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Outcome of HIV positive patients presenting with renal failure at Charlotte Maxeke Johannesburg Academic Hospital

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2013-01-24
http://hdl.handle.net/10539/12295

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Appendix 5 Normality of data

Shapiro Wilk test for normal data

	HIV positive		Prob>chi2	HIV negative		Prob>chi2
	Skewness	Kurtosis		Skewness	Kurtosis	
Right kidney	0.315	0.710	0.5326	0.810	0.589	0.8370
Left kidney	0.954	0.716	0.9343	0.474	0.334	0.4459
Na	0.283	0.019	0.0453	0.000	0.003	0.0001
K	0.746	0.832	0.9277	0.000	0.005	0.0002
Cl	0.429	0.897	0.7179	0.057	0.002	0.0039
CO2	0.439	0.515	0.5874	0.006	0.010	0.0028
Urea (admission)	0.029	0.585	0.0818	0.000	0.000	0.0000
Creatinine (admission)	0.010	0.688	0.0431	0.000	0.000	0.0000
Calcium	0.161	0.508	0.2784	0.445	0.001	0.0088
Magnesium	0.703	0.622	0.8208	0.000	0.004	0.0000
Phosphate	0.009	0.780	0.0421	0.000	0.000	0.0000
Haemoglobin	0.224	0.352	0.2906	0.411	0.243	0.3509
Albumin	0.000	0.002	0.0002	0.711	0.010	0.0425
Urine PCR	0.003	0.123	0.0095	0.003	0.156	0.0112

HIV & AKI	Year	Area	N	AKI	Age	Black %	Male%	Summary	Outcome
Hospitalised HIV+ Rao et al American Journal of Kidney disease (1995)	1984-1993	Brooklyn New York	452	146 HIV+ 306 HIV-	38,4	99	75	Inclusion criteria (Cr>530µmol/l) IV drug abuse (70%) Sepsis (75%)	36% AIDS patients agonal (no RRT) Renal recovery and mortality similar between HIV+ and HIV-
Hospitalised HIV+ Peraldi, M et al NDT (1999)	1988-1997	France	92	92	35		88	60 biopsies 82% AIDS Mean CD4 76 Sepsis (75%)	Mortality 18% in 2 months
Ambulatory HIV+ Franceschini et al KI (2005)	2000-2002	North Carolina	754	111 episodes in 71 patients	40	61	68	Sepsis (52%), Drugs (32%) 29% CD4<200 Associated with Hepatitis C AIDS HAART	Mortality nil 5 RRT
Hospitalised HIV+ Wyatt et al AIDS (2006)	1995 & 2003	New York	1995 (pre HAART) 52 580 2003 (post HAART) 25114	1516	46.7	54.6	67	Common Sepsis & ischaemia Associated with age, diabetes, CKD, liver disease Hepatitis C	Mortality 26.6%
Critically Ill HIV+ Lopes et al CRITICAL CARE (2007)	2002-2006	Portugal	97	46	42.7	60	40	Sepsis (84%) Age>60 APACHE ll >50%	Mortality 43,3% (95% died in 1/12) 7 RRT 2 TTP-HUS
Ambulatory HIV+ Ibrahim et al (2010)	1999-2008	London	2556	184	37	55.4	62	Mean CD4 99 Opportunistic infection 37% 45% HAART	Mortality 22% Immunodeficiency and renal impairment associated with AKI Ethnicity, hepatitis B or C, exposure to HAART and HIV viraemia not associated with AKI

Appendix 7 Local vs International Literature – HIV & Acute Kidney Injury

	N	AKI	Mean Age (years)	Race (Black) (%)	Male (%)	SUMMARY	OUTCOME
Hospitalised HIV+ Rao et al American Journal of Kidney disease (1995)	452	146 HIV+ 306 HIV-	38,4	99	75	Inclusion criteria (Cr>530µmol/l) IV drug abuse 70% Sepsis(75%)	36% AIDS patients agonal (no RRT) Renal recovery and mortality similar between HIV+ and HIV-
Hospitalised HIV+ Peraldi, M et al NDT (1999) Retrospective 1988-1997	92	92	35		88	60 biopsies 82% AIDS Mean CD4 76 Sepsis (75%)	Mortality 18% in 2 months
Ambulatory HIV+ Franceschini et al KI (2005) Retrospective (2000-2002) North Carolina	754	111 episodes in 71 patients	40	61	68	Sepsis (52%) Drugs(32%) 29% CD4<200 HIV RNA>10 000 Hep C AIDS	Mortality nil 5 RRT
Hospitalised HIV+ Wyatt et al AIDS(2006) Retrospective 1995 & 2003	1995 (pre HAART) 2003 (post HAART)	1516	46.7	54.6	67	Sepsis, ischaemia Age, diabetes, CKD, liver disease	Mortality 26.6%
Ambulatory HIV+ Ibrahim et al (2010) Retrospective 1999-2008 London	2556	184	37	55.4	62	Mean CD4 99 Opportunistic infection 37% Hepatitis B 11.8% Hepatitis C 14.6% HAART	Mortality 22% AKI associated with older age, intravenous drug use, hepatitis B,C
LOCAL DATA AKI & HIV Retrospective 2005-2006 Johannesburg	101	50	38	99	56	Sepsis (62%) 63% CD4 < 200 ↑ K ↓ Na , Cl, CO2 Larger renal sizes	Mortality 44% 36 RRT

Appendix 8 Datasheet (HIV positive patients)

