Expert Consultation Form for *Clinical Comprehensive Evaluation of Antiretroviral Drugs for Post-occupational Exposure Prophylaxis of HIV* (First Round)

Dear Expert,

Greetings!

The project "Clinical Comprehensive Evaluation of Antiretroviral Drugs for Post-occupational Exposure Prophylaxis of HIV" is a drug clinical comprehensive evaluation research project approved by the Guangxi Zhuang Autonomous Region Health Commission in 2023. This project aims to construct an evaluation index system based on six dimensions: safety, efficacy, economy, innovativeness, suitability, and accessibility. Centering around two main lines—technical evaluation and policy evaluation—and employing methods such as literature analysis, expert consultation/questionnaire surveys, and real-world studies, it seeks to conduct a comprehensive evaluation of commonly used antiretroviral regimens for patients with occupational HIV exposure. The goal is to provide evidence and reference for clinical treatment drug selection and decision-making regarding inclusion in the National Essential Medicines List and the National Reimbursement Drug List.

According to the Guidelines for the Management of Drug Clinical Comprehensive Evaluation (2021 Edition Trial), we have designated safety, efficacy, economy, innovativeness, suitability, and accessibility as the first-level indicators. An initial pool of evaluation indicators was developed through literature retrieval, and the Delphi method (expert consultation) will be used to modify, screen, score, and assign weights to these indicators. This process will ultimately establish the detailed scoring criteria for the clinical comprehensive value of antiretroviral drugs for post-occupational exposure prophylaxis of HIV. Given your extensive clinical experience and expertise, our research team cordially invites you to serve as an expert for this study. Your suggestions will serve as crucial evidence for our work!

This consultation form consists of four parts: basic information of the expert, importance evaluation of indicators at each level, survey on the expert's level of authority, and scoring/weighting of first-level indicators. Each indicator is rated on a scale of 1-5 based on its importance (5 = Very Important, 4 = Relatively Important, 3 = Moderately Important, 2 = Not Important, 1 = Very Unimportant). Please indicate the corresponding score based on your professional judgment by marking it clearly (with a √). If you have suggestions for modification, please note them in the corresponding space; if you wish to add items, please list them in the "Addition" column.

We sincerely hope for your valuable feedback and greatly appreciate your support and assistance.

Wishing you smooth work and a pleasant life!

For any inquiries, please contact: Name: Chen Chaoguang Phone: 19158686030

Clinical Comprehensive Evaluation of Antiretroviral Drugs for Post-occupational Exposure Prophylaxis of HIV Project Team

March 2024

Part I

Expert Basic Information Survey

Name		Age	
Gender		Email	
Highest Degree		Years of Work Experience	
Title		Position	
Professional Field	□Clinical Medicine □Pharmacy □Hospital Management □Other		
Work Unit			

Part II

1. Importance Evaluation of First-level Indicators

Instructions: If you have suggestions for modification, please note them in the corresponding space; if you wish to add items, please list them in the "Addition" column. Each indicator is rated on a scale of 1-5 based on its importance (5 = Very Important, 4 = Relatively Important, 3 = Moderately Important, 2 = Not Important, 1 = Very Unimportant). Please indicate the corresponding score based on your professional judgment by marking it clearly (with a √).

Indicator	**Modification Suggestions**	**Importance Score**				
Effectiveness		5	4	3	2	1
Safety		5	4	3	2	1
Economy		5	4	3	2	1
Innovation		5	4	3	2	1
Applicability		5	4	3	2	1
Accessibility		5	4	3	2	1

2. Importance Evaluation of Second-level Indicators

Instructions: Same as above.

