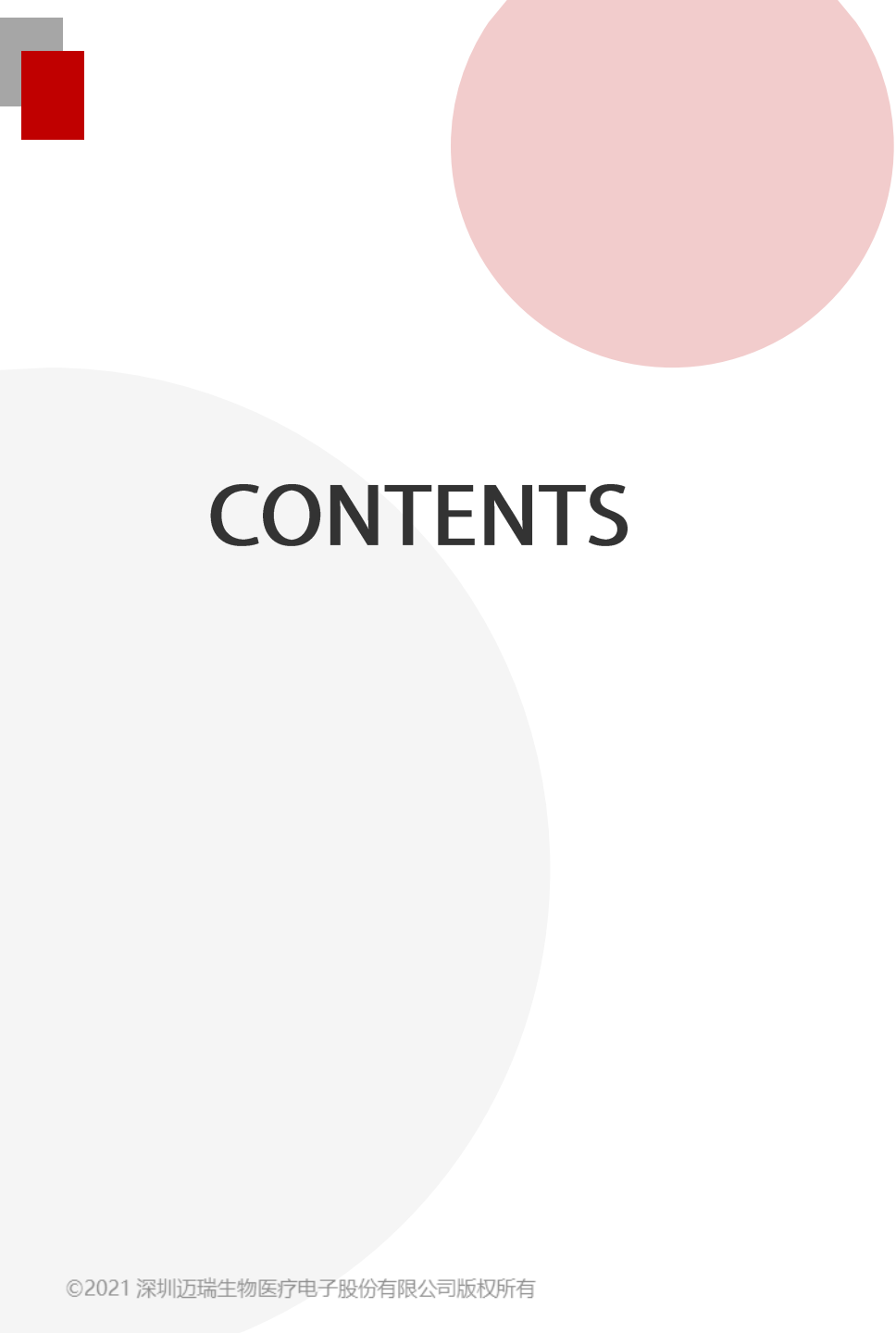


Case handling on abnormal UA results

IVD International Clinical Application Department

Celia Tang/50238545

2025/10/10



CONTENTS

01. Case Background



02. Case Analysis



03. Case Solution



04. Case Summary



Case Background

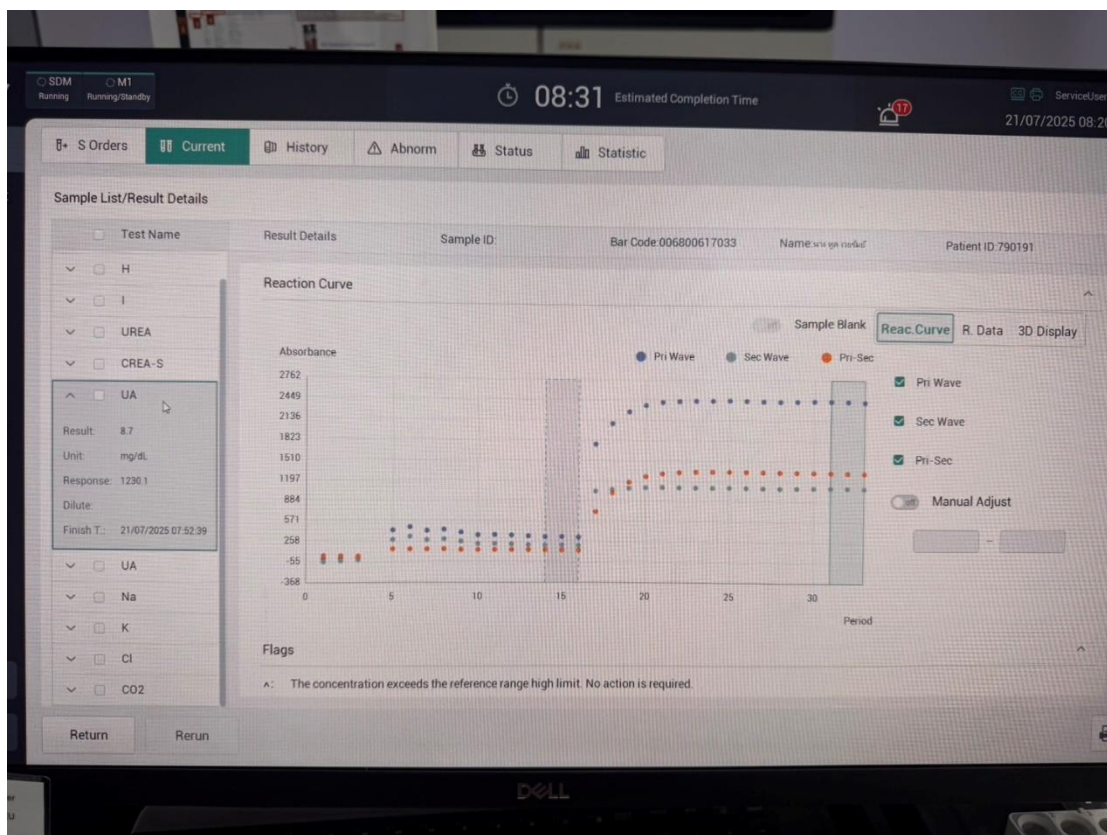
Background

Analysis

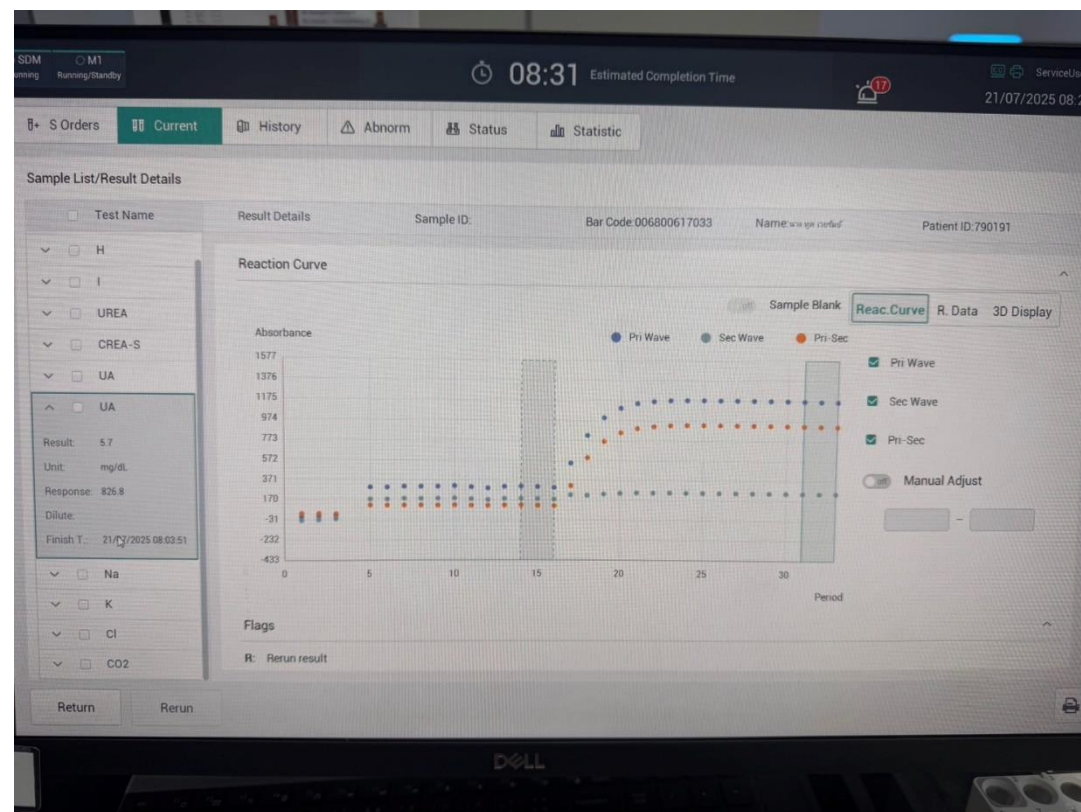
Solution

Summary

Feedback from Hospital B(Large testing volume 500-700 samples per day): There have been multiple cases where the initial test results and the faulty results showed interference or abnormal reaction curve,-- Can be the 1st results lower than the 2nd one, and can the 1st higher than the 2nd