	WARD								PRESENTATION			AETIOLOGY										
No.	**MED**	**SURG**	**ICU**	**O&G**	**AGE**	**MALE**	**RACE**	**DIAG**	**AKI**	**AOCRF**	**CKD**	**SEPSIS**	**TOXIN**	**HD**	**OBS**	**MISC**	**Co-MORBIDITIES**	**HT**	**DM**	**TB**	**SBP**	**DBP**
1	1	0	0	0	44	1	B	AKI	1	0	0	0	1	0	0	0		0	0	0	120	80
2	1	0	0	0	32	0	B	AKI	1	0	0	0	0	1	0	0	DCMO	0	0	0	90	60
3	1	0	0	0	36	0	B	AKI	1	0	0	1	0	0	0	0	HT / DM	1	1	0	197	100
4	0	0	0	1	33	0	B	AKI	1	0	0	1	0	0	0	0	UTI / PREG 20 WKS	0	0	1	114	82
5	1	0	0	0	31	0	B	AKI	1	0	0	1	0	0	0	0	MILIARY TB	0	0	1		
6	1	0	0	0	30	0	B	AKI	1	0	0	1	0	0	0	0		0	0	0		
7	0	0	0	1	21	0	B	AKI	1	0	0	1	0	0	0	0	MMVD / PREG 31 WKS	0	0	0		
8	1	0	0	0	44	1	B	AKI	1	0	0	0	0	1	0	0	DISSEMINATED TB	0	0	1	87	58
9	1	0	0	0	41	0	B	AKI	1	0	0	1	0	1	0	0	GE	0	0	0	112	75
10	1	0	0	0	52	0	B	AKI	1	0	0	1	0	0	0	0	SYPHILLIS	0	0	0	70	50
11	1	0	0	0	28	1	B	AKI	1	0	0	0	1	0	0	0		0	0	0	122	88
12	1	0	0	0	58	1	B	AKI	1	0	0	0	0	1	0	0	GE	0	0	0	80	67
13	1	0	0	0	33	0	B	AKI	1	0	0	1	0	0	0	0	PTB / UTI	0	0	1	91	76
14	0	1	0	0	47	1	B	AKI	1	0	0	0	0	0	0	1	CONTRAST	0	0	0	130	60
15	1	0	0	0	24	1	B	AKI	1	0	0	0	0	1	0	0	GE	0	0	0	90	62
16	1	0	0	0	36	0	B	AKI	1	0	0	0	0	0	1	0	CAP / URO OBS	0	0	0	92	51
17	1	0	0	0	39	0	B	AKI	1	0	0	1	0	0	0	0	DISSEMINATED TB	0	0	1	110	63
18	0	1	0	0	48	1	B	AKI	1	0	0	1	0	0	1	0	URETHRAL STRICTURE	0	0	0	106	61
19	1	0	0	0	46	1	B	AKI	1	0	0	1	0	0	0	0	PNEUMONIA	0	0	0		
20	1	0	0	0	42	1	B	AKI	1	0	0	0	0	0	0	1	TB PERICARDITIS	0	0	1	90	60
21	1	0	0	0	30	1	B	AKI	1	0	0	0	0	0	0	0		0	0	0		
22	1	0	0	0	32	1	B	AKI	1	0	0	0	0	1	0	0	PTB	0	0	1		
23	1	0	0	0	50	1	B	AKI	1	0	0	1	1	0	0	0	TOXIN	0	0	1	82	54
24	0	1	0	0	22	1	B	AKI	1	0	0	1	0	0	1	0	URETERIC STRICTURE	0	0	0	110	70
25	1	0	0	0	46	1	B	AKI	1	0	0	1	0	0	0	0	CAP / HT	1	0	0	158	67
26	1	0	0	0	38	1	B	AKI	1	0	0	0	0	0	0	1		0	0	0		
27	1	0	0	0	33	1	B	AKI	1	0	0	1	0	0	0	0		0	0	0	115	64
28	1	0	0	0	33	1	B	AKI	1	0	0	1	0	0	0	0		0	0	0		
29	1	0	0	0	64	1	W	AKI	1	0	0	0	0	0	0	1	AMI / COPD	0	0	0		
30	1	0	0	0	54	1	B	AKI	1	0	0	1	0	0	0	0	PNEUMONIA	0	0	0	101	69
31	1	0	0	0	21	0	B	AKI	1	0	0	1	0	0	0	0	GE	0	0	0	86	47
32	1	0	0	0	31	1	B	AKI	1	0	0	1	0	0	0	0	PNEUMONIA	0	0	0	80	60
33	1	0	0	0	67	1	B	AKI	1	0	0	1	0	0	0	0	DISSEMINATED TB	0	0	1	69	52
34	0	1	0	0	35	1	B	AKI	1	0	0	0	0	1	0	0	KS	0	0	0	110	70

Appendix 8 Datasheet (HIV positive patients)

