Supplementary S1. PRISMA NMA Checklist of Items to Include When Reporting A Systematic Review Involving a Network Meta-analysis

Section/Topic	Item #	Checklist Item	Reported on Page #
TITLE			
Title	1	Identify the report as a systematic review *incorporating a network meta-analysis (or related form of meta-analysis).*	**Page. 1**
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: **Background:** main objectives **Methods:** data sources; study eligibility criteria, participants, and interventions; study appraisal; and *synthesis methods, such as network meta-analysis.* **Results:** number of studies and participants identified; summary estimates with corresponding confidence/credible intervals; *treatment rankings may also be discussed. Authors may choose to summarize pairwise comparisons against a chosen treatment included in their analyses for brevity.* **Discussion/Conclusions:** limitations; conclusions and implications of findings. **Other:** primary source of funding; systematic review registration number with registry name.	**Page. 1**
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known, *including mention of why a network meta-analysis has been conducted.*	**Page. 1-2**
Objectives	4	Provide an explicit statement of questions being addressed, with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	**Page. 1-2**
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists and if and where it can be accessed (e.g., Web address); and, if available, provide registration information, including registration number.	**Page. 2**
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. *Clearly describe eligible treatments included in the treatment network, and note whether any have been clustered or merged into the same node (with justification).*	**Page. 2-4**
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	**Page. 3**
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	**Supplementary S2**
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable,	**Page. 3-5**

		included in the meta-analysis).	
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	**Page. 3-4**
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	**Page. 3-4**
Geometry of the network	**S1**	Describe methods used to explore the geometry of the treatment network under study and potential biases related to it. This should include how the evidence base has been graphically summarized for presentation, and what characteristics were compiled and used to describe the evidence base to readers.	**Page. 4-5**
Risk of bias within individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	**Page. 4-5**
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means). *Also describe the use of additional summary measures assessed, such as treatment rankings and surface under the cumulative ranking curve (SUCRA) values, as well as modified approaches used to present summary findings from meta-analyses.*	**Page. 4-5**
Planned methods of analysis	14	Describe the methods of handling data and combining results of studies for each network meta-analysis. This should include, but not be limited to: • *Handling of multi-arm trials;* • *Selection of variance structure;* • *Selection of prior distributions in Bayesian analyses; and* • *Assessment of model fit.*	**Page. 4-5**
Assessment of Inconsistency	**S2**	Describe the statistical methods used to evaluate the agreement of direct and indirect evidence in the treatment network(s) studied. Describe efforts taken to address its presence when found.	**Page. 4-5**
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	**Page. 5 Supplementary S6**
Additional analyses	16	Describe methods of additional analyses if done, indicating which were pre-specified. This may include, but not be limited to, the following: • Sensitivity or subgroup analyses; • Meta-regression analyses; • *Alternative formulations of the treatment network; and* • *Use of alternative prior distributions for Bayesian analyses (if applicable).*	

RESULTS†			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	**Page. 5 and Figure. 1**
Presentation of network structure	**S3**	Provide a network graph of the included studies to enable visualization of the geometry of the treatment network.	**Figure. 2**
Summary of network geometry	**S4**	Provide a brief overview of characteristics of the treatment network. This may include commentary on the abundance of trials and randomized patients for the different interventions and pairwise comparisons in the network, gaps of evidence in the treatment network, and potential biases reflected by the network structure.	**Page. 5 and Figure. 2**
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	**Page. 5 and Supplementary S4**
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment.	**Page.5 and Supplementary S5**
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: 1) simple summary data for each intervention group, and 2) effect estimates and confidence intervals. *Modified approaches may be needed to deal with information from larger networks.*	**Supplementary S10**
Synthesis of results	21	Present results of each meta-analysis done, including confidence/credible intervals. *In larger networks, authors may focus on comparisons versus a particular comparator (e.g. placebo or standard care), with full findings presented in an appendix. League tables and forest plots may be considered to summarize pairwise comparisons.* If additional summary measures were explored (such as treatment rankings), these should also be presented.	**Page. 5-6 and Table. 1-3 and Supplementary S11**
Exploration for inconsistency	**S5**	Describe results from investigations of inconsistency. This may include such information as measures of model fit to compare consistency and inconsistency models, *P* values from statistical tests, or summary of inconsistency estimates from different parts of the treatment network.	**Page. 6 and Supplementary S13**
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies for the evidence base being studied.	**Supplementary S6-S9**
Results of additional analyses	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression analyses, *alternative network geometries studied, alternative choice of prior distributions for Bayesian analyses,* and so forth).	**Page. 4-6**
DISCUSSION			
Summary of evidence	24	Summarize the main findings, including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy-makers).	**Page. 7-9**
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review level (e.g., incomplete retrieval of identified research, reporting bias). *Comment on the validity of the assumptions, such as transitivity and consistency. Comment*	**Page. 9**

		on any concerns regarding network geometry (e.g., avoidance of certain comparisons).	
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	**Page. 9**
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. This should also include information regarding whether funding has been received from manufacturers of treatments in the network and/or whether some of the authors are content experts with professional conflicts of interest that could affect	**Page. 9**

PICOS = population, intervention, comparators, outcomes, study design.

* Text in italics indicateS wording specific to reporting of network meta-analyses that has been added to guidance from the PRISMA statement.

† Authors may wish to plan for use of appendices to present all relevant information in full detail for items in this section.

Supplementary S2: Search strategy

PubMed (August 2022)

Number	Search Terms	Number of Citations
1	papillomavirus infections [MeSH Terms]	33,848
2	((((((((((((Papillomavirus Infection[Title/Abstract]) OR (Human Papillomavirus Infection[Title/Abstract])) OR (Human Papillomavirus Infections[Title/Abstract])) OR (Papillomavirus Infection, Human[Title/Abstract])) OR (Papillomavirus Infections, Human[Title/Abstract])) OR (HPV Infection[Title/Abstract])) OR (HPV Infections[Title/Abstract])) OR (high-risk human papillomavirus infection[Title/Abstract])) OR (high-risk HPV infection[Title/Abstract])) OR (cervical intraepithelial neoplasia[Title/Abstract])) OR (hr-HPV[Title/Abstract])) OR (ASC-US[Title/Abstract])) OR (LSIL[Title/Abstract])) OR (CIN1[Title/Abstract])	25,719
3	1 or 2	49,674
4	Medicine, Chinese Traditional [MeSH Terms]	22,883
5	(((((Chinese herbal[Title/Abstract]) OR (Traditional Chinese Medicine[Title/Abstract])) OR (Chinese patent medicine[Title/Abstract])) OR (Chinese and Western Medicine[Title/Abstract])) OR (Integrated Chinese and Western Medicine[Title/Abstract])) OR (suppository[Title/Abstract])	39,983
6	4 or 5	52,175
7	**3 and 6**	**32**

Embase (August 2022)