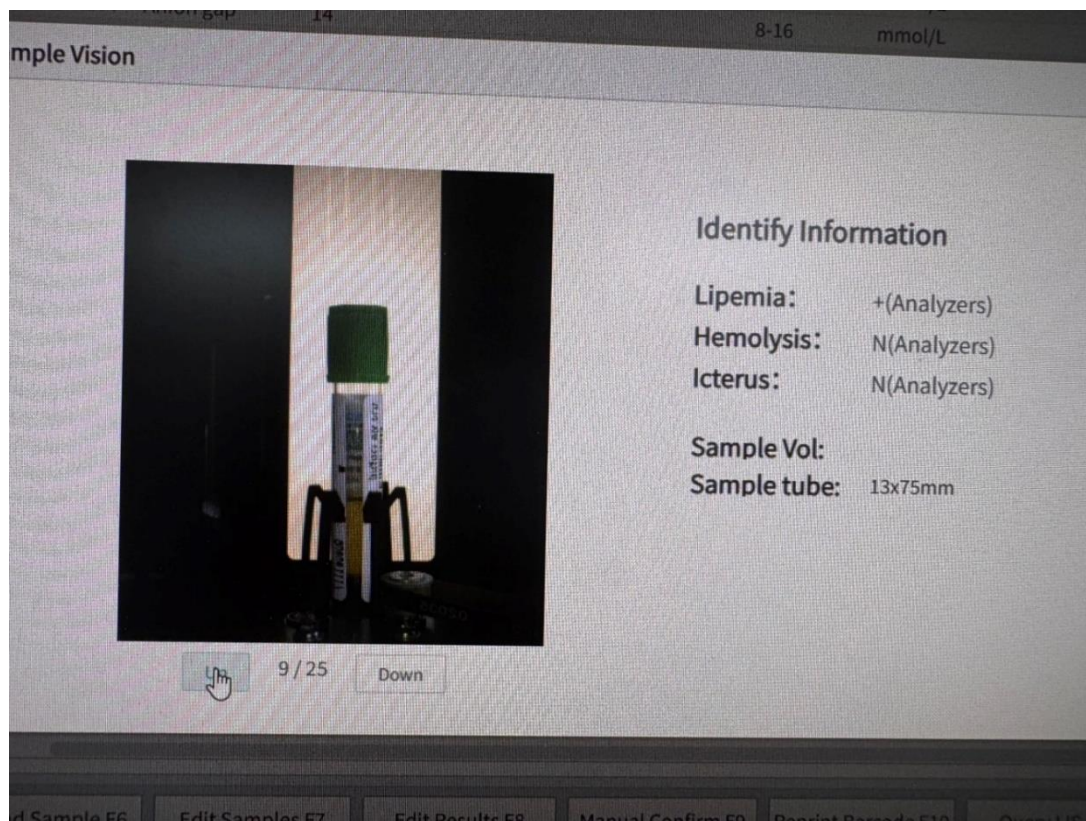
1st result



2nd result

Summary

Feedback from Hospital B: There have been multiple cases where the initial test results and the faulty results showed interference or abnormal reaction curve



Sample SI information

SDM

Running

M1

Running/Standby

11:57

Estimated Completion Time

ServiceUser

21/07/2025 11:48

S Orders

Current

History

Abnorm

Status

Statistic

ID/Barcode

Enter search criteria

Sample List

View Samples

View Tests

Type	Sample ID	Bar Code	Name	Sample Status	Finish T	Test	Finish T	Result	Dilute
Routine		006800618065	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:21	UA	11:38	5.4	
Extra Urgent		006800618903	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Incomple...	11:14	UA	11:38	5.4	
Extra Urgent		006800618792	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:24	UA	11:38	5.4	
Extra Urgent		006800618106	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:24	TP II	11:38	8.6	
Extra Urgent		006800617759	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:25	TP II	11:38	8.5	
Routine		726800618432	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:25	TP II	11:38	8.5	
Routine		006800617478	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:25	TP II	11:38	8.5	
Extra Urgent		006800618858	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:26	TP II	11:38	8.5	
Routine		006800618926	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:36	ALB II	11:33	4.6	
Routine	17033			Complete	11:38	ALB II	11:33	4.6	
Routine		106800618926	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:36	ALB II	11:33	4.6	
Routine		006800618914	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:36	ALB II	11:33	4.6	
Routine		006800618897	ว.ร. ชัยวัฒน์ ชื่นชูชัย	Complete	11:32	ALB II	11:33	4.6	

1 samples selected

Demographics

Rerun

Extra Urgent

Details

Edit Results

Delete

Review

Manual release

Sample Repeatability

Troubleshooting Conducted

Background

Analysis

Solution

Summary

- **Full system maintenance:** All probes and mixers were cleaned and maintained, but the issue persisted.
- **Adjustment of testing sequence and carryover pair:** Test sequence follow the default setting; Carryover pairs were set for ALB/TP (ALB/TP not the carryover pairs of UA, just avoid the higher immunoglobulin which might cause cross-contamination to UA). However, anomalies still occurred on the 22nd July.
- **Replacement of reagent carousel water:** To address the serum index showing "L+", all water in the reagent carousel was replaced with sterile water for injection.
- **Exclusion of endogenous interference:** On the 21st and 22nd, ALB and TP were measured for samples 621624 and Sample 617033. The reference range for Globulin (Glo) is 2–3 g/dL, but both samples **slightly** exceeded the upper limit:
 - 1) Sample 621624: TP = 8.3 g/dL; ALB = 4.6 g/dL; Glo = 3.7 g/dL
 - 2) Sample 617033: TP = 8.6 g/dL; ALB = 4.6 g/dL; Glo = 4.0 g/dL
- **Sample pretreatment confirmed:** 4500rpm, 10mins; Heparin tube
- **Reagent/Calibrator confirmed:** within the onboard stability;



