# **Pre-Feasibility Study DIALYSIS CENTER**



# **Small and Medium Enterprises Development Authority**

# Ministry of Industries & Production Government of Pakistan

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#### 1 DISCLAIMER

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## **2 EXECUTIVE SUMMARY**

Dialysis is the process of removing waste materials from the blood, through artificial means, when body is unable to excrete due to improper functioning of kidneys. It is one way of replacing the critical functions of the kidneys, thereby sustaining the life of patient. Setting up a dialysis facility on commercial basis has great potential because available health facilities across the country are not sufficient to cater the needs of the population. This particular pre-feasibility study provides basic information for setting up a 'Dialysis Centre' in smaller cities and their peripheral areas as they lack such health facilities.

Keeping in view the nature and scope of the services, it is proposed that center will be established on purchased land. The center will have capacity of treating 9,000 patients per year (8,640 normal patients and 360 patients in ICU). The starting operational capacity of center is recommended at 60% of installed capacity i.e. 5,400 patients per year. This treatment capacity has been found economically viable and justifies capital as well as operational costs. Engagement of reputed consultants and trained and professional Paramedical Staff are extremely important for the success of the proposed venture.

Total project cost is estimated at Rs. 43.42 million with capital investment of Rs. 41.16 million and working capital Rs. 2.26 million. Given the cost assumptions IRR, Payback and Net Present Value are 31%, 3.74 years and Rs. 24.30 million respectively. The project will provide employment opportunities to 20 people directly including owner as CEO. The legal status of this project is proposed as 'Sole Proprietorship'.

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May 2018

#### 3 INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectorial research' to identify policy, access to finance, business development services, strategic initiatives and institutional collaboration and networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of experts and consultants and delivery of need based capacity building programs of different types in addition to business guidance through help desk services.

#### 4 PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document/study covers various aspects of project concept development, start-up, and production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in **Dialysis Center** by providing them with a general understanding of the business with the intention of supporting potential investors in crucial investment decisions.

The need to come up with pre-feasibility reports for undocumented or minimally documented sectors attains greater imminence as the research that precedes such reports reveal certain thumb rules; best practices developed by existing enterprises by trial and error, and certain industrial norms that become a guiding source regarding various aspects of business set-up and it's successful management.

Apart from carefully studying the whole document one must consider critical aspects provided later on, which form basis of any Investment Decision.



### 5 BRIEF DESCRIPTION OF PROJECT

Dialysis is a process by which, when the kidneys have failed, artificial means are used to remove toxins from the body that accumulate due to non-functioning kidneys. It is one way of replacing the critical function of the kidneys, or renal replacement therapy, thereby sustaining life.

Dialysis is needed when a patient loses about 85 to 90 percent of the kidney function. Like healthy kidneys, dialysis keeps your body in balance. Dialysis removes waste, salt and extra water to prevent them from building up in the body.

It keeps a safe level of certain chemicals in blood, such as potassium, sodium and bicarbonate, which helps to control blood pressure and improved breathing. Most people undergo three dialysis sessions each week, for about four hours each time.

There are two types of dialysis: Hemodialysis and Peritoneal dialysis, however in this pre-feasibility study 'Haemodialysis' method will be used for patients.

To undergo Haemodialysis, a person must first have a minor surgical procedure to create an access for the needles and tubing needed to connect the blood circulation to the dialysis machine. This minor surgery forms what is called an AV (arteriesvenous) fistula, or a shunt, or simply a fistula. Once this is done, a person does not have to worry about difficulties being "stuck" with needles for each session of dialysis

A person is connected to the dialysis machine via the shunt. The dialysis machine pumps the blood through the dialyzer, which filters off the waste products, excess fluid, and excess body chemicals. The newly cleaned blood flows out of the dialyzer and is returned via a different set of tubes. During dialysis, a person also receives the hormones the kidneys are unable to produce.

#### 5.1 Installed And Operational Capacities

Proposed center will house 05 dialysis machines (04 Hemodialysis machines and 01 Continuous Renal Replacement Therapy Machine) and it will be able to treat 9,000 patients annually. The operational capacity in first year is estimated at 60% with an annual growth of 5%. Maximum capacity utilization of the project is assumed at 90%. Installed and operational capacities of the proposed unit are provided below.

