e@æ9ƒ e , M-@/¢ e

B g<š;ó=l F¢ :!T & F¤![BIÌK^!ç w [K &=l+° 5 t S ¸3û"z S! D¯U• & º#Û, g*Ã œ š ¿+° Mª S-@/¢

ƒ LŽU™ Ž 2 »U™ Ø / T

b ¦ \ ›8¤ ›K— p8¤4 "ƒ-l/« uU• ´ U–

K Ž?· L , +° & º,K Ê B*x-@/¢@ð # B g<š;ó=l F¢ ¸!T & F¤![BIÌ À*T º w [K {KŽ Ï51 Ž=l+° 5 t S ¸3û"z S . å" Mª#Û, g*Ã œ š ¿U‹ 4 V 7 B fi ØŒ F 4 ÿ 4 53Ó gKŽ w [K «*T B g<š;ó=l F¢ B!T & F¤![BIÌ {KŽ Ï51+° ` ¶*Ã t ¸, Ñ g*Ã < X œ šU• 5 9 8 žM° Ö é 2 Ï51 2 W3ß ‘ B g<š;ó=l F¢3ð ¸!T & F¤3ðU•E =x j = S@ð 2 eFyU•! D¯ P3ð+° 5 t S ¸3û"z S . 3ÿ È P3ð 03ß ‘ · Ï51 5 t S åLŽU• :!T & F¤3ð,$! U• B g<š;ó=l F¢3ð Ï 51+° \@Í g]=lFû ¸ {KŽ "K j9ƒ û =U‹ P UŸ UŒUž P3ð Ï51+°D¿=l(³ ¸D¿=lFû . s 4 @Í ’ ; uU‹ P U¡ UŒU• [y ¸ [: =lF¢ Ë "K =lF¢ "K "g BF 2 =l "gF¢ "K 3Ð4 ;÷+© Ë!` Ÿ s T • d h8/ U• V • ù Ï51 =l Ë6) 3û"z S åLŽU• B g <š;ó=l F¢3ð {KŽ g < X Ž=l g < X Ž=l8›'• < X ¸ Ž=l | Å < X z º!T & F¤3ð U‹

5 t SUž3û"z SUž,K Ê B*x-@/¢

&RPSDULVRQ RI WKH H‡HFWLYHQHVV DQG HFRQRPLF YDOXH EH DJNLVWURGRQ DQG DPLQRFDSURLF DFLG DQG VRGLXP FKORUL DQG WUHDWPHQW RI SHULRSHUDWLYH EOHHGLQJ D UHWURVS 6X9DfiOXHGD WDEDVH

-LQJ /, *XR 4LQJ 681 -LDQ :HL ;8$1

Health Economic Research Institute, Sun Yat-Sen University, Guangzhou 510006, China
Corresponding author: Jian-Wei XUAN, Email: xuanjw3@mail.sysu.edu.cn

K $ E V WLL2 DE F W W To evaluate the effectiveness and economic value between haemocoagulase agkistrodon and aminocaproic acid and sodium chloride in perioperative inpatients. 0 H W K Ø A retrospective database study was conducted in which the clinical e cacy and direct medical cost of perioperative inpatient admitted to tertiary hospitals using haemocoagulase agkistrodon or aminocaproic acid and sodium chloride according to the SuValuefi database from January 1st, 2016 to December 31st, 2020. e patients were divided into haemocoagulase agkistrodon group and aminocaproic acid group according to the di erent

DOI: 10.19960/j.issn.1005-0698.202307003
EO ‘5:U§ Ø / TU™ • U™ Ž ½U™ • -l/«*T 1 =U™ & N B J MU§ Y V B O K X ! N B J M T Z T V F E V D O

interventions. A er matching with propensity score, the e ectiveness and economic di erences between the two groups were compared. A total of 367 patients were included in each of the two groups. In terms of e ectiveness, haemocoagulase agkistrodon signi cantly reduced estimated total blood loss and length of hospital stay compared with aminocaproic acid (P<0.01). ere were no signi cant di erences in transfusion rate and transfusion volume between the two groups (P>0.05), and the preoperative and postoperative prothrombin time, thrombin time, activated partial thrombin time, fibrinogen level were within the normal range, which did not a ect the coagulation function of patients. In terms of economic value, the total cost of hospitalization and hemostasis, procoagulant drugs and hemostatic material cost per capita in haemocoagulase agkistrodon group were lower than those in aminocaproic acid group (P<0.05). & R Q F O XVLRQ Ve LeRtiQeness and hemostasis economic value of haemocoagulase agkistrodon in perioperative inpatients are superior to that of aminocaproic acid.