Analysis on Sample Pretreatment

Background

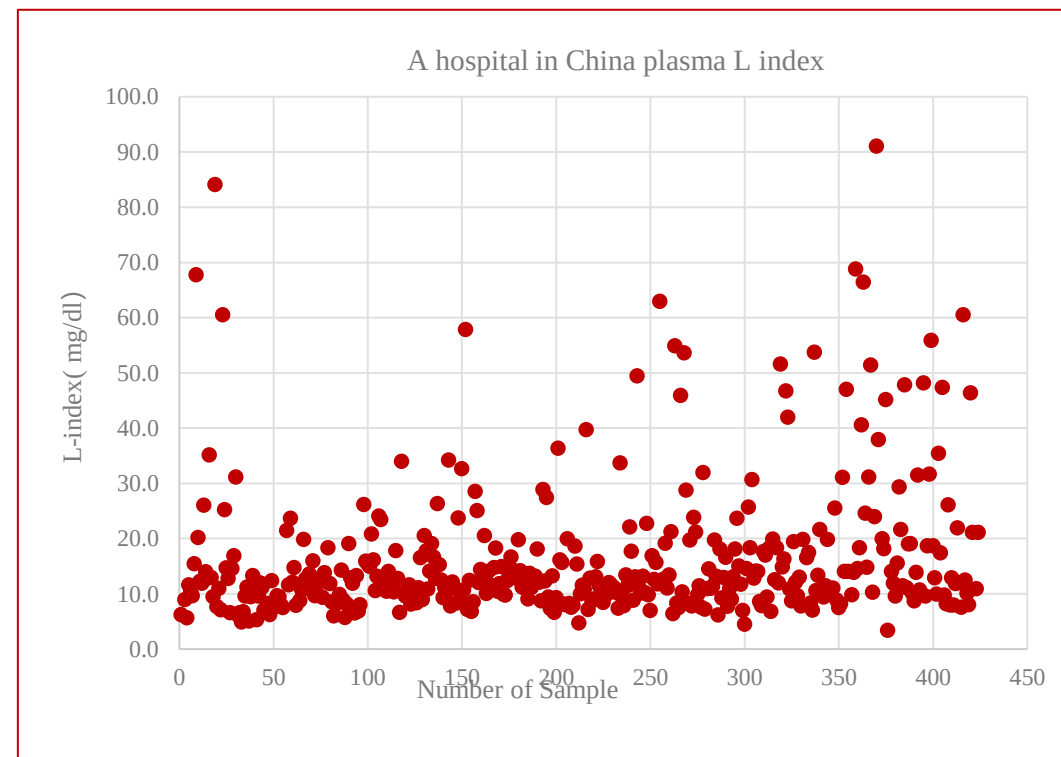
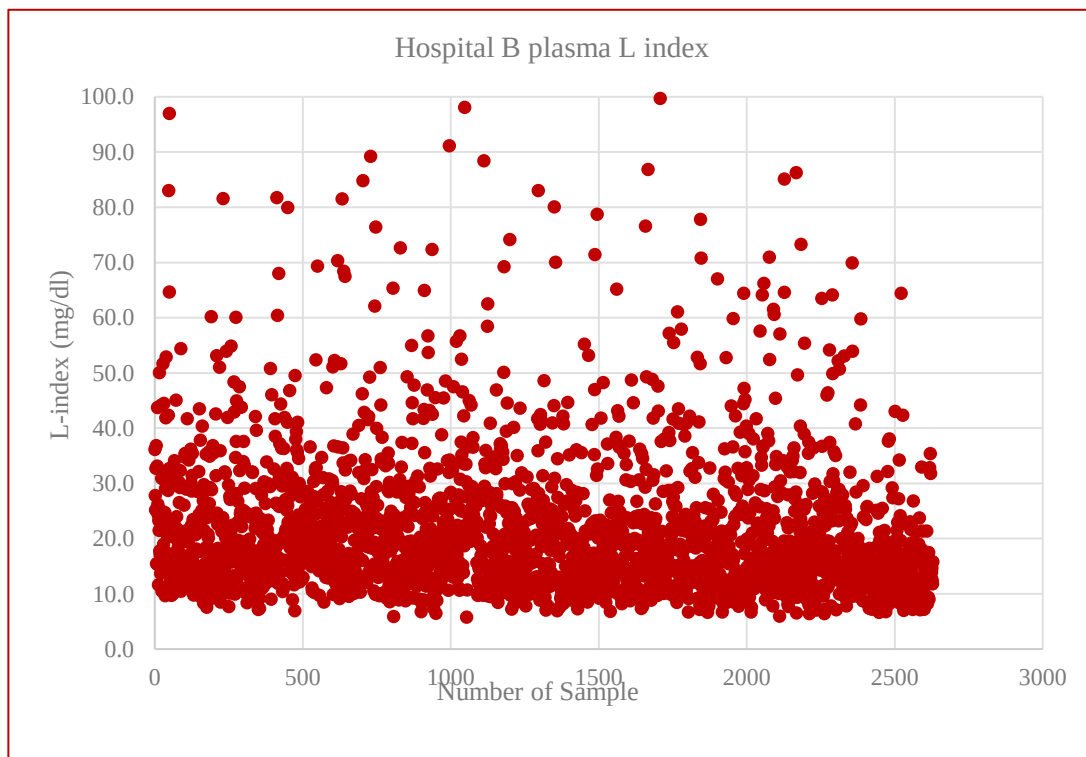
Analysis

Solution

Summary

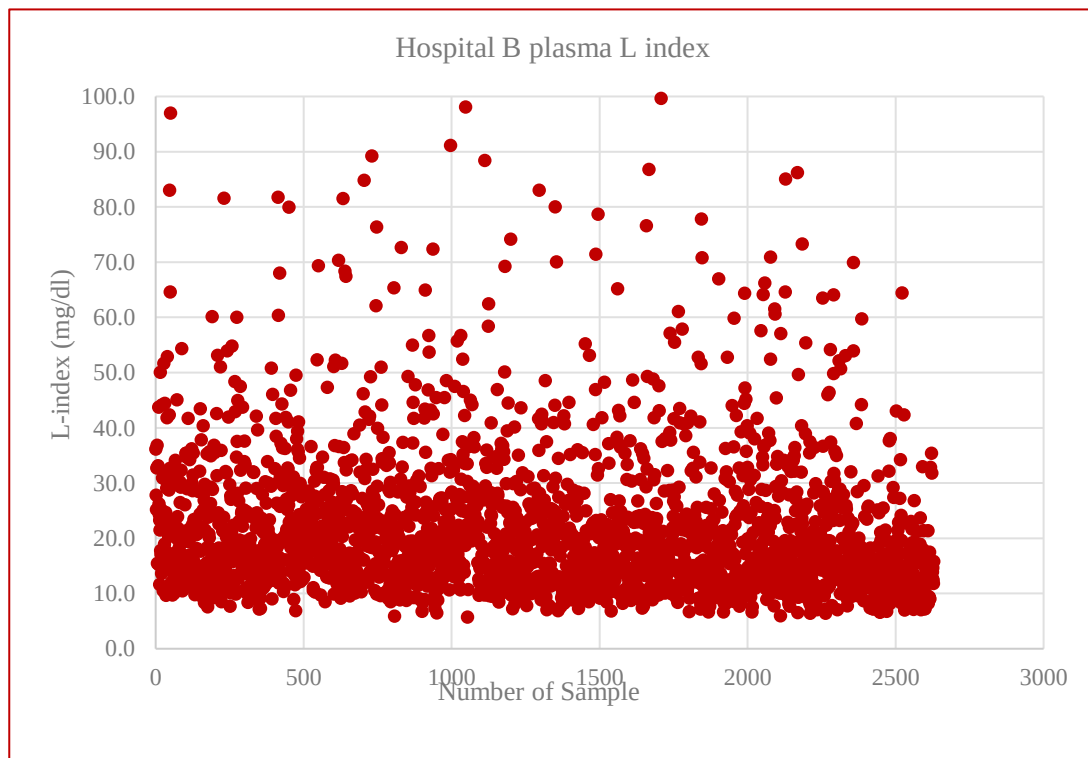
- Analysis of Matrix component Content in Plasma

Lipemic index in test samples form insoluble particles that do not participate in the main reaction but cause turbidity (with absorbance), acting as "Matrix component" in the reaction system.



Analysis on Sample Pretreatment

- Analysis of Matrix component Content in Plasma



Background

Analysis

Solution

Summary

Flag	L	H	I
N	40	50	4
+	225	150	15
++	450	300	25
+++	900	450	35
++++	1800	900	55
+++++			

Mindray Serum Index Tier Classification criteria

When compared with hospitals of the same level in China, the L serum index in samples from Hospital B is elevated. However, most of the samples still have an L serum index within the normal range (less than 40 mg/dl). The matrix component content in the plasma samples from Hospital B is also within the normal range.

Analysis on Sample Pretreatment

- Characteristics of Sample Matrix component

Property comparison between Serum and Plasma

Item	Serum	Plasma
Matrix component Composition	Fibrin, charged with adsorbed ions; occasional severe lipemia	Polymers of hydrophobic substances adsorbed by negatively charged heparin
Change Trend	The size of Matrix component tends to increase, hard to decrease (stable structure)	The size of Matrix component can either be increased or decreased (unstable structure, limited by charge effects)
Change Impact	Absorbance increases	Absorbance may increase or decrease
Influencing Factors	Weak surfactants cause Matrix component aggregation	Strong surfactants disperse Matrix component; weak surfactants cause aggregation

■ Summary:

Plasma: Matrix component cannot be completely eliminated and are unstable.

- 1) If the reaction system is contaminated by an amount of **strong surfactants that exceeds its anti-interference capacity**, the impurities will disperse, and the **turbidity will decrease**.
- 2) If the reaction system is contaminated by an amount of **weak surfactants** that exceeds its anti-interference capacity, the impurities will aggregate, and the **turbidity will increase**.

Serum: **Serum is a more stable sample type** for analysis because with a proper sample pre-processing can effectively eliminate fibrinogen (a key impurity). By switching to serum samples, this may significantly reduce this issue that are often caused by these impurities.

Analysis on Sample Pretreatment

Background

Analysis

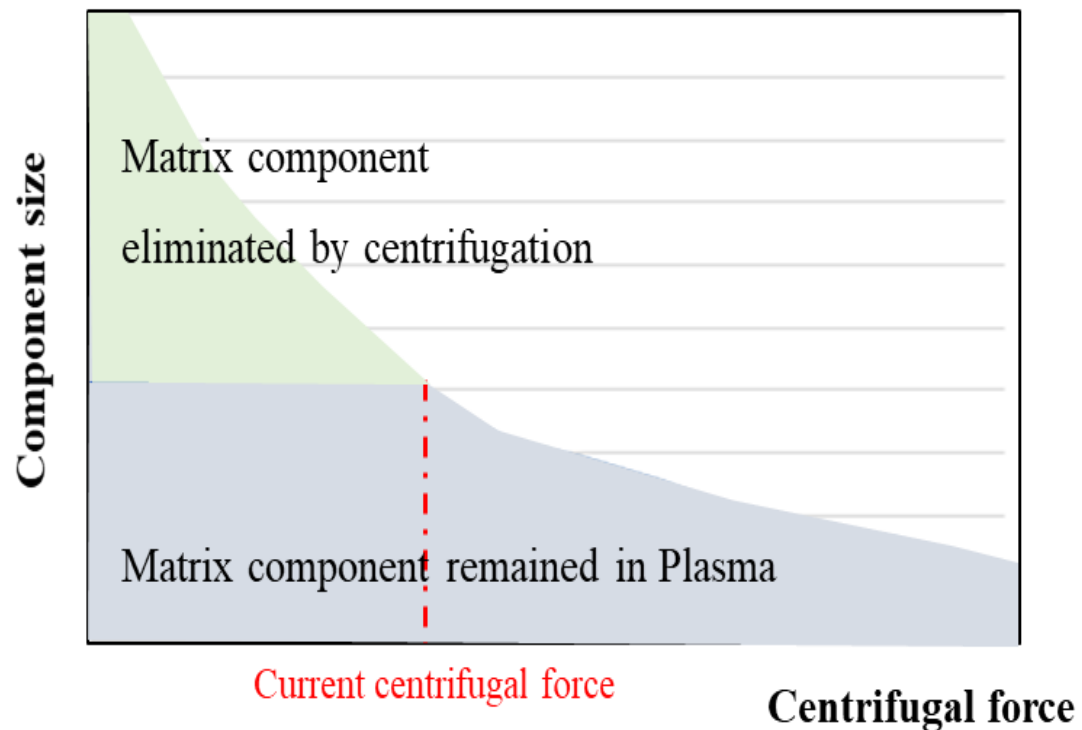
Solution

Summary

- Characteristics of Plasma Matrix component

In plasma, heparin is a strongly negatively charged substance. This property allows it to attract and adsorb numerous hydrophobic substances, forming particulate matter(particles). Large particles are easily removed by centrifugation, while small particles are difficult to eliminate.

