

NATFORLAB
2025

Snibe
Diagnostic

**БОЛЬШЕ ЧЕМ
АВТОМАТИЗАЦИЯ
СТРЕМЛЕНИЕ К
СОВЕРШЕНСТВУ**

Snibe - Идеальные лабораторные
решения



2025



Содержание



Информация о
компании и
Болевые точки
лабораторий



Идеальные
лабораторные
решения



Превосходство,
подтвержденное
пользователями





Информация о компании и Болевые точки лабораторий

1

No.1

**Быстрый хемилюминесцентный
иммунохимический анализ в мире**

30

Лет фокуса

160

Стран

37000

Модулей по
всему миру



Точное определение болевых точек пользователей



Болевые точки	Требования
Большой объем тестов	Высокая производительность
Низкая стабильность результатов	Высокая эффективность
Нехватка места в лаборатории	Экономия места
Высокая частота сбоев	Высокая надежность
Высокая стоимость реагентов и расходных материалов	Экономическая эффективность
Сложное ручное управление	Высокий уровень автоматизации
Недостаток специфических параметров	Комплексное меню



Snibe Идеальные Лабораторные Решения

2



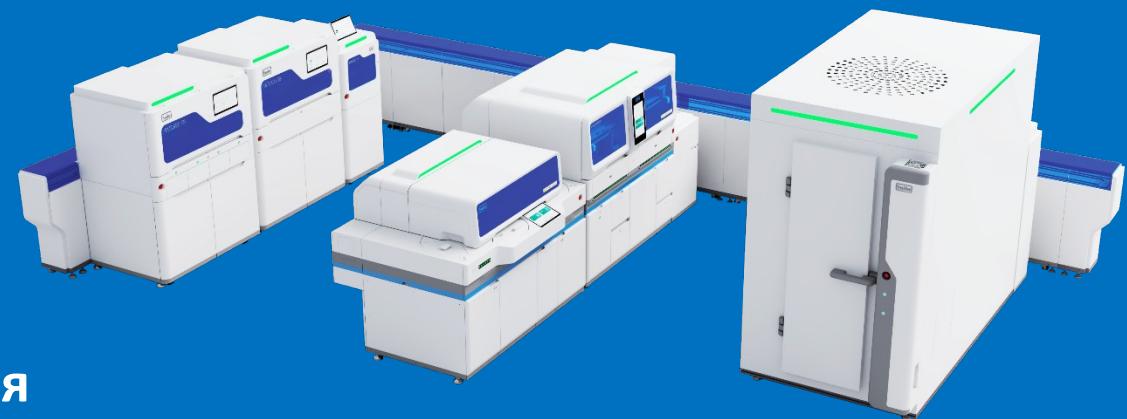


Решения для комплексной автоматизации лабораторий



SATLARSTM T8 — Новейшее решение полной автоматизации лаборатории

SATLARSTM T8 — это мощное решение для автоматизации лабораторных процессов, обеспечивающее высокую эффективность, надежную работу и интеллектуальные функции для оптимизации рабочего процесса и раскрытия большего потенциала ваших лабораторий.

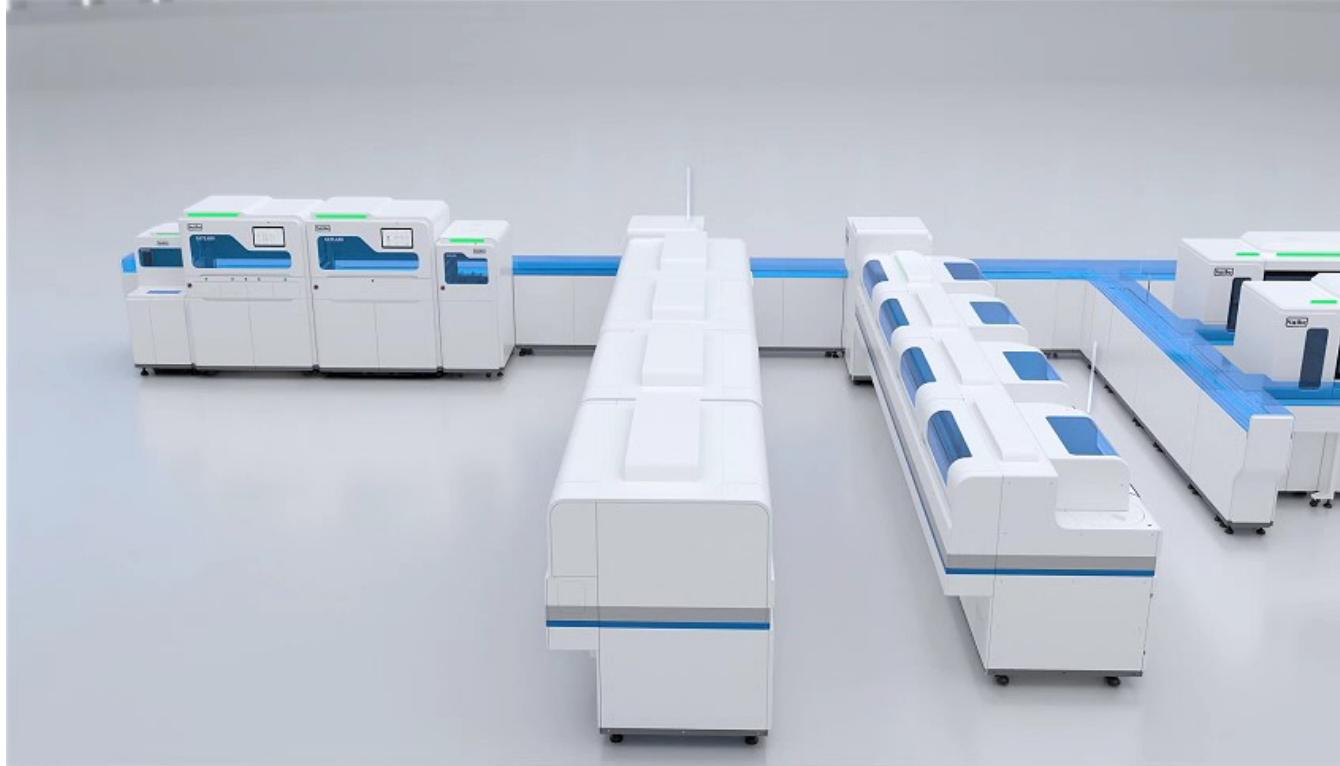




Решение полной автоматизации — SATLARS™ T8



Различные планировки и гибкие комбинации



Различные планировки могут быть настроены по мере необходимости.

Гибкие комбинации и неограниченные возможности расширения для удовлетворения растущих потребностей лабораторий.

Т форма

У форма

I форма

F форма

Особенность 2

Беспрецедентный анализатор CLIA

MAGLUMI® X Series





Новое поколение — MAGLUMI® X Series



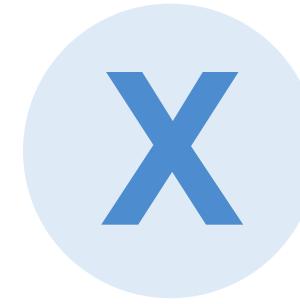
+



+



=



Одна кювета

Переработанная ОС

Улучшенное качество

Беспрецедентная группа X



Сбалансированный и мощный

Учитывая общую ситуацию, а также изобретательную конструкцию и использование передовых на сегодняшний день технологий, анализатор демонстрирует превосходные характеристики и занимает лидирующие позиции.



MAGLUMI® X3



MAGLUMI® X6



MAGLUMI® X8



MAGLUMI® X10

Особенность 3

Комплексные продуктовые решения





Biossays® 240 Plus

Автоматический биохимический
анализатор

- Пропускная способность: **240** тестов в час
- Опциональный модуль электролитов: **200** тестов в час
- До **90** позиций образцов и реагентов, загрузка в работе
- **Низкое потребление воды** ($\leq 2.0\text{-}3.0 \text{ Л/ч}$)
- **16** длин волн от 340 нм до 800 нм

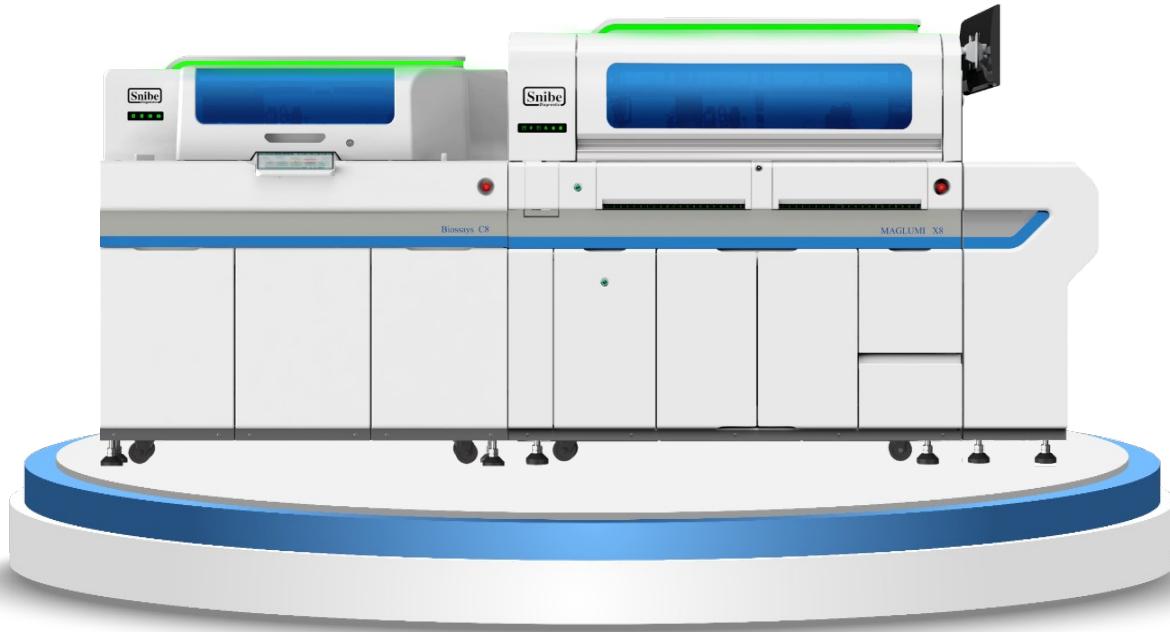


Интегрированные системы



Biolumi® CX8

Увеличьте потенциал своей лаборатории,
используя всего 3,8 м²



Надежная работа

- Передовые биохимические технологии и X-tech обеспечивают точные результаты

Удобство управления

- Все устройства управляются интеллектуальным программным обеспечением
- Вспомогательные системы отображения для удобного управления испытаниями