Number	Search Terms	Number of Citations
1	MeSH descriptor: [Papillomavirus Infections] explode all trees	1,845
2	("Papillomavirus Infection" OR "Human Papillomavirus Infection" OR "Human Papillomavirus Infections" OR "Papillomavirus Infection, Human" OR "Papillomavirus Infections, Human" OR " HPV Infection" OR "HPV Infections" OR "high-risk human papillomavirus infection" OR "high-risk HPV infection" OR "cervical intraepithelial neoplasia" OR "hr-HPV" OR "ASC-US" OR "LSIL" OR "CIN1"):ti,ab,kw	2,577
3	1 or 2	3,563
4	MeSH descriptor: [Medicine, Chinese Traditional] explode all trees	1,549
5	("Chinese herbal" OR "Traditional Chinese Medicine" OR "Chinese patent medicine" OR "Chinese and Western Medicine"	14,452

	OR "Integrated Chinese and Western Medicine" OR "suppository"):ti,ab,kw	
6	4 or 5	16,743
7	**3 and 6**	**39**

Cochrane Central Register of Controlled Trials (August 2022)

Number	Search Terms	Number of Citations
1	'papillomavirus infection'/exp	1,845
2	'Papillomavirus Infection':ab,ti OR 'Human Papillomavirus Infection':ab,ti OR 'Human Papillomavirus Infections':ab,ti OR 'Papillomavirus Infection, Human':ab,ti OR 'HPV Infection':ab,ti OR 'HPV Infections':ab,ti OR 'high-risk human papillomavirus infection':ab,ti OR 'high-risk HPV infection':ab,ti OR 'cervical intraepithelial neoplasia':ab,ti OR 'hr-HPV':ab,ti OR 'ASC-US':ab,ti OR 'LSIL':ab,ti OR 'CIN1':ab,ti	1,916
3	1 or 2	3,787
4	'Medicine, Chinese Traditional'/exp	8,061
5	'Chinese herbal':ab,ti OR 'Traditional Chinese Medicine':ab,ti OR 'Chinese patent medicine':ab,ti OR 'Chinese and Western Medicine':ab,ti OR 'Integrated Chinese and Western Medicine':ab,ti OR 'suppository':ab,ti	6,654
6	4 or 5	10,275
7	**3 and 6**	**16**

Web of Science (August 2022)

Number	Search Terms	Number of Citations
1	TS=(Papillomavirus Infection OR Human Papillomavirus Infection OR Human Papillomavirus Infections OR Papillomavirus Infection, Human OR HPV Infection OR HPV Infections OR high-risk human papillomavirus infection OR high-risk HPV infection OR cervical intraepithelial neoplasia OR hr-HPV OR ASC-US OR LSIL OR CIN1)	67,076
2	TS=(Chinese herbal OR Traditional Chinese Medicine OR Chinese patent medicine OR Chinese and Western Medicine OR Integrated Chinese and Western Medicine OR suppository)	124,976
3	**1 and 2**	**120**

Supplementary S3: Reference list of the included RCTs

[1]Tang M. Y., Tang D. Y., Li J. F. (2018).A clinical study on treating high-risk HPV persistent infection with the Baofukang suppository plus rhIFN. Clinical Journal of Chinese Medicine. (04),72-74.

[2]Wang Y. J. (2019). Effects of recombinant human interferon-α2a suppository combined with Baofukang suppository in the treatment of cervical high-risk human papillomavirus infection on HPV DNA load and negative rate. Chinese Journal of Clinical Rational Drug Use. (16),87-89. doi:10.15887/j.cnki.13-1389/r.2019.16.048.

[3]Wang L., Zhou H. J. (2021). Efficacy of Recombinant Human Interferon Combined with Baofukang Suppositories in the Treatment of High-Risk Cervical HPV Infection. Chinese Journal of Hemorheology. 31(1):90-93. DOI:10.3969/j.issn.1009-881X.2021.01.021.

[4]Wang Y. P., Xu J., Li Y., et.al. (2021). Effect of Baofukang suppository combined with interferon suppository on high-risk human papillomavirus infection patients and changes in HPV-DNA, inflammatory factors and immune function. Guizhou Medical Journal. (01),39-40.

[5]Wu Y. M. (2015). Efficacy observation of recombinant interferon α-2b suppository combined with Baofukang suppository in the treatment of cervical high-risk papillomavirus subclinical infection. New Chinese Medicine. (09),145-146. doi:10.13457/j.cnki.jncm.2015.09.068.

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[9]Zhu K. X. (2018). Observation on the effect of recombinant human interferon α-2a suppository combined with Baofukang suppository in the treatment of cervical high-risk HPV infection. Henan Medical Research. (04),723-724.

[10]Zhu L. F., Xu Y. (2021). Efficacy of Baofukang suppository combined with interferon α-2b in the treatment of chronic cervicitis complicated with human papillomavirus infection. Journal of Navy Medicine. (03),343-346.

[11]Chen Y. Q. (2021). Analysis of the effect of recombinant human interferon α-2b suppository combined with Baofukang suppository in the treatment of patients with chronic cervicitis and high-risk HPV infection. Strait Pharmaceutical Journal. (05),155-156.

[12]Chen C. Y., Huang R. S. (2022). Analysis of Clinical Efficacy of Interferon Combined with Baofukang Suppository in the Treatment of HR-HPV Infection. China & Foreign Medical Treatment. (13),86-89+97. doi:10.16662/j.cnki.1674-0742.2022.13.086.

[13] Chen J. (2020). Analysis of the application of Baofukang suppository combined with recombinant human interferon α-2b gel in the treatment of chronic cervicitis with high-risk HPV (HR-HPV) infection. Oriental medicinal diet. (11):42.

[14]Gao L. X. (2018). Clinical observation on chronic cervicitis combined with high-risk human papillomavirus infection treated by integrated traditional Chinese and Western medicine. Journal of Shanxi University of Chinese Medicine. (02),54-55.

[15]Geng C. C. (2020). Efficacy observation of recombinant human interferon α-2a combined with Baofukang suppository in the treatment of cervical high-risk HPV infection. Drug Evaluation. (08),27-29.

