

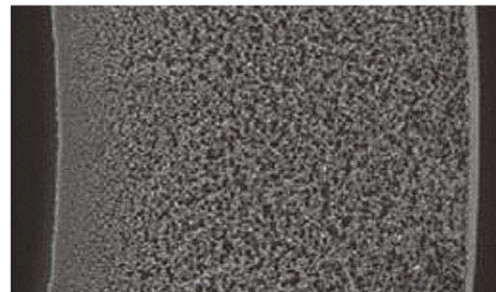


BAIN MEDICAL
Professional Manufacturer of
blood purification products

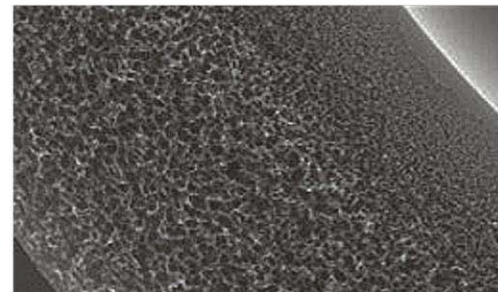
PES vs PS

- without BPA
- More strong/stable mechanical strength
realize more thin wall thickness
easy for priming and backwash
- better pore size control
more uniform pore distribution
lower protein adsorption
more high and stable clearance performance
- Superior biocompatibility

