 18				
Vaccine	2567	0	0.0	(0.0, 0.1)		(4.4.5)	105	(00 = 155 5)
Control	2593	34	1.3	(0.9, 1.8)	1.3	(1.1, 1.3)	100.0%	(90.7, 100.0)

Supplemental Table 2. Vaccine efficacy against 1 year persistence with individual HPV types (ATP analysis) "(continued)."

Arm	Number of women	Number of women with events	Rate per 100 women	(95% CI)	Rate reduction/ 100 women	(95% CI)	Vaccine Efficacy	(95% CI)
			н	IPV 45				
Vaccine	2573	8	0.3	(0.1, 0.6)				
Control	2622	17	0.6	(0.4, 1.0)	0.3	(-0.0, 0.6)	52.0%	(-9.8. 80.4)
			н	IPV 39				
Vaccine	2528	24	0.9	(0.6, 1.4)				
Control	2581	23	0.9	(0.6, 1.3)	-0.1	(-0.6, 0.5)	-6.5%	(-90.2, 40.2)
				IPV 59				
Vaccine	2576	17	0.7	(0.4, 1.0)				
Control	2637	10	0.4	(0.2, 0.7)	-0.3	(-0.6, 0.1)	-74.0%	(-295.1, 20.1)
Control	2001	10	0.1	(0.2, 0.7)	0.0	( 3.3, 3.1)	1 110 70	1 ( ===::, ==::)
		HF	PV 68 – 73 (HPV	73 is not in A	A7 species)			
Vaccine	2519	19	0.8	(0.5, 1.2)				
Control	2576	18	0.7	(0.4, 1.1)	-0.1	(-0.5, 0.4)	-7.9%	(-108.1, 43.8)
			۸5	species				
			A3	species				
			н	IPV 51				
Vaccine	2453	57	2.3	(1.8, 3.0)				
Control	2539	36	1.4	(1.0, 1.9)	-0.9	(-1.6, -0.1)	-63.9%	(-150.7, -8.2)
								1
			A6	species				
			н	IPV 56				
Vaccine	2524	22	0.9	(0.6, 1.3)				
Control	2564	30	1.2	(0.8, 1.6)	0.3	(-0.3, 0.8)	25.5%	(-29.2, 57.5)
			·	IPV 66				
Vaccine	2521	32	1.3	(0.9, 1.8)		(00000)	4.00/	( 04 4 00 0)
Control	2565	33	1.3	(0.9, 1.8)	0.0	(-0.6, 0.6)	1.3%	(-61.1, 39.6)

Supplemental table 3. Vaccine efficacy against 6 months persistence of different combinations of HPV types.

				ATP analysis	<b>3</b>				ITT analysis <sup>b</sup>			
HPV Type	Arm	Number of women in ATP cohort	Number of women with events	Rate per 100 women (95% CI)	Rate reduction/ 100 women (95% CI)	Efficacy (95% CI)	Number of women in ITT cohort	Number of women with events	Rate per 100 women (95% CI)	Rate reduction/ 100 women (95% CI)	Vaccine Efficacy (95% CI)	
HPV	Vaccine	2635	9	0.3 (0.2, 0.6)	5.0	93.6%	3727	231	6.2 (5.5, 7.0)	6.8	52.3%	
16, 18	Control	2677	143	5.3 (4.5, 6.2)	(4.5, 5.3)	(88.0, 96.9)	3739	486	13.0 (12.0, 14.1)	(5.5, 8.1)	(44.3, 59.3)	
HPV	Vaccine	2642	42	1.6 (1.2, 2.1)	2.4	60.0%	3727	217	5.8 (5.1, 6.6)	2.7	31.8%	
31, 33, 45	Control	2695	107	4.0 (3.3, 4.8)	(1.5, 3.1)	(43.1, 72.7)	3739	319	8.5 (7.7, 9.5)	(1.5, 3.9)	(19.0. 42.6)	
Other oncogenic	Vaccine	2643	362	13.7 (12.4, 15.1)	-0.7	-5.5%	3727	942	25.3 (23.9, 26.7)	0.2	0.8%	
types	Control	2697	350	13.0 (11.8, 14.3)	(-2.7, 1.2)	(-22.3, 8.9)	3739	953	25.5 (24.1, 26.9)	(-2.1, 2.5)	(-8.5, 9.4)	
Any Oncogenic	Vaccine	2643	400	15.1 (13.8, 16.6)	2.9 (0.7, 5.1)	16.2% (4.3, 26.6)	3727	1173	31.5 (30.0, 33.0)	3.2	9.1%	
Туре	Control	2697	487	18.1 (16.7, 19.6)			3739	1295	34.6 (33.1, 36.2)	(0.6, 5.8)	(1.7, 16.0)	