Indicator		**Modification Suggestions**	**Importance Score**				
Effectiveness	Clinical Recommendation Level		5	4	3	2	1
	Evidence-based Medicine Evidence		5	4	3	2	1
	Addition：		5	4	3	2	1
Safety	Incidence of Adverse		5	4	3	2	1

Indicator		Modification Suggestions	Importance Score				
	Reactions						
	Evidence-based Medicine Evidence		5	4	3	2	1
	Applicability in Special Populations		5	4	3	2	1
	Drug-Drug Interaction Information		5	4	3	2	1
	Addition：		5	4	3	2	1
Economy	Average Daily Treatment Cost		5	4	3	2	1
	Cost-Utility Analysis		5	4	3	2	1
	Addition：		5	4	3	2	1
Innovation	Clinical Innovation		5	4	3	2	1
	Service Innovation		5	4	3	2	1
	Industrial Innovation		5	4	3	2	1
	Addition：		5	4	3	2	1
Applicability	Technical suitability		5	4	3	2	1
	Prescribing Appropriateness		5	4	3	2	1
	Patient compliance		5	4	3	2	1
	Addition：		5	4	3	2	1
Accessibility	Availability		5	4	3	2	1
	Affordability		5	4	3	2	1
	Addition：		5	4	3	2	1

3. Importance Evaluation of Third-level Indicators

Instructions: Same as above.

Indicator		Modification Suggestions	Importance Score				
Effectiveness							
Clinical Recommendation Level	National Diagnosis and Treatment Guidelines		5	4	3	2	1
	Guideline Class I Recommendation		5	4	3	2	1
	Guideline Class II and Below Recommendation		5	4	3	2	1
	Expert Consensus Recommendation		5	4	3	2	1
	Addition：		5	4	3	2	1
Evidence-based Medicine Evidence	Efficacy Results Based on Systematic Review/Meta-analysis		5	4	3	2	1
	Clinical Efficacy in Real-World Studies		5	4	3	2	1
	Addition：		5	4	3	2	1
Safety							
Incidence of Adverse Reactions	Mild Adverse Reactions (CTC Grade 1)		5	4	3	2	1
	Moderate Adverse Reactions (CTC Grades 2-3)		5	4	3	2	1
	Severe Adverse Reactions (CTC Grades 4-5)		5	4	3	2	1
	Addition：		5	4	3	2	1
Evidence-based Medicine Evidence	Safety Results Based on Systematic Review/Meta-analysis		5	4	3	2	1
	Safety Results in Real-World Studies		5	4	3	2	1
	Addition：		5	4	3	2	1
Applicability in Special	Applicable to the Elderly		5	4	3	2	1
	Applicable to Pregnant		5	4	3	2	1

Indicator		Modification Suggestions	Importance Score				
Populations	Women						
	Applicable to Lactating Women		5	4	3	2	1
	Applicable to Individuals with Liver Impairment		5	4	3	2	1
	Applicable to Individuals with Renal Impairment		5	4	3	2	1
	Addition：		5	4	3	2	1
Drug-Drug Interaction Information	Resulting Adverse Reactions Mild/Moderate, No Dose Adjustment Required		5	4	3	2	1
	Resulting Adverse Reactions Severe, Dose Adjustment Required		5	4	3	2	1
	Contraindication: Prohibited to Take Concurrently		5	4	3	2	1
	Addition：		5	4	3	2	1
Economy							
Average Daily Treatment Cost	Lowest Daily Treatment Cost		5	4	3	2	1
	Medium Daily Treatment Cost		5	4	3	2	1
	Highest Daily Treatment Cost		5	4	3	2	1
Cost-Utility Analysis	Direct Medical Costs		5	4	3	2	1
	Quality-Adjusted Life Years (QALYs)		5	4	3	2	1
	Addition：		5	4	3	2	1
Innovation							
Clinical Innovation	Fills the Gap in Clinical Prevention/Treatment of Occupational HIV Exposure		5	4	3	2	1
	Demonstrates Significant Superiority		5	4	3	2	1

Indicator		Modification Suggestions	Importance Score				
	(e.g., in Safety, Efficacy, or Practicality) Compared to Existing Drugs for HIV Occupational Exposure Prevention/Treatment						
	Represents a Novel Mechanism of Action in the Field of HIV Occupational Exposure Treatment		5	4	3	2	1
	Technological Innovation (in aspects such as treatment regimen, applicable population, dosing interval, dosage form, administration route, split packaging, storage conditions)		5	4	3	2	1
	Addition：		5	4	3	2	1
Service Innovation	Optimizes the Diagnosis and Treatment Service Process for Occupational HIV Exposure, Improving Efficiency in Activities such as Service Appointment, Utilization, and Follow-up		5	4	3	2	1
	Improves the Utilization Efficiency of Regional or Institutional Diagnosis and Treatment Service Resources for Occupational HIV Exposure		5	4	3	2	1
	Addition：		5	4	3	2	1
Industrial	Self-developed Original		5	4	3	2	1

