Supplementary

Table S1 Full list of clinical questions

#	Question	Notes and considerations
FOCUS 1. Specimen selecting, collecting, transportation and receiving?		
1	What specimens can be used for SARS-COV2 detection?	Consider: • Kinds of specimen • The value of different kinds of specimen
2	How to increase detection positive rate?	• Which measures can be used ?
3	How to take specimen?	• The way of take different kinds of specimen
4	Labeling of specimen	• What content should be included?
5	Package of specimen	• How to package the specimen?
6	Which laboratory can detect SARS-COV2?	• How to confirm which laboratory can perform gene test of SARS-COV2
7	Conditions of specimen transportation?	• Temperature for transportation. • How to guarantee the safety?
8	Specimen receiving	• How to receive specimen and take out them from transportation container?
FOCUS 2. Nucleic acid isolation and amplification		
1	How to pre-treat different kinds of specimen	• A detail measures for different kinds of specimen pre-treatment.
2	Virus inactivation	• Which method can be used? • Which temperature is suitable? • How to do it ?
3	What should we do after virus inactivation and before nucleic acid isolation?	• How to protect biosafety and contamination of laboratory?
4	Is one kind of reagent enough?	• How many kinds of reagent should be selected?
5	Results analysis	• How to report? • When the test result is in the gray zone, what measures can be take?
FOCUS 3. quality control		
1	Quality of specimen collecting	Sample preservation solution should caution
2	Specimen transportation	Time and temperature
3	How long the specimen can be storage before treatment	Treat specimen immediately
4	Setting of control and quality control	How many control and quality control should be used and cautions
5	How to use 75% ethanol correctly?	It may inhibit the amplification
6	Aerosols contamination	How to decrease the risk of aerosols formation
FOCUS 4. Biosafety management and decotanmination		
1	Personal protection	• How to protect the staff involved in specimen collecting, transportation and treatment. • How to protect the staff during performing the test? • Should the individual who collects the specimen attend training? • How many people performing the test together is suitable?
2	Waste proposal	• How to package the waste? • What measures can be taken in terminal disinfection? • How to treat the used protective equipment (such as clothes, gloves and so on)
3	Decontamination of nucleic acid	• How to treat medical waste which contact with nucleic acid • How to treat the instruments after test? • How to clean the floor? • How to treat the amplification products?
4	Management of waste treatment	How to ensure the safety of waste treatment?

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Table S2 Literature review topics

#	Question	Final search terms	Limits
Topic 1. Specimen type and priority,collecting, transpotation and reciving			
1	What specimen can be used for detection and what is preferred?	PubMed: (SARS-COV2 OR 2019-nCOV OR coronavirus) AND (specimen or sample)	None
2	How to collect Nasopharyngeal swab and Oropharyngeal swab?	PubMed: (SARS-COV2 OR 2019-nCOV OR coronavirus) AND (Nasopharyngeal swab OR Oropharyngeal swab)	None
3	How to transport specimen?	PubMed: (SARS-COV2 OR 2019-nCOV OR coronavirus) and (specimen or sample) and(transport OR transportation)	None
Topic 2. Nucleic acid isolation and amplification			
1	How to homogenize the sputum?	PubMed: sputum AND (homogenize OR homogenization OR liquidation)	None
2	How to inactivate the 2019-nCOV?	PubMed: (SARS-COV2 OR 2019-nCOV OR coronavirus) AND (inactivate or inactivation)	None
3	How to select reagent for 2019-nCOV detection?	PCR AND “performance validation” OR ((SARS-COV2 OR 2019-nCOV OR coronavirus) AND sensitivity)	None
Topic 3. Quality control			
1	How to ensure the quality of specimen?	PubMed: (Sample OR Specimen) AND PCR	None
2	How to set quality control for nucleic acid detection?	PubMed: PCR AND “quality control”	None
3	How to control the quality of results?	PubMed: PCR AND “quality control” AND report	None
Topic 4. Biosafety management and decontamination			
1	How to protect medical staff from infection?	PubMed: (SARS-COV2 OR 2019-nCOV OR coronavirus OR “Respiratory virus”) AND (protection OR biosafety)	None
2	How to protect biosafety during specimen transportation?	PubMed: (SARS-COV2 OR 2019-nCOV OR coronavirus OR virus) AND (transport OR transportation)	None
3	How to treat specimen safely?	PubMed: (SARS-COV2 OR 2019-nCOV OR coronavirus OR “respiratory viruses”) AND (“Nucleic acid isolation” OR “Nucleic acid extraction”) AND biosafety	None
4	How to dispose of waste products and specimen?	PubMed: (SARS-COV2 OR 2019-nCOV OR coronavirus OR “respiratory viruses”) AND (disinfect OR disinfection OR sterilization)	None