**Table 1: Installed and Operational Capacities** 

	Description	Installed Capacity	Operational Capacity (Year 1) @ 60%
ICU		360	216



Normal	8,640	5,184
Total	9,000	5,400

## **6 CRITICAL FACTORS**

Following factors are critical in success of the proposed venture.

- ⇒ Engagement of reputed consultants and trained and professional Paramedical Staff
- ⇒ Provision of hygienic environment
- ⇒ Charges for the dialysis should be in accordance with market practices
- ⇒ Registration with law governing departments are essential in setting up the proposed centre
- ⇒ Selection of an appropriate location especially nearby to the health care facilities
- ⇒ Uninterrupted supply of electricity

## 7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Growing number of patients and lack of maintained infrastructure has put tremendous pressure on public sector Dialysis Centers. This has resulted in a rising demand for health care services in the private sector across the country. Moreover, availability of latest technology, hygienic environment and professional staff attitude is contributing to the popularity of the Dialysis Centers in private sector.

It is pertinent to highlight that, large public sector hospitals / dialysis centers are mainly concentrated in major cities of the country. Therefore, it is suggested that the proposed Dialysis Center may be established either in smaller cities, and their peripheral areas or in those areas of the larger cities with little presence of such facilities.

### 8 POTENTIAL TARGET CUSTOMERS / MARKETS

According to recent survey there are about 20 million kidney patients in Pakistan<sup>1</sup>. Due to limited health and medical facilities availability in smaller cities and their surroundings the population of these will be the potential target of the proposed dialysis center. The major target market for the facility will be the kidney patients of nearby locations.



<sup>&</sup>lt;sup>1</sup> DAWN, March 10, 2017

#### 9 PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of Dialysis Center. Various cost and revenue related assumptions along with results of the analysis are outlined in this section.

The projected Income Statement, Cash Flow Statement and Balance Sheet are also attached as annexure.

## 9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 28.08 million in the year one. The capacity utilization during year one is worked out at 60% with 5% increase in subsequent years up to the maximum capacity utilization of 90%.

The following table shows internal rate of return, payback period and net present value of the proposed venture.

**Table 2: Project Economics** 

Description	Details
Internal Rate of Return (IRR)	31%
Payback Period (Years)	3.74
Net Present Value (Rs.)	24,300,302

## 9.2 Project Financing

Following table provides details of the equity required and variables related to bank loan;

**Table 3: Project Financing** 

Description	Details
Total Equity (50%)	Rs. 21,711,724
Bank Loan (50%)	Rs. 21,711,721
Markup to the Borrower (%age / annum)	12%
Tenure of the Loan (Years)	5



### 9.3 Project Cost

Following fixed and working capital requirements have been identified for operations of the proposed business.

**Table 4: Project Cost** 

Description	Amount (Rs.)
Capital Investment	
Land	15,000,000
Building/Infrastructure	8,657,600
Machinery & equipment	11,720,000
Furniture & fixtures	1,867,500
Office equipment	320,000
Pre-operating costs	3,599,731
Total Capital Costs	41,164,831
Working Capital	
Equipment spare part inventory	13,956
Raw material inventory	234,000
Upfront insurance payment	586,000
Cash	1,423,462
Total Working Capital	2,257,418
Total Investment	43,422,249

## 9.4 Space Requirement

The space requirement for the proposed Dialysis Center is estimated considering various facilities including management office, reception, dialysis center, emergency room, pharmacy and corridor etc. Keeping in view the above mentioned requirements, it is suggested to build a building on 2,250 sq.ft. purchased land comprising of two floors. The details of space requirement along with construction cost are given below:

**Table 5: Space Requirment** 

Description	Area Required sq. ft.	Cost (Rs. / Sq.ft.)	Total Cost (Rs.)
Ground Floor			
Reception Hall/Waiting room	300	2,500	750,000
Dialysis center	952	3,000	2,856,000
Emergency room	192	3,000	576,000
Doctors Rooms	144	2,500	360,000
Washrooms	216	2,500	540,000



Pharmacy	120	2,500	300,000
Open Area	326		
First Floor			
Management / Admin area	400	2,500	1,000,000
Consultant Rooms	200	2,500	500,000
Nurses Room	100	2,500	250,000
Circulation Spaces (Corridors, Staircase, Lift, etc.)	619	2,000	1,237,600
Canteen	144	2,000	288,000
Total Infrastructure			8,657,600

The cost of land is taken at Rs. 15.00 million.

