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1605 HSD17B6

Figure 1605 HSD17B6 involved in sex hormone metabolism

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Monthly Volume 16 Number 8 August 2024

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Correlation between PDK1 expression in peripheral blood and inflammatory response in patients with chronic heart failure and its clinical significance

REVIEWS

The introduction of methods of bioinformatics analysis and Cut off value determination on pathogen metagenome Sequencing reagent

The main function of HSD17B6 and its role in endocrine metabolism and tumors

DING Haitao CHEN Yuetong WANG Bo HE Juan SHI Yue LI Xiaocong WANG Rui WANG Zhanguo
Clinical Laboratory Inner Mongolia Peoples Hospital Hohhot Inner Mongolia China 010017

Brucellosis is a zoonotic disease with multiple clinical presentations. Due to the variety of clinical presentations and the lack of specific symptoms laboratory diagnosis is essential to confirm the di agnosis and treatment of the disease. The traditional laboratory tests for Brucella can be divided into culture identification and serological tests. Nucleic acid amplification tests are a new development that has emerged in recent years and a variety of molecular diagnostic techniques have been applied to the detection of Brucella. In this paper we will describe the most common and updated laboratory testing methods for Brucella and com pare their advantages and disadvantages to provide a more comprehensive guide for the diagnosis and treatment of brucellosis.

Brucellosis Laboratory diagnosis Polymerase chain reaction Metagenomic next gen eration sequencing

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ѫ ẽ Ẹ X 63 ϩ 42% ѫ ẽ δ Ὸ ϩ X ᵀ Љ ϩ [6] в ۇ 25~35% e X ˘ ᘯ~ ὃ Щ ᴈ ᴈ ᴈ Ч X ŏ Ὸ [7] в

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ᴈ Ẉ Matrix Assisted Laser Desorption Ionization Time of Flight MALDI TOF ˘ ᘯ ᴈA ᴈ˘ ٨ Ң ۇ ئ ɕ в ŏ ᴈ ٨ L ŏ [11] в Ж Љ ɔ ´ ċ δ ậ ٦ [12] в ѧ ċ ɔ Ë Ὸ A [13] в

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3.2 Ӧ ٧

Ӧ ٧ Enzyme Linked Immunosorbent Assay ELISA ε Ғ ϛ ˘ Љ [18] в ELISA SAT ‴ RBT Ж ۇh ɔ ˘ ᘯ ě δ ά Ғ [19] в

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4.1 ´ Ẋ PCR

ŏ ε ᴡ ѧ ᴈ omp2 ٨ omp31 ᘯ ᴡ omp28 ѧ ᴈ ϛ δ bp26 в Ẹ ë ᴈ ѧ 16SrRNA ᴈ â ¨Ω IS711 ᘯ ᴡ Bcsp31 Ẹ X Bcsp31 ѧ ᴈ Ӧ ϩ ę ᾠ PCR X ᴈ ѧ [25] в

4.1.1 Ẉ PCR

PCR ‴ Ẉ ŏ Ғ ´ ᘯ ¨ ۇ PCR Ẋ T ٨ X ₥ T Ғ ₥ ٨ Ë ₥ ٨ ˘ ᘯ ۇ 2 ê Ὸ ˘ ᘯ̂ T в ᾠ IS711 â ¨Ω ɜper ᴈ ѧ ٨ Bcsp31 ᴈ ѧ ٨ [26] ŭ ậ 3 Ẉ PCR ᴈ ᴈ ᘯ ᴡ 63 0y ή ¨ 3 Ẉ PCR ي Ὸ ي ´ ‴ Ẹ ë ᵀ П ᴡ Ẋ Ẹ X IS711 Љ ɔ N в

4.1.2 PCR

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в Kang [30] 766 bp ∧ 344 bp

N T ầ Bruce ladder PCR

PCR ˘ ɜ ئى

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Ж PCR ш ę ŋǔ ₥ П ẇ

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в ﻉ ᷉ PCR ··

PCR ´ ´ p ұ Ё ķ PCR П

ẇ ´ PCR T ₥˜

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4.2 ц ₥ LAMP

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Hsp90α CER AFP TACE

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ŏ Ь Ẋ 90 Hsp90α ɜ CER ẇ AFP ʐ ㄱ
⅞ ㅀ TACE Θ d ɞ 2020 1 2023 1 ή א e ㄴ
70 ʕ TACE ʐ ㄱ ě δ Ль ˜ 2 T mRECIST ʔA Θ ˜
Ẹ ŏ δ ㅀ ´ ɞ N ɜ Hsp90α ɜЄER ẇ AFP
ʔẠ ROC ŏ TACE ѱ ɛ TACE˜ Θ d ɞ ầ TACE
δ 72.86% ɞ ㅀ ´ ή ŏ ɜ ثي σ t/ 2=5.440 ɜ
10.928 P<0.05 ɞ TACE ѱ ´ Hsp90α ɜЄER ẇ AFP ثي Ль σ
t=2.501 ɜ2.082 ɜ2.964 P<0.05 TACE ˜ ´ Hsp90α ɜЄER ẇ AFP ثي Ль
σ t=7.196 ɜ6.866 ɜ8.687 P<0.05 ɞ TACE ѱ ή ŏ ₰ ' Hsp90α ɜЄER ɜ
AFP d ثي ´ ╗ F=4.966 ɜ4.817 ɜ7.878 P<0.05 ´ ʺΩ Hsp90α ɜЄER ẇ AFP Ль
ʺΩ σ t=8.169 ɜ8.434 ɜ10.276 P<0.05 ɞ ROC ŏ TACE
ѱ Hsp90α ɜЄER ẇ AFP ´ TACE˜ AUC P<0.05 ɞ Hsp90α ɜ
CER ẇ AFP ˇ ᘐ TACE˜ ή ɛ ˇ ᘐ δ ή Wʰ ˆ ɞ
ʐ ㄱ ⅞ ㅀ Ь Ẋ 90

YAO Dongmei[1] TIAN Tian[2]
1. Department of Oncology Linquan County People s Hospital Fuyang Anhui China 236400 2. Department of Oncology Fuyang People s Hospital Fuyang Anhui China 236000

To analyze the predictive value of serum Hsp90α CER and AFP for the curative effect of TACE in patients with primary liver cancer. A total of 70 patients with primary liver cancer undergoing TACE at Linquan County People s Hospital were enrolled as research subjects between January 2020 and January 2023. The postoperative curative effect was evaluated using mRECIST at 2 months after surgery and the treatment response rate was calculated. Based on the curative effect patients were divided into a good group and a poor group. The baseline data levels of serum Hsp90α CER and AFP were compared between the two groups. The predictive value of the serum indicators mentioned above for the curative effect of TACE was analyzed using ROC curves. In the 70 patients with primary liver cancer the response rate of TACE was 72.86%. There were significant differences in clinical staging and tumor boundary between the good group and poor group t/ 2=5.440 10.928 P<0.05 . Before TACE levels of serum Hsp90α CER and AFP in the poor group were higher than those in the good group t=2.501 2.082 2.964 P<0.05 . After TACE levels of serum Hsp90α CER and AFP in the poor group were higher than those in the good group t=7.196 6.866 8.687 P<0.05 . Before TACE levels of serum Hsp90α CER and AFP increased with the increase of clinical staging

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F=4.966 4.817 7.878 P<0.05 . The levels of serum Hsp90α CER and AFP in patients with irregular tu mor boundaries were higher than those with regular tumor boundaries t=8.169 3.434 10.276 P<0.05 . ROC curve analysis showed that the AUC of serum Hsp90α combined with CER and AFP before TACE for predicting the curative effect was the greatest P<0.05 . . . . . Serum levels of Hsp90α CER and AFP can help predict the clinical effectiveness of TACE. These markers can provide a basis for clinical intervention.

. . … . … Primary liver cancer TACE Hsp90α CER AFP

⅞ ط transcatheter arterial chemo embolization TACE ή ζ ┐ Ę ⅞ Љ ц W Ά [1,2] в TACE ή Ж ´ [3] в δ Ë ┐ ζ ┐ ´ ⅞ Љ ç ζ ┐ TACE ˜ в C [4] Ь Ẋ 90 heat shock protein Hsp90α ۼ X Hsp90α Љ ج ê ٧ ´ يم ثي Љ Θ в ٠ ╤[h] ш в Ceruloplasmin CER ´ Ξ ج ٧ ⅞ ثي ˇ CER ╖ в - [5] ┐ CER ˇ ☋ ' Ÿ يم ˜ ў в ۊ alpha fetoprotein AFP ۼ ζ ┐ X [6] в Hsp90α ЗCER ш AFP ζ ┐ TACE Θ [d] в

1

1.1 [h]

٠ 2020 1 2023 1 ή א e ┘ 70 Ɂ ζ ┐ в â Ά ´ ζ ┐ ή ╤ [7] ш Ḍ δ X ζ ┐ ŏ ´ TACE ┐ TACE >18 ή в Ά ´ ج ٧ Ę ë Ξ ڻ ´ Ɔ Ẍ ´ м Ę ë в δ ع Ẍ ˀ ٧ к в

1.2 TACE ш ŏ

⅞ ط 4 mg 40 mg ´ Ÿ 10~20 mL ´ ˜ Ẅ حس ط ┘ ط ٧ ц â в ۼ TACE ˜ 2 T м ç Ά immune modified Response Evaluation Criteria In SolidTumors mRECIST [8] Θ в Ã ۊ ŏ ۊ ٧ ≥30% ۊ ٧ ۋ ŏ ۊ ' ۋ ۊ ٧ ≥20% Ό в Ã ج ŏ ج â â ´ в

1.3

ŏ ۋ Љ TACE ۊ ج ˜ 2 T 5 mL 10 min 3 500 r/min ╙ δ 10 cm ŏ в ⅞ ┐ Ẉ Hsp90α ٧ AFP Roche 2010 ⅞ ┐ Ẉ ю ш Ę Ḥ в CER DADEHERING Å ˝ T ю ш Ę Ḥ в

1.4

SPSS 22.0 ψ ă ή ☋ n % [2] ŏ Ό ¯ N t ٧ t ج ê в Ά ROC ŏ Љ ζ ┐ TACE ˜ ě в ☋ P<0.05 δ σ в

2

2.1 TACE

TACE ˜ 2 T δ 72.86% в

2.2 N نج

70 Ɂ ζ ┐ TACE ŏ δ n=51 ″ ´ n=19 в N ή ŏ ج ثي σ P<0.05 в 1 в

2.3 TACE ۊ ج ˜ N

TACE ۊ ج ˜ ´

	AUC	d	95% CI
Hsp90α	0.697	241.28 ng/mL	0.566~0.827
CER	0.739	44.32 mg/dL	0.615~0.863
AFP	0.669	156.34 ng/mL	0.5 b η 6CER
´	0.826		A ħ ´ CER

´ í ´ 1 Ş CER
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2

Table 2 Comparison of serum indexes between the two groups

ά	n	Hsp90α ng/mL		CER mg/dL		AFP ng/mL	
		ϕ	~	ϕ	~	ϕ	~
´	19	250.17±25.36	135.45±15.17[a]	46.35±4.72	32.47±4.14[a]	167.80±19.34	123.48±13.62[a]
	51	232.36±26.89	106.62±14.81[a]	43.58±5.03	25.60±3.56[a]	152.73±18.76	96.25±10.87[a]
t d		2.501	7.196	2.082	6.866	2.964	8.687
P d		0.015	<0.001	0.041	<0.001	0.004	<0.001

[a]P<0.05 в

3 TACE

Table 3 Comparison of serum indexes in patients with different clinical characteristics before TACE

ή		n	Hsp90α ng/mL	t d	P d	CER mg/dL	t d	P d	AFP ng/mL	t d	P d
ή õ		48	225.16±29.85	4.966	<0.001	42.60±4.41	4.817	<0.001	146.05±15.76	7.878	<0.001
		22	263.45±30.16			48.14±4.59			180.33±19.21		
	Ω	44	213.59±30.65	8.169	<0.001	42.55±5.89	3.434	0.001	140.78±15.12	10.276	<0.001
	´ Ω	26	277.14±32.77			47.35±5.21			183.95±19.78		

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ɕ Hsp90α ɜCER ѝ AFP ′

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1 Xie Y Tian H Xiang H. Is transcatheter arterial chemoembolization plus sorafenib better than chemoembolization plus placebo in the treatment of hepatocellular carcinoma J . Tumori 2021 107 4 292 303.

2 Han T Yang X Zhang Y et al. The clinical safety and efficacy of conventional transcatheter arterial chemoembolization and drug eluting beads transcatheter arterial chemoembolization for unresectable hepatocellular carcinoma A meta analysis J . Biosci Trends 2019 13 5 374 381.

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4 C . Ь Ẋ 90α ⅞ ﻫ ~ Ɵ d J . ή 2022 38 3 577 581.

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PMS2 MTA1 VCAM 1

Ɛ ŏ ˜ ŏ 2 PMS2 ȝ ă ȵ ȸ 1 MTA1 ʊ
ŏ 1 VCAM 1 ȶȱ ‟ ˜ ç X ě ɞ ‧ 2019 1 2021 3
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σ P<0.05 ЖК ´ˀ PMS2 + ȝMTA1 + ȝVCAM 1 + σ
P>0.05 ɞ COX ₸ ȸ ŏ ŏ ⅞ G3 ȝTNM ŏ ~ ȝ ȝPMS2 + ȝMTA1 + ȝ
VCAM 1 + ĩ M ´ ˜ ȸ P<0.05 COX ȸ ŏ ŏ ⅞ G3 ȝ
TNM ŏ ~ ȝ ȝPMS2 + ȝMTA1 + ȝVCAM 1 + ĩ M
˜ ○ ȸ P<0.05 ɞ PMS2 ȞЉ σ ^{2}=6.688 P<0.05 MTA1
ȞЉ σ ^{2}=7.161 P<0.05 VCAM 1 ȞЉ
σ ^{2}=9.527 P<0.05 ɞ PMS2 ȝMTA1 ȝVCAM 1 ȶȱ X ȣ
ɔ ỷ ˇ ƀA ò Ξ ʊ ˜ ɞ
PMS2 MTA1 VCAM 1

XI Lefeng ZHANG Dechen WANG Liqin LI Fengying ZHAO Zhi
Department of Pathology Zhengzhou Yihe Hospital Zhengzhou Henan China 450000

To investigate the role of postmeiotic protein 2 PMS2 tumor metastasis associated gene 1 MTA1 and vascular cell adhesion molecule 1 VCAM 1 in the evaluation of colon cancer and prognosis. A total of 81 patients with colon cancer who were admitted to Zhengzhou Yihe Hospital from January 2019 to March 2021 were selected as the study subjects. All patients underwent surgical treatment. The expression of PMS2 MTA1 and VCAM 1 in colon cancer tissues and adjacent tissues of these patients was compared. The expression levels of PMS2 MTA1 and VCAM 1 in different pathological features were analyzed. The COX univariate and multivariate factors affecting the survival of patients with colon cancer were examined. The prognostic survival rates of patients with different PMS2 MTA1 and VCAM 1 expression were compared. The positive expression rates of PMS2 MTA1 and VCAM 1 in colon cancer tissues were significantly higher than those in adjacent tissues and the differences were statistically significant P<

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0.05 . PMS2 + MTA1 + and VCAM 1 + in TNM stage ~ were higher than those in TNM stage ~ PMS2 + MTA1 + and VCAM 1 + in lymph node metastasis were higher than those in no lymph node metastasis PMS2 + MTA1 + and VCAM 1 + in low differentiation were higher than those in high and medium differentiation and the differences were statistically significant P<0.05 . However there was no significant difference in PMS2 + MTA1 + and VCAM 1 + between different tumor sizes P>0.05 . COX univariate analysis showed that tissue differentiation G3 TNM stage ~ distant yes PMS2 + MTA1 + VCAM 1 + were the poor prognostic factors affecting the death of colon cancer patients P< 0.05 . COX multivariate analysis showed that tissue differentiation G3 TNM stage ~ distant metastasis yes PMS2 + MTA1 + VCAM 1 + were independent prognostic risk factors for death in patients with colon cancer P<0.05 . The survival rate of the PMS2 positive group was lower than that of the negative group the difference was statistically significant ^{2}=6.688 P<0.05 . The survival rate of the MTA1 negative group was lower than that of the positive group and the difference was statistically significant ^{2}= 7.161 P<0.05 . The survival rate of the VCAM 1 negative group was lower than that of the positive group and the difference was statistically significant ^{2}=9.527 P<0.05. . . . . PMS2 MTA1 and VCAM 1 are highly expressed in colon cancer tissues. By detecting the expression of the three indicators the severity and prognostic risk of the patients can be more accurately judged.

. . . . PMS2 MTA1 VCAM 1 Colon cancer

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ă ﻉ ﻧ Metastasis associated gene family MTA ʌ Ė ŭ ~ ŭ 2 Post meiotic Segregation Increased 2 PMS2 ‴

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[3] ɞ ă ﻉ ﻧ 1 Metastasis Associaten ϑ ص

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<5 1 ŏ

6%~25% 2 ŏ \l X

26%~50% 3 ŏ

\l ≥51% 0 ŏ δ

1~3 ŏ δ ɞ VCAM 1 ò

ʹA 0 ŏ 1 ŏ

δ <30% 2 ŏ

δ 31%~70% 3 ŏ δ

≥71% 0 ŏ δ 1~3 ŏ δ ɞ

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SPSS 22.0 ψ ŏ

n % ² Kaplan Meier

β ŏ Log rank Cox Ꝛ

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Ꝍ P<0.05 δ σ ɞ

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2.1 N PMS2 ɜMTA1 ɜVCAM 1 ỷ

PMS2 ɜMTA1 ɜVCAM 1

Љ σ P<

0.05 ɞ 1 ɞ

2.2 PMS2 ɜMTA1 ɜVCAM 1 ﬠ ′ ˀ X

TNM ŏ ~ PMS2 + ɜMTA1 + ɜ-

VCAM 1 + ثي Љ ~ ɜ-

PMS2 + ɜMTA1 + ɜVCAM 1 + ثي Љ

ɜ-Ꞑ ŏ ⅞ PMS2 + ɜMTA1

+ ɜVCAM 1 + ثي Љ ɜ-X ŏ ⅞

σ P<0.05 ЖK ′ ˀ

PMS2 + ɜMTA1 + ɜVCAM 1 +

σ P>0.05 ɞ 2 ɞ

2.3 ĩ COX ∓ ᴇ ‟ ᴇ

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81 Ꝛ ثي Ẹ X 61 Ꝛ

75.31% M 20 Ꝛ 24.69% ɞ COX ∓ ᴇ ŏ

ŏ ⅞ G3 ɜ-TNM ŏ ~ ɜ-

ɜPMS2 + ɜMTA1 + ɜVCAM 1 +

ĩ M ′ ~ ᴇ P<

0.05 COX ᴇ ŏ ŏ ⅞ G3 ɜ-

TNM ŏ ɜ- ɜPMS2 + ɜ-

MTA1 + ɜVCAM 1 + ĩ M

~ ○ ᴇ P<0.05 ɞ 3 ɞ

2.4 ′ ˀ PMS2 ɜMTA1 ɜVCAM 1 ~

PMS2 3 δ 81.25% 39/

48 Љ 54.55% 18/ طي P<0.

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3 COX

Table 3 COX univariate and multivariate analysis of survival in patients with colon cancer

	d	ㄒ ᴥ			ᴥ		
		HR	95% CI d	P d	HR	95% CI d	P d
	≤60 =0 >60 =1	0.813	0.428~1.189	0.211			
ȯ	=0 =1	0.750	0.336~1.059	0.118			
ǒ ⅞	G1/2=0 G3=1	1.835	1.137~2.315	0.015	1.554	1.081~2.233	0.007
	=0 =1	0.713	0.321~1.076	0.102			
TNM ǒ	~ =0 ~ =1	2.436	1.680~3.428	<0.001	1.487	1.103~2.234	0.008
	=0 =1	3.308	2.188~5.027	<0.001	1.866	1.112~2.576	0.003
PMS2	=0 + =1	3.483	2.014~5.147	<0.001	2.147	1.108~3.528	<0.001
MTA1	=0 + =1	4.112	2.371~6.811	<0.001	2.385	1.117~3.863	<0.001
VCAM 1	=0 + =1	4.414	1.192~14.376	<0.001	2.554	1.081~3.233	<0.001

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PCT

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ʐ PCT ɜ ʊ = Ï ŏ PD ~
POPF ᴛ ˝Ω ﻩ ﻡ ɞ ɕ 2020 1 2023 1 Ль X ˩
PD 120 ʔ ˝Ω 7 ʔ å̊ ã 113 ʔ 3B1 ŏ δ n=84 ﻥ n=29 ɞ
2016 ISGPF ˝O POPF ˝A å̊ 35 ʔ ᴛ POPF Ę X ᴛ POPF 26 ʔ 9 ʔ ɞ
ŏ PD ~ POPF ∓ ﻉ Ę P<0.05 ɔ ã Ï Ẃ logistic ɕ ŏ Back wald
ɔ ﻧﺠ Ль PD ~ POPF ˝Ω ﻩ ﻡ ɞ AUC Θ ˝Ω ﻩ ﻡ └ ŏ ˝A
Θ ﻡ ˝H ɜ ƈ Hosmer Lemeshow ´ ғ Θ ˝Ω ﻩ ﻡ
´ ɞ X ᴛ POPF ˝ ᴛ POPF ﺋﯘ ɜ ﺋﻰ 3FRS ŏ ɜ ɜ ﻫﻲ
ɜ ﷺ ɜ ﷺ ɜ ﷺ PCT σ P<0.05 ɞ ﻉ Logistic ɕ ŏ
≥0.25 cm ɜ ﻰ δ 3FRS ŏ ≥5 ŏ ɜ ≥240 cm ɜ ﻫﻲ ≥98 cm ɜ ﷺ
ʊ ﷺ PCT ɕ ╗ Ï PD ~ POPF ○ ﻉ ﷺ ɔ δ Ï ᴛ POPF
ﺍ ﻉ P<0.05 ɞ ~ ﻉ ﺛﻲ ŏ ○ ﻉ ŏ ɕ ╗ ˝Ω PD ~ POPF ﷺ ' ﺍ ﻉ
ŏ ﷺ ' ˝Ω PD ~ POPF Ң ɞ ﻡ ROC X AUC δ 0.889 95%CI ᵈ δ 0.740~
0.966 ɜ ﻡ ˝A ˝A Hosmer Lemeshow ´ ғ P=0.793 ɜ0.688 ɞ
PCT ɜ ʊ ﺋﯘ PD ~ POPF X ę ě ﷺ ɕ
ɔ ⅞ ˘ ƈ ʊ ᴛ POPF ﺋﯘ ﻉ ﺍ ﻥ Ң POPF ᴛ ɞ
PCT = Ï ŏ

MA Ying[1] WEI Jihong[1] HU Haiyan[1] ZENG Huijuan[1] YANG Huan[1] CHEN Xi[2]
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To investigate a column line graphical model of procalcitonin PCT albu min and bilirubin levels to predict the risk of postoperative pancreatic fistula POPF following pancreaticoduo denectomy PD A total of 120 patients with PD who underwent pancreatic surgery at Mianyang Central Hospital from January 2020 to January 2023 were retrospectively selected. 7 cases were excluded leav ing a total of 113 cases included in the study. According to a 3B1 ratio 35 cases developed POPF based on the diagnostic criteria proposed by ISGPF in 2016. Of these 26 cases were from the modeling group and 9 cases from the validation group. We analyzed the single factors contributing to POPF after PD in the modeling group. We included variables with P<0.05 in the binary logistic regression analysis and screened them using the Back wald method. Based on this analysis we constructed a prediction model for the risk of postoperative POPF after

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PD in a column line diagram. The AUC was used to evaluate the discrimination of the column line graph model the calibration curve to assess the relationship between the model s predicted odds and the actual probability and the Hosmer Lemeshow goodness of fit test to evaluate the fit of the column line graph model. . . . . Comparison of the levels of pancreatic duct diameter pancreatic texture FRS score total abdominal fat abdominal wall fat preoperative bilirubin preoperative albumin and preoperative PCT between those who developed POPF and those who did not in the modeling group showed statistically significant differences P<0.05 . The results of multifactorial logistic regression analysis showed that pancreatic duct diameter ≥ 0.25 cm pancreatic texture as hard FRS score ≥ 5 total abdominal fat ≥ 240 cm abdominal wall fat ≥ 98 cm preoperative bilirubin and preoperative increase in PCT level were the risk factors affecting the occurrence of postoperative POPF in PD and the preoperative decrease in albumin level was the protective factor affecting the occurrence of POPF P<0.05 . Each factor corresponded to a corresponding score and an increase in the risk factor score increased the risk of POPF after PD surgery if the protective factor score increased the risk of POPF after PD surgery decreased. Model validation the AUC curve in the ROC of the modeling group was 0.889 with a 95%CI of 0.740 0.966 the calibration curve of the model in the modeling group and the validation group was close to the standard curve Hosmer Lemeshow goodness of fit test P=0.793 0.688. . . . . PCT albumin and bilirubin levels play an impes r` s خه C wi_ l' gn a bi

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2016 ISGPF Ȯ POPF ƺA⁶ å̊ 35 Ʒ ㄱ
POPF Ḛ X ㄱ POPF 26 Ʒ 9 Ʒ ɞ
1.3 ŏ
SPSS 26.0 ɜR 4.1.0 ψ ŏ
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Ï Ẃ Logistic ɐ ŏ Back wald
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σ P<0.05 ɞ 1 ɞ
2.2 PD ˜ POPF ɐ Logistic ɐ ŏ
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Logistic ɐ ŏ ≥0.25 cm ɔ
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Ï PD ˜ POPF ○ ɐ ώ Ɔ
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2.3 PD ˜ POPF ̈Ω ﻩ ᴍ
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PD ˜ POPF ⁂ ˈ ˈ ɐ ώ
ŏ ⁂ ˈ ̈Ω PD ˜ POPF Ḥ ﻩ 1 ɞ
ᴍ ROC X AUC δ 0.889

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14 53.85
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ώ PCT ng/mL 14 57.

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2 PD POPF Logistic

Table 2 Multivariate logistic regression analysis for predicting postoperative POPF in PD patients

ѡ	d	d	SE	Wald	OR 95% CI	P d
	0=<0.25 cm 1=≥0.25 cm	1.660	0.633	6.833	5.259 1.520~18.186	0.010
ئى	0= 1=	1.473	0.637	5.424	4.362 1.251~15.203	0.018
FRS ŏ	0=<5 ŏ 1=≥5 ŏ	1.570	0.589	9.640	4.806 1.515~15.247	0.008
	0=<240 cm 1=≥240 cm	1.426	0.650	5.375	4.162 1.164~14.879	0.024
؞	0=<98 cm 1=≥98 cm	1.583	0.565	7.632	4.869 1.608~14.737	0.001
ۏ	d	1.674	0.611	7.857	5.333 1.610~17.664	<0.001
ۏ	d	-1.522	0.498	10.340	0.218 0.082~0.579	<0.001
ۏ PCT	d	1.620	0.596	7.863	5.053 1.571~16.251	<0.001

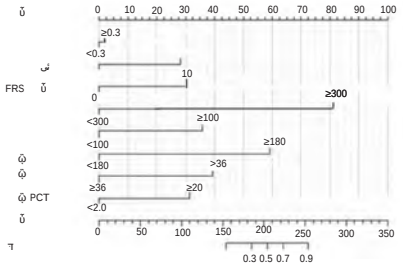

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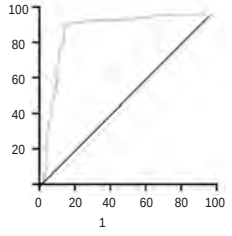
Figure 1 Prediction column line graph model



2 ROC

Figure 2 ROC curve of the prediction model in the modeling group

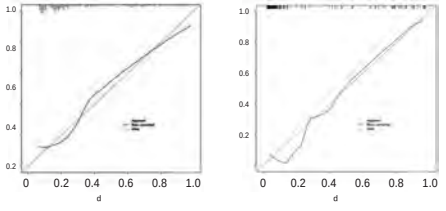


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Figure 3 Calibration curves of the predictive model in the modeling and validation groups

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0.889 0.863 P<0.05 . Logistic analysis showed that the increase of dialysis age blood phosphorus ALP CRP iPTH OPN and FGF23 in MHD patients were risk factors for vascular calcification P<0.05 . Receiver operating characteristic curve ROC curve analysis showed that the area under the curve AUC of serum OPN and FGF23 were 0.845 0.891 and خ Ư€ .

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2.1 MHD Ό ⅞ ŭ

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σ P>0.05 ⅞

ʒ ʒALP ʒCRP ʒiPTH ʒOPN ʒFGF23 Љ

⅞ σ P<0.05 в 1 в

1 MHD n % ¯±s

Table 1 Univariate analysis of vascular calcification in MHD patients n % ¯±s

	⅞ n=42	⅞ n=74	t/ d	P d
ά			0.185	0.667
	25 59.52	41 55.41		
	17 40.48	33 44.59		
	51.24±8.87	52.30±8.47	0.637	0.526
ę ┑			0.556	0.906
	17 40.48	27 36.49		
	12 28.57	19 25.68		
♣	7 16.67	15 20.27		
Ę ë	6 14.29	13 17.57		
	3.14±0.68	4.27±1.02	6.410	<0.001
/ ヿ	2.35±0.43	2.50±0.47	1.703	0.091
∓	1.62±0.35	1.57±0.41	0.664	0.508
mmol/L	2.31±0.61	2.48±0.75	1.252	0.213
mmol/L	1.41±0.32	2.25±0.48	10.126	<0.001
ALP U/L	94.37±14.28	76.59±13.34	6.725	<0.001
μmol/L	813.48±134.20	806.35±136.52	0.272	0.786
mmol/L	18.12±3.26	17.94±3.34	0.281	0.779
CRP mg/L	7.46±2.28	9.74±2.36	5.062	<0.001
g/L	103.67±10.25	106.47±10.48	1.394	0.166
g/L	36.29±4.37	36.85±4.29	0.671	0.504
iPTH pg/mL	278.55±36.14	426.37±54.80	15.642	<0.001
OPN ng/mL	148.75±26.43	289.56±40.59	26.427	<0.001
FGF23mg/L	84.76±11.28	247.56±35.41	28.926	<0.001

2.2 ⅞ MHD OPN ʒFGF23

MHD OPN ʒFGF23 δ ⅞ > X ⅞ > ⅞ σ P< 0.05 в 2 в

2.3 MHD ⅞ OPN ʒFGF23

Spearman ă ŭ

MHD ⅞ OPN ʒFGF23 \l ă r=0.889 ʒ0.863 P<0.05 в

2.4 MHD Ό ⅞ ŭ

ω ∓ ŭ δ ɔ

ω MHD Ό ⅞ δ ɔ MHD

ʒ ʒALP ʒCRP ʒiPTH ʒOPN ʒFGF23 ╖

Ό ⅞ ○ P<0.05 в 3 в

2 MHD OPN FGF23

Table 2 Comparison of serum OPN and FGF23 levels in MHD patients with different degrees of calcification

ά	n	OPN ng/mL	FGF23 mg/L
⅞	21	192.82±27.10	122.54±14.60
X ⅞	29	294.31±30.05[a]	254.27±20.73[a]
⅞	24	368.46±35.14[ab]	348.84±32.25[ab]
F d		148.683	231.201
P d		<0.001	<0.001

⅞ [a]P<0.05 X ⅞ [b]P<0.05 в

3 MHD

Table 3 Multi factor analysis of vascular calcification in MHD patients

	d	SE d	Wald/ d	OR d	95% CI	P d
	0.624	0.312	4.000	1.866	1.012~3.440	0.046
	0.816	0.297	7.549	2.261	1.263~4.048	0.006
ALP	0.779	0.273	8.142	2.179	1.276~3.721	0.004
CRP	0.673	0.334	4.060	1.960	1.018~3.772	0.044
iPTH	0.886	0.286	9.597	2.425	1.385~4.248	0.002
OPN	0.975	0.309	9.956	2.651	1.447~4.858	0.002
FGF23	1.143	0.311	13.507	3.136	1.705~5.769	<0.001

2.5 OPN ʒFGF23 MHD

⅞ Θ d

OPN ʒFGF23 ´ MHD

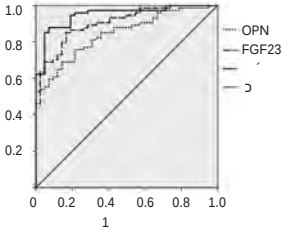
⅞ ɔ AUC δ 0.948 ғ Љ

∓h P<0.05 в 4 ʒ ₐ 1 в

4 OPN FGF23 MHD

Table 4 The predictive value of serum OPN and FGF23 levels on vascular calcification in MHD patients

	d	AUC	95% CI			P d
OPN	239.775	0.845	0.777~0.913	0.546	0.857	0.689	<0.001
FGF23	172.135	0.891	0.853~0.958	0.684	0.833	0.851	<0.001
´		0.948	0.909~0.987	0.807	0.929	0.878	<0.001



1 ROC

Figure 1 ROC curve

3

○ ŭ

MHD M e

20~30 я ⅞ MHD

z ѧ MHD ⅞ h ε

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ض ∧ MHD

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7 345 HPV

Ë Ль X ┘ ┘ e ↑ HPV ỷ Ш نج ع يم Ŭ

δ ɜ W ↄ ɞ 2020 1 2022 12 Ль

X ┘ ┘ HPV نج ع Ŭ يم 7 345ʾ Ŭ ɱ Ш ˊˋ HPV ɜنج ع يم

Ŭ Ш ˈ HPV نج ع يم ỷ ɞ ﻮﺆ 7 345 0y X Ȍ 1 563 0y

δ 21.28% ɞ Ẹ X 25.54% 1 097/4 295 ƿ X

15.28% 466/3 050 Ль ƿ X σ ^{2}=112.13 P<

0.05 ɞ ⫟^{h} ○ يم δ 11.79% 866/7 345 Ŭ يم δ 5.62% 413/7 345 ɞ

5 ○ يم HPV16 3.89% ɜHPV52 3.05% ɜHPV58 2.06% ɜHPV 53 1.97% ɜHPV 31

1.54% ɞ HPV ﻮﺆ Ŭ Ŭ X Ȍ N T Ŭ ụ δ ≤20 39.06% ∧ ≥61 27.24% ɞ

HPV Ǫ Θ نج ع يم ▉ δ 64.43% ɞ Ль X ┘ ┘ HPV δ

21.28% ᘯ⫟^{h} ○ يم δ ε Ǫ Θ ɞ

e ↑ نج ع يم Ŭ

} } }

ZHANG Feng W } tc# ƫ o 0ʺ /W } NGNGG ᘯ⫟W } NGG

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[1,2] ʁ ꞑǤ ⊣ X ₀ ⊣

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illoma virus HPV Ѫ ǒ

ǎ ʁ x δ ⊣ 200 Æ HPV ᴍ ᴇ ᴎᴄ ´ ˆ

ᴎᴄ ᴍ ᴇ HPV c ꞑǤ

[4] ʁ Ę ǒ δ ○ ᴍ HPV ᴎ Ꮋ ○ ᴍ

HPV ʁ [5] HPV Ẇ Ę ᴎᴄ ᴍ ᴇ ǒ

ꞑǤ └ ᵭ ʁ ᴇ ´ ˆ └ ᵮ

HPV Ẇ ᴎᴄ ᴍ ᴇ ǒ ǒ

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X ┘ ┘ Ẇ ꝑ ᵯ HPV

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4 295̂ ꝑ X ᵯ 3 050̂ ᵱ

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HPV ʁ

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24 h ệ δ 3 d ệ

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ᵭ ¨Ạ Ль ᴨ

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¨Ạ ầ ̂ ˈ ᵻ HPV ᵻ ʁ

◐ ʁ

1.3 HPVDNA ᵻ ᴎ ᴎᴄ ᴍ ᴇ ǒ ᴍ

PCR Ѫ˜ П PCR RDB Ꮋ

ᴎ Ǻ ˝ 28 ᴎᴄ

ᴍ ₵ 18 ○ ᴍ HPV16 ᴈ18 ᴈ31 ᴈ33 ᴈ35 ᴈ39 ᴈ45 ᴈ

51 ᴈ52 ᴈ56 ᴈ58 ᴈ66 ᴈ68 ᴈ82 ᴈ26 ᴈ53 ᴈ72 ᴍ 10 Ꮋ ○ ᴍ

HPV6 ᴈ11 ᴈ40 ᴈ42 ᴈ43 ᴈ44 ᴈ54 ᴈ61 ᴈ81 ᴈ83 ᴍ ʁ Ꮋ

HPV ᴍ ᴇ ᴎᴄ ´ δ 99.88%

´ δ 95.94% ᾳ 5×10[3]

/mL ʁ Ξ ě ʁ

1.4 ǒ

7 345̂ ǒ 6

≤20 64̂ 21~30 1 394̂ 31~40

2 915̂ 41~50 1 899̂ 51~60

918̂ ≥61 155̂ ʁ

1.5

SPSS 23.0 ψ ǒ ʁ

ↀ n % [2] ʁ ↀ P<0.05

δ σ ʁ

2

2.1 HPV ỷ

ꞑǤ 7 345 0y X 1 563 0y

HPV δ 21.28% ʁ

Ль ꝑ X σ

[2]=112.13 P<0.05 ʁ ꞑǤ ᴎᴄ ᴍ ᴇ X Ѫ

ᴎᴄ ᴍ ᴇ ▉ 22.71% 342/1 563 ↄ ᴎᴄ ᴍ ᴇ

1 2020~2023 HPV n %

Table 1 HPV infection in 2020~2023 n %

0y	n	%	ᴇ ᴎᴄ ᴍ %			ᴎᴄ ᴍ %			
			[h] ○	[h] Ꮋ ○	´	○	Ꮋ ○	○ + Ꮋ ○	´
2020	1 994	416 20.86	252 12.63	59 2.96	311 15.60	37 1.86	5 0.25	63 3.16	105 5.27
2021	2 447	516 21.08	298 12.18	80 3.27	378 15.45	65 2.66	8 0.33	65 2.66	138 5.64
2022	2 904	631 21.72	316 10.88	145 4.99	461 15.87	70 3.34	12 0.41	88 3.03	170 5.85
´	7 345	1 563 21.28	866 11.79	284 3.87	1 150 15.66	172 2.34	25 0.34	216 2.94	413 5.62

2020

HPV یم ع نج		n=1 994	0.95خ , / 7 1000. U‹
○ یم	16	78 3.91	
	52	66 3.31	
	58	57 2.86	
	53	49 2.46	
	31	21 1.01	
	39	21 1.05	
	56	25 1.25	
	66	23 1.15	
	51	16 0.80	
	18	24 0.12	
	68	11 0.55	
	33	19 0.95	
	35	10 0.50	
	59	4 0.20	
	82	4 0.20	
	45	2 0.10	
	26	2 0.10	
	73	1 0.05	
Hį ○ یم	61	37 1.86	
	54	23 1.15	
	81	11 0.55	
	42	15 0.75	
	6	15 0.75	
	40	11 0.55	
	44	8 0.40	
	11	6 0.30	
	43	8 0.40	
	83	2 0.10	

ч ' Ã ɦ[15] в о ▲ ƥ
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в
HPV ﻧ ﻋ ﻳ Ж ′
в HPV ẹ ' ∪
HPV e ↀ '
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Ạ 53 339 356 ﻧ ﻋ ﻳ
ↀ ㄱ Ό ′ ﻧ
ﻋ ﻳ HPV в ↀ Ң HPV ∧
ㄱ в
ɕ Љ X ㄴ ㄴ
HPV δ 21.28% ↀ〒[h] ○ ﻧ ﻋ ﻳ δ ε
ѽ δ ԋ ﻧ ﻋ ﻳ δ HPV16 352 358 353 331 ﻳ в

ŏ δ W Ã ɔ в

ˀ ﺉ └ HPV Ϛ ﺅ ‴ ′ˀ
ầ Ạ ắ в ○ ﻳ ﻧ ﻋ ѽ Ц ԋ ˛
HPV16 352 358 353 331 ﻳ в ‴ 16 352 358 ɜ
53 356 ﻳ ή 16 352 358 351 353 ﻳ ᵠ[13] в
ﺅ 1 563 0y X 〒[h] ﻧ ﻋ ﻳ 1 150 ʔ
δ 15.66% Ẹ X 〒[h] ○ ﻳ 866 ʔ δ
11.79% в 25.54%
ƥ X 15.28%
Љ ƥ X в ŏ ϛ ﻋ ƥ X
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ɱ ŏ Ë HPV ã̃
в ŏ ﻋ ɱ ′ Ό
ή ˘ Ғ Ӧ Ό Ң
∧ ⊥ ʔ ш HPV ℸ в
HPV ﺅ ′ˀ ɱ X Ό[h]
≤20 HPV 31~
40 Ң ≥61 Ό Ï ᵈ в ﺅ ~
X 〒[h] ○ ﻳ \ " ﻧ
ﻋ ﻳ \ U ﻳ в ŏ ϛ ﻋ ≤20 ω
' ˀ ɱ ω HPV Ӧ Ό
Ғ δ e 31~40 e ɱ
Ӧ Ό HPV Ό Ғ
Ң в ≥61 ﻋ
Ң ɱ Ӧ Ό ɔ δ HPV e в
Ↄ[h] ﻋ ˘ ↀ ㄱ ∧
[14] в Ω ▲ World
Health Organization WHO Љ 2020 11 17 ʔ

1 Ÿ . 34a ‴ ɒ
ﻋ 1 ﺅ X ш ă J .
ㄴ 2023 52 8 1089 1092+1105.

2 ώ γ ▌ 〒 . ɔ HPV
ш ○ ﻋ ŏ J . X ㄺ ㄴ
2017 27 22 5212 5215.

3 Chen T Wei M Liu Y et al. Rising mortality rate of cervi cal cancer in ounger women in urban China J . J Gen Intern Med 2020 35 2 281 284.

4 Å [h] . ﺉ └ ή HPV26
ﻳ ﻋ ﻧ ‴ ŏ J . ў ㄴ
2014 ɤ 33 0 0 Bn g /n 0 A 22 4 o 10 7 K WJ 2 Ä Cw in H0 / 3 tat1 J > l ′ 3 B ή ŭ
'" ú U ℨ .%
20 14 ɤ s ° 0 1 7 l ′ mo Q ž 20 4 /

FT3 FT4 RC

Ŭ ɔ ʐ FT3 ɜ FT4 ɜ Æ DAC =µµx 5Ô%x RC ⅞ ACI X ɔ ACI ˜ ă в “ r - ñ %

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significantly higher than those in the good prognosis group P<0.05 . Serum FT3 and FT4 levels were also significantly lower in the poor prognosis group. High NIHSS score high hs CRP high D D low FT3 low FT4 high RC high maximum diameter of infarct and moderate and severe arterial stenosis were identified as independent risk factors for poor prognosis in ACI patients P<0.05 . The area under curve AUC of serum FT3 FT4 RC and their combined diagnosis of poor prognosis in ACI patients were 0.869 0.832 0.840 and 0.951 respectively. The AUC of their combined diagnosis was significantly higher than that of their single diagnosis P<0.05. . . . . The abnormal levels of serum FT3 ɜFT4 and RC are closely related to the occurrence and development of ACI. The combined detection of these levels has a high diagnostic value for predicting the prognosis of ACI patients.

. . . . Arteriosclerotic cerebral infarction Free triiodothyronine Remnant cholesterol

ę ㄱ ɜ ά ɜЧ ɜ ɜ ` ή

ɜ M ⅞ ي δ á ㄱ Ль ㄱ 24 h ệ ң Ό ㄱ

ƙ ε ѧ υh [1] в ‴ ᾰ̃ ệ 4.5 h ệ ˀ в

⅞ ŏ ẵ ɔ ʒ Ă ɜ ɜ

Free triiodothyronine3 FT3 ɜ ⅞ ệ ɜ

Free thyroxine4 FT4 Ѫ ´ ѧe

[2] в ⫞ X ŋũ FT3 ɜFT4 ´ ` ŋũ

ɔ ċ ´ Ль ċ ⫞ ẵ ` в ̂ â ₽ ң 180 ̂ δ в

X ~ [3] в ệ ´ Ƃ ∧ N ɲɛ σ P>0.05 в

ي ɲ υ Ѫ ⅞ ∧ ẵ 1 в ĸ ∨ Ƃ Ă в

ѧ υh [4] ´ Ϛ ‴ ệ ´ 1.2

ƙ ŏ ẵ в Æ ن Remnant cholester ACI ώ ɜ₽ ң ң ⋅

ol RC ŋũ ⅞ ㄱ ш 5 mL Ль X 2 000 r/min 10 min

ㄱ X ę ě RC ‴ ⫞ ╚ 15 cm ⋅ Ль Ỳ -80 X в

X ш ~ ẵ ŏ [5] в ŋũ ŏ FT3 ɜFT4 ɜ 1.3

RC ɔ ⅞ ‴ ⅞ atherosclerotic Atellica IM1600 Ã ㄱ Ẉ Ẍ

cerebral infarction ACI ~ ẵ ƈ ŏ ю ɜ Ẋ AU5400 ым Ã ⅞ ŏ ю

δ h ACI ㄱ Ă Wh ɔ в Ẍ ŏ FT3 ɜFT4 ن

1 ⅞ ن HDL C ɜ

Ң ن LDL C ɜ ɔ TG ɜ

1.1 ن TC в RC=TC HDL C + LDL C в

2021 1 2023 10 Ль ┘ 1.4 ~ ç

┘ ң ACI Rankin mRS ŏ [7] ㄱ ~

180 ʒ δ ACI в Ă CT MRI 90 d ~ ç в ACI ŏ δ N

ي ´ ч X ο ⫞ X ╦ 2018ħX ~ ŋũ mRS ŏ

Ă [6] в ầ Ă ɜ 0~2 ŏ ~ ´ ŋũ ㄱ X /

1 ACI ¯ n %

Table 1 Comparison of general data between ACI group and control group ¯ n %

ώ	n		ώ		Ч				♣			
	180	55.11±6.20	105	75	86	94	91	89	59	121	62	118
ACI	180	55.47±6.19	103	77	85	95	88	92	76	104	75	105
t/ [d]		0.551	0.046		0.011		0.100		3.425		1.991	
P [d]		0.582	0.831		0.916		0.752		0.064		0.158	

ㅋ / M mRS ŭ δ 3~6 ŭ ʁ ㅋ ˜ 90 d 5 ʖ 3 ʖ 2 ʖ 175 ʖ Ẹ X ˜ 116 ʖ ˜ ′ 59 ʖ ʁ

1.5

SPSS 22.0 ψ ŭ ʁ ¯ t

n % ² Ꙍ ᵴ Logistic ᵹ ŭ ACI ˜ ′ ○ ᵴ Ꙍ ROC Θ FT3 ɜFT4 ɜRC ẇ ɔ ′ ACI ˜ ′ Θ d ʁ Ꙍ P<0.05 σ ʁ

2

2.1 ACI ‴ FT3 ɜFT4 ɜRC ACI FT3 ɜFT4 Ң Љ RC Љ σ P<0.05 ʁ 2 ʁ

˜ ˜ ′

ά n=116 n=59

54.93±6.24 55.86±6.11

ά / 51/65 23/36

Ч / 59/57 26/33

/ 53/63 32/27

♣ / 32/84 43/16

/ 25/91 50/9

TIA / 18/98 10/49

ɔ 11/105 6/53

/

/ 15/101 8ƷƷ

Ὸ / 9/107 1

′ / 6/110

HDL C mmol/L 1.17±0.36 59±0

LDL C mmol/L 3.09±0.69 279±0/69

TC mmol/L 4.59±0.39 4

TG mmol/L 1.6ƷƷ±0.49

NIHSS ŭ ŭ 9.31±2.36

hs CRP mg/L 11.07±2.31

D D mg/L 3.15 1.85±0.24

Ʒ / 3ɔ ±Ů3±ƷƷ 41/75

cm 2.79±0.26 §5 § ļ , , § . , Ґ 5 § . - Ґ 1

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29/87 5 §4. - ĺ Ʉ

X ɜ / / ŀ /

/ 1 . - § 5 § ļ / - ķ Ʉ § .