[16]Han Y. Q., Zhang L. L., Dai Q. L., et.al. (2019). Clinical study of recombinant human interferon α-2b combined with Baofukang suppository in the treatment of chronic cervicitis complicated with high-risk HPV infection. Journal of North Sichuan Medical College. (03),422-424.
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[18]Lai Z. F., Guo C., Xiao S. J., et.al. (2021). Clinical efficacy and safety of recombinant human interferon α2b suppository combined with Baofukang suppository in the treatment of cervical high-risk human papillomavirus infection. Chinese Journal of Clinical Rational Drug Use. (21),135-137. doi:10.15887/j.cnki.13-1389/r.2021.21.049.
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Supplementary S4: Basic features of the included studies

No.	Study ID	Sample size/ Experiment/Control	Age(years, $\bar{x}$±s)		Duration of disease($\bar{x}$±s)		Intervention		Intervention duration	Outcomes
			Experiment	Control	Experiment	Control	Experiment	Control		
1	Tang and Tang et al. (2018)	20/20	52.49 ± 4.60	53.02 ± 4.65	1.50 ± 0.35 (years)	1.56 ± 0.37 (years)	BFK+rhIFN	rhIFN	30 days	④
2	Wang (2019)	40/40	47.9 ± 11. 4	47.8 ± 11. 2	12.4 ± 8.8 (months)	12.3 ± 8.7 (months)	BFK+rhIFN	rhIFN	3 months	②③④
3	Wang and Zhou (2021)	60/60	35.26 ± 4.86	35.56 ± 5.10	7.51 ± 4.63 (months)	7.69 ± 5.12 (months)	BFK+rhIFN	rhIFN	30 days	②③④
4	Wang et al. (2021)	29/29	35.28 ± 4.90	35.64 ± 4.83	5.26 ± 1.78 (months)	5.13 ± 1.75 (months)	BFK+rhIFN	rhIFN	6 weeks	③
5	Wu (2015)	35/35	34.6 ± 4.1	33.9 ± 4.3	14.1 ± 3.3 (months)	13.7 ± 3.1 (months)	BFK+rhIFN	rhIFN	3 months	③
6	Wu and Zhang (2019)	50/50	38.06 ± 5.39	37.55 ± 4.55	3.32 ± 1.25 (years)	3.47 ± 1.13 (years)	BFK+rhIFN	rhIFN	30 days	②③④
7	Xiao and Deng (2020)	53/53	35.12 ± 6.11	34.98 ± 5.84	15.95 ± 4.65 (months)	16.14 ± 5.22 (months)	BFK+rhIFN	rhIFN	3 months	②④
8	Yang and Huang (2016)	73/73	35.56 ± 4.39	35.79 ± 4.42	3.48 ± 1.25 (years)	3.51 ± 1.19 (years)	BFK+rhIFN	rhIFN	27 days	②③
9	Zhu (2018)	33/33	47.37 ± 6.92	47.43 ± 6.84	NR	NR	BFK+rhIFN	rhIFN	30 days	②③④
10	Zhu and Xu (2021)	60/60	22 to 55	23 to 54	NR	NR	BFK+rhIFN	rhIFN	27 days	②
11	Chen (2021)	49/48	34.33 ± 2.49	34.28 ± 2.54	15.59 ± 1.52 (months)	15.48 ± 1.62 (months)	BFK+rhIFN	rhIFN	30 days	②③
12	Chen and Huang (2022)	120/120	40.22 ± 5.38	40.12 ± 5.46	7.39 ± 2.51 (months)	7.55 ± 2.36 (months)	BFK+rhIFN	rhIFN	30 days	③④
13	Cheng (2020)	45/45	45.5 ± 9.5	41.2 ± 9.9	11.2 ± 3.3 (months)	11.4 ± 3.7 (months)	BFK+rhIFN	rhIFN	6 weeks	③
14	Gao (2018)	38/34	35.45 ± 6.54	35.45 ± 6.54	NR	NR	BFK+rhIFN	rhIFN	6 weeks	③
15	Geng (2020)	39/39	34.01 ± 4.72	33.85 ± 4.56	NR	NR	BFK+rhIFN	rhIFN	30 days	②③④
16	Han et al. (2019)	50/50	38.71 ± 8.25	38.80 ± 8.14	NR	NR	BFK+rhIFN	rhIFN	3 months	②③④
17	He (2019)	48/48	35.16 ± 6.29	34.85 ± 6.17	12.18 ± 3.52 (months)	12.24 ± 3.49 (months)	BFK+rhIFN	rhIFN	40 days	②③④
18	Lai et al. (2021)	39/39	46.2 ± 3.5	46.2 ± 3.5	NR	NR	BFK+rhIFN	rhIFN	27 days	①④
19	Lai et al. (2022)	40/40	35.12 ± 4.08	35.32 ± 4.31	NR	NR	BFK+rhIFN	rhIFN	48 days	①④
20	Li (2018)	100/100	35.62 ± 2.19	35.92 ± 2.61	NR	NR	BFK+rhIFN	rhIFN	48 days	③④

No.	Study ID	Sample size/ Experiment/Control	Age(years, $\bar{x}$±s)		Duration of disease($\bar{x}$±s)		Intervention		Intervention duration	Outcomes
			Experiment	Control	Experiment	Control	Experiment	Control		
21	Li (2020)	35/35	35.3 ± 5.0	36.3 ± 4.4	3.34 ± 0.63 (years)	3.12 ± 0.57 (years)	BFK+rhIFN	rhIFN	27 days	②③④
22	Li (2021)	30/30	38.1 ± 5.4	38.1 ± 5.3	3.32 ± 1.24 (years)	3.31 ± 1.23 (years)	BFK+rhIFN	rhIFN	30 days	①④
23	Li et al. (2014)	50/50	NR	NR	NR	NR	BFK+rhIFN	rhIFN	30 days	④
24	Li et al. (2018)	73/73	35.56 ± 4.39	35.79 ± 4.42	3.48 ± 1.25 (years)	3.51 ± 1.19 (years)	BFK+rhIFN	rhIFN	27 days	②③
25	Liang et al. (2019)	30/30	35.4 ± 4.2	35.6 ± 4.1	3.3 ± 1.1 (years)	3.2 ± 1.1 (years)	BFK+rhIFN	rhIFN	27 days	①
26	Liu and Qi et al. (2016)	112/109	36.13 ± 11.93	37.28 ± 12.36	NR	NR	BFK+rhIFN	rhIFN	3 months	②
27	Liu and Huang et al. (2016)	60/60	39.3 ± 4.1	39.23 ± 4.16	NR	NR	BFK+rhIFN	rhIFN	30 days	②③④
28	Ma et al. (2021)	49/48	39.47 ± 6.01	39.47 ± 6.01	NR	NR	BFK+rhIFN	rhIFN	45 days	④
29	Mai et al. (2018)	44/44	44.58 ± 4.25	45.16 ± 4.41	4.87 ± 1.62 (years)	4.73 ± 1.84 (years)	BFK+rhIFN	rhIFN	30 days	②
30	Song et al. (2011)	53/35	36.5 ± 0.5	37.4 ± 0.6	NR	NR	BFK+rhIFN	rhIFN	24 days	④
31	Su et al. (2020)	91/82	49.91 ± 5.03	49.72 ± 4.84	18.30 ± 4.12 (months)	18.24 ± 4.06 (months)	BFK+rhIFN	rhIFN	3 months	②④
32	Li (2021)	40/40	34.78±6.33	34.56±6.27	NR	NR	BFK+rhIFN	rhIFN	30 days	②
33	Zhang (2016)	49/49	34.78±6.33	34.56±6.27	NR	NR	BFK+rhIFN	rhIFN	21 days	③
34	Cao (2017)	42/42	26.4 ± 3.0	26.2 ± 3.3	1.3 ± 0.5 (years)	1.1 ± 0.2 (years)	SJZ+rhIFN	rhIFN	54 days	②③
35	Han (2020)	49/49	55.85 ± 8.99	56.45 ± 9.56	2.13 ± 0.12 (years)	2.13 ± 0.13 (years)	SJZ+rhIFN	rhIFN	54 days	①③
36	Hu (2018)	90/90	35.67 ± 5.92	35.77 ± 5.93	2.18 ± 0.51 (years)	2.16 ± 0.52 (years)	SJZ+rhIFN	rhIFN	3 months	②③
37	Shen (2015)	46/46	39.74 ± 4.74	40.32 ± 4.56	7.04 ± 1.47 (months)	6.97 ± 1.52 (months)	SJZ+rhIFN	rhIFN	3 months	①③
38	Wu and Feng (2018)	53/53	40.26 ± 4.58	41.35 ± 4.54	NR	NR	SJZ+rhIFN	rhIFN	60 days	③
39	Pan and Zhang (2021)	47/47	38.79 ± 4.22	38.86 ± 4.15	3.42 ± 1.09 (years)	3.26 ± 1.06 (years)	KS+rhIFN	rhIFN	27 days	①③
40	Zhao et al. (2016)	40/40	18 to 60	18 to 60	NR	NR	KS+rhIFN/KS	rhIFN	3 months	②

