

Table SV. Summary of findings and risk of bias.

First author(s), year	Sample size	HPV DNA positive		OR (95% CI)	P<0.05	Weight (random), %	Risk of bias	(Refs.)
		Patients with BC, %	Controls, %					
Afshar <i>et al</i> , 2018	138	8.16	0.00	7.61 (0.43-135.00)	0.17	3.10	Moderate	(74)
Ahangar-Oskouee <i>et al</i> , 2014	130	32.81	0.00	63.29(3.74-1072.07)	0.00	3.20	Moderate	(75)
Alinezhadi <i>et al</i> , 2022	95	12.69	28.12	0.37 (0.13-1.08)	0.07	7.50	Moderate	(7)
Antonsson <i>et al</i> , 2011	58	50.00	25.00	3.00(0.29-30.69)	0.35	4.10	Moderate	(76)
Bakhtiyarizadeh <i>et al</i> , 2017	300	0.00	0.00	1.00 (0.02-50.73)	1.00	1.90	Serious	(77)
Cavalcante <i>et al</i> , 2018	198	55.34	15.79	6.61 (3.37-12.97)	0.00	8.70	Moderate	(78)
Chang <i>et al</i> , 2012	78	0.00	0.00	0.63 (0.01-32.53)	0.82	1.90	Low	(79)
Damin <i>et al</i> , 2004	142	25.74	0.00	27.67 (1.64-466.13)	0.02	3.20	Low	(80)
de León <i>et al</i> , 2009	94	29.41	0.00	36.95 (2.14-638.9)	0.01	3.10	Moderate	(81)
Delgado-García <i>et al</i> , 2017	437	51.80	26.30	3.00(1.99-4.52)	0.00	9.40	Low	(21)
Doosti <i>et al</i> , 2016	171	22.99	0.00	51.33 (3.05-864.19)	0.01	3.20	Moderate	(82)
ElAmrani <i>et al</i> , 2018	88	25.00	8.33	3.67 (0.44-30.30)	0.23	4.50	Low	(83)
Fu <i>et al</i> , 2015	252	14.79	1.20	14.20(1.89-107.00)	0.01	4.70	Moderate	(84)
Gannon <i>et al</i> , 2015	90	16.25	10.00	1.75 (0.20-14.99)	0.61	4.40	Moderate	(85)
Li <i>et al</i> , 2015	279	1.60	0.00	3.51 (0.18-68.66)	0.41	3.00	Moderate	(86)
Maldonado-Rodríguez <i>et al</i> , 2022	116	20.34	33.33	0.51 (0.22-1.18)	0.12	8.30	Moderate	(3)
Mendizabal-Ruiz <i>et al</i> , 2009	107	4.48	0.00	4.40(0.22-87.33)	0.33	2.90	Moderate	(87)
Mou <i>et al</i> , 2011	108	6.45	0.00	7.15 (0.38-136.27)	0.19	3.00	Low	(18)
Salman <i>et al</i> , 2017	110	47.30	30.56	2.04 (0.88-4.74)	0.10	8.20	Low	(88)
Sigaroodi <i>et al</i> , 2012	130	18.99	1.96	11.72 (1.50-91.74)	0.02	4.60	Low	(89)
Tawfeik <i>et al</i> , 2020	35	20.00	0.00	8.46 (0.42-170.30)	0.16	2.90	Moderate	(90)
Vernet-Tomas <i>et al</i> , 2015	78	0.00	0.00	0.03 (0.00-2.01)	0.10	1.80	Moderate	(91)
Wang <i>et al</i> , 2014	9	14.29	50.00	0.17 (0.01-5.45)	0.31	2.30	Moderate	(92)
Total (random effects)	3243	21.95	8.96	3.83 (2.03-7.26)	<0.001	100.00	Moderate	N/A

HPV, human papillomavirus; DNA, deoxyribonucleic acid; BC, breast cancer; OR, odds ratio; CI, confidence interval; N/A, not applicable.

One-tailed Fisher's exact probability test for 2x2 contingency tables has been used for every study included in the meta-analysis to determine the P-value of each study.