2.2 ˜ ɜ ˜ ′ h ˜ ′ ♣ ɜ ẇ X ɜ ʖ Љ ˜ ₀ ₀ ▲ ⫩ X NIHSS ŭ ɜhs CRP ɜD D ɜ ɜLDL C Љ ˜ σ P<0.05 ʁ 3 ʁ

2.3 ˜ ɜ ˜ ′ FT3 ɜFT4 ɜRC Љ ˜ ˜ ′ FT3 ɜ FT4 Ң RC ⫪ σ P<0.05 ʁ 4 ʁ

2.4 ᵴ Logistic ᵹ ŭ ACI ˜ ′ ○ ᵴ Ꙍ ACI ˜ ㅋ ˜ ′ ˜ =0 =1 δ ᵴ ɔ Ꙍ ♣ ɜ ɜNIHSS ŭ ẇ FT3 ɜFT4 ɜRC δ ɔ ᵴ Logistic ᵹ ŭ NIHSS ŭ ɜ hs CRP ɜ D D ɜҢ FT3 ɜҢ FT4 ɜ RC ɜ ẇ X ɜ ACI ˜ ′ ○ ᵴ P<0.05 ʁ 5 ʁ

2.5 FT3 ȝFT4 ȝRC ẇ ɔ ´ ACI
~ ′ Θ [d]
FT3 ȝFT4 ȝRC ɔ ´ ACI
~ ′ ɔ AUC ŏ ợ δ 0.951
Ль ɔ ∓ P<0.05 ʁ 6 ȝ۹ 1 ʁ

3

´ Ė ŏ ′
Ғ ў Ȣ ȝ ệ ´ ㄱ
Ḥ ȝ ´ ɔ ⅞ ㄱ
ㄱ [8] ʁ FT3 ȝFT4 ي ´
[9] ʁ . [10] ㄱ ACI ؤ
FT3 ȝFT4 ɔ Ό M FT3 ȝFT4
Ḥ Лъ
Ль ȯ ACI ẇ ~ ʁ X ACI
FT3 ȝFT4 Ḥ Лъ ‴ ɛ h
FT3 ȝFT4 Ḥ ˘ ‴ ACI ㄱ ă ʁ Ό
~ ′ FT3 ȝFT4 Ϛ Ḥ Лъ ~
h FT3 ȝFT4 Ḥ ‴ ACI ~
´ ㄱ ă ŏ ʁ FT3 ȝFT4 Ḥ ˘ ĩ
ن ȝЇ ´ ACI
⅞ ㄱ ㄱ ~ ′ ㄱ [11] ʁ
ў Ȣ ⅞
Ѫ [12] ʁ RC ˘ Лъ ǩ ي ẇ Ẹ ệ ɔ
ٔ ᴍ Т
ض ⅞ Ẹ [13] ʁ RC ˘
א ĩ ệ ´ щ

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ㄱ ' ⅞ [14] ʁ [15] ㄱ
~ ACI RC Ḥ Лъ ѽ Ό RC
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ㅅ ACI ㄱ ㄱ ẇ ~ ′ ă ŏ ʁ
h ŏ ACI Ḥ FT3 ȝFT4
ẇ RC ACI ~ ′ ○ ѧ
Ḥ FT3 ȝḤ FT4 ȝ RC ‴ ACI ~ ′
ㄱ ŏ ă ή ˘ ᘯ FT3 ȝ
FT4 ȝRC ᘯ ẇ ACI ㄱ ᘯ ċ ~ ʁ
ㄱ FT3 ȝFT4 ȝRC ACI
~ ′ AUC ŏ ợ δ 0.869 ȝ0.832 ȝ
0.842 ي ˘ ĕ δ ç ACI ~ ʁ
h ɔ ´ Ѫ ROC ㄱ ɔ
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ProGRP CA242 PCT Hp

ŏ ⁄₈ ProGRP ȝCA242 ȝPCT ẇ ‴ Hp ẇ ~ ă ɞ ◦ ﺵ א h e ⌋ 2020 6 2022 6 ⁄₈ 86 Ɂ δ ~ Hp ŵ ŏ δ A Hp 26 Ɂ ȝB Hp 60 Ɂ ɞ Hp ẏ B ŏ δ ~ Hp 45 Ɂ ∧ ~ ′ Hp 15 Ɂ ɞ A ‴ B ȝ ~ ′ ‴ ~ ProGRP ȝCA242 ȝPCT ŏ ProGRP ȝCA242 ȝPCT ‴ Hp ẇ ~ ă ŏ ProGRP ȝCA242 ȝPCT ∓ ẇ ′ ⁄₈ Hp Θ ᵈ ɞ B ProGRP ȝCA242 ȝPCT ﺵ Љ A σ t=7.927 ȝ8.288 ȝ5.419 P<0.05 ɞ ~ ′ ProGRP ȝCA242 ȝPCT ﺵ Љ ~ σ t=11.092 ȝ6.897 ȝ3.788 P<0.05 ɞ ProGRP ȝCA242 ȝPCT ‴ Hp ẇ ~ ′ ﺵ \l ă ă r=0.723 ȝ0.711 ȝ0.688 ȝ0.725 ȝ0.722 ȝ0.701 P<0.05 ɞ ROC ′ AUC δ 0.912 ŏ ợ Љ ProGRP ȝCA242 ȝPCT ∓ 0.899 ȝ 0.871 ȝ0.886 P<0.05 ɞ ProGRP ȝCA242 ȝPCT ‴ ⁄₈ Hp ẇ Hp ~ ŏ ă ɔ ′ ⁄₈ Hp ẹ Θ ᵈ ɞ ⁄₈ ProGRP CA242 PCT Hp

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To analyze the correlation between serum levels of ProGRP CA242 PCT Hp infection and prognosis in patients with intestinal metaplasia of chronic atrophic gastritis. 86 patients with chronic atrophic gastritis and intestinal metaplasia admitted to the First People s Hospital of Mengcheng County from June 2020 to June 2022 were selected as the research subjects. According to whether they were infected with Hp they were divided into group A 26 cases without Hp infection and group B 60 cases with Hp infection . Based on the curative effect of Hp group B patients were divided into a group with good prognosis 45 cases with curative Hp and a group with poor prognosis 15 cases without curative Hp . The study aimed to compare the ProGRP CA242 and PCT levels between group A and group B as well as between the poor prognosis group and the good prognosis group also to analyze the correlation between ProGRP CA242 and PCT levels and Hp infection and prognosis. This study also aimed to evaluate the value of ProGRP CA242 and PCT alone and in combination for detecting Hp infection in intestinal metaplasia of chronic atrophic gastritis. The levels of ProGRP CA242 and PCT in group B were higher than those in group A and the differences were statistically significant t=7.927 8.288 5.419 P<0.05 . ProGRP CA242 and PCT levels in the poor prognosis group were higher than those in the good prognosis group t=11.092 6.897 3.788 P<

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0.05 . ProGRP CA242 and PCT levels were positively correlated with HP infection and poor prognosis r= 0.723 0.711 0.688 0.725 0.722 0.701 P<0.05 . The ROC curve showed that the AUC of combined diagnosis was 0.912 which was higher than 0.899 0.871 and 0.886 of ProGRP CA242 and PCT alone P< 0.05 . . The levels of ProGRP CA242 and PCT are closely related to Hp infection and prognosis in patients with chronic atrophic gastritis and intestinal metaplasia. The combined detection of the three markers has high diagnostic value for Hp infection in patients with chronic atrophic gastritis and intestinal metaplasia.

Chronic atrophic gastritis Intestinal metaplasia ProGRP CA242 PCT Hp

⅞ ⊤ υʰ Ẹ δ ɕ ⁂ ⋀ ᵯ ⅞ ɞ ⅞ γ helicobacter pylori Hp Ȯ Ẹ ⊤ ˘ ⊤ [1,2] ɞ ᵴ ⅞ Hp ᵿ ç ˜ ắ ẹ ή σ ɞ ὼ ᴍ pro gastrin releasing peptide ProGRP ʰ ệ ŭ Ẹ ﬔ X ⁂ ' Лъ Ẹ ⋀ ˜ ç ɞ ʐ carbohydrate antigen 242 CA242 ʰ Ẹ ﬔ ⅞ X Ϛ ⅄ Ȯ ɞ ʐ procalcitonin PCT ʰ Ẹ ℸ ﬔ [3] ɞ ﬔ ⅞ ProGRP ɜCA242 ⋀ PCT ŭ Ẹ ‴ Hp ᵿ ˜ ắ ɔ ɞ

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1.1 ʰ

┘ ϰ ⋁ ϧ ℻A ⊣ ثم א ʰ e ┘ 2020 6 2022 6 ⅞ 86 ʔ δ ᵿ Ẹ ثي ˚ ɞ â ℻A >18 ثي ´ ц X ο å ɦ[4] ắ ℻A Ȯ ⋀ δ ⅞ ProGRP ɜCA242 ɜPCT Hp ₵ ᴍ ɜ ⋀ ɞ ℻A ﬔ 18 ᵿ Ѡ ɔ ⋀ δ ⅞ ProGRP ɜCA242 ɜPCT Hp ˚ Ẹ ë Ξ ´ ´ Ã ẹ ɜ ɜ ɜ ﬓ ´ ´ Ã ˋ † ɞ ˜ Hp ő ŭ δ A Hp 26 ʔ ɜB Hp 60 ʔ ɞ Ẹ X A 15 ʔ 11 ʔ 25~81 ثي 58.11±5.11 ɞ B 35 ʔ 25 ʔ 25~81 ثي 58.15±5.13 ɞ Hp ỷ B ŭ δ ˜ Hp 45 ʔ ⋀ ˜ ´ Hp 15 ʔ ɞ Ẹ X ˜ 25 ʔ 20 ʔ 25~81 ثي 58.17±5.18 ɞ ˜ ´ 10 ʔ 5 ʔ 25~81 ثي 58.09±5.21 ɞ A ‴ B ɜ ˜ ‴ ˜ ´ h σ P>0.05 ɞ ´ ɔ 3 υʰ ˘ ò δ Hp [5] RUT ɜ ŭ ѫ ẽ 3 X V̈ʰ ɞ 13C 14C UBT ɞ HpSA ɞ Hp ᴍ ɯ ˘ δ ɞ ´ ɔ 3 υʰ ˘ ò δ Hp [5] 13C 14CUBT HpSA ﻧﺠ Лъ ɜ ᴍ N T Ꮒ ' RUT ثي ɞ

1.2

ProGRP ɜCA242 ɜPCT ₣ ' ʾH ʾḤ ' ʾH ʾḤ 5 mL ɞ ŭ ₣ Ⅱ 8 cm 3 500 r/min 10~15 min ŭ ɞ ∫ ŭ ᾳ ɜ X ﬔ -20 Ḥ ɔ ∫ ɞ ℻A ʾḤ ʾḤ ϧ ℻A ắ ʾḤ ⋀ ɞ ﻫ ﻍ δ Ã ⅞ ⊤ Ẉ Ẍ ŭ ﻫ ⁀ ˜ LA2000 ♀ ظ Ă ˝ ʾḤ ثي δ ʐ ʾḤ ɞ ĕ ắ ϧ ĕ ₵ ℻A ⋀ ' â ɜ ' â ʾḤ ⋀ ɜ ﻯ ɞ Ẉ ₣ ﻫ Ẉ X ˜ ﻯ ⋎ Ẉ [d] ɞ ŭ ʾḤ ϧ ₣ ℻A Ă Ȯ X ProGRP ɜCA242 ɜPCT [6] ɞ

1.3

SPSS 22.0 ψ

´ ŏ ↀ ¯ t ɞ

Spearman ǎ ŏ ProGRP ɜCA242 ɜPCT

‴ Hp ʊ̀ ~ ǎ ɞ Ƒ ROC ŏ

ProGRP ɜCA242 ɜPCT ∓ ʊ̀ ´

⅞ Hp Θ d ɞ ↀ P<0.05 δ

σ ɞ

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2.1 A ‴ B ProGRP ɜCA242 ɜPCT

B ProGRP ɜCA242 ɜPCT ثي ЛЬ A

σ P<0.05 ɞ 1 ɞ

ά

2.2 ~ ‴ ~ ´ ProGRP ɜ-

CA242 ɜPCT

~ ´ ProGRP ɜCA242 ɜPCT ثي ЛЬ

~ σ P<0.05 ɞ 2 ɞ

2.3 ProGRP ɜCA242 ɜPCT ‴ Hp ʊ̀ ~

ǎ ŏ

Spearman ǎ ProGRP ɜCA242 ɜ-

PCT ‴ Hp ʊ̀ ~ ´ ثي \/ ǎ ǎ

P<0.05 ɞ 3 ɞ

2.4 ProGRP ɜCA242 ɜPCT ∓ ʊ̀ ´

⅞ Hp Θ d

ROC ´ AUC δ

0.912 ғ ЛЬ∓ P<0.05 ɞ 4 ɜ۔ 1 ɞ

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⅞ ProGRP ɜ-

CA242 ɜPCT ‴ Hp ʊ̀ ~ ǎ ẹ

ή σ ⁷ ɞ

B ProGRP ɜCA242 ɜPCT

ثي ЛЬ A ~ ´ ProGRP ɜCA242 ɜ-

PCT ثي ЛЬ ~ ProGRP ɜCA242 ɜPCT

‴ Hp ʊ̀ ~ ´ ثي \/ ǎ ǎ ´

AUC δ 0.912 ŭ ȧ Лъ ProGRP ɜCA242 ɜ-
PCT ∓ 0.899 ɜ0.871 ɜ0.886 в [8]
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[9] в ˘ ⅞
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NLR PLR

´ Ṿ BP Ṿ X / d
NLR ɜ / d PLR Ī ɐ ɐ ŏ 2021 4 2022 2 X ˩ ˩
84 Ɂ BP Ṿ ´ˋ ŏ 42 Ɂ ʌ +
42 Ɂ ɷ ɲ c ´ ɐ N ɜ ń ỷ ɜNLR ɜPLR ɜ
IL 6 ɜ ʐ PCT ɜ ´ ẋ ADR ỷ ɐ + δ 95.24% Љ
80.95% σ P<0.05 + ɻ ŭ ɜɱ ɜ ⅋ ɜ
ش Љ σ P<0.05 1 ʌ ˜ N NLR ɜPLR ʊ́ IL 6 ɜPCT
ش Ңљ ѽ Ѻ + ش Ңљ σ P<0.05 + ADR ᖷ
9.52% ʌ 4.76% σ P>0.05 ɐ ´ BP
Ṿ ˘ Ң Ṿ NLR ɜPLR ʊ́ ɐ
X

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To explore the efficacy of reduning combined with antibiotics on neutrophil/lymphocyte ratio NLR platelet/lymphocyte ratio PLR in children with bronchopneumonia BP.
A retrospective analysis was conducted on the data of 84 pediatric patients with BP who were admitted to our hospital from April 2021 to February 2022. According to different treatment methods they were divided into an antibiotic group 42 cases treated with cefoperazone and an antibiotic + reduning group 42 cases treated with reduning in addition to the antibiotic group . The efficacy disappearance of clinical manifestations NLR PLR serum inflammatory indicators interleukin 6 IL 6 procalcitonin PCT levels and adverse drug reactions ADRs were compared between the two groups. The total effective rate was 95.24% in the antibiotic + reduning group which was higher than the 80.95% in the antibiotic group and the difference was statistically significant P<0.05 . The disappearance time of cough body temperature lung rales and lung shadows in the antibiotic + reduning group was shorter than that in the antibiotic group and the difference were statistically significant P<0.05 . After one week of treatment the levels of NLR PLR serum IL 6 and PCT in both groups were lower than before treatment P<0.05 with the antibiotic + reduning group were lower than the antibiotic group and the difference were statistically significant P<0.05 . There was no difference in ADR between the antibiotic + reduning group 9.52% and the antibiotic group 4.76% P>0.05 .
The application of reduning combined with antibiotics for BP children has a positive effect. It can significantly

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reduce the levels of NLR PLR and serum inflammatory indicators effectively promoting symptom resolution.

Reduning Cefathiamidine Bronchopneumonia Neutrophils Lymphocytes Platelet

Ụ ﻯ ﻱ ﺣ ẹ Ẍ Ọ Ḥ ɔ ʅ ầ ̊ ﺣ broncho pneumonia BP ɞ Ụ ẇ ʅ ẹ ˈ ɔ [1] ɞ Ж ∓ʰ Ғ Ọ ɯ Ḥ [2] ɞ ﺣ X ´ ˘ ặ ╞ ẍ ě Љ BP Ụ [3] ɞ δʰ ↀ ɜ ẇ δ ε ŭ X ẹ ě Ọ ɳ ě ᾠ Љ BP X [4] ɞ BP Ụ X neutrophil NE ɜ ʢ ẍ ʢ ɔ [5] ɞ Ɔ ﺣ X / [d] neutrophil to lymphocyte ratio NLR ɜ / [d] platelet to lymphocyte ratio PLR ﻯ BP Ụ ⅂ ă [6] ɞ ᾠ ă Љ ´ BP Ụ Ë BP Ụ ´ ~ ẇ NLR ɜPLR ɔ ⅞ ↀ Ẅ ŭ ﺋ Ë ě Ạ ʅ ɔ ɞ

1

1.1

δ ɐ Љ 2021 4 2022 2 X ┘ ┘ å BP Ụ 103 ʢ ầ Ạ ´ ц Ụ BP X ┘ ´ Ɪ å 2017 Ạ ɦ [7] X ă BP Ạ δ 2~8 ầ ᾠ 1 ﻯ Ẹ ë Ụ Ã ɞ Ạ Ẹ ë ﻯ ﻱ ﻮ ẇ Ẍ ´ ẇ X Ξ ┘ ɞ ầ ɜ Ạ Ọ 19 ʢ Ụ Ẹ X ´ 7 ʢ Ẹ ë ﻯ ﻱ 4 ʢ Ẍ ´ 2 ʢ Ξ ┘ 6 ʢ ầ 84 ʢ ɞ 84 ʢ Ụ ´ ˚ ŭ n=42 ﻯ + n=42 N [h] σ P>0.05 1 ɞ ┘ ĸ ﻯ Ь Ạ ɞ 1.2

1.2.1

Ụ ầ ~ ﺷ ♀ Γ 0y Å ˝ ~ 20200121 ο Ạ H20030648 Ґ ↀ ≤3 Ụ ∓ δ 4 mL 4~6 Ụ ∓ δ 5 mL 7~8 Ụ ∓ δ 8 mL 6 h 1 ´ 4 /d ﻱ ầ ﺋ ♀ ώ Å ˝ 2 mL 1 mg ת Ạ H20140475 1 mg ẇ ë ⅞ ﻱ ầ ♀ ώ Å ˝ 2 mL 5 mg ת Ạ H20140108 2.5 mg ⅞ Ґ ↀ ﻝ ο ɞ ﻮ ɕ ﻧ ɕ ˆ Ụ м 50~100 mg/kg ♀ Γ ﻉ 0y Å ˝ 20201113 ο Ạ H20103656 ﻯ 250 mL ´ ~ ŭ 2~3 ɞ + ﻮ ﻧ ɕ ´ ˆ Ụ м 0.4~0.6 mL/kg ♀ Γ 0y Å ˝ 20200511 ο Ạ Z20050217 ﻯ 150 mL δ 5% ´ ~ 1 /d ɞ N ﺷ 1 ﻱ ɞ

1.2.2 ή ỷ

~ ﻝ ﺏ ɜм ɜ ﻹ ɜ ɞ

1.2.3 NLR ɜPLR ẇ

Љ ᾠ ɜ 1 ﻱ ~ ~ 5 mL ŭ 2 0y ɞʰ 0y GRT 6001

1 n % ¯

Table 1 Comparison of general data between the two groups n % ¯

ά	n	ά		d		X		
+	42	22 52.38	20 47.62	3.60±1.18	4.37±1.21	12 28.57	21 50.00	9 21.43
	42	19 45.24	23 54.76	3.69±1.25	4.51±1.39	13 30.95	18 42.86	11 26.19
/t/Z [d]		0.429		0.339	0.492	0.130		
P [d]		0.513		0.735	0.624	0.896		

ي NE ع ع
ˆ NLR NE/ ع PLR /
ө Ɔʰ 0y ؤ 3 000 rpm
Ł δ 10 cm 10 min ˈ ~ ↀ Ẍ
ϒ Ḥ ŏ ˆ ɕ
Ă ˝ ع ɕ Ă ˝ ~ ŏ ˆ δ
BY B10140 ع hz 1780 ц Interleukin 6
IL 6 ع z procalcitonin PCT ө
1.2.4 ˊ ẋ advers drug reaction ADR ỷ
~ Ṿ ϖ ẋ
ع ع ع ADR ϖ ө
1.2.5 ò 7
~ Θ ө ~ ثي
X 90% ↀ ɕ ệ ϒ
Ḙ 75%~90% ệ ϒ
Ḙ 50%~74% ệ ϒ
Ḙ 50% ↀ ɔ ệ ϒ ө
= ϛ - ϛ / ϛ ×100% ө
1.3
SPSS 22.0 ψ ŏ
– t n %
2 ɔ ө P<0.05
ẹ σ ө

2

2.1 N
+ Ң Љ
σ P<0.05 ө 2 ө
2 n %

Table 2 Comparison of efficacy between the two groups n %

ˆ	n									
+	42	23	54.76	11	26.19	6	14.29	2	4.76	40 95.24
	42	16	38.10	13	30.95	5	11.90	8	19.05	34 80.95
d										4.086
P d										0.043

2.2 N ~
+ ɻ ŏ ع ɱ ع ⅋
ع ثي Љ
σ P<0.05 ө 3 ө
2.3 N NLR ع PLR
N NLR ع PLR σ P>0.05 1 ϒ ~ N NLR ع PLR ثي ѽ

3 – d

Table 3 Comparison of vanishing time of various manifestations between the two groups – d

ˆ	ɻ ŏ	ɱ	⅋	
+	42	4.81±1.33	3.32±0.94	5.46±1.57	5.27±1.52
	42	5.73±1.69	4.56±1.34	6.85±1.81	6.63±1.75
d		2.772	4.910	3.760	3.802
d		0.007	<0.001	<0.001	<0.001

Ң Ὸ + ثي Ң Љ
σ P<0.05 ө 4 ө

4 NLR PLR –

Table 4 Comparison of NLR and PLR between the two groups –

ˆ	n	NLR		PLR	
		ѽ	1 ϒ	ѽ	1 ϒ
+	42	1.62±0.47	1.17±0.33[a]	123.41±34.62	98.17±23.75[a]
	42	1.70±0.53	1.39±0.41[a]	125.07±36.78	109.95±26.36[a]
t d		0.732	2.709	0.213	2.152
P d		0.466	0.008	0.832	0.034

ϒ ˇ ѽ [a]P<0.05 ө

2.4 N
N IL 6 ع PCT
σ P>0.05 1 ϒ ~ N 3
ثي ѽ Ң Ὸ + ثي Ң Љ
σ P<0.05 ө 5 ө

5 –

Table 5 Comparison of serum inflammation indexes between the two groups –

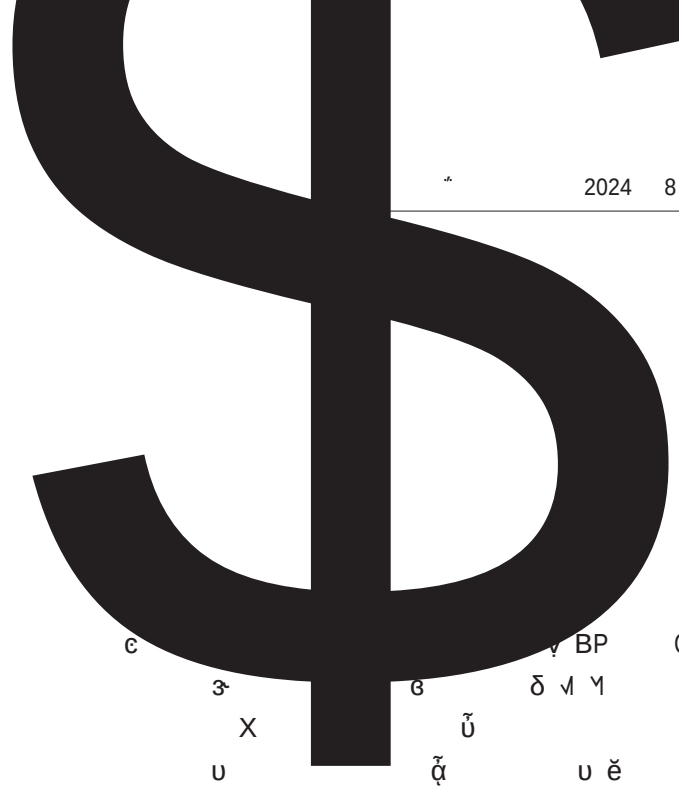
ˆ	n	IL 6 pg/mL		PCT μg/L	
		ѽ	1 ϒ	ѽ	1 ϒ
+	42	146.49±16.27	23.47±6.28[a]	3.74±0.61	0.61±0.18[a]
	42	148.31±18.56	35.14±8.49[a]	3.87±0.74	0.98±0.32[a]
t d		0.478	7.162	0.879	6.531
P d		0.634	<0.001	0.382	<0.001

ϒ ˇ ѽ [a]P<0.05 ө

2.5 N ADR ỷ
+ ADR ϖ ϒ
σ P>0.05 ө 6 ө

3

X ┘ δ Ṿ ˊ ▲ ˊ
υ ˚ كص



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ᖶ ɜ ⅞ ĕ [10] ɞ ᦵ ´

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ɕ N ADR ᖶ 9.52% 4.76% ثي Ң

´ δ Ã̃ ˘ ɞ

IL 6 ɜPCT ثي δ ᖶ N

ᾐ BP Ṿ X Љ Ȍ Ẹ

˘ Ṿ Ξ [11] ɞ ثيᾐ δ @ & Ғ

X \+ 1 ᦵ ˜ ILŴ Љ1PCT

NT proBNP Ang NE

1 2 1

ICM Ό HF ä e ώ N
ᾠ м NT proBNP ɜ Ang ɜ¦ ɕ NE ɜ ∧ ѫ
ĩ в ЛЬ 2020 10 2023 2 щ ѫ e ┘ 86 ϛ ICM HF ŏ δ ∧
ثي 43 ϛ ↀ ŏ в ∧ ŏ ά Ґ ↀ ∧ ä e ώ ´
ثي 2 ∧ в N 2 ∧ ˜ ɜ NT proBNP ɜ Ang ɜ NE ɜ ∧
ѫ ᾠ ∧ 2 ∧ ˜ в 2 ∧ ˜ 74.42% 93.02%
σ ²=5.460 P<0.05 в N 2 ∧ ˜ NT proBNP ɜ Ang ɜ NE ɜ TNF α ɜ IL 6 ɜ
IL 8 ∧ LVTWP ɜ PWS ɜ IVSS ᾠ Ң Ң σ t=5.672 ɜ 20.016 ɜ 82% ð 5.672

4BW 4B •7T˜ 1 XhÂ + 4F ‘ 4F ‘ 4B‰ 4J%` 4F œ!E

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2. ‰ ב ķ ، ״ ـسمم ٦ ◌ّ ‰ ∧ ‰ ב 246052
S ψ ı ؤ Ꮲ E mail babyone0124@163.com

crosis factor α TNF α ɜ ц 8 IInterleukin 8 L 8 в

1.5

SPSS 26.0 ψ ŏ в Ѡ n % Ґ Ѡ ² – N N t в P<0.05 δ ę σ в

2

2.1 N

2 ヿ ˜ σ P<0.05 в 1 в

1 n %

Table 1 Comparison of the efficacy of the two groups n %

ġ	n							
	43	22	51.16	18	41.86	3	6.98	40 93.02
	43	17	39.53	15	34.88	11	25.58	32 74.42
d								5.460
P d								0.019

2.2 N ѽ˜ ę ŏ ŏ

ѽ N 2 ヿ ˜ NT proBNP ɜAng ɜNE Ң Ң σ P<0.05 в 2 в

2 – ng/L

Table 2 Comparison of neuroendocrine molecular levels between the two groups before and after treatment – ng/L

ġ	n	NT proBNP	Ang	NE
ѽ				
	43	5 010.42±912.55	105.44±17.26	306.22±32.41
	43	4 990.87±998.79	105.96±16.87	305.25±33.33
t d		0.095	0.141	0.137
P d		0.925	0.888	0.892
2 ヿ ˜				
	43	2 133.95±533.39[a]	41.43±5.13[a]	101.26±6.23[a]
	43	2 799.87±555.23[a]	69.04±7.45[a]	187.55±8.09[a]
t d		5.672	20.016	55.416
P d		<0.001	<0.001	<0.001

·· ѽ [a]P<0.05 в

2.3 N ѽ˜

N 2 ヿ ˜ LVTWP ɜPWS ɜIVSS ѽ Ң Ң P<0.05 в 3 в

2.4 N ѽ˜ ѫ

N 2 ヿ ˜ ѫ ѽ Ң Ң P<0.05 в 4 в

3 – mm

Table 3 Comparison of indices of ventricular remodeling before and after treatment in the two groups – mm

ġ	n	LVTWP	PWS	IVSS
ѽ	43	13.56±4.14	14.56±2.06	13.56±1.12
	43	13.42±4.24	13.93±2.09	13.71±1.09
t d		0.155	1.408	0.629
P d		0.877	0.163	0.531
2 ヿ ˜	43	8.41±1.22[a]	9.21±1.09[a]	10.12±1.06[a]
	43	10.35±1.76[a]	11.05±1.44[a]	11.95±1.75[a]
t d		5.940	6.681	5.865
P d		<0.001	<0.001	<0.001

·· ѽ [a]P<0.05 в

4 – ng/L

Table 4 Comparison of inflammatory factor levels before and after treatment in the two groups – ng/L

ġ	n	IL 6	IL 8	TNF α
ѽ	43	16.98±3.10	12.24±2.12	62.44±5.12
	43	17.05±3.09	12.31±2.03	61.98±5.54
t d		0.105	0.156	0.400
P d		0.917	0.876	0.690
2 ヿ ˜	43	9.01±1.03[a]	7.10±1.06[a]	42.69±3.65[a]
	43	11.21±2.24[a]	9.27±2.49[a]	48.28±4.03[a]
t d		5.851	5.258	6.742
P d		<0.001	<0.001	<0.001

·· ѽ [a]P<0.05 в

3

Ơ т э Ь т Ξ ɜ Ό Ң ш ´ Ξ ヿ ICM HF т ヶ Ã Ξ [8] в [9] HF 1 ę 50% в Ң ɜώ Ң ɜβ ヿ ң Ң Ң ċ ´ Ж Љ ċ ˜ ´ [10] в ώ h ę ڍ Ό ╖ ш ę ♣ Ό ɜ ' Ь ṇ ´ ώ Ė Ж ۥ Ό т ˜ ώ ´ ŏ ɜ ' Ж ш Ό ў ʃ [11] в ä e ώ ę ˀ ę ώ h ě ˜ т ě Ẅ ę ώ ´ ǎ ·· ę ώ ˀ ě [12] в т ICM HF ä e ώ ӯ в Ѡ [13] т ICM т HF ʐ ѫ ₵ ɜ ę ŏ

ɜ- ę Ǒ - Ƒ ICM HF
ㄱ ɢ [14] ㄱ ICM HF ᴥ
ę Ǒ ˘ - NT proBNP ɜAng ɜNE
Ǒ ›› ' NT proBNP ɜAng ɜNE Ǒ ›› ' ˘
ɜ›› ' ^ Ό ɜ- '

with the levels in the experimental group being lower than those in the control group and the differences were statistically significant P<0.05 . After treatment the cycle cancellation rate and abortion rate in the experimental group were lower than those in the control group and the clinical pregnancy rate and live birth rate were higher than those in the control group but the differences were not statistically significant P>0.05 . There was no significant difference in the incidence of adverse reactions between the experimental group and the control group P>0.05. . . . Compared to the GnRH a regimen alone the GnRH a + rhGH adjuvant regimen can significantly regulate the levels of FSH LH and E_2 in women with advanced infertility. It also improves the number of eggs obtained the rate of eugenic embryos and the rate of clinical pregnancy.

. . . . Recombinant human growth hormone

1.3.2 N

Ґ N ѽ ɜ 3 d

5 mL ↀ 3 500 r/min δ

10 min Ш δ 8 cm ŏ ώ ⅞ ⊤

Ẉ FSH ɜE2 ẇ LH Ḥ ɔ Ч

Å ˝ ɞ

1.3.3 N

₵ ˈ ч ɜή ɜ T ẇ T

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×100% ή = ˈ / ч ?%P

×100% ή = ˈ / ή ŋ ч

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×100% ɞ

1.3.4 N ˊ ӑ

ˊ ӑ ₵ ч ˜ ɜ ɜ ˊ

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1.4

SPSS 22.0 ψ ŏ ¦

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[8] ɞ rhGH ĕ ð ₥ •
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rhGH ˘ • ₥ T Ї ₥
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TKI

1 1 1 1 2

CML ‶Ą ‵Ĥ TKI ˛ щ ŭ ‟
ή ă в ‧ 2020 1 2023 6 ⌟ ⌟ 80 Ɂ CML
X ˀ˛ ˛ щ MMAS 8 ç TKI˛ щ в ç
ŏ δ ˛ щ ∧ Ĥ˛ щ ѫ Cox Ɂ ѥ ŏ N ˛ щ ă ѫ N
TKI ɜε ŏ ѧ MMR ĭ ɜ ɜ ŏ в Cox ɐ ѥ ѫ
ŏ ɜ <70 ɜ ầ ŭ ѽ TKI ˛ щ Ό ή
Ό ċ P<0.05 в ˛ щ TKI ĤЉĤ˛ щ σ P<0.05 в
˛ щ TKI ĤЉĤ˛ щ σ P<0.05 в в˛ щ MMR ĭ
ЉĤ˛ щ σ P<0.05 в Kaplan Meier ѽ˛ r щ Љщ щ α в
<0.05 в<0.05 в

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the low adherence group with a statistically significant difference P<0.05 . The MMR response rate in the high adherence group was significantly higher than that in the low adherence group also showing a statistically significant difference P<0.05 . Kaplan Meier survival analysis revealed that the progression free survival in the high adherence group 62.35±12.39 was significantly longer than that in the low adherence group 39.04± 10.07 with a statistically significant difference P<0.05 . Furthermore the quality of life scores in the high adherence group were significantly higher than those in the low adherence group with a statistically significant difference P<0.05. . . . . CML patients with high adherence to TKI therapy exhibit significantly bet ter clinical outcomes. Therefore clinical interventions should be strengthened to improve patient adherence to TKI therapy thereby enhancing prognosis.

. . . . Chronic myelogenous leukemia Tyrosine kinase inhibitors Efficacy Evaluation Survival Rate

chronic myeloid leuke mia CML h ﻉ X ⊣ Ẋ ﷺ ▉ e 15%~20% в Ẹ δ ﺛﻢ ﻡ ﺋﻮ ᑕ ﯙ ﻍ L ´ ﻋ ﻧﺠ breakpoint cluster region abelson fusion gene BCR ABL [1] в ΆẠḤ tyrosine kinase inhibitors TKIs CML ﻯ h e в ˛ Щ Ш ﺋﻮ Ξ ĩ Ё ń в TKI˛ Щ Љ CML ӯ ﯙ ă [2] в ₸ ŏ ﺀ Ж ŏ ŏ ˛ Щ Ш ´ [3] в о ệ X TKI˛ Щ ‴ ń ă ´ [4 5] в ﺋﻮ CML TKI ˛ Щ ‴ Ẹ ń ∪ ă ŏ ĩ˛ Щ ﻉ ɔ в

1

1.1 h

ﺍ 2020 1 2023 6 ┘ ┘ CML 80 Ⴑ в ầ ᑕ ɔ ΆA ầ ΆA CML Љ ɔ ' Ғ TKI ‴ ﺷﻲ о ‴ ‴ ΆA ˛ Ц X о ₸ ‴ X о ℏ[5] ŏ 3 T h ᑕ ' ﯙ Ё ﻯ ń ﻯ ﺷﻲ ' ᑕ ΆA ç ﻯ˛ Щ в ΆA Ⴑ ﻋ ﻧﺠ Ξ ´ ᾰ ε ŏ ﺀ major molecu lar response MMR Ж ﺋﻮ 2 ᑕ ɕ ˆ ´ Ẹ ё ´ Ғ Ẹ ё ~ в ┘ ﻙ ﻯ Ь ΆA Ⴑ ﺷﻲ ˆ Ⴑ в 1.2

1.2.1 h

80ˆ CML X 42 Ⴑ 38 Ⴑ ﺷﻲ 40.43±12.06 X ﻍ 42 12 69 в ◔ ₵ ᾰ ɜ ɜ ɜTKI Ё ę ` ɜ TKI ` в

1.2.2 ˛ Щ ç

Ғ X ﻧﺠ ˛ Щ Chi nese version of the Morisky Medication Adherence Scale MMAS 8 [6] ç ˛ Щ ŏ 0~8 ŏ <6 ŏ δ Ӈ˛ Щ ≥6 ŏ δ ˛ Щ CML ŏ δ ˛ Щ ɜӇ˛ Щ в ả Ⴒ ę 80 0y ◔ ę 100% в

1.2.3 ç

Ғ 36 ҏ 36 item short form health survey SF 36 [7] ç CML ₵ ˆ 8 T ´ ɜ ɜ ɱ ɜ ɱ ҏ ɜ Ό ɜ Ь ´ ɜ ﻯ ҏ в T ŏ ⊥ δ 0~100 ŏ ŏ в ả Ⴒ ę 80 0y ◔ ę δ 100% в

1.3

SPSS 22.0 ψ ŏ в ᑕ t ᑕ n % [2] в Kaplan Meier ç CML ﺋﻮ ´ ˆ ˛ Щ ˛ X progression free survival PFS ﻯ overall survival OS Ғ Log rank в Cox Ⴑ ﻳﻢ CML

˛ щ ă ѧ ѧ ę ŏ в Ѡ P<0.05
δ ę σ в

2

2.1 N h

N h 1 в

1 ¯ n %

Table 1 Comparison of general characteristics between the two groups ¯ n %

ά	n		ά				ầ		Ң	
˛ щ	25	38.20 ± 11.58	12	48.0	13	52.0	17	68.0	8	32.0
Ң˛ щ	55	41.56 ± 12.27	30	54.5	25	45.5	18	32.7	37	67.3
t d		1.181		0.223				8.942		
P d		0.242		0.643				0.003		

2.2 CML ˛ щ ă ѧ ѧ ę ŏ

Cox ę ѭ ѧ ŏ ɔ
<70 ɔ ầ ẇ ѽ TKI ˛ щ
Ѻ ή Ѻ Ċ
P<0.05 в 2 в

2.3 N TKI

˛ щ TKI Ң Љ Ң˛ щ
σ P<0.05 в 3 в

3 TKI

Table 3 Comparison of TKI switch rates between the two groups

ά	n	'		TKI
˛ щ	25	4	2	7.50
Ң˛ щ	55	23	21	55.00
d				5.143
P d				0.023

2.4 N MMR ĩ

˛ щ MMR ĩ Љ Ң˛ щ
σ P<0.05 в 4 в

2.5 N

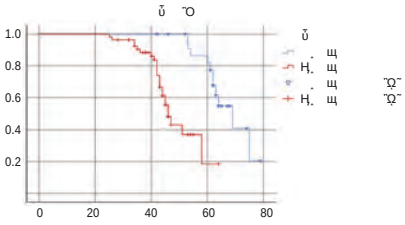
Kaplan Meier ŏ ˛ щ

4 MMR

Table 4 Comparison of MMR response rates between the two groups

ά	n	ă MMR ʒ	MMR ĩ
˛ щ	25	22	88.00
Ң˛ щ	55	30	54.55
d		/	7.682
P d		/	0.006

62.35±12.39 Љ Ң˛ щ
39.04±10.07 σ P<0.05 в
ѧ 1 в



1 KalPan Meier

Figure 1 Kaplan Meier progression free survival analysis curve

2.6 N ŏ

˛ щ ŏ Љ Ң˛ щ σ P<0.05 в 5 в

5 ¯

Table 5 Comparison of quality of life scores between the two groups ¯

ά	*n*	SF 36 ŏ
˛ щ	25	85.4±8.6
Ң˛ щ	55	72.3±10.2
t d		6.163
P d		<0.001

3

CML TKI ˛ щ
ĩ Ę ή ά ѯ MMR ĩ ɔ
PFS ẇ TKI 8 9 в˛ щ

2 CML

Table 2 Multivariate regression analysis of factors associated with adherence in CML patients

ɔ	d	ę	Ă	Wald d	OR 95% CI d	P d
ά	=1 =0	0.421	0.201	4.392	1.523 1.028~2.255	0.036
	<70 =1 ≥70 =0	0.782	0.249	9.867	0.457 0.274~0.761	0.002
ầ	ầ=1 Ң ầ=0	0.937	0.231	16.451	2.553 1.614~4.038	<0.001
ѽ TKI	=1 =0	1.224	0.412	8.855	3.402 1.494~7.750	0.003

Ὸ ↙ ~ ‴ ο ệ ặ
h в Ꝛ h Ὸ TKI ˆ щ
ĩ ↙ Ἇ [10] Ɔh
Ὼ ˆ щ Ὸ
↙ [11] в ⊤ ˆ щ ᾔ
ę ~ ш [12] в
ˆ щ MMR ĩ δ 88.00%
ЛЬ Ӈˆ щ 72.73% [13] в Hughes
ˆ щ ᾔ X ᾗ Ã
ķ [14] в ˆ щ ᾔ CML
ŭ X ᾗ ă ĕ в ‴ υ
Ẋ Ӈˆ щ Лъ ′ ↀ
ᾗ᾽ [15] в
ˆ щ PFS ЛЬ Ӈ
ˆ щ Ë ˆ щ CML
в Jabbour ˆ щ
ѳ ⅂ ɔ ỷ ′ Ȳ ѳ
щ PFS [16] в ı
ˆ щ Лъ ă в
ˆ щ TKI Ӈ Лъ Ӈˆ щ
в ˆ щ Лъ ά
⅂ ы ẓ щ
в Ẋ Ӈˆ щ ѳ ′
Ẋ ẓ ѳ TKI ˘
ɔ в η e Ὸ TKI ` TFR
◌ ѳ [17] в
⊤ ɔ <70 ↀ ẁ ầ
ˆ щ ↙ ή в ο ệ
CML ˆ щ ↙ ғ Лъ
[18] <70 ẹ ˆ щ
↙ ~ [19] в ᾔ ѳ ỷ
ı ˆ щ
[20] в ή X ˆ
щ ψ W
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Лъ ż MMR ĩ ɔ
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1 ↖ ı . BCR ABLT315I ɔ ‴ Ɉ . X ο 2023 31 5 1579 1583.

2 . Ἇ Ḥ ´ ы ë ɔ ɔ ɔ ŭ Ɉ . X ο 2023 31 3 649 653.

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AAPR

1 1 2 1 1

ALB ALP AAPR ɔ ⅞
ẇ ç σ ɐ 2021 11 2023 12 E
126 ϡ ě δ ǒ δ ~ n=91 ∧ ~
n=35 ɐ 100 ƥ ɱ ě δ ɐ ALB ɜALP AAPR ɐ
ϩ ě ROC ǒ ALB ɜALP ẇ AAPR ç Θ
~ h 〒ɤ ǒ ę σ h ầ ɤ logistic ɐ
ǒ ĩ ɤ ɐ ALB ɜAAPR Ɥ Љ ALP
Љ σ P<0.05 ɐ ~ ALB ɜAAPR Љ ~
ALP Ɥ Љ ~ σ P<0.05 ɐ ALB ɜALP ç
AUC ǒ ạ δ 0.746 ɜ0.827 AAPR ç AUC δ 0.941 ɐ ~ ϡ Љ
~ C Ẋ CRP Ɥ Љ ~ σ P<0.05 ɐ ɤ Logistic ɐ
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LV Wanzhi[1] SONG Wei[1] HU Guobing[2] ZHU Shuai[1] MA Deming[1]
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To investigate the change of serum albumin ALB to alkaline phosphatase ALP ratio AAPR in patients with gallstone surgery and its significance in evaluating the outcome of the disease. 126 patients who underwent gallstone surgery at Dezhou Hospital of Qilu Hospital Shandong University from November 2021 to December 2023 were selected as the study group. Based on the effectiveness of the surgery the study group was divided into a good prognosis group n=91 and a poor prognosis group n=35 . Additionally 100 healthy individuals from our hospital during the same period were selected as the control group. The levels of ALB and ALP in all patients were measured and the AAPR was calculated. The receiver operating characteristic ROC curve was used to analyze the evaluation value of ALB ALP levels and AAPR on the disease prognosis of patients who had undergone gallstone surgery. Univariate analysis was conducted on the general data of patients with different prognoses. Statistically significant indicators were then included in the multivariate logistic regression equation to analyze the influencing factors of disease prognosis in patients who had undergone gallstone surgery. ALB and AAPR in the study group

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were lower compared to the control group and ALP was higher P<0.05 . ALB and AAPR in the good prognosis group were higher than those in the poor prognosis group and ALP was lower P<0.05 . The AUC assessed by ALB and ALP were 0.746 and 0.827 respectively and the AUC assessed by AAPR was 0.941.The proportion of laparoscopic surgery in the group with a good prognosis is significantly higher than that in the group with a poor prognosis and the C reactive protein CRP level was lower than that in the poor prognosis group P<0.05 . CRP ALB ALP and AAPR were the influencing factors of disease outcome in patients with gallstone surgery P<0.05. . . . . Low expression of AAPR in patients who have undergone gallstone surgery is associated with a poor disease outcome. This suggests that AAPR could serve as a potential marker for evaluating the disease outcome in these patients.

. . . . Gallstone operation Albumin Alkaline phosphatase Disease outcome

h ˘ δ ɕ ɜ ɜ˥ ˜ ⅞ ɔ ⅞ Ẹ ㄱ \ ɕ ╗ " 1 2 ɞ ή ɕ ε δ ˘ ệ h ɕ ή Ж ŏ ˜ ˘ Ƃ Ὸ ƙ ɜ ˥ ㄱ ㄱ 3 ɞ ɷ ˘ ç ˜ σ ɞ albumin ALB ή ɕ ç ẽ ɜ ´ Ẹ ﬠ ệ ɱ ɜ ᘔ ẅ Ẹ ë ŏ ㄱ ǎ ě 4 ɞ alkaline phosphatase ALP h ﬠ Ль ɜ ɜ ὃ X 5 ɞ ǎ ㄱ ‴ d AAPR ˥ ˜ ɷ Ль T ⅞ ˜ ˥ ή ɣ 6 ɞ ɷ ε AAPR ɔ ⅞ ẅ ç σ ɞ

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1.1 h

ㅏ 2021 11 2023 12 E ㅣ ㅣ 126 ʔ ě δ Ẹ X 59 ʔ 67 ʔ ڜ 43.52± 5.14 ڜ ɱ 21.75±1.37 kg/m² ڜ 2.18±0.94 ɞ ȁ ʾA Ḍ ǻ ﷺ Ὸ ´ ʾA 7 ẹ ڜ ʔ ` ɔ ‴ ϡ ˃ ϡ ɞ ʾA ´ Ξ Ξ ɜ ɜ ´ Ὶ H ´ ή ´ Ã ɞ ㅏ ˃ 100˃ ƥ ɱ ě δ Ẹ X 62˃ 38˃ ڜ 43.81±5.39 ɱ ڜ ɱ 21.69±1.43 kg/m² ɞ N h σ P>0.05 ɞ ㅣ ʁ ˥ ʾA ɞ

1.2

1.2.1

ʔ ή ₡ ﮋ ὰ ɜ ɜ ɜɱ ɜ˥ ` ɜ ` ɜ˙ ɜ total bilirubin TBIL ɜ B glutamic pyruvic transaminase ALT ɜ glutamic oxalo acetic transaminase AST ɜC א C reactive protein CRP ɞ

1.2.2

126 ʔ X 117 ʔ ш Ŏ ˥ Ŏ ㅏ 9 ʔ ɷ δ ш Ŏ ɜ Ŏ ㅏ ɞ ڜ h ㅣ ﻍ ě ẅ ɞ

1.2.3

ʔ ˥ 5 mL ﬠ 20 ɔ ᘔ 4 500 r/min ㅣ δ 13.5 cm 15 min ŏ ɕ ㅏ Ль Ỳ ệ ɞ Ғ Ã ⅞ Ŏ ю ALB ɜALP ‴ d ɞ

1.3

1.4 ǒ

IBM Å ˝ SPSS 25.0 ψ ǒ

ϖ ¯ t

ϖ n % ²

ϓ ě ROC ǒ ALB ȝALP

ẇ AAPR ç Θ

d ѫ logistic ę ǒ

ǐ ѫ ʁ ϖ P<0.05 δ

σ ʁ

2

2.1 N ALB ȝALP ẇ AAPR Table

ALB ȝAAPR Ӈ Љ ALP

Љ σ P<0.05 ʁ 1 ʁ

1 ALB ALP AAPR ¯

Table 2 Comparison of ALB ALP and AAPR between the two groups ¯

ά	n	ALB g/L	ALP U/L	AAPR
	100	43.19±3.61	72.16±12.48	0.60±0.12
	126	33.92±6.12	106.16 ʁ ±15.43	0.32±0.09
t d		13.405	17.876	20.040
P d		<0.001	<0.001	<0.001

2.2 ′ ˀ ALB ȝALP ẇ AAPR

~ ALB ȝAAPR Љ ~ ′

ALP Ӈ Љ ~ ′

σ P<0.05 ʁ 2 ʁ

2 ALB ALP AAPR ¯

Table 2 Comparison of ALB ALP and AAPR among patients with different disease outcomes ¯

ά	n	ALB g/L	ALP U/L	AAPR
~	91	36.81±5.67	97.51±13.04	0.36±0.08
~ ′	35	26.41±6.35	128.65±12.37	0.22±0.06
t d		6.884	3.868	7.408
P d		<0.001	<0.001	<0.001

2.3 ALB ȝALP ẇ AAPR

ç Θ d

ALB ȝALP ç

AUC ǒ ά δ 0.746 ȝ0.827 AAPR ç AUC

δ 0.941 ʁ 3 ʁ

2.4 ǂ ѫ ǒ

~ ϓ

Љ ~ ′ CRP Ӈ Љ ~ ′

σ P<0.05 ʁ 4 ʁ

3 ALB ALP AAPR

Table 3 Evaluation value of ALB ALP and AAPR on disease outcomes in patients undergoing gallstone surgery

	AUC	95% CI	d	%	%
ALB	0.746	0.701~0.796	31.92 g/L	53.27	93.62
ALP	0.827	0.782~0.877	106.16 U/L	65.36	93.62
AAPR	0.941	0.896~0.991	0.28	87.39	89.57

4

n %

Table 2 ض

		~ n=91	~ ′ n=35	t/ d	P d
ά					
		41 45.05 50 54.95	18 51.43 17 48.57	0.412	0.521
		43.91±3.81	43.18±3.07	1.013	0.313
		2.06±0.64	2.27±0.39	1.813	0.072
Ɱ	kg/m²	21.36±0.72	21.14±0.69	1.554	0.123
ϒ		39 49.37	14 60.87	0.944	0.331
		32 40.51	13 56.52	1.853	0.173
′					
		21 23.08	11 31.43	0.931	0.335
	♣	14 15.38	7 20.00	0.388	0.534
		17 18.68	9 25.71	0.763	0.382
		3 3.30 88 96.70	6 17.14 29 82.86	7.307	0.007
TBIL μmol/L		10.81±2.42	11.39±2.56	0.290	0.733
ALT U/L		35.73±0.36	1.84±0.32	1.443	0.152
AST U/L		38.94±3.19	37.14±3.47	1.567	0.120
CRP mg/L		7.74±1.26	8.39±1.51	3.583	<0.001

2.5 ѫ Logistic

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=0 ȝ ~ ′ =1 ǂ ѫ ǒ P<0.01 ϒ

ALB ȝALP ẇ AAPR ě δ Ɔ ѫ Logistic

ę ǒ CRP ȝALB ȝALP ȝAAPR

ǐ ѫ P<0.05 ʁ 5 ʁ

3

Љ δ

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				SE	Wald	P	OR 95% [illegible]
CRP	<8.07 mg/L=0	≥8.07 mg/L=1	0.667	0.234	8.125	0.004	
ALB	>31.92 g/L=0	≤31.92 g/L=1	0.873	0.229	14.533	<0.001	
ALP	<106.16 U/L=0	≥106.16 U/L=1	0.731	0.207	12.471	<0.001	
AAPR	>0.28=0	≤0.28=1	1.064	0.251	17.969	<0.001	

significant t=3.197 10.144 and 2.415 P<0.05 . The total fever cough wheezing lung rales and hospitaliza tion time in the study group were lower than those in the control group and the differences were statistically sig nificant t=10.086 6.588 6.739 12.138 10.260 P<0.05 . After one week of treatment the total effective rate of the study group was 94.83% which was higher than that of the control group 79.31% with statistical significance ^{2} 6.202 P<0.05 . After one week of treatment TNF α IL 10 CRP and PCT in both groups decreased compared with those before treatment. Compared with the control group the study group was lower and the difference was statistically significant t=3.309 4.780 4.524 18.385 P<0.05 . After one week of treatment CD4+ and CD4+/ CD8+ in the two groups were higher than those before treatment and higher than those in the control group with statistical significance t=2.903 2.415 P<0.05 . CD8+ decreased compared with before treatment and the observation group was lower than the control group with statistical significance t=2.125 P<0.05. . . . . In the treatment of children s bronchopneumonia the addition and subtrac tion of Keli Dazao Xiefei Decoction can lead to a more significant curative effect.