No.	Study ID	Sample size/ Experiment/Control	Age(years, $\bar{x}$±s)		Duration of disease($\bar{x}$±s)		Intervention		Intervention duration	Outcomes
			Experiment	Control	Experiment	Control	Experiment	Control		
41	Cheng (2021)	60/60	34.4 ± 5.1	35.3 ± 4.3	7.1 ± 2.3 (months)	7.5 ± 2.4 (months)	ZMK+rhIFN	rhIFN	3 months	②③
42	Sun (2021)	52/52	37.19 ± 9.51	37.28±9.56	13.71±2.71 (years)	13.58±2.86 (years)	BFK+rhIFN	BFK	2 months	③④
43	Ying (2019)	62/62	37.2±4.6	38.4±4.7	1.8±0.8 (years)	1.9±1.4 (years)	BFK+rhIFN	BFK	54 days	②
44	Du (2020)	43/43	37.56±3.12	38.10±3.24	1.52±0.43 (years)	1.63±0.39 (years)	BFK+rhIFN	BFK	54 days	②④
45	Xu and Nie (2022)	35/35	37.56±3.12	38.10±3.24	1.52±0.43 (years)	1.63±0.39 (years)	BFK+rhIFN	BFK	4 weeks	②③④
46	Ma (2019)	41/41	23～61	25～59	NR	NR	BFK+rhIFN	BFK	21 days	②③
47	Hu (2017)	58/58	42.19±3.82	43.76±2.06	16.57±4.32 (months)	18.52±4.37 (months)	BFK+rhIFN	BFK	64 days	②④
48	Xu (2016)	66/54	37.03 ± 9.33	37. 03 ± 9. 33	persistent high-risk HPV infection	persistent high-risk HPV infection	BFK	rhIFN	3 months	②
49	Zhang (2017)	40/40	25～65	25～65	NR	NR	BFK	rhIFN	3 months	①
50	Wu et al. (2018)	55/55	20～53	20～53	NR	NR	BFK	rhIFN	6 weeks	④
51	Zhang (2019)	51/51	38.57 ± 2.35	38.16±1.45	NR	NR	BFK	rhIFN	3 months	②③④
52	Ye et al. (2015)	40/40	35.1 ± 5.1	34.8±4.7	3.6±1.0 (months)	3.7±1.2 (months)	BFK	rhIFN	6 weeks	②④
53	Huang and Chen (2012)	20/20	26.3 ± 3.7	28.1±3.2	NR	NR	SJZ	rhIFN	60 days	①
54	Huang et al. (2013)	30/30	23～54	24～54.5	NR	NR	SJZ	rhIFN	60 days	①③
55	Li (2017)	60/60	36.54±6.48	36.69±6.17	NR	NR	SJZ	rhIFN	60 days	③
56	Liu (2017)	23/23	38.6±1.2	37.4±1.6	NR	NR	SJZ	rhIFN	60 days	①③
57	Qiu (2017)	51/48	31.25±9.23	s	NR	NR	SJZ	rhIFN	60 days	③
58	Du (2018)	30/30	29.42±4.31	29.39±4.28	5.42±1.27 (months)	5.37±1.30 (months)	SJZ	rhIFN	60 days	②③
59	Hua (2019)	40/40	34.23±1.85	33.52±1.30	NR	NR	SJZ	rhIFN	20 days	②③
60	Zhang (2019)*	40/40	35.6±2.6	36.9±3.5	8.6±2.0 (months)	10.2±2.3 (months)	SJZ	rhIFN	60 days	③

NR = no detailed information; BFK = Baofukang suppository; SJZ = Compound seabuckthorn seed oil suppository; KS = Kushen gel; ZMK = Zhimikang suppository; rhIFN = recombinant human interferon. ①the

rate of HR-HPV clearance follow-up at 6 months; ②the rate of HR-HPV clearance after treatment; ③the clinical effectiveness rate; ④Adverse reactions.

Supplementary S5: The product information (raw materials, labeled efficacy, indications, extraction procedure) of Chinese patent medicines