<sup>&</sup>lt;sup>a</sup>ATP (according to protocol) cohort includes women who received all 3 doses within protocol – defined windows, complied with the protocol during the vaccination period did not have a biopsy or treatment (LEEP) prior to the 6-month visit and were HPV DNA negative (by PCR) for at least one of the HPV types in the endpoint at enrollment and at the 6-month visit.

b ITT (intention to treat) cohort includes all women randomized and vaccinated, regardless of prevalence of infection and follow-up visits.

## Supplemental table 4. Vaccine efficacy against 6 months persistence with individual HPV types (ATP analysis)

Arm	Number of women	Number of women with events	Rate per 100 women	(95% CI)	Rate reduction/ 100 women	(95% CI)	Vaccine Efficacy	(95% CI)
			A9	species				
			ŀ	HPV 16				
Vaccine	2464	9	0.4	(0.2, 0.7)				
Control	2452	97	4.0	(3.2, 4.8)	3.6	(3.0, 4.0)	90.8%	(82.4, 95.6)
			-	IPV 31				
Vaccine	2525	21	0.8	(0.5, 1.2)				
Control	2546	60	2.4	(1.8, 3.0)	1.5	(0.9, 2.1)	64.7%	(42.6, 78.9)
				IPV 33				
Vaccine	2596	12	0.5	(0.3, 0.8)				
Control	2645	18	0.7	(0.4, 1.1)	0.2	(-0.2, 0.6)	32.1%	(-41.1, 68.2)
				IPV 35				
Vaccine	2593	17	0.7	(0.4, 1.0)				
Control	2631	23	0.9	(0.6, 1.3)	0.2	(-0.3, 0.7)	25.0%	(-40.6, 60.6)
				IPV 52				
Vaccine	2456	78	3.2	(2.5, 3.9)		,		
Control	2505	99	4.0	(3.2, 4.8)	0.8	(-0.3, 1.8)	19.6%	(-8.1, 40.4)
			H	IPV 58				
Vaccine	2551	43	1.7	(1.2, 2.2)				
Control	2595	45	1.7	(1.3, 2.3)	0.0	(-0.7, 0.8)	2.8%	(-48.0, 36.2)
			A7	species				
				IPV 18				_
Vaccine	2567	0	0.0	(0.0, 0.1)		(4.0.0.1)	400.007	(0.4.0
Control	2593	54	2.1	(1.6, 2.7)	2.1	(1.9, 2.1)	100.0%	(94.2, 100.0)

Supplemental Table 4. Vaccine efficacy against 6 months persistence with individual HPV types (ATP analysis) "(continued)."