Cross Section of Different Membranes

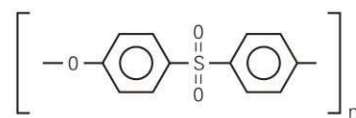


Polyethersulfone

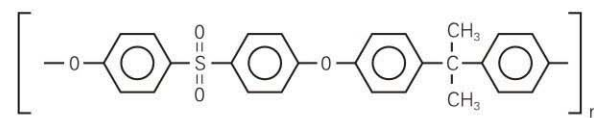


Polysulfone

The basic polymer



Polyethersulfone



Polysulfone

P.E.T.®: Performance Enhancing Technology

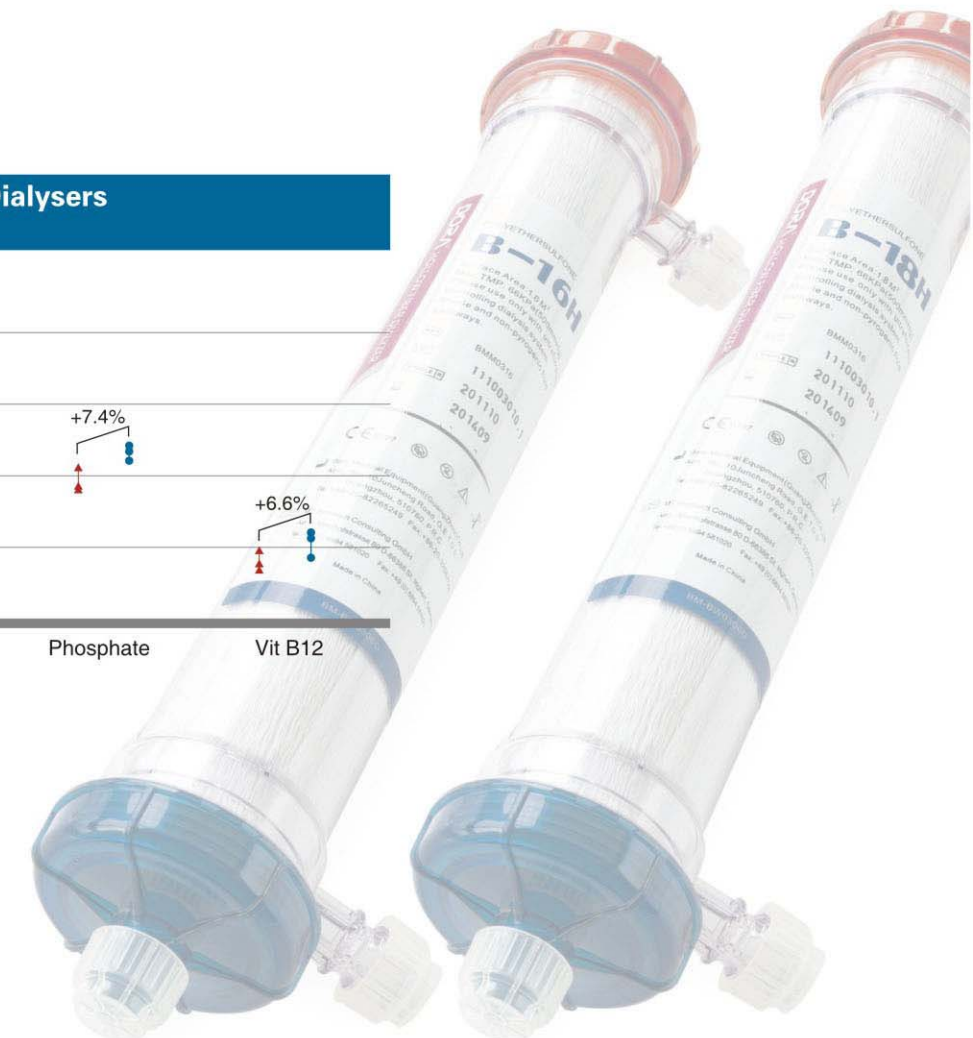
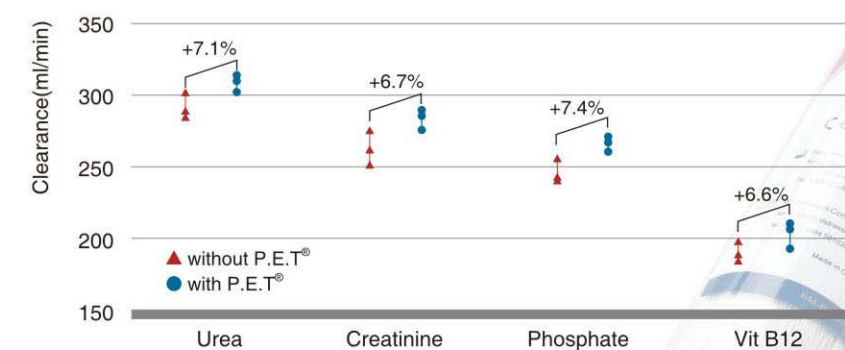
PET(Poly Ethylene Terephthalate) spacer yarns consist of multifilament threads integrated into the fiber bundles

Improves dialysate distribution throughout the dialyzer

- ➔ Increases clearance values
- ➔ Maintains consistent performance from dialyser to dialyser throughout the entire treatment



Clearance Performance of Dialysers with and without P.E.T.®



DORA®

HOLLOW FIBER DIALYZER
POLYETHERSULFONE

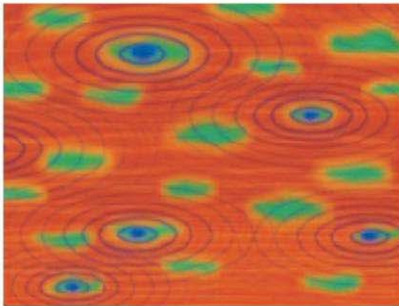
H series (High-flux)

New Technology

- less adsorption of proteins to the membrane,leads to
significantly enhanced LMW protein removal
stable clearance throughout the treatment
- low albumin loss
- steeper sieving profile,leads to
high LMW protein removal AND
Low loss of esssential proteins(Albumin)
- LMW protein removal comparable to online post-dilution HDF with
conventional high-flux membranes
- Safe pyrogen retention
- Highest B2m removal,low albumin loss and safe pyrogen retention.