Name	Raw materials	Labeled efficacy	Indications	Extraction procedure
Baofukang suppository	Zedoary Turmeric Oil, Borneolum Syntheticum	Break the stasis of qi, build muscle and relieve pain.	It is used for the disease of subordination caused by dampness and heat stasis, the symptoms are large amount of banding, yellow color, and sometimes itching of the genitals; Mold vaginitis, senile vaginitis, cervical erosion see the above symptoms.	Flavor the oil and ice chips, add to the suitable ethanol, stir to dissolve. Take it separately Polytibial oxygen (40) stearate 1235g and polyethylene glycol 4000 200g, heated to melt. To transform, add macrogol 400 120g and laurazone 17.5g, stir well and add. The above liquid is stirred well, poured into the suppository mold, cooled and taken out to make 1000 capsules.
Compound seabuckthorn seed oil suppository	Seabuckthorn Seed Oil, Cnidii Fructus, Olibanum, Myrrha, Sophorae Fla Vescentis Radix, Calamina, Borneolum Syntheticum	Clear heat and dampness, reduce swelling and pain, kill insects and itch, and activate blood and muscle.	For cervical erosion caused by hot and humid bets. Symptoms: large amount of belt, yellow or yellow-white, bloody vaginal discharge or bleeding after sexual intercourse, vulvar itching, swelling and pain, waist and abdomen swelling, etc.	Crush the five flavors such as cnidii fructus, olibanum, myrrha, sophorae fla vescentis radix and calamina into the finest powder. The ice chips are finely ground, mixed with the above powder, and mixed. Take another glycerol gelatin matrix 1550g (gelatin 400g, glycerol 650g, boric acid 50g, distilled water 450g), heat and melt in a 75 °C water bath, add 150ml of sea buckthorn seed oil and water at the same temperature, quickly emulsify into a viscous gum, add the above powder, mix well, and pour it into the plug mold when the bubbles disappear, and after cooling, make 1000 capsules, which is obtained.
Kushen gel	Matrine	Clear heat and dampness, kill insects and relieve itching.	It is used for underband, pubic itching caused by humid heat bets. The symptoms are that the amount is large, thick as tofu dregs or yellow foam, its smell, vaginal flushing, swelling, vulvar pain and itching, even itching, frequent urination and astringency, bitter and sticky mouth, constipation or pond unpleasant, yellow urine; Mold vaginitis and trichomonas vaginitis are seen in the above symptoms.	Add 667ml of water to Matrine, add dilute hydrochloric acid dropwise, stir to dissolve, and adjust the pH value to 4 ~ 5 with dilute hydrochloric acid, and the solution is reserved; Take another 100g of glycerol and 30g of sodium carboxymethylcellulose, mix well, add Matrine while stirring, add an appropriate amount of water, mix well, and make 1000g, which is obtained.

Zhimikang suppository	Phellodendri Chinensis Cortex, Sophorae Fla Vescentis Radix, Catechu, Aluminum Potassium Sulfate, Borneolum Syntheticum	Clear heat and detoxification, dry and wet convergence.	It is used for the disease caused by humid heat bets, the symptoms are large amount of banding, thick yellow color, odor, or dry stool; Bacterial vaginosis, trichomonas vaginosis, cervical erosion see the above symptoms.	Catechu and aluminum potassium sulfate crushed into fine powder; Borneolum syntheticum chips; Phellodendri chinensis cortex and sophorae fla vescentis radix participate in water decoction three times, the first time 2 hours, the second and third times 1 hour each, combined with decoction; Filtrate, the filtrate is concentrated to a clear paste with a relative density of 1.09 ~ 1.11 (80 ± 5 °C), ethanol is added to make the ethanol content 75%, stand to precipitate, take the supernatant to recover ethanol, oncentrate to an appropriate amount, spray dry, mix well with the above fine powder, sieve, add to the matrix made of olyoxyethylene monostearate cool 2000-2060g and glycerol 20ml, mix, perfusion, inject into the suppository mold, cool, make 1000 capsules.

Supplementary S6: Risk-of-bias judgments for the included RCTs

Study ID	Random sequence generation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome	Selective outcome reporting	Overall bias
Cao (2017)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Chen (2021)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Chen and Huang (2022)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Cheng (2020)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Cheng (2021)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Du (2018)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Du (2020)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Gao (2018)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Geng (2020)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Han (2020)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Han et al. (2019)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
He (2019)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Hu (2017)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Hu (2018)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Hua (2019)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Huang and Chen (2012)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Huang et al. (2013)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Lai et al. (2019)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Lai et al. (2022)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Li (2017)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Li (2018)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Li (2020)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Li (2021)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Li (2021)*	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Li et al. (2014)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Li et al. (2018)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Liang et al. (2019)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Liu (2017)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Liu and Huang et al. (2016)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Liu and Qi et al. (2016)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Ma (2019)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Ma et al. (2021)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Mai et al. (2018)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Pan and Zhang (2021)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Qiu (2017)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Shen (2015)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Song et al. (2011)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Su et al. (2020)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Sun (2021)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Tang and Tang et al. (2018)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Wang (2019)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Wang and Zhou (2021)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Wang et al. (2021)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Wu (2015)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Wu and Feng (2018)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Wu and Zhang (2019)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Wu et al. (2018)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Xiao and Deng (2020)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Xu (2016)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Xu and Nie (2022)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Yang and Huang (2016)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk

Ye et al. (2015)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Ying (2019)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Zhang (2016)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Zhang (2017)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Zhang (2019)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Zhang (2019)*	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Zhao et al. (2016)	Unclear	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Zhu (2018)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk
Zhu and Xu (2021)	Low risk	Unclear	High risk	Low risk	Low risk	Unclear	Low risk

Supplementary S7: GRADE assessment for NMA—the rate of HR-HPV clearance follow-up at 6 months

GRADE (grading of recommendations assessment, development, and evaluation) working group grades of evidence (or certainty of evidence): high quality—very confident true effect lies close to that of estimate of effect; moderate quality—moderately confident in effect estimate; true effect is likely to be close to estimate of effect, but there is a possibility that it is substantially different; low quality—confidence in effect estimate is limited; true effect may be substantially different from estimate of effect; very low quality: very little confidence in effect estimate; true effect is likely to be substantially different from estimate of effect.

ntion	Comparator	Direct evidence		Indirect evidence		Network meta-analysis	
		Odds Ratio (95% CrI)	Quality of evidence	Odds Ratio (95% CrI)	Quality of evidence	Odds Ratio (95% CrI)	Final network rating
BFK+rhIFN	rhIFN	3.4 (0.9, 15.5)	Very low	—	—	3.4 (0.9, 15.5)	Very low
SJZ+rhIFN	rhIFN	3.2 (0.4, 25.8)	Very low	—	—	3.2 (0.4, 25.8)	Very low
KS+rhIFN	rhIFN	3.2 (0.2, 55.5)	Very low	—	—	3.2 (0.2, 55.5)	Very low
BFK	rhIFN	0.4 (0.02, 8.4)	Very low	—	—	0.4 (0.02, 8.4)	Very low
SJZ	rhIFN	0.1 (0.01, 0.6)	Very low	—	—	0.1 (0.01, 0.6)	Very low
BFK+rhIFN	SJZ	—	—	36.5 (4.0, 570.1)	Very low	36.5 (4.0, 570.1)	Very low
SJZ+rhIFN	SJZ	—	—	34.9 (2.5, 753.5)	Very low	34.9 (2.5, 753.5)	Very low
KS+rhIFN	SJZ	—	—	34.5 (1.3, 1319.2)	Very low	34.5 (1.3, 1319.2)	Very low
BFK	SJZ	—	—	4.5 (0.1, 195.4)	Very low	4.5 (0.1, 195.4)	Very low
BFK+rhIFN	BFK	—	—	8.1 (0.3, 248.3)	Very low	8.1 (0.3, 248.3)	Very low
SJZ+rhIFN	BFK	—	—	7.8 (0.4, 149.7)	Very low	7.8 (0.4, 149.7)	Very low
KS+rhIFN	BFK	—	—	7.7 (0.2, 302.0)	Very low	7.7 (0.2, 302.0)	Very low
BFK+rhIFN	KS+rhIFN	—	—	7.6 (0.1, 496.1)	Very low	7.6 (0.1, 496.1)	Very low
SJZ+rhIFN	KS+rhIFN	—	—	1.0 (0.03, 35.9)	Very low	1.0 (0.03, 35.9)	Very low
BFK+rhIFN	SJZ+rhIFN	—	—	1.0 (0.1, 13.9)	Very low	1.0 (0.1, 13.9)	Very low

CrI = credible intervals; BFK = Baofukang suppository; SJZ = Compound seabuckthorn seed oil suppository; KS = Kushen gel; ZMK = Zhimikang suppository; rhIFN

= recombinant human interferon.