Relationship between centrifugal and residual matrix components



Summary:

1. The current centrifuging condition could minimize the matrix component effect in plasma but they cannot remove them as completely as with serum.
2. Changes in the matrix component size and quantity lead to changes in turbidity which cause a change in absorbance.
3. The primary focus for troubleshooting this issue is **to eliminate contamination from excessive surfactants, as matrix component effect are unavoidable.**

Analysis on Reaction Curve

Background

Analysis

Solution

Summary

When sample impurities enter the UA reaction system, they are influenced by contamination, which causes them to aggregate. This leads to differences in turbidity changes.

The graphs below illustrate this effect in two abnormal samples:

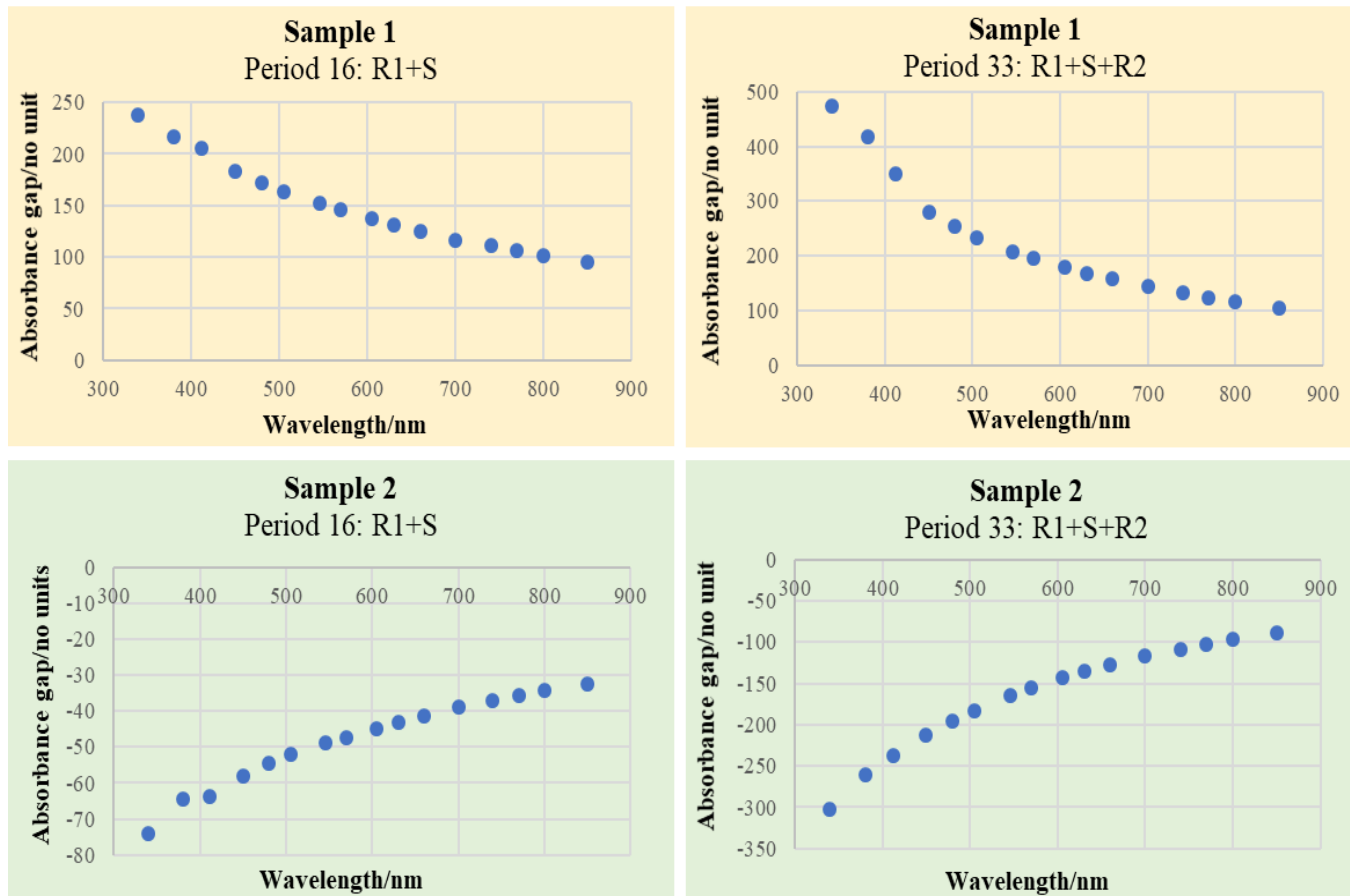


Fig. samples absorbance distribution on multiple wavelengths before and after reaction

■ Experiment:

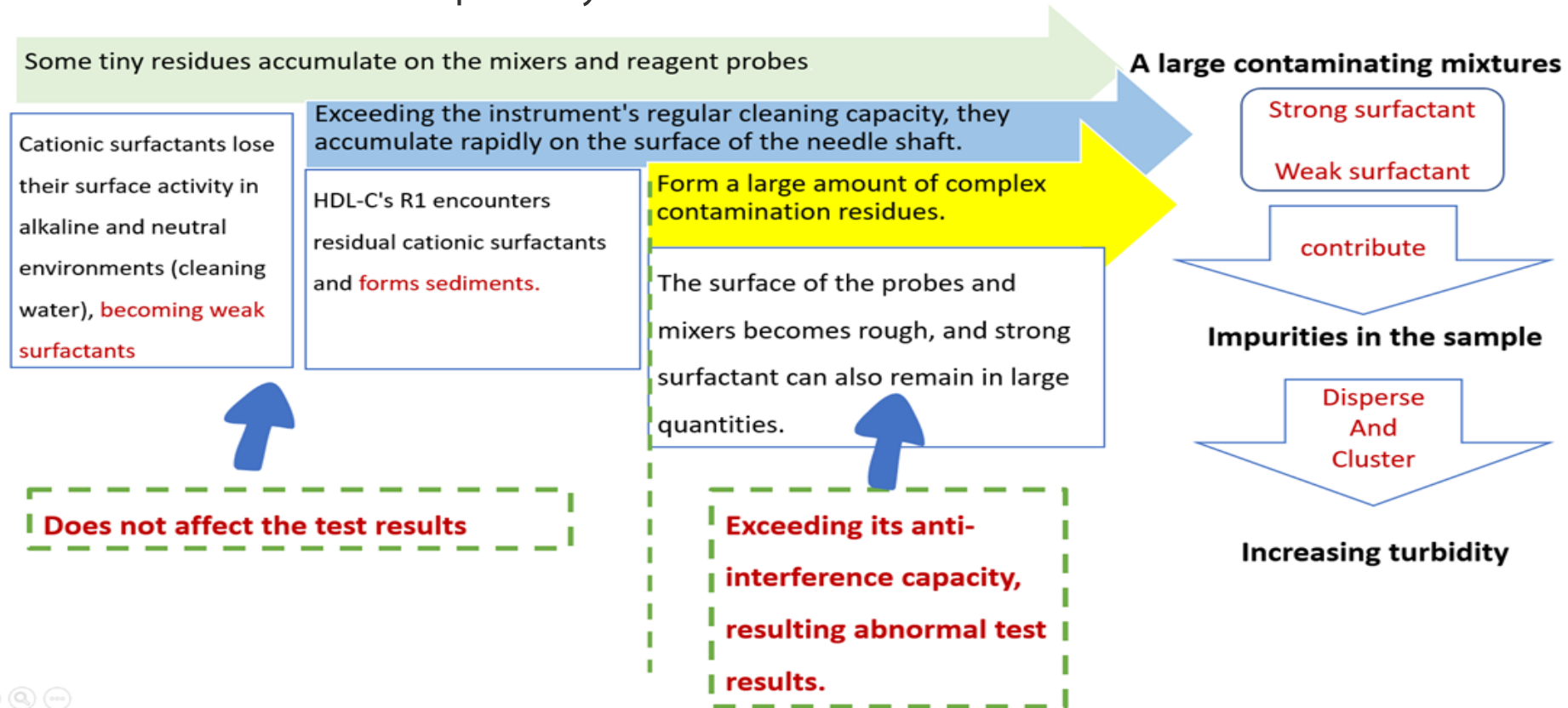
To assess the impact of contamination, select 2 contaminated UA test samples. Then measure at 2 specific points in the reaction with the individual absorbance at 16 different wavelengths and record the trend of the absorbance changes on the spectrum:

- Point1: At the time of adding R1 reagent to the samples (Cycle 16: R1+S)
- Point2: After the mixture of R1, the sample, and R2 has been fully mixed and equilibrated (Cycle 33: R1 + Sample + R2)
 - **X-axis:** 16 wavelengths provided by BS-2800M (Unit: nm)
 - **Y-axis:** The absorbance gap/differences between first abnormal test and rerun

Analysis on matrix component

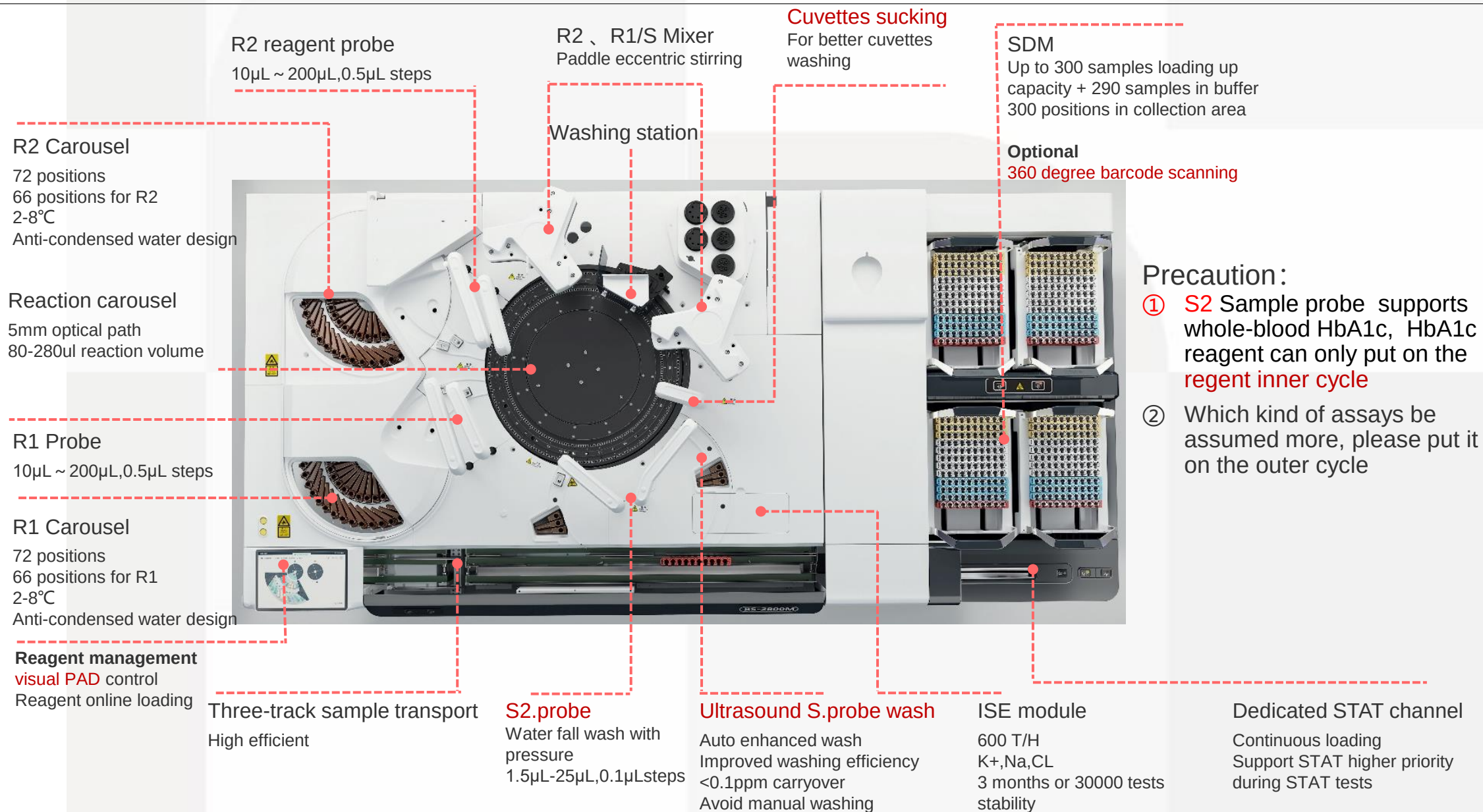
• Sources of Contamination Causing Matrix component Aggregation/Dispersion

Surfactant residues and contamination pathways



1. Initial residue: Cationic surfactants in acidic reagents leave small residues on probe surfaces.
2. Deposit formation: Residues react with HDL-C reagent R1, forming deposits.
3. Surface alteration: Probe surfaces become rough, altering their properties.
4. Increased contamination: Substances that previously did not leave residues now accumulate, worsening

1.1 Overall appearance and configuration



Analysis on allocation and Sequence

Background

Analysis

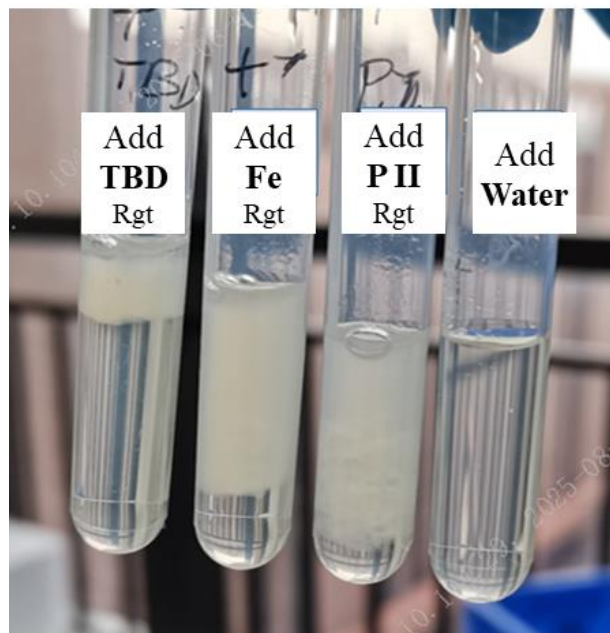
Solution

Summary

- The current allocation of items in the reagent carousels require adjustment.

Inner Ring		Outer Ring	
Parameter	Tests	Parameter	Tests
ALB II	152	a-AMY Manual	8
ALP	129	AST	148
ALT	146	Ca	58
CK	12	D-bil-D II	118
CO2	174	Fe	18
CREA-S	263	Glu-H	120
D-Bil-V	7	HDL-C	52
HbA1c-3	53	LDL-C	36
HS-CRP	11	Mg II	28
LDH	9	PII	61
T-Bil-V	7	T-bil-D II	117
TP II	122	TC	55
TPUC	30	TG	59
UIBC	15	UA	89
		UREA	191
In total	1130	In total	1158

Solvent: HDL-C R1 reagent



- Four acidic reagents are allocated in one ring (same reagent carousel ring), and three of them are used frequently (have a high testing frequency).
- Residue or sedimentation from acidic reagents such as DBD, TBD, Fe, P which are acidic reagents, and HDL-C can leave over a large amount of weak surfactants. This causes impurities to aggregate within the reaction system, which in turn leads to an increase in turbidity and results in elevating or increasing absorbance.
- Residue of strong surfactants from TC, LDL-C, and cleaning agents can remain on a rough reagent probe surface. This causes impurities within the reaction system to disperse, which in turn can lead to a decrease in turbidity.

TBV/DBV/TBD/DBD/Fe/PII	+	HDL-C R1	Increasing Turbidity
TC /LDL-C			Decreasing Turbidity

Fig. 1(left) Current allocation of parameters in the reagent carousel

Fig. 2 (right) Experiments of HDL-C R1 reagent producing precipitation by acidic reagent

Instrument Cleaning and Deposit Removal

Ensure cleaning water covers $\geq 4\text{mm}$ of the reagent probe's outer wall and fully submerges stirrer paddles.

1. Enable "Interval Test Insert Cleaning" (default: 400 tests) to enhance cleaning;
2. Temporarily replace DA with DC for intensive probe cleaning (restore DA afterward) to remove surfactant deposits.

Tests

Analysis

System

System/Configuration

☒ Temp steady B. test

☒ Blood Cell Lysis Unit

Special Wash

☒ No. of Tests

400

Probe/Mixer Soak Time

60

Second

Special Wash Interval

6

Hour

Auto Sleep

☒ Interval

60

Minute

☐ Non-sleep T.

07:30

-

17:30

Auto awake

☐ Monday

07:30

☐ Tuesday

07:30

☐ Wednesday

07:30

☐ Thursday

07:30

☐ Friday

07:30

☐ Saturday

07:30

☐ Sunday

07:30

1. Instrument Cleaning and Deposit Removal

Ensure cleaning water covers $\geq 4\text{mm}$ of the reagent probe's outer wall and fully submerges stirrer paddles.