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Table S3 Search strategies

STAGE	INSTRUCTIONS
1.DEFINE SEARCH TERMS AND SEARCH STRINGS AND APPLY LIMITS	*Define search terms and search strings* • Construct and test search terms and strings • Create search strings that incorporate: o Medical subject headings (MeSH) (https://www.nlm.nih.gov/mesh/) o Free text key words • refine and test your search terms • Use the Search Strategy Recording Form to record your search strategy and number of hits at each stage, so that it can be replicated
2. SEARCH A SET LIST OF DATA SOURCES	• Conduct the literature search using a set list of sources, including online databases, online journals and relevant books • Record your results and clearly indicate the data source • Delete duplicate references and record • Share the completed Search Strategy Recording Form and Full Search Hits (unscreened) with all work group members. *Online databases* o PubMed – the mainly database for the literature search. o Wanfang data online (Chinese) o VIP databank(Chinese) o CNKI (Chinese) *Online journal search* • Search the following website: o http://www.nhc.gov.cn) o http://www.samr.gov.cn/
3. IDENTIFY RELEVENT ARTICLES (SCREENING)	*Screening* Identify and assess relevant studies according to the inclusion and exclusion criteria outlined below. This task occurs in two screening stages: • Screening stage 1: screen titles/abstracts according to the below exclusion criteria to identify relevant articles: o Not relevant to topic of interest • Screening stage 2: for any articles that are deemed relevant in stage 1 screening, retrieve the full text to assess more closely against the exclusion criteria below: *Exclude:* o Lack of science o Incorrect statistical method o Observational study
4. WRITE SUMMARIES	• extract the key content according to the topics • list all content and provide them to the work group.

Table S4a Oxford Grading

Level	sources	objects	metholds
1	Guidelines, Consensus, or standard	SARS-COV2	PCR
2	Data bank (Pubmed ,Wanfang or CNKI)	SARS-COV2	PCR
3	Data bank (Pubmed ,Wanfang or CNKI)	SARS-COV2	Molecular test (besides PCR)
4	Data bank (Pubmed ,Wanfang or CNKI)	Virus (besides SARS-COV2)	Molecular test (besides PCR)
5	Work group member's opinion		

Table S4b Grades of Recommendation

A	consistent level 1
B	consistent level 2
C	consistent level 3 or 4
D	level 5 evidence

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Table S5 Summary of respondents to Round 1 of modified-Delphi voting by institution

Table S5a A total of 36 responses were received, from 34 individual hospitals and institutions