Flexible Expansion

- Различные комбинации X8, C8 и модуля открытия образца
- Возможность подключения к TLA/LAS

Up to
600 tests/h
Immunoassay module

Up to
1600 tests/h
Clinical chemistry module

Up to
300 tests/h
ISE module

Особенность 4

Широкое меню тестов ИХЛ и
превосходная эффективность
реагентов





Широкое меню тестов ИХЛ охватывает 23 панели заболеваний





Реагенты - легкие в использовании



Наборы реагентов совместимы со всеми анализаторами

- Интегрированный набор реагентов, готовый к использованию
- **RFID метка** хранит всю информацию о реагенте
- Легко и быстро, загрузка/выгрузка реагентов без пауз
- 2-точечная перекалибровка для мастер-кривой
- **50/100T в упаковке**, выбирайте в соответствии с потребностями вашей лаборатории

- ✓ Внутренний контроль качества и калибраторы предоставляются бесплатно.
- ✓ Не беспокойтесь о проблемах с регистрацией реагентов.



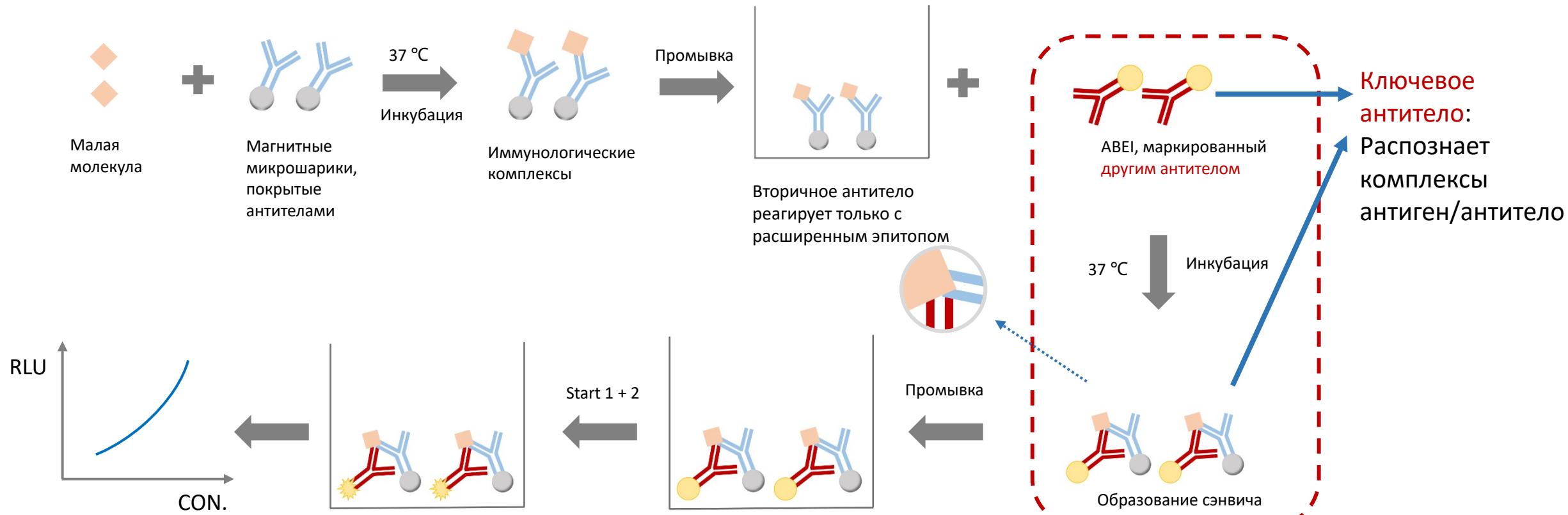


Инновационная технология измерения малых молекул



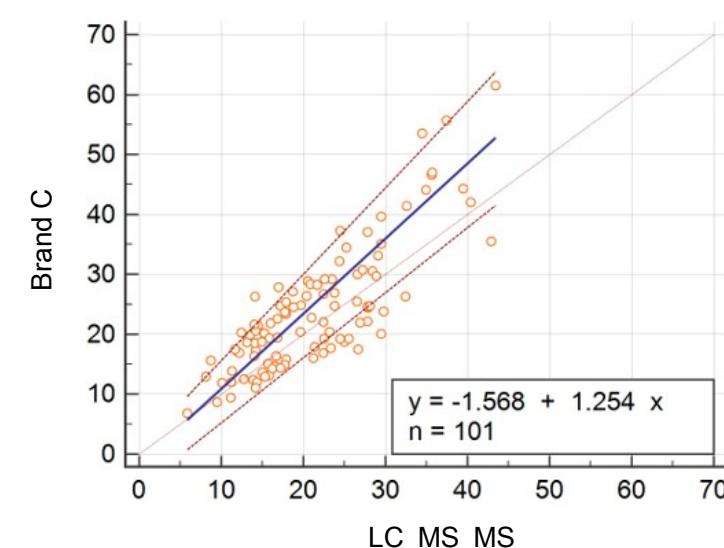
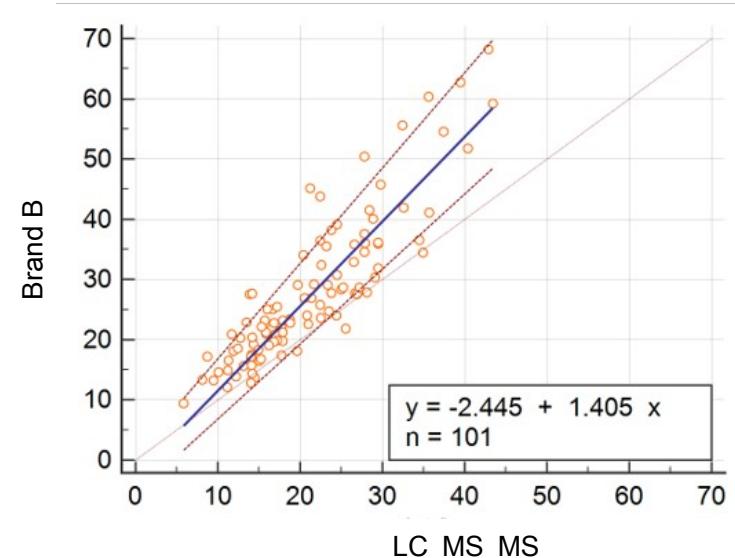
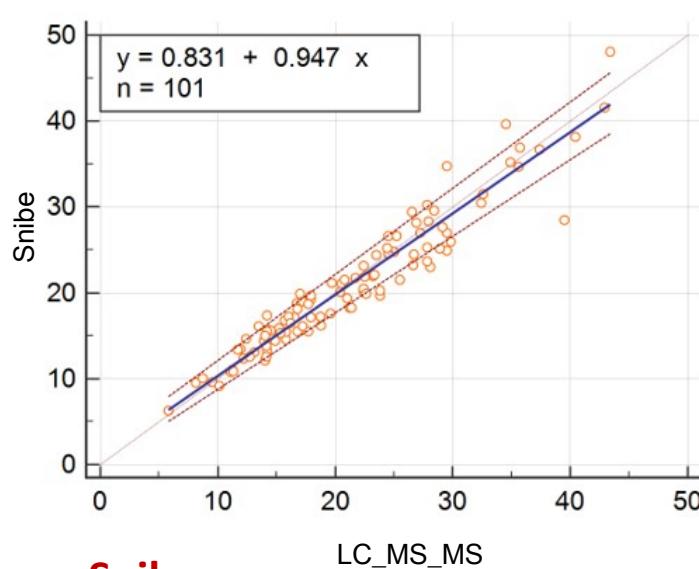
■ Новое решение для достижения более высокой точности, достоверности и чувствительности

Принцип





MAGLUMI® 25-OH Vitamin D — Сравнение трех систем иммуноферментного анализа и ЖХ-МС