	ELECTROLYTES (admission)						AKI			(lowest)			(discharge)														
No	**Na**	**K**	**Cl**	**CO2**	**Ua**	**Ca**	**Risk**	**Injury**	**Failure**	**Ul**	**Cl**	**DAYS**	**Ud**	**Cd**	**WCC**	**Hb**	**Pt**	**ALB**	**HEP (N)**	**HEP B**	**HEP C**	**CD4**	**CD4<100**	**Cal**	**Mg**	**PO4**	**UA**	**LEUC**
1	135	4.8	104	14	15.6	337			1	13	148	7	10.7	273	10.3	15.9	160	17		0	0	335		2.5	0.97	1.85		306000
2	125	6.7	87	14	28.6	270		1		22	126	5	22.5	157	4.9	13.3	269	33	1	0	0	269	1	2.51	1.23	4.07		
3	156	3.3	106	18	80.3	764			1	16.6	193	6	16.6	193	9.2	12.4	287	29		0	0	72	1	1.65	1.15	3.39		19000
4	145	4.6	111	24	15.7	232		1		11.6	104	6	40	533	10.2	7.3	52	20		0	1	10		2.19	1	1.87		
5	132	4.1	104	18	8.8	293			1	5.1	87	91	18.5	288	7.9	5.8	169	17		0	0	131		2.26	0.63	1.57		3
6	134	4.7	102	19	29.5	143	1			14.3	70	13	14.3	70	8.6	6.9	95	21		0	0	214		2.23	1.34	1.88		10000
7	135	3.7	106	18	10.8	227		1		12.9	110	28	16.2	446	9.4	11.1	254	36		0	0	373	1	2.48	0.83	1.37	0.71	75000
8	134	6.5	106	13	37.1	830			1	13.4	82	153	15.5	99	12	10.8	281	25	1	0	0	43	1	2.67	1.27	1.77		18000
9	123	4.3	87	12	30.5	835			1	3.4	67	39	3.4	67	10.1	11.2	128	33	1	0	0	150		1.91	0.89	2.07		750000
10	135	4.2	99	25	9.1	176	1			8.2	114	5	8.5	134	5.7	10.4	413	17		0	0	330		2.52	0.86	1.79		120000
11	134	5	103	11	8	247		1		6.3	77	3	6.3	77	13.9	18.9	357	60	1	0	0	526		2.4	1.32	2.6		18000
12	138	4	103	13	69.1	1339			1	12.4	151	4	12.4	151	13.2	12	194	22		0	0	35	1	2.01	1.2	2.54		15000
13	126	5.6	98	13	23.7	519			1	15.1	297	10	13.5	323	3.3	9	225	21	1	0	0	65		2.13	0.79	1.33		1000
14	135	2.7	87	17	18.9	258		1		5.6	65	10	5.6	72	5.9	14.3	286	46		0	0	530						
15	112	6.3	76	19	40	741			1	4.7	49	15	4.7	49	9.1	15.2	162	32		0	0	579	1	2.11	1.17	2.49		18000
16	128	7.4	97	12	56.4	861			1	10.3	212	11	71.6	1341	6.8	10.6	248	34		0	0	99		2.33	0.93	2.19		750000
17	136	4.4	96	15	57.1	783			1	5.9	122	14	5.9	122	7.6	6.2	374	24		0	0	158		2.44	1.01	1.98		
18	126	4.9	96	12	39.2	474			1	7	182	7	7	182	14.3	11.5	650	26	1	0	0	375	1					395000
19	123	4.3	87	16	39.2	537			1	5.5	82	10	5.5	82	32.5	11.9	284	27		0	0	41	1	2.31	1.09	2.27		5000
20	127	5.6	98	14	14.1	438			1	5.1	106		5.1	106	6.24	6	382	28		0	0	91	1	2.3	0.71	1.6		4000
21	125	2.8	93	15	21.8	565			1	6.9	211	8	6.9	211	3.7	12.8	56	35	1	0	0			2.04	1.29	2.88		1000
22	137	5.3	104	12	41.1	623			1	28.4	376	7	28.4	376	2.6	10.5	176	24		0	0	9	1	2.53	1.28	2.06		2000
23	134	7.6	110	12	78.3	1475			1	23.2	359	7	23.2	359	7.5	5.3	330	26	1	0	0	40	1	2.54	1.34	4.15		405000
24	139	6	109	23	12.6	293			1	4.4	48	53	10.2	130	20.9	9.2	584	27	1	0	0		1	2.06	0.49	1.52		
25	131	4.7	93	9	73.3	1038			1	7.8	212	13	7.8	212	32.28	11.7	229	20		0	0	53	1	2.32	1.63	4.8		1000
26	142	5	81	22	88.8	1744			1	1.5	62	44	6.2	106	13.06	7.3	648	36		0	0	300		2.33	0.83	1.53	0.59	45000
27	133	5.2	85	12	58	892			1	8.7	137	22	8.7	137	10.7	12	46	32		0	0	59		2.01	1.27	2.14		1000
28	132	6.5	95	5	57.8	1196			1	9.6	136	30	8.6	105	14.4	11.1	582	24		0	0	10	1	2.05	1.49	4.24		1000
29	133	3.8	104	21	11.3	237		1		27.5	226	13	27.5	226	3.3	10	152			0	0	86	1	2.64	0.91	1.65		
30	128	6.6	99	11	41.2	912			1	12.6	216	25	48.3	729	6.7	7.8	437	24	1	0	0	72		2.2	0.99	2.49		1000
31	136	4.3	109	13	12.5	235		1		9.7	182	4	9.7	182	13.7	13.8	252	26		0	0	179						23000
32	128	4.3	95	14	20.4	246		1		21.5	180	4	24.1	245	14	8.3	191	25		0	0	27		2.13	1.08	4.59		6000
33	136	5.8	109	7	42.3	490			1						1.8	9.7	102	17	1	0	0		1	2.3	1.37	3.33		162000
34	133	4	101	22	21.2	547			1				62.2	1563	4.02	5.6	664	16		1	0	16	1	2.27				2

Appendix 8 Datasheet (HIV positive patients)

No.	L+	ERY	E+	PROT	PCR	BLOOD	S.Pn	STAPH	MRSA	E.COLI	SALM	URINE	U_ECOLI	U_KLEB	Right	Left	DIALYSIS	CONS	D/C	RIP
1	1	750000	1	3													0	0	1	0
2																	0	0	1	0
3	1	5000	1		0.28										10	9.6	0	0	1	0
4		3	1	1											12.2	12.4	0	0	1	0
5	1	-			0.17							KLEB E		1	10.9	11	0	0	1	0
6	1	13000	1		0.31							KLEB		1			0	0	1	0
7	1	1000		3	0.26							E.COLI	1				0	0	1	0
8	1	1000			0.18										14.5	14.4	0	0	1	0
9	1	1000			0.11	SALM					1						0	0	1	0
10	1	28000	1		0.9							E.CLOA			10.4	9.5	0	0	1	0
11	1	750000	1	1													0	0	1	0
12	1	1000		1	0.1										10.8	10.3	0	0	1	0
13		189000	1	3	0.55	S.Pn	1					KLEB-E		1	13.5	13.4	0	0	1	0
14		2	1	1											-	13.2	0	0	1	0
15	1	1000		-	0.05												0	0	1	0
16	1	750000	1		0.46										12.4	12.3	0	0	1	0
17																	0	0	1	0
18	1	1000			0.09							M.MORG					0	0	1	0
19	1	1000			0.08	S.Pn	1										0	0	1	0
20	1	315000	1		0.12										10.5	11.5	0	0	1	0
21		126000	1	1	0.05												0	0	1	0
22	1	1000			0.27										14	15.3	1	0	1	0
23	1	750000	1	2								E.COLI	1		12.2	12.3	1	0	1	0
24						MRSA			1								1	0	1	0
25		16000	1	-													1	0	1	0
26	1	1000			0.06												1	0	1	0
27		1000				MALARIA									12	14	1	0	1	0
28		1000			0.69												1	0	1	0
29															11.6	11.8	0	0	0	1
30		1000		1	0.14										13	12.8	0	0	0	1
31	1	1000		2	0.23												0	0	0	1
32	1	1000			0.11	ENTERO									11.5	12	0	0	0	1
33	1	477000	1									E.COLI	1				0	0	0	1
34	1	3	1														0	0	0	1