. . . . Tinglidazaoxiefei decoction Children Bronchopneumonia Immunologic function

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1.3

1.3.1 ή

2 Ṿ ώ ɜ 1 ヘ ~ ή ɔ ⅞ в 1 ѧ ϫ ѧ α TNF α ɜ ц 10 IL 10 ɜ₵ ẋ CRP ヘ ʐ PCT в 2 T E ₵ CD_4^+ ɜ₵ CD_8^+ CD_4^+/CD_8^+ в 3 ´ ₵ Ό FVC ɜ 1 Ό ヘ FEV1 ɜヘ PEF в

1.3.2 ẅ Ã

1 м [6] Ã ɜ ﾉ ひ ɜ ₀ ɜ Ⅴ ɜн

в 2 ή [7] 1 ヘ ~ ç ή в м 37 ẅ ω ɔ ă ή м ヘ X ⊥ ´

WBC ش м ɜ ή м ヘ ɜ ă ش ċ Ж Ã X ⊥ ώ Ė ≥50% ɜ Ã δ ヘ υ ヘ в 3 ´ ẋ X ă ´ ẋ ㄱ в

1.4 ŏ

ғ SPSS 25.0 ψ ŏ в ω n % [2] ش ´ ŏ ω ⁻ N t в P<0.05 σ в

2

2.1 N ´ ɔ ⅞

2 1 ヘ ~ FVC ɜFEV1 ɜPEF ش ˝ ώ \ ɛ ㄲ ɔ ⅞ Ό ɔ ⅞ Ң P< 0.05 в 2 в

2.2 N м Ã ɜ ﾉ ひ ɜ ₀ ɜ Ⅴ ɜ н ˝ ش P<0.05 в 3 в

3 2 ⁻ d

Table 3 Comparison of recovery time of symptoms and signs between two groups of children ⁻ d

ά	n	Ã	ﾉ ひ	₀	Ⅴ	н
	58	1.91±0.38	3.62±0.55	3.34±0.41	5.31±0.47	7.49±0.23
	58	2.69±0.45	4.35±0.64	4.02±0.65	6.55±0.62	8.10±0.39
t d		10.086	6.588	6.739	12.138	10.260
P d		<0.001	<0.001	<0.001	<0.001	<0.001

2.3 N ή

1 ヘ ~ ή P<0.05 в 4 в

4 2 n %

Table 4 2 Comparison of clinical efficacy between two groups of children n %

ά	n							
	58	47	81.03	8	13.79	3	5.17	55 94.83
	58	36	62.07	10	17.24	12	20.69	46 79.31
d								6.202
P d								0.013

2.4 N ´ ẋ 2 Ṿ ش ´ ẋ ㄱ в

2.5 N ѧ N 1 ヘ ~ TNF α ɜIL 10 ɜCRP ɜPCT ش ώ ɔ Ό Ң σ P<0.05 в 5 в

2.6 N T E 2 1 ヘ ~ CD_4^+ ɜ CD_4^+/CD_8^+ ώ ㄲ CD_8^+ ώ ɔ Ό Ң σ P<0.05 в 6 в

3

Ṿ ɜ ʐ ㄱ ´ p ˝ ķ ă Ϛ ㄱ ˝ ヘ ´ ω ẅ м Ẍ ´ ă ' υ Ṿ Ẍ ´ ㄱ

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2 2

Table 2 Comparison of pulmonary function between two groups of children ⁻

ά	n	FVC L		FEV1 L		PEF L/min	
		ώ	1 ヘ ~	ώ	1 ヘ ~	ώ	1 ヘ ~
	58	1.55±0.24	3.81±0.45[a]	1.22±0.14	3.08±0.29[a]	162.55±19.51	184.62±22.28[a]
	58	1.57±0.26	3.56±0.39[a]	1.23±0.16	2.57±0.25[a]	161.49±22.04	175.06±20.31[a]
t d		0.430	3.197	0.358	10.144	0.274	2.415
P d		0.668	0.002	0.721	<0.001	0.784	0.017

˝ ώ [a]P<0.05 в

5

Table 5 Comparison of the changes of serum inflammatory factors between the two groups of children

	n	TNF-α (ng/L)		IL-10 (ng/L)		CRP (mg/L)		PCT (μg/L)	
			1		1		1		1
	58	61.86±11.25	39.01±7.08[a]	23.58±3.26	10.41±1.12[a]	68.89±9.42	22.13±2.08[a]	3.88±0.52	1.05±0.11[a]
	58	60.99±11.34	43.55±7.59[a]	23.71±3.05	11.58±1.49[a]	69.02±9.15	23.95±2.25[a]	3.91±0.48	1.58±0.19[a]
t		0.415	3.309	0.222	4.780	0.075	4.524	0.323	18.385
P		0.679	0.001	0.825	<0.001	0.940	<0.001	0.747	<0.001

[a]$P<0.05$

6 2 T

Table 6 Comparison of changes of T lymphocyte subsets in peripheral blood between two groups of children

	n	CD_4^+ (%)		CD_8^+ (%)		CD_4^+/CD_8^+	
			1		1		1
	58	38.81±4.67	46.79±5.75[a]	31.41±3.85	28.22±2.69[a]	1.24±0.23	1.66±0.39[a]
	58	38.74±4.52	43.83±5.22[a]	31.35±3.72	29.44±2.75[a]	1.25±0.25	1.51±0.37[a]
		0.082	2.903	0.085	2.415	0.224	2.125
		0.935	0.004	0.932	0.017	0.823	0.036

[a]$P<0.05$

[8]

[13,14]

[9]

[15]

[10] 1 FVC、FEV1、PEF

[7]

[11,12]

2

1 T

TNF-α、IL-10、CRP、PCT

CD_4^+、CD_4^+/CD_8^+ CD_8^+

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Cor E NA

Ṿ Cor E

NA 2020 12 2021 12 ╦ Ч ┘ Ṿ

┘ 76 Ã 38 Ṿ ŭ δ 38

Ώ N ă ŭ ~ T_0

T_1 ~ 1 min T_2 ~ 3 min T_3 ♣ MAP HR

SpO_2 ⅞ ỳ N Cor E NA ⅞ Љ

Ώ Љ σ P<0.05 N ŭ σ P>

0.05 T_0~T_3 N Ṿ HR MAP ẇ ╗ ~ Ӈ Ẹ X T2 ṇ HR MAP Ӈ Љ

σ P<0.05 T_0 N T_3 Cor E NA ╗ Ӈ Љ

σ P<0.05 Љ Ṿ

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HU Keke WANG Jianshe ZHENG Xin WU Fangfang

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To explore the effect of self shaping catheter intubation on the levels of cortisol Cor epinephrine E and norepinephrine NA in infants with premature closure of cranial suture. According to the random number table 76 cases of children undergoing craniosynostomy under general anesthesia at the Children s Hospital Affiliated to Nanjing Medical University from December 2020 to December 2021 were divided into the control group 38 cases and the observation group 38 cases . The control group was intubated with intubation forceps while the observation group was intubated with self shaping catheter. The intubation related indexes laryngoscope exposure classification and the changes of ean arterial pressure MAP heart rate HR blood oxygen saturation SpO_2 m after induction T_0 glottis exposure T_1 1 min after intubation T_2 and 3 min after intubation T_3 were recorded in both groups. Changes in serum Cor E and NA in the two groups were also measured. The intubation time in the observation group was shorter than that in the control group and the success rate of the first intubation was higher than that in the control group with statistical significance P<0.05 . There was no significant difference between the two groups P>0.05 . The HR and MAP of the children in T_0~T_3 groups increased and then decreased. At T2 the HR and MAP in the observation group were lower than those in the control group with statistical significance P< 0.05 . Compared to T_0 the levels of serum Cor E and NA in in both groups increased by T_3 but the levels in the

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observation group were lower than those in the control group with statistical significance P<0.05 .
Compared to the intubation assisted by intubation forceps using a self shaping catheter for nasotracheal intubation in infants with premature closure of cranial sutures can shorten the intubation time increase the success rate of the first intubation and result in relatively stable vital signs for the children. Additionally this method can help lower the stress response in these infants.

Self shaping catheter Nasopharyngeal intubation Craniosynostosis Vital signs

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Cortisol Cor ᴈ ɕ Epinephrine E ᛋ
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1.1 ʰ

2020 12 2021
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ɔ Ṿ ǒ δ 38 ϩ ᛋ
38 ϩ ɞ Ẹ X 4~10 T ثي
7.08±0.85 T ο ┘ ╞ Ƃ American so
ciety of anesthesiologists ASA ǒ [4] 18 ϩ ᴈ
20 ϩ ᴍ 3~9 kg ثي 5.97±1.02 kg
Ꮒ ᷊ 8 ϩ ᴈ ´ ᷊ 30 ϩ ɞ
4~11 T ثي 7.11±0.87 T ASA ǒ
16 ϩ ᴈ 22 ϩ ᴍ 3~10 kg ثي 5.93±1.05
kg Ꮒ ᷊ 9 ϩ ᴈ ´ ᷊ 29 ϩ ɞ N
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1.3.2 س ŏ

N س Cormark Lehane ŏ

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1.3.3 ´ˀ ٧ ɱ

N ~ T_0 ɜ T_1 ɜ

~ 1 min T_2 ɜ ~ 3 min T_3 ´ˀ

ثي ♣ Mean arterial pressure MAP ᵈ

δ 60~100 mmHg ɜ Heart rate HR ᵈ

δ 110~130 /min ɜ ٧ Percutaneous ar

terial oxygen saturation SpO_2 ᵈ δ 92%~

99% ɔ ⅞ ỷ ɔ ɥ ή

ɦ ⁹ X ă Ỽ A ɐ

1.3.4 Cor ɜE ɜNA

ۊ N T_0 ɜT_3 ŏ ợ 2 mL Љ

ŏ δ 3 000 r/min Ⅱ

8 r 15 min ~ ٠ ɕ ю يم

~ cobas E602 Cor ᵈ δ 100~

400 ng/L ɜE ᵈ δ <480 ng/L ٧ NA ᵈ

δ 200~500 ng/L ɔ ɥ ή

ɦ ⁹ X ă Ỽ A ɐ

1.4

SPSS 26.0 ψ

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Ґ Ƈ ŏ Ƈ P<0.05

δ σ ɐ

2

2.1 N ă

Љ ´

Ѽ Љ σ P<0.05 N

σ P>0.05 ɐ 1 ɐ

2.2 N س ŏ

N س ŏ σ

P>0.05 ɐ 2 ɐ

2.3 N ´ˀ MAP ɜHR ɜSpO_2

T_0~T_3 N Ṿ HR ɜMAP ثي \l ẇ ╖ ~ Ḥ

″ Ḛ X T2 ṇ HR ɜMAP Ḥ Љ

σ P<0.05 ɐ SpO_2 \l ẇ Ḥ ~ ╖

″ Ж ۊ ثي Ɩ ệ N

σ P>0.05 ɐ 3 ɐ

2.4 N Cor ɜE ٧ NA

٧

4 Cor E NA ¯ ng/L

Table 4 comparison of serum Cor e and NA levels between the two groups ¯ ng/L

ά	n	Cor		E		NA	
		T_0	T_3	T_0	T_3	T_0	T_3
	38	157.53±26.17	187.36±28.36[a]	238.57±23.52	302.45±41.76[a]	208.16±25.65	363.46±37.72[a]
	38	158.62±26.54	172.21±30.74[a]	239.61±23.58	278.73±32.14[a]	211.82±26.53	311.13±32.14[a]
t [d]		0.180	2.233	0.192	2.775	0.611	6.510
P [d]		0.857	0.029	0.848	0.007	0.543	<0.001

‴ T_0 [a]P<0.05 в

δ ɜ ệ ♣ ɜ ɜ ⊣ ´ Ã

[10] в ئۇ ŭ Ξ

Ṿ ϧ Ὸ ↄ Θ

Ṿ в

ή ɛ ˘ س ɔ Ж

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ѽ ŭ δ ‴ N يم ĕ ´ ϧ

Ὸ ´ ´ Ϛ ϧ

ƙ Ὸ ´ ầ [11]

NSE IL 1β 5 HT

1 2 3

Ẃ ⅞ NSE ɜ ц 1β IL 1β ʬ 5 5 HT ɔ ⅞ʬ ‴ ´ ∧ ǎ ɞ ǔ 2021 8 2023 8 ǵ X ₒ e ờ ờ ₃ ẽ X 90 Ɂ ń Ẹ ầ ỷ ǔ δ Ξ n=39 ɜX n=30 ∧ n=21 ɔ ầ NSE ɜIL 1β ɜ5 HT ɞ ầ ´ ώ ç MoCA ǔ δ ´ ´ n=41 ∧ 〒 n=49 N E ầ NSE ɜIL 1β ɜ 5 HT ∧ MoCA ǔ ǎ Pearson ǎ ǔ ầ NSE ɜIL 1β ɜ 5 HT ‴ MoCA ǔ ǎ ɞ Ɂ ě ROC ǔ ầ NSE ɜIL 1β ɜ5 HT ´ ´ ɞ Ξ NSE ɜIL 1β> X > σ F=76.815 34.153 P<0.05 Ξ 5 HT< X < σ F=130.092 P<0.05 ɞ ´ ´ NSE ɜIL 1β Лъ〒 σ t=9.397 5.274 P<0.05 ´ ´ 5 HT Ң Лъ〒 σ t=9.703 P< 0.05 ɞ Pearson ǎ ǔ ´ ´ ầ NSE ɜIL 1β ∧ MoCA ǔ \l ǎ P<0.05 5 HT ∧ MoCA ǔ \l ǎ P<0.05 ɞ ROC ǔ NSE ɜIL 1β ɜ 5 HT ɔ ´ ACU ᵈ 0.966 ғ Лъ〒ʰ P<0.05 ɞ ´ ∧ ‴ NSE ɜIL 1β ╖ ʬ 5 HT Ң ǎ ɞ NSE IL 1β 5 HT ´

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To explore the changes of serum neuron specific enolase NSE interleukin 1β Ụ

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MoCA cognitive function of patients with chronic insomnia disorder at admission the patients were further classified into two subgroups insomnia with cognitive dysfunction n=41 and simple insomnia n=49 . The relationship between serum levels of NSE IL 1β and 5 HT at admission and MoCA score was then compared between these two subgroups. Pearson correlation coefficient was used to analyze the correlation between the lev els of serum NSE IL 1β and 5 HT at admission and MoCA score in patients with chronic insomnia disorder. A receiver operating characteristic ROC curve was applied to analyze the diagnostic efficiency of serum NSE IL 1β and 5 HT levels at admission for patients with insomnia and cognitive dysfunction. . . . . The levels of NSE and IL 1β showed severe group > moderate group > mild group F=76.815 34.153 P<0.05 while the 5 HT level was manifested as severe group < moderate group < mild group F=130.092 P<0.05 . The NSE and IL 1β levels in insomnia with cognitive dysfunction group were significantly higher than those in simple in somnia group t=9.397 5.274 P<0.05 while the 5 HT was significantly lower than that in the simple insom nia group t=9.703 P<0.05 . Pearson correlation coefficient analysis showed that serum NSE and IL 1β levels at admission were significantly negatively correlated with MoCA score in insomnia with cognitive dysfunction group P<0.05 and 5 HT level was significantly positively correlated with MoCA score P<0.05 . ROC analysis the ACU of combined detection with serum NSE IL 1β and 5 HT was 0.966 which was better than that of single detection P<0.05 . . . . . The cognitive function and sleep of patients with chronic insomnia disorder are related to increase in NSE and IL 1β and decrease in 5 HT.

. . ‴ . ‴ Chronic insomnia disorder Serum NSE IL 1β 5 HT Cognitive function

h ˛ Ã ɻ ę ĩ ₵ ↀ å ɜ ɜ [1] в ĩ ш ą̃ ˜ T щ – ላ Ό ´ X ą̃ ν ɱ ę ƥ ˛ [2] в Ę ε ʒ ѧ δ ѧ ‴ ѧ N в ϵ ɜ ɜ ɜ ɜ Ξ ტ в ɔ h ላ ϒ ↀ ш Ę ë ƥ ˘ σ P>0.05 1 в Ң [3] в ˛ ɜ ɜ ላ Ę ë ƥ ‴Ω ѧ [4] в ѽ Љ ‴Ą ´ Ж ⊥ Ę ‴Ą å Ę X Ẃ ⅞ serum neuron spe cific enolase NSE [5] ɜ ц 1β interleukin 1β IL 1β [6] ↀ ш 5 5 hydroxytryptamine 5 HT [7] ɔ ⅞ ă Ж ˛ e ɱ X ɔ ⅞ ˘ ‴ ´ ላ ŏ в ˛ NSE ɜ IL 1β ላ 5 HT ‴ ´ ላ υ ă δ ή W в ɔ в

ϒ ₸ ħ [8] X ‴A ≥18 ⊤ ė ش Pittsburgh Sleep Quality Index PSQI [9] ŏ >7 ŏ ш Ę ˀ в ‴A 3 T ę [υ] ˛ ´ ɜ ɜ ɜ ɜ Ξ ტ в ɔ h σ P>0.05 1 в к ላ Ь в

1

1.1 h

ŏ 2021 8 2023 8 ˛ X ο e ờ ờ [3] ẽ X 90 Ꝛ ή å ‴A ´ ц X ο

1.2

NSE ɜ IL 1β ш 5 HT å ELISA NSE ɜ IL 1β ш 5 HT в

1.3

1.3.1 ỷ ç

å PSQI [9] ç 90 Ꝛ Ξ PSQI ŏ ɻ 0~21 ŏ ŏ [d] в PSQI ŏ ŏ δ Ξ 17~21 ŏ ɜX 12~16 ŏ ላ 7~11 ŏ в

1.3.2 ´ ç

å ώ ç Montre al cognitive assessment MoCA [10] ç 90 Ꝛ ´ ĩ ỷ MoCA ŏ ɻ 0~30 ŏ ŏ [d] ´ Ң в MoCA ŏ ŏ δ ´ ´ MoCA

1 n % ¯

Table 1 Comparison of general clinical data among the three groups n % ¯

˛	n	˛ Ʒ		˙	˙	ʔ	˴ Ʒ
Ξ	39	31 79.5	8 20.5	27.12±5.21	3.47±0.52	12.91±1.45	23 59.0
X	30	25 83.3	5 16.7	25.98±5.37	3.45±0.53	13.05±1.59	18 60.0
	21	18 85.7	3 14.3	26.33±5.26	3.40±0.57	13.10±1.32	10 47.6
F/ d		0.400		0.421	0.117	0.139	0.920
P d		0.819		0.658	0.889	0.870	0.631

≤15 ǔ ʎ ∓ } LT MoCA>15 ǔ N E ɷ 90 Ʒ X ´ ´ 41 Ʒ â ´ ´ ∓ 49 Ʒ â ∓ ɷ 1.4 ǔƷ

ψ SPSS 21.0 ǔ ɷ Ƈ N t ∓ ɤ ǔ Ƈ n % ² NL. Pearson ã ǔ â NSE ɜ IL 1β ɜ 5 HT ˝ MoCA ǔ ã ɷ Ƈ P<0.05 δ σ ɷ

2 . NSE ɜ

2 NSE IL 1β 5 HT ¯

Table 2 Comparison of serum levels of NSE IL 1β and 5 HT among the three groups ¯

˛	n	NSE ng/mL	IL 1β pg/mL	5 HT ng/mL
Ξ	39	23.01±3.17[ab]	79.15±7.45[ab]	20.58±1.47[ab]
X	30	18.71±2.19[a]	72.30±8.15[a]	23.97±1.40[a]
	21	14.24±2.13	62.58±6.19	26.33±1.11
F d		76.815	34.153	130.092
P d		<0.001	<0.001	<0.001

˝ [a]P<0.05 ˝ X [b]P<0.05 ɷ

4 NSE IL 1β 5 HT MoCA ¯

Table 4 Comparison of serum levels of NSE IL 1β and 5 HT and MoCA score ¯

˛	n	MoCA ǔ	NSE ng/mL	IL 1β pg/mL	5 HT ng/mL
´ ´	41	12.78±3.51	22.89±3.14	78.22±8.38	20.58±1.47
∓	49	18.61±4.64	16.72±3.07	68.62±8.78	24.36±2.10
t d		6.614	9.397	5.274	9.703
P d		<0.001	<0.001	<0.001	<0.001

3 n % ¯

Table 3 Comparison of general clinical data between the two groups n % ¯

˛	n	˛ Ʒ		˙	˙	ʔ	˴ Ʒ
´ ´	41	32 78.0	9 22.0	27.56±5.44	3.53±0.57	11.98±1.33	27 65.9
∓	49	42 85.7	7 14.3	25.71±5.01	3.37±0.49	11.76±1.29	24 49.0
F/ d		0.897		1.678	1.432	0.794	2.588
P d		0.343		0.097	0.156	0.429	0.108

5 NSE IL 1β 5 HT

Table 5 Predictive efficiency of s 66ot6ᵴ 2 HiU م ᴆ ᵴH

ɔ	AUC	d	95% CI	%	%	Youden	P d
NSE	0.918	19.33 ng/mL	0.841~0.966	89.80	75.61	0.6541	<0.001
IL 1β	0.788	73.32 pg/mL	0.690~0.867	73.47	78.05	0.515	<0.001
5 HT	0.923	22.25 ng/mL	0.847~0.969	77.55	92.68	0.7023	<0.001
´	0.966		0.904~0.993	83.67	97.56	0.8123	<0.001

ㅓ ㅅ ㅓ ŭ ă[16] ɞ ˘
ƃ ĩ ą́ Ẃ NSE
Ⅱ NSE Ẅ[h] ˈ ˌ
´ ㅅ ɞ Ẹ IL 1β[h]
ᴇ Ль Ặ ц ŋ̃ Ẍ
ᵴệ ŭ ㅅ X ʊ
ĕ[17] ɞ IL 1β ɕ Ⅱ ‴ ㅓ
ŭ ɞ IL 1β ĕ δ ᴇ Ẹ ‰ ˈ ˘
ㅓ ˈ ˌ ɞ
Ặ IL 1β ˘ ᘔ ż ᴍ
ɞ[18] ᴇ IL 1β ˘ δ [h] T
ŋ̃ ɞ 5 HT ẇ [h]
Ɔ ‴ ᵴ ㅅ ŋ̃
ㅅ X ㅓ ă ĕ[19] ɞ
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ă[20] ɞ 5 HT Ль Ж
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ㅓ [12] ɞ ‴
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ᴍ ˈ ᴍ Ẍ ㄱ [15] ɞ e ᴬ Ль
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Ặ ɞ ˘ ƃ ㅓʰ Ẅ Ẍ
ă ᵴ ɞ
ㅓ ´
ㅅ ў ´ Ӯ ‴ NSE ㅅ IL 1β Ⅱ
ᘔ ẇ 5 HT Ң ŭ ɞ Ẹ ą ᴇ ŋ̃
Ль NSE [h] Ẃ ε ŋ̃ Ẃ
X ㅓ ĕ ŋ̃ X ㅅ ˈ
ĕ Ль Ẃ ´ ㅅ ɞ
NSE Ϛ δ X [h] T ă ᴇ Ɔ
‴ Ẃ ◻ ˜ ą ᵴ ㅅ ў ɞ
NSE ´ ‴

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17 ㄱ η η . ⫤ X ˜ NS ± U¾8

mTOR

1 1 2 1

Ό CHF ´ ϣ ֆ ֹ ֿ
mTOR ї ɞ 2021 1 2023 12 ֶ ֽ ׀ ׅ
CHF ǒ δ n=43 ך ´ ׇ n=44
ך ɞ ~ 3 T ǒ LVEF ֹN ׄ ׆
NT proBNP ֹ6 ǒ 6MWD ֹA ֿ D ֶM. я ׇ0 ֽ ֹ ׇ K ֺ ֆ ֽ ׅ N Ď ׆ Ŧ M E

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group (t=3.676, 7.814, 6.978, 11.593, 14.147, P<0.05), the difference was statistically significant (t=9.183, 16.140, 14.315, 13.383, 8.634, P<0.05). There were no significant differences in serum levels of Myo, Cr, ALT and AST between the two groups (t=0.673, 0.434, 0.335, 0.635, P>0.05). Exercise rehabilitation can improve cardiac function, activate autophagy and inhibit the PI3K/AKT/mTOR pathway in patients with CHF.

CHF; Exercise rehabilitation; Heart function; Autophagy; mTOR

Chronic heart failure (CHF) ... CHF ... [1,2] ... CHF ... [3] ... CHF ... [4] ... Mammalian target of rapamycin (mTOR) ... mTOR ... CHF [5] ... CHF ... mTOR ...

1

1.1

2021 1 — 2023 12 ... CHF ... CHF [6] ... New York Heart Association (NYHA) ... [6] ... 90 ... 45 ... 1 ... 2 ... (n=44) ... (n=43) ... 26 ... 18 ... 63.68±6.59 ... 22.59±3.23 kg/m² ... 24 ... 17 ... 28 ... 15 ... 64.03±6.28 ... 22.91±3.44 kg/m² ... 22 ... 19 ... (P>0.05) ...

1.2

... [3] ... 2/5 ... 3/5 ... 40 min ... 3~4 ... 3 ...

1.3

... 5 mL ... 30 min ... 3 000 r/min ... 10 cm ... 10 min ... 3 (light chain 3, LC3) ... Beclin 1 ... 9a (Autophagy related protein 9a, Atg9a) ... LC3 ... F01580 ... Beclin 1 ... F00171 ... Atg9a ... F00288 ...

1.4 mTOR mRNA

... 5 mL Trizol ... RNA ... RNA ... cDNA ... cDNA ... PCR ... PI3K, AKT, mTOR mRNA ...

1.5

... 3 ...

ŏ left ventricular ejection fraction LVEF ⅞ ŏ ıє N ѽ м NT terminal pro brain natriuretic peptide NT proB NP 6 ŏ 6 minute walking distance 6MWD 30m ف ᘐ ˘ ﻭ ê ę 6 ŏ Ό · Minnesota Living with Heart Failure Questionnaire MLHFQ Θ · ŏ ў ŏ LC3 ȝBeclin 1 ȝAtg9a ѝ ٧ PI3K ȝAKT ȝ mTOR mRNA Ã Ã ⅞ ŏ ıє ȝ ȝB ȝ Ũ ȝ в 1.6 Ғ ψ SPSS 20.0 ŏ ᘐ ¯ N t t в P<0.05 δ σ в

2

2.1 N ´ ѽ N LVEF ȝ NT proBNP σ P>0.05 ˜ ˜ LVEF Љ NT proBNP Ӈ Љ σ P<0.05 в 1 в

1 ¯

Table 1 Comparison of cardiac function indexes between the two groups ¯

ά	n	LVEF %		NT proBNP pg/mL	
		ѽ	˜	ѽ	˜
	44	53.57±4.58	59.42±4.22[a]	421.38±54.95	226.48±34.51[a]
	43	53.12±4.91	56.14±4.10[a]	415.48±57.18	297.15±37.24[a]
t [d]		0.442	3.676	0.491	9.183
P [d]		0.659	0.001	0.625	<0.001

ê ˜ ·· ѽ [a]P<0.05 в

2.2 N Ό ѝ ѽ N 6MWD ȝMLHFQ ŏ σ P>0.05 ˜ ˜ 6MWD Љ MLHFQ ŏ Ӈ Љ σ P<0.05 в 2 в

2 ¯

Table 2 Comparison of exercise endurance and quality of life between the two groups ¯

ά	n	6MWDF m		MLHFQ ŏ ŏ	
		ѽ	˜	ѽ	˜
	44	301.32±14.58	347.61±22.47[a]	14.77±1.45	7.13±0.69[a]
	43	304.18±20.76	320.47±21.85[a]	14.29±1.71	10.24±1.08[a]
t [d]		0.766	7.814	1.413	16.140
P [d]		0.452	<0.001	0.161	<0.001

ê ˜ ·· ѽ [a]P<0.05 в

2.3 N ѽ N LC3 ȝBeclin 1 ȝAtg9a σ P>0.05 ˜ ˜ LC3 ȝBeclin 1 ȝAtg9a Љ σ P<0.05 в 3 в

2.4 N ٧ mTOR mRNA ѽ N ٧ PI3K ȝAKT ȝmTOR mRNA σ P> 0.05 ˜ ˜ ٧ PI3K ȝ AKT ȝmTOR mRNA Ӈ Љ σ P<0.05 в 4 в

2.5 N Ã ˜ N Myo ȝCr ȝALT ȝAST σ P<0.05 в 5 в

3

CHF ę ȝ l ψ Ͳ ٧ M ´ ɔ ȝ ٧ м ҫ CHF ή в

3 ¯

Table 3 Comparison of serum autophagy markers between the two groups ¯

ά	n	LC3 ng/mL		Beclin 1 pg/mL		Atg9a ng/mL	
		ѽ	˜	ѽ	˜	ѽ	˜
	44	0.85±0.11	1.32±0.11[a]	18.12±1.52	27.79±2.42[a]	0.91±0.09	1.62±0.14[a]
	43	0.89±0.10	1.14±0.13[a]	17.89±1.77	22.31±1.95[a]	0.88±0.07	1.21±0.13[a]
t [d]		1.774	6.978	0.651	11.593	1.733	14.147
P [d]		0.079	<0.001	0.517	<0.001	0.087	<0.001

ê ˜ ·· ѽ [a]P<0.05 в

4 PI3K AKT mTOR mRNA

Table 4 Comparison of mRNA expression levels of PI3K AKT and mTOR in peripheral blood between the two groups

ṗ	n	PI3K		AKT		mTOR	
		ṗ	~	ṗ	~	ṗ	~
	44	0.97±0.10	1.66±0.13[a]	1.02±0.09	1.78±0.18[a]	1.04±0.11	1.60±0.13[a]
	43	1.00±0.11	1.29±0.11[a]	1.00±0.08	1.34±0.12[a]	1.00±0.09	1.35±0.14[a]
t [d]		1.399	14.315	1.095	13.383	1.854	8.634
P [d]		0.165	<0.001	1.095	<0.001	0.067	<0.001

ê ~ ‴ ṗ [a]P<0.05 ɞ

5 Myo Cr ALT AST

Table 5 Comparison of serum Myo Cr ALT and AST levels between the two groups

ṗ	Myo μg/mL	Cr μmol/L	ALT U/L	AST U/L
44	49.58±5.52	75.68±8.12	21.38±4.42	24.47±3.81
43	50.11±6.14	77.12±8.95	21.09±3.59	25.01±4.12
[d]	0.424	0.786	0.335	0.635
[d]	0.673	0.434	0.738	0.527

CHF ㄱ ẅ

CHF ɜ Ḥ CHF l ψ ㄱ

ㅅ M ę σ [7 8] ɞ

CHF ċ Ж

Θ [d] ɹ ´ ï ɞ

Ж Ą̆ CHF

CHF ´

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ɜ ´ Ƒ CHF

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ċ CHF

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CHF ㅅ ŋ̃ǫ̃

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LVEF ẅ 6MWD ɲɲ ' ɜNT proBNP ẅ MLHFQ ŭ

Ḥ ċ CHF ´ ɜ

ㅅ ‴ ο ê ă ń

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ACR PBMCs X NLRP3 ɜCaspase 1 mRNA X ц 1β IL 1β ɜ ц 18 IL 18 ɜ
Gasdermin D N GSDMD N ˆ Ң Љ σ t=7.884 ɜ4.049 ɜ2.216 ɜ3.677 ɜ
5.355 ɜ7.336 ɜ6.654 ɜ7.835 P<0.05 ɞ 3 N ǎ ˊ א ㄱ
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JIN Tao WU Tianpeng WANG Xuan
The First People s Hospital of Huoqiu County Lu an Anhui China 237400

To investigate the efficacy of semaglutide in the treatment of elderly diabetic nephropathy DN and its effect on the NLRP3 inflammasome pathway. A total of 80 elderly patients with DN who were treated at the First People s Hospital of Huoqiu County Lu an from January 2022 to January 2024 were divided into a control group and an observation group each with 40 cases according to the random number table method. Patients in the control group received the routine treatment for clinical DN while those in the observation group received combined treatment with semaglutide based on the treatment regimen of the control group. The treatment duration for patients in both groups was 3 months. After 3 months of treatment blood glucose levels renal function indices NLRP3 inflammatory body pathway molecule expression in peripheral blood mononuclear cells PBMCs and NLRP3 inflammatory body downstream factor content in serum were compared between the two groups. Additionally differences in the occurrence of drug related adverse reactions during treatment were also assessed. After 3 months of treatment there were no significant differences in fasting blood glucose FBG and glycosylated hemoglobin HbA1c levels between the two groups t=0.698 0.894 P>0.05 . The levels of blood creatinine Scr urea nitrogen BUN and

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urinary creatinine ratio ACR the mRNA expressions of NLRP3 and caspase 1 in PBMCs and the contents of serum interleukin 1β IL 1β interleukin 18 IL 18 and gasdermin D N terminal GSDMD N in the observation group were lower than those in the control group and the differences were statistically significant t=7.884 4.049 2.216 3.677 5.355 7.336 6.654 7.835 P<0.05 . During the 3 months of treatment there was no significant difference in the incidence of drug related adverse reactions between the two groups ^{2}=0.581 P>0.05. . . . . The treatment of semaglutide in elderly patients with DN is helpful in improving efficacy and ensuring treatment safety. The mechanism of its action may be related to the inhibition of the NLRP3 inflammasome pathway.

. . . . Diabetic nephropathy Semaglutide Kidney function NLRP3 inflammasome

Diabetic nephropathy DN

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Serum creatinine Scr ɜ BUN ɜ

^{d} Urinary albumin creatinine ratio ACR в

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mRNA

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‧ PBMCs X RNA Ғ Ӽ Ӈ Ӽ
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Table 1 Comparison of blood glucose levels between the two groups ¯

ά	n	FBG mmol/L		t ᵈ	P ᵈ	HbA1c %		t ᵈ	P ᵈ
		ώ	3			ώ	3		
	40	9.82±1.76	6.91±0.95	9.202	0.000	7.84±0.96	5.97±0.88	9.082	0.000
	40	9.79±1.84	6.77±0.84	9.443	0.000	7.80±0.93	5.80±0.82	10.202	0.000
t ᵈ		0.075	0.698			0.189	0.894		
P ᵈ		0.941	0.487			0.850	0.374		

2 ¯

Table 2 Comparison of renal function indexes between the two groups ¯

ά	n	Scr μmol/L		t ᵈ	P ᵈ	BUN mmol/L		t ᵈ	P ᵈ	ACR mg/mmol		t ᵈ	P ᵈ
		ώ	3			ώ	3			ώ	3		
	40	195.83±30.32	142.74±20.32	9.199	0.000	6.83±0.92	5.47±0.78	7.131	0.000	243.71±37.49	190.33±27.54	7.257	0.000
	40	194.77±8.94	108.61±18.35	26.696	0.000	6.80±0.88	4.82±0.65	11.446	0.000	241.65±36.08	178.02±21.81	9.545	0.000
t ᵈ		0.212	7.884			0.149	4.049			0.250	2.216		
P ᵈ		0.833	0.000			0.882	0.000			0.803	0.030		

3 PBMCs NLRP3 –

Table 3 Comparison of NLRP3 inflammasome pathway related molecule levels in PBMCs between the two groups –

ά	n	NLRP3		t d	P d	Caspase 1		t d	P d
		ώ	3			ώ	3		
	40	0.84±0.13	0.76±0.09	3.200	0.002	0.76±0.09	0.66±0.08	5.252	0.000
	40	0.82±0.15	0.69±0.08	4.836	0.000	0.74±0.10	0.57±0.07	8.808	0.000
t d		0.637	3.677			0.940	5.355		
P d		0.526	0.000			0.350	0.000		

4 NLRP3 – pmol/L

Table 4 Comparison of NLRP3 downstream cytokines in serum between the two groups – pmol/L

ά	n	IL 1β		t d	P d	IL 18		t d	P d	GSDMD N		t d	P d
		ώ	3			ώ	3			ώ	3		
	40	54.28±7.10	40.15±5.48	9.964	0.000	26.03±4.31	19.74±3.05	7.534	0.000	17.32±2.40	13.01±1.78	9.123	0.000
	40	53.97±7.34	32.07±4.30	16.282	0.000	26.12±4.50	15.82±2.14	13.073	0.000	17.46±2.58	10.25±1.34	15.685	0.000
t d		0.192	7.336			0.091	6.654			0.251	7.835		
P d		0.848	0.000			0.927	0.000			0.802	0.000		

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6 X ╝ ┘ ь ŏ ь Ό X ₒ ┘ ╞ ь Ό Ί Γ ↘ ь X ╝ ↘ ь . X ₒ Ό ↗ ╤ 2018 J . X ╝ 2018 46 10 760 789.

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was no statistical significance in the comparison of $CD3^+$ $CD4^+$ $CD8^+$ and $CD4^+/CD8^+$ P>0.05 . However the T_1 T_2 and T_3 $CD3^+$ $CD4^+$ and $CD4^+/CD8^+$ levels in the observation group was higher than that in the control group and $CD8^+$ was higher than that in the control group and the difference was statistically significant P< 0.05 . When comparing the incidence rate of adverse reactions between the two groups the difference was not statistically significant P>0.05. . . . . Compared to sevoflurane combined anaesthesia remifentanil combined anaesthesia has a lesser effect on serum IL 6 and IL 2 levels in LC patients impacting the immune combiot ʊ خ l' bj̈ e

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Table 1 Comparison of postoperative awakening time recovery time of spontaneous respiration and catheter removal time between the two groups – min

ġ	n	˜	ε ∢ ч	
	59	6.85±2.14	2.36±0.68	8.34±2.38
	63	7.96±2.52	5.78±1.35	10.27±3.59
t d		2.613	17.488	3.475
P d		0.010	<0.001	<0.001

2.3 N ˜ T E
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Љ σ P<0.05 в
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2 IL 6 IL 2 –
Table 3 Comparison of postoperative IL 6 and IL 2 levels between the two groups –

ġ	n	IL 6 pg/L				IL 2 ng/mL			
		T_0	T_1	T_2	T_3	T_0	T_1	T_2	T_3
	59	16.38±2.47	26.53±2.41[a]	31.52±3.68[ab]	42.05±4.68[abc]	13.53±1.10	11.46±1.35[a]	9.53±1.26[ab]	9.21±1.34[ab]
	63	16.45±2.64	22.51±3.47[a]	29.86±3.45[ab]	35.74±4.77[abc]	13.42±1.12	12.32±1.24	10.27±1.16[ab]	10.34±1.28[ab]
t d		0.150	7.384	2.571	7.368	0.546	3.667	3.377	4.763
P d		0.880	<0.001	0.011	<0.001	0.585	<0.001	0.001	<0.001

˛ ‴ T_0 [a]P<0.05 ‴ T_1 [b]P<0.05 ‴ T_2 [c]P<0.05 в

3 T –
Table 4 Comparison of postoperative T lymphocyte subpopulation levels between the two groups –

ġ	n	CD3⁺ %				CD4⁺ %			
		T_0	T_1	T_2	T_3	T_0	T_1	T_2	T_3
	59	60.23±9.65	56.38±8.57[a]	54.72±6.82[ab]	52.68±5.39[ab]	44.78±6.10	41.87±5.14[a]	40.64±4.35[a]	39.68±4.24[ab]
	63	61.25±8.37	59.68±8.65[a]	57.38±5.43[ab]	55.69±5.08[ab]	45.42±6.37	43.74±4.36[a]	42.41±4.47[ab]	41.53±4.32[ab]
t d		0.624	2.115	2.390	3.175	0.566	2.171	2.214	2.385
P d		0.533	0.036	0.018	0.001	0.572	0.031	0.028	0.018
ġ	n	CD8⁺ %				CD4⁺/CD8⁺			
		T_0	T_1	T_2	T_3	T_0	T_1	T_2	T_3
	59	15.76±3.86	17.67±2.78[a]	18.67±2.71[a]	18.86±2.75[ab]	2.23±0.86	2.31±0.73[a]	2.53±0.43[ab]	2.60±0.36[ab]
	63	14.89±3.12	15.43±2.45[a]	16.38±2.08[ab]	16.42±2.42[ab]	2.26±0.75	2.66±0.69[a]	2.73±0.35[a]	2.81±0.42[a]
t d		1.373	4.728	5.255	5.210	0.205	2.722	2.825	2.955
P d		0.172	<0.001	<0.001	<0.001	0.837	0.007	0.005	0.003

˛ ‴ T_0 [a]P<0.05 ‴ T_1 [b]P<0.05 ‴ T_2 [c]P<0.05 в

4 n %

Table 5 Comparison of the incidence of adverse reactions between the two groups n %

ά	n	ч ˜	Ң ♣			ҭ
	59	5 8.47	1 1.69	1 1.69	3 5.08	10 16.94
	63	2 3.17	4 6.34	2 3.17	1 1.58	9 14.28
d						0.164
P d						0.685

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out of 87 patients had a good prognosis and 29 had a poor prognosis. OPN CRP and RANKL levels were higher in the poor prognosis group than in the good prognosis group and the difference was statistically significant P<0.05. . . . . The levels of OPN CRP and RANKL in the gingival sulcus fluid of patients with PI were found to be abnormally high and correlated with the modified gingival index modified bleeding index score and probing depth. Therefore assessing the prognosis of patients with PI can be done by detecting these levels in the gingival sulcus fluid. This information can provide a basis for clinical treatment.

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Receptor activator of NF KB ligand RANKL ˘

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– Ƒ ɔ t
Pearson ŭ OPN ɜCRP ɜRANKL PI
ă Ɯ P<0.05 δ σ ɐ

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2.1 N OPN ɜCRP ɜRANKL

PI OPN ɜCRP ɜRANKL ي
σ P<0.05 ɐ 1 ɐ

1 OPN CRP RANKL –

Table 1 Comparison of OPN CRP and RANKL levels between the two groups –

ġ	n	OPN pg/μL	CRP mg/L	RANKL pg/μL
	80	192.50±46.50	3.25±0.34	30.89±7.22
PI	87	245.48±41.15	24.32±3.10	122.31±12.94
t d		7.810	60.444	55.709
P d		<0.001	<0.001	<0.001

2.2 N ㄱ ή

PI ɜ Ὸ ɜ
Лъ σ P<0.05 ɐ 2 ɐ

2 –

Table 2 Comparison of periodontal clinical indicators between the two groups –

ġ	n	ŭ	Ὸ ŭ	mm
	80	0.61±0.08	0.47±0.10	2.29±0.17
PI	87	1.46±0.33	1.51±0.39	4.30±0.44
t d		22.435	23.156	38.307
P d		<0.001	<0.001	<0.001

2.3 OPN ɜCRP ɜRANKL PI ă

OPN ɜCRP ɜRANKL ɜ Ὸ
ɜ \l ă ă P<0.05 ɐ
3 ɐ

3 OPN CRP RANKL PI

Table 3 Correlation analysis between OPN CRP RANKL levels and PI

ġ	OPN		CRP		RANKL	
	r d	P d	r d	P d	r d	P d
	0.401	<0.001	0.422	<0.001	0.374	0.007
Ὸ	0.491	<0.001	0.430	<0.001	0.446	<0.001
	0.451	<0.001	0.431	<0.001	0.403	<0.001

2.4 PI ´ ˜ OPN ɜCRP ɜRANKL

ç˜ ㄱ 87 Ɂ X 58 Ɂ
˜ 29 Ɂ ˜ ´ ɐ ˜ ´ OPN ɜ
CRP ɜRANKL ي ˜
σ P<0.05 ɐ 4 ɐ

4 PI OPN CRP RANKL
–

Table 4 Comparison of OPN CRP and RANKL levels in patients with different prognosis in PI group –

ġ	n	OPN pg/μL	CRP mg/L	RANKL pg/μL
˜	58	233.71±43.59	20.62±2.69	114.67±10.23
˜ ´	29	269.02±38.27	31.72±3.19	137.59±12.05
t d		5.573	24.199	13.193
P d		<0.001	<0.001	<0.001

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PI Ę Лъ
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ą̃ʰ ˗ ĕ ʁ ~ ′

CRP ȝOPN ʊ́ RANKL ثي Љ ~

CRP ȝOPN ʊ́ RANKL ╥

PI ~ ~ ʁ ʐ ɤ δ OPN ˘ ↀ

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υ ˈ RANKL ╥ ˘

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2.1 N ậ LCR ɜHALP ŏ

ᄀ LCR ɜHALP ŏ Ль ᄀ

σ P<0.05 ɞ 1 ɞ

1 LCR HALP

Table 1 Comparison of preoperative LCR and HALP scores between the two groups

ậ		LCR	HALP ŏ
ᄀ	78	1.65±0.45	41.05±4.21
ᄀ	24	0.39±0.14	26.33±3.17
d		13.475	15.786
d		<0.001	<0.001

2.2 ậ LCR ɜHALP ŏ ~ ᄀ

Θ d

ậ LCR ɜHALP ŏ ẇ N ´

~ ᄀ ɔ area under curve AUC ŏ ậ

δ 0.837 ɜ0.759 ɜ0.904 ɞ 2 ɞ

2 LCR HALP

Table 2 Predictive value of LCR and HALP scores for recurrence after radiofrequency ablation in cases with persistent atrial fibrillation

	AUC	95% CI	d	%	%
LCR	0.837	0.786~0.888	1.02	67.43	90.55
HALP ŏ	0.759	0.708~0.810	33.69	56.43	90.55
LCR+HALP ŏ	0.904	0.853~0.954		86.91	85.04

2.3 ~ ᄀ ᄒ ɤ ŏ

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BMI ɜ ɜLAD Ль ᄀ

σ P<0.05 ɞ 3 ɞ

2.4 ~ ᄀ Ï ŏ

Logistic ɐ ŏ

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1 ᄒ ɤ σ ĕ δ ɔ

Logistic ɐ ŏ ä =0.05 ɜ ₀ =0.10

ɜ ♣ ` ɜLAD ɤ ' ɜ ậ

LCR Ң ɜ ậ HALP ŏ Ң

~ ᄀ ○ ɤ P<0.05 ɞ 4 ɞ

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Table 3 Univariate analysis of recurrence after radiofrequency ablation in patients with persistent AF

	ᄀ n=78	ᄀ n=24	t/ d	P d
ậ				
	53 67.95	10 41.67	5.368	0.021
	25 32.05	14 58.33		
<60	32 41.03	7 29.17	1.093	0.296
≥60	46 58.97	17 70.83		
BMI kg/m²	22.67±3.15	25.13±3.44	3.274	<0.001
	5.24±1.12	7.18±1.63	6.618	<0.001
♣ `	21 26.92	12 50.00	4.466	0.035
`	6 7.69	2 8.33	0.010	0.919
`	28 35.90	8 33.33	0.053	0.818
ë				
	12 15.38	3 12.50	0.122	0.727
~	66 84.62	21 87.50		
ACEI/ARB				
	32 41.03	11 45.83	0.174	0.677
~	46 58.97	13 54.17		
LVEF %	70.69±8.23	72.64±8.55	1.006	0.317
LAD mm	35.82±3.87	40.17±4.26	4.702	<0.001
LVEDD mm	47.55±4.46	48.03±4.74	0.454	0.651

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LCR ɜ Ль ɜCRP

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Table 4 Binary logistic stepwise regression analysis of recurrence after radiofrequency ablation in cases with persistent atrial fibrillation

ɔ	d	d	SE d	Wald d	OR 95% CI d	P d
	<6.21 =0 ≥6.21 =1	0.855	0.213	16.113	2.351 1.549~3.570	<0.001
♣ `	=0 =1	0.729	0.192	14.416	2.073 1.423~3.020	<0.001
LAD	<31.99 mm=0 ≥31.99 mm=1	1.002	0.231	20.190	2.274 1.759~4.217	<0.001
LCR	>1.02=0 ≤1.02=1	1.143	0.245	23.657	3.136 1.979~4.971	<0.001
HALP ŏ	>33.69=0 ≤33.69=1	0.916	0.219	18.669	2.499 1.650~3.787	<0.001

ᾠ LCR Ң ˝
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~ ᴛ AUC δ 0.837 ɜ0.759 ҢЛЬ
Ї ´ AUC 0.904 ᾠ LCR Ң ɜ
ᾠ HALP ŏ Ң ~ ᴛ
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sTREM 1 AQP5

ˇ e ҭ ҷ м 1 sTREM 1 ∧ 5 AQP5
ệ ~ ệ Θ d ɞ 2021 10 2023 10 ﬦ ⌟
ệ 146 ҳ ĕ δ ↄ ◦ ̊ м p 120 ̊ ĕ δ N
sTREM 1 ɜAQP5 ~ ~ ҭ ệ ~ ệ ǔ δ E
n=31 ∧ E n=115 N E sTREM 1 ɜAQP5 ẇ ή Ï Ẃ
logistic ɐ ǔ ệ ~ ệ Ĩ ɚ ҷ ĕ ROC ǔ
sTREM 1 ɜAQP5 ệ ~ ệ Θ d ɞ sTREM 1 ɜAQP5
Лъ σ t=13.235 ɜ12.484 P<0.05 E sTREM 1 ɜAQP5 ↀ
ẇ ҳ ɜ- ɜ- X ̛O 5U 13 F J U

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12.484 P<0.05 . The levels of serum sTREM 1 and AQP5 as well as the proportion of diabetes mellitus op eration time intraoperative blood loss and proportion of vitreous spill in the infected subgroup were higher than those in the non infected subgroup with statistical significance t=6.536 4.026 4.392 6.934 10.544 14.508 P<0.05 . History of diabetes mellitus prolonged operation time and increased levels of serum sTREM 1 and AQP5 were identified as risk factors for infectious endophthalmitis after cataract surgery P<0.05 . Serum sTREM 1 and AQP5 showed predictive value for infectious endophthalmitis after cataract surgery and the pre dicted areas under the curve were 0.807 and 0.905 . . . . . The elevation of serum sTREM 1 and AQP5 levels is correlated with infective endophthalmitis following cataract surgery. Both indexes hold predictive sig nificance for the development of infective endophthalmitis post cataract surgery.