## 9.5 Machinery & Equipment Requirement

Machinery and equipment for the proposed project are stated below;

**Table 6: Machinery & Equipment Requirement** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Haemodialysis Machine with Blood Model: 4008 S	4	1,285,000	5,140,000
Continuous Renal Replacement Therapy (CRRT) Machine	1	2,500,000	2,500,000
ICU Bed	1	175,000	175,000
Dialysis Chair Model: T688	4	675,000	2,700,000
Water Treatment System	1	650,000	650,000
Instrument sterilizers	2	15,000	30,000
Stethoscope	5	5,000	25,000
Generator	1	500,000	500,000
Total Machinery & Equipment			11,720,000

## 9.6 Furniture & Fixtures Requirement

Details of the furniture and fixture required for the project are given below:

**Table 7: Furniture & Fixture Requirement** 

Description	Quantit y	Cost per Unit (Rs.)	Total Cost (Rs.)
Sofa Sets			
Sofa Set for reception & Waiting Room	1	45,000	45,000
2 seater For Dialysis center	1	20,000	20,000

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2 seater for Nursing Room	1	20,000	20,000
Chairs			
Reception and waiting room	4	5,000	20,000
Consultant Room	3	10,000	30,000
Doctors Room	3	7,500	22,500
For Nursing rooms	4	5,000	20,000
Counter chairs	2	5,000	10,000
Visitor Chairs	10	5,000	50,000
Tables	3	15,000	45,000
Reception Counter	1	35,000	35,000
Table & Chair for CEO	1	50,000	50,000
File Racks	4	20,000	80,000
Small Cabinets	4	15,000	60,000
Lighting			100,000
Air conditioners (1.5 ton)	10	70,000	700,000
Fans	15	4,000	60,000
Generator	1	500,000	500,000
Total Furniture & Fixtures			1,867,500

## 9.7 Office Equipment Requirement

Following office equipment will be required for the proposed Dialysis Center;

**Table 8: Office Equipment Requirement** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Computers	4	35,000	140,000
Printer	3	15,000	45,000
UPS	1	50,000	50,000
Scanner	1	15,000	15,000
Security Cameras	1	50,000	50,000
Telephone Sets	8	2,500	20,000
Total Office Equipment			320,000

#### 9.8 Consumables / Raw Material

It is assumed that 10% of the Dialysis Fee will be used in consumables (i.e. Syringes, Surgical cotton, Bandages, injections, etc.). Other related medicines will be purchased by patient.

## 9.9 Human Resource Requirement

In order to run operations smoothly, details of human resources required along with number of employees and monthly salaries are recommended as under:



**Table 9: Human Resource Requirment** 

Description	Required	Salary per Month (Rs.)
CEO	1	150,000
Medical Officers	2	60,000
Nursing Staff	4	25,000
Consultant	2	100,000
Technician	2	25,000
Receptionist	2	18,000
Admin officer/ Accountant	1	30,000
Office Boy	2	16,000
Guard	2	16,000
Sweeper	2	16,000
Total	20	

#### 9.10 Utilities and Other Costs

An essential cost to be borne by the project is the cost of electricity. The electricity expenses are estimated to be around Rs. 3.24 million per annum. Furthermore, promotional expense, being essential for the business are estimated as Rs. 1.00 million in year 1.

### 9.11 Revenue Generation

Based on the capacity utilization of 60%, sales revenue during the first year of operations is estimated in below table.