Supplementary S8: GRADE assessment for NMA—the rate of HR-HPV clearance after treatment

GRADE (grading of recommendations assessment, development, and evaluation) working group grades of evidence (or certainty of evidence): high quality—very confident true effect lies close to that of estimate of effect; moderate quality—moderately confident in effect estimate; true effect is likely to be close to estimate of effect, but there is a possibility that it is substantially different; low quality—confidence in effect estimate is limited; true effect may be substantially different from estimate of effect; very low quality: very little confidence in effect estimate; true effect is likely to be substantially different from estimate of effect.

Intervention	Comparator	Direct evidence		Indirect evidence		Network meta-analysis	
		Odds Ratio (95% CrI)	Quality of evidence	Odds Ratio (95% CrI)	Quality of evidence	Odds Ratio (95% CrI)	Final network rating
BFK+rhIFN	rhIFN	3.5 (2.7, 4.6)	Low	2.8 (1.4, 5.7)	Low	3.7 (2.8, 4.9)	Low
SJZ+rhIFN	rhIFN	3.5 (1.4, 9.3)	Very low	—	—	3.5 (1.4, 9.3)	Very low
KS+rhIFN	rhIFN	6.9 (2.0, 26.2)	Very low	—	—	6.9 (2.0, 26.2)	Very low
ZMK+rhIFN	rhIFN	2.5 (0.8, 7.9)	Very low	—	—	2.5 (0.8, 7.9)	Very low
BFK	rhIFN	0.9 (0.5, 1.6)	Low	1.2 (0.7, 2.0)	Low	1.0 (0.7, 1.5)	Low
SJZ	rhIFN	0.1 (0.03, 0.4)	Very low	—	—	0.1 (0.03, 0.4)	Very low
KS	rhIFN	3.0 (0.9, 10.9)	Very low	—	—	3.0 (0.9, 10.9)	Very low
BFK+rhIFN	SJZ	—	—	33.0 (9.4, 141.6)	Very low	33.0 (9.4, 141.6)	Very low
SJZ+rhIFN	SJZ	—	—	31.9 (6.6, 177.5)	Very low	31.9 (6.6, 177.5)	Very low
KS+rhIFN	SJZ	—	—	63.0 (10.8, 453.5)	Very low	63.0 (10.8, 453.5)	Very low
ZMK+rhIFN	SJZ	—	—	23.0 (4.3, 137.0)	Very low	23.0 (4.3, 137.0)	Very low
BFK	SJZ	—	—	9.1 (2.5, 39.3)	Very low	9.1 (2.5, 39.3)	Very low
KS	SJZ	—	—	27.4 (4.6, 184.7)	Very low	27.4 (4.6, 184.7)	Very low
BFK+rhIFN	BFK	3.2 (1.9, 5.3)	Low	3.8 (2.4, 4.3)	Low	3.6 (2.5, 5.4)	Low

SJZ+rhIFN	BFK	—	—	3.5 (1.3, 10.0)	Very low	3.5 (1.3, 10.0)	Very low
KS+rhIFN	BFK	—	—	6.9 (1.9, 27.3)	Very low	6.9 (1.9, 27.3)	Very low
ZMK+rhIFN	BFK	—	—	2.5 (0.8, 8.4)	Very low	2.5 (0.8, 8.4)	Very low
KS	BFK	—	—	3.0 (0.8, 11.4)	Very low	3.0 (0.8, 11.4)	Very low
BFK+rhIFN	ZMK+rhIFN	—	—	1.4 (0.5, 4.6)	Very low	1.4 (0.5, 4.6)	Very low
SJZ+rhIFN	ZMK+rhIFN	—	—	1.4 (0.3, 6.1)	Very low	1.4 (0.3, 6.1)	Very low
KS+rhIFN	ZMK+rhIFN	—	—	2.7 (0.5, 15.2)	Very low	2.7 (0.5, 15.2)	Very low
KS	ZMK+rhIFN	—	—	1.2 (0.2, 6.4)	Very low	1.2 (0.2, 6.4)	Very low
BFK+rhIFN	KS	—	—	1.2 (0.3, 4.4)	Very low	1.2 (0.3, 4.4)	Very low
SJZ+rhIFN	KS	—	—	1.2 (0.2, 5.6)	Very low	1.2 (0.2, 5.6)	Very low
KS+rhIFN	KS	—	—	2.3 (0.4, 14.3)	Very low	2.3 (0.4, 14.3)	Very low
BFK+rhIFN	SJZ+rhIFN	—	—	1.0 (0.4, 2.8)	Very low	1.0 (0.4, 2.8)	Very low
KS+rhIFN	SJZ+rhIFN	—	—	2.0 (0.4, 10.0)	Very low	2.0 (0.4, 10.0)	Very low
KS+rhIFN	BFK+rhIFN	—	—	1.9 (0.5, 7.3)	Very low	1.9 (0.5, 7.3)	Very low

CrI = credible intervals; BFK = Baofukang suppository; SJZ = Compound seabuckthorn seed oil suppository; KS = Kushen gel; ZMK = Zhimikang suppository; rhIFN = recombinant human interferon.

Supplementary S9: GRADE assessment for NMA—the clinical effectiveness rate

GRADE (grading of recommendations assessment, development, and evaluation) working group grades of evidence (or certainty of evidence): high quality—very confident true effect lies close to that of estimate of effect; moderate quality—moderately confident in effect estimate; true effect is likely to be close to estimate of effect, but there is a possibility that it is substantially different; low quality— confidence in effect estimate is limited; true effect may be substantially different from estimate of effect; very low quality: very little confidence in effect estimate; true effect is likely to be substantially different from estimate of effect.