Arm	Number of women	Number of women with events	Rate per 100 women	(95% CI)	Rate reduction/ 100 women	(95% CI)	Vaccine Efficacy	(95% CI)
			н	IPV 45				
Vaccine	2573	9	0.3	(0.2, 0.6)				
Control	2622	34	1.3	(0.9, 1.8)	0.9	(0.5, 1.3)	73.0%	(45.3, 87.8)
			Н	IPV 39				
Vaccine	2528	41	1.6	(1.2, 2.2)				
Control	2581	32	1.2	(0.9, 1.7)	-0.4	(-1.0, 0.3)	-30.8%	(-109.2, 17.6)
			L	IPV 59				
Vaccine	2576	28	1.1	(0.7, 1.5)				
Control	2637	22	0.8	(0.5, 1.2)	-0.3	(-0.8, 0.3)	-30.3%	(-130.3, 25.6)
				(0:0, ::=)	1	(,,		1 ( , ,
			PV 68 – 73 (HPV		A7 species)			
Vaccine	2519	36	1.4	(1.0, 2.0)				
Control	2576	40	1.6	(1.1, 2.1)	0.1	(-0.5, 0.8)	8.0%	(-44.7, 41.6)
			A5	species				
				IPV 51				
Vaccine	2453	98	4.0	(3.3, 4.8)				
Control	2539	65	2.6	(2.0, 3.2)	-1.4	(-2.4, -0.4)	-56.1%	(-114.3, -14.2)
			0	(=:0, 0:=)				
			A6	species				
			Н	IPV 56				
Vaccine	2524	38	1.5	(1.1, 2.0)				
Control	2564	52	2.0	(1.5, 2.6)	0.5	(-0.2, 1.2)	25.8%	(-12.7, 51.4)
				IPV 66				
Vaccine	2521	59	2.3	(1.8, 3.0)		(00000)	4.007	( 44 0 04 0)
Control	2565	61	2.4	(1.8, 3.0)	0.0	(-0.8, 0.9)	1.6%	(-41.0, 31.3)

Supplemental table 5. Vaccine efficacy (ATP) against 6 months persistence with HPV 16 stratified by HPV 16 and HPV 18 serology at enrollment

HPV Serology	Arm	Number of women	Number of women with events	Rate per 100 women	(95% CI)	Rate reduction/ 100 women	(95% CI)	Vaccine Efficacy	(95% CI)
HPV 16	Vaccine	1875	4	0.2	(0.1, 0.5)				
serology	Control	1856	86	4.6	(3.7, 5.7)	4.4	(3.8, 4.7)	95.4%	(88.5, 98.6)
Negative									
				T		1	T		
HPV 16	Vaccine	558	5	0.9	(0.3, 2.0)				
serology Positive	Control	551	11	2.0	(1.1, 3.4)	1.1	(-0.3, 2.2)	55.1%	(-27.3, 85.9)
HPV 18	Vaccine	1853	5	0.3	(0.1, 0.6)				
serology negative	Control	1854	73	3.9	(3.1, 4.9	3.7	(3.1, 4.0)	93.1%	(84.2, 97.6)
HPV 18	Vaccine	563	3	0.5	(0.1, 1.4)				
serology positive	Control	541	23	4.3	(2.8, 6.2)	3.7	(2.1, 4.5)	87.5%	(62.1, 97.0)

ATP (according to protocol) cohort includes women who received all 3 doses within protocol – defined windows, complied with the protocol during the vaccination period did not have a biopsy or treatment (LEEP) prior to the 6-month visit and were HPV DNA negative (by PCR) for at least one of the HPV types in the endpoint at enrollment and at the 6-month visit.

The stratification by HPV 16 serology excludes 31 and 45 subjects without HPV 16 serology results from the vaccine and control arm, respectively. The stratification by HPV 18 serology excludes 48 and 57 subjects without HPV 18 serology from the vaccine and control arm, respectively.