	Hospital/Institution	Specialism	Work group member
1	China's PLA General Hospital/ Medical Laboratory Center	• Medical laboratory medicine Specialist	√
2	First Affiliated Hospital of Kunming Medical University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
3	Renmin hospital of Wuhan University /Laboratory Medicine Center	• Medical laboratory medicine Specialist	√
4	Shanghai general Hospital,Shanghai /Laboratory Medicine Center	• Medical laboratory medicine Specialist	√
5	The Second Hospital of Shandong University/ Laboratory Medicine Center	• Medical laboratory medicine Specialist	√
6	Gansu Provincial Hospital /The Institute of Clinical Research and Translational Medicine	• Medical laboratory medicine Specialist	√
7	Cancer Hospital Chinese Academy of Medical Sciences/ Department of Laboratory medicine	• Medical laboratory medicine Specialist	√
8	China-Japan Friendship Hospital/ Laboratory Department	• Medical laboratory medicine Specialist	√
9	Southwest Hospital/ Laboratory department	• Medical laboratory medicine Specialist	√
10	Nanfang Hospital of Southern Medical University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
11	The First Affiliated Hospital of Xi'an Jiaotong University/ Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
12	People's Hospital of Inner Mongolia Autonomous Region / Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
13	Huashan Hospital, Fudan University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
14	Zhongshan Hospital, Fudan University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
15	Eastern Hepatobiliary Surgery Hospital, Second Military Medical University /Department of Laboratory Medicine,	• Medical laboratory medicine Specialist	
16	Air Force Military Medical University / Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
17	960th Hospital of Chinese PLA /Department of Laboratory Diagnosis	• Medical laboratory medicine Specialist	
18	Guizhou province center for Clinical Laboratory	• Medical laboratory medicine Specialist	√
19	The First Hospital of Jilin University /Gene Diagnostic Center	• Medical laboratory medicine Specialist	
20	National center for clinical Laboratories	• Medical laboratory medicine Specialist	√
21	the First Affiliated Hospital of Hunan University of Traditional Chinese Medicine/ Medical Laboratory and Pathology Center	• Medical laboratory medicine Specialist	
22	the First Affiliated Hospital of Xi'an Medical College /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
23	the First Affiliated Hospital of Zhengzhou University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
24	the First Affiliated Hospital of Nanjing Medical University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
25	the First Affiliated Hospital of University of Science and Technology of China /Scientific Research Department	• Medical laboratory medicine Specialist	
26	Beijing Friendship Hospital, Capital Medical University/ Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
27	Tongji Medical College, Huazhong University of Science and Technology / Department of Laboratory Medicine, Tongji Hospital	• Medical laboratory medicine Specialist	
28	Peking University People's Hospital /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
29	Eastern Theater General Hospital;Nanjing /Department of Laboratory Medicine,	• Medical laboratory medicine Specialist	√
30	Center of Jiangsu Cancer Hospital/ Provincial Clinical Inspection	• Medical laboratory medicine Specialist	
31	Xinhua Hospital Affiliated to Shanghai Jiaotong University /Laboratory of Suzhou Branch	• Medical laboratory medicine Specialist	
32	Qilu Hospital of Shandong University/ Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
33	Xinjiang Production and Construction Corps Hospital/ Department of laboratory medicine	• Medical laboratory medicine Specialist	√
34	Yunnan Key Laboratory of Laboratory Medicine	• Medical laboratory medicine Specialist	√