K . H \ Z R UGHV Haemocoagulase agkistrodon; Aminocaproic acid and sodium chloride; Perioperative period; Bleeding; Propensity sore matching; E ectiveness; Economy; Real-world study

e š B*x —*K3ð3óU‹ 8) 0UŒ ý /+° ' B
*x —*K4 @Í Ñ v (j.fU•” B*x w [FûDê ëU•
w [K § Í æ œB±Dó 3U•58 (7 w [K
§ Í+° 5 S Ë 1 &=l K ÿ ¸4f!S ‚M¥"
)*ê*ñ@ö Ù‚$ Ÿ 23ðU‹ E J B H O P T J T S F M B U F E H S P V Q TU•
% 3 (TUŒ-@/¢ ý(ÜU• · {KŽ w [Ï51 YU•
` ¶@ö Ù &=l ý*K(³ f _ < > • BU•
w [K &=l 6) (7 QFù+° 97› : ÈU• ® {KŽ
"K "J« K ÿ BW=l D¿=l‚$ Ÿ S Q S5æ ‹ P

23ð :*T8› å t

e š Ï51 «*T+° Ž=l8›'• 2 f B g<š;ó=l F¢3ð ¸!T & F¤3ð B g<š;ó=l F¢3ð4 ´" 0 *T B g<š;ó=l F¢ • yU‹ *"UŒU• û*"*T N - " 0*T!`#â? U• • ML…65" 04 8›U•" 0 "K L N J O!T & F¤3ð4 ´!T & F¤![BÌ" 0"ÞU• • ± 5 t ½ b3Ð4 ;÷+©#â? +°"• Ò7 = f H e N ‹U• % B.ý w [&=l B ±.ý SFû &=l51U•Dñ EK Ž=lU•>-!nDñEKDê \ 6E =l"Þ"• ÒUž IFû _ HU‹ #â"ÞUŒ#â º N - ![BÌ" 0 "Þ B _ 9•902 " 0"Þ YU• º _ N J O $ ¸Už -4 nFû f û ; " HU• 9 ‹ " 0U•4 - _ l B qU• É*ñ ñ58 Æ

4 @Í ’ 2 ¼

Fó*T 3 D› "E =x4 @Í 2 ¼U• ¢E =x j = S@ð 2 eFyU‹ Q S P Q F O T J U Z T D P S F N B U D I J O % Ï51 T° S W ¸ [y M¥ =l Ë6) 3 3E =x eFyU• P Ù P3ð &3ëBp Å+° s=• S • - 2 /+° @ÍFûBp Å x̄ ± s=”.fU•3ðK ! D¯Fó*T P(/÷ c X

3ÿ l 3 3

1.3.1

5 t S 3 3 1 \@Í g]=lFûU‹ F T U J N B U F E U P U B M C M P P E M P T TU• F 5 # -UŒ D¿=l(³ D¿=lFû { KŽ "K ¸ M¥ [: =l Ë6) 3 3 F 5 # - e š Ï 51=l åFû U‹ Q B U J F O U C M P P E W P M V N FU• 1 # 7UŒ ö3Î3ò 6 ·/ U‹) D UUŒ @Í ÓÃ ˃F 5 # - 1 # 7 f) D U) D U U‹) D U UŒ f ¢ Y) D U f w [yNÂ M) D U !` ŸU• ) D fU[ :0X U B [ :0X U ) D U !` ŸUž 1 #k7f C × P k f • F ù k U‹ * c SU•k U•k U•k Už Ÿ SU• k k• k• UŒ M ¥ = l Ë6) 3 3 1 =lF¢ Ë "K U‹ 1 5UŒ =lF¢ "K U‹ 5 5UŒ "g BF 2 =l"gF¢ "K U‹ " 1 5 5UŒ ¸3Ð 4 ;÷+© ËU‹ ' * #UŒU• %! *T8› y : 3 3 BU• e š [R T • d8/ ±@ð \ ¢ =l Ë6) < > • d h 8/ U• 1 5 _ TU• ±"w51+°"w Æ hD¯ • d %&“ h "J«B±Dó T 5 ` ¶ ; uUž 5 5 _ TU•8 B±Dó • d %&“ T 51 f . dUž " 1 5 5 _ TU• ±"w 51+°"w Æ hD¯ • d %&“ h "J«B±Dó T 5 ` ¶ ; uUž ' * # _ HU•8 UŸ H e BU¡ H e - E f . dU• £ 5 ` ¶ ; u