## Supplemental table 6. Vaccine efficacy against 6 months persistence with HPV 16/18 stratified by age at enrollment

			ATP ana	ysis <sup>a</sup>					ITT anal	ysis <sup>b</sup>	
Age	Arm	Number of women	Number of women with events	Rate per 100 women (95% CI)	Rate reduction/ 100 women (95% CI)	Vaccine Efficacy (95% CI)	Number of women	Number of women with events	Rate per 100 women (95% CI)	Rate reduction/ 100 women (95% CI)	Vaccine Efficacy (95% CI)
18-19	Vaccine	825	1	0.1 (0.0, 0.6)	5.7	97.9	1193	47	3.9 (2.9, 5.2)	9.3	70.3%
years	Control	870	51	5.9 (4.4, 7.6)	(4.9, 6.0)	(89.4, 99.9)	1244	165	13.3 (11.5, 15.2)	(7.2, 11.1)	(59.2, 78.7)
20-21	Vaccine	659	3	0.5 (0.1, 1.2)	5.1	91.8	946	64	6.8 (5.3, 8.5)	8.0	54.3%
years	Control	649	36	5.5 (4.0, 7.5)	(3.7, 5.8)	(76.1, 98.0)	905	134	14.8 (12.6, 17.2)	(5.2, 10.7)	(38.6, 66.2)
22-23	Vaccine	588	2	0.3 (0.1, 1.1)	5.4	94.1	818	59	7.2 (5.6, 9.1)	6.0	45.4%
years	Control	625	36	5.8 (4.1, 7.8)	(4.0, 6.0)	(79.3, 99.0)	848	112	13.2 (11.1, 15.6)	(3.0, 8.8)	(25.3, 60.4)
24-25	Vaccine	563	3	0.5 (0.1, 1.4)	3.2	85.8	770	61	7.9 (6.2, 10.0)	2.2	21.6%
years	Control	533	20	3.8 (2.4, 5.6)	(1.7, 4.0)	(56.4, 96.6)	742	75	10.1 (8.1, 12.4)	(-0.8, 5.1)	(-9.9, 44.3)

\_\_\_\_\_

<sup>&</sup>lt;sup>a</sup>ATP (according to protocol) cohort includes women who received all 3 doses within protocol – defined windows, complied with the protocol during the vaccination period did not have a biopsy or treatment (LEEP) prior to the 6-month visit and were HPV DNA negative (by PCR) for at least one of the HPV types in the endpoint at enrollment and at the 6-month visit.

<sup>&</sup>lt;sup>b</sup>ITT (intention to treat) cohort includes all women randomized and vaccinated, regardless of prevalence of infection and follow-up visits.

Supplemental table 7. ATP and ITT efficacy estimates against 6 months persistence HPV 16/18 infection by time since first sexual intercourse at enrollment

				ATP analysis	s <sup>a</sup>				ITT analysis	b	
Time since first sex	Arm	Number of women	Number of women with events	Rate per 100 women (95% CI)	Rate reduction/ 100 women (95% CI)	Vaccine Efficacy (95% CI)	Number of women	Number of women with events	Rate per 100 women (95% CI)	Rate reduction/ 100 women (95% CI)	Vaccine Efficacy (95% CI)
	Vaccine	566	1	0.2 (0.0, 0.9)	3.9	95.7%	773	4	0.5 (0.2, 1.2)	3.6	87.5%
Virgin	Control	615	25	4.1 (2.7, 5.9)	(2.7, 4.2)	(76.9, 99.8)	819	34	4.2 (2.9, 5.7)	(2.4, 4.3)	(67.5, 96.2)
<2	Vaccine	227	1	0.4 (0.0, 2.2)	7.8	94.6%	352	21	6.0 (3.8, 8.8)	12.1	67.0%
years	Control	244	20	8.2 (5.2, 12.2)	(4.8, 8.6)	(70.9, 99.7)	349	63	18.1 (14.3, 22.4)	(7.3, 16.1)	(46.4, 80.2)
2	Vaccine	233	0	0.0 (0.0, 1.3)	8.6	100.0%	335	27	8.1 (5.5, 11.4)	12.6	60.9%
years	Control	221	19	8.6 (5.4, 12.9)	(6.2, 8.6)	(83.8, 100.0)	325	67	20.6, (16.5, 25.3)	(7.0, 17.4)	(39.3, 75.3)
3	Vaccine	279	1	0.4 (0.0, 1.8)	5.5	93.9%	395	28	7.1 (4.9, 9.9)	8.6	55.0%
years	Control	256	15	5.9 (3.4, 9.3)	(3.0, 6.2)	(65.8, 99.7)	394	62	15.7 (12.4, 19.6)	(4.0, 12.7)	(30.1, 71.5)
4+	Vaccine	1330	6	0.5 (0.2, 0.9)	4.3	90.5%	1872	151	8.1 (6.9, 9.4)	6.0	42.5%
years	Control	1341	64	4.8 (3.7, 6.0)	(3.4, 4.8)	(79.4, 96.3)	1852	260	14.0 (12.5, 15.7)	(3.9, 8.0)	(29.9, 53.1)

