Leukotrap® WB High Efficiency Pre-Process Filter System

For Leucocyte Removal from Whole Blood

- Indicated for the collection and pre-storage leucocyte removal of whole blood, and subsequent preparation of red cells and plasma
- High efficiency filtration, providing consistently low residual leucocytes
- Rapid filtration
- Filtration performance validated over a range of hold conditions
- Improved quality of blood components
- Easy to use, fits into routine standard operating procedures and logistics

Filtration Application

- High efficiency leucocyte removal from one unit of whole blood before processing.

Clinical Benefits

- Clinically proven media technology significantly reduces the risk of leucocyte associated transfusion complications such as microaggregates, alloimmunisation, febrile reactions, refractoriness to platelets, Cytomegalovirus and immunosuppression.*
- Unique technology filtration media and minimal filter hold up volume provide high recovery of red cells and plasma for transfusion to the patient.

*Data available on request from Haemonetics Corporation.

HAEMONETICS®
THE Blood Management Company®

Performance Summaries of Whole Blood Filtered after a Specified Hold Time & Temperature

- 500 mL blood draw volume, anticoagulant 70 mL CPD, additive solution 110 mL SAG-M, top & top processed following centrifugation at 4400 g for 12 minutes at 22 °C. Leucocyte concentration post-filtration was determined using flow cytometry.

Table 1

Hold Condition	Pre-Filtration		Post-Filtration Red Cells			Plasma
16 hours at ambient temperature n = 20	**Leucocytes/ Unit x 10^9**	**Filtration Time (Min)**	**Red Cells/ Unit x 10^{12}**	**Haematocrit (%)**	**Leucocytes/ Unit x 10^{-5}**	**Volume (mL)**
Mean	3.72	14	1.95	59.0	2.25	282
SD	0.98	4	0.22	2.8	1.86	20
Range	2.82 – 6.49	8 – 24	1.74 – 2.40	5.45 – 64.9	0.28 – 7.51	228 – 308
16 hours at 4 °C n = 19						
Mean	3.39		1.92	57.8	1.61	277
SD	1.28		0.18	2.3	1.29	20
Range	2.37 – 6.58		1.71 – 2.37	52.0 – 62.6	0.29 – 5.27	235 – 312

Performance Summaries of Whole Blood Filtered after a Specified Hold Time & Temperature

- 450 mL blood draw volume, anticoagulant 63 mL CPD, additive solution 100 mL SAG-M, top & top processed following centrifugation at 5000 g for 10 minutes at 22 °C. Leucocyte concentration post-filtration was determined using flow cytometry and/or concentrated Nageotte counting techniques.

Hold Condition	Pre-Filtration		Post-Filtration Red Cells			Plasma
2– 5 hours at ambient temperature n = 24	**Leucocytes/ Unit x 10^9**	**Filtration Time (Min.Sec)**	**Red Cells/ Unit x 10^{12}**	**Haematocrit (%)**	**Leucocytes/ Unit x 10^5**	**Volume (mL)**
Mean	2.62	22.06	1.99	57.7	0.39	281
SD	0.77	6.54	0.18	1.9	0.44	14
Range	1.44 – 5.23	8.13 – 37.0	1.64 – 2.38	54.2 – 60.7	< 0.18 – 2.06	252 -308
< 8 hours on cooling plates n = 52[1]						
Mean		13.81			0.19	
SD		3.37			0.18	
Range		9 – 36			< 0.10 – 0.75	
Approx 18 – 20 hours at ambient temperature n = 12						
Mean	2.73	20.30	1.77	57.4	0.74	289
SD	0.72	5.25	0.20	2.1	0.92	18
Range	1.95 – 4.21	14.19 – 32.22	1.55 – 2.25	55.0 – 62.2	< 0.16 – 3.51	269 – 332
Approx 6 – 26 hours at 4 °C temperature n = 27						
Mean	2.59	30.27	1.80	54.7	0.48	275
SD	0.62	20.04	0.17	1.8	0.41	17
Range	1.61 – 3.70	13.39 – 97.0	1.52 – 2.08	50.6 – 58.0	< 0.17 – 1.72	241 – 312

[1]Data kindly provided by the Blood Transfusion Service of the Finnish Red Cross.

References

Further information regarding the performance of Haemonetics Leukotrap® WB filter systems can be found in the following supporting references.

- Stebler *et al.*, Evaluation of a new whole blood filter for production of leukodepleted red cells and plasma. *Infus Ther Transfus Med* 2001: 28 (Sonderheft 1): 1-70. V4.5.
- Saunders *et al.*, Evaluation of a new whole blood filter. *Transf Clin Biol* 2001; 8 (Suppl 1). Abstract P693.
- Hibbs *et al.*, Investigation of plasma parameters after whole blood filtration. *Transf Clin Biol* 2001; 8 (Suppl 1). Abstract P612.
- Illert W. Whole blood filtration – investigation on effiency and quality of the final products. *Infus Ther Transfus Med* 1998; 25 (Sonderheft 1): Abstract 18/8p.
- Wierckx *et al.*, Plasma prepared using the Haemonetics Leukotrap WB whole blood filter set. *Vox Sang* 1998; 74 (Suppl 1). Abstract 1274.
- Riggert *et al.*, Prestorage inline filtration of whole blood for obtaining white cell-reduced blood components. *Transfusion* 1997; 37: 1039-44.

Ordering Information

All Leukotrap WB systems are supplied in cases of 12 units. Please refer to your Haemonetics representative for further information on customised variants available in the Leukotrap WB range of filter systems.

Information contained herein for distribution outside of the USA only.

Haemonetics S.A. ■ Signy Centre ■ Rue des Fléchères ■ P.O. Box 262 ■ 1274 Signy Centre ■ Switzerland ■ www.haemonetics.com