Table 10: Revenue Generation - Year 1

Description	No. of Patients	Fee per Patient (Rs.)	Revenue (Rs.)
ICU	216	10,000	2,160,000
Normal	5,184	5,000	25,920,000
Total	5,400		28,080,800



### **10 CONTACT DETAILS**

In order to facilitate potential investors, contact details of private sector Service Providers relevant to the proposed project be given.

## 10.1 Machinery Suppliers

#### **FRESENIUS** B.Braun 27-C-III, First Floor TAMC, M.M. Alam 35, Sherpao Bridge Colony, Cant, Road, Gulberg III, Lahore Lahore Tel: +92 42 35762920-23 Tel: (92 21) 35810230 Fax:+92 42 35762924 Fax: (92 21) 35810228 http://www.freseniusmedicalcare.com http://www.bbraun.pk Medicuips Pvt. Ltd 30- Shahra-e-Quaid-e-Azam, Lahore. Tel: 042-37233241, 37236475 Fax: 042- 37232302 akhtar@medequips.org www.medequips.org



# 11 USEFUL WEB LINKS

Small & Medium Enterprises Development	www.smeda.org.pk		
Authority (SMEDA)	WWW.cmcda.org.pix		
Government of Pakistan	www.pakistan.gov.pk		
Ministry of Industries & Production	www.moip.gov.pk		
Ministry of Federal Education and Professional Training	moent.gov.pk		
Government of Punjab	www.punjab.gov.pk		
Government of Sindh	www.sindh.gov.pk		
Government of Khyber Pakhtunkhwa	www.khyberpakhtunkhwa.gov.pk		
Government of Baluchistan	www.balochistan.gov.pk		
Government of Gilgit Baltistan	www.gilgitbaltistan.gov.pk		
Government of Azad Jamu Kashmir	www.ajk.gov.pk		
Trade Development Authority of Pakistan (TDAP)	www.tdap.gov.pk		
Security Commission of Pakistan (SECP)	www.secp.gov.pk		
State Bank of Pakistan (SBP)	www.sbp.org.pk		
Federation of Pakistan Chambers of Commerce and Industry (FPCCI)	www.fpcci.com.pk		
Medicuips Pvt Limited	www.medequips.org		
Pakistan Medical and Dental Association	www.pmdc.org		
Pakistan Medical Forum	www.pakmedinet.com		
World Health Organization	www.who.com		
University of Health Sciences	www.uhs.edu.pk		
Drug Regulatory Authority of Pakistan	www.dra.gov.pk/		
Ministry of National Health Services, Regulation and Coordination	www.nhsrc.gov.pk		
Punjab Healthcare Commission	www.phc.org.pk		