Indicator		Modification Suggestions	Importance Score				
Innovation	Drug or Globally First Generic Drug						
	Granted Domestic Patent for Drug Structure or Formulation Process		5	4	3	2	1
	Granted International Patent for Drug Structure or Formulation Process		5	4	3	2	1
	Addition：		5	4	3	2	1
Applicability							
Technical suitability	Drug Packaging and Labeling Information		5	4	3	2	1
	Drug Shelf Life		5	4	3	2	1
	Storage Conditions		5	4	3	2	1
	Addition：		5	4	3	2	1
Prescribing Appropriateness	Drug Efficacy Precisely Corresponds to Indication		5	4	3	2	1
	Dosing is Easy to Master		5	4	3	2	1
	Contraindications are Easy to Exclude		5	4	3	2	1
	Patient Medication Tolerance is Low		5	4	3	2	1
	Addition：		5	4	3	2	1
Patient compliance	Palatability		5	4	3	2	1
	Appropriate Size and Shape		5	4	3	2	1
	Appropriate Dosage Form		5	4	3	2	1
	Appropriate Dosing Frequency		5	4	3	2	1
	Appropriate Treatment Duration		5	4	3	2	1
	Addition：		5	4	3	2	1
Accessibility							
Availability	Regional Coverage		5	4	3	2	1
	Hospital Coverage		5	4	3	2	1
	Community Pharmacy Coverage		5	4	3	2	1

Indicator		Modification Suggestions	Importance Score				
	Addition：		5	4	3	2	1
Affordability	National Medical Insurance Reimbursement Status		5	4	3	2	1
	Proportion of Annual Per Capita Drug Treatment Cost to Annual Per Capita Disposable Income of Households		5	4	3	2	1
	Addition：		5	4	3	2	1

Part III

1. Expert's Basis of Judgment

Instructions: When evaluating the above indicators, what is the degree of influence each of the following four bases of judgment had on your assessment? Please indicate by marking √ in the corresponding column.

Basis of Judgment	Degree of Influence on Expert Judgment		
	High	Medium	Low
Practical Experience			
Theoretical Analysis			
Reference to Domestic & International Literature			
Intuition			

2. Expert's Familiarity with the Six Dimension Indicators

Instructions: Please mark √ in the appropriate column.

Familiarity	Very Familiar	Relatively Familiar	Moderately Familiar	Somewhat Unfamiliar	Very Unfamiliar
Effectiveness					
Safety					
Economy					
Innovation					
Applicability					
Accessibility					

Part IV

1. Scoring and Weighting of First-level Indicators

Instructions: Please rank Effectiveness, Safety, Economy, Innovation, Applicability, Accessibility in order of importance (from left to right, decreasing importance; if equal, no order is needed). Then, assign scores and weights (using a percentage system, where the total sum of weights equals 100).

Ranking						
Score/Weight Assignment						

Expert Consultation Form for *Clinical Comprehensive Evaluation of Antiretroviral Drugs for Post-occupational Exposure Prophylaxis of HIV* (Second Round)

Dear Expert,
Greetings!

Thank you for participating in the first round of consultation! This round will provide feedback on the statistical results and invite you to conduct a final evaluation of the revised indicator system and assign weights using the Analytic Hierarchy Process (AHP).

Indicators in red font have been modified based on comprehensive expert opinions. Please rate these indicators. A total of 5 indicators have been modified. Indicators with a coefficient of variation (Cv) > 0.4 from the first Delphi round results have been deleted.

This consultation form consists of four parts: basic information of the expert, feedback on first-round Delphi results and scoring of modified indicators, survey on the expert's level of authority, and expert consultation on indicator weights using the Analytic Hierarchy Process.