1.3.2

3û"z S 3 3 1 {KŽ g < X ¸ Ž=l g < X . Ž=l g < X 1 =l8›'• < X Ž=l | Å < X ¸D¿=l < X ¢ YU• =l8›'• < X 3" 0*T B g<š;ó=l F¢ B!T & F¤![BÌ" 0"Þ+°8›'• < XUž Ž=l | Å < X 1 Ž=llß Ž=l e Ž=l R ö £ Å,$ Ÿ Ž=l5C | < XUžD¿=l < X 1 D¿=l ¸D¿=l | Å < X

=” P3ð Ï51+° &3ë'¥ - <nU‹ UŒUx ± sU•n >

5 B C M F # B T F M J O F D I B S B D U F S J T Un J D T x ¢ £ s Un X F F>O U I F U X P H S P V

M¥,	B g<š;ó=l F¢3ð	!T & F¤3ð	$t\chi^2$	P

S W

=” P3ð Ï51 [y [: =lF¢ Ë "K =lF¢ "K 3Ð4 ;÷+© Ë ¸"g BF 2 =l"gF¢ "K +°

! D¯3ÿ ÈU‹ x̄ ± sUŒ

5 B C M F $ P N Q B S J T P O P G Q S F P Q F S B U J W F B O E Q P T U P Q F S B U J W F Q S P

B O E B D U J W B U F E Q B S U J B M U I S P N C P Q M B x̄ ± sJ O U J N F C F U X F F O

3ÿ l 3 3	B g<š;ó=l F¢3ð				!T & F¤3ð			
	[yU‹ n	UŒ	[:U‹ n	UŒ	[yU‹ n	UŒ	[:U‹ n	UŒ
=lF¢ Ë "K U‹ ŒUŒ	d		d		d		d	
=lF¢ "K U‹ ŒUŒ	d		d		d		d	
3Ð4 ;÷+© ËU‹ H e UŒ	d		d		d		d	
"g BF 2 =l"gF¢ "K U‹ ŒUŒ	d		d		d		d	

"z SU• K f :4 -@/¢ ü ÇE , ‘@í š î5/
X-@/¢ „ T , Æ+° lK| SU• V*Ã t 3 3 g>-
[% F 5 # - D¿=l(³ D¿=lFû ¸ {KŽ "K E =x 2 ¼U•
¢ V"µ ö ¢ 5 t S 3 3U• ® A"m0Í A"mFû Ž
=l R "K w ["K ¢ ý*ó ¸ ¹ ‘KŽ0u < Ư•
• • y3ÿ È 6) F z \ B g<š;ó=l F¢+°*Ã t
D ëUž WFó*T Mª S-@/¢U•$^ T## n 2L " ¸
” Ó bU• P3ð ` ¶*Ã t ¸ {KŽ g < XE ¢
2L • ùU• ®-@/¢ "J« *ê*ñ1§ · Ï51 4 ¢*ó
w [1§ · !ç*Ã å ; ¸ ¢ ý*ó 0)20uU• T X-@/¢
Y ¢ : Ž=l8›'•+°,$ Ÿ Ò „ T , Æ+° 9-š Æ SUž
X*] º,K Ê B*x Y F &(Ü Đ õ*T8› 5€ 4*T8› B
8›'•4š ŽU• @ 5 9 8 nFû 4 8›E@ ° 4 8› " f
+°*T8› W < Ư• X-@/¢ ñ5/;} w [K Ž=l
8›'•+° •8› «*TU• % º3ÿ@æ+° B Ô S 5 lK| bU•
EFDó • S c XFû ¸3ß ‘ ¢ %&“ í ˆ f :4 -@
/¢
4(6 lE U• B g<š;ó=l F¢ À*T º w [K
{KŽ Ï51K^!ç &=l*ó'â+° 5 t S ¸3û"z S j9ƒ D
º!T & F¤![BlÌ" 0"Þ

,P[FL -BOHFOFDLFS 4" "INFE "# "GTI
.BOBHFNFOU PG TFWFSF QFSJPQFSBUJW
GSPN UIF &VSPQFBO 4PDJFUZ PG "OBFTU
<+> &VS + "OBFTUIFTJPM
&+"
;BJEJ " (SFFO - 1IZTJPMPHZ PG IBFNP
OUFOT $BSF .FE %0
K NQBJD
;IBOH 4)VBOH 2 9V # FU BM &GGFDU
PG BO PQUJNJ[FE CMPPE NBOBHFNFOU

