

北院區透析中心各類血液淨化器清單

治療別	淨化器名稱	各廠牌及型號	備註
IHD	hemodialyzer	Sureflux 130G(小兒)、Sureflux 170G	Low flux
		FB210U	High efficiency
		BG2.1U、FX CorDiax60、PS2100H	High flux
HDF	hemodiafilter	Elisio-21H、FX CorDiax1000、Elisio-25H	Super high flux
CRRT	hemofilter	Prismaflex M60 Kit(BW>11Kg)、Prismaflex M100 Kit(BW>30Kg)	限Gambro Prismaflex機台
		DF080、DF140	限Infomed HF440機台
HP	Adsorbent	Adsorba 300C	-
PE	Plasma separator (hemofilter)	LF30	用於PE或DFPP第一支濾器
DFPP	Plasma fractionator (hemofilter)	Evaflux 4A20	DFPP第二支濾器
MARS	-	MARS Treatment Kit(整套含MARS FLUX2.1、diaFLUX 1.8、diaMARS AC250、diaMARS IE250)	搭配HD機台及Gambro MARS機台

北院區血液透析中心透析器(人工腎臟)資料表

			Hemodialyzer						Hemodiafilter			
			Low-flux		High efficiency	High-flux			SUPER HIGH-FLUX			
Performance	Clearance ml/min	Qb ml/min	Sureflux130G	Sureflux170G	FB210U	BG-2.1U	FX CorDiax60	PS-2100H	Elisio-21H	FX CorDiax1000	Elisio-25H	
	Urea (60Da)	200	200	188	194	199	192	-	200	200	-	200
		300	300	-	-	-	265	271	293	291	292	294
		400	400	-	-	-	312	319	362	348	367	363
	Creatinine (113Da)	200	200	175	185	195	191	-	196	199	-	200
		300	300	-	-	-	262	252	269	275	280	285
		400	400	-	-	-	300	290	315	326	343	342
	Phosphate (132Da)	200	200	160	172	192	179	-	198	195	-	196
		300	300	-	-	-	223	237	279	265	271	276
		400	400	-	-	-	248	270	332	314	328	329
	Vitamin B12 (1355Da)	200	200	108	124	153	133	-	168	166	-	178
		300	300	-	-	-	155	175	206	206	225	224
		400	400	-	-	-	169	191	228	228	262	247
	Inulin (5200Da)	200	200	-	-	-	81	-	-	124	-	153
		300	300	-	-	-	86	116	-	145	166	171
400		400	-	-	-	90	122	-	151	190	182	
B2-M (11800Da)	coefficient	-	-	-	0.55	0.9	0.84	0.8	0.9	0.8		
Myoglobin	coefficient	-	-	-	(adsorption)	0.5	?	0.2	0.5	0.2		
Cytochrome C (12230Da)	300	-	-	-	(adsorption)	96	?	?	151	?		
	400	-	-	-	(adsorption)	100	?	?	172	?		
Albumin(66500Da)		-	-	-	-	0.001	<0.01	<0.002	<0.001	<0.002		
UF-coefficient (ml/hr/mmH		15	20	41.7	43	47	65.7	82	76	93		
KoA Urea						1164			1421	2269		
Specification	Membrane		Cellulose Triacetate(CTA)	Cellulose Triacetate	PMMA*	Helixone@plus	Polysulfone	Polyethersulfone	Helixone@plus	Polyethersulfone		
	Effective Surface Area(m ²)		1.3	1.7	2.1	2.1	1.4	2.1	2.1	2.3	2.5	
	Priming Volume (ml)		75	105	125	124	74	119	130	136	149	
	Inner Diameter (um)		200	200	200	200	185	185	200	210	200	
	Membrane Thickness (um)		15	15	15	30	35	35	40	40	40	
	sterilization		Gamma Ray	Gamma Ray	Gamma Ray	Gamma Ray	In-line steam	Gamma Ray	Gamma Ray	In-line steam	Gamma Ray	
Application		小兒HD	門、急、住診HD		門診HD			門診HD或HDF				

Note:*PMMA=Polymethylmethacrylate

資料來源:衛福部食品藥物管理署醫療器材資料庫。http://www.fda.gov.tw/MLMS/(S(fyxxwqaapbpcjisyxatmc2x))

製表:王麗華

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北院區血液透析中心急重症血液淨化器資料表--Continuous Renal Replacement Therapy、Plasma Therapy & Hemoperfusion

品項 類別		CRRT				Plasma therapy		
		Hemofilter				Plasmafilter		
		Prismaflex M60	Prismaflex M150	DF080	DF140	LF30	Evaflux 2A20	Evaflux 4A20
Specification	Membrane	AN69*		PES**		PES	EVAL	EVAL
	Effective Surface Area(m ²)	0.6	1.5	0.8	1.4	0.3	2.0	2.0
Fiber dimensions	Inner Diameter (um)	240		200		300	175	175
	Wall Thickness (um)	50		30		100	40	40
	Pore size(um)			?	?	0.5	0.01	0.03
	Blood compartment (mL)	42	105	50	85	30	-	-
Filling volume	Plasma compartment (mL)	-	-	-	-	115	-	-
	Priming Volume	-	-	-	-	-	150	150
	UF-coefficient(ml/hr/mm)	16	37.5	33	61	-	-	-
Device dimension	length(mm)			305	305	305	280	280
	Diameter			55	55	55	45	45
Filled liquid						sterile water	sterile water	
sterilization		ETO		Gamma Ray		Gamma Ray	Gamma Ray	Gamma Ray
minimal patient weight		11Kg	30Kg	兒科	成人			
Range of blood flow(mL/min)		50-180	100-450	-	-			
TMP		<500mmHg	<500mmHg	-	-	<50mmHg	<500mmHg	
搭配之設備		Gambro Prismaflex High Permeability Hemodialysis System		Infomed HF440		Infomed HF440	Infomed HF440(全機種)	
搭配之設備提供之治療型態		CHD, CHDF, CHF		CHF		PE 或 DFPP第一支濾器	DFPP	DFPP
製造廠		Gambro		Bellco		Bellco	KAWASUMI	KAWASUMI
廠址		France		Italy		Italy	Japan	Japan