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Tests

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07:30

☐ Tuesday

07:30

☐ Wednesday

07:30

☐ Thursday

07:30

☐ Friday

07:30

☐ Saturday

07:30

☐ Sunday

07:30

2. Adjust Test Sequence of both the inner and outer cycle

1	α-AMY	18	UA
2	AST	19	TPUC
3	ALT	20	CREA-S
4	T-Bil-V	21	TG
5	T-Bil-D	22	HDL-C
6	P II	23	TC
7	D-Bil-V	24	LDL-C
8	D-Bil-D	25	TP II
9	Fe	26	TP
10	UIBC	27	ALB II
11	Ca	28	LDH
12	Mg II	29	UREA
13	ALP	30	HS-CRP
14	GLU-H	31	Hb-3
15	CK	32	HbA1c-3
16	CO2	33	Water
17	LIP		

2. Adjust the reagent allocation

Inner Ring		Outer Ring	
Parameter	Tests	Parameter	Tests
ALT	146	a-AMY Manual	8
T-Bil-V	7	AST	148
T-bil-D II	117	D-bil-D II	118
P II	61	Fe	18
D-Bil-V	7	UIBC	15
ALP	129	Ca	58
CO2	174	Mg II	28
CREA-S	263	Glu-H	120
TG	59	UA	89
ALB II	152	HDL-C	52
LDH	9	TC	55
TPUC	30	LDL-C	36
HbA1c-3	53	TP II	122
		UREA	191
		HS-CRP	11
		CK	12
In total	1207	In total	1081

Words in **Blue** indicates that the positions of the inner and outer rings need to be adjusted.

So with all these measures taken, this problem should be resolved.

However, although the frequency of the problem has been reduced, the problem itself still persists

Case Analysis

Background

Analysis

Solution

Summary

mindray

SDM Running M1 Running/Standby

13:29 Estimated Completion Time

ServiceUser 08/09/2025 13:15

Sample S Orders Current History Abnorm Status Statistic ID/Barcode Enter search criteria

Sample List View Samples View Tests Order Time: 6:14,11:14; Filter

Type	Sample ID	Bar Code	Name	Sample Status	Finish T.	Test	Result	Flag	Unit	Ref Range
Extra Ur...		006800768564	นางสาว อรุณ	Complete	09:19	UREA	18.91		mg/dL	7.80-20.00
Extra Ur...		006800768337	นาย บุญ ภูมิ	Complete	09:03	CREA-S	1.16		mg/dL	0.80-1.30
Extra Ur...		006800768389	นาย โฉม ภูมิ	Complete	09:03	UA	7.30		mg/dL	3.60-8.20
Extra Ur...		036800768596	นาย ทรงยศ ศรีงาม	Complete	08:45	Na	141.3		mmo...	
Extra Ur...		006800768386	นาย สุกฤษ ศิษย์	Complete	09:03	K	4.65		mmo...	3.40-4.50
Extra Ur...		006800768401	นาง ลำไย นนทิ...	Complete	09:05	Cl	106.7			
Extra Ur...		006800768431	นาย วุฒิพงษ์ คำ...	Complete	09:03	CO2	27.13			
Extra Ur...		006800768384	นาย เทียน นันท...	Complete	09:04	L	N			
Extra Ur...		006800768426	นาย เอกชัย น...	Complete	09:04	H	N			
Extra Ur...		006800768438	นางสาว ปรียา...	Complete	09:05	I	N			
Extra Ur...		006800768674	นาย ทองสุข เขียว...	Complete	09:05	Anion gap	12			
Extra Ur...		006800768570	นางสาว บุญ...	Complete	09:06					
Extra Ur...		006800768376	นาย บุญถึง พร...	Complete	09:06					

1 tests selected

Demographics Rerun Extra Urgent Details Edit Results Delete Review Manual

mindray

SDM Running M1 Running/Standby

13:20 Estimated Completion Time

ServiceUser 08/09/2025 13:11

Sample S Orders Current History Abnorm Status Statistic

Sample List/Result Details

Sample ID/Bar Code 006800768376

Result: 7.30 Unit: mg/dL Response: 1059.0 Dilute: Finish T.: 08/09/2025 09:06:11

Test Name: UA

Reaction Curve

Absorbance

Period

Pri Wave Sec Wave Pri-Sec

Manual Adjust

Return Rerun

Case Analysis

Background

Analysis

Solution

Summary

AnyDesk 1 672 438 394

1672438394

BS-2800M-2 (4ce49b8c2) - VNC Viewer

mindray

SDM Running M1 Running/Standby

13:12 Estimated Completion Time

ServiceUser 08/09/2025 13:12

Sample S Orders Current History Abnorm Status Statistic ID/Barcode Enter search criteria

Sample List View Samples View Tests Filter

Type	Sample ID	Bar Code	Name	Sample Status	Finish T.	Test	Result	Unit	Finish T.	Dilute
Extra Urgent		006800768376	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:30	L	N	mg/dL	09:10	
Extra Urgent		006800768570	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:17	H	N	mg/dL	09:10	
Extra Urgent		006800768426	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:18	I	N	mg/dL	09:10	
Routine		016800768815	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:25	UA	6.5			
Routine		016800768830	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:26		6.5*			
Extra Urgent		036800768688	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:27					
Routine		006800768859	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:25					
Routine		726800768166	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:26					
Routine		006800768482	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:26					
Routine		006800768887	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:26					
Routine		006800768632	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:27					
Routine		106800768632	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:27					
Routine		006800768843	นางสาวกัญญา ทรัพย์นิรันดร์	Complete	09:27					

1 tests selected

Demographics Rerun Extra Urgent Details Edit Results Delete Review Manual release

E Stop Exit

mindray

SDM Running M1 Running/Standby

13:12

ServiceUser 08/09/2025 13:13

Sample S Orders Current History Abnorm Status Statistic

Sample List/Result Details

Test Name Result Details Sample ID: Bar Code:006800768376 Name:นางสาวกัญญา ทรัพย์นิรันดร์ Patient ID:305256