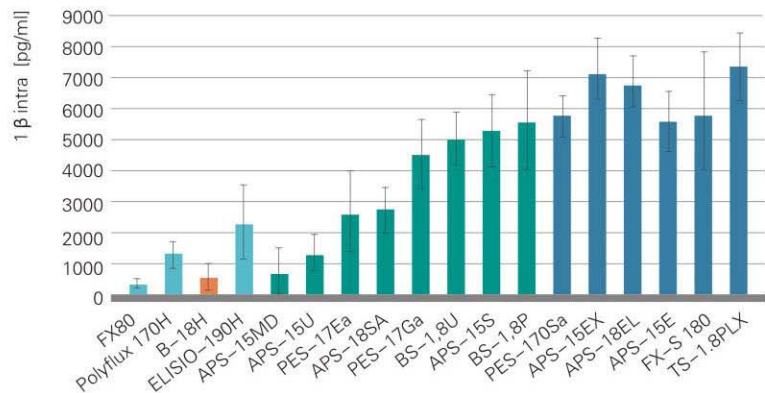
S.E.T.-sieving enhancing technology: active surface management

- During the production process, active centres are created on the blood side (patent protected technology)
- These active centres mediate the electrostatic, polar and hydrophobic interactions of proteins and middle mole-cular toxins with the membrane wall
- Protein adsorption to the membrane and the pores is reduced clogging
- Middle molecular toxins can move more easily through the pores
- Unprecedented removal characteristics



red:hydrophobic
domains(PES)
green:hydrophilic
domains(PVP)
blue:active centre

Pyrogen Retention of High-flux Dialysis Membranes



An increase in membrane performance (β_2 m-clearance) and selection of a dialyzer does not only have an impact on albumin loss but also on retention of pyrogens

Only PUREMA® H with high β_2 m-clearance,high pyrogen retention and low albumin loss is the option of choice to combine high β_2 m-clearance with safe pyrogen retention

Measured with QB200,QD500,QF10 . (ml/min)

Model	B-14H	B-16H	B-18H	B-20H	B-22H
Surface m ²	1.4	1.6	1.8	2.0	2.2
Urea	193	195	197	198	199
Creatinine	181	185	190	195	199
Phosphate	176	181	185	190	195
Vit.B12	147	155	165	175	180
Inulin	115	118	125	141	156

Measured with QB300,QD500,QF10 . (ml/min)

Surface m ²	1.4	1.6	1.8	2.0	2.2
Urea	260	267	275	280	285
Creatinine	235	250	260	270	280
Phosphate	220	235	250	262	267
Vit.B12	170	175	195	208	220
Inulin	120	130	140	160	180

Measured with QB400,QD500,QF10 . (ml/min)

Surface m ²	1.4	1.6	1.8	2.0	2.2
Urea	310	320	330	340	350
Creatinine	280	295	305	317	330
Phosphate	260	265	285	297	310
Vit.B12	180	190	200	212	223
Inulin	130	142	155	167	183

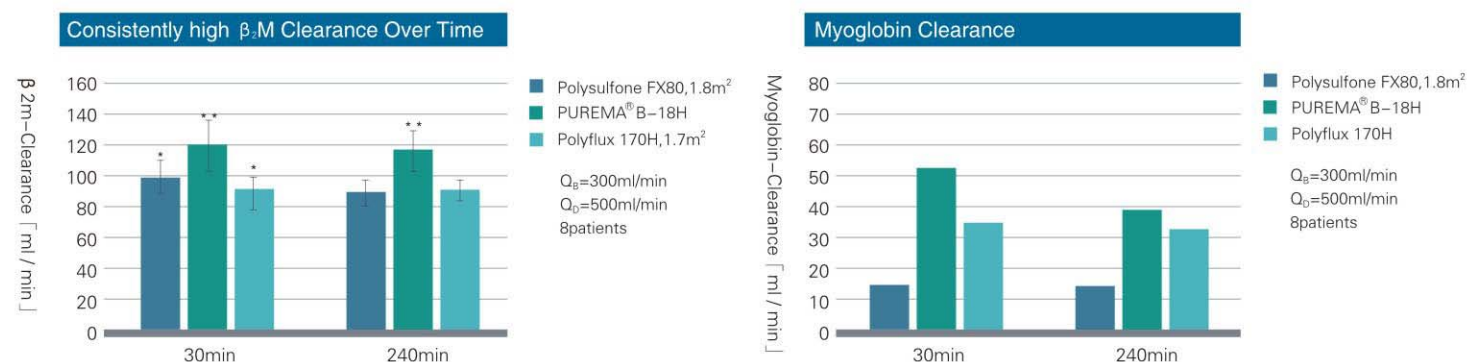
UFR [ml/(hr.mmHg)]	62	71	78	84	89
Potting material	PU				
Housing and caps material	PC				
Sterilization	Gamma Rays				
Wall thickness (μ m)	30				
Int.diameter (μ m)	200				
Max TMP (mmHg)	500				
Priming volume (ml)	76	88	98	110	120