## **12 ANNEXURES**

## 12.1 Income Statement

T										
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 1
Revenue	28,080,000	32,549,400	37,506,924	42,999,009	49,076,203	55,793,508	63,210,762	67,635,516	72,370,002	77,435,90
The foliate	20,000,000	32,0 15, 100	37,500,52	.2,>>>,00>	17,070,203	55,755,566	05,210,702	07,000,010	72,570,002	77,135,7
Cost of sales										
Consumables	2,808,000	3,254,940	3,750,692	4,299,901	4,907,620	5,579,351	6,321,076	6,763,552	7,237,000	7,743,59
Direct Labor	6,072,000	6,679,200	7,347,120	8,081,832	8,890,015	9,779,017	10,756,918	11,832,610	13,015,871	14,317,45
Machinery Maintenance	334,950	368,445	405,290	445,818	490,400	539,440	593,384	652,723	717,995	789,79
Direct Electricity	3,245,391	3,748,427	4,329,433	5,000,495	5,775,572	6,670,786	7,704,758	8,898,995	10,278,339	11,871,48
Total cost of sales	12,460,341	14,051,012	15,832,535	17,828,047	20,063,608	22,568,594	25,376,137	28,147,880	31,249,206	34,722,32
Gross Profit	15,619,659	18,498,388	21,674,389	25,170,963	29,012,595	33,224,914	37,834,626	39,487,636	41,120,796	42,713,57
General administration & selling expenses										
Administration expense	3,312,000	3,643,200	4,007,520	4,408,272	4,849,099	5,334,009	5,867,410	6,454,151	7,099,566	7,809,52
Administration benefits expense	331,200	364,320	400,752	440,827	484,910	533,401	586,741	645,415	709,957	780,95
Water expense	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,47
Gas expense	90,000	99,000	108,900	119,790	131,769	144,946	159,440	175,385	192,923	212,21
Travelling expense	600,000	660,000	726,000	798,600	878,460	966,306	1,062,937	1,169,230	1,286,153	1,414,76
Communications expense (phone, fax, mail, internet, etc.)	240,000	264,000	290,400	319,440	351,384	386,522	425,175	467,692	514,461	565,90
Office expenses (stationary, entertainment, janitorial services, etc.	960,000	1,056,000	1,161,600	1,277,760	1,405,536	1,546,090	1,700,699	1,870,768	2,057,845	2,263,63
Promotional expense	1,000,000	900,000	810,000	729,000	656,100	590,490	531,441	478,297	430,467	387,42
Insurance expense	586,000	527,400	468,800	410,200	351,600	293,000	234,400	175,800	117,200	58,60
Professional fees (legal, audit, consultants, etc.)	250,000	275,000	302,500	332,750	366,025	402,628	442,890	487,179	535,897	589,48
Depreciation expense	1,898,297	1,898,297	1,898,297	1,915,110	1,915,110	1,915,110	1,934,574	1,934,574	1,934,574	1,957,10
Amortization of pre-operating costs	719,946	719,946	719,946	719,946	719,946	-	-	-	-	-
Subtotal	10,047,443	10,473,163	10,967,315	11,551,555	12,197,785	12,209,132	13,052,000	13,975,414	15,007,659	16,181,08
Operating Income	5,572,216	8,025,225	10,707,074	13,619,407	16,814,809	21,015,782	24,782,626	25,512,222	26,113,137	26,532,49
Gain / (loss) on sale of office equipment	-	-	192,000	-	-	318,264	-	-	416,430	
Gain / (loss) on sale of office vehicles	-	-	-	-	-	-	-	-	-	
Earnings Before Interest & Taxes	5,572,216	8,025,225	10,899,074	13,619,407	16,814,809	21,334,046	24,782,626	25,512,222	26,529,568	26,532,49
Interest expense on long term debt (Project Loan)	2,297,885	1,892,521	1,435,746	921,041	341,059	_	_	_	_	_
Interest expense on long term debt (Working Capital Loan)	147,534	122,500	93.729	60,660	22,653	_	_	_	_	_
Subtotal	2,445,419	2.015.021	1.529.475	981,701	363,712					
Earnings Before Tax	3.126.797	6,010,204	9,369,599	12,637,706	16,451,098	21,334,046	24,782,626	25,512,222	26,529,568	26,532,49
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Tax	501,199	1,323,071	2,498,859	3,642,696	4,977,383	6,686,415	7,893,418	8,148,777	8,504,848	8,505,87
NET PROFIT/(LOSS) AFTER TAX	2,625,598	4,687,133	6,870,740	8,995,009	11,473,714	14,647,631	16,889,208	17,363,445	18,024,720	18,026,62