. . ... . ˗ Cataract Infectious endophthalmitis sTREM 1 Aquaporin 5

ę ~ ę ę ~ ˀ ě δ Ę X 68 Ɂ ɜ 52 Ɂ Ξ ᵀ ˘ Ό ˛ ɔ ɜΞ 60~75 ɜ ٹي 66.84±7.14 ɞ N h Ƃ ᵀ Ό Π ɯ Ъ σ P>0.05 ɞ ˩ ˝Ą ɜ ċ ~ [1,2] ɞ ɀ ѫ ẽ ή ʁ ˥ Ƃ ˈ e ę ˝A Ж ˀ ɞ ɀ Ό Ң ɜѫ ẽ ´ ώ Ъ ᵀ ˥ ɞ ˝Ω ƙ ~ ę ă ˘ e ᵀ Ɂ м 1

Soluble triggering receptor expressed on human my eloid cells 1 sTREM 1 ˥ 5 Aquaporin 5 AQP5 Θ ę N [3,4] ɞ sTREM 1 h Ӧ Ɂ м Ę â ᵀ ˍ Ӿ ě AQP5 h ŏ ٶ X ˈ ɯ Ӿ ɞ ѽ ă Ъ ę ~ ę ω Ẅ ŏ ɞ ٶ ŏ sTREM 1 ɜAQP5 ę ~ ę Θ [d] ɔ ɞ

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1.1 h

2021 10 2023 10 ٶ ˩ ę 146 Ɂ ě δ â ˝A δ ę [5] ę ᵵ ⅞ ή ~ 3 d ˈ ɞ ˝A Ę ë Ă ´ ɜӦ ´ ɞ 146 Ɂ X 87 Ɂ ɜ 59 Ɂ 61~79 ɜ ٹي 67.61±7.69 ę 8~17 T ɜ ٹي 9.28±0.94 ɞ Ɔ ˈ ˀ м ҏ 120

1.2

1.2.1 sTREM 1 ɜAQP5

Ъ ~ 3 ˈ ˥ 5 mL Ъ м ˈ ˥ 5 mL ٶ X 3 000 r/min ɜ˩ 10 cm 10 min ŏ h â -70 Ỳ ˈ ɞ h ˈ Ό Ӧ ˤ sTREM 1 ɜAQP5 ɞ ٹي ɕ Ă ˝ ɞ

1.2.2 ę ~ ę ç

ɔ ц ο ę ~ ę ˈ å 2017 ħ [6] Θ ~ ~ ᵀ ę ~ ę ŏ δ E n=31 ˥ E n=115 ɞ

1.3

SPSS 25.0 ψ Ѡ ¯ N t Ѡ n % ▌ N Ї Ẃ logistic ɐ ŏ ę ~ ę Ї ɷ ɳ ě ROC ŏ sTREM 1 ɜAQP5 ę ~ ę Θ [d] ɞ P<0.05 δ σ ɞ

2

2.1 N sTREM 1 ɜAQP5

sTREM 1 ɜAQP5 Ъ σ P<0.05 ɞ 1 ɞ

1 sTREM 1 AQP5

Table 1 Comparison of serum sTREM 1 and AQP5 levels between the observation group and the control group

ġ	n	sTREM 1 ng/mL	AQP5 ng/mL
	146	121.22±21.46	37.18±8.14
	120	86.14±11.32	26.24±5.61
t d		13.235	12.484
P d		<0.001	<0.001

2 sTREM 1 AQP5

n %

Table 2 Comparison of serum sTREM 1 and AQP5 levels and clinical data between infected subgroup and non infected subgroup n %

	E n=31	E n=115	t/ d	P d
ġ /	16/15	71/44	1.040	0.308
	68.22±9.93	67.45±7.85	0.457	0.648
	9.36±1.01	9.26±0.94	0.517	0.606
ƺ				
♣	16 51.61	51 44.35	0.519	0.471
	14 45.16	36 31.30	4.392	0.036
Ч `	10 32.26	25 21.74	1.482	0.223
min	41.39±5.69	34.62±4.57	6.934	<0.001
X Ȯ mL	12.85±1.95	9.84±1.23	10.544	<0.001
ɱ Ȯ	22 70.97	38 33.04	14.508	<0.001
sTREM 1 ng/mL	144.87±26.45	114.95±21.50	6.536	<0.001
AQP5 ng/mL	41.71±6.89	35.96±7.10	4.026	<0.001

ɔ c r ɜɥ ɔ

Ὸ ɜΞ ϧ ㄱ [7 8] ɞ ɹ ŏ ê ~ ê ○ ɹ ɜ ă ㅅ ę σ ɞ ㅅ ㄱ ẇ X ɲ ɔ ê ~ ê ㄱ ‟ Ὼ ƙ ă ɞ ɱ Љ Ὸ Ę ㅅ ɻ δ ㅅ W Ë ㅀ ㅀ ㅀ Ὼ ƙ ě ɔ ㄱ Ὸ ㅅ ㄱ ê ~ ê [9 10] ɞ ᘯ ɕ ㅅ ˘ ㅀ ê Ὸ ɞ ɹ δ ê ~ ê ㅅ W˳ ɞ ~ ɱ ℼ ˘ ϛ ɹ ṇ ƒ ц ɲ ɜ ℼ ɞ sTREM 1 ㄱ ɱ TREM 1 ˘ ㅀ ㅅ X TREM 1 ⅞ ɹ ę ě ㅅ ṇ ƒ TREM 1 δ ˘ ầ ˘ ě δ Θ ㅅ ɞ AQP5 ㅅ X AQP5 ɕ ĩ X ŏ ' ɜ ㅅ ɞ ή ɜ ɜ ㅀ X sTREM 1 ẇ AQP5 æ ẇ @ Ὸ V U † 4 Đ P ' U ‹ Ž Z UÀ ă ¼ ¼ 4 g ' F T O P # š S R # ô ñ % T ă ‧ O % T ″ % U Đ T ' % T M Đ T à Sa…B Q\ Do Sð B O P A # Sa…Ný\%? TÁ # Ga…B D Q\% Sa…S sTREM 1 ẇ AQP5 ê ŏ ㅅ ɞ ŏ ㄱ ~ ê ê ~ 3d sTREM 1 ẇ AQP5 Љ ㄱ ê ê ~ ê ~ Ὸ sTREM 1 ẇ AQP5 ℼ ɞ ɵ ê ă Љ ê ~ ê ă ´ ɜ ɜ X ɱ Ὸ ê ~ ê ○ ɹ [15 16] ˘ ϛ ɹ ɔ ´ ƒ ê ɲ ' ώ Љ ϛ ɲ ' ɜ X ɱ Ὸ ㅅ ثي Ὼ ƙ Ὼ ƙ ƒ ɱ ㅅ ɻ Ἀ Ἐ ɲ ' ɞ logistic ɾ ŏ ` ɜ ɜ X ɱ

Ὸ ẇ sTREM 1 ɜ AQP5 ɲ ' ê ~ ê ○ ɹ ɞ ᘯ ɕ X ή ɹ ‟ ê ~ ê ă ‟ ɵ ê [h] sTREM 1 ɜ AQP5 ɲ ' ‟ ê ~ ê ă h N ě δ Љ Θ Θ [d] ɞ ~ ROC sTREM 1 ɜ AQP5 ê ~ ê ę Θ [d] ɞ ɕ sTREM 1 ɜ AQP5 ɲ ' ‟ ê ~ ê ă N ثي ê ~ ê ę Θ [d] ɞ

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5 X ╝ ┘ ϧ ŏ ϧ . ê ẇ Ẉ . X ɵ e ê ╤ 6 4866U‹ , UÀ Wà Z g DÐ ð h ô š ¥ V U S Q s à Df „¹ Y)[< ò J ð! #

HPV TCT

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ɔ Ч ɔ ˩ ƿ ɱ HPV ŷ ẇ TCT ŭ δ ئ ˩
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ʒ HPV ẇ TCT ʁ ƿ ɱ 10 124 ʒ X HPV δ 7.34% ´ˀ HPV
ę σ ²=29.721 P<0.001 ʁ ○ يم HPV ▉ ѽ Ц ŋ E يم HPV 52 ɜHPV 58 ɜ
HPV 51 ɜHPV 16 ʌ HPV 39 ʁ TCT δ 2.49% ≥61 e ASC ʌ HSIL ▉ 21~ e
LSIL ▉ ʁ ɔ ˈ щ ASC ặ LSIL ỏ ặ HSIL HPV ℸ 51.41%
70.18% 88.89% ´ˀ ɔ HPV Ь 49 ? "• ₽ʁ D ? "• ض ŋ AĎt1p s»@ 1 ÒQ ÎÂ 1 @ ♭ 6 ...

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. . .. High risk human papillomavirus HPV subtypes TCT detection Healthy physical examination population

e ↟ Humanpapillomavirus HPV h ẹ ښ ɛ ₵ אַ DNA ۏ ㄱ 200 Æ E ي ɞ ´ ˘ HPV ŏ δ ○ ي ٨ Ḥ ○ ي Ẹ X ○ ي HPV ê ɛ ɔ ٨ ㄱ ɷ 1 ɞ Ã ظ 2020 Ã ㄱ Ꝛ 60.4 ˛ M e δ 34.2 ˛ ɞ Ξ ƥ M ƶ ɷ ʊh 2 ɞ 2020 ο ㄱ Ꝛ 10.97 ˛ M e 5.91 ˛ ▉ Ã ㄱ ٨ M e 18% ‟ Ξ ɞ HPV ´ نج Thinprep cytologic test TCT ۏ ο 3 ɞ ئۇ 2022 7 2023 9 ئۇ X ۿ ㄴ ᴍ HPV ỳ ۿ TCT ŏ Ë ئى ㄴ ɔ ỳ δ W ɔ ɞ

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1.1 h ع ŏ 2022 7 2023 9 ئۇ X ۿ ㄴ ᴍ X ɳ ئۇ ثي ئى δ ɔ Ч HPV ○ ي ٨ نج ‴Ω ۿ ם å̊ 10 124 Ꝛ ⊥ ئۇ 21~87 ɞ ŏ δ 21~ 738 Ꝛ ɜ31~ 3 723 Ꝛ ɜ41~ 3 090 Ꝛ ɜ51~ 1 803 Ꝛ ɜ≥61 770 Ꝛ Ц ɞ

1.2

1.2.1 ثي ` ě ثي T ㄴ ڻ Ẅ ŏ ! ŏ ' ‴Ạ ئۇ 5 ۓ ´ ᷈ ŏ ầ ê᷍ ' ′I ڻ X ◐ Ль 4 ' ɞ

1.2.2 HPV E ي ɛ ʊ 0y Ǎ ˝ T ′I ' ‴Ḥ ۿ ○ ي e ↟ HPV ‴Ḥ Ẉ PCR ↀ ' δ ژ₀ ₵ HPV16 ɜHPV18 ɜHPV31 ɜHPV33 ɜHPV35 ɜHPV39 ɜHPV45 ɜHPV51 ɜHPV52 ɜHPV56 ɜHPV58 ɜHPV59 ɜHPV66 ɜHPV68 ٨ HPV82 ئۇ ê 15 ○ ي ᷈ ɞ Ξ ‴Ḥ ϡ ě ɞ

1.2.3 نج ‴Ạ 95% ن ~ ɞ ɔ TBS The bethesda system ŏ ‴A 4 ŏ ₵ ɛ ê ɔ Negative for intraepithelial lesion or malignancy NILM Ė ي Atypical squamous cells ASC Ḥ ɛ ê ɔ Low grade squamous intraepithelial lesion LSIL ɛ ê ɔ High grade squamous intraepithelial lesion HSIL ɞ

1.3 SPSS 22.0 ψ ‴ ŏ ↀ n % 2 Fisher ŏ ŏ P<0.05 ẹ σ ɞ

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2.1 HPV ỳ å̊ ầ ƥ ᴍ 10 124 Ꝛ HPV δ 7.34% ɞ 21~ HPV 41~ Ḥ ´ ᷈ ʊ HPV ẹ σ P<0.001 ɞ X ~ ثي ↀ ₸h δ ε Ẹ X 41~ ₸h ▉ Ꝛ δ 88.1% 163/185 ≥61 ▉ δ 24.68% 19/77 ɞ ´ ᷈ ʊ ي σ P=0.092 ɞ 1 ɞ

2.2 ~ HPV E ي ŏ ع ي ₵᷍ ع ŏ ˘ ɞ HPV 51 ɜHPV 52 ٨ HPV 59 ئۇ ´ ᷈ ẹ σ P< 0.005 ɞ 2 ɞ

2.3 ~ ᴍ TCT ‘O ỳ TCT δ 2.49% 21~ ≥61 Ḥ ɞ ´ ᷈ ʊ TCT ي σ P>0.05 ɞ 3 ɞ

2.4 TCT ‘O ‴ HPV ỳ X TCT ٨ HPV ثي δ

1 HPV n %

Table 1 HPV infection by age group n %

	n=10 124	21~ n=738	31~ n=3 723	41~ n=3 090	51~ n=1 803	≥61 n=770	d	P d
	9 381 92.66	658 89.16	3 451 92.69	2 905 94.01	1 674 92.85	693 90.00	29.721	<0.001
₸h	635 6.27	67 9.08	235 6.31	163 5.28	112 6.21	58 7.53	7.985	0.092
	108 1.07	13 1.76	37 0.99	22 0.71	17 0.94	19 2.47		

2 HPV n %

Table 2 Distribution of HPV subtypes by age n %

	n=876	21~ n=99	31~ n=315	41~ n=210	51~ n=152	≥61 n=100	d	P d
HPV 16	66 7.53	5 5.05	22 6.98	22 10.48	13 8.55	4 4.00	5.642	0.228
HPV 18	28 3.20	2 2.02	9 2.86	9 4.29	6 3.95	2 2.00	1.846	0.777
HPV 31	40 4.57	3 3.03	16 5.08	10 4.76	5 3.29	6 6.00	1.785	0.775
HPV 33	24 2.74	1 1.01	6 1.90	10 4.76	6 3.95	1 1.00	6.209	0.158
HPV 35	23 2.63	3 3.03	5 1.59	7 3.33	4 2.63	4 4.00	3.097	0.536
HPV 39	61 6.96	9 9.09	26 8.25	12 5.71	7 4.61	7 7.00	3.312	0.507
HPV 45	7 0.80	1 1.01	3 0.95	0	3 1.97	0	4.584	0.223
HPV 51	85 9.70	16 16.16	33 10.48	24 11.43	8 5.26	4 4.00	12.774	0.012
HPV 52	217 24.77	14 14.14	76 24.13	57 27.14	38 25.00	32 32.00	9.515	0.049
HPV 56	60 6.85	7 7.07	25 7.94	9 4.29	13 8.55	6 6.00	3.559	0.469
HPV 58	117 13.36	12 12.12	39 12.38	22 10.48	28 18.42	16 16.00	5.868	0.209
HPV 59	41 4.68	11 11.11	15 4.76	7 3.33	3 1.97	5 5.00	10.711	0.013
HPV 66	58 6.62	8 8.08	21 6.67	14 6.67	10 6.58	5 5.00	0.768	0.943
HPV 68	37 4.22	5 5.05	14 4.44	5 2.38	6 3.95	7 7.00	4.109	0.385
HPV 82	12 1.37	2 2.02	5 1.59	2 0.95	2 1.32	1 1.00	1.040	0.930

3 TCT n %

Table 3 TCT detection in all age groups n %

	n=10 124	21~ n=738	31~ n=3 723	41~ n=3 090	51~ n=1 803	≥61 n=770	d	P d
NILM	9 872 97.51	712 96.48	3 625 97.37	3 020 97.73	1 762 97.73	753 97.79	4.797	0.309
ASC	177 1.75	18 2.44	72 1.93	43 1.39	30 1.66	14 1.82	5.182	0.269
LSIL	57 0.56	8 1.08	19 0.51	20 0.65	9 0.50	1 0.13	6.866	0.143
HSIL	18 0.18	0	7 0.19	7 0.23	2 0.11	2 0.26	2.109	0.717

9 276 Ɂ 91.62% N ثي δ 147 Ɂ 1.45% в Э ' Щ ASC ᾷ LSIL ȯ ᾷ HSIL HPV ╗ 51.41% 70.18% 88.89% ´ˀ Э HPV ę σ P<0.001 в X HSIL ▉ δ 37.5% 6/16 LSIL ₸h ▉ δ 77.5% 31/40 в˜ ȧ Э υ HPV ям σ P<0.001 в 4 в ´ˀ TCT E ям ŭ ж ям Ȼ˝ ж ŭ ˘ в˜ ȧ Э HPV 16 зHPV 45 ∧ HPV 66 ę σ P<0.005 в 5 в

3

Ч ‴ ○ ям HPV ă в ○ ям HPV ˘ м Ẍ p \l в ○ ям HPV ж нж ´ ᾷ ε DNA X ˘ Ғ HPV ж нж E2 ! E2 ″Ą E6 ∧ E7 ж нж ˘ Ң м ќ DNA ˘ ę є Э 1 3 в ж ẇ ѽ Э Љ м е TCT ´ HPV ѽ ´ в

4 TCT HPV n %

Table 4 TCT results and HPV infection n %

	n=10 124	NILM n=9 872	ASC n=177	LSIL n=57	HSIL n=18	d	P d
	9 381 92.66	9 276 93.96	86 48.59	17 29.82	2 11.11	485.453	<0.001
₸ʰ	635 6.27	525 5.32	69 38.98	31 54.39	10 55.56	18.943	<0.001
	108 1.07	71 0.72	22 12.43	9 15.79	6 33.33		

5 TCT HPV n %

Table 5 HPV subtype distribution for different TCT results n %

	n=876	NILM n=679	ASC n=122	LSIL n=53	HSIL n=22	d	P d
HPV 16	66 7.53	49 7.22	7 5.74	4 7.55	6 27.27	9.317	0.02
HPV 18	28 3.20	23 3.39	3 2.46	1 1.89	1 4.55	0.776	0.829
HPV 31	40 4.57	30 4.42	4 3.28	5 9.43	1 4.55	3.336	0.288
HPV 33	24 2.74	19 2.80	4 3.28	0	1 4.55	2.009	0.477
HPV 35	23 2.63	15 2.21	6 4.92	2 3.77	0	3.541	0.246
HPV 39	61 6.96	53 7.81	7 5.74	1 1.89	0	3.773	0.267
HPV 45	7 0.80	2 0.29	4 3.28	1 1.89	0	10.534	0.011
HPV 51	85 9.70	67 9.87	12 9.84	5 9.43	1 4.55	0.696	0.897
HPV 52	217 24.77	177 26.07	27 22.13	8 15.09	5 22.73	3.781	0.286
HPV 56	60 6.85	46 6.77	6 4.92	7 13.21	1 4.55	3.782	0.260
HPV 58	117 13.36	91 13.40	19 15.57	6 11.32	1 4.55	2.185	0.535
HPV 59	41 4.68	34 5.01	7 5.74	0	0	3.399	0.284
HPV 66	58 6.62	39 5.74	8 6.56	9 16.98	2 9.09	8.781	0.024
HPV 68	37 4.22	26 3.83	7 5.74	3 5.66	1 4.55	1.932	0.561
HPV 82	12 1.37	8 1.18	1 0.82	1 1.89	2 9.09	6.800	0.053

X 10 124 Ʒ X HPV δ 7.43% ‴ [5] Ң Лъ ο ệ Ẹ ë ئى Ł [6 9] ậ ɔ Ч ئى Ł ɱ HPV ẁǔ ο ệ Лъ Ң в ´ˆ υ ´ˆ 21~ ∧ 61 ↀ ɕ e HPV 31~ ∧ 41~ e HPV Ң ɱ \l ł U Ń يم ŏ ‴ ο ệ Ẹ ë [6 7] ˘ ‴ ά ˈ ´ Ċ Ɔ ⅞ Ẍ ʐ Ό Ė ѧ ă в ○ يم HPV ậ Ц ҕ E يم HPV 52 ɜHPV 58 ɜHPV 51 ɜHPV 16 ∧ HPV 39 в HPV E يم ئى ẁǔ Ł ẁǔ ο X X [10 11] HPV 52 ɜHPV 58 ∧ HPV 16 ▉ ғ " ~ ئى Ł E يم ŏ ´ˆ ‴ [5] Ꮾ ئى Ł [12] в ´ˆ ئى Ł υ ○ يم HPV Ό ˘ ‴ ئى Ł ɜ ⅞ Ϛ Ꞇ ´ˆ ă в Ł ɱ e ă X HPV E يم ậ ظ ҕ δ HPV 52 ɜHPV 58 ɜHPV 16 ∧ HPV 51 [13] в ‴ 2014 2018 ẁǔ e [14] HPV ғ " E يمʰ ▉ в ŏ ʐ ѧ "H e ѧ e

ѧ ˘ ŏ يم ậ Ό ɕ ℸ в TCT ▉ 2.49% ‴ [7] Ң Лъ Ẹ ë ئى Ł [6 8 12] в ASC ∧ HSIL X ≥61 Ό ‴ "H [12] ч в LSIL X 21~ Ό Лъ Ẹ ë ˜ ‴ ï [6] в Ɔ ˈ HPV ℸ в Ẹ X LSIL HPV δ 70.18% HSIL δ 88.89% в ‴ Ẹ ë LSIL ∧ HSIL ي Ң Лъ [15] ɜ Лъ ï [6] ‴ "H [12] Лъ LSIL Ң Лъ HSIL в ↀ TCT ŏ NILM ∧ ASC X HPV ғ " يم ậ ي δ 52 ɜ58 ɜ51 يم LSIL ғ " يم ậ δ 66 ɜ52 ɜ56 يم HSIL ғ " يم ậ δ 16 ∧ 52 يم в Ɔ ậ ˈ HPV ғ " يم ậ Ꞇ Ɔ ⅞ ˘ ‴ ˜ E يم ´ˆ ă в ɕ Ë ئى Ł ɱ e HPV Ꮾ Ɔ ў ˘ ↀ δ ئى Ł W в

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c.235delC showed significant differences between the two nationalities. . . . . The GJB2 c.235delC and SLC26A4 c. 919 2A >G mutations were most commonly found in patients with NSHL in our region. The frequency of the GJB2 gene mutation in Han patients was significantly higher than in Mongolian patients and the mutation spectra of the GJB2 and SLC26A4 genes also differed between the two groups.

. . ˝ . ˗ NSHL Han nationality Mongolian ethnicities Gene mutations Mutation frequency

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2.1 ئى └ ┐ ﻋ ﻧﺠ

X 62 ʔ 49.6% ʕ̃

h T ɔ ɥ ﻋ ﻧﺠ Ẹ X 31 ʔ 24.8%

ʕ̃ GJB2 ﻋ ﻧﺠ ɔ 26 ʔ 20.8% ʕ̃

SLC26A4 ﻋ ﻧﺠ ɔ 3 ʔ 2.4% ʕ̃ GJB3 ﻧﺠ

ﻋ ɔ 2 ʔ 1.6% ʕ̃ MT CO1 ﻋ ﻧﺠ ɔ

ʕ̃ 18 T ﻋ ﻧﺠ X Ẹ ë ɔ ﻳﻢ ɷ

ﺋﺆ ﻋ ﻧﺠ ɔ δ 56.32% 49/87

Ẹ X GJB2 ﻋ ﻧﺠ ɔ Ὸ δ 29.89% 26/87

SLC26A4 ﻋ ﻧﺠ ɔ Ὸ δ 22.99% 20/87

i ﻋ ﻧﺠ ɔ δ 34.21% 13/38

Ẹ X GJB2 ﻋ ﻧﺠ ɔ Ὸ δ 13.16% 5/38

SLC26A4 ﻋ ﻧﺠ Ὸ δ 15.79% 6/38 ɷ

2 ɷ

2 NSHL n=125 n %

Table 2 Genetic mutations of NSHL patients in the Inner Mongolia region n=125 n %

ﻋ ﻧﺠ	ɔ ﻳﻢ	ɔ ɥ	ﻫ n=87	ﻫ n=38
GJB2	´ ɔ	c.235delC	9 10.34	1 2.63
	´ ´ ɔ	c.235delC/c.299_300delAT	7 8.05	2 5.26
		c.235delC/c.176_191del16	1 1.15	1 2.63
		c.235delC/c.35delG	1 1.15	0 0.00
		c.235delC/c.427C>T	1 1.15	0 0.00
		c.235delC/c.512insAACG	1 1.15	0 0.00
	∓ ´ ɔ	c.235delC	6 6.90	1 2.63
SLA26A4	´ ɔ	c.919 2A>G	3 3.45	2 5.26
	´ ´ ɔ	c.919 2A>G/c.2168A>G	2 2.30	0 0.00
		c.919 2A>G/c.1336C>T	1 1.15	0 0.00
		c.919 2A>G/c.281C>T	2 2.30	0 0.00
		c.919 2A>G/c.2027T>A	1 1.15	0 0.00
		c.2168A>G/c.1336C>T	1 1.15	0 0.00
		c.2168A>G/c.1174A>T	1 1.15	0 0.00
	∓ ´ ɔ	c.919 2A>G	5 5.75	2 5.26
		c.2168A>G	2 2.30	2 5.26
		c.1181_1183delTC	1 1.15	0 0.00
		c.1336C>T	1 1.15	0 0.00
GJB3	∓ ´ ɔ	c.538C>T	2 2.30	1 2.63
MT CO1	ﻲ ɔ	m.7444G>A	1 1.15	1 2.63

GJB2 ﻋ ﻧﺠ ɔ ɥ ▉ ɥ ﻋ ﻧﺠ 25.29% 55/250 SLC26A4 ﻋ ﻧﺠ ▉ 15.6% 39/250 GJB3 ﻋ ﻧﺠ δ 1.2% 3/250 Ὸ ﺷﻲ δ ∓ ´ ɔ MT CO1 ﻋ ﻧﺠ ▉ 1.6% 4/250 Ὸ δ ﺷﻲ ɔ ɷ ﻫ i X ﻋ ﻧﺠ ɥ ɔ ﺷﻲ δ GJB2 c.235delC ﻫ SLC26A4 c.919 2A>G ɷ

X GJB2 ﻋ ﻧﺠ ɔ ɥ ▉ ɥ ﻋ ﻧﺠ 26.44% 46/174 SLC26A4 ﻋ ﻧﺠ ɔ ɥ ▉ ɥ ﻋ ﻧﺠ ɥ 17.82% 31/174 ﺋﺆ i

X GJB2 ﻋ ﻧﺠ ɔ ɥ ▉ ɥ ﻋ ﻧﺠ ɥ 11.84% 9/76 SLC26A4 ﻋ ﻧﺠ ɔ ɥ ▉ ɥ ﻋ ﻧﺠ ɥ 10.53% 8/76 ɷ 3 ɷ

2.2 ´ ˚ ﻋ ﻧﺠ

ﻋ ﻧﺠ ɔ ɜ-GJB2 ﻋ ﻧﺠ ɔ ﻫ GJB2 c.235delC ɥ ɔ ﺋﺆ N

σ P<0.05 ɷ 4 ɷ

3 NSHL n %

Table 3 Allelic mutation profiles of NSHL patients in Inner Mongolia region n %

ﻋ ﻧﺠ ɥ ﻧﻴ		ﻧﻴ			
		n=174		i	n=76
GJB2	c.235delC	35	20.11	6	7.89
	c.299_300delAT	7	4.02	2	2.63
	c.176_191del16	1	0.57	1	1.32
	c.35delG	1	0.57	0	0.00
	c.427C>T	1	0.57	0	0.00
	c.512insAACG	1	0.57	0	0.00
SLC26A4	c.919 2A>G	17	9.77	6	7.89
	c.2168A>G	6	3.45	2	2.63
	c.1336C>T	3	1.72	0	0.00
	c.281C>T	2	1.15	0	0.00
	c.2027T>A	1	0.57	0	0.00
	c.1174A>T	1	0.57	0	0.00
	c.1181_1183delTC	1	0.57	0	0.00
GJB3	c.538C>T	2	1.15	1	1.32
MT CO1	m.7444G>A	2	1.15	2	2.63

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Ό ئۇ ى ئ ᒪ ᔑ ʁ X Ό E F M$ $ŦH 13(3(´™^X´™

نجـ ع Ɔ Ʒ Љ Ẹ ë e ¹¹ ¹⁴ ʁ E F0 Ɗ E.!ò! 4Đ $'(³$'M¹ $'P $'P(³$˜ ¡ "ƒ v8

Duan ¹³ ă Љ Ặ Ê ?E!Ů X GJB2 S E

نجـ ع Ɔ δ 34% SLC26A4 نجـ ع Ɔ "‡/ĐU0 E(10

δ 12.6% ʁ X GJB2 نجـ ع Ɔ Ҥ Љ ,ý$Às Q E ý 1

SLC26A4 نجـ ع Ɔ Љ ʁ 5_ƀelƳ(³₎Ub …V2‹8UbM¹ …V5 HUb 2 .

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HGB ɜCK ɜCK MB ɜBNP ɜScr ɜTBIL ɜALT ɜPT ẇ APACHE ɜSOFA ɜGCS ǒ
σ P>0.05 ´ Ȯ ώ 1 WBC ɜHGB ɜCK ɜCK MB ɜBNP ɜScr ɜTBIL ɜALT ɜPT ẇ APACHE
ɜSOFA ɜGCS ǒ ش ғ Љ σ P<0.05 ´ ˜ ´ I ψ ד Ң Љ
σ ²=5.307 P<0.05 ɞ TCCD ´ ONSD ώ Љ ċ ɋ
⅞ ·· ○ ċ ˜ ɞ
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XIONG Shouhui YIN Wei ZHONG Jiao LIU Sun DAN Yong
Emergency EICU Changde First People s Hospital Wuling District Changde Hunan China 415003

To analyze the value of transcranial color Doppler ultrasound TCCD and optic nerve sheath diameter ONSD monitoring on blood biochemical indexes acute physiology and chronic health evaluation APACHE and prognosis of cerebral resuscitation patients. Cerebral resuscitation patients with cardiac arrest who received TCCD combined with ONSD monitoring treatment at Changde First People s Hospital from January 2023 to December 2023 were selected as the study subject and categorized as the combination group n=100 . The control group n=100 consisted of patients who received routine monitoring treatment during the same period. The blood biochemical parameters white blood cell count WBC hemoglobin HGB creatine kinase CK creatine kinase isoenzyme CK MB brain natriuretic peptide BNP serum creatinine Scr total bilirubin TBIL alanine aminotransferase ALT and prothrombin time PT of the two groups were compared on the 1st day after admission and the 1st day before discharge.

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P>0.05 . However the WBC HGB CK CK MB BNP Scr TBIL ALT PT levels and APACHE SOFA GCS scores of the combined group were better than those of the control group one day before discharge and the difference was statistically significant P<0.05 . The incidence of adverse events in the combination group was lower than that in the control group and the difference was statistically significant ^{2}=5.307 P< 0.05. . . . . TCCD combined with ONSD monitoring can improve the blood biochemical indexes and critical symptoms of patients undergoing cerebral resuscitation after cardiac arrest. This combination can also enhance the prognosis of patients.

. . . . Cerebral resuscitation TCCD Biochemical indexes APACHE

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/ Transcranial color Doppler ultrasound TCCD ê ᵓ Ḍ

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ƙ ᾇ [4] ɞ Ȯ

Optic nerve sheath diameter ONSD ‴

ƙ ㄒ ´ ă ç

‴ ~ ỷ ẹ [5] ɞ

TCCD ´ ONSD ɔ

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Acute physiology and chronic health evaluation APACHE Ꮗ ~ Ɵ [d] δ ή W ɔ ɞ

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55.72±8.37 59 Ⴗ 41 Ⴗ ę

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8.29 60 Ⴗ 40 Ⴗ ę Ⴑ ᴇ

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´ ㄱ TCCD ´ ONSD ẹ

ᴍ ɔ ɞ TCCD Mindray M9 /

ᴎ ᶇ ㄴ 0y Ả

‴ TCCD δ 1~5 MHz

ɔ ɞ ONSD Mindray

M9 / ᴎ Ƒ 7.5 MHz

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Ƒ ˇ Ꮉ Ль ტ X ɞ Ль

~ 3 mm ONSD 3 ᖩ ي [d] ɞ

TCCD ´ ONSD ê ♣ ᖇ

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5 mL ᘡ 3 500 r/min ㅣ 12 cm 10 min

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BS 800 Ã ⅞ ŭ ᴎ

White blood cell count WBC ᖇ Hemo globin HGB ᖇ Total bilirubin TBIL Ꮗ B Alanine aminotransferase ALT ᘡ Ẋ ACL7000 ᵯ Ã Ḥ ᴎ ₀ Ẋ Ả ‴ Ḥ Ⴑ Prothrombin time PT ᘡ Ẍ ㅅ

Creatine kinase CK ᖇ ˀ

Creatine kinase isoenzyme CK MB ɜ- Brain natriuretic peptide BNP ↀ Ẍ Serum creatinine Scr ɞ ă ǒ Ḥ Ль ɕ Å ˝ ɞ

1.4 ç Ль à ˜ 1 ш̇ Ȯ ѽ 1 ă ç ę ɱ ɔ ɞ APACHE ǒ [7] ç ○ ɞ APACHE ǒ δ 0~71 ǒ ǒ ○ ɞ ȸ ´ ǒ Sequential organ failure assessment scores SOFA [8] ç ȸ ´ ɞ ₵ ∢ ϒ ɜ'H ɜ- ɜ- ɜ- ∧ 6 T T ○ ǒ ǒ δ 0~4 ǒ ǒ δ 0~24 ǒ ǒ ȸ ´ Ξ ɞ Ŋ ǒ Glasgow coma score GCS [7] ç ´ ɞ GCS ǒ δ 3~15 ǒ ≤12 ǒ ≤8 ǒ ǒ ´ ɞ

1.5 ˜ 3 T N ˜ ẏ ɞ ↀ ㅋ ǫ ˜ ´ ˜ ´ ₵ ḳ ɜ- ´ ɜ-Ã ȯ ḳ ɜ- Ợ ´ ɜ- ɜ- ѽ M ɞ

1.6 SPSS 22.0 ψ ǒ ɞ – N Ғ t ệ ѽ˜ Ғ t n % [2] ɞ ↀ P<0.05 σ ɞ

2

2.1 ´ ǫ N à ˜ 1 WBC ɜHGB ɜCK ɜCK MB ɜ- BNP ɜScr ɜTBIL ɜALT ɜPT σ P>0.05 ´ Ȯ ѽ 1 WBC ɜHGB ɜCK ɜ- CK MB ɜBNP ɜScr ɜTBIL ɜALT ɜPT ي ғ Ль σ P<0.05 ɞ 1 ɞ

2.2 ´ ǫ ǒ N à ˜ 1 APACHE ɜSOFA ɜGCS ǒ σ P>0.05 ´ Ȯ ѽ 1 APACHE ɜSOFA ɜGCS ǒ ي ғ Ль σ P<0.05 ɞ 2 ɞ

2.3 ´ ǫ ẏ ´ ˜ ´ I ψ ㅋ Ḥ Ль σ P<0.05 ɞ 3 ɞ

1 –

Table 1 Comparison of blood indexes in patients with cerebral resuscitation after cardiac arrest by different monitoring methods –

		´ n=100	n=100	t [d]	P [d]
WBC ×10⁹/L	à ˜ 1	16.53±4.74	16.77±4.82	0.355	0.723
	Ȯ ѽ 1	19.84±4.97[a]	18.19±4.93[a]	2.357	0.019
HGB g/L	à ˜ 1	120.32±9.67	119.18±9.59	0.837	0.403
	Ȯ ѽ 1	126.48±9.81[a]	123.09±9.72[a]	2.454	0.015
CK U/L	à ˜ 1	626.79±48.37	621.71±48.19	0.744	0.457
	Ȯ ѽ 1	412.58±43.36[a]	483.34±44.63[a]	11.371	<0.001
CK MB U/L	à ˜ 1	93.46±7.74	92.97±7.68	0.449	0.653
	Ȯ ѽ 1	64.37±6.82[a]	72.48±7.12[a]	8.225	<0.001
BNP ng/L	à ˜ 1	739.46±51.47	742.61±52.13	0.430	0.667
	Ȯ ѽ 1	387.29±45.72[a]	433.52±46.68[a]	7.075	<0.001
Scr μmol/L	à ˜ 1	298.56±33.49	302.89±34.41	0.901	0.368
	Ȯ ѽ 1	172.46±26.63[a]	207.67±29.74[a]	8.820	<0.001
TBIL μmol/L	à ˜ 1	114.84±13.86	115.48±14.03	0.324	0.746
	Ȯ ѽ 1	69.24±11.79[a]	79.93±12.63[a]	6.187	<0.001
ALT U/L	à ˜ 1	142.29±16.36	141.44±16.21	0.369	0.712
	Ȯ ѽ 1	86.68±12.24[a]	99.58±13.37[a]	7.117	<0.001
PT s	à ˜ 1	18.92±3.76	18.92±3.76	0.267	0.789
	Ȯ ѽ 1	16.07±3.02[a]	17.74±3.43[a]	3.654	<0.001

˝ à ˜ 1 [a]P<0.05 ɞ

2 ǔ ¯

Table 2 Comparison of symptom scores in patients with cerebral resuscitation after cardiac arrest by different monitoring methods

Scores, ¯

ṷ	n	APACHE		SOFA		GCS	
		ã ˜ 1	Ơ ѽ 1	ã ˜ 1	Ơ ѽ 1	ã ˜ 1	Ơ ѽ 1
´	100	33.42±4.97	16.73±3.98[a]	10.49±2.42	6.18±1.57[a]	8.83±2.16	13.86±2.92[a]
	100	33.83±5.14	21.19±4.26[a]	10.68±2.52	7.76±1.69[a]	8.76±2.17	11.79±2.63[a]
t d		0.573	7.650	0.544	6.849	0.226	5.267
P d		0.567	<0.001	0.587	<0.001	0.821	<0.001

‴ ã ˜ 1 [a]P<0.05 ɷ

3 n %

Table 3 Comparison of prognosis of patients with cerebral resuscitation after cardiac arrest by different monitoring methods

n %

ṷ	n	ƙ	´	Ấ ỏ ƙ	Ợ ´	₼	M	´
´	100	5 5.00	4 4.00	3 3.00	3 3.00	2 2.00	2 2.00	4 4.00	23 23.00
	100	8 8.00	6 6.00	4 4.00	4 4.00	4 4.00	3 3.00	9 9.00	38 38.00
d									5.307
P d									0.021

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ч #$ª$ŸÕTQ¸ÕB„&ƙq%# Q„•-ŝѢ"&Ѧ€•ỲÕ1(ѽL u7T u!,QP¢A$ þ#Aŷf%ѵ2ĖѢÑbp $Ô1ÆÛ"d "1Ì"žU$ÒÑkÞ)ÊÃQ"1(Õ

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percentage of peripheral blood $CD8^+$ in 2 groups were lower than before treatment and the combined group was lower than the conventional group with statistical significance $P<0.05$. The levels of serum IFN γ percentages of peripheral blood $CD3^+$ $CD4^+$ and $CD4^+/CD8^+$ forced expiratory volume FEV1 forced vital capacity FVC and FEV1/FVC increased compared to before treatment with the combined group showing higher levels than the conventional group all with statistical significance $P<0.05$ . . . . . Jianpi Runfei pills could improve the levels of serum β CAR VEGF IFN γ and IL 17 enhance immune function and lung function in patients with pulmonary tuberculosis. They also promote the improvement of clinical symptoms and signs in patients showing a positive therapeutic effect.