We sincerely hope for your valuable feedback and greatly appreciate your support and assistance.

Wishing you smooth work and a pleasant life!

For any inquiries, please contact: Name: Chen Chaoguang Phone: 19158686030

Clinical Comprehensive Evaluation of Antiretroviral Drugs for Post-occupational Exposure Prophylaxis of HIV Project Team
May 2025

Part I
Expert Basic Information Survey

Name		Age	
Gender		Email	
Highest Degree		Years of Work Experience	
Title		Position	
Professional Field	□Clinical Medicine □Pharmacy □Hospital Management □Other		
Work Unit			

Part II
1. First-level Indicator Results Feedback (This section does not require filling)

Indicator	Mean	Standard Deviation	Coefficient of Variation (Cv)	Adopted
Effectiveness	4.50	1.0	0.22	Yes
Safety	5.0	0	0	Yes
Economy	4.08	1.0	0.24	Yes
Innovation	3.50	0.80	0.23	Yes
Applicability	4.33	0.78	0.18	Yes
Accessibility	3.75	1.28	0.34	Yes

2. Second-level Indicator Results Feedback

Indicators in red are modified. Please rate these indicators: 1-5 points (5 = Very Important, 4 = Relatively Important, 3 = Moderately Important, 2 = Not Important, 1 = Very Unimportant)

	Original Indicator	Modification Suggestions	Mean	Std. Dev.	Cv	Adopted
Effectiveness	Clinical Recommendation Level	-	4.92	0.29	0.06	Yes
	Evidence-based Medicine Evidence	Clinical Efficacy Based on Systematic Review/Meta-analysis	Your Score:			
		Clinical Efficacy Based on Real-World Studies (data collected within Guangxi in this study)	Your Score:			
Safety	Incidence of Adverse Reactions	Incidence of Adverse Reactions in Package Insert (CTC Grades 3-5)	Your Score:			
	Evidence-based Medicine Evidence	Post-marketing Relative Safety Based on Systematic Review/Meta-analysis	Your Score:			

		Relative Safety Based on Real-World Studies (data collected within Guangxi in this study)	Your Score:			
	Applicability in Special Populations	-	4.17	0.58	0.14	Yes
	Drug-Drug Interaction Information	-	3.92	0.9	0.23	Yes
Economy	Average Daily Treatment Cost	-	4.67	0.89	0.19	Yes
	Cost-Utility Analysis	-	4.10	0.99	0.24	Yes
Innovation	Clinical Innovation	-	4.25	1.06	0.25	Yes
	Service Innovation	-	2.42	1.0	0.41	No
	Industrial Innovation	-	3.25	1.22	0.37	Yes
Applicability	Technical suitability	-	4.33	0.78	0.18	Yes
	Prescribing Appropriateness	-	4.17	0.94	0.22	Yes
	Patient compliance	-	4.67	0.49	0.11	Yes
Accessibility	Availability	-	4.50	0.80	0.18	Yes
	Affordability	-	4.0	0.95	0.24	Yes

Part III

1. Expert's Basis of Judgment

Instructions: When evaluating the above indicators, what is the degree of influence each

of the following four bases of judgment had on your assessment? Please indicate by marking √ in the corresponding column.

Basis of Judgment	Degree of Influence on Expert Judgment		
	High	Medium	Low
Practical Experience			
Theoretical Analysis			
Reference to Domestic & International Literature			
Intuition			

2. Expert's Familiarity with the Indicators

Instructions: Please mark √ in the appropriate column.

Familiarity	Very Familiar	Relatively Familiar	Moderately Familiar	Somewhat Unfamiliar	Very Unfamiliar
Your Choice					

Part IV

This study plans to use the Analytic Hierarchy Process (AHP) to compare the relative importance of indicators at each level in pairs. AHP is used to determine the weights of various elements. It decomposes a complex problem into multiple levels and determines their relative importance through expert pairwise comparisons of elements at different levels. The scoring criteria for each level refer to the "Saaty Relative Importance Scale". Please choose the appropriate ratio based on your understanding. Thank you for your support!