## 12.2 Balance Sheet

Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year
Assets											
Current assets											
Cash & Bank	1,423,462	3,440,044	8,286,652	15,531,320	25,864,182	39,370,840	62,033,179	88,606,024	115,942,763	143,863,819	173,389,3
Accounts receivable		1,153,973	1,245,810	1,439,514	1,654,232	1,891,956	2,154,857	2,445,293	2,688,622	2,876,826	3,078,20
Finished goods inventory		265,114	293,020	330,172	371,786	418,407	470,646	529,195	586,996	651,672	724,10
Equipment spare part inventory	13,956	16,119	18,618	21,504	24,837	28,687	33,133	38,269	44,200	51,051	-
Raw material inventory	234,000	284,807	344,595	414,806	497,104	593,402	705,904	793,083	891,029	1,001,071	-
Pre-paid building rent	· <u>-</u>	-	· -	· -	-	-	=	-	- -	-	-
Pre-paid insurance	586,000	527,400	468,800	410,200	351,600	293,000	234,400	175,800	117,200	58,600	-
Total Current Assets	2,257,418	5,687,457	10,657,494	18,147,515	28,763,741	42,596,292	65,632,119	92,587,663	120,270,811	148,503,038	177,191,62
Fixed assets											
Machinery & equipment	11.720,000	10.548,000	9.376.000	8,204,000	7.032.000	5,860,000	4.688.000	3.516.000	2,344,000	1.172.000	_
Furniture & fixtures	1,867,500	1,680,750	1,494,000	1,307,250	1,120,500	933,750	747,000	560,250	373,500	186,750	_
Office vehicles	-	-		-	-	-		-	-	-	_
Office equipment	320,000	213,333	106,667	370,440	246,960	123,480	428,831	285,887	142,944	496,425	330.95
Total Fixed Assets	37,565,100	35,666,803	33,768,506	32,240,650	30,325,540	28,410,430	26,924,150	24,989,577	23.055.003	21,616,855	19.659.75
101111111111111111111111111111111111111	37,500,100	22,000,003	33,700,000	32,210,030	30,020,010	20,110,130	20,721,100	21,505,577	25,655,665	21,010,055	17,007,70
Intangible assets											
Pre-operation costs	3,599,731	2,879,785	2,159,839	1,439,893	719,946	-	-	-	-	-	-
Total Intangible Assets	3,599,731	2,879,785	2,159,839	1,439,893	719,946	-	-	-	-	-	-
TOTAL ASSETS	43,422,249	44,234,045	46,585,839	51,828,057	59,809,226	71,006,721	92,556,269	117,577,239	143,325,814	170,119,893	196,851,37
Liabilities & Shareholders' Equity											
Current liabilities											
Accounts payable		1,048,871	1,184,731	1,337,165	1,508,218	1,700,194	1,915,696	2,154,040	2,390,392	2,654,904	2,853,89
Short term debt	_	-,,	-,,,	-	-	-,,,,,,,,	-	-,,	-,,	-,,	_,,,,,,,,
Total Current Liabilities	-	1,048,871	1,184,731	1,337,165	1,508,218	1,700,194	1,915,696	2,154,040	2,390,392	2,654,904	2,853,89
Other liabilities											
Deferred tax		501,199	1,824,270	4,323,128	7,965,825	12,943,208	19,629,624	27,523,042	35,671,819	44,176,667	52,682,53
Long term debt (Project Loan)	20,582,415	17,386,167	13,784,554	9,726,167	5,153,075	12,743,200	17,027,024	27,323,042	55,071,017	-1,170,007	32,002,3
Long term debt (Working Capital Loan)	1,128,709	961,086	768,429	547,001	292,504	_	_	_	_	_	_
Total Long Term Liabilities	21,711,124	18,848,452	16,377,253	14,596,296	13,411,404	12,943,208	19,629,624	27,523,042	35,671,819	44,176,667	52,682,53
Shareholders' equity		24.744.45	24.744.45	24.544.45		24.544.45	0	24.544.5	0.54.45	0	
Paid-up capital	21,711,124	21,711,124	21,711,124	21,711,124	21,711,124	21,711,124	21,711,124	21,711,124	21,711,124	21,711,124	21,711,12
Retained earnings	21.511	2,625,598	7,312,731	14,183,471	23,178,480	34,652,194	49,299,825	66,189,033	83,552,478	101,577,197	119,603,8
Total Equity	21,711,124	24,336,722	29,023,855	35,894,595	44,889,605	56,363,319	71,010,950	87,900,157	105,263,602	123,288,322	141,314,94
TOTAL CAPITAL AND LIABILITIES	43,422,249	44,234,045	46,585,839	51,828,057	59,809,226	71,006,721	92,556,269	117,577,239	143,325,814	170,119,893	196,851,37