Appendix 8 Datasheet (HIV positive patients)

	WARD								PRESENTATION			AETIOLOGY										
No.	**MED**	**SURG**	**ICU**	**O&G**	**AGE**	**MALE**	**RACE**	**DIAG**	**AKI**	**AOCRF**	**CKD**	**SEPSIS**	**TOXIN**	**HD**	**OBS**	**MISC**	**Co-MORBIDITIES**	**HT**	**DM**	**TB**	**SBP**	**DBP**
35	0	0	1	0	35	0	B	AKI	1	0	0	1	0	0	0	0	CAP / GE	0	0	0	120	78
36	1	0	0	0	45	1	B	AKI	1	0	0	0	0	0	0	1	BURKITTS LYMPHOMA	0	0	0		
37	0	0	0	1	43	0	B	AKI	1	0	0	0	0	0	1	0	CANCER CERVIX / SEIZURE	0	0	0	116	74
38	1	0	0	0	38	1	B	AKI	1	0	0	1	0	0	0	0	TB / PLEURAL EFFUSION	0	0	1	80	60
39	1	0	0	0	24	0	B	AKI	1	0	0	1	0	0	0	0	LYMPHOMA	0	0	0		
40	0	0	1	0	38	0	B	AKI	1	0	0	1	0	0	0	0		0	0	0	99	71
41	0	0	1	0	27	1	B	AKI	1	0	0	1	1	0	0	0	TOXIN / HT	1	0	0	144	98
42	0	0	1	0	40	0	B	AKI	1	0	0	0	0	1	0	0	GE	0	0	1	83	44
43	1	0	0	0	45	0	B	AKI	1	0	0	1	0	1	0	0	GE	0	0	0	90	60
44	1	0	0	0	29	1	B	AKI	1	0	0	1	0	0	0	0		0	0	0	88	56
45	1	0	0	0	29	1	B	AKI	1	0	0	1	0	0	0	0		0	0	1		
46	0	0	1	0	27	0	B	AKI	1	0	0	1	0	0	0	0		0	0	0	80	40
47	1	0	0	0	29	0	B	AKI	1	0	0	0	0	1	0	0	DCMO	0	0	0	100	70
48	0	0	1	0	37	0	B	AKI	1	0	0	1	0	0	0	0	Nephrectomy	0	0	0		
49	1	0	0	0	30	1	B	AKI	1	0	0	0	1	0	0	0	HT	1	0	0	188	134
50	1	0	0	0	34	0	B	AKI	1	0	0	1	0	0	0	0		0	0	1	127	92
51	1	0	0	0	52	1	B	AKI	1	0	0	0	0	0	0	1	LYMPHOMA	0	0	0		
52	1	0	0	0	32	1	B	AKI	1	0	0	0	0	1	0	0	? TTP	0	0	1	85	68
53	1	0	0	0	39	1	B	AKI	1	0	0	0	0	0	0	1	BVF	0	0	0		
54	0	0	1	0	28	0	B	AKI	1	0	0	1	0	0	0	0		0	0	1	120	80
55	1	0	0	0	52	0	B	AKI	1	0	0	1	0	0	0	0	SEPTICAEMIA / HT	1	0	0	165	77
56	1	0	0	0	52	1	B	AKI	1	0	0	0	0	0	0	1	SJS	0	0	0	140	90
57	1	0	0	0	53	0	B	AKI	1	0	0	1	0	0	0	0	UTI	0	0	1	114	78
58	1	0	0	0	29	0	B	AOCRF	0	1	0	1	0	0	0	0	PTB	0	0	1	80	54
59	1	0	0	0	34	0	B	AOCRF	0	1	0	1	0	0	0	0		0	0	0		
60	1	0	0	0	25	1	B	AOCRF	0	1	0	1	0	0	0	0	PTB / STAB CHEST	0	0	0	134	66
61	0	0	0	1	45	0	B	AOCRF	0	1	0	1	0	0	0	0	MFU	0	0	0	83	52
62	1	0	0	0	43	0	C	AOCRF	0	1	0	0	0	0	0	0	HT / HHD	1	0	0	182	96
63	1	0	0	0	48	1	B	AOCRF	0	1	0	0	0	0	0	1	HT / DM	1	1	0	200	124
64	0	0	0	1	36	0	B	AOCRF	0	1	0	1	0	0	0	0	PIH 36/40 / SLE	0	0	0	126	80
65	1	0	0	0	32	0	B	AOCRF	0	1	0	1	0	0	0	0	PERICARDIAL EFF	0	0	0	100	60
66	0	0	1	0	24	0	B	AOCRF	0	1	0	0	0	1	0	0	APH /PREG 25 WKS	1	0	0	143	84
67	0	0	1	0	30	1	B	AOCRF	0	1	0	1	0	0	0	0	SCROTAL ABSCESS	0	0	0	103	59
68	1	0	0	0	29	1	B	AOCRF	0	1	0	1	0	0	0	0		0	0	0	129	65
69	1	0	0	0	38	1	B	AOCRF	0	1	0	1	0	0	0	0	MILIARY TB / PUD	0	0	1	81	51
70	1	0	0	0	37	1	B	AOCRF	0	1	0	1	0	0	0	0	CAP / DIC	0	0	0		

Appendix 8 Datasheet (HIV positive patients)