Table S5b Consensus response at Delphi Round 1

Statement	Delphi Round 1		Consensus reached Y/N
	Number of responses	Number (%) of responses that agreed with statement (answered 7–9)	
1. Following specimen can be selected a) Nasopharyngeal swab, oropharyngeal swab, sputum and Bronchoalveolar lavage fluid (BALF) are suitable for detection. b) Feces can be tested for controlling the source of infection. c) The blood tests for the diagnosed patients can be used to monitor the therapeutic effect (further research support is required).	36	32(88.9%)	Y
2. Collecting one nasopharyngeal swab and one oropharyngeal swab at the same time in a single specimen collection tube.	36	36(100%)	Y
3. It is recommended to use lysate (supplied in the nucleic acid extraction kit) to replace of specimen preservation solution.	36	31(86.1%)	Y
4. It isrecommended that proteinase K (1 g/L) is used for homogenazing the sputum and BALF, and can be added in the collection container in advance.	36	36(100%)	Y
5. The specimen transportation container should be water-proof, breakage-proof, leak-proof, and resistant to high or low temperature and high pressure.	36	36(100%)	Y
6. it is recommended that two individuals are sent together for the transport of the specimens. If conditions permit, a specimen transfer monitoring device should be equipped.	36	36(100%)	Y
7. it is recommended that two individuals are sent together for the transport of the specimens. If conditions permit, a specimen transfer monitoring device should be equipped.	36	36(100%)	Y
8. Both the specimen delivery personnel and the receiving personnel should sign when the specimen is handed over to the concerned personnel.	36	36(100%)	Y
9. Virus inactivation can perform as follows: a) The virus can be inactivated by heating at 56 ℃ for 30 min or 60 ℃–65 ℃ for 20 min. The virus inactivation time is the effective time after the specimen reaches the set temperature. Due to the different types of sample collection containers, the time taken to reach the set temperature is also different, which should be tested in advance. b) The specimen is agitated gently, once every 10 minutes. In order to prevent specimen floating, a heavy object can be placed to cover them. c) The inactivation temperature can be adjusted according to the temperature used for the lysis of specimens by the extraction reagent, but it cannot be <56 ℃. the optimization of the inactivation conditions is carried out by experiments, showing that the sensitivity of nucleic acid detection is not affected significantly. Note: Virus inactivation may decrease the sensitivity of nucleic acid detection.	36	29(80.1%)	Y
10. Nasopharyngeal swab and oropharyngeal swab with cell lysate can be used directly for nucleic acid isolation. If necessary, virus inactivation steps can be added.	36	36(100%)	Y
11. Sputum be incubated for 15 min at 55 ℃ for homogenization . If proteinase K is not pre-added in the sputum collection cup, this step should be performed after virus inactivation.	36	33(91.7%)	Y
12. Automated nucleic acid extraction methods are recommended.	36	36(100%)	Y
13. The regent should contain at least two sites of the SARS-COV2 gene (open reading frame 1a/b and nucleocapsid protein or envelope protein E).	36	32(88.9%)	Y
14. the results should be reported as positive or negative .	36	31(86.1%)	Y
15. If the cell lysate or proteinase K is added to the specimen collection tube, the expiration date and storage conditions should meet the criteria.	36	36(100%)	Y
16. Specimens should be transported to the hospital within 2–4 h to shorten the time of detection.	36	36(100%)	Y
17. The specimens should be processed promptly.	36	36(100%)	Y
18. Setting reagent control,positive control , negative and positive quality control.	36	36(100%)	Y
19. Ice bath for 3–5 min or at room temperature for >10 min after heating or centrifuging for decreasing the risk of aerosol.	29	28(96.6%)	Y
20. A reasonable decrease in the amount of 75% ethanol used during the test	36	36(100%)	Y
21. Sample processing should be carried out at least by two or more individuals depending on the amount of specimen.	36	30(83.3%)	Y
22. It is recommended that individuals should protect themselves according to the three-level protection requirements during the whole process. If the conditions are not conducive, you should: a. three levels of protection, including work clothes, disposable work hats, double gloves, protective clothes, KN95/N95, or higher-level particulate protective masks or powered air-purifying respirator, protective face screen, work shoes or rubber boots and waterproof boot covers. If necessary, one can wear a waterproof apron or waterproof isolation clothing b. the specimen transport personnel can be protected by second-level protective equipment as well as 75% ethanol. c. the staff of specimen collecting, specimen transportation and in the amplification working area can appropriately decrease the protection level. However, laboratory clothes, disposable medical hat, disposable medical mask, single-layer glove, and shoe covers should be provided.	36	28(77.8%)	Y
23. All works about treat specimens should be carried out in a biological safety cabinet with an efflux function.	36	36(100%)	Y
24. Individuals involved in specimen collection must pass the biosafety training organized by the Department of Hospital Infection management or Superior Management.	36	36(100%)	Y
25. The waste generated during the test should be immediately transferred outside of the working area through the waste passage. It is recommended to use three-layer medical waste packaging bags.	36	36(100%)	Y
26. The terminal disinfection is carried out using a hydrogen peroxide disinfector.	36	27(75%)	Y
27. Protective clothing, shoe covers, gloves, and masks are sterilized with 75% ethanol and collected in three layers of medical waste packaging bags.	36	36(100%)	Y
28. In order to minimize the possibility of contamination of residual nucleic acid, decontamination of nucleic acid can be perform as follows: a) Medical waste should be treated with 0.55–1% chlorine-containing disinfectant. b) 75% ethanol is used to spray or wipe for disinfection treatment of the biosafety cabinets, pipettes;work surfaces, and other supplies(besides instruments) can use 0.55–1% chlorine-containing disinfectant. c) Floor disinfection should be done at least once a week . d) The amplification product should be packed tightly in a disposable medical garbage bag and transferred to the amplification product disposal area through the waste passage. The amplification products can also be treated by immersed in the disinfectant containing 0.55–1% chlorine solution (treatment >1 h is recommended) .	36	36(100%)	Y
29. The operator should dispose of the waste promptly and this should be recorded. The waste should not be removed from the laboratory without permission. Medical waste should be treated in accordance with the Administrative Measures on Medical Wastes in Medical and Health Institutions.	36	36(100%)	Y

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Table S6 Summary of respondents to Round 2 of modified-Delphi voting by institution

Table S6a A total of 36 responses were received, from 34 individual hospitals and institutions