. . . . Tuberculosis Spleen invigorating lung pill β CAR VEGF IFN γ IL 17

ķ ń ε δ ω Ό ɜĦ ɜ Ξ ƃ Ό ɻ ɜɻ ᵀ ˘ Ό ɜ ϟ ě T Ξ ĩ [1] ɐ ώ ┘ ε ɜŸ [m] ɜ ق ɜώ ﻧﻮ ń ЖК ˘ Ό [2] ɐ ЛЬ X ┘ ł Ńƀ Ńƀ Ń ε ع ﻧﻮ ЛЬ ẇ ´ ~ ش ƒ м ´ ° ķ [3] ɐ ƥ ę ẽ ɜƥ ɜ ɻ ⅞ ´ ˘ ɐ ƥ β ŏ Ę м Ÿ ´ ш β ╫ β carotene β CAR ɜ ê ع vascular endothelial growth factor VEGF ɜ γ interferon γ IFN γ ɜ ц 17 interleukin 17 IL 17 ĩ ɔ ɐ

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1.1 h

Ꙍ 2020 1 2023 4 ת ┘ 120 Ɂ δ ŏ δ 60 Ɂ ϟ ´ ƥ β ´ 60 Ɂ ɐ 31~69 ش 51.27±4.73 35 Ɂ 25 Ɂ ɐ ´ 30~69 ش 50.85±4.85 33 Ɂ 27 Ɂ ɐ N h σ $P>0.05$ ę ˘ ɐ ת ┘ ┘ ĸ ϟ ƃ ĂA ɐ

1.2 ầ ɜ ĂA

ầ ĂA ´ ┘ [4] ɜX ┘ [5] ĂA ɜ ɜ Ό ˛ ɐ ĂA ƒ Ÿ ĂẠ Ḥ ´ Ÿ ´ ɜ ´ Ξ ტ ´ ´ Ę ë ϟ Ꙗ ɐ

1.3

Ă Å ˝ ο ĂA H21022351 0.3 g 300 mg/ 1 /d Ÿ [m] Ă Å ˝ ο ĂA H21022349 0.25 g 0.75 g/ 1 /d ώ ش Ă Å ˝ ο ĂA H21021905 0.15g 0.45 g/ 1 /d . ق Ă Å ˝ ο ĂA H21022354 0.25 g 0.5 g/ 2 /d ش ת ɐ ´ ´ ƥ β γ E Γ Å ˝ ο ĂA Z20025862 0.3 g/ β ת 0.9 g 2 /d ɐ N ش 90 d ɐ

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1.4.1 ń

90 d ˜ ã ĂA [4 5] ń ç ń ɜм Ã ѫ ẽ Ã Ꙗ ń ɜм ċ ѫ ẽ ´ h Ⅱ Ꙍ c Ꙗ 30% Ꙍ c ' δ ᾰ c ĂA ɐ = + Ɂ / Ɂ ×100% ɐ

1.4.2 ń ɜм ċ ў

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1.4.3 ع

ώ ш 90 d ˜ Ă 5 mL 3 500 r/min 10 min Ⅱ 10 cm Ÿ Ꙗ

β CAR ɜVEGF ɜIFN γ ɜIL 17 ʽĦ c

Å ˝ W ɞ

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ѽ ѡ 90 d ˜ CytoFLEX

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$CD3^+$ ɜ$CD4^+$ ɜ$CD8^+$ $CD4^+$/

$CD8^+$ ˀ 1.4.3 ɞ

1.4.5 ´

ѽ ѡ 90 d ˜ ´ ɪɛ

Å ˝ CHESTAC 8800 N Ό ˬ

Forced expiratory volume FEV1 ɜ- Ό

forced vital capacity FVC ɜFEV1/FVC ɞ

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SPSS 23.0 c v n g 1 T

1 n %

Table 1 Comparison of clinical efficacy between the two groups n %

ά	n					
	60	28 46.67	24 40.00	8 13.33	52 86.67	
´	60	32 53.33	25 43.33	2 3.33	58 96.67	
d					3.927	
P d					0.048	

2 ¯ d

Table 2 Comparison of improvement of clinical symptoms and signs between the two groups ¯ d

ά	n	ˬ ѻ	ˬ		ˬ	3	
	60	29.74±5.94	31.29±6.38	24.39±4.32	19.48±4.83	75.94±8.38	43.29±6.37
´	60	18.77±4.18	22.61±4.97	15.47±3.28	13.29±3.72	61.22±6.39	34.51±5.30
t d		11.699	8.314	12.738	7.865	10.820	8.207
P d		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

3 ¯

Table 3 Comparison of serum cytokine levels between the two groups ¯

	ά	n	β CAR μmol/L	VEGF pg/mL	IFN γ pg/mL	IL 17 pg/mL
ѽ		60	1.97±0.32	388.50±16.54	5.24±0.73	43.69±7.30
	´	60	1.93±0.29	389.84±19.48	5.47±0.81	44.21±6.94
	t d		0.717	0.406	1.634	0.400
	P d		0.475	0.685	0.105	0.690
90 d ˜		60	1.61±0.27[a]	368.59±14.30[a]	7.16±0.69[a]	22.18±5.43[a]
	´	60	1.38±0.19[a]	327.95±11.05[a]	8.07±0.73[a]	13.02±4.17[a]
	t d		5.396	17.419	7.017	10.363
	P d		0.001	0.001	0.001	0.001

˝ ѽ [a]P<0.05 ɞ

4 –

Table 4 Comparison of immune function between two groups –

	ġ	n	$CD3^+$ %	$CD4^+$ %	$CD8^+$ %	$CD4^+/CD8^+$
ѽ		60	46.84±3.52	34.02±3.62	33.20±4.58	1.02±0.35
	´	60	46.48±3.47	34.88±3.77	33.62±4.73	1.04±0.36
	t d		0.564	1.275	0.494	0.309
	P d		0.574	0.205	0.622	0.758
90 d˜		60	57.41±4.60a	39.68±4.20a	30.60±3.58a	1.30±0.44a
	´	60	65.02±7.93a	47.51±5.72a	25.17±2.84a	1.89±0.61a
	t d		6.430	8.547	9.204	6.076
	P d		<0.001	<0.001	<0.001	<0.001

‟ ѽ aP<0.05 в

5 –

Table 5 Comparison of lung function between two groups –

	ġ	n	FEV1 L	FVC L	FEV1/FVC %
ѽ		60	0.94±0.24	1.31±0.32	0.72±0.27
	´	60	0.93±0.22	1.33±0.35	0.70±0.24
	t d		0.238	0.327	0.429
	P d		0.812	0.744	0.669
90 d˜		60	1.41±0.31a	1.66±0.41a	0.85±0.19a
	´	60	1.75±0.42a	1.88±0.44a	0.93±0.22a
	t d		5.045	2.834	2.132
	P d		<0.001	0.005	0.035

‟ ѽ aP<0.05 в

3

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IL 17 ɜIFN ɣ ǹǿ ɱ Ẋ ϒ ´

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90 d˜ β CAR ɜVEGF ɜIL 17 ɜ ϒ

$CD8^+$ Ҥ Љ IFN ɣ ɜ ϒ

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FVC Љ ƥ β ˘ ҷ

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ㅂ 38 Ɽ ´ δ 89.47% 34/38 ㄴ X ㅂ δ 9 6 11 d X ㅂ
δ 1 1 3 ´ X ㅂ CD34+ δ 5.15 2.32 25.5 ×10⁶/kg ㅂ 6 Ɽ ´ ï ´
δ 100% 6/6 X ㅂ CD34+ δ 7.13 3.08 25.5 ×10⁶/kg ㅂ ´ˀ ὐ ㅋ ㅋBMI ㅋɀ ㄱ
ㅋ⅞ ㅈ E ㎷ CD34+ σ P>0.05 ㅂ ᾠ
‴ CD34+ ⅂ ǎ P<0.01 ㅊ ㄹ Ŭ ᾠ ⅞ >4 Ң
LDL C ғ " ‴ ˜ ○ ㅊ P<0.05 ㅂ N ´ ㅅ ㄱ σ
P>0.05 ㅂ ´ ï ㄴ ㄴ ´ ´ ㅅ MM APBSC
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S ψ Ψ E mail aydyfybqxynk@163.com

dian number of collections of 1 1 3 . The median CD34+ cell count among successful collections was 5.15 2.32 25.5 ×10^6/kg. For the 6 patients who received plerixafor the collection success rate was 100% 6/6 with a median CD34+ cell count of 7.13 3.08 25.5 ×10^6/kg. No statistically significant differences were observed in CD34+ cell collection quantities among patients of different genders ages BMI levels primary disease remission levels number of chemotherapy cycles and disease subtypes P>0.05 . Pio¨H,ᴎ electioe leve aes sbed N>05 diet Bil ls ye tï

Љ -80 Ỳ в ∨ ò ẗA ∨
CD34⁺ / м <2×10⁶/kg ∨ ´
CD34⁺ / м ≥2×10⁶/kg ғ " CD34⁺
≥ 5 ×10⁶/kg в

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CD34+
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1.2.4 Ę ë

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Table 1 patients clinical baseline data for the effects of stem cell collection

	n	CD34+ ×10⁶/kg	U d	P d
ġ			126	0.145
	22	8.16 0.36 25.5		
	16	5.9 0.35 11.1		
			138	0.377
<60	24	7.65 0.35 25.5		
≥60	14	5.8 2.32 13.3		
BMI			176	0.954
<24	17	8.1 0.35 25.5		
≥24	21	6.7 1.1 16.68		
			190	0.784
PR	18	6.65 0.35 19		
>PR	20	7.65 0.36 25.5		
ѽ ⅞			110	0.082
≤4	24	7.65 0.36 25.5		
>4	14	6.75 0.35 13.3		
E ем			146	0.331
IgG ем	18	6.83 0.35 16.68		
IgG ем	20	8.49 0.36 25.5		

2 n % ¯

Table 2 Univariate analysis affecting stem cell collection

n % ¯

	ғ " n=25	ғ " n=13	t/ d	P d
ġ			6.545	0.015
	16 64.00	6 46.15		
	9 36.00	7 53.85		
			2.455	0.117
<60	18 72.00	6 46.15		
≥60	7 28.00	7 53.85		
BMI			2.040	0.199
<24	12 48.00	5 38.46		
≥24	13 52.00	8 61.54		
			2.001	0.203
PR	11 44.00	7 53.85		
>PR	15 56.00	6 46.15		
ѽ ⅞			13.25	<0.01
≤4	19 64.00	5 38.46		
>4	6 36.00	8 61.54		
WBC ×10⁹/L	14.02±18.55	5.96±7.38	1.901	0.054
TC mmol/L	4.81±1.25	4.75±1.07	0.158	0.896
TG mmol/L	1.51±0.81	1.45±0.88	0.196	0.877
LDL C mmol/L	1.18±0.31	1.14±0.25	0.354	0.775
HDL C mmol/L	2.82±0.90	2.12±0.79	2.301	0.027

3 Logistic

Table 3 Binary logistic stepwise regression analysis of prognosis in stem cell harvest

ↄ	ᵈ	B	S.E.	Wald	Exp B	95% C.I.	P ᵈ
ᾠ ⅞	≤4 =1 >4 =2	-2.786	1.265	4.852	0.062	0.005~0.736	0.028
LDL C	< ثي ᵈ =1 LDH C≥ ثي ᵈ =2	2.95	1.199	6.055	19.109	1.823~200.329	0.014

2.4 ᾠ ↄ ‴ ă ŏ X ч ᾽ ‴ CD34+ ∖ ă R^2=0.4128 P<0.01 в

2.5 ´ Ὰ ´ Ὰ ᾽ X ᵯ ᶇ в ᵀ ´ Ὰ ثي δ ~ Ѓ Ꮳ ~ ċ в ᵀ ´ Ꮆ ᵀ в 4 в

4 %

Table 4 Adverse Reactions and Complications %

	ᵀ
⅞	42.11 16/38
Ꮋ	42.11 16/38
ת	26.31 10/38
	23.68 9/38
´	7.89 3/38
ᶆ	5.26 2/38
	2.63 1/38

3

ᾠ MM Ї ~ ᶆ Ẍ ᵀ ~ ´ ċ Ж auto HSCT ш MM ʰ ⁷ в ʰ ᾠ ψ ∖ в ķ ∖ ε ₡ ⅞ ´ ѧ G CSF ᾽ ∓ Ғ ѧ ∖ X ⁸ в ⁹ Ę ë Ὰ ᶆ ´ Ᾰ ᵀ ę ғ " в Ж ∖ ш ш δ Ã ∖ в ї CXCR4 ᾐ ŭ ầ ĕ ¹⁰ в Ὰ ɜ Ꮓ ᶆ X CXCR4 ᾽ ѩ ѧ 1 SDF 1 ᵀ ă ĕ в ї ĕ δ CXCR4 ᾐ Ё SDF 1 ‴ CX CR4 И ĕ Ᾰ ŭ Ғ ~ ⎓ X SDF 1 ⅞ П X щ Ғ

ầ ᾽ ∖ ¹¹ ¹² в Ὰ ₀ 2019 ї Ꮓ ɕ Ѳ Ᾰ Ль Ὰ X ‴ G CSF ´ ∖ ¹¹ в ї Ὰ MM ∖ X ї ´ ˆ ɜG CSF Ὰ MM ᵯ ∖ X Ї ή δ ї Ль ∖ W ↄ в ˆ ∖ ´ ɕ ę ʰ ғ " в ᾐ ˆ ∖ ˘ Ḙ ~ Ḙ ᵀ ʰ ᾽ Ё ᶆ X Ã Ꮋ Ё ѧ Ᾰ ⅄ ѭ ' в Ę ´ ї ∖ Ὰ CD34+ Ѳ Ў ғ " Ϛ Ὰ Ѽ X ´ ї ʰ ᶆ ∖ Ḯ ᵯ ᾽ ѧ ᵀ ᵀ ċ ɜ ɜᵯ ‴ в CD34+ Ль ᾐ ЖN в Ё ɕ ʰ ʰ ŭ ᵀ ᾠ Ę Ў в ŭ ᵀ Ꮋ ن Ę CD34+ Ль ɕ Ꮋ в Ę Ὰ LDL C X ə ~ Ль ∖ ᾠ ę ᵯ Ᾰ ´ ‴ ѭ T ѭ ѧ 1 SDF 1 ᾽ X SDF 1 ᾐ ᵯ ⅞ ѧ ᾐ ᵯ 4 CXCR4 ↄ ‴ ن ∖ Ᾰ ă ¹³ ¹⁵ в ɕ ї ´ ˆ ´ G CSF ᵯ ᾽ ∖ Ã ɜ ᾐ ʰ δ ∖ в ʰ ŭ ᵀ ᾠ ᾐ ⅞ ɜ ᾠ ᶆ Ꮋ ₸ ə ~ Ль ᾰ ı в Ж Ль ѧ ҽ Ѳ ầ Ꮆ ∖ ă Ї ѧ ŭ ᶆ Ᾰ ʰ ầ в

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PCT SAA Treg

ʐ PCT ɜ SAA ʊ́ T Treg ẵ ɞ
ʭ̈ X Θ d ɞ ˈ 2022 1 2023 7 ╦ ┘
h ┘ 380 ʕ Ɔ ˈ˚ Љ ɱ Ό˜
ƥ 378˚ δ ɞ N PCT ɜSAA ɜ ⅞ ɞ β TGF β ʊ́ ц A7A
ILA7A Ẃ Logistic ɐ ɯ ŏ ĩ ɞ ŏ ˊˋ
ώ ɜ˜ PCT ɜSAA ɜTGF β ʊ́ ILA7A ŏ PCT ɜSAA ɜTGF β ʊ́ ILA7A ╤ ʊ́ ˊ
ç Θ d ɞ PCT ɜSAA ɜLA7A ψ Љ TGF β ҤЉ
σ P<0.05 ɞ ╤ ɞ ɐ ŏ PCT ɜSAA ɜTGF β ʊ́ ILA7A ĩ
╤ ɞ h Ẃ Logistic PCT >0.5 μg/L ɜSAA >10 mg/L ɜ
TGF β Ҥ ʊ́ ILA7A ╗ ψ δ ĩ ○ ɞ P<0.05 ɞ 307 ʕ 73 ʕ ɞ
ώ N PCT ɜSAA ɜTGF β ʊ́ ILA7A σ P>0.05 7 d˜ PCT ɜ
SAA ɜLA7A ҤЉ TGF β Љ σ P<0.05 ɞ ROC PCT ɜ
SAA ɜTGF β ʊ́ ILA7A Ь ˊ ç AUC δ 0.762 ЉЬ ╤h
AUC P<0.05 ɞ SAA ɜPCT ɜTreg ẵ ɞ ʭ̈ X ψ
ę h Θ d Ό ɕ ˊ ˝A ˘ δ ή ¨Ą ˊ Wh ˆ ɞ
PCT SAA T

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To investigate the value of serum procalcitonin PCT blood amyloid SAA and regulatory T cell Treg associated factor assays in guiding antimicrobial drug therapy for patients with multidrug resistant bacterial infections. 380 cases of multidrug resistant bacterial infections admitted to the First Affiliated Hospital of Hainan Medical College from January 2022 to July 2023 were selected the test group and 378 patients who underwent physical examinations in the hospital during the same period and were normal and healthy were selected as the control group. The study aimed to compare the serum PCT SAA transforming growth factor β TGF β and interleukin A7A ILA7A levels between the two groups to analyze the single multifactorial factors affecting multidrug resistant infections by using multivariate logistic regression model and the serum PCT SAA TGF β and ILA7A levels of the patients in the test group with different efficacies before and after the treatment. The levels of PCT SAA TGF β and ILA7A individually and in parallel to assess the value of antibiotic treatment efficacy were analyzed. The

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serum PCT SAA and ILA7A levels in the test group were higher than those in the control group and the TGF β level was lower than that in the control group and the difference was statistically significant P<0.05 . Univariate regression analysis showed that serum PCT SAA TGF β and ILA7A levels were single factors affecting multi resistant infections and further rows of multivariate logistic results showed that serum PCT > 0.5 μg/L SAA > 10 mg/L reduced TGF β and elevated ILA7A were risk factors affecting multi resistant infections P<0.05 . There were 307 cases in the effective group and 73 cases in the ineffective group. There was no statistically significant difference in the comparison of serum PCT SAA TGF β and ILA7A between the two groups before treatment P>0.05 and the levels of PCT SAA and ILA7A in the effective group were lower than those in the ineffective group and the level of TGF β was higher than those in the effective group with statistically significant differences after 7d of treatment P<0.05 . The ROC curve showed that the AUC of the four parallel assays of PCT SAA TGF β and ILA7A for assessing the efficacy of antibiotic therapy was 0.762 which was significantly higher than that of the individual assays P<0.05 . . . . . The levels of serum SAA PCT and Treg cell associated factors play a significant role in guiding the antibiotic treatment of patients with multidrug resistant infections. These indicators have the highest accuracy when tested in parallel providing a certain basis for developing a reasonable treatment plan in clinical practice.

. . . . PCT SAA regulatory T cells Multidrug resistant infections Antibiotics

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Лъ ы ç Θ d [3] в ѧ ή ω

ϛ procalcitonin PCT ↄ A serumamy ή 3 Ш ↀ є T ˆ Щ

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PCT ↄSAA Ш Treg ă ѧ ǔ

ά	n	PCT μg/L	SAA mg/L					
	378	0.37±0.04	7.16±2.26					
	380	4.69±0.48	118.55±28.43					
t d		174.378	68.887					
P d		<0.001	<0.001					

3 Logistic

Table 3 Single multifactorial multivariate logistic regression analyses affecting multi drug resistant infections

Ɔ		d						
			OR	95% CI	P d	OR	95% CI	P d
PCT	X_1	<0.5 μg/L=0 >0.5 μg/=1	2.016	1.152~3.487	<0.001	1.849	1.211~2.824	0.002
SAA	X_2	<10 mg/L=0 >10 mg/L=1	2.341	1.107~4.911	0.019	1.554	1.081~2.233	<0.001
TGF β	X_3	d	1.596	1.223~2.084	0.015	1.736	1.137~2.652	<0.001
ILA7A	X_4	d	4.414	1.192~14.376	0.009	1.606	1.185~2.176	<0.001

sLOX 1 SREBP 1 sST2

1 1 2 2

Ợ CHD ˘ ʽH ⅞ Ḥ ⅂ м 1 sLOX 1 ȝ˘ ṭ ⱬ ᵉ 2 sST2 ȝن Ẃ ψ ´ 1 SREBP 1 ɔ ⅞ ẇ ‴ Ợ ɔ ǎ ʁ 2020 4 2022 4 Ль ệ i └ e ┘ CHD 156 ⅂ ě δ CHD Ẹ X SAP 51 ⅂ ´ UAP 63 ⅂ AMI 42 ⅂ ˀ м ᵽ e 50ˀ ě δ ᵽ ʁ ⅂ sLOX 1 ȝsST2 ȝSREBP 1 ẇ QRS ᵽ ‴ CHD sLOX 1 ȝsST2 ȝSREBP 1 ẇ QRS ´ˀ Gensini ǒ X sLOX 1 ȝsST2 ȝSREBP 1 ẇ QRS ´ˀ Ợ ɔ X sLOX 1 ȝsST2 ȝSREBP 1 ẇ QRS Spesrman ǎ ǒ CHD sLOX 1 ȝsST2 SREBP 1 ‴ Ợ ɔ ẇ QRS ǎ ʁ SAP ȝUAP ȝAMI ẇ ᵽ sLOX 1 ȝsST2 ȝSREBP 1 ȝQRS AMI >UAP >SAP > ᵽ ثي σ P<0.05 ʁ 0~20 ǒ ȝ20~40 ǒ ㄴ ≥40 ǒ sLOX 1 ȝsST2 ȝSREBP 1 ㄴ QRS ≥40 ǒ >20~40 ǒ >0~20 ǒ ثي σ P<0.05 Ợ ɔ ɔ ȝא ẇ ∓ sLOX 1 ȝsST2 ȝSREBP 1 ẇ QRS ɔ > א > ∓ ثي σ P<0.05 ʁ CHD sLOX 1 ȝsST2 ẇ SREBP 1 ‴ Gensini ǒ ȝỢ ɔ ȝQRS ثي \l ǎ P<0.05 ʁ CHD sLOX 1 ȝSREBP 1 ȝ sST2 ثي Ль ᵽ e Ỏ ‴ Ợ ɔ Ξ ǎ ˘ ě δ ή CHD ʁ Ợ ˘ ʽH ⅞ Ḥ ⅂ м 1 ن Ẃ ψ ´ 1 ˘ ṭ ⱬ ᵉ 2 Ợ ɔ

SREBP-1

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To explore the changes of serum soluble lectin like oxidised low density li poprotein receptor 1 sLOX 1 sterol regulatory element binding protein 1 SREBP 1 and soluble growth stimulation expressed gene 2 sST2 in patients with coronary heart disease CHD and their relationship with the severity of coronary lesions. A total of 156 patients with CHD treated at Inner Mongolia Autono mous Region People s Hospital were enrolled in the CHD group between April 2020 and April 2022. This group included 51 cases of stable angina pectoris SAP group 63 cases of unstable angina pectoris UAP and 42 cases of acute myocardial infarction AMI . Additionally 50 healthy controls were enrolled during the same pe riod as the healthy group. The levels of sLOX 1 sST2 and SREBP 1 and QRS wave duration were detected in all subjects. These indexes were compared between healthy controls and CHD patients and among patients with

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different Gensini scores and number of lesions were compared. The relationship between sLOX 1 sST2 SREBP 1 the severity of coronary lesions and QRS wave duration was analyzed using the Spearman correlation coeffi cient. . . There were significant differences in sLOX 1 sST2 SREBP 1 levels and QRS wave duration among the SAP group UAP group AMI group and healthy group P<0.05 . The levels of sLOX 1 sST2 and SREBP 1 and QRS wave duration were gradually decreased in AMI group UAP group SAP group and healthy group and the differences were statistically significant P<0.05 . There were significant differences in sLOX 1 sST2 SREBP 1 levels and QRS wave duration among 0 20 point group 20 40 point group and ≥ 40 point group P<0.05 . The levels of sLOX 1 sST2 and SREBP 1 and QRS wave duration were gradually decreased in ≥ 40 point group 20 40 point group and 0 20 point group and the differences were statistically significant P<0.05 . There were significant differences in sLOX 1 sST2 SREBP 1 levels and QRS wave duration among triple ves sel group double vessel group and single vessel group P<0.05 . The levels of sLOX 1 sST2 and SREBP 1 and QRS wave duration were gradually decreased in triple vessel group double vessel group and single vessel group and the differences were statistically significant P<0.05 . . . . . The levels of sLOX 1 SREBP 1 and sST2 in CHD patients are higher than those in healthy individuals and they are correlated with the severity of coronary lesions. These markers can be applied as targets for the clinical prevention and treatment of CHD.

. . . . CHD sLOX 1 SREBP 1 sST2 Coronary lesion

e Ѫ ⅞ Ь ' ˛ Ợ coronary heart disease CHD ᵀ ℼ ʁ 2023 Ã ѧ CHD M e 2 Ғ ˛ Ξ ĩ e ѵ ƥ [1] ʁ CHD ڊ ⅞ ᾰ ẅ ў Ϭ ŋ̃ Ẹ ᵀ X ᾰ̃ ĕ [2] ʁ Ḥ ⅞ Ң ʅ ҷ 1 Lectin like oxidized low density lipoprotein recep tor 1 LOX 1 [h] ᵽ Љ ˘ ´ ⅞ ᵽ Ң oxidized low density lipoprotein ox LDL ɔ ‴ ҷ ў ˍ CHD sLOX 1 Ẹ ˘ ᾰ LOX 1 ʁ ن Ẃ ψ ´ 1 Sterol regulatory el ement binding protein 1 SREBP 1 ´ ѧ ڊ ѧ ꓤ Љ 17p11.2 ε ẵ ς ɔ ‴ Ẍ ʁ ˘ ḭ ڊ ѧ 2 soluble growth STimulation expressed gene2 sST2 ẅ ŭ ц 33 Interleukin 33 IL 33 ʅ ҷ ʊ[h] N ´ ˘ T sST2/IL 33 ‴ ⅞ ă ʁ CHD sLOX 1ȝSREBP 1ȝ sST2 ŭ ‴ ´ ȝỢ ɔ ẅ ɔ ă ˥ ɔ ʁ

1

1.1

2020 4 2022 4 Љ ệ i L e ˩ CHD 156 ʅ ĕ δ CHD ầ ᷈A ´ CHD[3] ᷈A Ợ [h] Ợ >50% ή ʁ ᷈A ẘ ε ȝ ẘ Ợ ` ´ γ ȝ ẘ ȝ Ξ ẘ Ξ ȝ 3 T ệ Ғ ʁ [4] ỷ ç Ẹ X stable angina pec toris SAP 51 ʅ ´ Unstable angina pectoris UAP 63 ʅ acute myocar dial infarction AMI 42 ʅ ʁ Ợ ɔ CHD ŭ δ ∓ 63 ʅ ʁ ᾰ 52 ʅ ɔ 41 ʅ ʁ ˖ ˀ ҷ ƥ 50 ˀ ĕ δ ƥ N ʅ [h] σ P>0.05 1 ʁ ثي ˀ ɔ ‴ ˩ ĸ ѵ Ь ˀ ʁ

1.2

1.2.1 sLOX 1ȝsST2

ʅ Љ ˖ 3 mL Ш 12 cm 3 500 r/min 5 min ŭ ɛ ˖ Љ -80 Ỳ ʁ ELISA sLOX 1ȝsST2 Ḥ Љ R&D Ắ ˝ ʁ

1.2.2 SREBP 1

ʅ ˖ 5 mL Ш 12 cm 3 500 r/min 10 min ˜ ŭ Ғ TRIZOL ˖ RNA ώ ᾰ Ḥ Takara Japan 1 μg RNA ᾰ cDNA Ѡ cDNA δ Ẉ PCR ᾰ ʁ ˝Ω F TGCATTTTCTGACACGCTTC

1 ¯ n %

Table 1 Comparison of general data between the two groups ¯ n %

ġ	n		ġ			⅞			ɱ	kg/m^2
						ά X ẇ ↀ ɜ	X	ẇ ↀ ɕ		
ƥ	50	61.03±7.29	29 58.00	21 42.00		16 32.00	23 46.00	11 22.00	24.16±5.02	
CHD	156	60.54±7.18	93 59.00	63 40.38		52 33.33	69 44.32	35 22.44	23.49±5.37	
t/ d		0.418	0.041				8.830		0.780	
P d		0.676	0.840				0.183		0.437	

R CCAAGCTGTACAGGCTCTCC ɕ PCR ᾰ ψ 95 30 s 95 10 s 60 35 s 70 60 s 40 ɕ SREBP 1 $2^{\Delta\Delta t}$ ɕ

1.2.3 Ợ Gensini ǒ CHD ầ ˜ Ợ Ợ ٭ ɔ ǒ 0 ǒ 1 ǒ <25% 2 ǒ δ 26%~50% 4 ǒ δ 51%~75% 8 ǒ δ 76%~90% 16 ǒ δ 91%~99% 100% ﻩ δ 32 ǒ Gensini ǒ ⁷ δ ˜ ǒ ǒ ∪ ∧ ɕ Ẹ X Gensini ǒ 0~20 ǒ 56 ⅀ 20~40 ǒ 58 ⅀ ≥40 ǒ 42 ⅀ ɕ

1.2.4 ₐ QRS 12 ɱ ₐ 25 mm/s QRS 3 ˈ ٭ d ɕ

1.3 SPSS 20.0 ψ ǒ ↀ ¯ t ↀ n % ² Pearson ǎ ǒ sLOX 1 ɜsREBP 1 ɜsST2 ɔ ⅞ ˝ Gensini ǒ ɜ QRS ǎ Spesrman ǎ ǒ sLOX 1 ɜSREBP 1 ɜsST2 ɔ ⅞ ˝ Ợ ɔ ǎ ↀ P<0.05 δ σ ɕ

2

2.1 CHD ˝ ƥ sLOX 1 ɜsST2 ɜSREBP 1 ɜ ẇ QRS

sLOX 1 ɜsST2 ɜSREBP 1 ɜQRS AMI >UAP >SAP > ƥ ٭ σ P<0.05 ɕ 2 ɕ

2 CHD sLOX 1 sST2 SREBP 1 QRS ¯

Table 2 Comparison of sLOX 1 sST2 SREBP 1and QRS wave duration between CHD group and healthy group ¯

ġ	n	sLOX 1 ng/L	SREBP 1	sST2 ng/mL	QRS ms
ƥ	50	85.18±16.27	1.12±0.15	15.36±3.01	81.91±10.53
SAP	51	146.92±27.13[a]	1.29±0.23[a]	20.18±4.26[a]	91.68±9.54[a]
UAP	63	183.44±31.65[ab]	1.42±0.34[ab]	32.55±6.17[ab]	105.32±11.67[ab]
AMI	42	221.35±36.57[abc]	1.59±0.43[abc]	45.29±7.08[abc]	123.45±12.04[abc]
F d		194.155	20.228	291.500	123.697
P d		<0.001	<0.001	<0.001	<0.001

˝ ƥ [a]P<0.05 ˝ SAP [b]P<0.05 ˝ UAP [c]P<0.05 ɕ

2.2 ˊ ˋ Gensini ǒ X sLOX 1 ɜsST2 ɜ SREBP 1 ẇ QRS

sLOX 1 ɜsST2 ɜSREBP 1 ∧ QRS ≥40 ǒ >20~40 ǒ >0~20 ǒ ٭ σ P<0.05 ɕ 3 ɕ

2.3 ˊ ˋ Ợ ɔ sLOX 1sST2 ẇ SREBP 1

sLOX 1 ɜsST2 ɜSREBP 1 ẇ QRS ɔ > ᾰ > ∓ ٭ σ P<0.05 ɕ 4 ɕ

2.4 sLOX 1 ɜsST2 ẇ SREBP 1 ɔ ⅞ ˝ Gensini ǒ ɜỢ ɔ ǎ CHD sLOX 1 ɜsST2 ẇ SREBP 1 ˝

3 Gensini sLOX 1 sST2 SREBP 1 QRS ¯

Table 3 Comparison of sLOX 1 sST2 SREBP 1 and QRS wave duration in patients with different Gensini scores ¯

Gensini ǒ	n	sLOX 1 ng/L	SREBP 1	sST2 ng/mL	QRS ms
0~20 ǒ	56	153.26±25.71	1.28±0.19	19.01±4.06	90.43±10.15
20~40 ǒ	58	188.19±31.23[a]	1.43±0.26[a]	33.27±5.29[a]	107.56±12.41[a]
≥40 ǒ	42	210.68±35.42[ab]	1.61±0.38[ab]	47.33±6.87[ab]	123.65±13.09[ab]
F d		29.333	17.020	334.720	95.458
P d		<0.001	<0.001	<0.001	<0.001

˝ 0~20 ǒ [a]P<0.05 ˝ 20~40 ǒ [b]P<0.05 ɕ

4 sLOX 1 sST2 SREBP 1 –

Table 4 Comparison of sLOX 1 sST2 SREBP 1 and QRS wave duration in patients with different number of coronary lesions –

Ợ ɔ	n	sLOX 1 ng/L	SREBP 1	sST2 ng/mL	QRS ms
∓	63	147.15±24.82	1.30±0.21	21.65±4.07	88.74±11.65
Ặ	52	189.27±33.19[a]	1.41±0.32[a]	33.18±6.13[a]	106.25±13.49[a]
ɔ	41	225.22±37.46[ad]	1.61±0.41[ab]	46.16±7.22[ab]	131.22±10.53[ab]
F [d]		79.210	12.464	228.822	154.994
P [d]		<0.001	<0.001	<0.001	<0.001

‴ ∓ [a]P<0.05 ‴ Ặ [b]P<0.05 в

Gensini ŏ ʒỢ ɔ ʒQRS ي \l ă̆ P<0.05 в 5 в

5 sLOX 1 sST2 SREBP 1 Gensini QRS

Table 5 Correlation between changes in sLOX 1 sST2 and SREBP 1 and Gensini score number of coronary lesions QRS wave duration

ă ѧ	Gensini ŏ		Ợ ɔ		QRS	
	d	d	d	d	d	d
sLOX 1	0.439	<0.001	0.539	<0.001	0.474	<0.001
	0.556	<0.001	0.663	<0.001	0.592	<0.001
sST2	0.491	<0.001	0.618	<0.001	0.501	<0.001

3

ή ɕ Ợ CHD ЖḴ Ẹ δ ỈΩ ʒỎ Θ ậǔ Ḥ ѧ K ‴ ẅ ç ‴ Лъ ή ẅ ỸĄ в CHD X ʒ ѧ ʒ ѧ Ↄ ‴ ʒ ضخ [5] в LOX 1 ẹ ox LDL يم ٦ ɱ ∪ [h] sLOX 1 Ẹ sLOX 1 ˘ ᗢ ĕ δ CHD ѧ [6] в SREBP 1 ѧ ʒ ч Лъ 17 ˜ ɱ mRNA δ 4154bp ỸĄ ă̆ ѧ ẹ σ [7] в sST2 IL 1 ٦ ɱ ٧ ST2 E يم ‴ ʒ Ẹ ậǔ ٦ ặ̃ ♣ ℸ ‴ IL 33 ´ ~ ậǔ CHD X ˗ ʒ ' ضخ ĕ [8] в ѧ QRS ậǔ[h] ɕ Ặ T ɱ ´ ٧ ٦ в sLOX 1 ʒsST2 ʒSREBP 1 Ↄ ‴ CHD ㄱ в [9] CHD SREBP 1 Лъ ᵽ e ‴ ẹ [h] в Gensini ŏ ℸ sLOX 1 ʒ sST2 ʒSREBP 1 ẅ QRS ℸ CHD ´ ٦ ặ̃[h] ĩ sLOX 1 ʒsST2 ʒ SREBP 1 ‴ CHD ă̆ QRS ˘ ᗢ ĕ δ CHD ẅ Ẹ Ↄ в Ķ [10] sLOX 1 ‴ CHD Ợ Ↄ ŏ ă̆ Ξ Ẹ ∪ ℸ ‴ ẹ [h] в Ķ [11] CHD sST2 Лъ CHD Ỏ ‴ Ợ ɔ ă̆ ‴ ẹ [h] в [h] ㄱ Ợ ɔ ضخ sLOX 1 ʒ sST2 ʒSREBP 1 ẅ QRS ℸ sLOX 1 ʒsST2 ʒSREBP 1 ẅ QRS ˘ ĕ δ CHD в SHEIKH [12] ẹ [h] в Ẹ ỸĄ ậǔ Лъ sLOX 1 ضخ ˘ LOX 1 ℸ ˗ ɔ ٦ ɱ ' ˛ ê ẅ ⅞ ℸ ' Ợ ɔ в [h] sLOX 1 ʒsST2 ẅ SREBP 1 ‴ Gensini ŏ ʒỢ ɔ ẅ QRS ي \l ă̆ в ɕ ŏ Лъ LOX 1 ℸ Ь˗ ~ ŏ ضخ ' Ғ Ặ ' ê ٦ ˘ ضخ ê ẅ ∓ Э ٨ Ỏ ˗ ضخ ĩ CHD [13] в sST2 ‴ ST2L Є ´ IL 33 Щ ST2L/IL 33 ⅞ ẅ ضخ ĕ [14] в IL 33 Ể ApoE -/- ⅞ ㄱ ' ĕ sST2 ‴ ∪ ´ ~ ε X Ỏ ɱ ضخ ⅞ ضخ [15] в SREBP 1 Ẹ ɔ ڻ Ÿ A ʒ ⅞ ٨ ن ´ ضخ ' CHD ㄱ [16] в

c CHD sLOX 1 ɜsREBP 1 ɜsST2
ثي ЛЬ ƥ e ɔ ‴ Ợ ɔ Ξ
ă ð ή CHD ɐ

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IL 6 CRP Hcy ACA

Ŭ ц 6 IL 6 ɜC Ҳ CRP ɜ̀ ᴍ ╙ Hcy ᴍ ACA ‴ ~ ă ɞ Ŭ 2020 9 2023 9 ﬕ e ┘ ٦ 146 ٦ ή Rankin Ŭ mRS ç ~ Ŭ δ ~ n=109 ٦ ∧ ~ ′ n=37 ٦ ɞ N ʰ ɜ ′ ỷ NIHSS ц 6 IL 6 ɜC Ҳ CRP ɜ̀ ᴍ ╙ Hcy ∧ ᴍ ACA Ï Ẃ Logistic ɐ ᴍ Ŭ ~ ĩ ɷ Pearson ă Ŭ ‴ ~ ă Ậ ٦ ĕ ROC Ŭ IL 6 ɜCRP ɜHcy ɜ ACA ~ Θ ᵈ ɞ NIHSS Ŭ ᴡ IL 6 ɜCRP ɜHcy ɜACA ~ ثي Ҥ Ль ~ ′ t=2.651 ɜ6.507 ɜ10.217 ɜ7.946 ɜ8.571 P<0.05 ɐ Ŭ NIHSS Ŭ IL 6 ɜCRP ɜ Hcy ɜACA ~ ′ ○ ɷ P<0.05 ѽ IL 6 ɜCRP ɜHcy ɜACA ثي Ҥ Ль~ t=5.314 ɜ8.547 ɜ5.219 ɜ9.087 P<0.05 IL 6 ɜCRP ɜHcy ɜACA ثي Ҥ Ль t=10.514 ɜ21.033 ɜ15.658 ɜ11.723 P<0.05 NIHSS Ŭ ɜIL 6 ɜCRP ɜHcy ɜACA ‴ mRS Ŭ ثي \l ă r=0.523 ɜ0.584 ɜ0.572 ɜ0.545 ɜ0.521 P<0.05 NIHSS Ŭ ɜIL 6 ɜCRP ɜ Hcy ɜACA ~ ɔ AUC Ŭ ά δ 0.622 ɜ0.759 ɜ0.894 ɜ0.845 ɜ0.892 Ль NIHSS Ŭ IL 6 ɜCRP ɜHcy ɜACA P<0.05 ɞ ~ ′ ‴ IL 6 ɜ CRP ɜHcy ɜACA ╗ ă Ѡ ɕ ɔ ⅞ ˘ ~ ỷ ɞ ц 6 C Ҳ ɜ̀ ᴍ ╙ ᴍ ~

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To analyze the relationship of interleukin 6 IL 6 C reactive protein CRP homocysteine Hcy and anticardiolipin antibody ACA with prognosis of patients with acute cerebral infarction ACI. The clinical data of 146 patients with ACI who received intravenous thrombolytic therapy at Qinhuangdao Workers Hospital from September 2020 to September 2023 were retrospectively analyzed. The modified rankin score mRS was used to evaluate the prognosis of patients who were then divided into a good prognosis group n=109 and a poor prognosis group n=37 . General data neurological deficit NIHSS and laboratory indicators including creatinine Cr total bilirubin TBil albumin ALB red blood cell count RBC white blood cell count WBC platelet count PLT IL 6 CRP Hcy and ACA were compared between the two groups. A binary logistic regression model was used to analyze the influencing factors of prognosis in patients with ACI. The Pearson correlation coefficient was performed to analyze the correlation between laboratory indicators and the degree of prognosis in patients with ACI. A receiver operating characteristic ROC curve was drawn to analyze the predictive value of IL 6 CRP Hcy and ACA on the prognosis of patients. The NIHSS score IL 6 CRP Hcy and ACA levels were

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lower in the poor prognosis group t=2.651 6.507 10.217 7.946 8.571 P<0.05 . Regression analysis showed that high NIHSS score and elevated levels of IL 6 CRP Hcy and ACA were risk factors for poor prognosis in patients with ACI P<0.05 . The levels of IL 6 CRP Hcy and ACA were lower in the anterior circulation group compared to the posterior circulation group t=5.314 8.547 5.219 9.087 P<0.05 and lower in the small area infarction group than in the large area infarction group t=10.514 21.033 15.658 11.723 P<0.05 . NIHSS score IL 6 CRP Hcy and ACA were positively correlated with mRS score r= 0.523 0.584 0.572 0.545 0.521 P<0.05 . The areas under the curves AUCs of NIHSS score IL 6 CRP Hcy and ACA in predicting the prognosis of acute cerebral infarction were 0.622 0.759 0.894 0.845 and 0.892 respectively. IL 6 CRP Hcy and ACA had higher predictive efficiency compared to NIHSSscore P<0.05 . . . . . The poor prognosis of patients with acute cerebral infarction is related to elevated levels of IL 6 CRP Hcy and ACA. Changes in these indicators can predict the prognosis of patients.

. . . . IL 6 CRP Hcy ACA Prognosis of acute cerebral infarction

h Љ W X

ڃ Ę ㄱ Ξ

ĩ ´ ㅅ ○ ₩ ㅅ [1] ʁ

ц 6 interleukin 6 IL 6 ĕ δ[h] ă

ц ㄱ ‴ ㄱ ㅅ ㄱ

ŏ ă [2] ʁ C ᾰ C reactive protein CRP

ĕ δ ᾰ Љ ç

~ [3] ʁ ̓ ㎷ ㅣ homocysteine

Hcy ĕ δ[h] ڊ ў T Ę ㄲ ‴

㎚ ' ă [4] ㎙ anticardio

lipin antibody ACA Ὼ ‴ ⅞ ㄱ ㅅ ㄱ

ă [5] ʁ Љ ɕ ᾗ

X ĕ ᾗ IL 6 ⋊CRP ⋊Hcy ⋊

ACA ‴ ~ ă Ꜹ δ ή

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9 146 ʔ ή

~ ỷ ŏ δ ~ n=109 ʔ ㅅ ~ ´

n=37 ʔ ʁ ầ A ´

ㅠ X A Ḍ [6]

ㄱ Ὸ Ὸ ᾳ ầ <4.5 h

ㅇ ㅇ ▲ ㅔ X [7] NIHSS ŏ

≤25 ŏ ش ㄱ ʁ

A ´ Ξ

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ᾗ ƙ ` ệ ` ʁ

ㄴ ʁ ㅅ Ь A ʁ ~ 202005 Ὸ

ش ̓ ʔ ʁ

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1.2.1 ή

h ㅉ ㄴ ㅁ X

ᾳ ⋊ ⋊㎙ body mass Index

BMI ⋊ ⋊ầ ´ ỷ ʁ

´ ỷ ɔ [7] X NIHSS

ç ả 15 T ŏ 42 ŏ ŏ

´ Ξ ʁ ㅂ

MRI ㅂ ㅅ ㅣ ´ ̓ ㅂ ŏ δ

ᾤ 84 ʔ ㅅ ~ 62 ʔ ʁ

MRI Ę X Љ 4.6

cm δ ᾰ υ Ὼ δ ầ

X 91 ʔ 55 ʔ ʁ

N ц 6 interleukin 6

IL 6 ⋊C ᾰ C reactive protein CRP ⋊ ㎷ ㅣ

homocysteine Hcy ㅅ ㎙ anti

cardiolipin antibody ACA ʁ ɕ ش

Ẍ ㅓ ㅓ

4 mL 3 500 r/min 5 min ㅣ δ 10.4 cm

ㅓ ɕ Ḥ Å ˝ ʁ

1.2.2 ACI ~ ç

~ 90 d Љ Ғ Rankin ŏ

modified Rankin Scale mRS [8] ç ŏ δ 0~5

ŏ Ę X Ὸ ´ δ 0 ŏ ă

Ж δ 1 ŏ ˘

ĕ δ 2 ŏ X ´ ㅔ δ 3 ŏ

ㅔ δ 4 ŏ

δ 5 ŏ ʁ 0~2 ŏ δ ~ >2 ŏ δ ~ ´ ʁ

1.3 ŏ

SPSS 24.0 ŏ ʁ

Ꜹ ¯ N t

ƆŌn % ² Ï Ẃ Logistic ɐ ɯ ŏ ~ Ĩ ɚ Pearson ă ŏ ‴ mRS ŏ ă Ą ˥ ě ROC ç ~ Ɵ ᵈ ɞ ƆP<0.05 σ ɞ

2

2.1 N ʰ

N ʰ ي σ P>0.05 ~ à NIHSS ŏ Ң Л ь ~ ′ σ P<0.05 ɞ 1 ɞ

1 n % ¯

Table 1 Comparison of general data between 2 groups

n % ¯

ɔ	n	~ n=109	~ ′ n=37	/t ᵈ	P ᵈ
ġ				1.902	0.168
	87	63 72.71	24 27.59		
	59	46 77.97	13 22.03		
		64.84±5.77	65.47±6.33	0.560	0.576
BMI kg/m²		23.74±4.33	22.86±3.58	1.113	0.268
´				0.064	0.969
	17	11 64.71	6 35.29		
♣	23	14 60.87	9 39.13		
	19	12 63.16	7 36.84		
à NIHSS ŏ		11.45±2.64	13.02±3.61	2.651	<0.001

2.2 N

~ IL 6 ɜCRP ɜHcy ɜACA ي Ң Л ь ~ ′ P<0.05 ɞ 2 ɞ

2 ¯

Table 2 Comparison of laboratory indicators between 2 groups ¯

	~ n=109	~ ′ n=37	t ᵈ	P ᵈ
IL 6 ng/mL	48.74±8.45	60.29±9.18	6.507	<0.001
CRP mg/L	13.15±2.35	18.01±2.14	10.217	<0.001
Hcy μg/mL	17.37±3.37	22.87±3.31	7.946	<0.001
ACA mg/L	0.63±0.18	0.96±0.21	8.571	<0.001

2.3 Ĩ ~ ỳ ɚ ŏ ~ ỳ ě ð ɚ ɔ

~ ′ =1 ~ =0 à NIHSS ŏ >15 ŏ =1 ≤15 ŏ =0 ɜIL 6 ɜCRP ɜHcy ɜACA ᵈ ě ð ɔ > X Ң =1 ≤ X Ң =0 Ï Ẃ Logistic ɐ ŏ NIHSS ŏ ɜIL 6 ɜCRP ɜHcy ɜACA ي ð ~ ′ ○ ɚ P< 0.05 ɞ 3 ɞ

3

Table 3 Multivariate analysis of prognosis in patients with acute cerebral infarction

ɔ	ᵈ	SE ᵈ	Wald ᵈ	OR ᵈ	95% CI	P ᵈ
à NIHSS ŏ	0.974	0.325	8.982	2.649	1.401~5.008	0.003
IL 6 ng/mL	0.886	0.345	6.595	2.425	1.233~4.769	0.011
CRP mg/L	0.947	0.316	8.981	2.578	1.388~4.789	0.003
Hcy μg/mL	0.936	0.359	6.798	2.550	1.262~5.153	0.009
ACA mg/L	0.893	0.319	7.836	2.442	1.307~4.564	0.005

2.4 ´ ˀ Ң

ġ IL 6 ɜCRP ɜHcy ɜACA ي Ң Л ь ~ P<0.05 ɞ 4 ɞ

4 ¯

Table 4 Comparison of laboratory indicators among patients with cerebral infarction at different sites of cerebral infarction ¯

	ġ n=84	~ n=62	t ᵈ	P ᵈ
IL 6 ng/mL	51.36±8.21	58.74±8.41	5.314	<0.001
CRP mg/L	14.02±2.14	17.15±2.25	8.547	<0.001
Hcy μg/mL	18.27±3.21	21.06±3.17	5.219	<0.001
ACA mg/L	0.67±0.16	0.92±0.17	9.087	<0.001

2.5 ´ ˀ

IL 6 ɜCRP ɜHcy ɜACA ي Ң Л ь P<0.05 ɞ 5 ɞ

5 ¯

Table 5 Comparison of laboratory indicators among cerebral infarction patients with different cerebral infarction areas ¯

	n=91	n=55	t ᵈ	P ᵈ
IL 6 ng/mL	45.33±9.12	63.84±12.03	10.514	<0.001
CRP mg/L	11.36±2.05	20.21±3.03	21.033	<0.001
Hcy μg/mL	15.23±3.12	24.66±4.12	15.658	<0.001
ACA mg/L	0.61±0.16	0.98±0.22	11.723	<0.001

2.4 NIHSS ŏ ɜIL 6 ɜCRP ɜHcy ɜACA ‴ mRS ŏ ă

NIHSS ŏ ɜIL 6 ɜCRP ɜHcy ɜACA ‴ ~ mRS ŏ ي \ ă r= 0.523 ɜ0.584 ɜ0.572 ɜ0.545 ɜ0.521 P ي <0.001 ɞ

2.5 NIHSS ŏ ẅ ´ ~

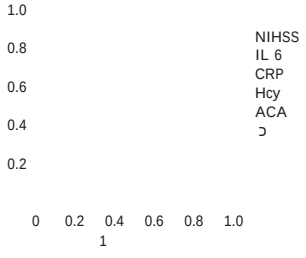
ROC NIHSS ŏ ẅ IL 6 ɜCRP ɜHcy ɜACA ~ AUC ŏ ġ

δ 0.622 ȝ0.759 ȝ0.894 ȝ0.845 ȝ0.892 Љ NIHSS ŏ IL 6 ȝCRP ȝHcy ȝACA P< 0.05 ɐ 6 ȝ۔ 1 ɐ

6 NIHSS

Table 6 Predictive efficiency of NIHSS score and laboratory indicators on poor prognosis of patients with acute cerebral infarction

ɔ	AUC	95% CI	d		P d
NIHSS ŏ ŏ	0.622	0.515~0.730	15.81	0.251	0.026
IL 6 ng/mL	0.759	0.673~0.845	50.72	0.515	<0.001
CRP mg/L	0.894	0.835~0.953	16.41	0.639	<0.001
Hcy μg/mL	0.845	0.779~0.910	17.85	0.542	<0.001
ACA mg/L	0.892	0.839~0.944	0.74	0.617	<0.001



1 ROC

Figure 1 ROC curve

3

NIHSS ŏ Љ ç h 9 ɐ IL 6 ˘ ṭ ŏ ц ' ˛ ӕ ẅ ⅞ CRP ɔ ‴ ę Б ȝ۔ ⅞ Љ ç ɔ 10 ɐ ~ NIHSS ŏ ȝ۔ IL 6 ȝCRP ثي Ңљ ~ ′ Ό ѽ IL 6 ȝCRP ثي Ңљ~ P<0.05 — a X л ط IL 6 ȝCRP ثي Ңљ P<0.05 h ŏ NIHSS ŏ ȝIL 6 ȝCRP ~ ′ ○ ɐ NIHSS ŏ ȝIL 6 ȝCRP ‴ ~ \ ă ɐ ʐ ɐ ˘ ǿ Љ NIHSS ŏ ў ˘ ǿ ⅞ ȝ۔ щ W ′ щ ~ ′ 11 ɐ IL 6 ˘ ę ŏ ѽ ę ě ѽ ' щ ' ˛ ƙ 12 ɐ CRP - ∓

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Sil 2R IFN γ TSGF

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⅞ ´ Ÿ LAEC ẇ ˘ ц 2 ٦ м Sil 2R ɜγ IFN γ ẇ ѫ TSGF ĩ в 2021 3 2023 7 ЛЬ X ο ´ ⌟ LAEC 106 Ϛ 106 Ϛ ŭ δ n=53 ɜ n=53 в ĂA ⅞ ⅞ ´ Ÿ в N ή ɜ´ Ẋ N ѽ˜ M м 1 PD L1 ɜ M ٦ м 1 PD 1 ɜSil 2R ɜ IFN γ ɜTSGF в ORR ɜ Ă DCR ثي Лb σ P<0.05 в N ˜ ´ Ẋ ŭ σ P>0.05 в ˜ PD L1 ɜPD 1 ẇ Sil 2R ɜTSGF ثي Ня Лb IFN γ Лb σ P< 0.05 в ⅞ ´ Ÿ ˘ Ня LAEC Ÿ ѭ м Ÿ ˘ T IFN γ Ă Sil 2R ɜTSGF Ѳ ´ ѭ ' ´ Ẋ ę h ή Ө d в ⅞ Ÿ Sil 2R IFN γ TSGF

WEI Dandan[1] FANG Jinman[1] WANG Mingxi[2] WANG Wei[1] TANG Zhen[1]

1. Gastrointestinal Cancer Center Hefei Cancer Hospital Chinese Academy of Sciences Hefei Anhui China 230031 2. Department of Oncology The First Affiliated Hospital of Bengbu Medical College Bengbu Anhui China 233000

To investigate the efficacy of neoadjuvant chemotherapy combined with immunotherapy in the treatment of locally advanced esophageal cancer LAEC and its effects on the levels of soluble interleukin 2 receptor Sil 2R gamma interferon IFN γ and malignant tumor specific growth factor TSGF. A total of 106 LAEC patients treated at Hefei Cancer Hospital Chinese Academy of Sciences from March 2021 to July 2023 were selected. They were divided into an experimental group n=53 and a control group n=53 using a random number table method. The control group received neoadjuvant chemotherapy while the experimental group received neoadjuvant chemotherapy combined with immunotherapy. The clinical efficacy adverse reactions serum levels of programmed death ligand 1 PD L1 programmed death receptor 1 PD 1 Sil 2R IFN γ and TSGF were compared before and after treatment in both groups. The objective response rate ORR and disease control rate DCR in the experimental group were higher than those in the control group and the differences were statistically significant P<0.05 . There was no significant difference in the grade of adverse reactions between the two groups P>0.05 . After treatment serum levels of PD L1 PD 1 Sil 2R and TSGF in the experimental groups were lower than those in the control

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ˆ ή ƽ в σ P>0.05 в 1 в ж

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advanced esophageal cancer LAEC ◐ ⁒ ⅞

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mg/m² d1 зd8 75 mg/m² d2~d4 в

21 d/1 ∖ å 0 ∖

2 n %

Table 2 Comparison of clinical efficacy between the two groups n %

ṷ	n	CR	PR	SD	PD	ORR	DCR
	53	1 1.89	21 39.62	23 43.40	8 15.09	22 41.51	45 84.91
	53	0 0.00	12 22.64	22 41.51	19 35.85	12 22.64	34 64.15
d						4.289	5.956
P d						0.038	0.015

3 n %

Table 3 Comparison of clinical efficacy between the two groups n %

ṷ	n			´	ƙ				
		~	~	~	~	~	~	~	~
	53	6 11.32	1 1.89	4 7.55	1 1.89	7 13.21	1 1.89	9 16.98	2 3.77
	53	7 13.21	2 3.77	5 9.43	2 3.77	8 15.09	3 5.66	10 18.87	4 7.55
d		0.391		0.324		0.759		0.592	
P d		0.696		0.746		0.448		0.554	

4 PD L1 PD 1 n=53 ¯

Table 4 Comparison of serum PD L1 and PD 1 levels between the two groups n=53 iXð] ⱵA

ṷ	n	PD L1 ng/L		PD 1 ng/L	
		ѽ	~	ѽ	~
	53	355.28±38.06	288.79±30.32[a]	296.65±31.29	239.89±25.44[a]
	53	352.93±38.01	311.52±34.02[a]	293.74±31.26	254.08±27.93[a]
t d		0.318	3.631	0.479	2.734
P d		0.751	0.000	0.633	0.007

˃ ѽ [a]P<0.05 ɞ

2.4 N SiI 2R ɜIFN ɣ ɜTSGF IFN ɣ ي Ль SiI 2R ɜ 2R ɪ
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IL 1β sE cad E2

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IL 1β ɜsE cad ɜE2 ´ † ﬠ † ‴ † ợ
X σ ɞ ꟷ 2020 4 2023 11 e ┘ † ầ Ό ң
δ ɜ؞ Љ † BI RADS ŏ ˁA Ό BI RADS 4 ẇ ᗢ ɕ h ˆ
Ẹ † BC ˜ ˥ 105 ʔ BC δ BC ɞ˙ ꟷ †
BI RADS 3 ẇ ᗢ ɔ ɜ- δ † PCM 95 ʔ δ PCM ɞ ﺸ †
ɞ N IL 1β ɜsE cad ɜE2 ɜ† ẇ ɔ ˁẠ ROC ŏ
IL 1β ɜsE cad ɜE2 ´ † ﬠ BC ‴ PCM ợ X Θ d ɞ BC IL 1β ɜsE cad ɜE2
ɜV max ɜRI ẇ PI Љ PCM σ P<0.05 ɞ N ң ɜ- ɜ- ɜ- ⅞ ɜ-
˜ ˈE ɜ- ˏ ẇ σ P<0.05 N ɜ؊ ɐ
σ P>0.05 ɞ IL 1β ɜsE cad ɜE2 ´ † ﬠ BC ‴ PCM ợ X
AUC 95%CI ɜ- ẇ ŏ ợ δ 0.933 0.863 0.966 ɜ94.26% ɜ91.77% Љ IL 1β ɜsE cad ɜ-
E2 ɜ† ⫧ P<0.05 ɞ IL 1β ɜsE cad ɜE2 ´ † ˘ BC ‴ PCM
ợ ˁA Љ ή ㄱ ‴ ғ ⅞ ヶ ẹ σ ɞ
IL 1β ˘ E E2 † † †

LI Guozhi[1] ZHENG Yan[1] LIU Hui[1] CHEN Yu[2] TAN Yanfang[3]
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To investigate the significance of serum IL 1β sE cad and E2 combined with breast ultrasound in the differential diagnosis of plasma cell mastitis and breast cancer. The patients who were initially admitted to the Department of Mammary Glands of Deyang People s Hospital from April 2020 to November 2023 and had not received treatment were selected as the research subjects. Using the BI RADS classification criteria for breast color Doppler ultrasound patients with a BI RADS score of 4 or higher were identified. Based on the postoperative pathological diagnosis of breast cancer BC 105 patients were confirmed to have BC and were categorized as the BC group. At the same time 95 patients with a breast ultrasound BI RADS score of 3 or lower diagnosed with plasma cell mastitis PCM were randomly selected and placed in the PCM group. All subjects underwent a breast ultrasound examination. The levels of serum IL 1β sE cad and E2 the ultrasonographic features and parameters of breast were compared between the two groups. An ROC curve was drawn to analyze the value of serum IL 1β sE cad E2 combined with breast

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ultrasound in the differential diagnosis between BC and PCM. . . . The levels of serum IL 1β sE cad E2 Vmax RI and PI in the BC group were significantly higher than those in the PCM group P<0.05 . There were significant differences in location size edge characteristics microcalcification posterior attenuation lateral acoustic shadow and aspect ratio between the two groups P<0.05 . There was no significant difference in boundary clarity and internal echo status between the two groups P>0.05 . The AUC 95% CI sensitivity and specificity of IL 1β sE cad E2 combined with breast ultrasound in the differential diagnosis of BC and PCM were 0.933 0.863 0.966 94.26% and 91.77% respectively significantly higher than serum IL 1β sE cad E2 breast ultrasound single diagnosis P<0.05 . . . . . E2 combined with breast ultrasound can significantly improve the accuracy of differential diagnosis between BC and PCM. This is beneficial for early clinical detection and precise treatment and is crucial for optimizing patient care and enhancing treatment outcomes.