	ELECTROLYTES (admission)						AKI			(lowest)			(discharge)														
No.	**Na**	**K**	**Cl**	**CO2**	**Ua**	**Ca**	**Risk**	**Injury**	**Failure**	**Ul**	**Cl**	**DAYS**	**Ud**	**Cd**	**WCC**	**Hb**	**Pt**	**ALB**	**HEP (N)**	**HEP B**	**HEP C**	**CD4**	**CD4<100**	**Cal**	**Mg**	**PO4**	**UA**	**LEUC**
35	130	3.3	98	16	10.1	130	1			8.3	94	10	11.7	239	1.15	7.6	152	24	1	0	0	1		2.32	1.13	1.85		1000
36	141	4.5	100	16	28.7	315			1	23.5	204	9	23.5	204	6.1	13.9	249	33	1	0	0	184	1	2.39	1.36	3.07	0.89	1000
37	134	7.6	107	5	52.2	1309			1						35.7	7.2	123	18	1	0	0	41		2.47	1.25	2.5		
38	145	6.3	117	7	63.3	1053			1						8.7	7.6	75	23	1	0	0			2.52	1.08	3.42		-
39	127	5.9	91	11	26.3	589			1	24.7	238	8	40.3	795	3.7	11.3	91	29	1	0	0	13	1	2.22	0.91	1.41		15000
40	128	3.9	94	13	24.8	241		1					29.8	327	1.98	11.1	228			0	0	8	1	1.94	0.83	1.9		
41	138	4.5	98	25	16.8	435			1	8	219	1	48.7	598	6.2	7.9	289	18	1	0	0	381	1	2.6	0.96	1.98		
42	128	3.7	92	9	28.4	899			1	13.9	408	2	13.9	408	6.9	10.4	301	36	1	0	0	41	1	2.23	0.82	2.3		9000
43	132	2	112	5	36.3	728			1						27.7	8.5	120		1	0	0	148	1					1000
44	126	4.8	93	20	17	231		1					28.3	623	10.9	8.6	206	29		1	0	36		2.31	1.29	1.72		189000
45	122	6.1	87	7	60.8	1105			1	23.4	546	2	25.1	593	25.8	11.4	456	24		0	0		1	2.34	1.47	4.62		
46	134	6	97	5	15.8	190	1						18.7	211	26.3	3.5	67	37		0	0		1	2.03	1.3	3.24		
47	139	5.6	104	23	16.6	348			1						10.7	10.2	333			0	0							
48	136	2.8	97	28	13.4	327			1	14.1	114	12	22.5	149	7.1	9	115	21	1	0	0	160	1					
49	125	5	84	19	57.5	1497			1	11.6	431	8	11.6	431	6.2	9.5	201	35	1	0	0	302	1					-
50	129	5.1	93	12	45.2	732			1	33.8	321	16	39.6	691	9.5	7.3	539	23		0	0	28	1	2.34	0.91	2.74		63000
51	132	6.9	101	16	43.2	1299			1	12.8	191	10	12.8	191	12.2	8.4	737	26	1	0	0	14	1	2.84	1.26	2.84		3000
52	138	4.8	104	13	44.8	650			1	15.8	215	8	15.8	215	4.3	10.4	46	24		0	0	14	1	2.28	1.51	3.5		5000
53	126	2.5	74	31	64.3	300			1	59.3	104	1	59.3	104	13.2	9.1	292	28		0	0		1	2.3	1.46	2.05		5000
54	139	3.5	113	18	29.7	256		1		6.6	102	17	6.6	102	0.6	6.9	23	23	1	0	0	2	1	1.97	1.14	1.68		108000
55	123	5.5	99	7	37.1	1329			1	20.5	335	13	20.5	335	10.4	12.4	223	18	1	0	0	327		2.05	1.31	3.17	0.62	
56	142	7.1	108	16	54.2	1099			1	18.5	184	11	18.5	184	10.6	11.6	227	24		0	0	163		1.93	1.11	3		45000
57	128	4.2	96	16	19.9	252		1		5.6	123	12	5.6	123	15.5	9.2	166	17	1	0	0	18	1	2.44	0.72	1.13		17000
58	133	5.4	100	17	17.6	322			1	10	228	5	13.8	277	7.7	5.2	445	17	1	0	0	16		1.9	1.35	0.65		7000
59	130	3.9	96	16	37.8	919			1	28.5	697	9	28.5	697	7.2	9.3	168	21	1	0	0	49						35000
60	135	5.4	106	17	22.3	666			1	17.6	659	6	17.6	659	13	7.6	386		1	0	0							1000
61	131	6	105	19	23.8	556			1	24.9	622	5	24.9	622	6.1	7.3	167	14		0	0	11	1	2.17	0.96	1.69		9000
62	137	3.7	104	21	15.8	323			1	11.7	277	30	28.9	446	9.1	11.6	474	37	1	0	0			2.08	0.88	1.52		3000
63	143	5.5	112	17	16.2	331			1				18.9	403	7.6	11.6	323			0	0	193		2.22	0.79	1.81		2000
64	139	4.8	101	20	12.7	228		1		9.6	198	21	25.4	403	10.8	10.6	281	33	1	0	0	244	1	2.53	0.78	1.39	0.53	750000
65	127	4.3	97	11	21	527			1	8.6	204	13	12.2	311	15	3.5	550	30		0	0	43	1	2.47	0.97	1.85		750000
66	132	3.7	103	21	14	598			1	4.9	276	3	46.9	1170	4.5	8.3	173	38	1	0	0		1	2.33	0.56	0.3	0.3	
67	140	3.2	108	20	22.1	169	1						6.9	194	1.7	7.2		26	1	0	0	6	1	2.08	0.63	2.49		405000
68	122	6.1	85	15	41.1	796			1				52.4	939	8.6	4.8	137	17	1	0	0	27		1.95	1.07	2.73		1000
69	137	4.2	101	16	41.3	946			1	40.9	518	14	48.1	596	7.9	5.2	510	28	1	0	0	5	1	2.17	0.83	2.58		110000
70	134	6.3	97	9	90.7	763			1	93.4	608	2	93.4	608	9	10.5	9	22		0	0	68		2.11	2	5.72		8000

Appendix 8 Datasheet (HIV positive patients)