<sup>&</sup>lt;sup>a</sup>ATP (according to protocol) cohort includes women who received all 3 doses within protocol – defined windows, complied with the protocol during the vaccination period did not have a biopsy or treatment (LEEP) prior to the 6-month visit and were HPV DNA negative (by PCR) for at least one of the HPV types in the endpoint at enrollment and at the 6-month visit.

b ITT (intention to treat) cohort includes all women randomized and vaccinated, regardless of prevalence of infection and follow-up visits.

## Supplemental table 8. ATP and ITT efficacy estimates against HPV 16/18 by number of sexual partners at enrollment

				ATP analysi	S <sup>a</sup>				ITT analysis	b	
Number of sex partner s	Arm	Number of women	Number of women with events	Rate per 100 women (95% CI)	Rate reduction/ 100 women (95% CI)	Vaccine Efficacy (95% CI)	Number of women	Number of women with events	Rate per 100 women (95% CI)	Rate reduction/ 100 women (95% CI)	Vaccine Efficacy (95% CI)
	Vaccine	566	1	0.2			773	4	0.5		
				(0.0, 0.9)	3.9	95.7%			(0.2, 1.2)	3.6	87.5%
Virgin	Control	615	25	4.1	(2.7, 4.2)	(76.9, 99.8)	819	34	4.2	(2.4, 4.3)	(67.5, 96.2)
				(2.7, 5.9)					(2.9, 5.7)		
	Vaccine	904	3	0.3			1237	65	5.3		
1				(0.1, 0.9)	4.5	93.1%			(4.1, 6.6)	5.3	50.0%
partner	Control	915	44	4.8	(3.4, 5.0)	(80.2, 98.3)	1256	132	10.5	(3.1, 7.2)	(32.9, 63.0)
				(3.6, 6.3)					(8.9, 12.3)		
	Vaccine	544	2	0.4			777	67	8.6		
2				(0.1, 1.2)	5.4	93.6%			(6.8, 10.8)	9.0	51.2%
partners	Control	519	30	5.8	(3.9, 6.0)	(77.4, 99.0)	753	133	17.7	(5.5, 12.3)	(34.7, 63.8)
				(4.0, 8.0)					(15.1, 20.5)		
	Vaccine	621	3	0.5			940	95	10.1		
3+				(0.1, 1.3)	6.5	93.1%			(8.3, 12.2)	10.4	50.8%
partners	Control	628	44	7.0	(5.0, 7.2)	(80.2, 98.3)	911	187	20.5	(7.0, 13.7)	(37.1, 61.7)
				(5.2, 9.2)					(18.0, 23.2)		

<sup>&</sup>lt;sup>a</sup>ATP (according to protocol) cohort includes women who received all 3 doses within protocol – defined windows, complied with the protocol during the vaccination period did not have a biopsy or treatment (LEEP) prior to the 6-month visit and were HPV DNA negative (by PCR) for at least one of the HPV types in the endpoint at enrollment and at the 6-month visit.

b ITT (intention to treat) cohort includes all women randomized and vaccinated, regardless of prevalence of infection and follow-up visits.