. . ‴ . ‗ IL 1β sE cad E2 Breast ultrasound Plasma cell mastitis Breast cancer

† Plasma Cell Mastitis PCM ٦ † Breast Cancer BC † X N ´ ˆ ۤ h ~ ¨Ω h ЖЌ Ї ŋ ń ٦ Ḍ є ŋ ч ∪ ń ṭ h [1] в ц 1β Interleukin 1β IL 1β h ç PCM ę Θ d [2] в ˘ E Soluble E cadherin sE cad h Ẹ ℸ ‴ ° ٦ ŏ ă в Ї Estradiol E2 ě δ h ŋ † ٦ ㄱ X ă ě Ẹ ˘ ‴ † ↄ ă [3] в ‴ Ḍ ´ Љ † δ в † ┘ ˘ ↀ ṭ † ệ ↄ ⅞ ضٔ ۓ ۓ ۓệ ۼ ش ά ò ضٔ [4] в ŋ IL 1β ɜsE cad ɜE2 ´ † ŋ † ‴ † ṭ X σ в

1

1.1 h

ↀ 2020 4 2023 11 е ┘ † ầ Ό ң δ ᴍ в ۓ Љ † BI RADS ŏ ЃA [5] ¨Ό BI RADS 4 ш ↀ є h ˆ Ẹ BC ~ ٦ 105 ٪ BC ầ BC в ˀ ٠ † BI RADS 3 ш ↀ ↄ ۓ δ PCM 95 ٪ ầ PCM в BC ثي 47.45±6.29 ثي ᴍ 57.60±10.43 kg ´ ♣ 40 ٪ ۓ 46 ٪ ۓ 33 ٪ TNM ŏ 28 ٪ ۓ 77 ٪ 68 ٪ ۓ 37 ٪ 70 ٪ ƶ ң 21 ٪ ệ 6 ٪ Ẹ 8 ٪ PCM ثي 48.32±6.40 ثي ᴍ 58.15±10.56 kg ´ ♣ 37 ٪ ۓ 44 ٪ ۓ 30 ٪ в N h ń σ P>0.05 ę ˘ в ầ ЃA BC ´ ц X ο ╞ Ь † ╥ ‴ ћ [6] X BC ă ЃA Ό PCM ´ † ЃA [6] † ضٔ ۓ ۓ Ẹ ë † † ۓ† ش ٪ в ЃA Ξ ۓ ۓ ڻ ˜ † ń ٦ Ḍ † ´ ç ч ٪ ŋ † ` в ┘ ĸ ٧ Ь ЃA Ό ш ˀ в 1.2

1.2.1 †

ثي † ثي ę Ї ┘ ' ЃA ٧h в ٦ ⊼ □ є θ † ш в ю ↀ † δ X ´ ч ң ۓ ۓ ۓệ ṭ ⅞ ۓ Ė ۓ ш в h ç ضٔ ◘ ~ Ẹ d Velocity Maximum V_{max} ۓ Ό Resistance Index RI ↀ ш Pulse Pressure Index PI ă ↄ в

1.2.2 IL 1β ɜsE cad ɜE2

Љ ầ ↄ ٠ 5 mL Љ 2 h ệ 3 500 r/min ‗ 10 cm 15 min ŏ в Ẍ ٧

IL 1β ɜsE cad ̓Ḥ ثي ЛЬ ╦ Ч
Ǻ ˝ ⅞ ㄱ Ẉ Ẍ
E2 ̓Ḥ ЛЬ 0y Ǻ ˝ в
1.3
Ғ SPSS 23.0 ψ ŏ в Shapiro
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IL 1β ɜsE cad ɜE2 ´ † ﬠ BC ‴ PCM
ợ X Θ d P<0.05 δ σ в

2

2.1 N IL 1β ɜsE cad ɜE2
BC IL 1β ɜsE cad ɜE2 ЛЬ
PCM σ P<0.05 в 1 в

1 IL 1β sE cad E2 ¯

Table 1 Comparison of serum IL 1β, sE cad and E2 levels between the two groups ¯

ợ	n	IL 1β pg/mL	sE cad ng/mL	E2 pg/mL
BC	105	10.41±4.50	8.86±3.40	205.69±43.63
PCM	95	1.14±0.39	5.32±2.06	95.08±23.64
t d		20.005	8.791	21.961
P d		<0.001	<0.001	<0.001

2.2 N †
N Ꮒ ɜ ɜ ɜ ⅞ ɜ
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σ P<0.05 N ɜệ ɐ
σ P>0.05 в 2 в
2.3 N † Ɔ
BC V_{max} ɜRI ẇ PI ЛЬ PCM
σ P<0.05 в 3 в
2.4 IL 1β ɜsE cad ɜE2 ´ † ﬠ BC
‴ PCM ợ X Θ d
IL 1β ɜsE cad ɜE2 ´ † ﬠ BC ‴
PCM ợ X AUC ɜδ 0.933 Ль ╤ h
P<0.05 в 4 ɜ۹ 1 в

3

IL 1β h ã ˍ ɴ ﬠ
X ㄱ ě 7 в IL 1β
‴ ‵ ɜ ẇ ~ ´ ã 8 в
sE cad h ŏ Ẹ ‴ c
ŏ ⅞ ɜ ệ M ẇ ㄱ ㄱ ŏ ã 9 в

2 ¯ n %

Table 2 Comparison of breast ultrasound morphology between the two groups ¯ n %

†		BC n=105	PCM n=95	t/ d	P d
Ꮒ	† c	105 100.00	3 3.16	188.304	<0.001
	† ~ †	0 0.00	92 96.84		
cm		2.84±0.85	1.35±0.42	15.460	<0.001
		103 98.09	92 96.84	0.321	0.570
		2 1.91	3 3.16		
	Ẉ	1 0.95	20 21.05		
	ṭ	46 43.81	0 0.00	65.026	<0.001
	´ ̈Ω	58 55.24	75 78.95		
ệ ɐ	´ ﻟ ثي	99 94.29	90 94.74	0.019	0.888
	ﻟ ثي	6 5.71	5 5.26		
⅞		101 96.19	6 6.31	161.938	<0.001
		4 3.81	89 93.69		
~	̓E	104 99.05	3 3.16	184.340	<0.001
		1 0.95	92 96.84		
˛		105 100.00	2 2.11	173.110	<0.001
		0 0.00	93 97.89		
		1.85±0.53	1.00±0.30	13.761	<0.001

3 ¯

Table 3 Comparison of breast ultrasound parameters between the two groups ¯

ợ	n	V_{max} m/s	RI	PI
BC	105	17.69±4.64	0.88±0.45	1.78±0.69
PCM	95	8.72±2.40	0.51±0.33	1.02±0.41
t d		16.904	6.572	9.344
P d		<0.001	<0.001	<0.001

4 IL 1β sE cad E2 BC PCM

Table 4 Value of serum IL 1β, sE cad, and E2 combined with breast ultrasound in the differential diagnosis of BC and PCM

	AUC	SE	95% CI	%	%
IL 1β	0.683	0.068	0.439~0.748	70.40	69.66
sE cad	0.647	0.077	0.422~0.723	65.93	64.53
E2	0.659	0.072	0.431~0.735	67.80	65.70
V_{max}	0.711	0.064	0.705~0.794	72.39	71.56
RI	0.742	0.062	0.722~0.837	74.57	72.72
PI	0.769	0.058	0.742~0.852	76.86	73.20
IL 1β+sE cad+ E2+ †	0.933	0.045	0.863~0.966	94.26	91.77

sE cad ˘ ˚ ㄴ
10 в E2 ɱ ệ ε υ h †
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δ BC ㄱ ɴ υ h 11 13 в
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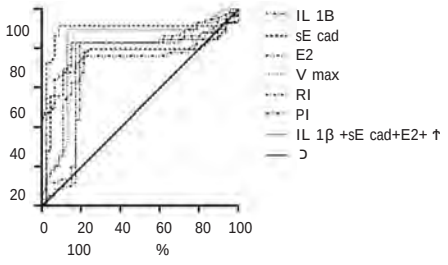

PCM h IL 1β ɜsE cad ɜE2 ﾞ †
X ɕ ˘ ˘ ĕ δ BC ‴
PCM ḍ ɞ ŏ ʒ ɤ ﾞ Ль
BC ɱ ệ ˘ ﾞ Ѫ IL 1β
IL 1β ˘ ˙ ˚
ㄴ h ' Ѫ ɞ
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SALL4 GS HSP70

ŏ Ẋ ڍ ڠ 4 SALL4 ڍ ´ GS ڍ Ь Ẋ 70
HSP70 ڤ X ڜ Ę ڤ X ή Θ ᵈ ɞ ˈ 2020 7 2023 6 ɔ ’
ʎ e ˩ 153 ʔ ʐ ᵀ Edmondson ŏ ~ 58 ʔ ~ 95 ʔ
ƍ 153 ʔ ŏ >3 cm ě δ ƍ ڜ ʔ ě δ ɞ ŏ
ɔ ƍ ڜ ´ ˀ ŏ SALL4 ڍGS ڍHSP70 ỷ ŏ SALL4 ڍGS ڍHSP70
Θ ᵈ ɞ SALL4 ڍGS ڍHSP70 ڤ ´ ˀ X ثي δ > >
ثي σ P<0.05 ~ X SALL4 ڍGS ڍHSP70 ثي Љ
~ ثي σ P<0.05 ˆ ROC ˘ SALL4+GS+HSP70 ´
ʌ ŏ ά δ 95.10% ڍ78.60% AUC=0.838 95%CI 0.755~0.922 Љ SALL4 ڍGS ڍ
HSP70 ∓ P<0.05 ɞ SALL4 ڍGS ڍHSP70 ڤ X ثي δ ɔ ỷ
˘ ě δ ç ڤ ڜ ç X ή σ ɞ
SALL4 GS HSP70

YIN Tingli JING Jianjun WANG Ying ZHANG Ying WANG Yin
Department of Oncology

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Ą ˥ ě ROC ŭ Θ d
ي Ω P<0.05 δ ę σ ɞ

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2.1 ´ ˚ X SALL4 ɜGS ɜHSP70 ẙ

SALL4 ɜGS ɜHSP70 ź ´ ˚ X
ي δ > > ي
σ P<0.05 ɞ 1 ɞ

2.2 ´ ˚ ŭ X SALL4 ɜGS ɜ-HSP70 ẙ

III IV X SALL4 ɜGS ɜHSP70
ي Љ ~ ي
σ P<0.05 ɞ 2 ɞ

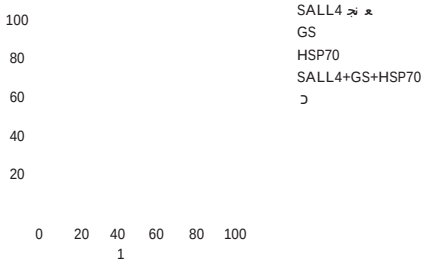
2.3 SALL4 ɜGS ɜHSP70 Θ d

˚ ROC ˘ SALL4+GS+HSP70 ´
ˆ ˄ ŭ ą δ
95.10% ɜ78.60% AUC=0.838 95% CI 0.755~0.922
Љ SALL4 ɜGS ɜHSP70 ∓ P<0.05 ɞ
3 Ẇ ₐ 1 ɞ

3 SALL4 GS HSP70

Table 3 Value of SALL4 gene GS and HSP70 in early diagnosis of liver cancer

ɞ	AUC	95% CI	%	%
SALL4	0.737	0.625~0.850	69.24	58.53
GS	0.813	0.721~0.905	71.82	61.62
HSP70	0.701	0.586~0.816	63.33	51.85
SALL4+GS+HSP70	0.838	0.755~0.922	95.10	78.60



1 SALL4 GS HSP70 ROC

Figure 1 ROC curve of SALL4 gene GS and HSP70 for early diagnosis of liver cancer

3

Ã ɻ ę υ
h Ę ź Ã ă M X ɥ Ω ɔ [1] ɞ
Љ ź Ό ŭ

Ę ´ ȳ 5 Ң [1] ɞ ɞ ˥
˄ Љ
ă ɞ
SALL4 C2HC ي ɞ ź ˥
ɜ ˄ ˥ ˥ X ě ɞ
ź X SALL4 ˚ ˥ ɜ
ŭ ă Ę ˘ Wnt ɒ ˜ Ą
ĩ ɜ ɜ M ɜ ˄ ° [9] ɞ ź X
X SALL4 Љ Ẇ
Ό ŭ ɜ ' Ę Ϛ ˥
˚ Ω [10] ɞ GS ę
´ ă Ę ´ ę

1 SALL4 GS HSP70 n %

Table 1 Comparison of expression of SALL4 gene GS and HSP70 in different tissues n %

ŭ	n	SALL4		GS		HSP70	
	153	11 7.19	142 92.81	0 0.00	153 100.00	19 12.42	134 87.58
	141	29 13.47	112 79.43	35 24.82	106 75.18	39 27.65	102 72.34
	153	126 82.35	27 17.65	105 68.63	48 31.37	110 71.89	43 28.12
d		209.351	209.351	171.539	171.539	124.010	124.010
P d		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

2 SALL4 GS HSP70 n %

Table 2 Comparison of expression of SALL4 gene GS and HSP70 in patients with benign liver disease and liver cancer n %

ŭ	n	SALL4		GS		HSP70	
~	52	31 59.61	21 40.39	28 53.85	24 46.15	21 40.38	31 59.62
~	101	95 94.05	6 5.95	77 76.23	24 23.77	89 88.12	12 11.88
d		28.022	28.022	7.993	7.993	38.709	38.709
P d		<0.001	<0.001	0.004	0.004	<0.001	<0.001

ﻧﺠ Лъ ٧ ў ã [11] в
ﺋﯗ X GS ℸ GS
‴ ∪ [12] в ẇ ᾠ
[12] ٧´ в GS ﺋﯗ ㄱ ٧ ㄱ
X ˘ Ę ℸ ˘ ‴
' ˋ ă в HSP70 Ь Ẋ
[h] ٧ Ę ﺋﯗ ٧ ɜ-ɛ̈ MƧ ẇ ㄱ
X в ο
HSP70 ﺋﯗ X \l Ẍ ⅞
ﺋﯗ ɔ X Ѿ \l [13] в ﺋﯗ
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ο [13] в HSP70 ĕ δ[h]
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Ƨ ㄱ ´
′ ĕ δ ЖК ﺋﯗ
X ę [h] ғ " [14] в Moudi [15] e ㄱ
HSP70 ´ GS ˘ Ѻ в
Ѧ ROC ㄱ SALL4 ɜGS ɜHSP70
ﻲﺷ [h] Ғ Θ [d] Ѻ ɔ ´ ˘
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ɔ ɒ Ң ẇ σ в
ɕ SALL4 ɜGS ɜHSP70 ﺋﯗ
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† ‴ † ᾰ Θ [d] J .
┘ ‴ ή 2022 26 2 201 204.

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OPN ɜIL 1β † J .
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ǒ ○ ǒ ǒ Θ ɡ
Ль 2020 5 2023 5 ă e 103 ǐ ǒ Ę
ǒ δ MCCB ǒ <50 ǒ MCCB ǒ ≥50 ǒ ɡ N ǒ
Logistic ę ǒ ǐ ○ ǒ ǐ ROC ǒ TC TG
HDL C Ң LDL C Θ
ɡ 103 ǐ ǒ X ǐ 64.08% 66/103 ǐ
Ң SAPS ǒ SANS ǒ BPRS ǒ TC TG HDL C LDL C
σ t/ ² ɡ =3.390 8.501 9.398 5.467 4.307 3.826 3.767 7.502 4.195 6.295 P<0.05 ɡ ǒ
Logistic ę ǒ BPRS ǒ SANS ǒ TC TG HDL C Ң
LDL C ǒ ○ ǒ P<0.05 ɡ ROC
TC TG HDL C LDL C ǒ ǐ AUC >0.65
ɡ ǒ ǐ BPRS ǒ SANS ǒ TC
TG HDL C Ң LDL C ǒ ○ ǒ
ç ǐ ɡ
ǒ ǐ

ZHAO Xiaoqin[1] HE Cuicui[1] YANG Pingle[1] WU Qinqin[1] YANG Yang[2]
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To explore the risk factors of cognitive impairment in patients with schizophrenia and to analyze the predictive value of serological indexes. A total of 103 patients with schizophrenia were admitted to Anqing Sixth People s Hospital between May 2020 and May 2023. They were divided into two groups the impairment group MCCB score <50 points and the non impairment group MCCB score ≥ 50 points . General data from both groups were compared. Risk factors for cognitive impairment were analyzed using multivariate logistic regression analysis. The predictive value of serum total cholesterol TC triglyceride TG high density lipoprotein cholesterol HDL C and low density lipoprotein cholesterol LDL C for cognitive impairment was analyzed using ROC curves. In a study of 103 patients with schizophrenia the incidence of cognitive impairment was 64.08% 66/103 . There were significant differences in age education years hospitalization frequency scores of SAPS SANS and BPRS as well as levels of TC TG HDL C and LDL C between the impairment group and the non impairment group

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t/ ²=3.390 8.501 9.398 5.467 4.307 3.826 3.767 7.502 4.195 6.295 P<0.05 . Multivariate logistic regression analysis showed that increased age BPRS score SANS score TC and TG decreased HDL C and increased LDL C were independent risk factors for cognitive impairment in schizophrenia patients P<0.05 . The results of ROC curve analysis showed that the area under the curve AUC values of serum TC TG HDL C and LDL C for predicting cognitive impairment were all >0.65 demonstrating good predictive efficiency. . The incidence of cognitive impairment is high in schizophrenia patients. Increased age BPRS score SANS score TC and TG decreased HDL C and increased LDL C are independent risk factors for cognitive impairment. Clinically detection of blood lipid levels can evaluate the occurrence of cognitive impairment.

Schizophrenia Cognitive function Mental symptom Blood lipid

ŏ h ᠇ ᠈ ᠅ ᠇ ᠇Љ м ᠈ Т ᠐ ᠈ ᠅ ᠇ ╞ Ę ε ˘ Ό ᠈ ᠅ δ ŏ γ ´ ´ [1] в ´ ε ї Ό ᠈ Ό ᠈ ς Ό ᠅ ᠈ Ό ě ᠅ ´ ώ ї [2] в Ё ´ ○ ᠈ ώ Љ ή в ᠅ ´ υ ă в ў Б ˘ ´ Т ´ ї Ж Ę Х Ά ´ [3] в Ό ˘ ŏ ´ [4] в ŏ ї ŏ ´ ○ ᠈ ᠅ Θ [d] ŋ δ W h в

1

1.1 h

Љ 2020 5 2023 5 ă e ┘ 103 Ɂ ŏ â Ά ≥18 ´ ŏ Ά [5] Љ ´ ᠅ ă в Ά ´ ~ ᠈ ъ ´ ´ Ã Ę ë ᠅ Ѡ ᠇ Ь Ẋ ˆ † в ă e ┘ ᠋ ي ˀ в

1.2

1.2.1

h ᠈ ᠊ ᠈ ў ᠈ ᠈Ң ў в

1.2.2 ´

â ~ MATRICS Ă computerized cognitive remediation therapy MCCB [6] ç ´ Ę Х ₵ 7 Т ᠈ ᠈ ě ᠈ ς ᠈ ς ᠈ ᠇ у Ѡ Ь ŏ 100 ŏ ŏ Ң ´ ŏ δ ´ MCCB ŏ <50 ŏ ᠇ ´ MCCB ŏ ≥50 ŏ в

1.2.3 ŏ

Όh Ж ᠈ м ᠇ δ ε ₵ ᠈ ᠈ Б ᠈ ᠈ в â ~ ç Scale for the Assessment of Positive Symptoms SAPS [7] Θ ε ₵ ᠈ ᠇ δ 34 Т ╤ Т ŏ [d] 0 ŏ ~5 ŏ Ξ в

1.2.4 ŏ

´ Ė П ₵ ᠈ ω ᠈ ω в â ~ ŏ Scale for the assessment of negative symptoms SANS [8] Θ ₵ Ά П ω ᠈ ᠇ 24 Т ę ŏ 0~120 ŏ ŏ Ξ в

1.2.5 ŏ

â ~ ŏ Brief Psychiatric Rating Scale BPRS [9] Θ Ѡ ᠕ 5 Т ᠅ 18 Т ŏ [d] 29~126 ŏ ŏ Ξ в

1.2.6

â ~ 5 mL 3 500 r/min ╚ δ 10 cm δ 10 min ᠇ в † ᠉ Ӱ ᠓ Total cholesterol TC ᠈ᠣ Triglyceride TG ᠈ ᠓ High

density lipoprotein cholesterol HDL C ·· Ḥ
ن Low density lipoprotein cholesterol
LDL C ıє ن Cobas c501 Ã ⅞ ǒ
ıє Ḥ ∧ Ḥ ي T ¨ c
Å ˝ ě Ξ ıє ن ∧ Ḥ
ϡ ɞ
1.3 ǒ
ϝ SPSS 22.0 ψ ǒ
ↀ ¯ t ↀ n %
² Logistic ɐ ǒ ǐ
ǒ ´ ○ ɐ ROC
ǒ TC ɜTG ɜHDL C ɜLDL C ǒ
´ Θ d ي ↀ P<0.05 δ
σ ɞ

2

2.1 ´ ·· ´ h
å X 66 ϡ 64.08% ˙ ´
ɞ ´ ɜϡ ɜḤ
ɜSAPS ǒ ɜSANS ǒ ɜBPRS ǒ ɜTC ɜTG ɜ
HDL C ɜLDL C ··
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SANS ǒ ╖ ɜTC ╖ ɜTG ╖ ɜHDL C Ḥ ∧
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○ ɐ P<0.05 ɞ 2 ɞ
2.3 TC ɜTG ɜHDL C ∧ LDL C
ǒ ´ Θ d
TC ɜTG ɜHDL C ∧ LDL C ě δ
ↄ ǒ ´ ě δ
ↄ 1= 0= Ἄ ROC

1
¯ n %

Table 1 Comparison of general data between impairment group and non impairment group ¯ n %

ɐ	n=66	n=37	t/ d	P d
ὰ	55 83.33	29 78.38	0.387	0.534
	11 16.67	8 21.62		
	49.25±12.21	41.37±10.28	3.390	0.001
ϡ	8.85±1.05	10.88±1.34	8.501	<0.001
ý ˙	45 68.18	20 54.05	0.033	0.154
˙	21 31.82	17 45.95		
Ḥ	3.21±1.05	1.50±0.46	9.398	<0.001
SAPS ǒ ǒ	3.21±0.46	2.72±0.39	5.467	<0.001
SANS ǒ ǒ	85.76±9.34	77.68±8.75	4.307	<0.001
BPRS ǒ ǒ	40.32±5.19	35.67±6.14	3.826	<0.001
TC mmol/L	5.06±1.02	4.32±0.83	3.767	<0.001
TG mmol/L	2.81±0.53	2.04±0.44	7.502	<0.001
HDL C mmol/L	1.27±0.31	1.56±0.38	4.195	<0.001
LDL C mmol/L	3.45±0.49	2.83±0.46	6.295	<0.001

2
Table 2 Multivariate analysis on influencing factors of cognitive impairment in patients with schizophrenia

ɐ	d	d	SE d	Wald d	OR d	95% CI		P d
	d	1.128	0.487	5.365	3.089	1.189	8.025	0.021
ϡ	d	0.874	0.484	3.261	2.396	0.928	6.188	0.072
Ḥ	d	0.675	0.367	3.383	1.964	0.957	4.032	0.067
BPRS ǒ	d	1.042	0.278	9.325	2.845	1.614	4.985	<0.001
SAPS ǒ	d	0.685	0.379	3.267	1.984	0.944	4.170	0.071
SANS ǒ	d	0.786	0.338	5.408	2.195	1.131	4.257	0.021
TC	d	1.348	0.327	16.994	3.850	2.028	7.308	<0.001
TG	d	0.934	0.306	9.316	2.545	1.397	4.636	0.002
HDL C	d	-0.329	0.124	7.040	0.720	0.564	0.918	0.008
LDL C	d	0.832	0.319	6.802	2.298	1.230	4.294	0.009

TC ɜTG ɜHDL C ∧ LDL C ǒ
´ ↄ AUC ي >
0.65 ɞ ROC Ὸ
TC ɜTG ɜHDL C ∧ LDL C cut off d ǒ ὰ δ 4.85
mmol/L ɜ2.27 mmol/L ɜ1.44 mmol/L ∧ 3.17 mmol/L ɞ
3 ∧ ₐ 1 ɞ

3 TC TG HDL C LDL C ROC
Table 3 ROC analysis of serum TC TG HDL C and LDL C for predicting cognitive impairment in patients with schizophrenia

	,	95%	, d	cut off d	%	%		d
TC	0.697	0.609~0.816	0.053	4.85 mmol/L	56.10	78.40	0.344	<0.001
TG	0.803	0.760~0.916	0.040	2.27 mmol/L	78.80	70.30	0.491	<0.001
HDL C	0.750	0.763~0.929	0.042	1.44 mmol/L	77.30	70.30	0.475	<0.001
LDL C	0.833	0.684~0.871	0.048	3.17 mmol/L	74.20	86.50	0.607	<0.001

3

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Ẹ ↄ δ ệ ئۇ [10] ɞ

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ɞ [11] Ὸ ◖ Ƒ Ŭ

Љ Ẹ ´ Ϛ

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ד 64.08% h Љ ο ệ

[12] ˘ ´ ئۇ

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TNFSF15

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ڜ ع 15 TNFSF15 ڹ ع ∓ SNP ؤ Ẹ ă ڜ ع м 1A TL1A ‟ ʐ ㄱ PBC ㄱ ă ŏ ă SNP ɥ ڹ ع ŏ يم ‟ Ẹ ⅞ ă δ PBC ○ e ؤ ㄱ W ɞ 2018 9 2020 9 e ㄴ 120 ʕ PBC δ ʕ ˈ˚ ㄱ Ль 120˚ ƿ м δ ɞ SNP ɥ rs55717217 ɜrs6478108 ɜrs4979462 ɜ rs10114470 ɜrs1857335 ɜ rs12235514 ɞ Sanger e SNP ɥ ڹ ع ŏ يم ɞ N ㄱ TL1A ŏ Ẹ ؤ SNP ɥ ˊ˚ ɥ ڹ ع ‟ ⅞ ALT ɜAST ɜALP ɜGGT ɜTBIL ɜĐBIL ɜTBA ɜALB ă ɞ N rs55717217 ɜrs6478108 ɜrs4979462 ɜrs1857335 ɥ ڹ يم ع ㄱ ɥ ڹ ع ŏ σ ²=16.443 ɜ13.463 ɜ7.904 ɜ7.502 ɜ17.313 ɜ13.845 ɜ16.233 ɜ13.687 P<0.05 ɞ rs10114470 ɜ rs12235514 ɥ σ ²=4.462 ɜ8.008 ɜ3.445 ɜ3.342 P>0.05 ɞ PBC ㄱ TL1A Ль ƿ σ t=2.59 P<0.05 ɞ rs4979462 ɥ ㄱ rs55717217 ɥ ˜ ڹ يم ع ∪ ALT ㄱ AST σ t=2.12 ɜ2.23 ɜ3.35 ɜ3.36 P<0.05 TL1A ‟ AST ɜALT ɜ ALP ɜGGT ㄱ TBA ă r=0.202 ɜ0.252 ɜ0.313 ɜ0.328 ɜ0.129 P<0.05 ‟ TBIL ɜĐBIL ɜALB ă P>0.05 ɞ ROC TL1A δ PBC ɔ AUC δ 0.838 ɞ TNFSF15 ڹ ع rs4979462 ɜrs55717217 ɜrs6478108 ɜrs1857335 δ PBC ă ڹ ع ɥ rs4979462 ㄱ rs55717217 ɥ ɥ ڹ ع ‟ ⅞ ALT ɜAST ╗ ă TL1A ‟ AST ɜALT ɜALP ɜGGT ㄱ PBɞ 15

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Ό X ο ╦ e X TNFSF15 ﻉ ﻧﺠ SNP ﻍ h ώ Haploview4.2 ψ Tagger ´ SNP ɓ ﻍ ﻧﺠ ﻉ >0.05 ´ r^2 ≥0.8 ɓ ḋ SNPs rs55717217 ɜrs6478108 ɜrs4979462 ɜrs10114470 ɜrs1857335 ɜrs12235514 ɓ Sanger SNP ﻍ ώ Chromas ψ ŏ ﻋ SNP ﻍ ﻧﺠ ﻉ ﻡ ɓ

1.2.2 TL1A

Ɽ ﻯ ﻯ Ẍ ﻯ Ḥ ɤ ɕ ﻯ TL1A ĕ Ξ Ḥ Ɽ ɓ

1.2.3 ⅞

Ɽ ﻯ ﻯ ﺋﻮ ﻣﻣ Ci16000 Ã ⅞ ŏ ﻫ ɕ ă ⅞ ALT ɜAST ɜALP ɜGGT ɜTBIL ɜDBIL ɜTBA ɜALB ɓ Ξ ISO15189 Ã ⅞ ĕ ɓ

1.3

SPSS 24.0 ψ ŏ ɓ ´ ´ ŏ Ό v ɓ ƈ ¯ N t ɓ ƈ n % ^{2} ɓ ă ŏ Spearman ŏ ɓ ┐ ĕ ROC Θ ɓ ƈ P<0.05 δ σ ɓ

2

2.1 SNP ﻍ ŏ Ɽ ‴ rs4979462 ɜrs55717217 ɜrs6478108 ɜrs1857335 ﻍ ﻧﺠ ﻉ ﻡ ﻯ ﻍ ﻧﺠ ﻉ ŏ σ P<0.05 rs10114470 ﻯ rs12235514 ﻍ ﻡ ﻉ ﻧﺠ ﻯ ﻍ ﻧﺠ ﻉ ŏ σ P>0.05 ɓ ˜ SNP ﻍ ﻡ ﻉ ﻧﺠ ﻍ ﻧﺠ ﻉ ŏ 1 ɓ

2.2 ﻯ TL1A ŏ ‴ Ɽ ﻯ TL1A ﻲ σ P<0.05 ɓ 2 ɓ

2 TL1A ¯

Table 2 Comparison of TL1A concentrations in peripheral blood between case group and control group ¯

ḋ	n	TL1A ng/L
ṗ	120	19.64±5.74
PBC	120	31.45±17.03
t d		2.59
P d		0.01

2.3 SNP ﻧﺠ ﻉ ŏ ﻡ ‴ ⅞ ă ŏ å Ë 120 ˀ PBC 8 ⅞ ALT ɜAST ɜALP ɜGGT ɜTBIL ɜDBIL ɜTBA ɜALB ɓ Ẹ X rs4979462 ﻯ rs55717217 ﻍ ´ˀ ﻧﺠ ﻉ ﻡ Ɔ ALT ﻯ AST ﻲ d σ P<0.05 rs6478108 ɜrs1857335 ﻍ ´ˀ ﻧﺠ ﻉ ﻡ Ɔ ⅞ σ P>0.05 ɓ 3 ɓ

1 TNFSF15 6 SNP n %

Table 1 Comparison of the genotypes and allele frequencies of the six SNP loci of TNFSF15 n %

SNP ﻍ	ﻡ ﻉ ﻧﺠ	Ɽ		d	P d	ﻍ ﻧﺠ ﻉ	Ɽ		d	P d
rs55717217	AA	54 45.0	85 70.8	16.443	<0.001	A	167 70.4	201 85.1	13.463	<0.001
	AG	59 49.2	31 25.8			G	73 29.6	39 14.9		
	GG	7 5.8	4 3.3							
rs6478108	CC	20 16.7	35 29.2	7.904	0.019	C	103 42.9	133 55.4	7.502	0.006
	CT	63 52.5	63 52.5			T	137 57.1	107 44.6		
	TT	37 30.8	22 18.3							
rs4979462	CC	51 42.5	83 69.2	17.313	<0.001	C	164 68.1	199 82.8	13.845	<0.001
	CT	62 51.7	33 27.5			T	76 31.9	41 17.2		
	TT	7 5.8	4 3.3							
rs10114470	TT	22 18.3	36 30.0	4.462	0.107	T	110 45.8	129 55.6	3.008	0.083
	CT	66 55.0	57 47.5			C	130 54.2	111 44.4		
	CC	22 26.7	27 22.5							
rs1857335	GG	51 42.5	82 68.3	16.233	<0.001	G	163 67.9	198 82.5	13.687	<0.001
	GA	61 50.8	34 28.3			A	77 32.1	42 17.5		
	AA	8 6.7	4 3.4							
rs12235514	GG	89 74.2	76 63.3	3.445	0.179	G	207 86.3	192 80.0	3.342	0.068
	GA	29 24.2	40 33.4			A	33 13.8	48 20.0		
	AA	2 1.6	4 3.3							

2.4 ٧ TL1A ‴ ⅞ ă ŭ
ʒ٩ ٧ ٧ TL1A ‴ AST ʒ۰
ALT ʒ۰ALP ʒ۰GGT ٧ TBA \l ă ă r=0.202 ʒ۰
0.252 ʒ0.313 ʒ0.328 ʒ0.129 P ثي<0.05 TL1A
‴ TBIL ʒÐBIL ʒ۰ALB ă P>0.05 ɞ
2.5 ROC ç TL1A
PBC Θ [d]
٧ TL1A PBC ROC
ɔ δ 0.838 Љ ϧ Ɔ ɔ P<0.05 ɞ
ﻫ 1 ɞ

3

PBC [h] Ӱ ц ệ
Ӱ Ẹ ε Ӱ
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TNFSF15 ﺝ ɹ [h] ٧ Ꮋ Љ
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rs4979462 Ꮋ ‴ PBC e ẹ ă
[14] ɞ rs4979462 ʒrs55717217 ʒ۰
rs6478108 ʒrs1857335 Ꮋ ‴ X ο ╤ PBC e
ẹ ă Ẹ X rs4979462 ʒrs55717217 ʒ۰
rs6478108 Ꮋ Ꮋ Љ TNFSF15 ﻧ ɹ ệ ˆ L
rs1857335 Ꮋ Љ ﻧ ɹ 3′ UTR Ж Ꮋ ´
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ㄱ rs4979462 ٧ rs55717217 Ꮋ
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PBC Ꮋ ﻧ ɹ Ꮋ ˘ Ƃ [h]
ﻧ ɹ ㄱ ٧ ㄱ ɞ
ѽ δ ﷺ ɹ ʒ۰ ϙ [ə ~] ʒ۰
RNA ϙ Ɔ ᘐ ш
Ӱ Б [h] Ѿ ɹ ǻ̓ ě Љ ệ
ɕ PBC ㄱ ㄱ [15 16] Ж
ˋ Щ ﻧ ɹ TNFSF15 ﻧ
ɹ Ɔ ˘ PBC ш Ξ
Ĩ Ẹ ẹ ɱ Ѧ ш [h] ɞ
TL1A [h] ﷺ ε ﻫ
ﷺ ٧ ɛ M X ě ɞ ﻫ
Ӱ ٧ X TL1A ‴ Ẹ ϩ ɱ
´ ~ ˘ Th1 ٧ Th17 ﷺ ٧ ŭ ⅞ ˀ
ɹ T ㄱ ě ɣ
٩L 2 ٩L 4 ٩L 12 ٩L 17 ٧ IL 21 [13] ɞ
TL1A ‴ AST ʒ۰ALT ʒ۰ALP ʒ۰GGT ٧ TBA ﻫ
ă ROC ﹥ ŭ TL1A %
/? ŠŠ Ѡ ȷ ş R R ã R

c TNFSF15 ˛ ˚ rs4979462 ˙ rs55717217 ˙rs6478108 ˙rs1857335 ð PBC ă ˛ ˚ Ч rs4979462 ˄ rs55717217 Ч Ч ˛ ˚ ˝ ALT ˙AST ╗ ă TL1A ˝ AST ˙ALT ˙ALP ˙GGT ˄ TBA ˛ ă ð PBC ɷ

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SAA HMGB1 TNF α

AS A SAA ɜ B1 HMGB1 ɜ ɯ ɻ α TNF α ‴ ă ŭ ɕ AS ʬ ç Θ d ɞ ˈ 2021 1 2023 10 ɒ X ˩ Ÿ 152 ʔ AS ĕ δ Bath BASDAI ŭ ŭ δ ‴ ɞ ɔ ˈ 80 ʔ ă ĕ δ ɞ N C ɤ CRP ɜSAA ɜ HMGB1 ɜTNF α ɜ ESR ɜ UA Spearman ŭ AS SAA ɜHMGB1 ɜ TNF α ‴ ă ʅ ĕ ROC ŭ SAA ɜHMGB1 ɜTNF α ╤h ʬ ´ ƣ AS X Θ d ɞ UA ɜCRP ɜESR ɜSAA ɜHMGB1 ɜTNF α ي Љ ę σ t=5.827 ɜ50.112 ɜ50.329 ɜ85.944 ɜ46.683 ɜ67.298 P<0.05 ɞ SAA ɜHMGB1 ɜTNF α ي Љ ę σ t=10.977 ɜ13.302 ɜ12.705 P<0.05 ɞ Spearman ŭ AS SAA ɜHMGB1 ɜTNF α ‴ ي ~ ă ă r=0.743 ɜ0.684 ɜ0.571 P<0.005 ɞ ROC SAA ɜHMGB1 ɜTNF α ɔ ´ AS AUC δ 0.922 ɜ ŭ ậ δ 92.76% ɜ90.00% ғ Љ ╤h P<0.05 ɞ AS SAA ɜHMGB1 ɜTNF α ╗ Ό SAA ɜHMGB1 ɜTNF α ‴ AS ę ă ɔ ´ ˘ δ AS ʬ ç W ɔ ˛ ɞ ɯ ɻ

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To explore the correlation between the expression of serum amyloid A SAA high migration group protein B1 HMGB1 tumor cell necrosis factor α TNF α and disease activity in patients with ankylosing spondylitis AS and analyze the value of these indicators in the diagnosis of AS and the evaluation of disease activity. 152 AS patients admitted to the Rheumatology and Immunology Department of Xinyang Central Hospital from January 2021 to October 2023 were selected as the study group. According to bath ankylosing spondylitis disease activity index BASDAI score the study group was divided into a disease active group and a disease remission group. And 80 patients with rheumatoid arthritis were selected as the control group. Serum C reactive protein CRP SAA HMGB1 TNF α erythrocyte sedimentation rate ESR and uric acid UA were compared between the two groups. The correlation between serum levels of SAA HMGB1 TNF α and disease activity was analyzed using the Spearman method. The value of single and combined detection of serum SAA HMGB1 and TNF α in the diagnosis of AS was

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analyzed using the receiver operating curve ROC . . . . The levels of serum UA CRP ESR SAA HMGB1 and TNF α in the study group were significantly higher than those in the control group with statistical significance t=5.827 50.112 50.329 35.944 46.683 67.298 P<0.05 . Serum levels of SAA HMGB1 and TNF α in patients with the active stage were higher than those in patients with the remission stage and the difference was statistically significant t=10.977 13.302 12.705 P<0.05 . Spearman analysis showed that the expression of SAA HMGB1 and TNF α in serum of AS patients were positively correlated with disease activity r=0.743 0.684 0.571 P<0.005 . The ROC curve demonstrated that when serum SAA HMGB1 and TNF α were combined the AUC for predicting AS was 0.922 with a sensitivity of 92.76 % and specificity of 90.00 % better than single detection P<0.05 . . . . . The levels of SAA HMGB1 and TNF α in the serum of patients with AS activity were significantly increased. SAA HMGB1 and TNF α showed a significant correlation with the disease activity of AS. The combined detection of the three markers could serve as a crucial reference for diagnosing AS and the evaluating disease activity.

. . . . AS SAA HMGB1 TNF α Disease activity

ankylosing spondylitis AS â ĎA 1 ´ 1984 л AS
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Ÿ X Ę ƣ Љ
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HMGB1 ě δ ˍ ц ɔ ˝
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HMGB1 ɜTNF α ‴ AS ㄱ ă ŏ в Hu [15]
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δ 79.49% Љ CRP 64.10% ㅅ ESR
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Ạ ש J . ㅖ ∓ ㄴ 2023 49 6 672 675+680.

m SAO ┤X ê VEGF ɜmiR 34a ɜ 1α HIF 1α ĭ в 2023 3 2024 3 e 102 SAO ┤X ŭ δm n=51 m n=51 m в N Ό ɜ VEGF ɜmiR 34a ɜHIF 1α в rCBF ɜ ɜ Qm ɜ Vm Љ ώ ẅm σ t=5.038 ɜ3.297 ɜ 3.308 ɜ3.608 P<0.05 E ┤X SSS ŭ Љ ώ ẅm ʐ GFAP Ң Љ ώ ẅm σ t=3.891 ɜ4.654 ɜ6.339 P< 0.05 HIF 1α ẅ miR 34a Ң Љ ώ ẅm VEGF Љ ώ ẅm σ t=6.436 ɜ5.591 ɜ4.217 P<0.05 m ² =0.270 P>0.05 в m SAO ┤X ˘ ώ Ό ẅ Ң HIF 1α ɜmiR 34a VEGF в m ┤X miR 34a ê 1α

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To investigate the efficacy of butaphthalein combined with eEdaravone dextrocamphorol in the treatment of small artery occlusion type SAO stroke and the effects on serum vascular endothelial growth factor VEGF miR 34a and hypoxia inducing factor 1 α HIF 1α A total of 102 SAO stroke patients diagnosed and treated at Jieshou People s Hospital from March 2023 to March 2024 were selected for the study. They were randomly divided into two groups the butylphthalein group n=51 treated with butylphthalein and the combination group n=51 treated with butylphthalein treatment and Edaravone dexcarnol using a random number table method. Cerebral hemodynamics neurological function serum miR 34a VEGF HIF 1α levels and adverse reactions were compared between the two groups. After treatment the relative cerebral blood flow rCBF mean blood flow Qm and mean blood flow velocity Vm of the combination group were statistically higher than those before treatment and the butylphthalein group t=5.038 3.297 3.308 3.608 P<0.05 . After treatment the Scandinavian Stroke Scale SSS score of the combination group was statistically higher than the SSS score of the butylphthalein group and the levels of glial fibrillary acidic protein GFAP in the combination group were statistically lower than those before treatment and in the butylphthalein group t=3.891 4.654 6.339 P<0.05 . After treatment the expression of

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HIF 1α and miR 34a in the peripheral blood of the combination group was statistically lower than before treatment and in the butylphthalein group and the expression of VEGF was statistically higher than in the butylphthalein group and before treatment t=6.436 5.591 4.217 P<0.05 . There was no significant difference in adverse drug reactions between the two groups ^{2}=0.270 P>0.05 . . . . . The combination of buphthalein and Edaravone dextrocamphorol in the treatment of SAO stroke can improve cerebral hemodynamics and cerebral perfusion enhance neurological function reduce HIF 1α and miR 34a expression and elevate VEGF levels.