No.	L+	ERY	E+	PROT	PCR	BLOOD	S.Pn	STAPH	MRSA	E.COLI	SALM	URINE	U_ECOLI	U_KLEB	Right	Left	DIALYSIS	CONS	D/C	RIP
35		2	1														0	0	0	1
36		1000		-	0.03												0	0	0	1
37																	0	0	0	1
38		-		-													0	0	0	1
39	1	1000			0.08	MRSA			1								0	0	0	1
40						S.Pn	1										1	0	0	1
41						MRSA			1						13.1	12.8	1	0	0	1
42	1	1000			0.05										11.4	12	1	0	0	1
43		1000		1	0.51							M.MORG					1	0	0	1
44	1	15000	1												11.8	11.2	1	0	0	1
45																	1	0	0	1
46																	1	0	0	1
47																	1	0	0	1
48												SALM			11.5		1	0	0	1
49		-		-	0.9										14.8	12.3	1	0	0	1
50	1	153000	1	2	0.28												1	0	0	1
51	1	1000															0	1	0	0
52	1	5000	1		0.07										13	12.8	0	1	0	0
53	1	1000		-	0.15												0	1	0	0
54	1	30000	1			SALM					1				13	13.9	1	1	0	0
55						E.COLI				1		M.MORG			13.5	12.5	1	1	0	0
56	1	1000			0.09												1	1	0	0
57	1	1000			0.2	E.COLI				1		E.COLI-E	1		11.1	11.2	1	1	0	0
58	1	1000			0.13							KLEB E		1			0	0	1	0
59	1	14000	1		1.61	S.Pn	1										0	0	1	0
60		3000	1	-													0	0	1	0
61	1	18000	1		0.71										11.7	11.5	0	0	1	0
62	1	1000		3	0.23												0	0	1	0
63	1	1000		-	0.14										9.9	9.6	0	0	1	0
64	1	1000		1	0.43							E.COLI	1				0	0	1	0
65	1	1000			0.15							E.COLI	1				0	0	1	0
66		1	1	1	1.97												1	0	1	0
67	1	1000		-		E.COLI				1							1	0	1	0
68		-		2	0.83												0	0	0	1
69	1	1000			0.06	PSEUDO									13	13	0	0	0	1
70	1	43000	1		0.04	KLEB											0	0	0	1

Appendix 8 Datasheet (HIV positive patients)

No.	MED	SURG	ICU	O&G	AGE	MALE	RACE	DIAG	AKI	AOCRF	CKD	SEPSIS	TOXIN	HD	OBS	MISC	Co-MORBIDITIES	HT	DM	TB	SBP	DBP
71	1	0	0	0	38	0	B	AOCRF	0	1	0	1	0	0	0	0	UTI / MENINGITIS	0	0	0	137	80
72	1	0	0	0	39	0	B	AOCRF	0	1	0	1	0	0	0	0	CAP / TB	1	0	0	165	97
73	0	0	0	1	42	0	B	AOCRF	0	1	0	1	0	0	0	0	ICA / CAP	0	0	0	110	70
74	1	0	0	0	44	1	B	AOCRF	0	1	0	0	0	0	0	1	HT / DM / ALL	1	1	0	160	100
75	1	0	0	0	42	1	B	AOCRF	0	1	0	1	0	0	0	0	HT	1	0	0	91	50
76	1	0	0	0	45	0	B	AOCRF	0	1	0	0	0	0	0	0		0	0	0		
77	1	0	0	0	49	1	B	AOCRF	0	1	0	0	0	1	0	0	HT / UGI BLEED	1	0	0	152	103
78	0	0	1	0	52	1	B	AOCRF	0	1	0	1	0	0	0	0	GE	0	0	0	80	53
79	1	0	0	0	41	1	B	CKD	0	0	1	0	0	0	0	0	NEPHROTIC SYN	0	0	0	96	56
80	1	0	0	0	39	1	B	CKD	0	0	1	1	0	0	0	0	PCP	0	0	1	94	59
81	1	0	0	0	38	0	B	CKD	0	0	1	0	0	0	0	0	HT / CVA	1	0	0	240	60
82	1	0	0	0	30	0	B	CKD	0	0	1	0	0	0	0	1	TB / HAEM ANAEMIA	0	0	1	127	94
83	1	0	0	0	30	1	B	CKD	0	0	1	0	0	0	0	1	HT / MHT	1	0	0	221	134
84	1	0	0	0	29	1	B	CKD	0	0	1	1	0	0	0	0	GE / UGI BLEED / HT	1	0	0	231	137
85	1	0	0	0	24	0	B	CKD	0	0	1	0	0	0	0	1	DM	0	1	0	134	78
86	1	0	0	0	30	0	B	CKD	0	0	1	0	0	0	0	1	HT / DM / BVF	1	1	0	198	109
87	1	0	0	0	41	1	B	CKD	0	0	1	1	0	0	0	0	HT	1	0	0	191	119
88	1	0	0	0	59	1	B	CKD	0	0	1	0	0	0	0	0	HT / ASCITIS	1	0	0	174	126
89	1	0	0	0	60	1	B	CKD	0	0	1	1	0	0	0	0	DM / VBD SYNDROME	0	1	0		
90	1	0	0	0	34	0	B	CKD	0	0	1	1	0	0	0	0	HT / PCP	1	0	1	144	91
91	1	0	0	0	28	1	B	CKD	0	0	1	1	0	0	0	0	HT	1	0	0	144	90
92	1	0	0	0	35	0	B	CKD	0	0	1	0	0	0	0	0		0	0	0		
93	1	0	0	0	40	1	B	CKD	0	0	1	1	0	0	0	0	HT	1	0	0	176	94
94	1	0	0	0	51	1	B	CKD	0	0	1	0	0	0	0	0	HT	1	0	0	180	110
95	1	0	0	0	47	1	B	CKD	0	0	1	1	1	0	0	0	TOXIN / UTI	0	0	0		
96	1	0	0	0	23	0	B	CKD	0	0	1	1	0	0	0	0	PREG14 WKS	0	0	1	104	77
97	1	0	0	0	30	1	B	CKD	0	0	1	0	1	0	0	0		0	0	0		
98	1	0	0	0	46	0	B	CKD	0	0	1	1	0	0	0	0		0	0	0		
99	1	0	0	0	33	1	B	CKD	0	0	1	1	0	0	0	0		0	0	0		
100	1	0	0	0	43	1	B	CKD	0	0	1	0	1	0	0	0		0	0	0	112	84
101	1	0	0	0	41	0	B	CKD	0	0	1	0	0	0	0	1	SEIZURES	0	0	0	108	60

Appendix 8 Datasheet (HIV positive patients)