	Hospital/Institution	Specialism	Work group member
1	China's PLA General Hospital/ Medical Laboratory Center	• Medical laboratory medicine Specialist	√
2	First Affiliated Hospital of Kunming Medical University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
3	Renmin hospital of Wuhan University /Laboratory Medicine Center	• Medical laboratory medicine Specialist	√
4	Shanghai general Hospital, Shanghai /Laboratory Medicine Center	• Medical laboratory medicine Specialist	√
5	The Second Hospital of Shandong University/ Laboratory Medicine Center	• Medical laboratory medicine Specialist	√
6	Gansu Provincial Hospital /The Institute of Clinical Research and Translational Medicine	• Medical laboratory medicine Specialist	√
7	Cancer Hospital Chinese Academy of Medical Sciences/ Department of Laboratory medicine	• Medical laboratory medicine Specialist	√
8	China-Japan Friendship Hospital/ Laboratory Department	• Medical laboratory medicine Specialist	√
9	Southwest Hospital/ Laboratory department	• Medical laboratory medicine Specialist	√
10	Nanfang Hospital of Southern Medical University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
11	The First Affiliated Hospital of Xi'an Jiaotong University/ Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
12	People's Hospital of Inner Mongolia Autonomous Region / Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
13	Huashan Hospital, Fudan University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
14	Zhongshan Hospital, Fudan University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
15	Eastern Hepatobiliary Surgery Hospital, Second Military Medical University /Department of Laboratory Medicine,	• Medical laboratory medicine Specialist	
16	Air Force Military Medical University / Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
17	960th Hospital of Chinese PLA /Department of Laboratory Diagnosis	• Medical laboratory medicine Specialist	
18	Guizhou province center for Clinical Laboratory	• Medical laboratory medicine Specialist	√
19	The First Hospital of Jilin University /Gene Diagnostic Center	• Medical laboratory medicine Specialist	
20	National center for clinical Laboratories	• Medical laboratory medicine Specialist	√
21	the First Affiliated Hospital of Hunan University of Traditional Chinese Medicine/ Medical Laboratory and Pathology Center	• Medical laboratory medicine Specialist	
22	the First Affiliated Hospital of Xi'an Medical College /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
23	the First Affiliated Hospital of Zhengzhou University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
24	the First Affiliated Hospital of Nanjing Medical University /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
25	the First Affiliated Hospital of University of Science and Technology of China /Scientific Research Department	• Medical laboratory medicine Specialist	
26	Beijing Friendship Hospital, Capital Medical University/ Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
27	Tongji Medical College, Huazhong University of Science and Technology / Department of Laboratory Medicine, Tongji Hospital	• Medical laboratory medicine Specialist	
28	Peking University People's Hospital /Department of Laboratory Medicine	• Medical laboratory medicine Specialist	
29	Eastern Theater General Hospital;Nanjing /Department of Laboratory Medicine,	• Medical laboratory medicine Specialist	√
30	Center of Jiangsu Cancer Hospital/ Provincial Clinical Inspection	• Medical laboratory medicine Specialist	
31	Xinhua Hospital Affiliated to Shanghai Jiaotong University / Laboratory of Suzhou Branch	• Medical laboratory medicine Specialist	
32	Qilu Hospital of Shandong University/ Department of Laboratory Medicine	• Medical laboratory medicine Specialist	√
33	Xinjiang Production and Construction Corps Hospital/ Department of laboratory medicine	• Medical laboratory medicine Specialist	√
34	Yunnan Key Laboratory of Laboratory Medicine	• Medical laboratory medicine Specialist	√

Table S6b Consensus response at Delphi Round 2

Statement	Delphi Round 1		Consensus reached Y/N
	Number of responses	Number (%) of responses that agreed with statement (answered 7–9)	
9. The virus can be inactivated by heating at 56 ℃ for 30 min or 60 ℃ –65 ℃ 20 min. Specimen preservation solution should contain RNA protectant.	36	34(94.4%)	Y
21. Sample processing should be carried out at least by two or more individuals.	36	36(100%)	Y
22. It is recommend that taking three levels of protection. If necessary, one can wear a waterproof apron or waterproof isolation clothing.	36	36(100%)	Y
26. The terminal disinfection is carried out using a hydrogen peroxide disinfector or other metholds.	36	36(100%)	Y