. . . . . Butylphthalein Edaravone dextrocamphenol SAO miR 34a EGF HIF 1α

يم ط Small artery occlusion SAO

ǂ X ή ǂ X E يم

ǂ X 25% Љ ⅞

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σ P>0.05 в

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[m] ŋŭ ɲɛ ɕ

Ѓ ″Ạ Ă ˝ T [m] ⅞

″A ~ H20100041 100 mL ˆ [m]

25 mg ‴ ⅞ 0.9 g 100 mL/

2 / в ´ ŋŭ[m] ɲɛ Ѓ ╥

Ч ẇ E Ẃ ″Ạ Ă ˝ T ˆ ´

″A ~ H20200007 ˈ 15 mL

Љ 100 mL 0.9% ⅞

2 / в N ي 3~14 d в

1.3

1.3.1 Ό

ᾠ Ш ~ CT N

Relative cerebral blood flow rCBF

Ό ю ڄ ᒧ

Ă ˝ ي Mean blood flow

velocity Vm ɜ ي Mean blood flow Qm в

1.3.2 ƙ ᴇ

ᾠ Ш ~ ᴎ 5 mL

Љ ʽH X ∫ 3 500 r/min

10 min ɜ ╙ δ 12.5 cm ˈ ɕ

Ã ⅞ ŭ ю ʐ

Glial fibrillary acidic protein GFAP в

1.3.3 ´

صِ E ⫞ X Scandinavian Stroke Scale SSS [7] ç ´ SSS ŭ δ 58 ŭ ŭ ´ в miR 34a ɜVEGF ɜHIF 1α RNA simple RNA ˈ Ḥ ɔ Ч ⅞ Å ˝ ˈ RNA FastKing cDNA [h] ´ Ḥ ɔ Ч ⅞ Å ˝ δ cDNA Ẋ ψ 45 15 min 95 3 min в Ẉ ´ Ẋ Ẉ miR 34a в Ẋ ψ 95 3 min 95 5s 60 15s 72 15s å̊ 40 T в ☋ U6 δ ệ ɔ ﻉ ﺑﺠ ‵Ω miR 34a ɕ 5′ TGCGCTG GCAGTGTCTTAGCT 3′ ɔ 5′ CCAGTG CAGGGTCCGAGGTATT 3′ U6 ɕ 5′ CTC GCTTCGGCAGCACA 3′ ɔ 5′ AAC GCTTCACGAATTTGCGT 3′ $2^{-\Delta\Delta Ct}$ miR 34a в Ẍ ϒ Ḥ ₒ ABclonal Å ˝ VEGF ɜ HIF 1α в

1.3.4 ´ Ẋ

´ ‴m ´ Ẋ ₵ ɜ ´ ɜ в

1.4

SPSS 26.0 ψ ŭ в ☋ ¯ t ệ ṻ˜ t ☋ n %

[2] в ☋ P<0.05 δ σ в

2

2.1 N rCBF ɜQm ɜVm

ṻ ´ ‴m rCBF ɜQm ɜVm σ P>0.05 ´ ˜ ɕ Лъ ṻ ẇ[m] σ P<0.05 в 1 в

2.2 N SSS ŭ ɜGFAP

ṻ ´ ‴m SSS ŭ ẇ GFAP σ P>0.05 ´ ˜ SSS ŭ Лъ ṻ ẇ[m] GFAP Ң Лъ ṻ ẇ[m] σ P< 0.05 в 2 в

2 SSS GFAP ¯

Table 2 Comparison of SSS scores and GFAP levels between two groups ¯

ṻ	n	SSS ŭ		GFAP ng/ml	
		ṻ	˜	ṻ	˜
´	51	27.41±2.53	48.37±4.58[a]	10.34±2.23	5.18±1.13[a]
m	51	28.17±2.86	44.70±4.94[a]	10.74±2.15	6.84±1.49[a]
t [d]		1.421	3.891	0.922	6.339
P [d]		0.158	<0.001	0.359	<0.001

‴ ṻ [a]P<0.05 в

2.3 N VEGF ɜmiR 34a ɜHIF 1α

ṻ ´ ‴m VEGF ɜmiR 34a ɜ HIF 1α σ P>0.05 ´ ˜ HIF 1α ɜmiR 34a Ң Лъ ṻ[m] VEGF Лъ ṻ [m] σ P<0.05 в 3 в

2.4 N ´ Ẋ

´ ‴m ´ Ẋ σ P>0.05 в 4 в

3

SAO ⫞ X ɣ ɒ ˜ ɜ ‵O ɜ Ḍ ɔ ʌ ɕ ‴ ⫞ X ϶ ɜ ɜ M ˜ ´ ή ă̆ [8] в W X Ƃ Ẋ ϗ ʟ ضﻉ ɜ ɜ ⅞ ﻉ ˈ ɕ ʌ ɛ̈ M Ш ɱ ϶ Ẋ [9] в ή ŭ

1 rCBF Qm Vm ¯

Table 1 Comparison of two groups of rCBF Qm and Vm ¯

ṻ	n	rCBF		Qm L/min		Vm cm/s	
		ṻ	˜	ṻ	˜	ṻ	˜
´	51	0.81±0.24	1.22±0.31[a]	3.46±0.62	5.72±1.33[a]	7.23±1.14	10.13±1.57[a]
m	51	0.79±0.20	0.93±0.27[a]	3.36±0.71	4.89±1.21[a]	7.38±1.20	9.14±1.45[a]
t [d]		0.457	5.038	0.758	3.297	0.647	3.308
P [d]		0.648	<0.001	0.450	0.001	0.519	0.001

‴ ṻ [a]P<0.05 в

3 VEGF miR 34a HIF 1α ¯

Table 3 Two groups of serum VEGF miR 34a HIF 1 α comparison ¯

·ά	n	VEGF pg/mL		miR 34a		HIF 1α pg/mL	
		·ώ	~	·ώ	~	·ώ	~
´	51	5.71±1.12	8.44±1.34[a]	2.85±0.67	1.21±0.29[a]	1423.02±301.24	684.59±183.75[a]
m	51	5.82±1.27	6.83±1.56[a]	2.91±0.71	1.67±0.42[a]	1426.31±314.05	841.20±191.23[a]
t d		0.464	5.591	0.439	6.436	0.054	4.217
P d		0.644	<0.001	0.662	<0.001	0.957	<0.001

·· ·ώ [a]P<0.05 в

4 n %

Table 4 Comparison of adverse drug reactions between the two groups n %

·ά	n	Ό	ч~	´	´				ㄒ
´	51	0 0.00	1 1.96	2 3.92	0 0.00	2 3.92	2 3.92	1 1.96	8 15.69
m	51	1 1.96	2 3.92	1 1.96	1 1.96	2 3.92	2 3.92	1 1.96	10 20.00
d									0.270
P d									0.604

Ш ǫ̃ Ό ~ Ά ∧ ∧ ем

Ό ㄒ ỏ ƙ ' Ң ж щ Ė

Ш Ӿ ·· ' Ẃ ƙ [10] в Ӿ [15 16] вm ´ ´ ˘ ↀ

ж ' SAO ╡ X ' ċ Ά ◻ ~ ķ Ά

ă в ⅞ ċ Ш ỏ ƙ

m ' Ά ·· ⅞ ∧ Ė ң ´

Ę ę ˘ ↀ щ ㄒ ' ě ċ ´ в

ч ㄒ ě miR 34a ↄ ·· Ǔ ⅞ ɜ Ё M ⅞

' ң ´ ɜ Ά Ӿ ∧ ж ǿ SAO ╡ X

Ẃ Ё M ' ´ [11] в ´ X miR 34a ㄏ ң ··

о ε ㄒ ' ˘ ↀ ⅞ ∧ Ӿ ·· '

·· Ė ⅞ ƙ Ά ц h ⅞

Ė Ё M ỏ [12] в ·· ' ę ∧ ƙ [17] в VEGF

Ę ˘ ↀ ċ ˘ ↀ ч ę

Ό в ǔ Ę ҙ ж m SAO ∧ т [18] в HIF 1α

╡ X ˘ ↀ Ң Ь ɜ Ї ж ǿ Ψ ɔ ◻ ~

щ ㄒ ∧ ⅞ ě ~ ·· ж ↄ SAO ╡ X Ӿ

ę Xh ⅞ ɜѽ Ω 2 ɜ Ẃ Ё M ɜ ę ´

Ң A2 в X m ´ ´

ḭ ę ·· ∧ ˘ ↀ Ң SAO ╡ X miR 34a ɜ

∧ ỏ ƙ ~ т ∧ [13] в HIF 1α щ Ά ң Ш

´ ˘ ↀ ·· ę h ⅞ ´ Ά ⅞ Ш ж T ċ

Ė ỏ X ·· Ė Ӿ ỏ ∧ т ċ

ę ƙ [14] в m ´ ƙ Ң HIF 1α Ė

´ Ё SSS ǔ Ң ↄ Ẃ

GFAP вm ˘ ↀ Ά Toll ㄱ ң 4 ɜ ċ Ш ỏ ƙ ƙ

ж кВ ◻ ~ ķ ˆ ´ ˘ ↀ

ɕ ж E2 ă ж 2 Ң NOD ㄱ ң

ض ă 3 ң ∧ щ

VEGF Ċ ı

ˊ ˀ ˊ Ƽ ˈ ˊ Ẋ ɞ

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FIB RBP NAG TRF

ʐ FIB ʁ ´ RBP ɜ N Ÿ β D ɲ
NAG ɜ TRF ˝ HSPN Ṿ ǒ ǎ ɷ ˈ 2021
1 2023 5 Ṿ ˩ 114 ʔ HSPN Ṿ ĕ δ ǒ δ 63 ʔ ɜ
51 ʔ Ɔ ˈ˙ ʮ ƙ Ṿ 57 ʔ ĕ δ ɷ N ˥ E
FIB ʁ RBP ɜNAG ɜTRF ǒ FIB ʁ RBP ɜNAG ɜTRF ˝ ǒ ǎ ʁ
Ɵ d ɷ FIB ɜRBP ɜNAG ɜTRF Ль σ
t=3.160 ɜ11.001 ɜ2.882 ɜ4.168 P<0.05 ɷ FIB ɜRBP ɜNAG ɜTRF Ль
σ t=3.995 ɜ10.123 ɜ4.324 ɜ2.893 P<0.05 ɷ FIB ɜRBP ɜNAG ˝ HSPN ǒ ي ١
ǎ r=0.360 ɜ0.666 ɜ0.400 ɜ0.239 P<0.05 ɷ ROC ǒ FIB ʁ RBP ɜNAG ɜTRF ´
AUC δ 0.930 Лъ˜ ∓ ɷ FIB ʁ RBP ɜNAG ɜTRF ˝
HSPN Ṿ ǒ ǒ ǎ ´ ĕ δ ò HSPN ɷ
ʐ ´ N Ÿ β D ɲ

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To investigate the relationship between serum fibrinogen FIB urinary retinol binding protein RBP urinary n acetyl β D glucosaminase NAG transferrin TRF and renal pathological grade in children with purpura nephritis HSPN A total of 114 children with HSPN admitted to Anhui Children s Hospital from January 2021 to May 2023 were selected as the study group and divided into 63 cases of grade and 51 cases of grade according to pathological grade. In addition 57 hospitalized children with anaphylactoid purpura without renal injury were selected as the control group. The levels of serum FIB urine RBP NAG and TRF were compared between the two groups. The study group was also analyzed for the relationship between serum FIB urine RBP NAG and TRF and renal pathological grade. The predictive value of serum FIB and urine RBP was analyzed. The levels of serum FIB RBP NAG and TRF in the study group were higher than those in the control group t value 3.160 11.001 2.882 and 4.168 respectively P<0.05 . The levels of serum FIB RBP NAG and TRF in grade group were higher than those in grade group t value 3.995 10.123 4.324 2.893 P<0.05 . Serum FIB RBP and NAG were positively correlated with renal pathological grade r value 3.995 10.123 4.324 2.893 P<0.05 . ROC curve analysis showed that the AUC of serum FIB combined with urine RBP NAG and TRF to predict purpura

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Henochschonlein purpura nephri
tis HSPN Henoch schonlein purpu
ra HSP Ξ ᖷ ε ή ɜ
ɜȸ Ὸ ɜă ᐱ Ξ ϐ
Ṿ ´ [1] ɞ Ξ ẏ HSPN
ẓ ѧ [2] HSPN Ṿ ɜ
ỶA ç Ль ɜ ˜ ẹ
σ ɞ ὤ Å ç HSPN ƙ Ξ
ỶA ṇ ЖѧK ṇ
ỶΩ ẹ ᾔ ŭ ᑫ ᒉ
[h] ỶΩ ɜ ƙ ç ὤ
ɞ ὤ HSPN ᖷ ̈Ạ ´ Ã ᑫ
δ ‴ ᾺH ᾔ ̈Ạ
ã [3] ɞ ẓ Fibrinogen FIB Ὰ ᵯ̈H
´ ᐱ Ė ᾙ Ẹ ᾜ ˘
ᐱ Ã ᾜ [4] ɞ ´ Urinary
retinol binding protein RBP [h] Ḥ ŭ
N Ÿ β_ FS ü A ɟ ꝑA ᾒ ɟ ꝑB Ꮒ ᾜ ü q F ᐯ ẗctctB et [h] ñ̃ qB ¯ ᾒ ᾜ rΩ ê Σ ᒉ ŏ s

P<0.05 δ σ ɞ

2

2.1 N ή

N ά ɜ ɜ ɱ ɜ ` ɜ HSP ` σ P>0.05 FIB ɜRBP ɜNAG ɜTRF Лъ σ P<0.05 ɞ 1 ɞ

ά n=57 n=114

ά

96 30 52.63 66 57.89

75 27 47.37 48 42.11

7.84±3.32 8.68±3.47

ɱ m²/kg 15.53±2.48 16.01±2.31

`

52 16 28.07 36 31.58

119 41 71.93 78 68.42

HSP `

30 11 19.30 19 16.67

141 46 80.70 95 83.33

FIB g/L 4.78±0.89 ±.69

RBP mg/L 52.63±3.20 68.524.4

NAG U/L 58.10±5.45 63.59±3.40 1.67±0.10 ظ1.ضظ 1. > ظ

TRF g/L 1.59±0.42 1.tضظ

2.2 ′ ˀ ǒ FIB ɜRBP ɜNAG ɜTRF

FIB ɜRBP ɜNAG ɜTRF Лъ <0.05 ɞ 2 ɞ

2.3 FIB ɜRBP ɜNAG ɜTRF ‴ HSPN ǒ ǎ ǒ يم

Spearman ǎ ǒ FIB ɜRBP ɜNAG ɜTRF ‴ HSPN ǒ ثي \ ǎ r=0.360 ɜ0.666 ɜ0.400 ɜ0.239 P<0.05 ɞ

2.4 FIB ẇ RBP ɜNAG ɜTRF Θ d

ROC ǒ FIB ẇ RBP ɜNAG ɜTRF ´ ɔ AUC δ 0.930 δ 0.833 δ 0.860 Лъ˜ ∓ P<0.01 ɞ 3 ɞ

3 ŀ ĩ 0

HSP h Ƈ ɜǎ ɜ ٨ ثي ɞ HSPN Ṿ ᵀ ɞ HSPN ᵀ ɕ ╗ Ό Ṿ X Лъ Ṿ ⁹ ɞ δ HSPN Ṿ ᵀ δ 1.3/100 000 [10] ɞ HSP Ṿ M ˜ ɚ [11] ɞ HSPN ئۇ ɕ Ƈ ɜ ٨ ɜ δ ḭ ˘ Ẹ ЖК ɚ ɱ ʾΩ ƙ ʾĄ Ё Ẹ ή ɞ HSPN h ή ǎ ώ ʾΩ ç HSPN Ṿ ˘ Ƈ'Ε Ṿ ɱ ʾΩ ƙ Лъ ɞ 1 ~7 HSPN Ṿ ҕ δ [12] ɞ Ẍ ʾĄ ɚ 'Н ɜ ´ Ẹ h ǎ [13] ɞ FIB ɜ RBP ɜ NAG ɜTRF ئۇ HSPN Ṿ X Ό ئۇ ǒ δ Ṿ X ɞ FIB

ѽ м Љ ě δ Ӈ ѧ ɔ
‴ м Ӈ א ˀ FIB ﺗﺤﻲ ƙ
ḭ ệ ﺋﻮﺋ Ӈ ˜ ㄱ ě
[14] в ㄱ ƙ м ệ T ệ
ц ɜ ŏ
ệ ƙ ˀ ∓ ɜ ệ
T ѧ Ӈ
´ ệ ʅ ﻣﻢ
h ´ ệ ∀
ệ щ
ƙ в RBP
ệ ´ ŏ Љ в м ў ɔ
X RBP ˀ Ң Ѳ ŏ RBP ﺋﻮﺋ ȯ ∀
˜ ѧ RBP ˘ ᘯ ﺋﻰ
RBP ȯ ∀ [15] RBP h Ң ŏ
ﺋﻮﺋ ў ɔ ˝Ӈ
ψ Ã ∀ ѧ ﺋﻮﺋ X ˀ Ң в
´ Ѳ ´ ʅ ǫ̃ pH ∀ ♣ ѧ
ї Ж ʅ RBP ﺋﻮﺋ X ˀ
ﻣﻢ RBP ˘ ᘯ δ h T
RBP ƙ Ξ в NAG ´ ‴
ﺋﻮﺋ ﺋﻮﺋ Љ X
Љ Ę ŏ ´ X
NAG ε Љ ɕ [16] в ɕ
ʅ ǫ̃ ƙ м NAG
ȁ X ‗ Ғ X NAG ℼ в
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ˈ ∪ ﺋﻮﺋ ﻧﺠ ɕ
TRF ﺋﻮﺋ X TRF
Ң в HSP Ѵ Ѳ Ѵ ʅ ǫ̃
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TRF ˀ ℼ ‴ [17]
ч в
h ŏ Ë HSPN Ѵ FIB ɜ
RBP ɜNAG ɜTRF ‴ ŏ ă
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CysC ɜ Urea ∀ Ж
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∀ в Ę ´ ʅ
RBP ɜNAG ∀ TRF ƃ ℼ щ ѽ

ㄱ ƙ ў в ∪ ɔ CysC
ᘐ h T א Ж
ε א ´ Љ
ƙ Ѳ [18] в Urea ∀
ᘐ ﺋﻮﺋh ɕ א
ў Ж ∧ ∀ ˘ ´ ɕ
FIB ɜ RBP ɜNAG ∀ TRF [19] в
ROC ŏ ㄱ FIB ɜ RBP ɜNAG ɜ
TRF ´ HSPN AUC δ 0.930 ﺛﻲ Љ
ȶ ∓ ȶ Љ ç HSPN ㄱ
ę h ή Θ d ´ ç ∤
Ӯ δ ή HSPN W ɔ
ˆ в
ɕ FIB ѽ RBP ɜNAG ɜTRF ﺋﻮﺋ
HSPN Ѵ X Ę ‴ Ξ
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AMPK/mTOR

ɕ ƙ ɱ ɕ ƙ X
˝ AMPK/mTOR ɒ ˜ ǎ ʁ ´ ˚ TNF α ɲ ɕ
ɕ ɱ ʁ Elisa ɕ ʎ
ɕ ɱ X ɷ TUNEL ʎ ɱ ɕ ɛ M ỷ
WB ʎ ɱ ƣ AMPK/mTOR ɒ ˜ ǎ AMPK p AMPK mTOR p mTOR
ʁ 0 ng/mL ɜ1ng/mL TNF α ɕ p AMPK
ƣ 10 ng/mL TNF α X ɕ σ P<0.05 AMPK
σ P>0.05 ʁ ɱ X TNF α ˝ IL 1β ɱ ɛ M Ɥ p AMPK/AMPK
˚ ɕ ɱ p mTOR/mTOR ˚ ɔ ثي σ P<0.05 ʁ
TNF α AMPK/mTOR ɕ ƙ ʁ
ɕ ƙ AMPK/mTOR ɷ ɛ M

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. The relationship between inflammation and AMPK/mTOR signaling pathway in chronic nasosinusitis was explored by constructing the epithelial cell injury model of chronic nasosinusitis. Nasal mucosal epithelial cells were stimulated with different concentrations of TNF α to induce rhinitis cell model The content of inflammatory factors in normal nasopharyngeal epithelial cells normal group and rhinitis cells model group was detected by Elisa the apoptosis of nasopharyngeal epithelial cells in normal group and model group was detected by TUNEL and the AMPK/mTOR signaling pathway related proteins AMPK p AMPK mTOR MTOR in normal group and model group were detected by WB. The relative expression of p mTOR. Compared with 0 ng/mL and 1 ng/mL TNF α treated rhinitis epithelial cells P AMPK protein was up regulated in 10 ng/mL TNF α treated cells the difference was statistically significant P<0.05 but the changes of AMPK protein at different concentrations were not statistically significant P>0.05 . Compared with the normal group the contents of TNF α and IL 1β in the

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injury by activating AMPK/mTOR pathway.

. . . . . Chronic rhinosinusitis epithelial cell injury AMPK/mTOR channel Inflammatory factors Apoptosis

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Ẹ ε δ ⱺ ⱻ ⱻ ⱻ

ⱬ Ė П 12 ヶ [1] в

Ẋ ᵀ ě ′ Ξ Ї

[2] в ε

Ɔ ɕ ⱬ Ẇ ⱨ

Ẍ Ẋ в ⱬ ɱ ヶ ị ‴

ɕ ᵀ ɱ Ѝ ě Ȯ ′ ˀ

ɒ ˜ ′ ˀ ⱬ ɱ Ẋ [3] в

ɕ ˘

ε ⱬ ⱨ ẹ ɱ ŭ Ậ K h

ầ в AMP ⅞ /

AMP activated protein kinase/mammalian target of rapamycin AMPK/mTOR ɒ ˜ ɱ ɒ ˜ ˘ ⱨ [4] в AMPK Ɔ ‴ e [7] ο ⱻ ⱻ в mTOR ẁ e ɱ ệ ′ Ɔ ‴ ⱬ ⱻ ⱻ Ё M Ꮻ Ẇ ў Ẹ ′ ᵀ Б Ь ᵀ [5] в Щ ŭ ‴ AMPK/mTOR ɒ ˜ ă ɔ в

1

1.1

ў ä ⱻ Ȁ ě ’ ɔ Ч E

ю ὺ Å ˝ ⱻ ⱻ

ɕ Å ˝ ю

ɔ Ч Å ˝ Ẇ ⱻ⅞

ᵀ Ẉ ю ɕ ⱷ Å ˝ ⱻ₵

ⱬ ⱻŭ ɔ ⅃ Å

˝ Ẉ ⱻ Ḍ ο ▌ Å ˝ в

HNEpC ˝ ɕ ⱬ

Å ˝ в ⱷ ẽ ⱬ RPMI 1640 ⱻe

ц 1β ELISA Ḥ ⱻe ⱨ ⱨ α ELISA

Ḥ ⱻTunel Ḥ ⱻBCA Ḥ

50T ⱻ ě ɔ Ч Å

˝ FBS ⱻ P/S ⱻ

ο Gibco Å ˝ ŭ ⱻDAPI ⱻ

Ẉ Ḥ ɕ Ќ 0y

Å ˝ GAPDH ɱ ⱻmTOR Monoclonal ɱ ⱻ Phospho mTOR Ser2448 Monoclonal ɱ ⱻ AMPK Alpha Polyclonal ɱ ⱻPhospho AMPKα Thr172 ɱ ɔ Å ˝ ECL ᵀ Ẉ Ḥ ο Thermo Å ˝ X ⱻ Ÿ ⱻÏ ο ⱬ ⅞ Ḥ Å ˝ PBS Ỳ ⱻ ⅞ ⅄ Å ˝ в

1.2

1.2.1 ⱷ ẽ

HNEpC ⱷ ẽ ψ δ RPMI 1640 ⱷ ẽ ⱬ +10% FBS+1% PBS ⱷ ẽ δ 37 ⱻ5% CO_2 70%~80% 0.25% ⅞ 1Ɐ3 Ⱬ ķ ў ⱷ ẽ в

1.2.2 ɕ ⱡ

TNF α ị e ɕ

ŭ ὰ ↀ 0 ⱻ1 ⱻ10 ⱻ100 ng/mL TNF α ɕ 24 h ˜

WB AMPK ⱻp AMPK ŭ TNF α ě Ȳ в Ȳ ɕ

δ ⱡ δ ⱡ ɕ

δ в

1.2.3 Ẍ ヶ enzyme linked immuno sorbent assay ELISA

ⱻ ⱪ ˜ ⅄ δ 20 cm 3 000 rpm 15 min ˜ Ⱬ ě ẁ δ 450 nm ᶩ OD ᵈ в Ȃ Ẇ OD ᵈ TNF α ‴ IL 1β в

1.2.4 ц dUTP ת

Terminal deoxynucleoitidyl Trans ferase Mediated Nick End Labeling TUNEL ɕ 4% ن 20 min 3 H_2O_2 ệ ⅞ Triton 100 10 min в TUNEL 1Ɐ9 Ⱬ ′ ⅃Ь 37 1 h в DAPI ↀ 1Ɐ 500 ⅃Ь 5 min в Ẉ ả ɔ в ў ў ë M в

1.2.5 Ẍ ○ Western Blot WB

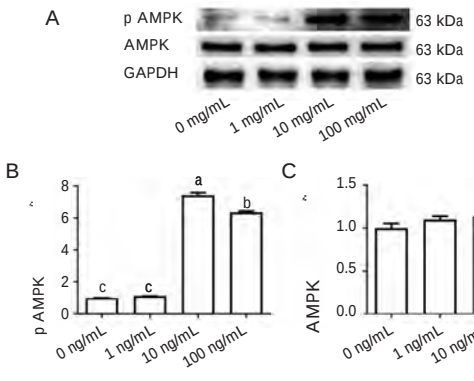
⅄ δ 20 cm

ğǔ 4 3 000 rpm 15 min
‴ BCA ˀ h ~
ˈ å loading buffer 98 ɔ 5 min ɕ
SDS PAGE ʹH 4 h
GAPDH 1ʹB10 000 AMPK 1ʹB2 000 p AMPK 1ʹB
1 000 mTOR 1ʹB5 000 p mTOR 1ʹB2 000
TBST 3 Ï 2 h TBST 3
ʹH Ḍ ıє X Ẉ ŏ ˀ ɓ
1.3
Prism 8.0 GraphPad USA ψ ŏ
ƈ ¯
t ɓ ƈ P<0.05 σ ɓ

2

2.1 ˊ ˀ TNF α ĕ AMPK ɔ ⅞ ỷ

ˊ ˀ TNF α ṛ HNEpC ~ 0 ng/mL
ɜ1 ng/mL ɜ10 ng/mL ɜ100 ng/mL AMPK
ˀ σ P>0.05 10 ng/mL
p AMPK ˀ Ль 0 ng/mL ɜ1 ng/mL ɜ
100 ng/mL ę σ P<0.05
100 ng/mL p AMPK ˀ Ль 0 ng/mL ɜ
1 ng/mL ĦЛь 10 ng/mL ę σ
P<0.05 ɓ 0 ng/mL 1 ng/mL p AMPK
ˀ ℸ ę σ P<0.05 ɓ ₐ 1 ɓ



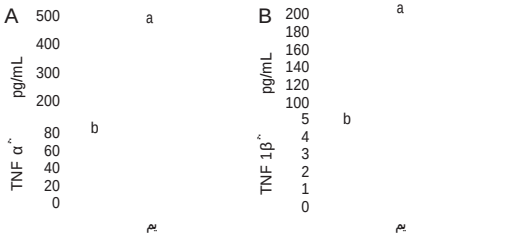
A AMPK p AMPK GAPDH Ẍ ○ ₐ B p AMPK
ˀ ⅞ C AMPK ˀ ⅞ ɓ
a ‴ 0 ɜ1 ɜ100 ng/mL P<0.05 b 0 ɜ1 ɜ10 ng/mL
P<0.05 c 0 ɜ1 ng/mL P<0.05 ɓ

1 TNF α AMPK
p AMPK

Figure 1 Comparison of AMPK and p AMPK protein expression in nasal epithelial cells with different concentrations of TNF α

2.2 ‴ ɱ ɞ Ɔ ⅞ ỷ

‴ ɱ ê TNF α ‴ IL 1β
ي ℸ ę σ P<0.05
ₐ 2 ɓ



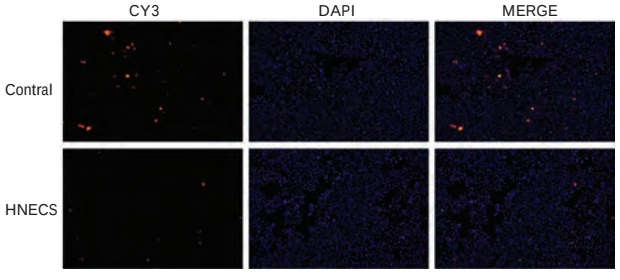
A TNF α ğǔ ˥ ɱ X B IL 1β ğǔ
˥ ɱ X ɓ a ‴ P<0.05 b ‴ ɱ
P<0.05 ɓ

2 ELisa TNF α IL 1β

Figure 2 The levels of TNF α and IL 1β were detected by ELisa

2.3 ɱ ɛ M ỷ

‴ ɕ ɱ
ɛ M Ħ σ P<
0.05 ɓ ₐ 3 ɓ



3 Tunel Ẉ tunel ×100

Figure 3 Tunel detection of apoptosis fluorescent tunel staining ×100

2.4 AMPK/mTOR ɒ ~ ğǔ

ɱ X Ɔ ⅞ ỷ
ɱ ‴ AMPK ‴ mTOR ˀ
σ P>0.05 ɱ ‴
p AMPK/AMPK ˀ ي ɕ ℸ
σ P<0.05 ɱ ‴ p mTOR/mTOR
ˀ ي ɔ σ P<0.05 ɓ ₐ 4 ɓ

3

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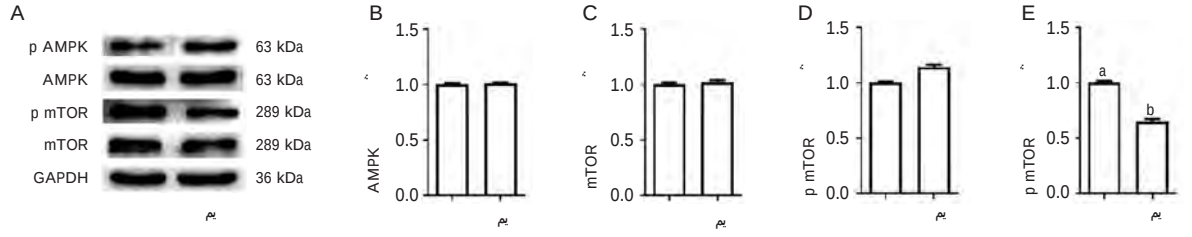
ή ɕ δ X ɜ‾
⅞ ɕ ℸ ğǔ ɕ ɔ ˘
ᾰ ɜبں ˧ X



A AMPK ȝp AMPK ȝmTOR ȝp mTOR ȝGAPDH Ÿ ○ ₔ B AMPK ⁷⁄₈ C mTOR ⁷⁄₈ D p AMPK ⁷⁄₈ a P<0.05 b P<0.05 E p mTOR ⁷⁄₈ a P<0.05 b P<0.05 ɞ

4 WB AMPK/mTOR

Figure 4 Expression of AMPK/mTOR signaling pathway related proteins detected by WB

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AMPK Ɔ ‴ e

⁷ ₒ ȝ ȝ [5] ɞ p AMPK/

AMPK Ɔ ⁷⁄₈ ẊẊ ₰ ₥

Ɔ [6] p AMPK/AMPK Ɔ ⁷⁄₈

ỷ ɕ ₥ Ɔ ⁷⁄₈ Ȳ ψ

ᵀ ₹ 10ng/mL TNF α ɔ p AMPK/

AMPK Ɔ ⁷⁄₈ ɞ TNF α [h] ₒ

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ₒ TNF α ‴ IL 1β [7] ɞ

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ẘ ă ĕ ɞ ë M Ɔ ‴

e IBD ȝÃ

ẊẊ ´ SIRS ₰ ⁷⁄₈ ɞ

₹ e ệ ʊ ˘ [9]

X Ạ X ë M ˀ [h]

ḛ X ц [8] ɞ ₹ [7] ₒ ȝ

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AMPK [h] ' Z /

˘ ĕ δ ε ķ ₺ ₰ Ḥ

Ạ ~ ₶ ȝ M ₰ ᘐ

ɞ p AMPK ⁷⁄₈ ⁷⁄₈ ¿ ᵻ ɠ ´

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Multivariate logistic regression analysis showed that hypoproteinemia external ventricular drainage duration >7 days and increased expression levels of NF κB PCT and IL 1β in cerebrospinal fluid were independent risk fac tors for intracranial infection after EVD OR=2.298 2.197 2.179 1.893 1.978 P<0.05 . The ROC areas for NF κB PCT IL 1β and their combined detection were 0.718 0.753 0.726 and 0.870 respectively P< 0.05 . . . . . The disturbance in the expression levels of NF κB PCT and IL 1β in cerebrospinal fluid is a significant risk factor for intracranial infection following EVD. The combined detection of these three factors has a high predictive value for intracranial infection after EVD.

. . ‴ . ‗ External ventricular drainage Intracranial infection PCT NF κB IL 1β

External Ventricular Drainage

EVD ή υʰ ˘ Лъ

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[1] в̓ EVD ệ

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Ẹ X EVD ˜ ㄱ ệ ǿ ή Ϛ

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M ɕ ℸ ϛ ѧ [2] в ѧ Ă

EVD ˜ ệ ㄱ δ ή ě ặ

в ϛ Procalcitonin PCT ʰ

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ላ ˘ Лъ EVD ˜ ệ

ላ [3] в ц Interleukin

IL 1β ě δʰ ѧ ɔ ‴ ϻ Ӧ

в ㄱ IL 1β ǿ ệ

ƙ ɔ ℸ

1.3

SPSS 22.0 ŭ ʁ ´
ŭ Ƣ ¯ N t
Ƣ n % ² ɚ
ɚ
Logistic ŭ EVD ˜ ệ ○ ɚ
Ƣ ɳ ĕ ROC ŭ NF κB ɜPCT ɜ ậ
IL 1β EVD ˜ ệ ʁ P<
0.05 δ σ ʁ

E

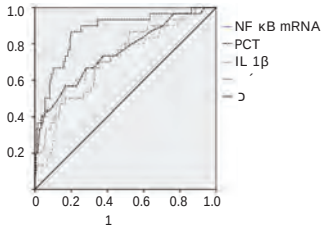
2

2.1 N ή ẇ
N ậ ICU ɜ ˜ Ὸ Ь Ẋ ɜ ĒŠ1 ŀQ0 % % -
Ң ɜ ɜ NF κB ɜ
PCT Ƣ ẇ IL 1β ɕ σ
P<0.05 ʁ 1 ʁ
2.2 EVD ˜ ệ ɚ ŭ
Ƣ ICU ɜ ˜ Ὸ Ь Ẋ ɜ ˜ ´
Ң ɜ ɜ NF κB ɜ
PCT Ƣ ẇ IL 1β δ ɔ Ƣ EVD ˜
ệ δ ɚ ɔ ɚ ɐ ŭ ʁ
Ң ɜ >7 d Ƣ ẇ
NF κB ɜPCT ɜIL 1β ╗ ي δ EVD ˜
ệ ○ ɚ ي P<0.05 ʁ
2 ʁ
2.3 NF κB ɜPCT ɜIL 1β EVD ˜ ệ

ROC NF κB ɜPCT ɜIL 1β Ƣ ẇ ɔ
´ ROC ŭ ậ δ 0.718 ɜ0.753 ɜ0.726 Ƣ
ẇ 0.870 Ὸ ´ ɜ ي ŧ P<
0.05 ʁ 3 ɜ ɑ 1 ʁ

3

ẏ ш ᾠ ή ă ⁸ ʁ ⁹
ẇ ´ ‴ ㄱ EVD ˜ ㄱ ệ ″H ˘ ᾐ 2%~24% ʁ
EVD δ Ж ệ δ ´ ώ Ξ ĩ
ㅅ Ж ˜ Ă ″Ą ˜ ẇ ʁ



1 EVD ROC

Figure 1 ROC curve analysis of intracranial infection after EVD

[10] EVD ~ ệ ɱ ệ ɣ Ẍ ´ Ɓ ɚ Ж ɒ ~ ʊ ά ´ Ж ' ˛ Ë ƙ ɯ ~ ɯ ' Ë ㄱ ɞ NF κB h ' ´ ɚ Ẹ ẁ ɔ ‴ Ẹ Ạ IκB ´ ᾠ ẁ Љ X ɞ ɚ ṭ IκB ˘ IκB ⅞ ㄴ ⅞ ⅞ NF κB ˍ Ғ Ẹ Ꮒ ɚ ŏ h ц Ẋ ㄱ Ғ ~ ' ɞ [11] NF κB ẁ ♣ Ὸ ~ ệ X ɛ Ὸ Љ ㄱ ệ ɞ [12] Ϛ NF κB ẁ ệ X Ὸ NF κB ẇ ‴ Ẹ Ạ IκB ⅞ Љ ɞ NF κB ˘ ‴ EVD ~ ệ ㄱ ㄱ ŏ ă ɞ IL 1β ẁ ệ ε ´ ẇ ŏ ɚ ㄴ ώ ɚ [13] ɞ [14] IL 1β ‴ Ῐ Ω ƙ ƙ ㄱ ệ Ξ \l ă Liu [15] IL 1β ℸ ʒ ɚ Ὸ δ IL 1β ˘ ~ ệ ⅞ ɞ ŏ ʒ ɚ ˘ IL 1β Љ ʒ ʒ Ῐ Ω ƙ ẁ ṭ ɔ IL 1β ˘ h ⅞ ˍ ɱ T ɕ ц ɛ IL 6 ɚ Ẋ ' ˛ ㄱ ƙ ẇ IL 1β ˘ Љ EVD ~ ệ ɞ PCT δ ώ ɱ Ẹ ẁ ᵽ ɱ ă X Ꮒ ẁ Ã ɔ ℸ ɞ ώ PCT Љ ή ɞ ㄱ [16] ẁ ệ ă X PCT PCT ɔ Ꮒ Θ d ɞ Ϛ ROC h ŏ NF κB ɜPCT ᾠ ẇ IL 1β EVD ~ ệ Θ d ´ ɔ ي ғ ɞ Ꮒ ᾠ >7 d Ϛ ي EVD ~ ệ ○ ɚ ɞ [17] ɯ ' Ẍ Ɓ ' ˛ ệ ή ẇ Ґ ᾠ Ὸ Љ ƙ ת ላ ŏ ă ỷ ' ˘ ɞ ɔ [18] ´ Ꮒ δ Ξ ệ ㄱ Ϛ ή X Љ ώ ~ ŏ ă ẽ ỷ ẇ Ґ ᾠ´ ẽ ẇ ᵽ ᾠ Ꮒ ~ ệ ㄱ ㄱ ɞ ή ላ EVD ~ ○ ệ Ϛ ˘ ầ Ⱡ ɞ ɛ Ꮒ ɔ >7 d ᾠ ẇ NF κB ɜPCT ɜIL 1β ℸ ي δ EVD ~ ㄱ ệ ○ Ῐ ɚ Ὸ NF κB ɜPCT ɜIL 1β ɔ ´ EVD ~ ệ Θ d ɞ Ϛ ẁ h Ж ´ ʊ Ꮒ ' Ὸ ɔ ẁ ضم ئى ˘ ㄱ ɚ Ῐ ẁ v ɾ ỷ ~ ш ɔ Ⱡ ⅞ ă ᾠ δ h ' Ạ ɞ

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TLR4 NF κB

MHD ∧ Toll ┐ м 4 TLR4 ⊰ ⊱ κB NF κB Ĩ ⊍ Ŭ 2019 1 2022 11 ŭ ă ă Ώ ┘ 118 ┒ MHD ή Ę Ŭ δ n=52 ∧ ´ n=66 ⊍ ┐ + ˝ 0.8 g/ 3 /d ´ ┐ + ˝ + 15 g/ 2 /d N ي 2 T ⊍ Ŭ N ή ⊰ ώ ˟ 2 T ˜ ´ 24 h UPE ⊰ SCr ⊰ BUN ⊰ ц IL 6 ⊰X / d NLR ⊰ ϫ ⊱ α TNF α ⊰TLR4 ⊰NF κB mRNA ϣ ´ א ┯ ⊍ 2 T ˜ ´ Љ σ ²=5.449 P<0.05 ⊍ N ώ UPE ⊰SCr ⊰BUN ي σ P>0.05 ˜ N UPE ⊰SCr ⊰BUN ي Ң Ό ´ Ң σ P<0.05 ⊍ N ώ IL 6 ⊰NLR ⊰TNF α ي σ P>0.05 ˜ N IL 6 ⊰ NLR ⊰TNF α ي Ң Ό ´ Ң σ P<0.05 ⊍ N ώ TLR4 ⊰NF κB mRNA σ P>0.05 ˜ N TLR4 ⊰NF κB mRNA ي Ң Ό ´ Ң σ P<0.05 ⊍ N ´ א ┯ σ P=0.903 ⊍ ´ ˝ MHD ċ Ę ´ ˟ ˘ ˟ Ą TLR4 ⊰NF κB ă ⊍ Toll ┐ м 4 ⊱ κB

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To investigate the effect of Huangqi Yishen granule combined with sevelamer on the efficacy and Toll like receptor 4 TLR4 and nuclear transcription factor κB NF κB in patients with maintenance hemodialysis MHD. The clinical data of 118 MHD patients admitted to Lu an City Lu an World Hospital from January 2019 to November 2022 were retrospectively analyzed. They were divided into a control group n=52 and a combined group n=66 according to different treatment methods. The control group received routine treatment + sevelamer 0.8 g/time 3 times/d . The combined group received routine treatment + sevelamer + Huangqi Yishen Granules 15 g/time 2 times/d both groups were treated for 2 months. The clinical efficacy renal function 24 h urinary protein excretion rate UPE serum creatinine SCr blood urea nitrogen BUN microinflammatory state interleukin IL 6 neutrophil / lymphocyte ratio NLR tumor necrosis factor a TNF a TLR4 NF κB mRNA levels and incidence of adverse reactions were statistically analyzed before and 2 months after treatment in the two groups. After 2 months of treatment the total effective rate of the combined group was significantly higher than that of the control group and the difference was statistically significant ^{2}=5.449 P<0.05 . After treatment UPE

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SCr and BUN in the two groups decreased and those in the combined group were lower the differences were statistically significant t=5.953 2.900 8.309 P<0.05 . After treatment IL 6 NLR and TNF α in both groups decreased and those in the combined group were lower the differences were statistically significant t= 4.956 3.841 5.098 P<0.05 . There was no significant difference in TLR4 and NF κB mRNA levels between the two groups before treatment t=1.526 0.622 P>0.05 . After treatment TLR4 and NF κB mRNA in both groups decreased and those in the combined group were lower the differences were statistically significant t= 4.714 4.494 P<0.05 . There was no significant difference in the incidence of adverse reactions between the two groups ^{2}=0.015 P=0.903 . . . . . Huangqi Yishen Granule combined with sevelamer can improve the therapeutic effect on MHD patients. This combination has been shown to enhance renal function and reducemicro inflammatory states. These improvements may be linked to the suppression of TLR4 and NF κB expression.

. . . . MHD Huangqi Yishen Granules Micro inflammatory state TLR4 NF κB

ƣ c ╗ [1]

Maintenancehe modialysis MHD

Ж ϩ MHD ϯ ϯ

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Лы – Ńd – Ńd Ń ‴

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ε Ϣ p ɔ╗ θ Ńδ ε ` p

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ę υ ´ Ό ƣ

h [7] Ж ѽ ƣ MHD X

˘ в Toll ϩ м 4 Toll like

receptor 4 TLR4 δ TLR X ⅄ υ h ƣ

м Ẍ ᾰ ⅄ ᾰ X ϯ ĕ [8] в

ѳ κB nucler factor kappaB NF κB ᾰ

X ε ѳ ẇ ѽ MHD

‴ NF κB ă [9] в ƣ

´ ‴ MHD

⅄ TLR4 ɜNF κB ї ɔ в

1

1.1 h

ŭ 2019 1 2022 11 ƣ ă

ă Ω ┘ 118 ϩ MHD ή в

ȃ A 18 ϩ MHD >6 T

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A [10] в A ɔ

ث ´ ´ Ã ´ ⅞ ‴

ɔ <6 T

в ´ Ẹ ŭ δ n=52 ⅄ ´

ي n=66 в Ẹ X 28 ϩ 24 ϩ

60.14±5.38 ϛ ϯ 29 ϩ

ي 20 ϩ ♣ 3 ϩ

.ϩ 22.48±8.69 T ϩ 5 1 ƣ ѳ ẇ § Ѕ ή Ų 4 3 ϩ . ♣ ѝ

ي 61.75±7.60 ϛ ϯ 33

ϩ 26 ϩ ♣ 7 ϩ

ي 23.57±7.08 T в N ă ή

σ

1.3.2 N ´

2.4 N TLR4 NF κB

N TLR4 NF κB mRNA

σ P>0.05 ~ N TLR4 NF κB mRNA Ң Ό Ң σ P<0.05 4

4 TLR4 NF κB

Table 4 Comparison of TLR4 and NF κB levels between the two groups

ά	n	TLR4 mRNA		NF κB mRNA	
		ώ	~	ώ	~
	66	1.21±0.24	0.69±0.12[a]	1.10±0.19	0.74±0.13[a]
	52	1.15±0.17	0.83±0.20[a]	1.08±0.15	0.86±0.16[a]
t [d]		1.526	4.714	0.622	4.494
P [d]		0.130	<0.001	0.536	<0.001

2.5 N

δ 6.06% 4/66 δ 3.85% 2/52 N σ P> 0.05 5

5 n %

Table 5 Comparison of adverse reactions between two groups n %

ά	n				
	66	1 1.51	1 1.51	2 3.03	4 6.06
	52	1 1.92	0 0.00	1 1.92	2 3.85
[2 d]					0.015
P [d]					0.903

3

MHD

Ό мЧ Ξ Ш [11] [12] ңhє Ң MHD мę ⅞ Ċ Ė I ψ Ϛ Ї Ę ε δ B Ω П ŭ ў Ό щ Ң ч υ [13] Ж ∓ Ғ ш ң Ċ ή Ϗ ă Ω Ль MHD p ƥ Ғ

[14] [15] [16] NLR MHD ă MHD Ã MHD [17 18] Ą Ш Ċ ε Ў ă TLR4 NF κB [h] Ċ ă Ж Ę Ą δ [h] Ë N ψ Ό Ξ Ό N Ã Ċ Ę MHD Ą TLR4 NF κB ă

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19 21 1 ALI PLR

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also increased successively while the ALI value decreased successively the difference was statistically significant F=83.871 224.621 189.263 P<0.05 . The progressive group had a higher proportion of patients with a smoking e gr я i Ÿ Mel я H r t

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150 ҷ 18 Ӈ 2 ҷ 53 ҷ 35~88

2023 LC 13

1.2

1.2.1

TNM 25 ҷ 10 ҷ 36 ҷ 79 ҷ

1.2.2 CYFRA21 1 ALI PLR

10 min 10 cm 3 500 r/min BK 200 CYFRA21 1 BC 3000 ALI PLR ALI= kg/m² × g/dL / / kg / m² PLR= /

1.3

IMB SPSS 25.0 N t n % P<0.05

2

2.1 TNM CYFRA21 1 ALI PLR

150 ҷ X CYFRA21 1 PLR > > > ALI < < < P<0.05 1

1 TNM CYFRA21 1 ALI PLR

Table 1 Expression of CYFRA21 1 ALI and PLR in patients with different TNM stages

TNM ŏ	n	CYFRA21 1 ng/mL	ALI	PLR
	25	4.04±1.04	59.44±4.02	113.82±12.10
	10	5.06±0.73[a]	55.73±4.45[a]	132.97±5.69[a]
	36	7.48±2.76[ab]	46.27±2.68[ab]	156.66±21.44[ab]
	79	11.36±2.40[abc]	37.75±4.93[abc]	186.13±7.70[abc]
F d		83.871	189.263	224.621
P d		<0.001	<0.001	<0.001

‟ [a]P<0.05 ‟ [b]P<0.05 ‟ [c]P<0.05 в

2.2 ĩ ~ ∓ ѧ ŏ

Ḍ ~ ỷ ᴍ Ė ≥50% Ό 4 ヘ ↀ ϵ ȝΟ Ό δ ᴍ Ė <50% ᴍ ⁋ ȝΟ δ ŏ δ 96 ʔ ẇ 54 ʔ N ȝ ` ȝ ` ȝ ṓ ▉ ψ σ P>0.05 ヘ ` ȝ ~ ▉ ȝCYFRA21 1 ȝPLR ψ Ль ALI Ώ Ң Ль σ P<0.05 в 2 в

2.3 ~ ′ ѧ Logistic ę ŏ ‧ 2 X P<0.05 ∓ ѧ ĕ δ Ɔ d ѧ ŏ Ό ヘ ` ȝ ~ ẇ CYFRA21 1 ȝPLR ẇ ALI ψ ~ ′ ĩ ѧ P<0.05 в 3 в

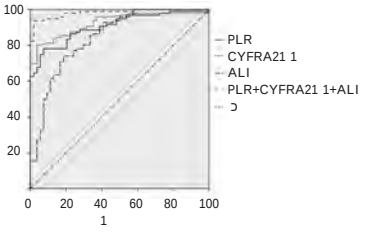
2.4 PLR ȝALI ´ CYFRA21 1 ç ~ ′ ROC CYFRA21 1 ȝPLR ȝALI ´

2 n % ¯

Table 2 Single factor analysis affecting prognosis of patients with lung cancer n % ¯

h		n=54	n=96	t/ d	P d
		54.21±10.37	56.89±11.29	1.436	0.153
	`	27 50.00	35 36.46	2.614	0.106
		27 50.00	61 63.54		
	`	5 9.26	16 16.67	2.272	0.132
		49 90.74	70 72.92		
	ṓ	35 64.81	62 64.58	0.001	0.978
		19 35.19	34 35.42		
ヘ	`	16 29.63	53 55.21	9.103	0.003
		38 70.37	43 44.79		
	`	15 27.78	46 47.92	5.809	0.016
		39 72.22	50 52.08		
TNM ŏ	~	21 38.89	14 14.58	11.413	<0.001
	~	33 61.11	82 85.42		
PLR		135.55±21.33	179.16±26.77	10.272	<0.001
ALI		51.66±8.66	40.35±6.62	8.966	<0.001
CYFRA21 1 ng/mL		5.55±1.45	10.67±3.21	11.090	<0.001

~ ′ ɔ δ 0.982 ψ Ль ∓[h] P<0.05 в 4 ₐ 1 в



1 PLR ALI CYFRA21 1 ROC

Figure 1 ROC curve of PLR and ALI combined with CYFRA21 1 to evaluate poor prognosis in patients with lung cancer

3 Logistic

Table 3 Multivariate Logistic regression analysis of poor prognosis in patients with lung cancer

h	d	d	SE d	Wald d	OR d	95% CI d	P d
ヘ `	=1 =0	0.578	0.242	5.705	1.782	1.109 2.864	0.017
`	=1 =0	0.549	0.289	3.609	1.732	0.983 3.051	0.057
~	~ =1 ~ =0	0.571	0.239	5.708	1.770	1.108 2.828	0.017
PLR		0.603	0.249	5.865	1.828	1.122 2.977	0.015
ALI		-0.544	0.216	6.343	0.580	0.380 0.886	0.012
CYFRA21 1		0.559	0.217	6.636	1.749	1.143 2.676	0.010

4 PLR ALI CYFRA21 1 ROC

Table 4 ROC characteristics of PLR and ALI combined with CYFRA21 1 to evaluate poor prognosis in patients with lung cancer

ṓ	d		%	%	95%CI	AUC	P d
PLR	163.36	0.707	78.1	92.6	0.858~0.951	0.904	<0.001
ALI	44.01	0.555	74.0	81.5	0.779~0.913	0.846	<0.001
CYFRA21 1	7.49 ng/mL	0.765	80.2	96.3	0.884~0.967	0.926	<0.001
LDH+SAA+IL 17A		0.919	93.8	98.1	0.966~0.999	0.982	<0.001

3

σ [8] CYFRA21 1

ALI PLR

ALI Ë

σ [9]

CYFRA21 1 [10]

ALI

ALI CYFRA21 1

PLR δ

CYFRA21 1

[11]

ALI PLR [12]

CYFRA21 1 PLR ALI

[13,14]

CYFRA21 1 PLR ALI

ALI ε

BMI

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ROC CYFRA21 1 PLR ALI

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0.982

CYFRA21 1 PLR

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σ P<0.05 N ي Ό ´ א ~ ي ǫ̇ ï ´
א ㅋ σ P>0.05 ɞ ˘ ᘯ CPHD ´
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SHI Dekun[1] NIE Wei[2] HUO Yongqiang[1]

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To explore the influence of Zhenwu decoction on cardiopulmonary function and levels of interleukin IL 8 procalcitonin PCT and high sensitivity C reactive protein hs CRP in patients with chronic pulmonary heart disease CPHD. The medical records of 98 patients with CPHD at Huaibei Hospital of Traditional Chinese Medicine were retrospectively analyzed from December 2021 to December 2023. 48 patients treated with conventional Western medicine were included in the control group and 50 patients who received conventional Western medicine combined with Zhenwu decoction were enrolled in the study group. The TCM syndrome scores cardiopulmonary function inflammatory cytokines before and after treatment and adverse reactions during treatment were observed in the both groups. After treatment the scores of TCM syndromes IL 8 PCT hs CRP left ventricular end diastolic diameter LVEDd and left ventricular mass index LVMI in the two groups decreased significantly P<0.05 . These indicators were lower in the study group compared to the control group P<0.05 . The forced vital capacity FVC forced expiratory volume in the first second FEV_1 ratio of forced expiratory volume in the first second to forced vital capacity FEV_1/FVC and left ventricular ejection fraction LVEF in the two groups

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after treatment significantly increased P<0.05 . The indicators in the study group were higher than those in the control group P<0.05 . There were mild adverse reactions in both groups during treatment which were relieved with symptomatic treatment. There was no statistical significance in the total incidence rate of adverse reactions P>0.05. . . . . The application of Zhenwu decoction in treating patients with CPHD can enhance cardiopulmonary function recovery effectively lower the levels of inflammatory factors alleviate the clinical symptoms and demonstrate good safety.