L H I UA

Result: 6.5 Unit: mg/dL Response: 928.4 Dilute: Finish T.: 08/09/2025 09:17:22

Reaction Curve

Absorbance

Period

Pri Wave Sec Wave Pri-Sec

Sample Blank Reac.Curve R. Data 3D Display

Pri Wave Sec Wave Pri-Sec Manual Adjust

Flags

Return Rerun

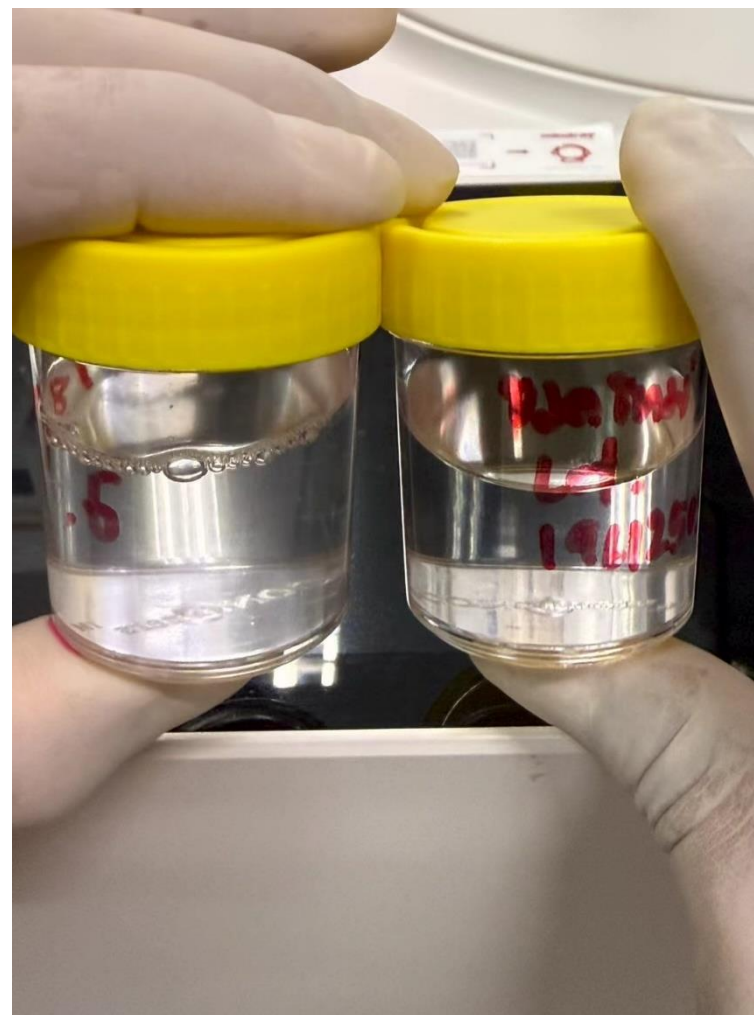
Case Analysis

Background

Analysis

Solution

Summary

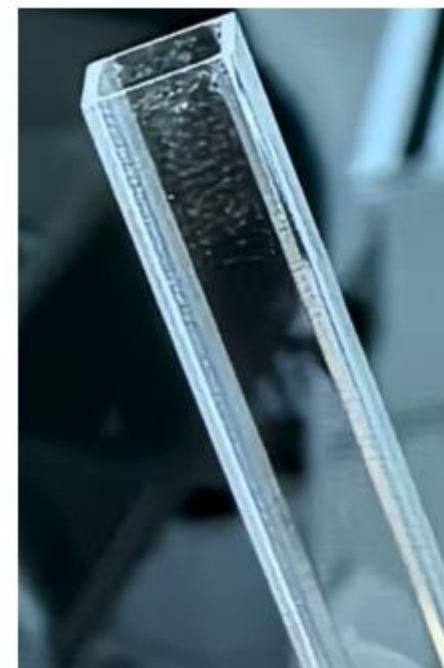
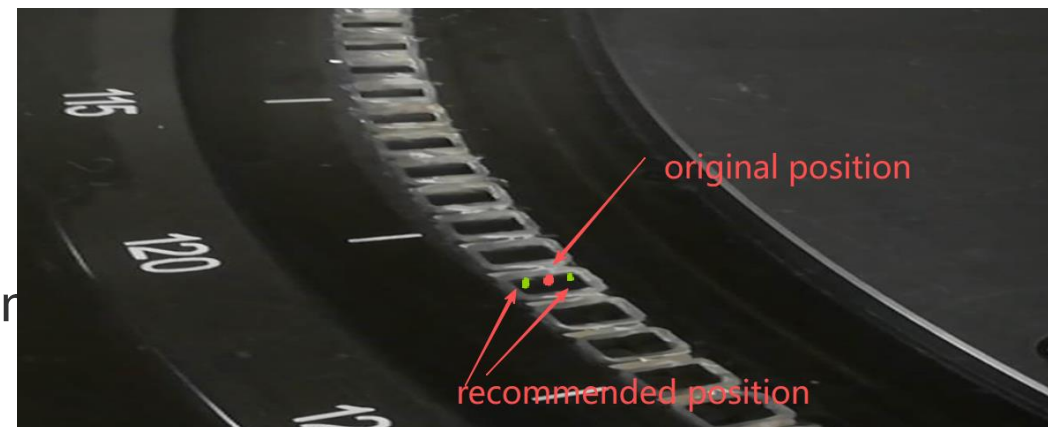


1. Move D-bil-D II and Fe from the outer ring to the inner ring, and move ALP from the inner ring to the outer ring.

2. Use a flashlight to check for contamination above the reaction cup. If there is any contamination, it needs to be taken out and cleaned with CD80;

3. Shut down the machine for debugging, and debug the R1 reagent probe of each instrument:

- 1) The probe must be adjusted by service tool in a horizontal way;
- 2) Adjust the position of the probe 1mm to the left or right in the direction of movement; do not center it.



Case Analysis

Background

Analysis

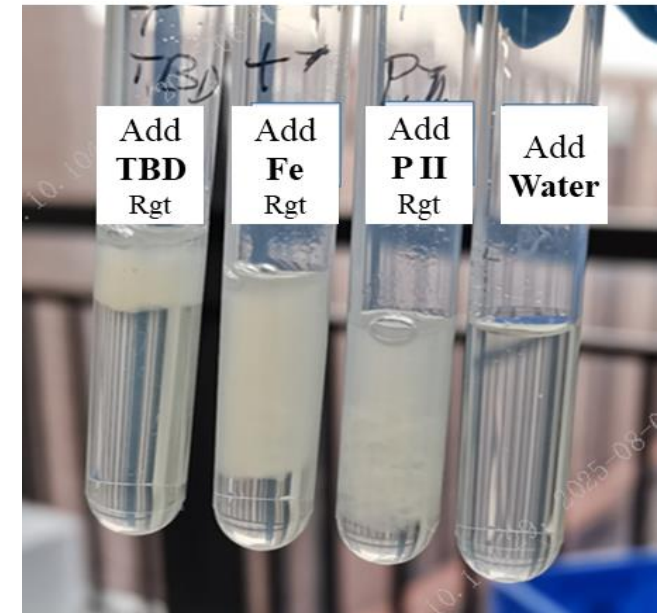
Solution

Summary

The first measure aims to cut off pollution sources, mainly considering the impact of **acidic reagents on turbidity**. Previously, it was suggested that acidic reagents should not be over-concentrated, but now it is necessary to avoid the impact of all acidic reagents. Therefore, DBD and Fe need to be moved to the inner circle. Meanwhile, to balance the number of tests in the inner and outer circles, the position of ALP will be adjusted to the outer circle.

Inner Ring		Outer Ring	
Parameter	Tests	Parameter	Tests
ALB II	152	MY Manual	8
ALP	129	AST	148
ALT	146	Ca	58
CK	12	D-bil-D II	118
CO2	17	Fe	18
CREA-S	263	Glu-H	120
D-Bil-V	7	HDL-C	52
HbA1c-3	53	LDL-C	36
HS-CRP	11	Mg II	28
LDH	9	PII	61
T-Bil-V	7	T-bil-D II	117
TP II	122	TC	55
TPUC	30	TG	59
UIBC	15	UA	89
		UREA	191
In total	1130	In total	1158

Solvent: HDL-C R1 reagent



TBV/DBV/TBD/DBD/Fe/PII	+	HDL-C R1	Increasing Turbidity
TC /LDL-C			Decreasing Turbidity

Case Analysis

Background

Analysis

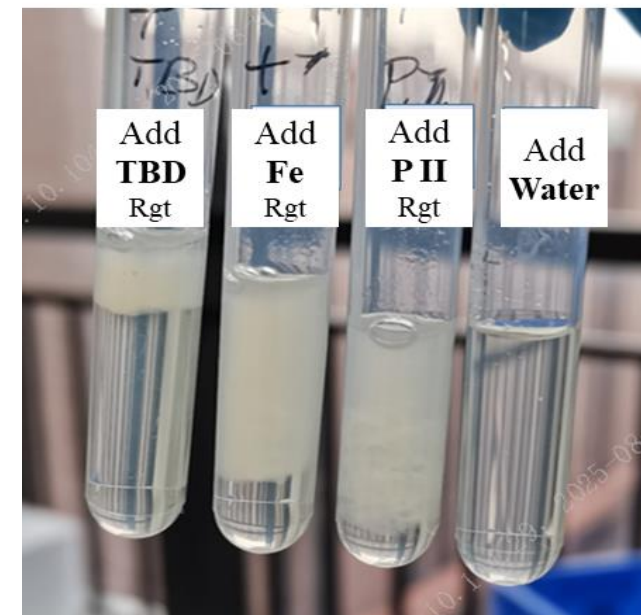
Solution

Summary

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ALB II	152	MY Manual	8
ALP	129	AST	148
ALT	146	Ca	58
CK	12	D-bil-D II	118
CO2	17	Fe	18
CREA-S	263	Glu-H	120
D-Bil-V	7	HDL-C	52
HbA1c-3	53	LDL-C	36
HS-CRP	11	Mg II	28
LDH	9	PII	61
T-Bil-V	7	T-bil-D II	117
TP II	122	TC	55
TPUC	30	TG	59
UIBC	15	UA	89
		UREA	191
In total	1130	In total	1158

Solvent: HDL-C R1 reagent



TBV/DBV/TBD/DBD/Fe/PII	+	HDL-C R1	Increasing Turbidity
TC /LDL-C			Decreasing Turbidity

Case Summary

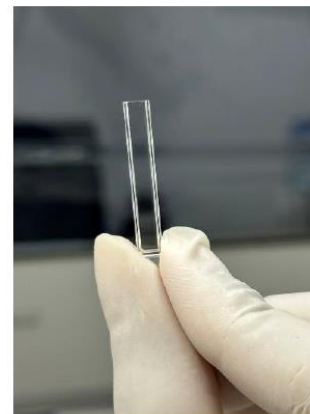
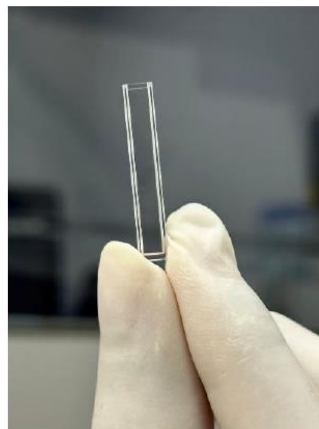
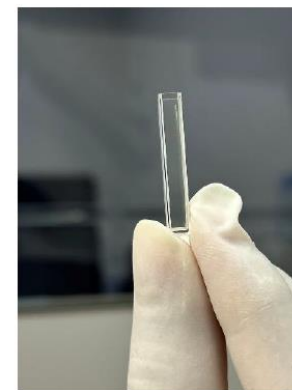
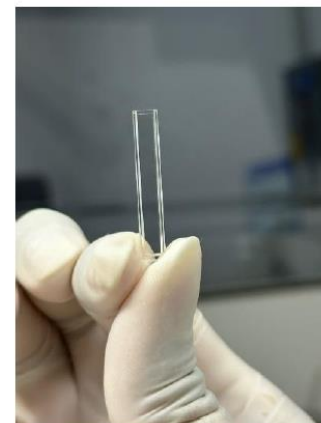
Background

Analysis

Solution

Summary

The second measure is a preventive one. If the first two measures are properly implemented, UA will temporarily return to normal. However, if splashing occurs, long-term use will inevitably lead to accumulated contamination in the reaction cups, along with other risks such as value jumps.