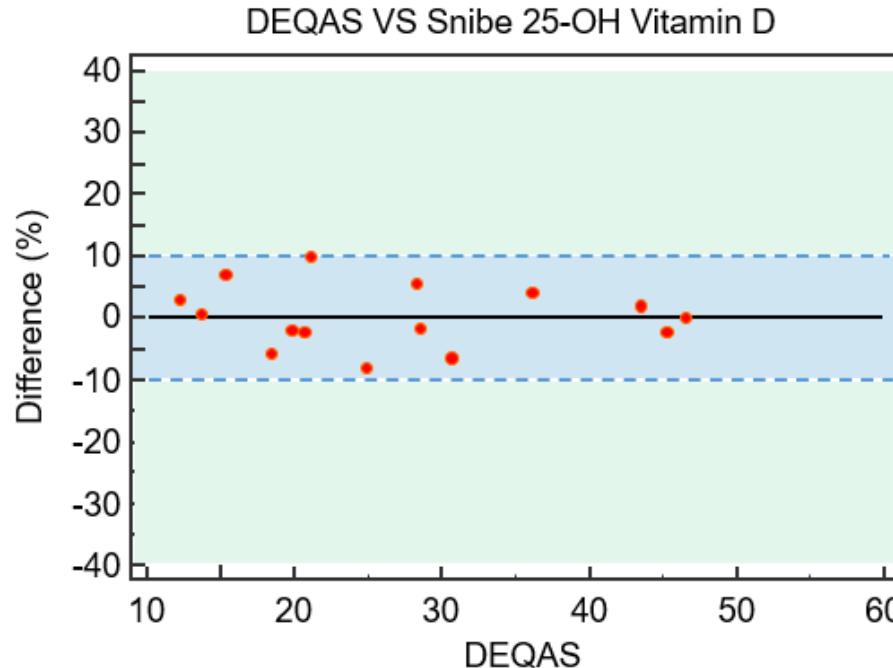
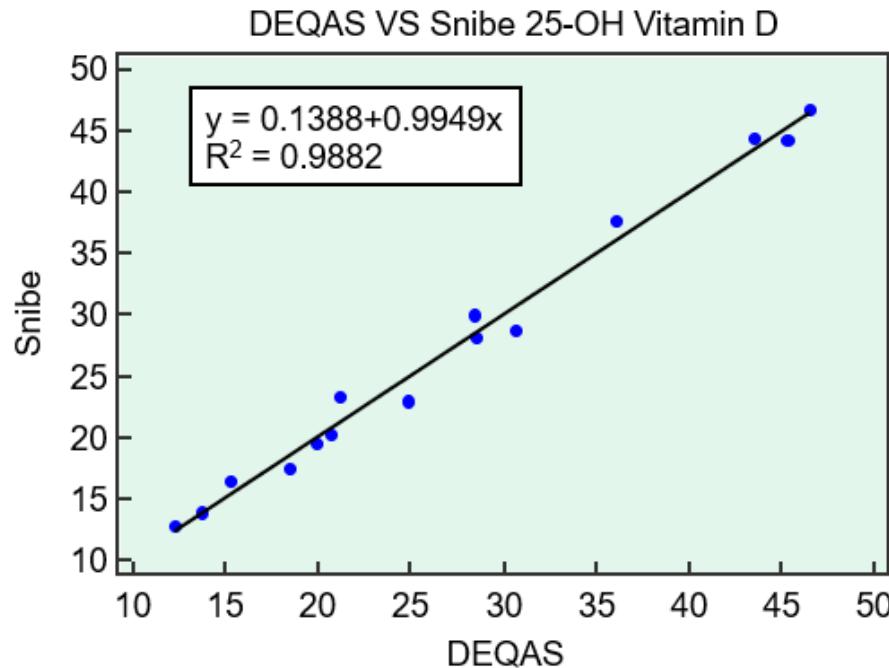


Реагент нового поколения, использующий метод сэндвича с малыми молекулами

- Высокая чувствительность, повышенная точность
- Хорошее соответствие результатов официальной референтной методике измерения (ЖХ-МС)
- Более широкий линейный диапазон (1,50–150 нг/мл)



MAGLUMI® 25-OH Vitamin D — сравнение результатов UK DEQAS

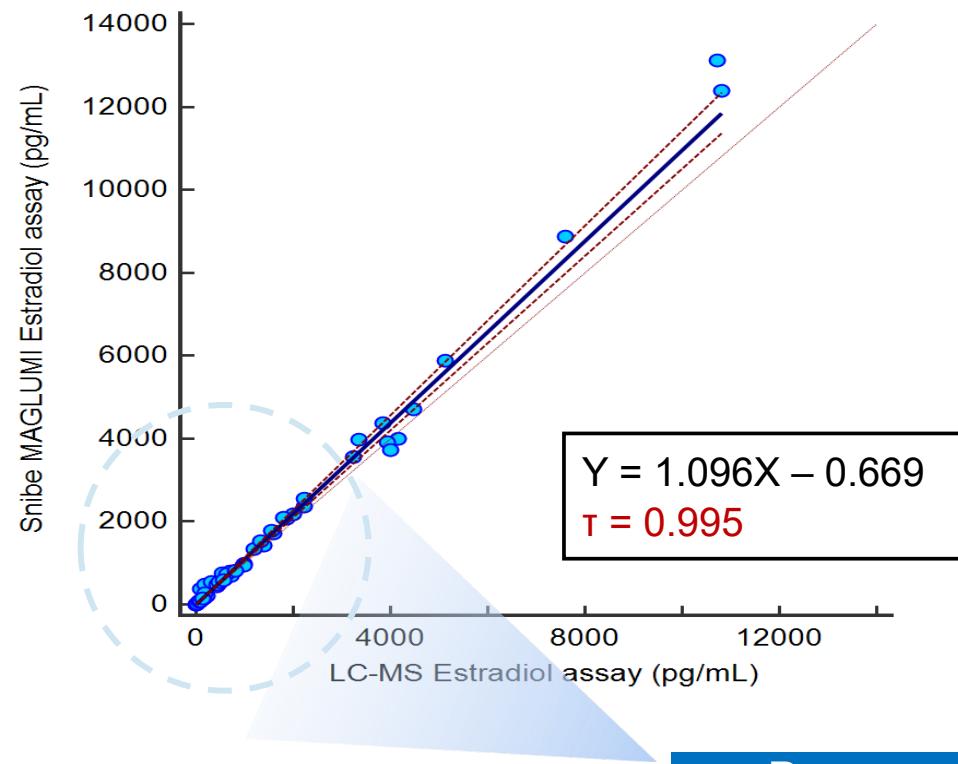


Snibe 25-OH Vitamin D в высокой степени соответствует образцам межлабораторной оценки качества DEQAS, полученным по данным масс-спектрометрии. Для каждого образца допускается систематическая погрешность в пределах 10%, при этом средняя погрешность составила 0,22%.

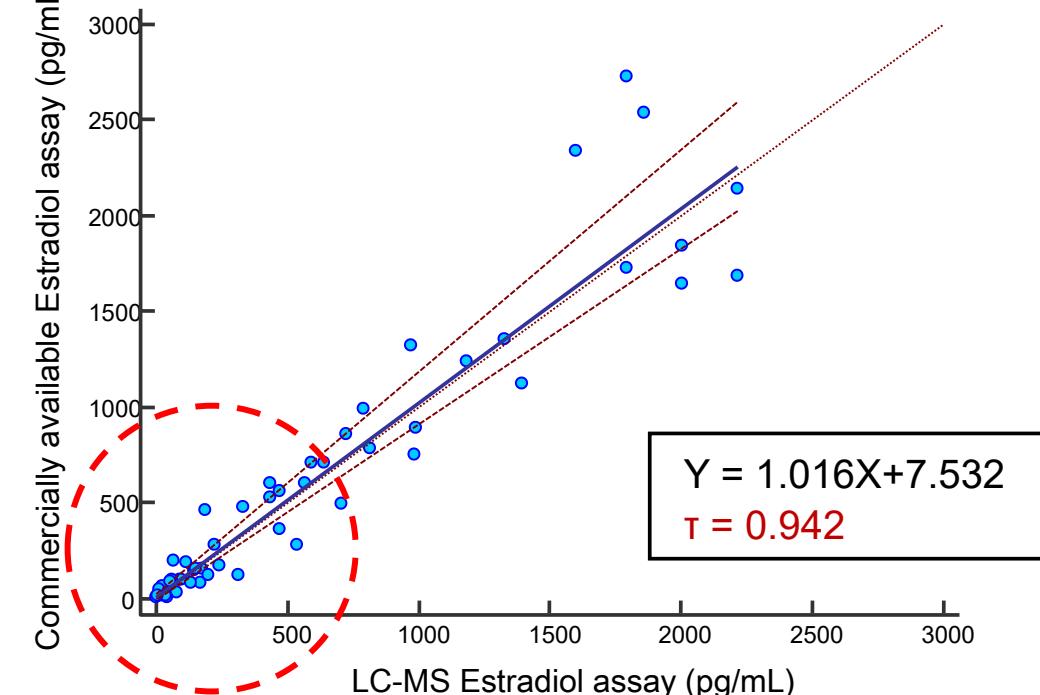


MAGLUMI® Estradiol — Точное измерение образцов с низкой концентрацией

Snibe MAGLUMI® Эстрадиол против
ЖХ-МС Эстрадиол



Доступный на рынке Эстрадиол против
ЖХ-МС Эстрадиол



Высокая степень соответствия методу ЖХ-МС, особенно в
низких концентрациях, что обеспечивает точность теста при
низких концентрациях.

Особенность 5

**Превосходное качество с множеством
сертификатов**

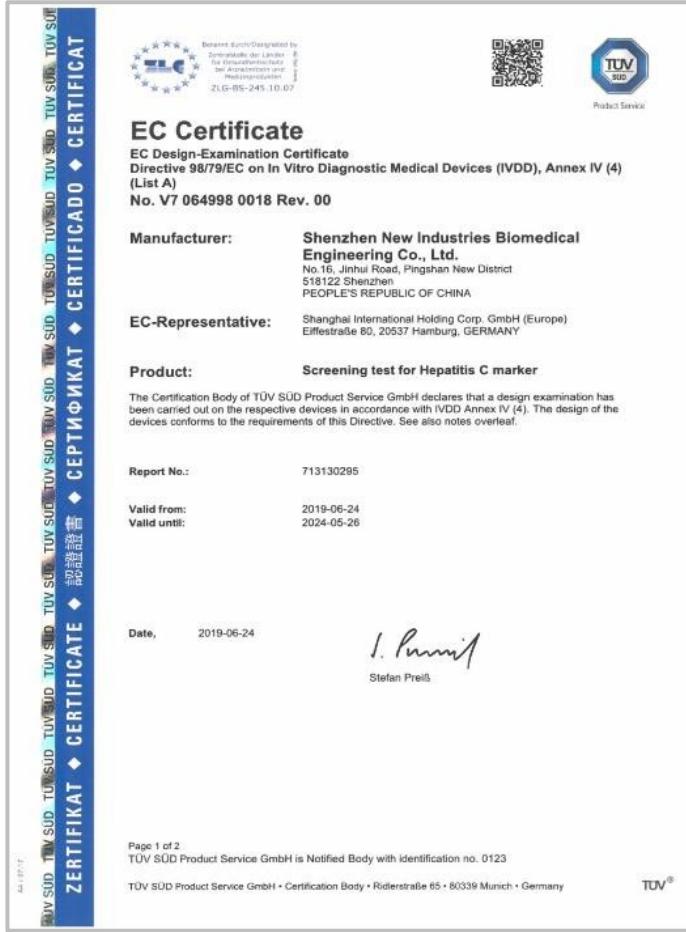




CE List A Сертификаты



Первый в Китае, получивший маркировку CE для тестов ИХЛ на anti-HCV



Confirmation Letter Template regarding amending Regulation (EU) 2024/1860

If devices covered by certificates issued under Directive Directive 98/79/EC (IVDD) that expired after 26th May 2022 and before 9th July 2024, without having been withdrawn, this letter also confirms that

- the manufacturer signed the written agreement under IVDR by the date of IVDD certificate expiry; or
- provided evidence that a competent authority of a Member State had granted a derogation or exemption from the applicable conformity assessment procedure in accordance with Article 54(1) of IVDR or Article 92(1) of the IVDR respectively.

