REQUIREMENT SPECIFICATIONS

REQUEST FOR PROPOSAL FOR SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF BLOOD VOLUME MONITORS

1. Introduction

1.1 The National Kidney Foundation ("**NKF**") wishes to appoint a contractor (the "**Contractor**") for the supply and delivery of Blood Volume Monitors as described in these Requirement Specifications (the "Goods"), to all its dialysis centres in Singapore.

2. Product Specification

2.1 The Goods shall conform to the detail specification in **Annex A**.

3. Contract Duration, Quantity Requirements and Delivery Schedule

3.1 The Contractor shall supply the Goods over a period of seventeen (17) months from 1 February 2027 to 30 June 2028.

3.2 NKF may extend the Contract Period, on the same terms as those contained herein (including on the same Contract Price), for a further duration not exceeding 36 months, by serving written notice of the Company's desire to renew the term hereof, which notice shall be given not less than 30 days prior to the expiry of the initial Contract Period

3.2 NKF's estimated consumption for the Goods over a period of seventeen (17) months is set out as below:

S/No.	Item Description	Estimated Quantity for 17 months
1	Blood Volume Monitor	45 untis

3.3 The Goods shall be delivered to such of NKF's dialysis centres as NKF shall stipulate from time to time. Please refer to **Annex B** for the detail list of NKF's Dialysis Centres (as at date of this RFP). For the avoidance of doubt, NKF reserves the right at any time to increase or decrease the number of and to vary and /or change the location of any or all of the listed Dialysis Centres. Avoid delivery from: 1300hours to 1400hours

4. Submission of RFP bids

4.1 Each Vendor should provide the price quote in the Price Schedule.

4.2 All quotations submitted by the Vendor must indicate the prices applicable for the estimated numbers of Goods specified in paragraph 3.2 above.

Authorised Signature: _____ Contractor's stamp : _____

4.3 Each vendor is required to indicate the following information for the proposed products in the Price Schedule:

4.3.1 The minimum delivery lead time
4.3.2 Country of manufacturer

5. Presentation / Demo

5.1 Each vendor may be required to provide presentation / demo, to the Company at the following address:

National Kidney Foundation
81 Kim Keat Road,
Singapore 328836

Authorised Signature: _____ Vendor's stamp : _____

Annex A

Technical Specifications – Blood Volume Monitor				
The device non-invasively measures key parameters such as hematocrit, oxygen saturation, blood volume percentage, and hemoglobin. These critical measurements provide valuable support for nurses, enabling effective monitoring and management of potential complications during dialysis treatment.				
S/No	**General Specification**			
	Parameters	**Specifications**	**Comply Yes / No/ Specify)**	**Comment**
1	**Technology of the measurement:** non-invasively measure absolute hematocrit and continuous oxygen saturation.	Specify the technology		
2	**Oxygen Saturation Instrument** Range and Accuracy	**@ Hct** ±5% (Pease Specify) • 45 to 60 • 20 to 45 • 10 to 20		
3	**Hematocrit Instrument** Range and Accuracy	10 Hct to 60 Hct: ±1 Hct SD		
	HD Blood Flow Rate	100 ml/min to 500 ml/min		
	Relative Blood Volume Calculation (RBV)	Real time RBV Changes with customizable alert and risk profiling availability		
4	**Monitoring and software support:**			
	Monitor	Specify Monitor Type		
		Monitor Dimensions L X H (Screen Size)		
	Data Storage capacity	Please specify storage capacity.		
	Connectivity / Data Export	1. Wi-Fi, Bluetooth or wired (Please Specify) 2. Data export – PDF, CSV (Please specify)		
	Security and Encryption	Medical data Encryption standard		

Authorised Signature: _____

Contractor's stamp : _____

5	**Accessories:**			
	Sensor	Cable Length		
		Calibration cell		
		Attachment method		
	Consumables specifications	Material used (Biocompatible plastic)		
		Sterilization method of the consumables		
6	**Power Supply:**			
	Power Source	230 V AC, 50 Hz		
	Battery Type	Rechargeable battery (specify the chemical composition)		
	Charging Duration	Please Specify		
	Operating Range (Battery Back-up)	>2 Hrs		
	Recommended Battey life span	Provide the battery replacement schedule		
7	**Physical Characteristics:**			
	Dimensions of the Monitor (W x D x H)	Specify the dimensions		
	Weight	Specify the weight		
	Monitor Mounting mode	Specify the Mounting Mode (Pole mount/ Rolling Stand)		

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8	**Warranty (Years)**	please specify warranty period		
9	**Product life span**	Please mention the life span of the goods/equipment		
10	**Obsolescence (if any)**	Please provide the product obsolescence date along with details on future product support and the availability of consumables.		
11	**Product Support:**			
	Product Training	Singapore Training support		
	Service and calibration	Please indicate whether the preventive maintenance, service and calibration facility available in Singapore		
12	**Disinfection protocol**	High Level Clinical Disinfection, Specify the cleaning agent used		
13	**Safety Standard**	Must be HSA Approved, please provide the details		
14	**IP Rating (water and Dust proof)**	IP64 or above		
15	**Reference**	Provide the list of hospitals and dialysis centers that are using the quoted model		
16	**Delivery & Installation**	Please provide lead time for delivery.		
17	**Training**	User training must be provided		
18	**Sustainability Initiative**	Please highlight sustainability initiatives with reference to good/equipment. (e.g. energy efficiency, battery management, environmentally responsible manufacturing practices, recyclable packaging)		