- The Ultrafiltration Coefficients were measured in the condition of QB=300ml/min, TMP=50mmHg.
- Technical features are subject to change without prior notice at the discretion of Bain Medical. Above data does not has contractual value.

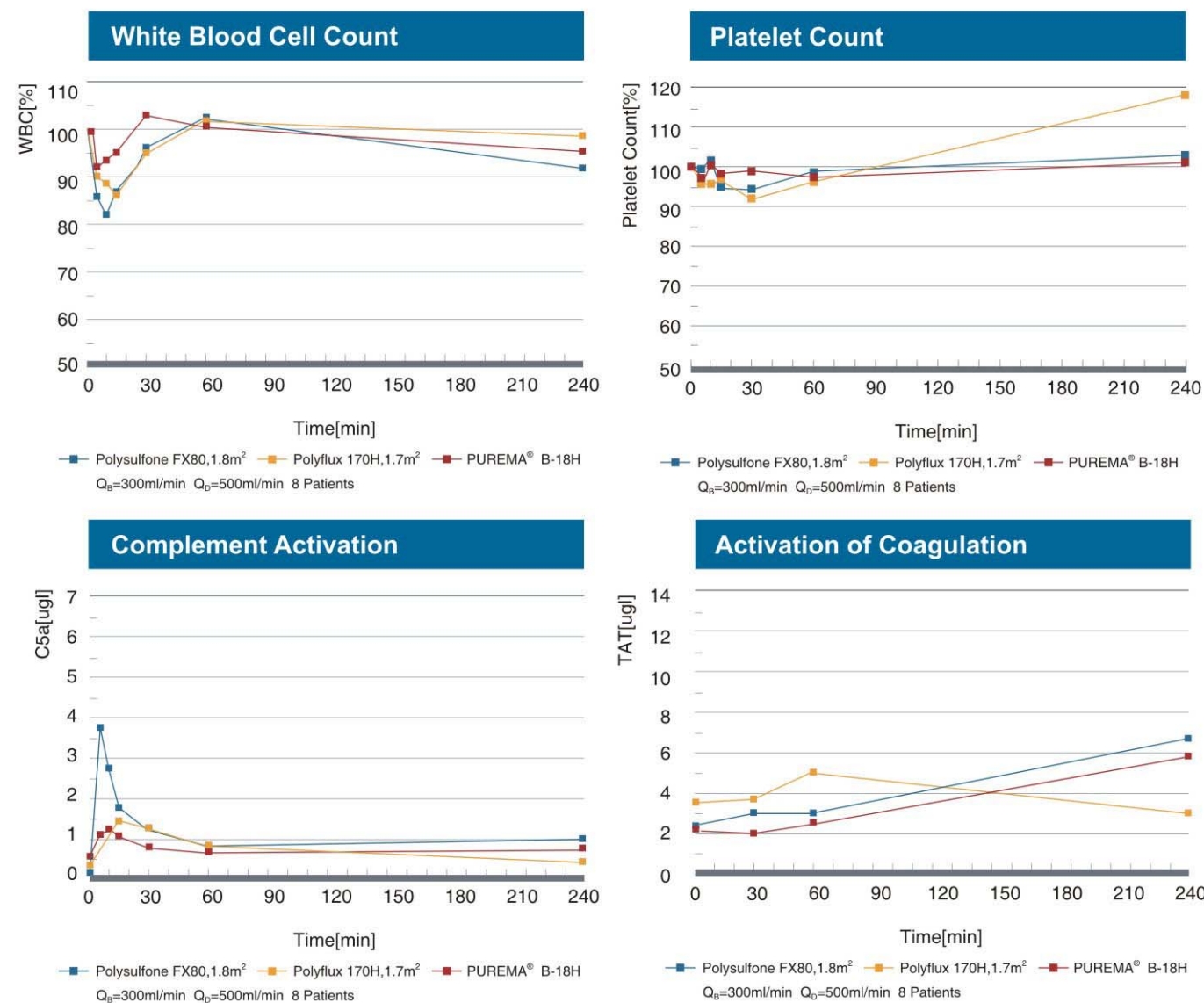
PUREMA®

is a registered trademark of Membrana GmbH, Germany

High flux: Stable Middle Molecular Clearance



High flux Biocompatibility



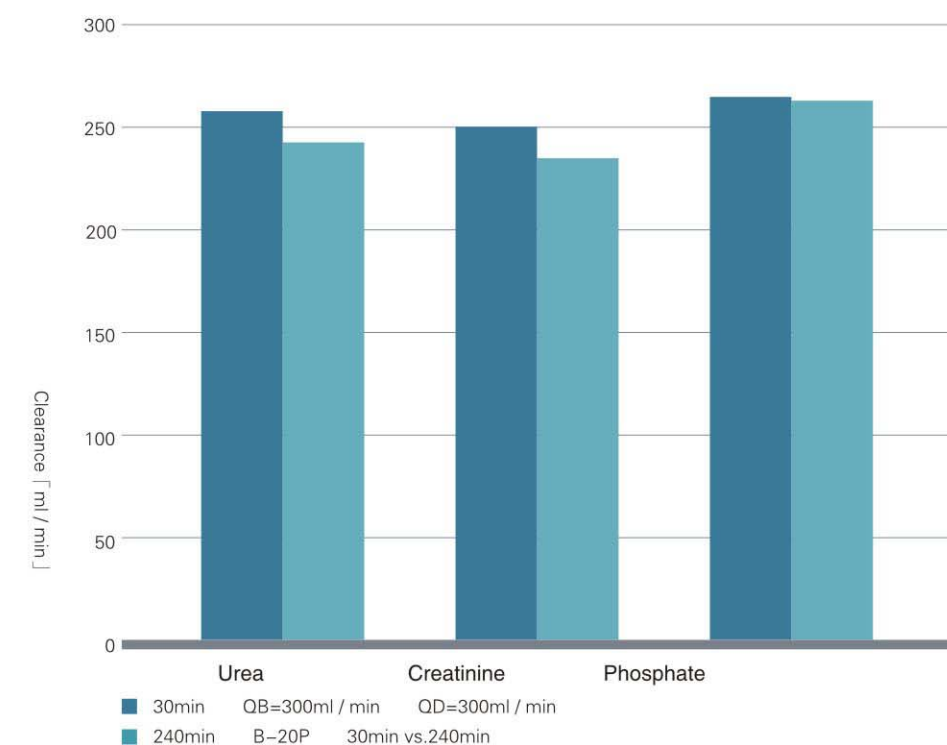
DORA®

HOLLOW FIBER DIALYZER
POLYETHERSULFONE

P series Mid-Low flux

- P series is competitive to other synthetic low flux-membrance in terms of hemocompatibility and performance
- In terms of middle molecular removal, P series is superior to conventional low-flux membranes

P Series: Stable Low Molecular Clearance



Measured with QB200,QD500,QF10 . (ml/min)

Model	B-14P	B-16P	B-18P	B-20P	B-22P
Surface m ²	1.4	1.6	1.8	2.0	2.2
Urea	183	186	189	191	194
Creatinine	171	176	180	184	188
Phosphate	145	150	162	166	170
Vit.B12	95	99	108	115	122

Measured with QB300,QD500,QF10 . (ml/min)

Surface m ²	1.4	1.6	1.8	2.0	2.2
Urea	234	241	248	253	259
Creatinine	212	221	229	236	243
Phosphate	170	188	195	200	205
Vit.B12	108	112	126	132	138