The transition timelines in accordance Article 110 (3) of IVDR that apply to the devices covered by this letter, subject to the manufacturer's continued compliance to the other conditions specified in Article 110 (3c) of IVDR, are shown below:

- 31st December 2027, for devices certified under IVDD;
- 31st December 2027, for class D devices;
- 31st December 2028, for class C devices;
- 31st December 2029, for class B devices and for class A devices placed on the market in sterile condition

We reserve the right to invoice any issuance, copies, amendments and / or changes of the confirmation letter according to effort.

For confirmation letter validity see www.tuv-sud.com/ps-cert?r=CLI 105113 0011

In case of inquiries please contact medical_devices@tuv-sud.com.

On behalf of the Notified Body TÜV SÜD Product Service GmbH,
2024-07-22

TÜV SÜD Product Service GmbH Medical and Health Services	TÜV SÜD Product Service GmbH Medical and Health Services
<u>Holly Tang</u> Holly Tang [Jul 22, 2024 18:09 GMT+8]	<u>Michael Mauermeir</u> Michael Mauermeir [Jul 22, 2024 11:45 GMT+2]
Ms. Holly Tang Conformity Assessment Responsible (CARE)	Mr. Michael Mauermeir Application Reviewer

Confirmation Letter Template regarding amending Regulation (EU) 2024/1860

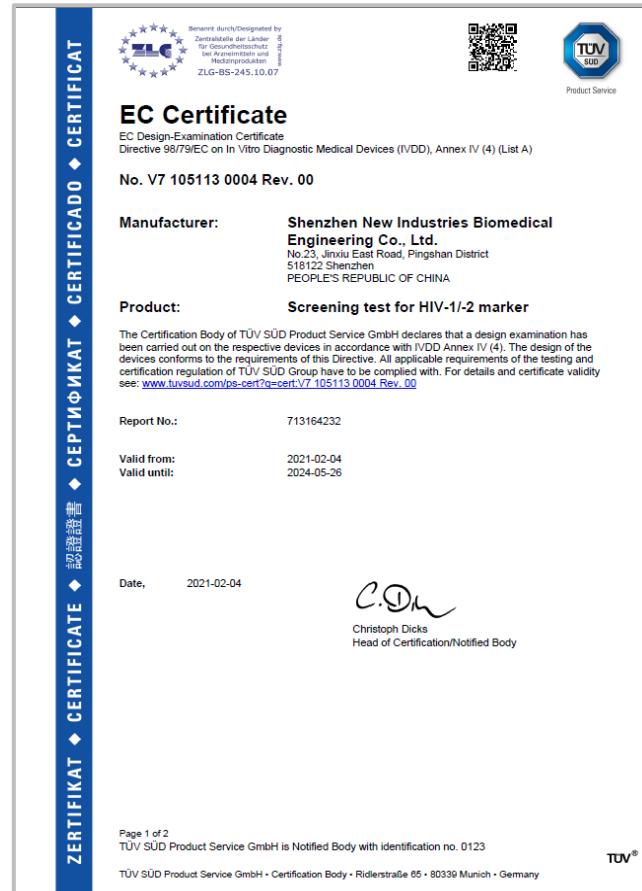
TÜV SÜD

Device name or Basic UDI-DI (under IVDR application)	IVDR Device classification (as proposed by the manufacturer and verified during application review)	If the IVDR device is a substitute device, identification of the corresponding IVDD device	IVDD Certificate Reference(s) of the devices under IVDR application, and the NB Identification
MAGLUMI® CMV IgG (CLIA) Negative Control (Basic UDI-DI: 69471455071VV)	Class C for professional use	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123
MAGLUMI® CMV IgM (CLIA) Positive Control (Basic UDI-DI: 69471455482WP)	Class C for professional use	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123
MAGLUMI® CMV IgM (CLIA) Negative Control (Basic UDI-DI: 69471455482WP)	Class C for professional use	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123
MAGLUMI® Anti-HCV (CLIA) (Basic UDI-DI: 69471455173W7)	Class D incl. ST/NPT	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123 V7 105113 0003 Rev. 00; NB0123
MAGLUMI® HIV Ab/Ag Combi (CLIA) (Basic UDI-DI: 69471455175WB)	Class D incl. ST/NPT	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123 V7 105113 0004 Rev. 00; NB0123
MAGLUMI® Tumor Marker Control (Basic UDI-DI: 69471455352W9)	Class C for professional use	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123
MAGLUMI® HBsAg (CLIA) (Basic UDI-DI: 69471455123VQ)	Class D incl. ST/NPT	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123 V7 105113 0006 Rev. 00; NB0123

Legend: ST – self-testing; NPT – near-patient testing; CDx – companion diagnostics



MAGLUMI® HIV Ab/Ag Combi
Анализ ИХЛ (4-го поколения)
имеет маркировку СЕ (список
А) — это высококачественное
решение для ранней
диагностики ВИЧ-инфекции.



Confirmation Letter Template regarding amending Regulation (EU) 2024/1860

Device name or Basic UDI-DI (under IVDR application)	IVDR Device classification (as proposed by the manufacturer and verified during application review)	If the IVDR device is a substitute device, identification of the corresponding IVDD device	IVDD Certificate Reference(s) of the devices under IVDR application, and the NB Identification
MAGLUMI® CMV IgG (CLIA) Negative Control (Basic UDI-DI: 69471455071VW)	Class C for professional use	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123
MAGLUMI® CMV IgM (CLIA) Positive Control (Basic UDI-DI: 69471455482WP)	Class C for professional use	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123
MAGLUMI® CMV IgM (CLIA) Negative Control (Basic UDI-DI: 69471455482WP)	Class C for professional use	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123
MAGLUMI® Anti-HCV (CLIA) (Basic UDI-DI: 69471455173W7)	Class D incl. ST/NPT	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123 V7 105113 0003 Rev. 00; NB0123
MAGLUMI® HIV Ab/Ag Combi (CLIA) (Basic UDI-DI: 69471455175WB)	Class D incl. ST/NPT	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123 V7 105113 0004 Rev. 00; NB0123
MAGLUMI® Tumor Marker Control (Basic UDI-DI: 69471455352W9)	Class C for professional use	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123
MAGLUMI® HBsAg (CLIA) (Basic UDI-DI: 69471455123VQ)	Class D incl. ST/NPT	N/A	Certification as follows: V1 105113 0002 Rev. 03; NB 0123 V7 105113 0006 Rev. 00; NB0123

Legend: ST – self-testing; NPT – near-patient testing; CDx – companion diagnostics



CE List A Сертификаты



ZERTIFIKAT ◆ CERTIFICATE ◆ CERTIFICADO ◆ CERTIFICAT ◆ CERTIFICAT

Benannt durch/Designated by
Zentralstelle der Länder
für Gesundheitsschutz
im Lebensmittel- und
Medizinproduktebereich
ZLG-BS-245.10.07

Product Service

EC Certificate
EC Design-Examination Certificate
Directive 98/79/EC on In Vitro Diagnostic Medical Devices (IVDD), Annex IV (4) (List A)

No. V7 105113 0006 Rev. 00

Manufacturer: Shenzhen New Industries Biomedical Engineering Co., Ltd.
No.23, Jinxiu East Road, Pingshan District
518122 Shenzhen
PEOPLE'S REPUBLIC OF CHINA

Product: Screening test for Hepatitis B marker for Professional Use only

The Certification Body of TÜV SÜD Product Service GmbH declares that a design examination has been carried out on the respective devices in accordance with IVDD Annex IV (4). The design of the devices conforms to the requirements of this Directive. All applicable requirements of the testing and certification regulation of TÜV SÜD Group have to be complied with. For details and certificate validity see: www.tuvsud.com/ps-cert?q=cert/V7 105113 0006 Rev. 00

Report No.: 713210558

Valid from: 2022-03-11
Valid until: 2025-05-26

Date, 2022-03-11

Christoph Dicks
Head of Certification/Notified Body

Page 1 of 2
TÜV SÜD Product Service GmbH is Notified Body with identification no. 0123

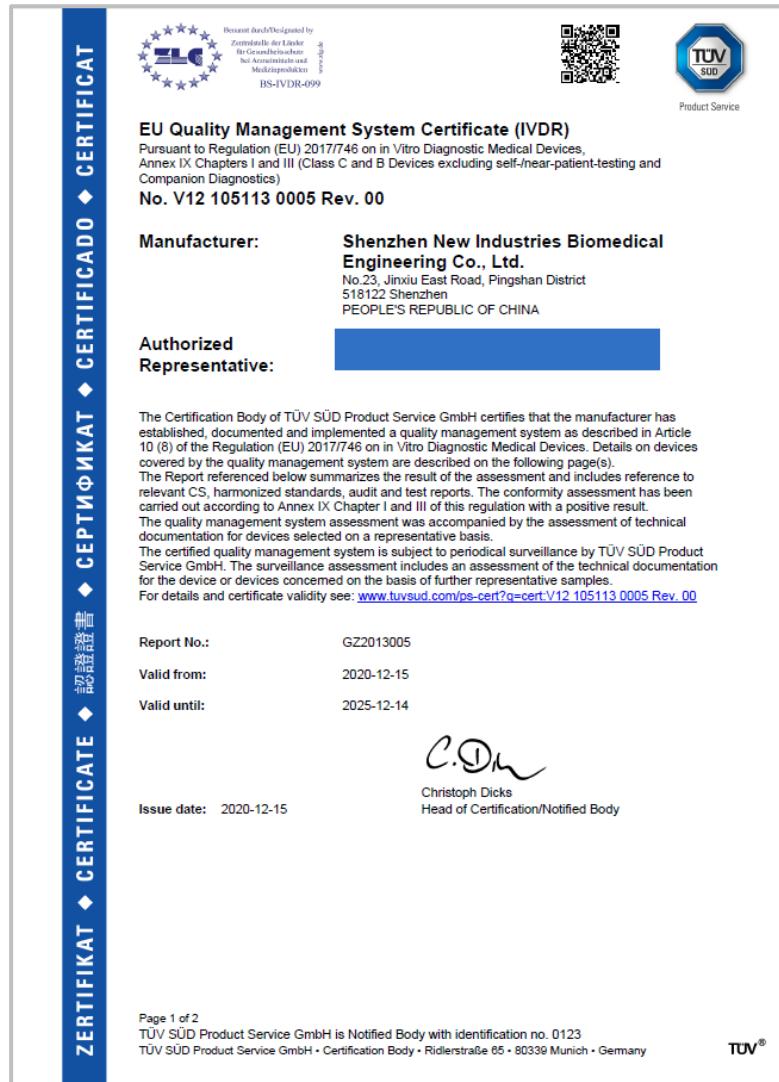
TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