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List of Dialysis Centres (By Zones)

S/N	Dialysis Centre	Address
WEST		
1	113A Bukit Batok	BLK 113A Bukit Batok West Ave 6, #01-01 S (651113)
2	326 Clementi (Nocturnal)	BLK 326 Clementi Ave 5 #01-175 S(120326)
3	701 West Coast	BLK 701 West Coast Rd #01-323 S (120701)
4	113 Teck Whye	BLK 113 Teck Whye Lane #01-666 S (680113)
5	744 Jurong West	BLK 744 Jurong West St 73 #01-19 S (640744)
6	940 Jurong West	BLK 940 Jurong West Street 91. #01-441 S (640940)
7	240C Jurong East	BLK 240C Jurong East Ave 1 #01-01 S (603240)
8	1 Ghim Moh	BLK 1 Ghim Moh Road #01-358 S (270001)
9	55 Strathmore	BLK 55 Strathmore Ave #01-145 S (140055)
10	128 Bukit Merah	BLK 128 Bukit Merah View #01-22 S (150128)
11	274 Bangkit	BLK 274 Bangkit Rd #01-54 S (670274)
12	275 Bangkit	BLK 275 Bangkit Rd. #01-96 S (670275)
13	IRC Level 1, 2 & 3 **(Building)**	500 Corporation Road Level 1 S (649808)
CENTRAL		
1	225 Toa Payoh	BLK 225 Toa Payoh Lorong 8. #01-54 S (310225)
2	19 Upper Boon Keng	BLK 19 Upper Boon Keng Rd #01-1220 S (380019)
3	43 Bendemeer	BLK 43 Bendemeer Rd. #01-1018 S (330043)
4	311 Ubi	BLK 311 Ubi Ave 1. #01-383 S (400311)
5	102 Aljunied	BLK 102 Aljunied Crescent. #01-265 S (380102)
6	213 Bidadari	BLK 213 Bidadari Park Dr #03-14 S (360213)
7	NKF Centre **(Building)**	Tay Choon Hye-NKF Dialysis Centre 81 Kim Keat Road S (328836)
8	Toa Payoh West CC **(Building)**	BLK 200 Toa Payoh Lorong 2 #03-01 S9319642)
9	Joo Seng Store **(Building)**	136 Joo Seng Road #03-01 S (368360)

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Annex B

S/N	Dialysis Centre	Address
NORTH-EAST		
1	633 Ang Mo Kio	BLK 633 Ang Mo Kio Ave 6. #01-5155 S (560633)
2	565 Ang Mo Kio	BLK 565 Ang Mo Kio Ave 3. #01-3401 S (560565)
3	628 Hougang (Nocturnal)	BLK 628, Hougang Ave 8, #01-108 S (530628)
4	114 Hougang	BLK 114 Hougang Ave 1. #01-1298 S (530114)
5	465 Fernvale	BLK 465 Fernvale Rd, #01-07 Fernvale Vines S (790465)
6	Punggol Oasis **(Building)**	BLK 681 Punggol Drive #02-02 S (820681)
7	One Punggol **(Building)**	One Punggol, 1 Punggol Dr #04-08 S (828629)
8	Sengkang Hospital **(Building)**	SKCH 1 Anchorvale St, #01-26 S (544835)
9	Serangoon Polyclinic **(Building)**	587 Upper Serangoon Road Level 3 S (534564)
NORTH		
1	365 Woodlands (Nocturnal)	BLK 365 Woodlands Ave 5. #01-490 S (730365)
2	825 Woodlands	BLK 825 Woodlands St 81. #01-30 S (730825)
3	761 Woodlands	BLK 761 Woodlands Ave 6. #01-108 S (730761)
4	204 Marsiling	BLK 204 Marsiling Drive. #01-188 S (730204)
5	203 Yishun	BLK 203 Yishun St 21. #01-239 S (760203)
6	639 Yishun	BLK 639, Yishun St 61. #01-168 S (760639)
7	840 Yishun	BLK 840 Yishun St 81. #01-382 S (760840)
8	Yishun Comm Hosp **(Building)**	YCH 2 Yishun Central 2 #03-01 S (768024)
EAST		
1	27 New Upper Changi	BLK 27 New Upper Changi Rd. #01-694 S (462027)
2	105 Bedok	BLK 105 Bedok North Ave 4. #01-2168 S (460105)
3	180 Pasir Ris	BLK 180 Pasir Ris St 11. #01-06 S (510180)
4	427 Pasir Ris	BLK 427 Pasir Ris Drive 6. #01-35/43 S (510427)
5	101 Simei	BLK 101 Simei St 1. #01-892 S (520101)
6	935 Tampines	BLK 935 Tampines St 91. #01-333 S (520935)
7	271 Tampines	BLK 271 Tampines St 21. #01-99 S (520271)

Authorised Signature: _____ Vendor's stamp : _____