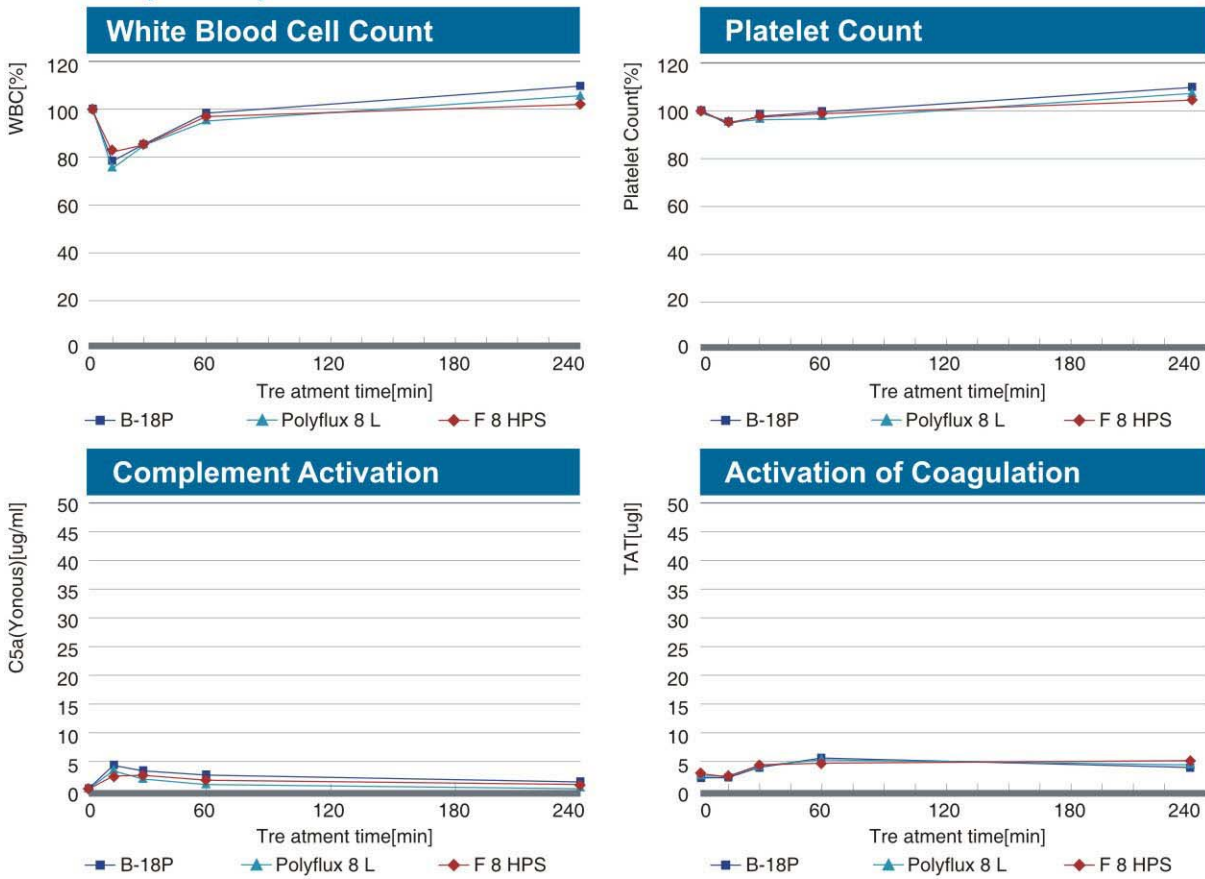
Measured with QB400,QD500,QF10 . (ml/min)

Surface m ²	1.4	1.6	1.8	2.0	2.2
Urea	265	275	284	292	300
Creatinine	236	248	258	268	278
Phosphate	200	220	230	246	260
Vit.B12	120	125	138	145	152

UFR [ml/(hr.mmHg)]	19	21	22	24	26
Potting material	PU				
Housing and caps material	PC				
Sterilization	Gamma Rays				
Wall thickness (μ m)	35				
Int.diameter (μ m)	200				
Max TMP (mmHg)	500				
Priming volume (ml)	79	87	100	109	116