Saaty Relative Importance Scale

Scale Value	**Definition**
$a_{ij}=1$	Equal importance of elements *i* and *j*
$a_{ij}=3$	*i* moderately more important than *j*
$a_{ij}=5$	*i* strongly more important than *j*
$a_{ij}=7$	*i* very strongly more important than *j*
$a_{ij}=9$	*i* absolutely more important than *j*
$a_{ij}=2,4,6,8$	Intermediate values
Reciprocal values	If $a_{ij} = k$, then $a_{ji} = 1/k$

Scoring Requirements:

(1) Scoring is divided into 9 levels. 9 = Extremely Important, 7 = Strongly Important, 5 = Moderately Important, 3 = Slightly Important, 1 = Equally Important. 2, 4, 6, 8 are intermediate values between the above judgments.
(2) Scoring must satisfy the consistency principle for factors at the same level. For example, if A > B and B > C, then A > C.

1. First-level Indicator Judgment Matrix

Instructions: - represents the corresponding reciprocal, no need to fill. To ensure consistency, it is recommended to first rank these 6 indicators by importance before pairwise comparison.

Indicator	Effectiveness	Safety	Economy	Innovation	Applicability	Accessibility
Effectiveness	1	-	-	-	-	-
Safety		1	-	-	-	-
Economy			1	-	-	-
Innovation				1	-	-
Applicability					1	-
Accessibility						1

2. Second-level Indicator Judgment Matrices

2.1 Pairwise comparison of the importance of the 3 indicators under the first-level indicator "Efficacy" (To ensure consistency, it is recommended to first rank these 3 indicators by importance before pairwise comparison.)

Indicator	Clinical Recommendation Level	Clinical Efficacy Based on Systematic Review/Meta-analysis	Clinical Efficacy Based on Real-World Studies
Clinical Recommendation Level	1	-	-
Clinical Efficacy Based on Systematic Review/Meta-analysis		1	-
Clinical Efficacy Based on Real-World Studies			1

2.2 Pairwise comparison of the importance of the 5 indicators under the first-level indicator "Safety" (To ensure consistency, it is recommended to first rank these 5 indicators by importance before pairwise comparison.)

Indicator	Incidence of Adverse	Post-marketing Relative Safety Based on Systematic	Relative Safety Based on	Applicability in Special Populations	Drug-Drug Interaction Informatio

	Reactions in Package Insert	Review/Meta-analysis	Real-World Studies		n
Incidence of Adverse Reactions in Package Insert	1	-	-	-	-
Post-marketing Relative Safety Based on Systematic Review/Meta-analysis		1	-	-	-
Relative Safety Based on Real-World Studies			1	-	-
Applicability in Special Populations				1	-
Drug-Drug Interaction Information					1

2.3 Pairwise comparison of the importance of the 2 indicators under the first-level indicator "Economy" (To ensure consistency, it is recommended to first rank these 2 indicators by importance before pairwise comparison.)

Indicator	Average Daily Treatment Cost	Cost-Utility Analysis
Average Daily Treatment Cost	1	-
Cost-Utility Analysis		1

2.4 Pairwise comparison of the importance of the 2 indicators under the first-level indicator "Innovativeness" (To ensure consistency, it is recommended to first rank these 2 indicators by importance before pairwise comparison.)

Indicator	Clinical Innovation	Industrial Innovation
Clinical Innovation	1	-
Industrial Innovation		1

2.5 Pairwise comparison of the importance of the 3 indicators under the first-level indicator "Suitability" (To ensure consistency, it is recommended to first rank these 3 indicators by importance before pairwise comparison.)

Indicator	Technical suitability	Prescribing Appropriateness	Patient compliance

Technical suitability	1	-	-
Prescribing Appropriateness		1	-
Patient compliance			1

2.6 Pairwise comparison of the importance of the 2 indicators under the first-level indicator "Accessibility" (To ensure consistency, it is recommended to first rank these 2 indicators by importance before pairwise comparison.)

Indicator	Availability	Affordability
Availability	1	-
Affordability		1