TÜV®

**Сертификат CE List A для 6 ИХЛ
анализов MAGLUMI для выявления
вируса гепатита В (HBV),
охватывающих HBsAg, Anti-HBs,
HBeAg, Anti-HBe, Anti-HBc и Anti-HBc
IgM.**



IVDR CE Сертификат



Первый сертификат IVDR CE для продукта ИХЛ в Азии

MAGLUMI® TSH и MAGLUMI® CA 19-9 получили сертификат IVDR CE от уполномоченного органа ЕС TÜV SÜD Product Service GmbH, что еще раз подтверждает, что качество нашей продукции соответствует международным стандартам.





Множественные измерения

измеренные методом масс-спектрометрии в референтной лаборатории Snibe,
прошли схему IFCC-RELA.

IFCC-RELA организована по поручению Международной федерации клинической химии и лабораторной медицины (IFCC). Она представляет собой высший уровень измерений в области клинической химии и лабораторной медицины и признана одним из важнейших мероприятий по оценке качества в области международной клинической химии и лабораторной медицины.



Другие сертификаты



ISO 13485



ISO 9001



CE Certificate



**Instrument EMC / Safety
FSC**



Контроль качества третьей стороны



**Первое в Китае предложение в официальной инструкции по применению
BIO-RAD с заданными значениями для анализов MAGLUMI® ИХЛ**

BIO-RAD

Lyphochek® Tumor Marker Plus Control Levels 1, 2 and 3

REF	367 Level 1	6 x 2 mL				EXP 2017-05-31	LOT	54590	Level 1 54591	Level 2 54592	Level 3 54593
368	Level 2	6 x 2 mL									
369	Level 3	6 x 2 mL									
368X	Trilevel MiniPak	3 x 2 mL									



EXP 2017-05-31

LOT 54590

INSERT UPDATE*
2015-06-11 (R.8)

Neu
Actu

BIO-RAD

Liquichek™ Cardiac Markers Plus Control Levels 1, 2 and 3

REF	180	Trilevel 6 x 3 mL				EXP 2017-03-31	LOT	29830	Level 1 29831	Level 2 29832	Level 3 29833
181	Level 1	6 x 3 mL									
182	Level 2	6 x 3 mL									
183	Level 3	6 x 3 mL									
180X	MiniPak	3 x 3 mL									



IVD

EXP 2017-03-31

LOT 29830

<http://www.myeinserst.com/29830>

方法 (1)

Snibe MAGLUMI

	1 - 29831	濃度 2 - 29832	濃度 3 - 29833 (2)		
範圍	均值	範圍	均值	範圍	
CK-MB ISOENZYME (MASS)	ng/mL	3.70	2.59 - 4.81	13.7	9.56 - 17.8
SNIBE Maglumi Series Analyzer (3)				67.2	47.0 - 87.3
MYOGLOBIN	ng/mL	41.1	28.8 - 53.4	125	87.4 - 162
SNIBE Maglumi Series Analyzer (3)				284	199 - 369
N-TERMINAL PRO-BRAIN NATRIURETIC PEPTIDE (NT-PROMBNP)	pg/mL	137	95.6 - 177	355	248 - 461
SNIBE Maglumi Series Analyzer (3)				3423	2396 - 4450

BIO-RAD

Lyphochek® Immunoassay Plus Control Levels 1, 2 and 3

REF	370	Trilevel 12 x 5 mL			
371	Level 1	12 x 5 mL			
372	Level 2	12 x 5 mL			
373	Level 3	12 x 5 mL			
370X	MiniPak	3 x 5 mL			



IVD

EXP 2017-02-28

LOT 40300

Level 1 40301
Level 2 40302
Level 3 40303

[http://www.myeinserst.com/57450](http://www.http://www.myeinserst.com/57450)

儀器 (1)

SNIBE MAGLUMI (2)

REF	359	Level LTA 6 x 5 mL		
364	Level 1	6 x 5 mL		
365	Level 2	6 x 5 mL		
366	Level 3	6 x 5 mL		
359X	MiniPak	4 x 5 mL		

BIO-RAD
SNIBE MAGLUMI (2)

儀器 (1)

SNIBE MAGLUMI Series (2)

	濃度 LTA - 57451L		
單位	均值	範圍	
25-HYDROXY VITAMIN D	ng/mL	(4)	
SNIBE Maglumi Series (2)			
ANTI-TG	IU/mL	(4)	
SNIBE Maglumi Series (2)			
ANTI-THYROPEROXYDASE (ANTI-TPO)	IU/mL	(4)	
SNIBE Maglumi Series (2)			
IGF-1/SOMATOMEDIN C	ng/mL	(4)	
SNIBE Maglumi Series (2)			
PTH (INTACT)	pg/mL	(4)	
SNIBE Maglumi Series (2)			

修訂日期 2015-08-24

方法 (1)

Snibe MAGLUMI

	濃度 LTA - 57451L		
單位	均值	範圍	
25-HYDROXY VITAMIN D	ng/mL	(4)	
SNIBE Maglumi Series (2)			
ANTI-TG	IU/mL	(4)	
SNIBE Maglumi Series (2)			
ANTI-THYROPEROXYDASE (ANTI-TPO)	IU/mL	(4)	
SNIBE Maglumi Series (2)			
IGF-1/SOMATOMEDIN C	ng/mL	(4)	
SNIBE Maglumi Series (2)			
PTH (INTACT)	pg/mL	(4)	
SNIBE Maglumi Series (2)			



Контроль качества третьей стороны



Первое в Китае предложение в официальной инструкции по применению Randox с присвоенными значениями для анализов MAGLUMI® ИХЛ

RANDOX					
IMMUNOASSAY PREMIUM PLUS - LEVEL 2 (IA PREMIUM PLUS 2)					
Cat. No. IA3110 / IA3112 Lot No. 1662EC Size: 12 x 5 ml / 4 x 5 ml Expiry: 2019-10-28					
Range					
Analyte	unit	Target	low	high	methods
CA 15-3	U/ml	50.6	34.4	66.8	Siemens Centaur CP
CA 19-9	U/ml	713	570	856	Abbott Architect
	U/ml	159	127	191	BioMerieux Vidas
	U/ml	259	176	342	Siemens Centaur XP/XPT/Classic
	U/ml	94.1	75.3	113	Siemens Immulite 2000/2500
	U/ml	97.6	78.1	117	Siemens Immulite 1000
	U/ml	89.4	71.5	107	Beckman Dxl800
	U/ml	65.7	52.6	78.8	Roche Elecsys
	U/ml	142	114	170	Diasorin Liaison
	U/ml	61.2	49.0	73.4	Roche Modular E170
	U/ml	98.2	78.6	118	Beckman Access
C-17-OH-C	U/ml	47.2	37.8	56.6	Tosoh AIA360
	U/ml	167	134	200	Vitros ECi
	U/ml	702	562	842	Abbott Architect XR/XR2 kit
	U/ml	62.1	49.7	74.5	Roche Cobas 6000/8000
	U/ml	65.7	52.6	78.8	Roche Cobas E411
	U/ml	139	111	167	Fujirebio Lumipulse G Series
	U/ml	243	165	321	Siemens Centaur CP
	U/ml	88.5	62.0	115	SNIIBE Maglumi Analysers