Case Summary

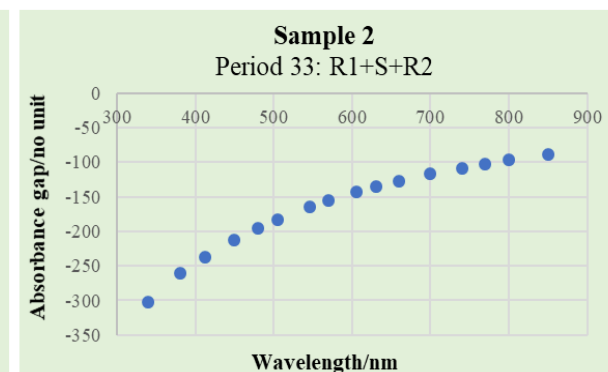
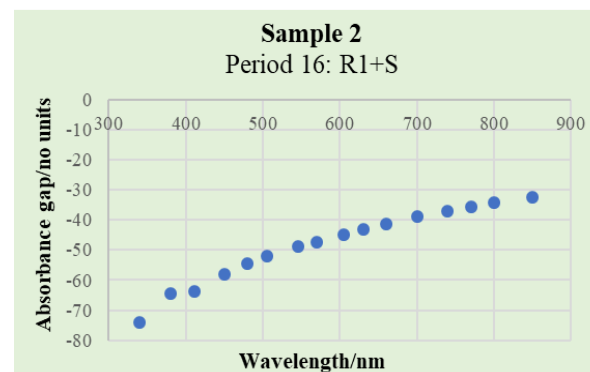
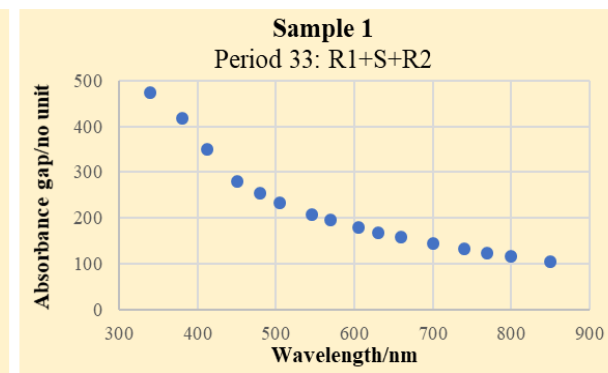
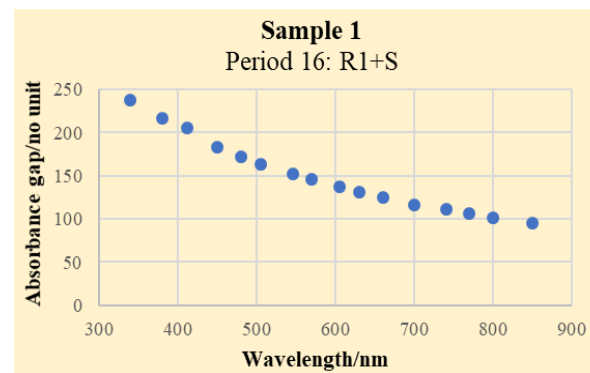
The third measure is intended to remove residual pollutants from the adjusted system. As the reaction characteristics clearly indicate the impact of other reagents on turbidity, the only paths for such reagent contamination are reagent probes and reaction cuvette. For reagent needles, their cleaning and maintenance processes are fully visible, so the risk of contamination is very low. However, if there is splashing from the reagent needles, it may affect the reaction cups. Hence, it is necessary to remove residual pollutants from the reaction cups.

Background

Analysis

Solution

Summary



China domestic setting

Background

Analysis

Solution

Summary

Carryover

Reagent

Sample

Cuvette

	Contaminator Test	Contaminator Rgt	Contaminated Test	Wash Type	Wash Count	Forced special wash
☐	ALBn	R2	DBILn	DB	1	N
☐	ALBn	R2	HDL-C	DB	1	N
☐	ALBn	R2	LDL-C	DB	1	N
☐	ALBn	R2	TP II	DB	1	N
☐	ALBn	R2	Glu-G	DB	1	N
☐	ALBn	R2	UA	DB	1	N
☐	ALBn	R2	D-Bil-V	DB	1	N
☐	ALBn	R2	T-Bil-V	DB	1	N
☐	ALBn	R2	UAn	DB	1	N
☐	ALBn	R2	TPn	DB	1	N
☐	ALBn	R2	CREA-S	DB	1	N

Edit

Delete

Return

Carryover

Reagent

Sample

Cuvette

	Contaminator Test	Contaminator Rgt	Contaminated Test	Wash Type	Wash Count	Forced special wash
☐	ALBn	R2	TBILn	DB	1	N
☐	FUN	R1	CRP II	DA	1	Y
☐	CK	R2	G6PD	DA	1	N
☐	PCT	R1	G6PD	Routine Wash	1	N
☐	Lp-PLA2	R1	TBA	Routine Wash	1	N
☐	ApoE	R1	TBA	Routine Wash	1	N
☐	CKMBmass	R1	Lp(a) II	DB	1	N
☐	H-FABP	R1	Lp(a) II	Routine Wash	1	N
☐	CG(LIT)	R1	AFU	Routine Wash	1	N
☐	HCY II	R2	GLDH	DB	1	N
☐	TPUC	R1	UIBC	DB	1	N

Edit

Delete

Return

Carryover

Reagent

Sample

Cuvette

	Contaminator Test	Contaminator Rgt	Contaminated Test	Wash Type	Wash Count	Forced special wash
☐	ApoE	R1	TBA	Routine Wash	1	N
☐	CKMBmass	R1	Lp(a) II	DB	1	N
☐	H-FABP	R1	Lp(a) II	Routine Wash	1	N
☐	CG(LIT)	R1	AFU	Routine Wash	1	N
☐	HCY II	R2	GLDH	DB	1	N
☐	TPUC	R1	UIBC	DB	1	N
☐	FUN	R1	UIBC	DA	1	Y
☐	LIP	R1	TBA	DB	1	N
☐	TG	R1	LIP	DB	1	Y
☐	TC	R1	LIP	DB	1	N
☐	FUN	R1	CHE	DA	1	Y

Edit

Delete

Return

China domestic setting

Background

Analysis

Solution

Summary

Carryover



Reagent

Sample

Cuvette

	Contaminator spl type	Contaminator Spl Vol	Contaminated spl type	Contaminated Test	Wash Type	Wash Count	Forced special wash
☐	Whole Blood	10	Urine	TPUC	DB	1	N
☐	Urine	18	Urine	TPUC	Routine Wash	1	N
☐	Urine	18	Urine	MALB	Routine Wash	1	N
☐	Urine	1.5	Urine	Mg II	Routine Wash	1	N
☐	Serum	18	Urine	TPUC	Routine Wash	1	N
☐	Serum	18	Urine	MALB	Routine Wash	1	N

Edit

Delete

Return

China domestic setting

Background

Analysis

Solution

Summary

Carryover

Reagent

Sample

Cuvette

	Contaminator Test	Contaminated Test	Wash Type	Wash Count	Forced special wash
☐	RBP-U	UIBC	DB	1	N
☐	Lp-PLA2	G6PD	DB	1	N
☐	PA	UIBC	DB	1	Y
☐	TBA	UIBC	DB	1	Y
☐	ApoB	UIBC	DB	1	N
☐	ApoA1	UIBC	DB	1	N
☐	AST	UIBC	DB	1	N
☐	sd LDL-C	UIBC	DB	1	N
☐	RBP	UIBC	DB	1	N
☐	HCY II	UIBC	DB	1	Y
☐	Glu-H	UIBC	DB	1	N

Edit

Delete

Return

Carryover

Reagent

Sample

Cuvette

	Contaminator Test	Contaminated Test	Wash Type	Wash Count	Forced special wash
☐	Fe	UIBC	DB	1	N
☐	ASO II	UIBC	DB	1	N
☐	AFU	UIBC	DB	1	N
☐	C3	UIBC	DB	1	Y
☐	C4	UIBC	DB	1	Y
☐	DA	UIBC	DB	1	Y
☐	β-HB	UIBC	DB	1	Y
☐	IgM	UIBC	DB	1	Y
☐	IgA II	UIBC	DB	1	N
☐	P II	UIBC	DB	1	Y
☐	DC	Fe	DB	1	N

Edit

Delete

Return

Carryover

Reagent

Sample

Cuvette

	Contaminator Test	Contaminated Test	Wash Type	Wash Count	Forced special wash
☐	IgM	UIBC	DB	1	Y
☐	IgA II	UIBC	DB	1	N
☐	P II	UIBC	DB	1	Y
☐	DC	Fe	DB	1	N
☐	UIBC	Fe	Routine Wash	1	N
☐	TPUC	UIBC	DB	1	Y
☐	LDH	UIBC	DB	1	Y
☐	IgG	UIBC	DB	1	Y
☐	UIBC	UIBC	DB	1	Y
☐	T-Bil-V	UIBC	DB	1	Y
☐	D-Bil-V	UIBC	DB	1	Y

Edit

Delete

Return

- For this case, after doing the machine maintenance, reagent allocation and probe alignment, UA results temporarily return to normal;
- Long-term stability on sample depends on the dual guarantee of regular instrument maintenance and improvement of sample quality.

[illegible]

Today's results, M1 had no abnormal