## 12.3 Cash Flow Statement

Calculations											SMEDA
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Operating activities											
Net profit		2,625,598	4,687,133	6,870,740	8,995,009	11,473,714	14,647,631	16,889,208	17,363,445	18,024,720	18,026,620
Add: depreciation expense		1,898,297	1,898,297	1,898,297	1,915,110	1,915,110	1,915,110	1,934,574	1,934,574	1,934,574	1,957,105
amortization of pre-operating costs		719,946	719,946	719,946	719,946	719,946	-	-	-	-	-
Deferred income tax		501,199	1,323,071	2,498,859	3,642,696	4,977,383	6,686,415	7,893,418	8,148,777	8,504,848	8,505,871
Accounts receivable		(1,153,973)	(91,837)	(193,704)	(214,718)	(237,725)	(262,901)	(290,436)	(243,329)	(188,204)	(201,378
Finished goods inventory		(265,114)	(27,906)	(37,152)	(41,614)	(46,620)	(52,239)	(58,549)	(57,802)	(64,675)	(72,429
Equipment inventory	(13,956)	(2,163)	(2,499)	(2,886)	(3,333)	(3,850)	(4,446)	(5,136)	(5,932)	(6,851)	51,051
Raw material inventory	(234,000)	(50,807)	(59,788)	(70,211)	(82,298)	(96,298)	(112,502)	(87,179)	(97,946)	(110,042)	1,001,071
Pre-paid building rent	- · · · · -	-	-	-	-	-	-	-	- · · · · ·	-	-
Advance insurance premium	(586,000)	58,600	58,600	58,600	58,600	58,600	58,600	58,600	58,600	58,600	58,600
Accounts payable		1,048,871	135,859	152,435	171,053	191,976	215,501	238,344	236,352	264,511	198,986
Cash provided by operations	(833,956)	5,380,454	8,640,876	11,894,924	15,160,452	18,952,237	23,091,169	26,572,845	27,336,740	28,417,481	29,525,498
Financing activities											
Project Loan - principal repayment		(3,196,248)	(3,601,613)	(4,058,387)	(4,573,092)	(5,153,075)	-	-	-	-	-
Working Capital Loan - principal repayment		(167,623)	(192,657)	(221,428)	(254,497)	(292,504)	-	-	-	-	-
Additions to Project Loan	20,582,415	-	-	-	-	-	-	_	_	_	_
Additions to Working Capital Loan	1,128,709	-	-	-	-	-	-	-	-	-	-
Issuance of shares	21,711,124	-	-	-	-	-	-	-	-	-	_
Cash provided by / (used for) financing activities	43,422,249	(3,363,872)	(3,794,269)	(4,279,816)	(4,827,589)	(5,445,579)	-	-	-	-	-
Investing activities											
Capital expenditure	(41.164.831)	_	_	(370,440)	_	-	(428.831)	_	_	(496,425)	_
Cash (used for) / provided by investing activities	(41,164,831)	-	-	(370,440)	-	-	(428,831)	-	-	(496,425)	-
NET CASH	1,423,462	2,016,583	4,846,607	7,244,668	10,332,863	13,506,658	22,662,339	26,572,845	27,336,740	27,921,055	29,525,498



## **13 KEY ASSUMPTIONS**

## 13.1 Operating Cost Assumptions

Description	Details
Administration Benefit Expenses	10% of Administration Cost
Office Expenses (Stationery, Entertainment etc.)	Rs. 80,000 per month
Communication Expenses	Rs. 20,000 per month
Professional Fee	Rs. 250,000 per year
Depreciation Method	Straight Line depreciation
Depreciation Rate	10% on Machinery 33% on Office Equipment 10% on Furniture & Fixture
Inflation Growth Rate	10%
Electricity Price Growth Rate	10%
Salaries Growth Rate	10%

## 13.2 Dialysis Cost Assumptions

Description	Detail
Dialysis Cost / Consumables	10% of the Dialysis Revenue
Machinery Maintenance	3% of Machinery Cost

## 13.3 Revenue Assumptions

Description	Details
Growth in Sales Price	7%
Days Operational / Year	360
Maximum Operational Capacity (Per Year)	9,000
Production Capacity in First Year	60%
Percentage Increase in Production Capacity every Year	5%
Maximum Production Capacity	95%

## 13.4 Financial Assumptions

Description	Details
Debt : Equity	50%:50%
Interest Rate on Debt	12%
Debt Tenure	5 Years