No.	Na	K	Cl	CO2	Ua	Ca	Risk	Injury	Failure	Ul	Cl	DAYS	Ud	Cd	WCC	Hb	Pt	ALB	HEP (N)	HEP B	HEP C	CD4	CD4<100	Cal	Mg	PO4	UA	LEUC
71	130	3.3	93	14	18.3	796			1	11.2	259	14	21.9	534	13.4	8.1	81	34	1	0	0	92		2.4	0.83	1.43		750000
72	136	4.6	103	14	11.3	254		1					38.8	655	25.6	8.1	656	37	1	0	0	138	1	2.56	0.9	0.87		1000
73	139	5	120	7	44.9	1218			1	33	895	6	33	895	18.1	7.2	420	16	1	0	0	33		2.45	0.7	1.08		10000
74	131	4.8	101	9	43.9	1240			1				100.4	1679	15.4	14.2	123	27		0	0	73	1	2.96	1.15	2.67	0.89	1000
75	140	6.3	114	5	35.2	585			1				36.3	649	24.2	9.1	263	38	1	0	0	70	1	2.4	1.02	1.91		-
76	133	3.8	98	14	30.2	366			1	29.7	280	2	29.7	280	2.4	5.9	213	28	1	0	0	6		2.3	0.83	1.74		1000
77	133	5.6	87	11	87.6	2072			1	11.5	317	30	20.9	722	6.6	11.1	254	34		0	1	267		2.02	0.83	3.52		50000
78	141	5.6	113	7	40.2	562			1	16.1	251	4	30.2	310	12.1	15.4	145	21		0	0	5		2.32	0.73	1.8		1000
79	133	5.4	113	9	24.4	483				22.1	334	4	23	482	4.3	8.4	321	22		0	0	53	1	2.27	0.78	2.16		1000
80	142	5.8	116	16	14.9	242				9.7	205	17	15.4	290	6.6	8.6	249	26	1	0	0	23		2.36	0.69	1.03		2000
81	127	2.8	91	23	31.1	714							28	737	6.4	9.5	200	27		0	0	261		2.36	1.11	2.42		5000
82	105	3.2	78	10	29.4	612				10.6	299	6	36.9	661	5.6	9.7	203	18	1	0	0	50	1	1.91	0.86	2.55		
83	138	3.3	93	21	44.5	1797				14.1	336		14.1	336	3.4	9.9	294	39		0	0	303		2.36	1.22	2.73	0.31	1000
84	121	3.9	74	18	75.6	1373							87.3	1547	6.3	11.4	179	46	1	0	0	87		2.35	1.27	4.98		1000
85	138	4.5	103	7	17	205							20	289	10.6	7.7	257	23		0	0			2.38	0.44	1.63		9000
86	139	8.6	108	5	53.1	1685				12.9	547	10	47.5	1683	14.7	6	309	34		0	0	471	1	1.71	1.05	3.14		1000
87	143	6.7	109	5	70	2955									12	7.8	269	25	1	0	0	72		2.08	1.24	4.65		2
88	145	5	117	13	25.1	492							31.3	546	3.5	8.3	160	16		0	0	378		2.36	1.13	2.13		315000
89	137	5.9	96	16	49	1918				21	828	30	19.2	907	10.9	10.8	386	32		0	0	204	1	2.25	1.4	1.84		5000
90	127	6.2	95	5	49.4	1843									14.4	7.3	391	23		0	0	9	1	2.29	0.92	3.3		18000
91	124	4.5	94	19	28.5	1143				25.4	1030	2	30	1374	32	9.7	139	19		0	0	364		2.39	0.9	1.86		1000
92	139	6.3	107	11	41.1	1708							40.9	1877	9.1	9.4	441	33		0	0			2.07	0.87	2.7		1000
93	117	5.2	69	7	77.5	1994				6.1	386	43	35.9	1994	20.2	5.9	122	28		0	0	426	1	2.31	1.43	2.31	0.56	11000
94	141	6.3	105	5	59.8	3045				58.2	2683	3	58.2	2683	20.5	5.2	336	29		0	0			2.18	0.94	3.48		
95	143	6.7	101	8	100.5	1612				21	657	10	26.3	1387	30.6	9.3	368	23		1	0	204	1	2.22	1.05	3.82	0.59	750000
96	132	4.9	109	5	61	1940				12.1	566	13	42.1	1420	8.3	4.6	223	12		1	0	17	1	2.51	1.01	3.27		243000
97	130	4.2	91	17	69.5	1593				33.5	786	4	33.5	786	6.3	12.3	-	31		1	0	135	1	2.14	1.39	1.67		1000
98	142	3	96	23	99.6	1341				38	579	6	38	579	10.7	9.9	297	34	1	0	0	34		2.42	0.86	3.85		288000
99	134	7.9	93	8	101.2	2491				103.8	2488	2	103.8	2488	26.1	6.7	466	18	1	0	0	250		2.53	1.29	3.72		
100	137	6.1	108	7	45.8	1240				21	627	16	31.2	1029	9.4	9.1	328	25		0	0	47	1	2.12	0.65	2.89		72000
101	127	2.8	102	5	24	803							28	869	14.2	6.6	114	31	1	0	0	15		2.21	0.49	2.25		18000

Appendix 8 Datasheet (HIV positive patients)

No.	L+	ERY	E+	PROT	PCR	BLOOD	S.Pn	STAPH	MRSA	E.COLI	SALM	URINE	U_ECOLI	U_KLEB	Right	Left	DIALYSIS	CONS	D/C	RIP
71	1	495000	1		1.67	MRSA			1								1	0	0	1
72		1000		-	0.1												1	0	0	1
73	1	1000		2	1.29										13	13.4	1	0	0	1
74		347000	1	2	0.43										13.2	13.6	0	1	0	0
75		2	1	-													0	1	0	0
76		1000		-	0.1												1	1	0	0
77	1	3000	1	-	0.25												1	1	0	0
78		750000	1		0.25							E.COLI-E	1				1	1	0	0
79		540000	1	2	3.99												0	0	1	0
80	1	126000	1		0.13										11.6	10.3	0	0	1	0
81	1	1000		-	0.59												0	0	1	0
82				1	0.44												1	0	1	0
83		2000	1	-	0.43										11.7	10.6	1	0	1	0
84		750000	1		0.2							STAPH			8.6	8.3	0	0	0	1
85	1	1000			0.95												0	0	0	1
86		1000		-	1.07										8.9	9.5	0	0	0	1
87	1	1	1			STAPH		1									1	0	0	1
88	1	1000			0.7										7	6.4	1	0	0	1
89	1	2000	1									STAPH			9.7	9.3	0	1	0	0
90	1	1000		3	2.58										13.5	13.9	0	1	0	0
91		1000		3	1.6										12.1	12.2	0	1	0	0
92		-		-	0.89												0	1	0	0
93	1	7000	1		1.62	STAPH		1							9	8	1	1	0	0
94																	1	1	0	0
95	1	750000	1		0.1												1	1	0	0
96	1	18000	1		3.92							E.COLI	1		9.3	8.7	1	1	0	0
97		1000			0.64												1	1	0	0
98	1	1000		-								E.COLI	1				1	1	0	0
99						S.Pn	1										1	1	0	0
100	1	1000		2	2.32												1	1	0	0
101	1	288000	1		0.38												1	1	0	0