朗道质控 Immunoassay Premium Plus Control 赋值结果										
		Immunoassay Premium Plus Control Level 1			Immunoassay Premium Plus Control Level 2			Immunoassay Premium Plus Control Level 3		
Analyte	unit	Target	low	high	Target	low	high	Target	low	high
17-OH P	ng/mL	1.70	1.19	2.21	3.05	2.14	3.97	11.7	8.19	15.2
AFP	IU/mL	11.9	8.33	15.5	53.0	37.1	68.9	191	134	248
ALD	pg/mL	<5.00			114	79.8	148	239	167	311
B2-MG	ug/dL	0.752	0.526	0.978	2.97	2.08	3.86	5.95	4.17	7.74
CA125	IU/mL	16.2	11.3	21.1	91.8	64.3	119	184	129	239
CA199	IU/mL	20.6	14.4	26.8	88.5	62.0	115	184	129	239
CEA	ng/mL	4.33	3.03	5.63	22.6	15.8	29.4	47.6	33.3	61.9
Cortisol	ng/mL	92.5	64.8	120	230	161	299	323	226	420
C-P	ng/mL	2.45	1.72	3.19	5.58	3.91	7.25	10.4	7.28	13.5
DHEA-S	ug/dL	115	80.5	150	470	329	611	740	518	962
DIGOXIN	ng/mL	0.453	0.317	0.589	2.31	1.62	3.00	3.55	2.49	4.62
E2	pg/mL	46.3	32.4	60.2	351	246	456	679	475	883
FA	ng/mL	3.05	2.14	3.97	6.82	4.77	8.87	13.1	9.17	17.0
Ferritin	ng/mL	16.7	11.7	21.7	89.3	62.5	116	287	201	373
F-PSA	ng/mL	1.15	0.805	1.50	9.72	6.80	12.6	24.7	17.3	32.1
FSH	mIU/mL	5.72	4.00	7.44	29.5	20.7	38.4	52.0	36.4	67.6
F-T	pg/mL	2.46	1.72	3.20	18.1	12.7	23.5	38.1	26.7	49.5
FT3	pg/mL	2.20	1.54	2.86	6.68	4.68	8.68	16.6	11.6	21.6
FT4	pg/mL	11.1	7.77	14.4	28.1	19.7	36.5	55.2	38.6	71.8
GH	ng/mL	2.86	2.00	3.72	10.2	7.14	13.3	23.8	16.7	30.9
HCG/B-HCG	mIU/ml	10.8	7.56	14.0	23.6	16.5	30.7	406	284	528
IgE	IU/mL	180	126	234	92.6	64.8	120	413	289	537
INS	ulU/mL	4.82	3.37	6.27	7.25	5.08	9.43	24.7	17.3	32.1
LH	mIU/mL	3.58	2.51	4.65	27.8	19.5	36.1	45.7	32.0	59.4
PRL	ulU/mL	181	127	235	704	493	915	1282	897	1667
PROG	ng/mL	1.24	0.868	1.61	9.94	6.96	12.9	27.5	19.3	35.8
PSA	ng/mL	2.15	1.51	2.80	18.0	12.6	23.4	41.9	29.3	54.5
T3	ng/mL	0.492	0.344	0.640	3.28	2.30	4.26	5.78	4.05	7.51
T4	ng/mL	31.2	21.8	40.6	131	91.7	170	199	139	259
TEST	ng/mL	0.261	0.183	0.339	4.98	3.49	6.47	8.10	5.67	10.5

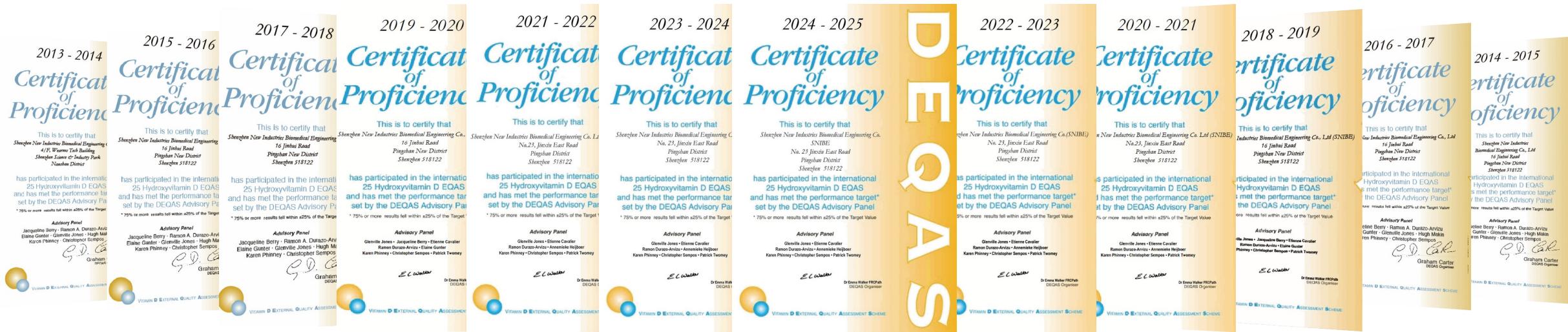
朗道质控 Immunoassay Speciality I Control 赋值结果										
		Immunoassay Speciality I Control Level 1			Immunoassay Speciality I Control Level 2			Immunoassay Speciality I Control Level 3		
Analyte	unit	Target	low	high	Target	low	high	Target	low	high
25-OH Vit D	ng/mL	13.7	9.59	17.8	24.4	17.1	31.7	37.0	25.9	48.1
C-P	ng/mL	2.29	1.60	2.98	3.64	2.55	4.73	7.57	5.30	9.84
INS	ulU/mL	6.71	4.70	8.72	11.2	7.84	14.6	37.4	26.2	48.6
PCT	ng/mL	1.07	0.749	1.39	3.09	2.16	4.02	26.2	18.3	34.1
PTH	pg/mL	50.3	35.2	65.4	216	151	281	754	528	980



Внешний контроль качества



Компания Snibe приняла участие в международном испытании EQAS на 25-ОН витамин D и получала сертификат 12 лет подряд.



Vitamin D External Quality Assessment Scheme, DEQAS



Внешний контроль качества

Snibe ежегодно участвует в различных программах EQA



RCPAQAP



NGSP Certification



IFCC Certification



CAP Proficiency Test



BIO-RAD External Quality Assurance Services (EQAS)



Randox International Quality Assessment Scheme (RIQAS)



Публикации по оценке

VALUTAZIONE DELLE PRESTAZIONI ANALITICHE DI MAGLUMI 2000 PLUS PER LA MISURA DELL'ANTIGENE PROSTATICO SPECIFICO (PSA)

Grandi G., Casoni G., Rossi M., Cicali C., Fiss E., Moneti M., Sogliani A., Neri A., Lazzari L., Savigliano R., Giacalone A., Gobbi G., Paganini C., Caviglioli G.

INTRODUZIONE: Il test di PSA è uno dei più importanti strumenti diagnostici per la deteczione e il monitoraggio della neoplasia prostatica. È possibile utilizzare diversi metodi analitici per misurare l'antigene prostatico specifico (PSA), ma non tutti sono validi per la diagnosi di tumore.

RISULTATO: Il nuovo strumento MAGLUMI 2000 PLUS è un avanzato strumento di analisi automatica che utilizza la tecnologia del chemiluminescenza. I risultati mostrano una buona precisione e una elevata accuratezza, con coefficienti di correlazione superiori al 0,95. I valori di PSA sono stati confrontati con quelli ottenuti con altri metodi di analisi, dimostrando una buona concordanza.

CONCLUSIONE: I risultati delle prestazioni analitiche dello strumento MAGLUMI 2000 PLUS risultano corretti, validi e concordanti con i valori ottenuti con altri metodi analitici per misurare la proteina PSA nel sangue.

VALUTAZIONE DELLE PRESTAZIONI ANALITICHE DI MAGLUMI 2000 PLUS PER LA MISURA DELL'ANTIGENE PROSTATICO SPECIFICO (PSA)

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TESTOSTERONA LIBRE
Comparación de resultados obtenidos por Quimoluminiscencia con los obtenidos por Radiomunoanálisis

Dr. Joaquim Chaves, Laboratorio de Análisis Clínicos, Madrid

Introducción: La determinación de la concentración de testosterona libre es de gran importancia en la medicina clínica. El análisis de la testosterona libre se realiza mediante radioinmunoanálisis (RIA) o mediante la medida de la actividad luminescente que emite el producto de la reacción de la testosterona con un reactivo fluorescente.

Método y resultados: Se han comparado los resultados obtenidos por la técnica de quimoluminiscencia (QLM) con los obtenidos por la RIA. Los resultados muestran una buena concordanza entre las dos técnicas, con un coeficiente de correlación de 0,95 para la testosterona libre total y 0,97 para la testosterona libre libre.

Conclusiones: Los resultados demuestran la precisión y la concordanza entre la QLM y la RIA para la determinación de la testosterona libre.

MAGLUMI 2000: NUOVO STRUMENTO IN AUTOMATIZZAZIONE COMPLETAMENTE PER DOSAGGI IMMUNOMETRICI

C. Cozzi, Laboratorio di Analisi Cliniche, Milano

Introduzione: Il MAGLUMI 2000 è uno strumento di analisi automatica per dosaggi immunoassay. È un avanzato strumento di analisi automatica che utilizza la tecnologia del chemiluminescenza.

Materiale e metodi: I risultati mostrano una buona precisione e una elevata accuratezza, con coefficienti di correlazione superiori al 0,95. I valori di PSA sono stati confrontati con quelli ottenuti con altri metodi di analisi, dimostrando una buona concordanza.

Conclusioni: I risultati delle prestazioni analitiche dello strumento MAGLUMI 2000 risultano corretti, validi e concordanti con i valori ottenuti con altri metodi analitici per misurare la proteina PSA nel sangue.

ANTI-GAD: VERIFYING REFERENCE INTERVALS IN THE CLINICAL LABORATORY

V. Mazzoni, C. Cozzi, Laboratorio di Analisi Cliniche, Milano

1. Background: Determinare gli intervalli di riferimento per i test di anticorpi anti-GAD è un problema importante per la clinica. I risultati di questi test sono spesso discordanti tra loro, anche quando si utilizzano le stesse metodologie.

2. Aim of the study: Verificare gli intervalli di riferimento per i test di anticorpi anti-GAD.

3. Methods: I risultati sono stati confrontati con i campioni di sangue di 100 pazienti, presi per prevenzione suggerita da un medico neurologista.

4. Results: I risultati mostrano una buona precisione e una elevata accuratezza, con coefficienti di correlazione superiori al 0,95. I valori di PSA sono stati confrontati con quelli ottenuti con altri metodi di analisi, dimostrando una buona concordanza.

5. Conclusion: I risultati delle prestazioni analitiche dello strumento MAGLUMI 2000 risultano corretti, validi e concordanti con i valori ottenuti con altri metodi analitici per misurare la proteina PSA nel sangue.

DEFINITION OF REFERENCE VALUES FOR PLASMA ALDOSTERONE USING A NEW IMMUNOASSAY METHOD ON MAGLUMI 2000 PLUS ANALYZER

F. D'Aurizio, P. Melis, A. Pollici Ascaso, S. Filippetti, R. Tazzoli

Introduction: Determining reference intervals for plasma aldosterone is a difficult task. The reference intervals for plasma aldosterone are often different from those for urinary aldosterone, mainly because of the different biological variability of the two parameters.

Material and methods: In this study we used the MAGLUMI 2000 PLUS analyzer (Siemens) to determine plasma aldosterone levels in 100 healthy volunteers. The results were compared with those obtained by the same method on urine samples.