Intervention	Comparator	Direct evidence		Indirect evidence		Network meta-analysis	
		Odds Ratio (95% CrI)	Quality of evidence	Odds Ratio (95% CrI)	Quality of evidence	Odds Ratio (95% CrI)	Final network rating
BFK+rhIFN	rhIFN	2.6 (2.1, 3.2)	Moderate	2.1 (0.8, 5.6)	Low	2.6 (2.1, 3.2)	Low
SJZ+rhIFN	rhIFN	1.8 (1.2, 2.7)	Low	—	—	1.8 (1.2, 2.7)	Low
KS+rhIFN	rhIFN	3.7 (1.2, 12.2)	Very low	—	—	3.7 (1.2, 12.2)	Very low
ZMK+rhIFN	rhIFN	2.6 (1.0, 6.8)	Very low	—	—	2.6 (1.0, 6.8)	Very low
BFK	rhIFN	1.0 (0.6, 1.5)	Very low	1.0 (0.6, 1.9)	Very low	1.0 (0.6, 1.5)	Very low
SJZ	rhIFN	0.2 (0.1, 0.4)	Low	—	—	0.2 (0.1, 0.4)	Low
BFK+rhIFN	SJZ	—	—	12.4 (6.6, 24.7)	Low	12.4 (6.6, 24.7)	Very low
SJZ+rhIFN	SJZ	—	—	8.6 (4.1, 18.4)	Low	8.6 (4.1, 18.4)	Very low
KS+rhIFN	SJZ	—	—	17.8 (4.9, 68.4)	Very low	17.8 (4.9, 68.4)	Very low
ZMK+rhIFN	SJZ	—	—	12.5 (4.2, 40.0)	Very low	12.5 (4.2, 40.0)	Very low
BFK	SJZ	—	—	4.8 (2.3, 10.1)	Very low	4.8 (2.3, 10.1)	Very low
BFK+rhIFN	BFK	2.5 (1.4, 4.4)	Low	2.7 (1.6, 3.9)	Very low	2.6 (1.7, 4.1)	Very low
SJZ+rhIFN	BFK	—	—	1.8 (0.9, 3.4)	Very low	1.8 (0.9, 3.4)	Very low
KS+rhIFN	BFK	—	—	3.7 (1.1, 13.5)	Very low	3.7 (1.1, 13.5)	Very low
ZMK+rhIFN	BFK	—	—	2.6 (0.9, 7.6)	Very low	2.6 (0.9, 7.6)	Very low
BFK+rhIFN	ZMK+rhIFN	—	—	1.0 (0.4, 2.6)	Very low	1.0 (0.4, 2.6)	Very low

SJZ+rhIFN	ZMK+rhIFN	—	—	0.7 (0.2, 1.9)	Very low	0.7 (0.2, 1.9)	Very low
KS+rhIFN	ZMK+rhIFN	—	—	1.4 (0.3, 6.7)	Very low	1.4 (0.3, 6.7)	Very low
BFK+rhIFN	SJZ+rhIFN	—	—	1.5 (0.9, 2.4)	Low	1.5 (0.9, 2.4)	Low
KS+rhIFN	SJZ+rhIFN	—	—	2.1 (0.6, 7.4)	Very low	2.1 (0.6, 7.4)	Very low
KS+rhIFN	BFK+rhIFN	—	—	1.4 (0.5, 4.9)	Very low	1.4 (0.5, 4.9)	Very low

CrI = credible intervals; BFK = Baofukang suppository; SJZ = Compound seabuckthorn seed oil suppository; KS = Kushen gel; ZMK = Zhimikang suppository; rhIFN = recombinant human interferon.

Supplementary S10: DIC values and I-square of fixed-effect model and random-effect model

Outcomes	Model	DIC	I-square
the rate of HR-HPV clearance follow-up at 6 months	fixed- effect	72.51	48%
	random-effect	53.29	3%
the rate of HR-HPV clearance after treatment	fixed- effect	123.15	14%
	random-effect	119.86	0%
the clinical effectiveness rate	fixed- effect	145.27	14%
	random-effect	145.63	7%

Supplementary S11: Ranking probabilities and SUCRA values

	BFK+rhIFN	SJZ+rhIFN	KS+rhIFN	ZMK+rhIFN	BFK	SJZ	KS	rhIFN
The rate of HR-HPV clearance follow-up at 6 months								
Best	0.29	0.31	0.36	—	0.03	0.00	—	0.00
2nd	0.39	0.31	0.23	—	0.05	0.00	—	0.02
3rd	0.26	0.26	0.22	—	0.08	0.00	—	0.18
4th	0.04	0.08	0.11	—	0.14	0.01	—	0.62
5th	0.02	0.04	0.07	—	0.53	0.17	—	0.18
Worst	0.00	0.00	0.01	—	0.17	0.82	—	0.00
SUCRA (%)	78.16	75.4	73.17	—	28.16	4.20	—	40.9
The rate of HR-HPV clearance after treatment								
Best	0.05	0.12	0.66	0.05	0.00	0.00	0.12	0.00
2nd	0.28	0.25	0.16	0.12	0.00	0.00	0.18	0.00
3rd	0.39	0.23	0.08	0.14	0.00	0.00	0.16	0.00
4th	0.23	0.24	0.06	0.24	0.01	0.00	0.22	0.00
5th	0.05	0.16	0.04	0.38	0.08	0.00	0.27	0.05
6th	0.00	0.00	0.00	0.03	0.46	0.00	0.02	0.48
7th	0.00	0.00	0.00	0.04	0.45	0.01	0.03	0.47
Worst	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00
SUCRA (%)	72.15	70.04	90.77	57.26	23.39	0.01	63.86	22.5

The clinical effectiveness rate								
Best	0.14	0.01	0.60	0.25	0.00	0.00	—	0.00
2nd	0.46	0.06	0.17	0.30	0.00	0.00	—	0.00
3rd	0.37	0.26	0.13	0.24	0.01	0.00	—	0.00
4th	0.03	0.64	0.08	0.17	0.06	0.00	—	0.02
5th	0.00	0.03	0.01	0.02	0.43	0.00	—	0.51
6th	0.00	0.00	0.01	0.02	0.50	0.01	—	0.47
Worst	0.00	0.00	0.00	0.00	0.00	0.99	—	0.00
SUCRA (%)	78.61	56.19	87.39	75.78	26.12	0.00	—	25.91

Ranking probabilities were estimated using a parametric bootstrap procedure with 10,000 resamples. SUCRA = Surface Under the Cumulative Ranking curve; BFK = Baofukang suppository; SJZ = Compound seabuckthorn seed oil suppository; KS = Kushen gel; ZMK = Zhimikang suppository; rhIFN = recombinant human interferon.