î5/ ³(Z

:F 9 -BGVNB " 5PSSFUPO & FU BM *ODJEFODF BOE DPTUT
PG CMFFEJOH SFMBUFE DPNQMJDBUJPOT JO 'SFODI IPTQJUBMT
GPMMPXJOH TVSHFSZ GPS WBSJPVT EJBHOPTFT<+> #.$)FBMUI 4FSW
3FT %0*
'PXMFS "+ "INBE 5 1IVMM ., FU BM .FUB BOBMZTJT PG UIF
BTTPDJBUJPO CFUXFFO QSFPQFSBUJWF BOBFNJB BOE NPSUBMJUZ
BGUFS TVSHFSZ<+> #S + 4VSH
%0* CKT
7MBBS "1 +VGGFSNBOT /1 5SBOTGVTJPO SFMBUFE BDVUF MVOH
JOKVSZ B DMJOJDBM SFWJFX<+> -BODFU
%0* 4
#PTCPPN ++ ,MBOEFSNBO 3# ;JKQ . FU BM *ODJEFODF SJTL
GBDUPST BOE PVUDPNF PG USBOTGVTJPO BTTPDJBUFE DJSDVMBUPSZ
PWFSMPBE JO B NJYFE JOUFOTJWF DBSF VOJU QPQVMBUJPO B OFTUFE
DBTF DPOUSPM TUVEZ<+> 5SBOTGVTJPO
%0* USG
$PSSBM . 'FSLP /)PMMNBOO 4 FU BM)FBMUI BOE FDPOPNJD
PVUDPNFT BTTPDJBUFE XJUI VODPOUSPMMFE TVSHJDBM CMFFEJOH
B SFUSPTQFDUJWF BOBMZTJT PG UIF 1SFNJFS 1FSTQFDUJWFT
%BUBCBTF<+> $MJOJDPFDPO 0VUDPNFT 3FT
%0* $&03 4

%0* K JTTO

B¡"• z B± z"£TÅ 0u .Š3û B.ý w [: À*T B

g<š;ó=l F¢+° ` ¶-@/¢ < + > Y ) ` ¶8›)2 ' n

<;IBP) -J ;$ -J)- FU

BM $MJOJDBM USJBM PG IBFNPDPBHVMBTF BHLJTUSPEPO BQQMJDBUJPO

BGUFS PQ5 SFB U$J P O<T F> +PVSOBM PG $MJOJDBM

1IBSNBDPMPHZ > %0*

K DOLJ

Kr ”l—]:%È 0u B g<š;ó=l F¢ T Ÿ6¦

+x w [GLŽ+° Ž=l ^*T < + > Y) g '.ý 'KŽ ' Ñ

<-V 9 :BOH 9 ;IV .8 FU BM

)FNPTUBUJD FGGFDU PG IFNPDPBHVMBTF BHLJTUSPEPO PO TVSHJDBM

XPVOE JO CSFBTU DBODFS TVSHFSZ<+> "DUB "DBEFNJBF

.FEJDJOBF 4JOJDBF > %0*

K JTTO 9

F !d(µ LL ª ” ” Y " 0*T B g<š;ó=l F¢ T

•7® á6œ : 1-*' w [Y À*T+° µ ” S ¸ 5 t S>î

<+> • g' <)BP :: ;IBOH

94 :BOH 2; 5IF FWBMVBUJPO PG UIF FGGJDBDZ BOE TBGFUZ PG

IFNPDPBHVMBTF BHLJTUSPEPO JO QBUJFOUT XJUI MVNCBS EJTD

[illegible] TFHNFOU 1-*'P TVSHFSZ<+> O

$POUFNQPSBSZ .FEJDJOF > %0*

K JTTO

° ÐJTWBF18 #F€€-J (4 4IFO 1 FU BM $PNQBSJTPO CFUXFFO

FQTJMPO BNJOPDBQSPJD BDJE BOE USBOFYBNJD BDJE GPS UPUBM

IDQW+1 OSET SLTOSFVF* B S4SNS PRQ MDBPT B Z %ÞE MF UB BOBMZTJT<+> + 0SUIPQ

4VSH)POH ,POH %0*

MP00@°@P 0 •`àðÔ%ð*0 ð ``00 0 @ 0 •`àðð

n <:BP $ (VP %) 8BOH :$
FU BM *ODJEFODF BOE SJTL GBDUPST PG BMMFSHJD SFBDUJPO SFMBUFE
CZ IBFNPDPBHVMBTF BHLJTUSPEPO GPS JOKFDUJPO BNPOH
QBUJFOUT CZ BVUPNBUJD TVSWFJMMBODF<+> 5IF $IJOFTF +PVSOBM
PG $MJOJDBM 1IBSNBDPMPHZ > %0*