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Table S7 Quick reference guide to guidance statements

Specimen type and priority ,collecting, transportation and handover

1. Following specimen can be selected
   a) Nasopharyngeal swab, oropharyngeal swab, sputum and Bronchoalveolar lavage fluid (BALF) are suitable for detection.
   b) Feces can be tested for controlling the source of infection.
   c) The blood tests for the diagnosed patients can be used to monitor the therapeutic effect (further research support is required).
2. Collecting one nasopharyngeal swab and one oropharyngeal swab at the same time in a single specimen collection tube.
3. It is recommended to use lysate (supplied in the nucleic acid extraction kit) to replace of specimen preservation solution.
4. It is recommended that proteinase K (1 g/L) is used for homogenizing the sputum and BALF, and can be added in the collection container in advance.
5. Specimens should be sent to a laboratory that is qualified to perform SARS-COV2 nucleic acid testing and approved by the health administrative organization.
6. The specimen transportation container should be water-proof, breakage-proof, leak-proof, and resistant to high or low temperature and high pressure.
7. it is recommended that two individuals sent together for the specimen transportation . If conditions permit, a specimen transfer monitoring device should be equipped.
8. Both the specimen delivery personnel and the receiving personnel should sign when the specimen is handed over to the concerned personnel.

Nucleic acid isolation and amplification

9. The virus can be inactivated by heating at 56 ℃ for 30 min or 60 ℃–65 ℃ 20 min. Specimen preservation solution should contain RNA protectant.
10. Nasopharyngeal swab and oropharyngeal swab with cell lysate can be used directly for nucleic acid isolation. If necessary, virus inactivation steps can be added.
11. Sputum is incubated for 15 min at 55 ℃ for homogenization . If proteinase K is not pre-added in the sputum collection cup, this step should be performed after virus inactivation.
12. Automated nucleic acid extraction methods are recommended.
13. The regent should contain at least two sites of the SARS-COV2 gene (open reading frame 1a/b and nucleocapsid protein or envelope protein E).
14. The results should be reported as positive or negative .

Quality control

15. If the cell lysate or proteinase K is added to the specimen collection tube, the expiration date and storage conditions should meet the criteria.
16. Specimens should be transported to the hospital within 2–4 h to shorten the time of detection .
17. The specimens should be processed promptly.
18. Setting reagent control,positive control , negative and positive quality control.
19. Ice bath for 3–5 min or at room temperature for >10 min after heating or centrifuge for decreasing the risk of aerosol.
20. A reasonable decrease in the amount of 75% ethanol used during the test.

Biosafety management and decontamination of nucleic acid

21. Sample processing should be carried out at least by two or more individuals.
22. It is recommended to take three levels of protection. If necessary, one can wear a waterproof apron or waterproof isolation clothing.
23. All works about treat specimens should be carried out in a biological safety cabinet with an efflux function.
24. Individuals involved in specimen collection must pass the biosafety training organized by the Department of Hospital Infection Management or Superior Management.
25. The waste generated during the test should be immediately transferred outside of the working area through the waste passage. It is recommended to use three-layer medical waste packaging bags.
26. The terminal disinfection is carried out using a hydrogen peroxide disinfector or other methods.
27. Protective clothing, shoe covers, gloves, and masks are sterilized with 75% ethanol and collected in three layers of medical waste packaging bags.
28. In order to minimize the possibility of contamination of residual nucleic acid, decontamination of nucleic acid can be perform as follows:
   a) Medical waste should be treated with 0.55–1% chlorine-containing disinfectant.
   b) 75% ethanol is used to spray or wipe for disinfection treatment of the biosafety cabinets, pipettes;work surfaces, and other supplies(besides instruments) can use 0.55–1% chlorine-containing disinfectant.
   c) Floor disinfection should be done at least once a week .
   d) The amplification product should be packed tightly in a disposable medical garbage bag and transferred to the amplification product disposal area through the waste passage. The amplification products can also be treated by immersed in the disinfectant containing 0.55–1% chlorine solution (>1 h treatment >1 h is recommended).
29. The operator should dispose ofthe waste promptly and this should be recorded. The waste should not be removed from the laboratory without permission. Medical waste should be treated in accordance with the Administrative Measures on Medical Wastes in Medical and Health Institutions.

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