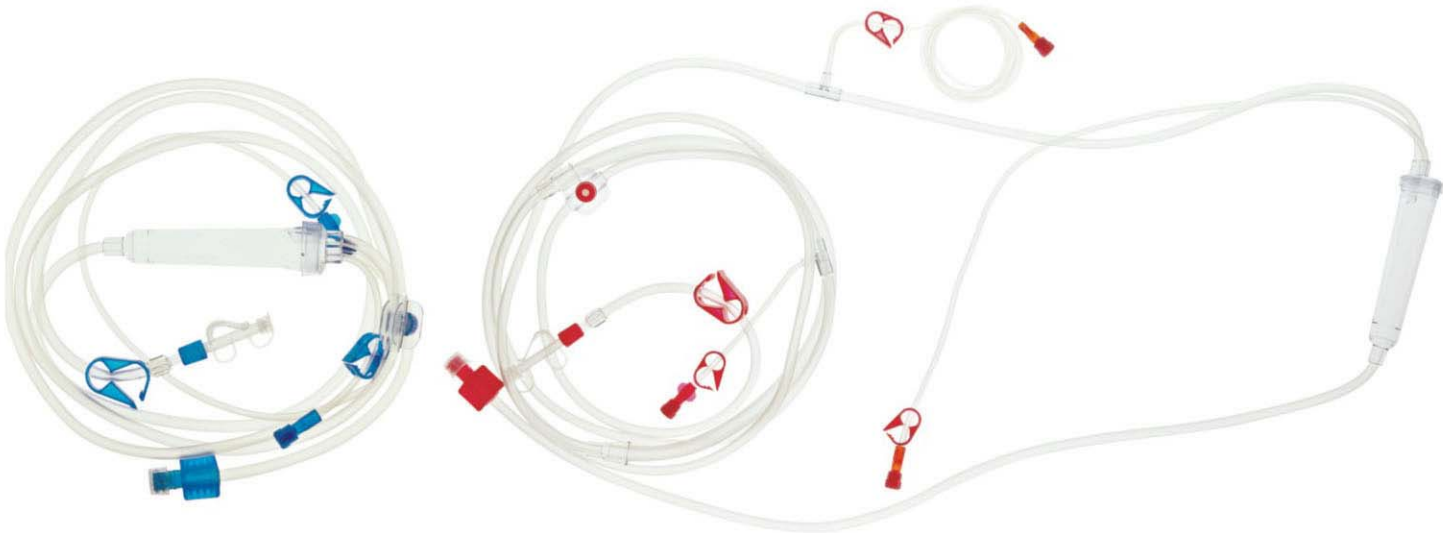
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Biocompatibility



Tubing Sets for Hemodialysis

- Medical grade PVC tubing minimizes side effect to health.
- All components are available for most brands of hemodialysis machines in operation worldwide; customized blood lines are available on request.
- Sterilization:E.O. gas or gamma ray.
- CE marked



Tubing Set for Hemodialysis with DINCH (DEHP FREE)

(*Available on demand)

The introduction to DINCH (DEHP FREE)

- DINCH was introduced to the global market in 2002 as an alternative plasticizer for sensitive exposure application such as toys, food packaging and medical devices.

The feature of DINCH (DEHP FREE)

- No relevant hazards for cancer, testicular toxicity, impairment of fertility, developmental toxicity, teratogenicity and endocrine action.
- No environmental hazards.
- No accumulation in the body.

Disposable A.V. Fistula Needle Sets

- Ultra thin wall and siliconized for smoother penetration.
- Special process on blade reduces pain and skin damage for smoother penetration.
- Medical grade PVC tubing minimize side effect to health.
- Sterilization: E.O. gas and gamma ray.
- CE Certification passed.

- * 15G/16G/17G
- * fixed wing/rotatable wing
- * with/without back eye
- * Safety needle & Dull needle are available

Components

All the process of moulding and extrusion are elaborated and qualified according to most up-to-date international rules.



Dialysis Kit



- Variable configurations are available according to different using habits.
- Better Care to patients and operators.