Results: The results show a good precision and accuracy, with correlation coefficients > 0.95. The values of plasma aldosterone were compared with those obtained by other methods, showing a good agreement.

Conclusion: The results of the performance analysis of the new MAGLUMI 2000 PLUS analyzer are correct, valid and in agreement with those obtained by other analytical methods for measuring plasma aldosterone.

MAGLUMI 2000: NUOVO STRUMENTO DI CHEMILUMINESCENZA COMPLETAMENTE AUTOMATIZZATO PER DOSAGGI IMMUNOMETRICI

D. Paganini, C. Cozzi, A. Moretti, R. Pollici

INTRODUZIONE: Il MAGLUMI 2000 è un avanzato strumento di analisi automatica per dosaggi immunoassay. È un avanzato strumento di analisi automatica che utilizza la tecnologia del chemiluminescenza.

SCOPO: Lo scopo di questo studio è di valutare le prestazioni analitiche del MAGLUMI 2000 PLUS per la misura di biomarcatore del fegato.

MATERIALI E METODI: Vennero utilizzati 100 campioni di sangue di pazienti con sindrome di cirrosi epatica.

Background: L'esperienza diagnostica sui marcatori del fegato è molto ampia, mentre quella sui marcatori della sindrome di cirrosi epatica è meno diffusa.

Obiettivo: Lo scopo di questo studio è di valutare le prestazioni analitiche del MAGLUMI 2000 PLUS per la misura di biomarcatore del fegato.

Risultati: I risultati mostrano una buona precisione e una elevata accuratezza, con coefficienti di correlazione superiori al 0,95. I valori di PSA sono stati confrontati con quelli ottenuti con altri metodi di analisi, dimostrando una buona concordanza.

Conclusioni: I risultati delle prestazioni analitiche dello strumento MAGLUMI 2000 PLUS risultano corretti, validi e concordanti con i valori ottenuti con altri metodi analitici per misurare la proteina PSA nel sangue.

New biochemical markers for liver fibrosis: relationship between serum values and liver biopsy

Valentino Ricossa, Riccardo Russo, Simona Girelli, Laboratorio di Biochimica Clinica, Ospedale Regionale Ca' Granda, Regione Lombardia

INTRODUZIONE: Lo studio ha dimostrato che esiste una relazione tra i valori di alcuni biomarcatori del fegato e la severità della fibrosi.

SCOPO: Lo scopo di questo studio è di valutare la relazione tra i valori di alcuni biomarcatori del fegato e la severità della fibrosi.

MATERIALI E METODI: Vennero utilizzati 100 campioni di sangue di pazienti con sindrome di cirrosi epatica.

Background: L'esperienza diagnostica sui marcatori del fegato è molto ampia, mentre quella sui marcatori della sindrome di cirrosi epatica è meno diffusa.

Obiettivo: Lo scopo di questo studio è di valutare le prestazioni analitiche del MAGLUMI 2000 PLUS per la misura di biomarcatore del fegato.

Risultati: I risultati mostrano una buona precisione e una elevata accuratezza, con coefficienti di correlazione superiori al 0,95. I valori di PSA sono stati confrontati con quelli ottenuti con altri metodi di analisi, dimostrando una buona concordanza.

Conclusioni: I risultati delle prestazioni analitiche dello strumento MAGLUMI 2000 PLUS risultano corretti, validi e concordanti con i valori ottenuti con altri metodi analitici per misurare la proteina PSA nel sangue.

VITAMIN D AND AUTOIMMUNE THYROID DISEASES

Federica D'Aurizio, Paola Melis, Paola Doretto, Renato Tazzoli, Clinica Padovana, Dipartimento di Scienze Mediche, Divisione di Laboratorio, S. Maria degli Angeli, Padova

Introduction: The recent description of several human and rodent autoimmunity diseases has led to the hypothesis that some of them could be induced by the presence of autoantibodies against the VDR.

Materials and Methods: Some sera were selected to represent normal subjects, patients with Hashimoto's thyroiditis (HT), Graves' disease (GD), non-thyroidal autoimmunity and patients with Hashimoto's thyroiditis and GD.

Aim of the study: To measure the serum levels of VDR in a group of healthy individuals affected by HT and to evaluate the presence of VDR autoantibodies.

Results: The mean serum levels of VDR in 100 healthy individuals were 10.20 ± 0.50 ng/ml. In patients with HT the mean serum levels of VDR were 10.20 ± 0.50 ng/ml. In patients with GD the mean serum levels of VDR were 10.20 ± 0.50 ng/ml. In patients with non-thyroidal autoimmunity the mean serum levels of VDR were 10.20 ± 0.50 ng/ml. In patients with HT and GD the mean serum levels of VDR were 10.20 ± 0.50 ng/ml.

Discussion and conclusion: The main finding of this study is that the VDR levels were not significantly different in patients with HT and patients with GD, supporting the hypothesis of an association between the presence of VDR autoantibodies and the pathogenesis of ATDs. The concordance of our conclusions with those of other authors supports the hypothesis that a preventive action may be needed in the medical care of ATDs.

DEFINITION OF REFERENCE INTERVALS FOR THYROID PEROXIDASE AUTOANTIBODIES ACCORDING TO NACB GUIDELINES: COMPARISON OF FOUR AUTOMATED METHODS

F. D'Aurizio, A. Ferraro, L. Castellone, J. Tommasi, D. Villalta*, M. Morandini*, G. Gianti, L. Bortolussi*, A. Pollici Ascaso, R. Tazzoli*

Introduzione: Il test di anticorpi contro la perossidasi tiroideana (TPO) è uno dei test più comuni per la determinazione della procalcitonina sierica.

MATERIALI E METODI: Vennero utilizzati 100 campioni di sangue di pazienti con sindrome di cirrosi epatica.

Background: L'esperienza diagnostica sui marcatori del fegato è molto ampia, mentre quella sui marcatori della sindrome di cirrosi epatica è meno diffusa.

Obiettivo: Lo scopo di questo studio è di valutare le prestazioni analitiche dei quattro strumenti di analisi automatica per la determinazione della procalcitonina sierica.

Risultati: I risultati mostrano una buona precisione e una elevata accuratezza, con coefficienti di correlazione superiori al 0,95. I valori di PSA sono stati confrontati con quelli ottenuti con altri metodi di analisi, dimostrando una buona concordanza.

Conclusioni: I risultati delle prestazioni analitiche dello strumento MAGLUMI 2000 PLUS risultano corretti, validi e concordanti con i valori ottenuti con altri metodi analitici per misurare la proteina PSA nel sangue.

ICCS
ESPERIENZA PRELIMINARE SU UNA NUOVA TECNOLOGIA IN CHEMILUMINESCENZA (CLIA) PER LA DETERMINAZIONE DELLA PROCALCITONINA SIERICA

V. Mazzoni, C. Cozzi, Laboratorio di Analisi Cliniche, Milano

INTRODUZIONE: L'esperienza diagnostica sui marcatori del fegato è molto ampia, mentre quella sui marcatori della sindrome di cirrosi epatica è meno diffusa.

MATERIALI E METODI: Vennero utilizzati 100 campioni di sangue di pazienti con sindrome di cirrosi epatica.

Background: L'esperienza diagnostica sui marcatori del fegato è molto ampia, mentre quella sui marcatori della sindrome di cirrosi epatica è meno diffusa.

Obiettivo: Lo scopo di questo studio è di valutare le prestazioni analitiche del MAGLUMI 2000 PLUS per la misura della procalcitonina sierica.

Risultati: I risultati mostrano una buona precisione e una elevata accuratezza, con coefficienti di correlazione superiori al 0,95. I valori di PSA sono stati confrontati con quelli ottenuti con altri metodi di analisi, dimostrando una buona concordanza.

Conclusioni: I risultati delle prestazioni analitiche dello strumento MAGLUMI 2000 PLUS risultano corretti, validi e concordanti con i valori ottenuti con altri metodi analitici per misurare la proteina PSA nel sangue.

VALUTAZIONE PRELIMINARE DELLE PRESTAZIONI ANALITICHE DI MAGLUMI 2000 PLUS PER LA MISURA DI FERRITINA, MICROGLOBINA E CK-MB

G. Verrini, L. Avallone, E. Paoletti, M. Sogliani, S. Berti, F. De Mattei, R. Tazzoli

INTRODUZIONE: Il test di ferritina è uno dei più importanti strumenti diagnostici per la deteczione e il monitoraggio della neoplasia prostatica. È possibile utilizzare diversi metodi analitici per misurare la ferritina, ma non tutti sono validi per la diagnosi di tumore.

RISULTATO: Il nuovo strumento MAGLUMI 2000 PLUS è un avanzato strumento di analisi automatica che utilizza la tecnologia del chemiluminescenza. I risultati mostrano una buona precisione e una elevata accuratezza, con coefficienti di correlazione superiori al 0,95. I valori di PSA sono stati confrontati con quelli ottenuti con altri metodi di analisi, dimostrando una buona concordanza.

CONCLUSIONE: I risultati delle prestazioni analitiche dello strumento MAGLUMI 2000 PLUS risultano corretti, validi e concordanti con i valori ottenuti con altri metodi analitici per misurare la proteina PSA nel sangue.



Публикации



Сотрудничал с известными врачами и опубликовал множество признаваемых статей в ведущих международных журналах.

Wang et al. *Critical Care* 2012, 16:R11
<http://ccforum.com/content/16/1/R11>

RESEARCH **Open Access**

Relationship between thyroid function and ICU mortality: a prospective observation study

Fellong Wang^{1†}, Wenzhi Pan^{2†}, Hairong Wang^{1†}, Shuyun Wang¹, Shuming Pan^{1*} and Junbo Ge^{2*}

Abstract

Introduction: Although nonthyroidal illness syndrome is considered to be associated with adverse outcome in ICU patients, the performance of thyroid hormone levels in predicting clinical outcome in ICU patients is unimpressive. This study was conducted to assess the prognostic value of the complete thyroid indicators (free triiodothyronine (FT3), total triiodothyronine, free thyroxine, total thyroxine, thyroid-stimulating hormone and reverse triiodothyronine) in unselected ICU patients.