Supplemental table 9. Rates of 6 months persistent infection with HPV 16/18 and vaccine efficacy (ATP and ITT) against HPV 16/18 by time since enrollment

				ATP analysis	a				ITT analysis	b	
Time since enroll.	Arm	Number of women	Number of women with events	Rate per 100 women (95% CI)	Rate reduction/ 100 women (95% CI)	Vaccine Efficacy (95% CI)	Number of women	Number of women with events	Rate per 100 women (95% CI)	Rate reduction/ 100 women (95% CI)	Vaccine Efficacy (95% CI)
	Vaccine	2183	6	0.3 (0.1, 0.6)	1.7	86.3%	3529	207	5.9 (5.1, 6.7)	2.7	31.6%
4-22 mo	Control	2239	45	2.0 (1.5, 2.7)	(1.2, 2.1)	(69.6, 94.7)	3545	304	8.6 (7.7, 9.5)	(1.5, 3.9)	(18.4, 42.7)
	Vaccine	2205	3	0.1 (0.0, 0.4)	2.6	95.0%	2797	16	0.6 (0.3, 0.9)	2.2	79.1%
22-34 mo	Control	2232	61	2.7 (2.1, 3.5)	(2.2, 2.8)	(85.9, 98.8)	2775	76	2.7 (2.2, 3.4)	(1.6, 2.6)	(64.9, 88.2)
	Vaccine	1259	0	0.0 (0.0, 0.2)	2.0	100.0%	2964	8	0.3 (0.1, 0.5)	2.3	89.5%
34-46 mo	Control	1205	24	2.0 (1.3, 2.9)	(1.5, 2.0)	(87.3, 100.0)	2847	73	2.6 (2.0, 3.2)	(1.8, 2.6)	(79.1, 95.3)
	Vaccine	1001	0	0.0 (0.0, 0.3)	1.3	100.0%	2085	0	0.0 (0.0, 0.1)	1.7	100.0%
46+ mo	Control	1018	13	1.3 (0.7, 2.1)	(0.7, 1.3)	(73.6, 100.0)	1989	33	1.7 (1.2, 2.3)	(1.4, 1.7)	(90.9, 100.0)

\_\_\_\_\_

<sup>&</sup>lt;sup>a</sup>ATP (according to protocol) cohort includes women who received all 3 doses within protocol – defined windows, complied with the protocol during the vaccination period did not have a biopsy or treatment (LEEP) prior to the 6-month visit and were HPV DNA negative (by PCR) for at least one of the HPV types in the endpoint at enrollment and at the 6-month visit.

<sup>&</sup>lt;sup>b</sup> ITT (intention to treat) cohort includes all women randomized and vaccinated, regardless of prevalence of infection and follow-up visits.

Supplemental table 10. Vaccine efficacy against 1 year persistence of individual HPV types among women positive for the corresponding HPV type at enrollment

Arm	Number of women	Number of women with events	Rate per 100 women	(95% CI)	Rate reduction/ 100 women	(95% CI)	Vaccine Efficacy	(95% CI)
				A9 species				
				HPV 16				
Vaccine	142	72	50.7	(42.5, 58.9)				
Control	180	82	45.6	(38.4, 52.9)	-5.1	(-20.5, 10.0)	-11.3%	(-52.8, 19.1)
				HPV 31				
Vaccine	83	41	49.4	(38.8, 60.1)				
Control	98	31	31.6	(23.0, 41.3)	-17.8	(-35.5, 0.8)	-56.2%	(-150.9, 2.1)
				1151/ 00				
\/ <u>-</u>	1 00		07.0	HPV 33				
Vaccine	33	9	27.3	(14.2, 44.2)	-3.3	(-26.4, 23.6)	-13.6%	(-243.1,
Control	25	6	24.0	(10.3, 43.4)	0.0	( 20.4, 20.0)	10.070	60.0)
				HPV 35				,
Vaccine	33	10	30.3	(16.5, 47.4)				
Control	38	10	26.3	(14.2, 41.9)	-4.0	(-27.9, 19.9)	-15.2%	(-183.8, 53.3)
		T		HPV 52				_
Vaccine	132	41	31.1	(23.6, 39.3)	<b></b> -	(000045)	40.50/	(000 174)
Control	127	49	38.6	(30.4, 47.3)	7.5	(-6.9, 21.5)	19.5%	(-22.0, 47.1)
Manains		0.4	20.0	HPV 58		1	1	
Vaccine	61	24	39.3	(27.7, 52.0)	-9.8	(-29.5, 11.1)	-33.3%	(-149.5,
Control	61	18	29.5	(19.1, 41.8)	-9.0	(-23.3, 11.1)	-33.370	27.8)
				A7 species				
				HPV 18		1		
Vaccine	58	14	24.1	(14.4, 36.4)	0.0	(000001)	27.00/	( 40 2 62 7)
Control	69	23	33.3	(23.0, 45.1)	9.2	(-9.9, 26.1)	27.6%	(-40.3, 63.7)