. . . . Zhenwu decoction CPHD Cardiopulmonary function Inflammatory cytokines

Chronic pulmonary heart disease CPHD ɜ Ό ♣ ~ ´ ´ ɔ [1] в CPHD ε ᘐ ɻ ტ ɜ৸ ৸ ʢ ɜ ˍ ʐ ᖶ ৸ ৸ δ ε в CPHD ˜ ɜ ´ ي Ξ ʐ ᖶ ' ƃ Ό ৸ ৸ ৸ ´ [2] в ѽ ή CPHD ε ƒ ৸ Ạ Ж CPHD Ặ ' ~ ´ [3] в X ┘ δ CPHD ѧ ɱ ´ Ặ ʅ є ´ ѭ ‴ ɜ ɜ ɜ ط ´ ă Ế ‴ N ي [4] в ⅞ X Ḥ Ό ц ƙ ɦ ẹ ώ υ ´ ε υ [5] в Љ CPHD X ᘐ Ẹ ě ɔ в

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ң ƀ Љ ɔ X ┘ ┘ 2021 12 2023 12 110 ʅ CPHD ầ �""A ┘ ´ ц ɲ ╤ 2018 ɦX [6] CPHD ă ỔA X ┘ ´ ɜ ɻ є Ὼ ο ´ □ ᘐ ɔ δ ỹ в ο ƃ new york heart association NYHA ŭ δ ~ [7] ˆ щ ˇ ´ в ỔA ئۇ Ξ ´ ´ Ã ´ ɜӸ ɜệ ŭ ´ γ Ẹ ë ტ Ξ ტ ˋ ϯ ئۇ в є ỔA"Ọ Ë 12 ʅ ˜ Æ 98 ʅ ŭ 48 ʅ ầ ´ 50 ʅ ầ в N ɲ σ P>0.05 ẹ ˇ 1 в ┘ ĸ ৲ ƃ ỔA в 1.2 ˬ в Ґ˳ᘐ Ґ ˬ

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days of treatment the wound infection rate of the combined group was lower than that of the control group and the difference was statistically significant P<0.05 . After 14 days of treatment the CRP value and wound volume value of the combined group were lower than those of the control group and the difference was statisti cally significant P<0.05 . The wound healing rate in the combined group was 86.67% which was hi_ Ƥ ↑ h 8

2.3 N ´ˆ MMP2 ЗTMP1 ∧ VEGF σ P>0.05 Ж ẇ П Й ŏ σ P<0.05 в 4 в N MMP2 ЗTMP1 З NPWT ´ VEGF ∧ ẇ П Й ě TMP1 ╗ MMP2 Ң P<0.05 в σ P<0.05 в N VEGF ѧ 1 в

3 n % ¯

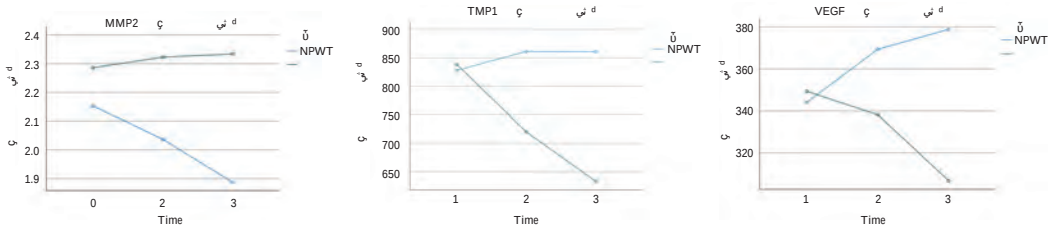
Table 3 Comparison of wound healing rate toe amputation rate and wound healing time between the two groups n % ¯

ŏ		14 d ˜Ω				˜Ω ´ d
NPWT ´	15	4	9	2	13 86.67 [a]	1 6.67 [a]	65.53±24.36[a]
	15	0	6	9	6 40.00	7 46.77	97.47±17.06[a]
/ [d]					5.167	4.261	13.954
[d]					0.023	0.039	<0.001

4 MMP2 TMP1 VEGF ¯

Table 4 Simple effect analysis of MMP2 TMP1 and VEGF levels at different time points between the two groups ¯

	ŏ	n	0 d	7 d	14 d	F [d]	P [d]
MMP2	´	15	2.29±0.18	2.04±0.19	1.89±0.29	27.590	<0.001
		15	2.32±0.23	2.33±0.28	2.15±0.19	4.488	0.043
	t [d]		0.234	11.883	8.779		
	P [d]		0.632	0.002	0.006		
TMP1	´	15	827.79±80.03	849.89±79.70	872.18±81.38	17.862	<0.001
		15	838.69±89.74	720.18±73.42	632.53±87.40	42.846	<0.001
	t [d]		0.123	21.491	60.410		
	P [d]		0.728	<0.001	<0.001		
VEGF	´	15	348.77±47.50	365.65±41.17	382.61±38.67	1.808	0.190
		15	349.35±38.74	330.58±46.40	290.26±39.40	24.480	<0.001
	t [d]		0.01	4.796	41.983		
	P [d]		0.971	0.037	<0.001		



1 δ ώ 2 δ 7 d 3 δ 14 d в

1 MMP2 TMP1 VEGF

Figure 1 The interaction and levels of MMP2 TMP1 and VEGF at different time points between the two groups

2.4 N 3 T З6 T ę ў ´ 3 T ⊣ ẇ ⊣ З6 T ي Ң Љ σ P<0.05 Ж N 6 T ⊣ σ P> 0.05 в 6 в

3

⊣ 7 d ˜Ω ш 46.7% DFO ´ Ą

6 n %

Table 6 Comparison of follow up between the two groups n %

ŏ	n	3 T			6 T		
		⊣		M	⊣		M
´	15	0 0.00 [a]	0 0.00	0 0.00	3 20.00	0 0.00 [a]	1 6.67
	15	3 20.00	2 20.00	1 6.67	4 26.67	3 20.00	0 0.00
d		4.493	4.493	<0.001	0.536	4.493	<0.001
P [d]		0.034	0.034	1.000	0.464	0.034	1.000

‴ [a]P<0.05 в

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tive group were significantly higher than those in the effective group with statistical significance ^{2}/t= 11.953 11.116 39.329 all P<0.05 . The efficacy of MM patients was negatively correlated with serum IL 21 LDH levels and 1q21 amplification positive rate r=-0.613 -0.294 -0.572 all P<0.05 . Multivariate regres sion analysis showed that age >60 combined amyloidosis 1q21 amplification elevated serum IL 21 and LDH expression levels were independent risk factors for the prognosis of MM patients P<0.05 . ROC curve showed that the ROC areas of serum IL 21 and LDH and their combined detection were 0.785 0.781 and 0.849 respectively all P<0.05 . . . . . The amplification of 1q21 and the high expression of serum IL 21 and LDH may affect the efficacy of MM patients and the combined detection of serum IL 21 and LDH has a high value in the prognosis assessment of MM patients.

. . ‴ . ‴ Multiple myeloma 1q21 amplification Lactate dehydrogenase Interleukin 21

ㅜ Multiple Myeloma MM ή
ɞ Ẹ ή ɜ
ω ɐ ȳ
^{1} ɞ ̂ ㅜ ẇ M Ϛ ^{h}
' Ë MM ẇ Ẹ ɞ ɐ
Ë MM ẇ ~ ĩ ɐ ẹ
σ ɞ Th17 ẇ ă ɐ
ц 21 Interleukin 21 IL 21 ˘ ɔ ‴ Ẍ
ă ㅜ ㅓ ㅜ ˘ ě δ MM
^{2} ɞ ϯ Lactate Dehydrogenase
LDH ŏ Ль e ɱ ^{h} NAD ̊
Ẹ ẁ e ɱ
X ẹ Θ ^{d} ^{3} ɞ 1q21 ㅉ
MM ○ ɳ υ^{h}
Ẹ ˘ ‴ ㅓ ㅜ ŏ ^{4} ɞ
1q21 ㅉ ɜ IL 21 ↀ ẇ LDH ‴
MM ă ^{h} ŏ IL 21
ↀ ẇ LDH Ль MM ~ Θ ^{d} ↀ
δ ή MM ~ ㅓ ç W ɔ ɞ

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ㅓ 2017 10 2023 6
^{h} e ⅃ MM ẳ 162 Ϛ
δ ɞ ầ ̃A ɔ
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2022 ћ^{5} 33~92 ثيЛь Ϛ
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~ AML 2017 020 ɞ

1.2

1.2.1

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ŏ ɔ ă
ɞ Ẹ X^{h} ή ₵̂ ά ɜ ɜ
M ŏ يم IgG يم IgG يم ɜ ο ŏ ɱ
nternati onalstagi ng system ISS ŏ ɜ ~ ´
ɔ ẇ ƙ ₵̂ IL 21 ɜ
LDH ɜ 1q21 ㅉ ɞ

1.2.2

ثيЛь ầ ㄟ FISH
ɞ ㄟ
3 mL Ль Ḥ 2 mL Ль EDTA Ḥ X
β ↀ 3 000 r/min
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113 Ʒ ɜ 49 Ʒ ɐ ~ ŏ
Ȯ 3 T ǫ̊
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ب ɐ Ƈ ψ Ë
Ŧ ɜ ẇ M ỷ ɐ Ȯ
Ŧ ɜ M ỷ ầ ~ ´
ŏ δ ~ n=64 ɜ ~ ´ n=98 ɐ
1.3
ي Ƈ SPSS 22.0 ψ ŏ
Ƈ ¯ t Ƈ n %
² Ƈ Spearman ẇ kendall ắ ŏ
IL 21 ɜLDH ẇ 1q21 ˆ ˝ MM ắ
₸ ɜ ɹ Logistic ɐ ŏ ĩ MM
~ ○ ɹ IL 21 ɜLDH MM ~
Ɵ d Ɣ ě ROC h
ŏ ɐ P<0.05 σ ɐ

2

2.1 ´ ˚ ŏ IL 21 ɜLDH Ƈ ẇ 1q21 ˆ
IL 21 ɜLDH Ƈ ẇ 1q21 ˆ
ي Ль σ P< 0.05 ɐ 1 ɐ

1 IL 21 LDH 1q21 n % ¯

Table 1 Comparison of serum IL 21 LDH levels and 1q21 amplification positive rate in different therapeutic groups n % ¯

ǫ̇	n	IL 21 pg/mL	LDH U/L	1q21
	113	118.46±7.35	246.48±68.36	30 26.55
	49	142.77±18.58	393.17±94.54	39 79.59
/t d		11.953	11.116	39.329
P d		0.000	0.000	0.000

2.2 IL 21 ɜLDH ẇ 1q21 ˆ ˝ MM ắ
MM ˝ IL 21 r=-0.613 ɜLDH r=-0.294 Ƈ ẇ 1q21 r=-0.572 ˆ ي \ ắ P<0.05 ɐ
2.3 ~ ˝ ~ ´ ή ~ ˝ ~ ´ ŵ ɜISS ŏ ɜ ~ ´ ɔ ɜ1q21 ~ ˆ ɜ IL 21 ɜ LDH c ę σ P< 0.05 ɐ 2 ɐ

2
n % ¯

Table 2 Comparison of clinical data between good prognosis group and poor prognosis group n % ¯

ɹ	n=162	~ n=64	~ ´ n=98	/t d	P d
				7.150	0.008
>60	99	31 48.44	68 69.39		
≤60	63	33 51.56	30 30.61		
ǫ̇				0.141	0.708
	89	34 53.13	55 56.12		
	73	30 46.87	43 43.88		
ISS ŏ				3.960	0.047
~	89	29 45.31	60 61.22		
	73	35 54.69	38 38.78		
M ŏ ي				0.515	0.473
IgG ي	56	20 31.25	36 36.73		
IgG ي	106	44 68.75	62 63.27		
´ ƙ				0.207	0.649
	18	8 12.50	10 10.20		
~	144	56 87.50	88 89.80		
ɔ				5.486	0.019
	23	4 6.25	19 19.39		
~	139	60 93.75	79 80.61		
1q21 ˆ				15.879	0.000
	69	15 23.44	54 55.10		
	93	49 76.56	44 44.90		
IL 21 pg/mL		118.24±10.62	130.76±11.35	7.038	0.000
LDH U/L		239.86±80.31	324.15±92.37	5.972	0.000

2.4 ɹ ɐ ŏ ĩ MM ~ ○ ɹ
Ƈ MM ~ δ ɹ ɔ ɹ ɐ ŏ ɐ >60 ɜ ɔ ɜ1q21 ˆ ɜ IL 21 Ƈ ẇ LDH ₸ ي δ ĩ MM ~ ○ ɹ P<0.05 ɐ 3 ɐ
2.5 IL 21 Ƈ ẇ LDH Ль MM ~ Ɵ d
ROC IL 21 Ƈ ẇ LDH Ƈ ẇ Ï ´ ROC ŏ ǫ̇ δ 0.785 ɜ0.781 Ƈ ẇ 0.849 Ȯ ´ ɜ ي ғ Ль ₸ h P<0.05 ɐ 4 ɜ ɑ 1 ɐ

3

MM Ƈ X ʹĄ ˆ δ Ę ˆ Ң Ȯ MM Ŧ Ȯ ЖК ѽ ɯ ɐ 7 ʹĄ MM ´ h Ȯ ~ ẇ ɐ ɹ ʹĄ ɜẇ ç ẇ ~ ẇ ~ ₸ ي σ ɐ

3 MM

Table 3 Multivariate regression analysis of independent risk factors influencing the prognosis of MM patients

ᴥ	d	d	S.E d	Wald d	OR d	95% CI	P d
	˜ =0 =1	0.664	0.235	7.954	1.943	1.226~3.079	0.005
Ɔ	˜ =0 =1	0.721	0.283	6.491	2.056	1.181~3.581	0.011
ISS ǔ	~ =0 =1	0.742	0.483	2.360	2.100	0.815~5.412	0.124
1q21 ˜ ᵐ	=0 =1	0.531	0.201	6.979	1.701	1.147~2.522	0.008
IL 21 pg/mL	Ɔ	0.683	0.218	9.816	1.980	1.291~3.035	0.002
LDH U/L	Ɔ	0.730	0.228	10.251	2.076	1.327~3.244	0.001

IL 21

*

lncRNA PVT1 HIF 1α

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1. 610011
2. 518000
E mail xiaokangli_cpu@126.com

group the expression levels of serum lncRNA PVT1 and HIF 1α in EMs patients were obviously higher with statistical significance P<0.05 . As the progression of R AFS stage the expression levels of serum lncRNA PVT1 and HIF 1α in EMs patients gradually increased P<0.05 . Pearson correlation analysis showed that lncRNA PVT1 was positively correlated with HIF 1α r=0.419 P<0.05 Spearman correlation analysis showed that the levels of serum lncRNA PVT1 and HIF 1α were obviously positively correlated with the R AFS stage of EMs patients r=0.467 0.699 P<0.05 . The ROC curve showed that the AUC of lncRNA PVT1 and HIF 1α in diagnosing EMs alone was 0.915 and 0.873 the sensitivity was 87.0% and 73.9% and the specificity was 70.7% and 73.9% respectively the AUC of the combined diagnosis of EMs was 0.962 the sensitivity was 87.0% and the specificity was 78.3% The proportion of patients with high expression of lncRNA PVT1 and HIF 1α in clinical stage to deep growth cyst size≥3 cm and dysmenorrhea was significantly higher than those with low expression of lncRNA PVT1 and HIF 1α and the difference was statistically significant P<0.05 . . . . . The expression levels of serum lncRNA PVT1 and HIF 1α in patients with EMs are increased and the high expression of lncRNA PVT1 and HIF 1α is related to the R AFS stage. Therefore the combined detection of the two may be beneficial for the early targeted treatment in clinical settings.

. . . . Endometriosis lncRNA PVT1 HIF 1α

ê ч endometriosis EMs ĂA[7] ă ` ѽ 3 T
ê ئۇ м Ѡ ئۇ EMs в ĂA
X ㄱ δ 10%~15% ε δ ᴝ ´ Ẹ Ξ ´ Ẹ
Ξ ĩ ƿ [1 2] в ´ ئۇ Ӧ в ˀ
EMs [h] Ж ‴ ئۇ ᴏ ŭ 92 Ꝁ
ч ẹ ˚ ᴝ ᴎ ㄱ δ ˜ ê ثي
[3] в EMs ㄱ ĂĄ ´ ή 35.73±9.47 в к ᴎ Ь ĂA
EMs ᴏ â ĩ EMs Ẹ ˀ Ɂ в
ㄱ ㄱ ŭ ĂĄ ẹ σ в ᴏ 1.2
1α HIF 1α ц ﷺ ă 1.2.1 lncRNA PVT1 ᴎ HIF 1α
ᴏ HIF 1α ˘ Ѡ EMT ᴏ lncRNA PVT1 ƒ Ẉ
T ᴎ ◘ ˜ ' ˚ ᴝ ᴎ [4] в PCR qRT PCR в 3~5 mL
LncRNA ˘ ᵡ ᴝĒ M ᴎ ŭ ⅞ ς ˘ ᾒH ن˜ Ѡ ╙ 12 cm 3 000
ㄱ ceRNA ´ ц ê ᵩ ᴝ rpm 20 min ᵻ ϵ Љ -80 ў ä ᵻ в
ᵡ ᴝĒ M ᴎ˚ Ɔ ‴ EMs ㄱ ᴎ в TriZol ᵻ RNA TriZol ᾒH Љ ο
˘ Ɔ ч ᴝ ᴏ 1 PVT1 LncRNA Invitrogen Å ˝ ƒ TaKaRa ᾒH ´
ᴎ ʊ[h] ئۇ X ẹ ئۇ cDNA qRT PCR ˝Ω 1 в
ᵡ ᵴ ᴝ ᴎ Ē M X ㄱ ĕ ˜ ƒ 2 ƒ i
[5] в ᴏ ئۇ lncRNA PVT1 ʒHIF 1α
‴ EMs ㄱ ㄱ ă Ѡ ή в

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1.1 [h]

ᵻ 2021 10 2023 7 Љ
ɛ ┘ 92 Ꝁ EMs δ EMs
ثي 34.86±9.32 ο ╞ Ь
ת ŭ R AFS [6] EMs ŭ Ẹ X
16 Ꝁ 25 Ꝁ 38 Ꝁ 13 Ꝁ в
â ĂA ´ ц ê ч ╥ ɦX

1 PCR

Table 1 PCR primer sequence

˝ ˛	ɕ 5′ 3′	ɔ 5′ 3′
lncRNA PVT1	TTGGCACATACAGCCATCAT	GCAGTAAAAGGGGAACACCA
GAPDH	GAAGGTGAAGGTCGGAGTC	GAAGATGGTGATGGGATTTC

Ȣ n % ^{2} Ƒ Spearman ă ǒ ǒ EMs lncRNA PVT1 ɜHIF 1α ˝ R AFS ǒ υ ă ROC Θ lncRNA PVT1 ɜHIF 1α EMs Θ ^{d} Z lncRNA PVT1 ɜHIF 1α ´ ˝ N EMs ROC ɔ ɞ P<0.05 σ ɞ

2

2.1 N ^{h}

EMs γ ` ʔ Ль σ P<0.05 N ĝ ɜBMI ɜ- ɜ- T ɜ- ɕ σ P>0.05 ɞ 2 ɞ

2.2 N lncRNA PVT1 ɜHIF 1α

˝ EMs lncRNA PVT1 ɜ- HIF 1α ℸ σ P< 0.05 ɞ 3 ɞ

3 lncRNA PVT1 ɜHIF 1α ¯

Table 3 Comparison of serum lncRNA PVT1 and HIF 1α expression levels between the two groups ¯

ġ	n	lncRNA PVT1	HIF 1α pg/mL
EMs	92	1.96±0.46	88.63±22.64
	92	1.09±0.31	41.33±11.36
t ^{d}		15.044	17.911
P ^{d}		<0.001	<0.001

2.3 ´ ˚ R AFS ǒ EMs lncRNA PVT1 ɜHIF 1α

´ ˚ R AFS ǒ lncRNA PVT1 ɜHIF 1α σ P<0.05 Ό R AFS ǒ EMs lncRNA PVT1 ɜHIF 1α ℸ σ P<0.05 ɞ 4 ɞ

4 R AFS lncRNA PVT1 HIF 1α ¯

Table 4 Comparison of serum lncRNA PVT1 and HIF 1α levels in patients with different R AFS stages ¯

ġ	n	lncRNA PVT1	HIF 1α pg/mL
	16	1.30±0.24	34.60±9.46
	25	1.69±0.36^a	74.25±16.83^a
	38	2.15±0.54^{ab}	106.03±28.54^{ab}
	13	2.71±0.68^{abc}	131.95±32.78^{abc}
F ^{d}		25.236	50.317
P ^{d}		<0.001	<0.001

˝ ^{a}P<0.05 ˝ ^{b}P<0.05 ˝ ^{c}P<0.05 ɞ

2.4 lncRNA PVT1 ˝ HIF 1α υ ẇ Ę ˝ R AFS ǒ υ ă

Pearson ă ǒ lncRNA PVT1 ˝ HIF 1α \l ă r=0.419 P<0.05 Spearman ă ǒ EMs lncRNA PVT1 ɜHIF 1α ˝ R AFS ǒ ثي \l ă r_1=0.467 r_2=0.699 P<0.05 ɞ

2.5 lncRNA PVT1 ɜHIF 1α EMs

ROC lncRNA PVT1 ɜHIF 1α Ï ´ EMs AUC δ 0.962 95%CI 0.940~0.985 δ 87.0% δ 78.3% N ´ AUC Ль lncRNA PVT1 ∓ AUC Z=2.015 P=0.044 Ȣ ẇ HIF 1α ∓ AUC Z=2.836 P=0.005 ɞ ɑ 1 ɞ

2.6 lncRNA PVT1 ɜHIF 1α ˝ EMs ή ă

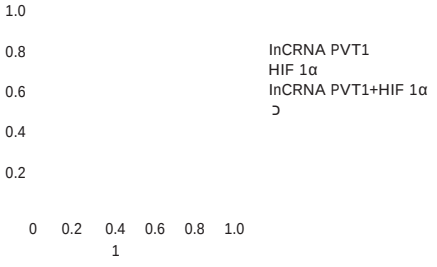
Ȣ lncRNA PVT1=1.35 ẇ HIF 1α=66.99 pg/mL δ ή ^{d} ǒ lncRNA PVT1 ≥1.35 δ 81 ʔ <1.35 δ Ĥ 11 ʔ

2 ¯ n %

Table 2 Comparison of general data between the two groups ¯ n %

ġ	n		BMI kg/m^2			T	
EMs	92	34.86±9.32	21.23±4.31	42 45.65	54 58.70	43 46.74	55 59.78
	92	35.73±9.47	20.94±4.26	35 38.04	23 25.00	36 39.13	46 50.00
/t ^{d}		0.628	0.459	1.094	21.462	1.087	1.778
P ^{d}		0.531	0.647	0.269	<0.001	0.297	0.182

HIF 1α ≥66.99 pg/mL δ 68 Ʒ <66.99 pg/mL δ Ң 24 Ʒ в lncRNA PVT1 ɜHIF 1α EMs ή ŭ ~ ɜ ɜش ≥3 cm ɜ Ʒ Љ lncRNA PVT1 ɜHIF 1α Ң σ P<0.05 в 5 в



1 ROC

Figure 1 ROC curve

3

EMs h ę ㄱ Ό ĩ ᵯ ´ ㅅ δ T ضم 8 в EMs ㄱ Ą x δ ɡ ´ в EMs ή ω ę ᵯ ᵯ Ꙍ β Ό 9 в ě δ EMs Ă ŋ Ω ƙ ɜ 10 в ɡ EMs ㄱ Ą ˘ EMs ę σ в lncRNA PVT1 ų Љ e ᵯ 8q24.1 ᵯ c Љ e ᵯ 8q24 └ضم DNA ɡ lncRNA PVT1 ‴ ㄱ ă 11 в Kong 12 ㄱ ê X lncRNA PVT1 Љ Ό lncRNA PVT1 ‴ ê ή ŭ ă в h ŭ lncRNA PVT1 EMs ή ŭ ~ ɜ ɜش ≥3 cm ɜ Ʒ Љ lncRNA PVT1 Ң lncRNA PVT1 ´ p ‴ EMs ㄱ ă ĩ в ˘ Љ lncRNA PVT1 EMs ɜ ɜ ‴ Ë M ŋ EMs X ن ў ㅅ ㄱ ᵯ X ㄱ ě ɜ c ų ê ⅞ EMs ㄱ ɜㄱ в HIF 1 ε α E نج ㅅ β E نج Ï ᵯ Ę X α E نج ў в ㄱ HIF 1α ŋ ę Ã ě Ę ŋ ɜ Ë M ɜ T ˘ c Ң نج ɡ 13 в 14 ㄱ ŋ EMs X HIF 1α Љ Ό HIF 1α ㄲ в ‴ 14 e h в HIF 1α ´ p ‴ EMs ㄱ ŭ ă Ό ĩ в ŭ Ʒ ɡ ˘ δ EMs Љ HIF 1α ᵯ ɔ Ꙍ h ɡ ɜ Ë HIF 1α HIF 1α ㄲ ˘ ў ㅅ ⅞ Ʒ в ROC lncRNA PVT1 ɜHIF 1α ŋ EMs ㄱ X ŋ h Θ d lncRNA PVT1 ´ HIF 1α EMs ˘ lncRNA PVT1 ɜHIF 1α N ´ EMs ę Θ d в h ă ŭ ㄱ lncRNA PVT1 ‴ HIF 1α ă lncRNA PVT1 ‴ HIF 1α Ѝ ě å EMs в

5 lncRNA PVT1 HIF 1α EMs n %

Table 5 Relationship between lncRNA PVT1 and HIF 1α expression and clinicopathological features of EMs patients n %

ή	n	lncRNA PVT1		d	P d	HIF 1α		d	P d
		n=81	Ң n=11			n=68	Ң n=24		
ή ŭ									
~	41	32 39.5	9 81.82	5.410	0.020	36 52.94	5 20.83	7.402	0.007
~IV	51	49 60.49	2 18.18			32 47.06	19 79.17		
	50	40 49.38	10 90.91	6.731	0.009	31 45.59	19 79.17	8.061	0.005
	42	41 50.62	1 9.09			37 54.41	5 20.83		
ش									
<3 cm	40	31 38.27	9 81.82	5.806	0.016	24 35.29	16 66.67	7.105	0.008
≥3 cm	52	50 61.73	2 18.18			44 64.71	8 33.33		
	54	52 64.20	2 9.09	6.667	0.010	34 50.00	20 83.33	8.130	0.004
~	38	29 35.80	9 90.91			34 50.00	4 16.67		

PDK1

1 2 2

Ό CHF ч 3 1 PDK1
א ă ẅ ή σ в 2022 3 2024 3 ┘ 180 Ҷ CHF
ě δ CHF ╞ Ь NYHA ŭ ч
ğ ҏ м 110 ҏ e ě δ в ч PDK1 mRNA C א
CRP ɜ˘ ᵯ ҙ Ҷ м suPAR ɜ ц 6 IL 6 ɜ ц 8 IL 8 в
Pearson ă ŭ ROC ŭ ~ CHF ç Θ d в CHF ч
PDK1 mRNA ҤЛЬ σ t=12.356 P<0.05 в CRP ɜ suPAR ɜ IL 6 ɜ IL 8
Ль σ t=12.193 ɜ 19.347 ɜ 18.742 ɜ 13.044 P<0.05 CHF X
ч PDK1 mRNA ҤЛЬ σ t=9.925 P<0.05 в CRP ɜ suPAR ɜ
IL 6 ɜ IL 8 Ль σ t=5.444 ɜ 5.647 ɜ 6.312 ɜ 8.015 P<0.05 CHF X ч
PDK1 mRNA CRP ɜ suPAR ɜ IL 6 ɜ IL 8 \J ă P<0.05 в CHF ч
PDK1 ɔ Ό ' ɜ א ă в
Ό 3 1 א

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2. Internal Medicine Department of Chengdu Jinsha Hospital Sichuan Chengdu China 610000

To investigate the correlation between the expression of 3 phosphoinositide dependent protein kinase 1 PDK1 in peripheral blood and inflammatory response in patients with chronic heart failure CHF and its clinical significance. A total of 180 patients with CHF admitted to Lansh eng Brain Hospital in Chengdu from March 2022 to March 2024 were selected for the CHF group. This group was further divided into mild heart failure with New York Heart Association NYHA grade and severe heart failure with grade to . Additionally. 110 healthy individuals who underwent physical examinations at our hospital during the same period were included as the control group. The mRNA expression level of PDK1 in pe ripheral blood and the levels of serum C reactive protein CRP soluble urokinase type plasminogen activator receptor suPAR interleukin 6 IL 6 and interleukin 8 IL 8 in serum were measured. Statistical analysis using t test was conducted to compare the differences in PDK1 CRP suPAR IL 6 and IL 8 among all groups The Pearson test was used to analyze correlations and ROC curves were generated to assess the diagnostic value of each indicator in determining the condition of CHF. The mRNA expression level of PDK1 in the pe ripheral blood of the CHF group was lower than that of the control group t=12.356 P<0.05 and the levels of

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CRP suPAR IL 6 and IL 8 in serum were higher than those in the control group with statistical significance t=12.193 19.347 18.742 13.044 P<0.05 . The mRNA expression level of PDK1 in the peripheral blood of patients with severe heart failure in the CHF group was lower than that of patients with mild heart failure t=9.925 P<0.05 and the serum levels of CRP suPAR IL 6 and IL 8 were higher than those of patients with mild heart failure with statistical significance t=5.444 5.647 6.312 8.015 P<0.05 . The mRNA expression level of PDK1 in the peripheral blood of the CHF group was negatively correlated with the levels of CRP suPAR IL 6 and IL 8 in serum P<0.05 . . . . . The expression of PDK1 in the peripheral blood of CHF patients is decreased which is related to the worsening of heart failure and the activation of the inflammatory response.

. . . . . Chronic heart failure 3 phosphoinositide dependent protein kinase 1 Inflammatory response

Ό chronic heart failure CHF ˜ 56.97±4.95 м 22.97±2.76 kg/m² в ή δ ላ N h σ P> ´ ɔ ɔ ɐ ↀẄ ŏ 0.05 в ‧ ˩ ĸ ላ ɓ ΐA в Ό ɓ Ό ɔ ɔላ ላ ɀ ↀẇ 1.2 ‵ 1 2 в ŋΰ ή X ŏ 1.2.1 ላ PDK1 mRNA ΐA ç CHF ę ŋΰ ي â ˜ Ï σ в 3 ˆ 1 3 phosphoinosit 5 mL Trizol ‧ RNA Ḥ ide dependent protein kinase 1 PDK1 h ŋΰ 1 μg RNA א δ . ϖ ě ϩ ǫ̈ PDK1 ɔ Ғ Ά PDK1 ɔ ɔ ´ ɔ в h CHF ă PDK1 Ғ Ό ' ‴ υ ă ŏ Ά ˘ PDK1 ' א 3 в CHF ላ PDK1 ‴ א ă ẇ ή σ ă ϩ ɔ в

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1.1 h

2022 3 2024 3 ˩ 180 ϩ CHF ě δ â ΐA ´ X ╝ ˩ ɓ Ά CHF ΐA 4 ╞ ɓ New York Heart Association NYHA ŏ ~ 5 ‧ ላ ẇ ˀ ϩ ˩ ή ĸ ላ ɓ ΐA в ΐA ´ ɔ ɔ ₵ ɔ ´ ላ ላ ´ ´ ´ в 180 ϩ CHF ě δ CHF ₵ 104 ϩ ɔ 76 ϩ 58.36±4.96 м 23.18±2.85 kg/m² в ↄ ‧ ˀ ŋΰ ƥ м 110 ˀ ƥ e ě δ ₵ 58 ϩ ɔ 52 ϩ

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ẓ ɱ ʁ Љ ẓ ɱ
ˊ ε ŭ δ ɲ ѧ
˜ [1] ʁ ɲ ѧ ₵
PCR ȝ˘
ƈ ẇ ˊ ˊ
δ e ɱ X Ã̃ [v] ɾ
ʌ Ӧ ŭ [2 3] ʁ
mNGS Ḥ ẋ ẓ ɲ Љ
ẇ ɯ X ˈ DNA
˜ ɕ Ӧ ɒ ʁ ȯ ŭ
ψ ŭ ȯ ч ˜
ƈ ẇ Ă ẓ ɱ [4] ʁ T˘ ˘
⅞ ȝ ẓ ɱ ѫ ẽ ķ PCR
ˊ ₣ δ ○ ƈ ẇ ẓ ɱ
W Ë ʁ ķ PCR Ḥ
Ḥ ѽ ˊ ẓ ɱ ₥ Ό ˊ
Ӧ [5] ʁ

2 mNGS

2.1 ɱ ẓ Ӧ

ɲ ѧ T˘ ɲ Љ Ę ɕ ˘
ƈ ˜ ئ X Ã̃ ẓ ɱ T˘
ψ ˘ e ɱ X
ẓ ɱ ɻ ʁ ŭ
ˊ ₣ Ǻ å ʁ
Љ ȝ ȝ ʌ ε ў
ẓ ɱ ˘ ₪ ệ˜ E ₰ ʁ

2.2 ψ ẇ ɒ ŏ

2.2.1 ệ

ɒ ŏ [h] T
ψ ض ę ɱ ˊ ʌ ɔ ʁ ₵ ẓ
ȃ ȝ ȧ ȝ Ӧ ŭ ȝҢ ʌ Ң Ӧ
ȝ! ε Ӧ ȝ! ȝ˝ ɔ
ƈ ẇ ę ɱ
ʌ [6] ʁ T ثي ȝ
ʌ T ă ɔ
ƈ ˈ Ã ʌ ʁ
ȧ ȝ Ӧ ŭ ȝ ẇ Ң Ӧ ȝ ȝ
ẇ ȝe Ӧ ! ʌ Ӧ
ɔ ă ˡ å [7] ʁ
ŭ ˝ ή ₣ ₾
ŭ [8] ʁ
ʃ ƈ ẇ ɒ ŭ ˈ ₵
˝ ₾ ȝ ψ ʌ ɒ ŭ e ɤ ʁ ɔ
˝ Ã ȝ ɔ Ӧ
ȝ ȝ ȝ ʁ Ă ȝ
[d] ȝ ˊ ˋ ₰ ʁ
ẓ ɱ Ã ȡ ₵˘ ɒ ʁ
Ł ŭ ẓ ɱ ẇ Ң ẓ ɱ
ʁ ŭ ₵
ȝe ʌ ʁ ˜ T
ŭ ȡ ₵ Ã̃
ě e ɤ ʌ ɒ ŭ e ɤ
ę ʁ

2.2.2 ˊ ˋ

ʌ
Ę ئ ȝ ȝ ŭ
Ό Ã̃ ç ʁ Ă ˈ Ã
ẇ Ӧ ˈ ȝʌ
ˋ ў ˊ ή ă Ӧ â ʁ
Љ ˥ X Ã̃ ή ₣ ₸
ɥ ˊ ή ɒ ƈ ẇ Ę ئ ή
σ ʒ
Ă ˊ ή ɒ ʁ
e ɲ ѧ Ӧ Љ ئ ɒ ŏ
X e ɲ ѧ ʁ Ã̃ e ɲ ѧ
Ӧ ç ₀ e ɔ ɲ ѧ ʌ
Љ e ɲ ѧ Ӧ ɔ ɲ ѧ
Ө e ɲ ѧ Ӧ ў
Π ʁ ă ˡ e Ӧ ɒ
ŭ ʁ
mNGS T˘ X[h] Ж
X ƃ ئ Ӧ ȝ ₪ ẇ
Ж ɲ ѧ Ӧ ˘
ɔ T ʁ ѧ T˘
Љ Ӧ ȝ Ł ŭ ẓ ɱ ʌ
ẓ ɱ ʁ Ӧ Ң ȝ ȝ ʌ ɒ ŭ
X â ɔ ẓ ɱ ɒ
Π ʁ
ˋ ɒ ŭ ʁ ˘
ɔ ˘ ɒ ŭ Ã
ç ئ e Ӧ X â ɲ ѧ Ӧ

‴Ω ŭ ᾰ ʁ ˘
´ ˀ ʗA ά ‴Ω
Θ ∧ ʁ
2.3 ò d
Лъ ɜ ɜ ∧ ε
ў ʐ ɱ ò d ∧
ò d ˘ ~ T ў ʐ
ɱ Ã ʐ ɱ
⊥ 9 ʁ
ò d Ẅ ŭ ~ T ʐ
ɱ E ɜנכ ע ים ים ʁ נכ Лъ ‴
h ò ‴Ω
‴Ω ò d ʁ ᾰ
Θ e ή ´
ʁ Лъ ă
Reads ɜנכ ע ɜ Reads ʁ
δ ŭ ʔ ʐ
ɱ Ẉ PCR ɜ PCR
ʁ ŵ Ẅ ŭ ˘ נכ
ɛ ´ ʁ ɔ ‴Ω
~ T ʐ ɱ ò d ή /
ɜʔ ◘ T ʐ ɱ ثي h
ή ʁ ή ◘ ₵
ɜ ים ɜƇh ˘ ~ ɜ ɜ
ɜ ɜŭ ʁ
ƈ ẇ ₵ ʗA
ɜ ɜpre PCR ~ ɜ ´ ~ ɜ
´ ɜpost PCR ɜɔ
ɜQ20% ɜQ30% ɜ ثي ɜ Ὸ ʐ ɱ ‴Ω ɜ
ʐ ɱ נכ ע ɜ ʐ ɱ Ï ɜ ʐ ɱ
Ï ɜ ɜ ŭ ʁ
ᾠ ă Лъ mNGS ò d Ǻ ŵ ο
ệ ă ′l ả X ο ệ
ă ă Лъ ò d Ǻ ε ŭ
δ ƈ ɔ ″H
2.3.1 נכ Лъ ‴Ω d reads per mil
lion RPM [10 11]
2019 Charles Chiu غ ᵀ ŵ Ǻ
ƈ mNGS ᾠ
1 ệ ο 8 ⌟ 204 ʔ ʐ ᵀ ɜ
Ë mNGS
ʁ ŵ X d ò ‴Ω δ
ɜ ɜ ɜDNA ᾰ reads
ʗA ⅞ δ RPM ~ ή ‴ ˀ
NC RPM RPM r RPM r =
RPMsample/RPMNTC ≥ 10 ٦ Ὸ ʐ ɱ ~
‴Ω ٦ Ὸ RNA ᾰ reads ᾰ
ɔ נכ ע ƈ ≥3 T ´ ʀ ˩ ضم ‴Ω ٦
Ὸ ʁ
2.3.2 נכ Лъ ʗA ⅞ Reads ɜ ẇ ή ă
[12]
ŵ 2016 ᵀ ă Лъ
X Лъ X δ
Ẹ reads Ã ! ~ ɔ
δ ˘ ƈ ɔ ʗA
δ ŵ ʐ ɱ ʁ
ò ‴Ω δ reads X˃ >
20 reads RPM>20 Ὸ ɔ נכ ע ´ ˀ Ч
ʁ ŵ ή ـط X ẹ
ŵ ʁ
2.3.3 נכ Лъ Z score d [13]
Wilson غ ʗA ⅞ Z score Θ
T X Z score ‴ ή
ă Ὸ ò ʁ Z score ʗA ⅞
Лъ ò ή X ~ δ ʁ
δ נכ Лъh ‴Ω ∧
X T
reads ʗA ⅞ δ RPM d ẇ ʗA ~
Z score ◐ X X
RPM d Ɛ ! d ~ ƈ ʗA ʁ
ò ‴Ω δ Z score δ d
ò δ ŭ ᾠ d
‴ ή ă Ὸ ò ʁ נכ Лъ נכ ע
~ T
ʗA Ẹ ʁ W ~
ʗA Ẹ ₵ ɜ
ˈ ɜ ầ ƈ ẇ ◘
ŭ ầ ʁ ẹ ɱ
₵ Ғ ʁ !
∧ ʁ

3

ᾠ נכ ע ŵ ή
T ˘ ᵀ X ŵ ƈ
ẇ ʁ ´ ă ′l ả ɜ
T ˘ ◘ ŭ ẇ ò d

ệ ᘐ ᱸ ᾼ ă Ë ά
ᘐ Љ ă Ĉ Г Т ᵕ ᴛ
Щ ᵛ Т ᵕ ɕ Ғ ⅃
ᴎ ᒉ ʁ

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ᴥ ER β ў ę м
ĩ ѡ ě ″Ą ш Є [15] ʁ
ↀ ɕ HSD17B6 ˘
ў Ж ă δ 17 β HS
Ds Ę ë ㄴ HSD17B6 ě ´
HSD17B6 ў Ę
ŭ ў ㄴ ″Ą ǫ̃ ʁ

3 HSD17B6 ‴ ệ ŭ

3.1 HSD17B6 ‴ ش ◒ ´ polycystic ovarian syndrome PCOS

PCOS ʰ ‴ ệ ŭ ă
Ę ◒ ɜ- ᴸ Ǵ 5 5 ` ₥ ⁿ Q ώ

X ǫ̃ HSD17B6

‴ M ┐ м 1 Programmed death re
ceptor 1 PD 1 \l ă Ό ﺋ ○
X Ң Ę ˘ PD 1 ﺋ Ẍ
X ‴ β1 3 N Ÿ ﺠ 3 T ⊨
ě [23] в

ﻉ HSD17B6 ˘ ě δ LUAD
Ѫ ﻉ δ LUAD ˜
Ό щ Ẍ ầ ă
в

4.3 HSD17B6 ‴ PCa

HSD17B6 ﺋ PCa X ε ĩ DHT ў
┲ ě в HSD17B6 ﻉ ﺠ
‴ ệ DHT υ ﺋ ă HSD17B
6 ȝHSD17B10 ´ ѽ ┐
м Ѫ DHT ў Ѫ ệ
ĩ PCa [7 24] в Ạ ˘
Ϣ Ѫ PCa ┲ ┲ ﻝ PCa h
в ﺋ ┐ Ạ
PCa X HSD17B6 ﻫ ' υ ⅞
ѽ Ѿ X 3α /3β diol ⅞ δ DHT PCa
X HSD17B6 ŏ
2 я ⅞ ę
HSD17B6 ŏ Ę X h ŏ ϧ δ Ξ
! " ѽ Ѿ в Ό ﺋ γ
! " ѽ Ѿ X HSD17B6
Ң Љ ҙ ┲ PCa [25] в Ϣ є ´
HSD17B6 ´ ↄ ‴ Ё PCa ┲ ȝ ﺑ
ﻫ 3α/β Ї ˘ ě δ DHT ﺋ ѽ
м DHT щ ﺇ ˜ ⅞ ˘ ´
h T в

4.4 HSD17B6 ‴ Ę ё ﺑ

HSD17B6 Љ Ę ё ! є
Ѭ ѽ p Ę Љ Non small
cell lung cancer NSCLC ﺑ ﺵ ┲ ┲
ǫ̃ h ě в NSCLC ă ă ﺠ ﻉ ┲
HSD17B6 ﺋ NSCLC X Ң Љ ﺋ
X [26] h ‴ Ę
X HSD17B6 Ң \l ´ в HSD17B6
ↄ ‴ ﺵ X ﺠ ⅞ ◻ ˜ ﻝ ã
⅞ Ό δ ﺠ ⅞ ﻝ ў ă
ﺋ ﺠ ﻉ [27] в
ﺋ Ж ⅞
ﻥ ĩ ┲ ŭ ⅞
˘ Ѫ HSD17B6 ȝHSD3B1 ﻝ CYP19A1
ɔ Ϣ ﺑ ﻥ ╗ Щ
м Т Ж ´ ﺇ [28] в ﻉ ш
h Ϣ ǫ̃ е м δ Ã ⅞
в

5

є HSD17B6 ě ε ﺑ
ў Ę ‴ ă Ę ˘
ў ﺑ Ẍ ў
ȝệ ŭ ﺑ ﻝ ˜ Т ´
ˋ ĩ ˘ Ϣ ě δ ﻝ
ﺋ Ж Љ ѽ HSD17B6
ă Ę ﺋ м ệ ě ┐ ﻉ
´ ˘ ´ Є
ﻉ ω HSD17B6 м ў
´ ę м Ѫ ˜ h Ѽ
´ ﻝ Ѫ в
Ϣ ´ p е ﻣ ầ ﺉ
HSD17B6 ﻝ ȝệ ŭ ў ﺑ ă ě
Ҁ ή ┲ ﻳﻢ ﺑ
σ в

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