Methods: A total of 480 consecutive patients without known thyroid diseases were screened for eligibility and followed up during their ICU stay. We collected each patient's baseline characteristics, including the Acute Physiology and Chronic Health Evaluation II (APACHE II) score and thyroid hormone, N-terminal pro-brain natriuretic peptide (NT-proBNP) and C-reactive protein (CRP) levels. The primary outcome was ICU mortality. Potential predictors were analyzed for possible association with outcomes. We also evaluated the ability of thyroid hormones together with APACHE II score to predict ICU mortality by calculation of net reclassification improvement (NRI) and integrated discrimination improvement (IDI) indices.

Results: Among the thyroid hormone indicators, FT3 had the greatest power to predict ICU mortality, as suggested by the largest area under the curve (AUC) of 0.762 ± 0.028 . The AUC for FT3 level was less than that for APACHE II score (0.829 ± 0.022) but greater than that for NT-proBNP level (0.724 ± 0.030) or CRP level (0.689 ± 0.030). Multiple regression analysis revealed that FT3 level (standardized $\beta = -0.600$, $P < 0.001$), APACHE II score (standardized $\beta = 0.459$, $P = 0.017$) and CRP level (standardized $\beta = 0.367$, $P = 0.030$) could independently predict primary outcome. The addition of FT3 level to APACHE II score gave an NRI of 54.29% ($P < 0.001$) and an IDI of 36.54% ($P < 0.001$). The level of FT3 was significantly correlated with NT-proBNP levels ($r = -0.344$, $P < 0.001$) and CRP levels ($r = -0.408$, $P < 0.001$).

Conclusion: In unselected ICU patients, FT3 was the most powerful and only independent predictor of ICU mortality among the complete indicators. The addition of FT3 level to the APACHE II score could significantly improve the ability to predict ICU mortality.

Introduction
During critical illness, changes in circulating hormone levels are a common phenomenon [1]. These alterations are correlated with the severity of morbidity and the outcomes of patients in ICUs [2,3]. Thyroid hormones play a key role in the maintenance of body growth by modulating metabolism and the immune system. In the 20th century, researchers found that thyroid dysfunction is associated with the mortality of patients admitted to the ICU [4-6]. These alterations in thyroid hormone levels are referred to as "euthyroid sick syndrome" [7,8] or "nonthyroidal illness syndrome" (NTIS) [9,10], which is characterized by low serum levels of free and total thyroxine (T4) and high serum levels of free T3 (FT3) accompanied by normal or low levels of thyrotropin (TSH) and thyroid-stimulating hormone (TSH). Subsequent studies confirmed the association between NTIS and adverse outcomes in patients with sepsis [11,12], multiple trauma [13], acute respiratory distress syndrome [14] and nontraumatic critical illness [15].

The most studied outcomes of hyperprolactinemia in psychiatric population include sexual dysfunction and infertility [7,8]. A recent study conducted in non-psychiatric population suggests that increased prolactin may have negative effects on cognition [9]. This prospective study examined the cognitive changes during late pregnancy and the early postpartum period, and their possible association with fluctuating hormone levels (estriol, progesterone, testosterone, prolactin and cortisol) in a cohort of pregnant women. Prolactin levels were studied with a neuropsychological assessment during the third trimester of pregnancy and retest during the early postpartum period. They concluded that very high and very low levels of cortisol were associated with poorer performance in certain cognitive domains, but the most novel finding was that they found significant associations between prolactin and executive function scores, suggesting that higher levels of prolactin are detrimental to executive function abilities. Animal studies also support a role for prolactin in the modulation of non-spatial cognitive tasks [10]. In this recent study, the induction of hyperprolactinemia in male rats receiving pituitary grafts was associated with impaired object recognition. Other studies have

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Increased Prolactin Levels Are Associated with Impaired Processing Speed in Subjects with Early Psychosis

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Abstract
Hyperprolactinemia, a common side effect of some antipsychotic drugs, is also present in drug-naïve psychotic patients and non-subjects at risk for psychosis. Recent studies in non-psychiatric populations suggest that increased prolactin may have negative effects on cognition. The aim of our study was to explore whether high plasma prolactin levels are associated with poorer cognitive functioning in subjects with early psychosis (55 psychotic disorders with <3 years of illness, 23 high-risk subjects). Cognitive assessment was performed using the CogState Computerized Cognitive Assessment program. Prolactin levels were measured in plasma as total and cortical levels in plasma. Psychopathology status was assessed and the use of psychopharmacological treatments (antipsychotics, antidepressants, benzodiazepines) recorded. Prolactin levels were negatively associated with cognitive performance in processing speed, in patients with a psychotic disorder and high-risk subjects. In the latter group, increased prolactin levels were also associated with impaired reasoning and problem solving, and poorer general cognition. In a multiple regression analysis, total and cortical prolactin levels were independently related to cognitive performance. Prolactin and benzodiazepine treatment were independently related to poor cognitive performance in the speed of processing domain. A mediation analysis showed that both prolactin and benzodiazepine treatment act as mediators of the relationship between risperidone/paliperidone treatment and speed of processing. These results suggest that increased prolactin levels are associated with impaired processing speed in early psychosis. If these results are confirmed in future studies, strategies targeting reduction of prolactin levels may improve cognition in this population.

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Introduction
Hyperprolactinemia is a common condition in subjects with a psychotic disorder. As dopamine is the main prolactin inhibiting factor, hyperprolactinemia is a common consequence of D2 receptor blockade in the tuberoinfundibular dopaminergic pathway [1,2] by antipsychotic drugs. However, increased prolactin levels have also been reported in drug-naïve patients with a first psychotic episode or at the onset of an acute episode [3-5]. It is believed that the increase of prolactin levels in psychotic subjects not receiving antipsychotic drugs are poorly understood. Moreover, prolactin levels may be increased by stress [6], which may in turn contribute to the increased prolactin levels in drug-naïve psychotic population.

The most studied outcomes of hyperprolactinemia in psychiatric population include sexual dysfunction and infertility [7,8]. A recent study conducted in non-psychiatric population suggests that increased prolactin may have

RESULTS During a median treatment duration of 4.5 years, compared with the enalapril alone group, the enalapril/folic acid group was associated with a 27% reduction in the number of participants in the enalapril/folic acid group vs 3.4% in the enalapril alone group, hazard ratio (HR) 0.70, 95% CI 0.58–0.93, first ischemic stroke 2.2% with enalapril/folic acid vs 2.8% with enalapril alone, HR 0.76, 95% CI 0.64–0.91, and composite cardiovascular events consisting of cardiovascular death, MI, and stroke 3.1% with enalapril/folic acid vs 3.9% with enalapril alone, HR 0.80, 95% CI 0.69–0.92. The risks of hemorrhagic stroke (HR, 0.93, 95% CI 0.65–1.34), MI (HR, 1.04, 95% CI 0.60–1.82), and all-cause deaths (HR, 0.94, 95% CI, 0.81–1.10) did not differ significantly between the 2 treatment groups. There were no significant difference between the 2 treatment groups in the frequencies of adverse events.

CONCLUSIONS & RELEVANCE Among adults with hypertension in China without a history of stroke or MI, the combination of enalapril and folic acid compared with enalapril alone significantly reduced the risk of first stroke. These findings are consistent with benefits from folate use among adults with hypertension and low baseline folate levels.

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Research

Efficacy of Folic Acid Therapy in Primary Prevention of Stroke Among Adults With Hypertension in China: The CSPPT Randomized Clinical Trial

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Importance Uncertainty remains about the efficacy of folic acid therapy for the primary prevention of stroke because of limited and inconsistent data.

Objective To test the primary hypothesis that therapy with enalapril and folic acid is more effective in reducing first stroke than enalapril alone among Chinese adults with hypertension.

Design, Setting, and Participants The China Stroke Primary Prevention Trial (CSPPT) was a randomized, double-blind clinical trial conducted from May 19, 2008, to August 24, 2013, in 32 communities in Jiangsu and Anhui provinces in China. A total of 20 702 adults with hypertension without history of stroke or myocardial infarction (MI) participated in the study.

Interventions Eligible participants, stratified by MTHFR C677T genotype (CC, CT, and TT), were randomly assigned to receive double-blinded daily therapy with a single-pill combination containing enalapril, 10 mg, and folic acid, 0.8 mg (n = 10 348) or a tablet containing enalapril, 10 mg, alone (n = 10 354).

Main Outcomes and Measures The primary outcome was first stroke. Secondary outcomes included first ischemic stroke, first hemorrhagic stroke; MI; a composite of cardiovascular events consisting of cardiovascular death, MI, and stroke; and all-cause death.

Results During a median treatment duration of 4.5 years, compared with the enalapril alone group, the enalapril/folic acid group was associated with a 27% reduction in the number of participants in the enalapril/folic acid group vs 3.4% in the enalapril alone group, hazard ratio (HR) 0.70, 95% CI 0.58–0.93, first ischemic stroke 2.2% with enalapril/folic acid vs 2.8% with enalapril alone, HR 0.76, 95% CI 0.64–0.91, and composite cardiovascular events consisting of cardiovascular death, MI, and stroke 3.1% with enalapril/folic acid vs 3.9% with enalapril alone, HR 0.80, 95% CI 0.69–0.92. The risks of hemorrhagic stroke (HR, 0.93, 95% CI 0.65–1.34), MI (HR, 1.04, 95% CI 0.60–1.82), and all-cause deaths (HR, 0.94, 95% CI, 0.81–1.10) did not differ significantly between the 2 treatment groups. There were no significant difference between the 2 treatment groups in the frequencies of adverse events.

Conclusions and Relevance Among adults with hypertension in China without a history of stroke or MI, the combination of enalapril and folic acid compared with enalapril alone significantly reduced the risk of first stroke. These findings are consistent with benefits from folate use among adults with hypertension and low baseline folate levels.

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Публикации



Качество, подтвержденное пользователями

3



Мировое присутствие



**Наша цель — лучшее качество и лучший сервис
Ориентированные на клиента и рынок**