Supplemental table 10 "(continued)" Vaccine efficacy against 6 months persistence of individual HPV types among women positive for the corresponding HPV type at enrollment

Arm	Number of women	Number of women with events	Rate per 100 women	(95% CI)	Rate reduction/ 100	(95% CI)	Vaccine Efficacy	(95% CI)				
				LIDV 45	women							
HPV 45    Vaccine  45  14  31.1  (18.9, 45.7)												
Control	40	16	40.0	, ,	8.9	(-16.2, 33.1)	22.2%	(-60.9, 62.7)				
Control	40	10	40.0	(25.8, 55.6) <b>HPV 39</b>	0.9	(-10.2, 33.1)	22.270	(-00.9, 02.7)				
Vaccine		21	32.8	(22.2, 45.0)	-4.2	(-22.4, 13.7)	-14.8%	(-110.3,				
Control	77	22	28.6	(19.3, 39.4)				37.4)				
	HPV 59											
Vaccine	40	6	15.0	(6.3, 28.6)								
Control	29	2	6.9	(1.2, 21.0)	-8.1	(-17.9, 9.1)	-117.5%	(-1466, 54.0)				
	-		HPV 68 - 73 (H		art of A7 speci	es)	<b>.</b>					
Vaccine	75	13	17.3	(10.0, 27.2)	-	_						
Control	55	13	23.6	(13.8, 36.2)	6.3	(-9.0, 21.6)	26.7%	(-60.9, 66.6)				
	A5 species											
HPV 51												
Vaccine	114	24	21.1	(14.3, 29.3)								
Control	93	19	20.4	(13.2, 29.5)	-0.6	(-12.6, 12.0)	-3.0%	(-90.7, 43.7)				
	A6 species											
	HPV 56											
Vaccine	86	17	19.8	(12.4, 29.2)								
Control	80	18	22.5	(14.4, 32.6)	2.7	(-11.1,16.3)	12.1%	(-72.1, 55.3)				
				HPV 66								
Vaccine	63	10	15.9	(8.4, 26.5)								
Control	76	14	18.4	(10.9, 28.3)	2.5	(-11.5, 15.2)	13.8%	(-95.0, 63.0)				

Supplemental table 11. Vaccine efficacy against 1-year persistence of HPV 16, 18 among women who received their vaccine out of per protocol windows

Arm	Number of women	Number of women with events	Rate per 100 women	(95% CI)	Rate reduction/ 100 women	(95% CI)	Vaccine Efficacy	(95% CI)				
Analysis similar to ATP but doses outside protocol window												
		Allaly					T					
Vaccine	317	1	0.3	(0.0, 1.5)	4.1	(2.0, 4.7)	92.8%	(59.4, 99.7)				
Control	319	14	4.4	(2.5, 7.1)								
ITT analysis												
Vaccine	321	18	5.6	(3.5, 8.6)	4.6	(0.2, 8.4)	44.9%	(2.8, 69.6)				
Control	324	33	10.2	(7.2, 13.8)								

<sup>&</sup>lt;sup>a</sup>ATP (according to protocol) cohort includes women who received at least one dose outside protocol – defined windows, complied with the protocol during the vaccination period did not have a biopsy or treatment (LEEP) prior to the 6-month visit and were HPV DNA negative (by PCR) for at least one of the HPV types in the endpoint at enrollment and at the 6-month visit.

<sup>&</sup>lt;sup>b</sup> ITT (intention to treat) cohort includes all women randomized and vaccinated who received at least one dose outside protocol – defined windows, regardless of prevalence of infection and follow-up visits.