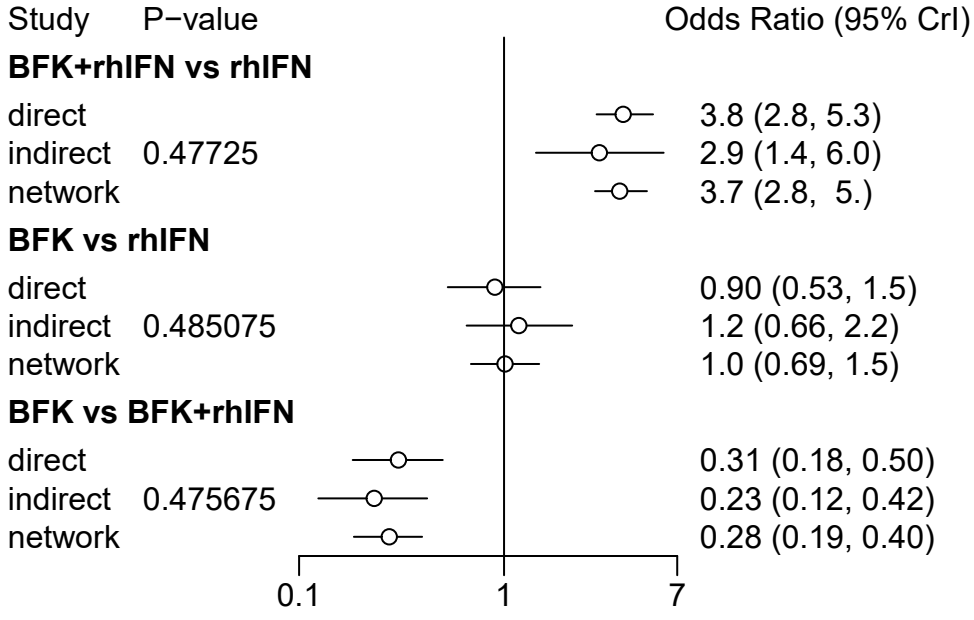
Supplementary S12: The detailed adverse reactions of the included studies

No.	Study ID	Experiment			Control		
		Intervention	Adverse reactions	events/ totals (proportion %)	Intervention	Adverse reactions	events/ totals (proportion %)
1	Tang and Tang et al. (2018)	BFK+rhIFN	vagina hot; secretion increase; leukorrhea abnormal	4/20 (20%)	rhIFN	secretion increase; leukorrhea abnormal	3/20 (15%)
2	Wang (2019)	BFK+rhIFN	Vaginal dryness; secretion increase	2/40 (5%)	rhIFN	muscle aches; secretion increase	3/40 (7.5%)
3	Wang and Zhou (2021)	BFK+rhIFN	secretion increase; leukorrhea abnormal; vaginal discomfort	10/60 (8.33%)	rhIFN	secretion increase; leukorrhea abnormal; vaginal discomfort	13/60 (21.67%)
4	Wu and Zhang (2019)	BFK+rhIFN	vagina hot	2/50 (4%)	rhIFN	vagina hot	3/50 (6%)
5	Xiao and Deng (2020)	BFK+rhIFN	vagina hot; Itching of the vulva	3/53 (5.66%)	rhIFN	vagina hot; Itching of the vulva	5/53 (9.43%)
6	Zhu (2018)	BFK+rhIFN	vagina hot; muscle aches	2/33 (6.06%)	rhIFN	vaginal dryness	1/33 (3.03%)
7	Geng (2020)	BFK+rhIFN	gastrointestinal discomfort; skin allergic; Itching of the vulva	5/39 (12.82%)	rhIFN	gastrointestinal discomfort; skin allergic; Itching of the vulva	3/39 (7.69%)
8	Han et al. (2019)	BFK+rhIFN	vagina hot	3/50 (6%)	rhIFN	vagina hot	2/50 (4%)
9	He (2019)	BFK+rhIFN	vaginal dryness; vaginal redness and swelling; vaginal itching	4/48 (8.33%)	rhIFN	vaginal dryness; vaginal itching	6/48 (12.50%)
10	Lai et al. (2021)	BFK+rhIFN	vagina hot; vaginal dryness	5/39 (12.82%)	rhIFN	vagina hot; vaginal dryness	4/39 (10.26%)
11	Lai et al. (2022)	BFK+rhIFN	vaginal discomfort; vagina hot	2/40 (5%)	rhIFN	vaginal discomfort; vagina hot; frequent urination	6/40 (15%)
12	Li (2018)	BFK+rhIFN	vaginal discomfort; vagina hot; frequent urination	9/100 (9%)	rhIFN	vaginal discomfort; vagina hot; frequent urination	11/100 (11%)
13	Li (2020)	BFK+rhIFN	secretion increase; rash	2/ 35 (5.71%)	rhIFN	secretion increase; rash	3/35 (8.57%)
14	Li (2021)	BFK+rhIFN	chills	1/30 (3.3%)	rhIFN	secretion increase	2/30 (6.7%)
15	Li et al. (2014)	BFK+rhIFN	itching of the vulva	2/50 (4%)	rhIFN	nothing	0/50 (0)
16	Liu and Huang et al. (2016)	BFK+rhIFN	skin allergies	1/60 (1.67%)	rhIFN	gastrointestinal discomfort; skin allergies	2/60 (3.33%)
17	Ma et al. (2021)	BFK+rhIFN	fever	1/49 (2.04%)	rhIFN	lower abdomen swelling	1/48 (2.08%)
18	Su et al. (2020)	BFK+rhIFN	vagina hot; secretion increase; leukorrhea abnormal	10/91 (10.99%)	rhIFN	secretion increase; leukorrhea abnormal; vaginal itching	13/82 (15.85%)

No.	Study ID	Experiment			Control		
		Intervention	Adverse reactions	events/ totals (proportion %)	Intervention	Adverse reactions	events/ totals (proportion %)
19	Song et al. (2011)	BFK+rhIFN	nothing	0/53 (0)	rhIFN	nothing	0/35 (0)
20	Chen and Huang (2022)	BFK+rhIFN	fever; vaginal dryness; vaginal itching	11/120 (9.16%)	rhIFN	fever; vaginal dryness; vaginal itching	8/120 (6.67%)
21	Sun (2021)	BFK+rhIFN	no detailed information	5/52 (9.62%)	BFK	no detailed information	8/52 (15.38%)
22	Du (2020)	BFK+rhIFN	vagina hot; vaginal itching	2/43 (4.65%)	BFK	vagina hot; vaginal itching	4/43 (9.3%)
23	Xu and Nie (2022)	BFK+rhIFN	nausea and vomiting	2/35 (5.71%)	BFK	nausea and vomiting	2/35 (5.71%)
24	Hu (2017)	BFK+rhIFN	fever; secretion increase; rash; soreness in the lower back	9/58 (15.52%)	BFK	fever; secretion increase; rash;	10/58 (17.24%)
25	Wu et al. (2018)	BFK	vaginal itching; vaginal edema	1/55 (1.8%)	rhIFN	vaginal itching; vaginal edema	2/55 (3.6%)
26	Zhang (2019)	BFK	nothing	0/51 (0)	rhIFN	nothing	0/51 (0)
27	Ye et al. (2015)	BFK	nothing	0/40 (0)	rhIFN	nothing	0/40 (0)

BFK = Baofukang suppository; rhIFN = recombinant human interferon.

1.The rate of hr-HPV clearance after treatment



2.The clinical effectiveness rate