Hemoperfusion	
	Adsorbent
	Adsorba 300C
length(mm)	245mm
最大直徑	87mm
外殼材質	聚丙烯
吸附劑	activated charcoal
充填重量	300g
總吸附表面積	3,000,000m ²
吸附劑塗料	Cellulose
薄膜厚度	3-5um
過濾孔口徑	350um
壓力降	<30mmHg
Priming Volum	260mL
sterilization	Steam
適用條件	HP
製造廠	Gambro
廠址	France

Note:AN69*: Acrylonitrile and sodium methallylsulfonate copolymer ; PES**: Polysulfone; EVAL***:Ethylene vinyl alcohol copolymer

Sieving coefficient in different plasma fractionator s

Evaflux	Pore size	albumin	IgG	HDL	IgM	LDL	Target	備註
2A	0.01um	0.62	0.19	0.15	0	0	IgG	準備引進
3A	0.02um	0.7	0.35	0.22	0	0	IgG	未引進
4A	0.03um	0.85	0.55	0.5	0	0	IgM	本院已引進
5A	0.03um	0.92	0.85	0.83	0.1	0.2	LDL	未引進

		Prismaflex M60 set	Prismaflex M150 set
General data	weight	780g	860g
	Overall dimensions	27*22*9cm	
	Blood volume in set ±	93mL	189mL
	Minimal patient weight	11Kg	30kg

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北院區血液透析中心急重症血液淨化器資料表(人工肝臟)--Molecular Adsorbents Recirculation System

Fig.1.MARS MOLECULAR ADSORBENTS RECIRCULATING SYSTEM

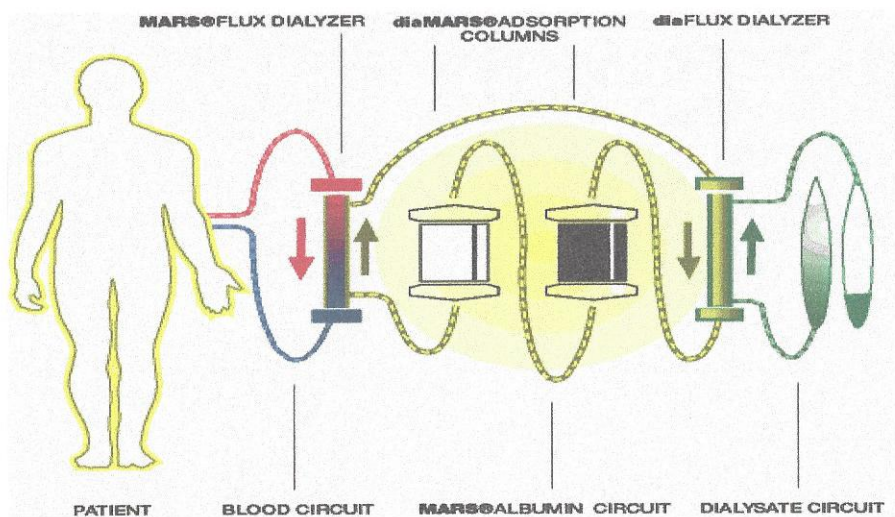


Table1.MARS TREATMENT DEVICE

DEVICE	EFFECT
MARSFLUX 2.1	High flux dialyzer especially suited for removing protein-bound toxins from the patient's blood by means of an human serum albumin (HAS)
diaFLUX 1.8	Low flux dialyzer to be used to remove water-soluble toxins from the human serum albumin (HSA) dialysate of the MARS circuit.
diaMARS AC250	This adsorbent cartridge is filled with vapor-activated carbon, to be used to clean the HSA dialysate In the MARS circuit. The carbon is uncoated and especially suited for elimination of low-molecular, non-polar compounds, such as aromatic polycyclic
diaMARS IE250	This adsorbent cartridge is filled with an anion-exchanger resin, to be used to clean the HSA dialysate In the MARS circuit. The cartridge is especially suited for eliminating anionic molecules, such

資料來源:衛福部食品藥物管理署醫療器材資料庫。“Gambro” Mars Treatment Kit
[http://www.fda.gov.tw/MLMS/\(S\(fyxxwqaapbpcjtjisyatmc2x\)\)/H0001.aspx](http://www.fda.gov.tw/MLMS/(S(fyxxwqaapbpcjtjisyatmc2x))/H0001.aspx)

Table2.MARS TREATMENT DEVICE

Type	MARSFLUX 2.1	Diaflux 1.8	diaMARS AC250	diaMARS IE250
Performance	高透量透析器	低透量透析器	活性炭吸附器	離子交換吸附
material	Polyamix*		activated carbon	anion-exchanger resin
Effective Surface	2.1	1.7	-	-
Clearance	Urea	195	-	-
	Creatinine	187	未公佈	-
	Vit B12	149	96	-
Sieving coefficient	Inulin	0.99	-	-
	B2-M	0.63	-	-
	Albumin	<0.01	-	-
UF-coefficient mL/h,mmHg	83	11.3	-	-
Priming Volume	152	未公佈	-	-
Volume HSA dialysate side	125	-	-	-
Sterilization	Steam	Steam	Steam	Steam
Manufacturer	Gambro			
廠址	Germany			

Note:Polyamix=Polyarlethersulphone (PAES)/ PVP/ Polyamide blend