Appendix 9 Datasheet (Acute Kidney Injury patients)

		CODENAME	W	M	S	I	G	A	S(M)	R	B	W	C	I	DIAG	AKI	AET	SEPSIS	TOXIN	MISC	URO OBS	HD	Co-MORBITIES	HT	DM	TB	HD
1	1	PEPH	M	1	0	0	0	44	1	B	1	0	0	0	AKI	1	TOXIN	0	1	0	0	0		0	0	0	0
2	1	PHTS	M	1	0	0	0	32	0	B	1	0	0	0	AKI	1		0	0	0	0	1	DCMO	0	0	0	0
3	1	FADI	M	1	0	0	0	36	0	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	HT / DM	1	1	0	0
4	1	LYKH	G	0	0	0	1	33	0	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	UTI / PREG 20 WKS	0	0	1	0
5	1	OLCH	M	1	0	0	0	31	0	B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	MILIARY TB	0	0	1	0
6	1	LOLCH	M	1	0	0	0	30	0	B	1	0	0	0	AKI	1	UTI	1	0	0	0	0		0	0	0	0
7	1	LADA	G	0	0	0	1	21	0	B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	MMVD / PREG 31 WKS	0	0	0	0
8	1	RIKH	M	1	0	0	0	44	1	B	1	0	0	0	AKI	1	HYPOPERF	0	0	0	0	1	DISS TB	0	0	1	0
9	1	MAVU	M	1	0	0	0	41	0	B	1	0	0	0	AKI	1	SEPTICAEMIA	1	0	0	0	1	GE	0	0	0	0
10	1	JOMO	M	1	0	0	0	52	0	B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	SYPHILLIS	0	0	0	0
11	1	GAGA	M	1	0	0	0	28	1	B	1	0	0	0	AKI	1	TOXIN	0	1	0	0	0		0	0	0	0
12	1	ROJO	M	1	0	0	0	58	1	B	1	0	0	0	AKI	1		0	0	0	0	1	GE	0	0	0	0
13	1	THMA	M	1	0	0	0	33	0	B	1	0	0	0	AKI	1	SEPTICAEMIA	1	0	0	0	0	PTB / UTI	0	0	1	0
14	1	BDIK	S	0	1	0	0	47	1	B	1	0	0	0	AKI	1	ATN	0	0	1	0	0	CONTRAST	0	0	0	0
15	1	NNDL	M	1	0	0	0	24	1	B	1	0	0	0	AKI	1	PRE	0	0	0	0	1	GE	0	0	0	0
16	1	ZNDL	M	1	0	0	0	36	0	B	1	0	0	0	AKI	1	POST	0	0	0	1	0	CAP / URO OBS	0	0	0	0
17	1	FAMA	M	1	0	0	0	39	0	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	DISS TB	0	0	1	0
18	1	MSIM	S	0	1	0	0	48	1	B	1	0	0	0	AKI	1	UTI	1	0	0	1	0	URETH STR	0	0	0	0
19	1	CNDL	M	1	0	0	0	46	1	B	1	0	0	0	AKI	1	SEPTICAEMIA	1	0	0	0	0	PNEUMONIA	0	0	0	0
20	1	GISI	M	1	0	0	0	42	1	B	1	0	0	0	AKI	1		0	0	1	0	0	TB PERICARDITIS	0	0	1	0
21	1	FUPH	M	1	0	0	0	30	1	B	1	0	0	0	AKI	1		0	0	0	0	0		0	0	0	0
22	1	WAND	M	1	0	0	0	32	1	B	1	0	0	0	AKI	1	HYPOPERF	0	0	0	0	1	PTB	0	0	1	1
23	1	ALNG	M	1	0	0	0	50	1	B	1	0	0	0	AKI	1	UTI	1	1	0	0	0	TOXIN	0	0	1	1
24	1	ANND	S	0	1	0	0	22	1	B	1	0	0	0	AKI	1	SEPTICAEMIA	1	0	0	1	0	URETERIC STRICTURE	0	0	0	1
25	1	MASI	M	1	0	0	0	46	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	PNEUMONIA	0	0	0	1
26	1	SMAK	M	1	0	0	0	38	1	B	1	0	0	0	AKI	1	ATN	0	0	1	0	0		0	0	0	1
27	1	THTH	M	1	0	0	0	33	1	B	1	0	0	0	AKI	1	SEPTICAEMIA	1	0	0	0	0		0	0	0	1
28	1	INMA	M	1	0	0	0	33	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0		0	0	0	1
29	1	ALPO	M	1	0	0	0	64	1	W	0	1	0	0	AKI	1		0	0	1	0	0	AMI / COPD	0	0	0	0
30	1	GESE	M	1	0	0	0	54	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	PNEUMONIA	0	0	0	0
31	1	CHMO	M	1	0	0	0	21	0	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	GE	0	0	0	0
32	1	MKMV	M	1	0	0	0	31	1	B	1	0	0	0	AKI	1	SEPTICAEMIA	1	0	0	0	0	PNEUMONIA	0	0	0	0
33	1	JOKH	M	1	0	0	0	67	1	B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	DISS TB	0	0	1	0
34	1	BOKH	S	0	1	0	0	35	1	B	1	0	0	0	AKI	1	UGI BLEED	0	0	0	0	1	KS	0	0	0	0
35	1	NOSI	I	0	0	1	0	35	0	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	CAP / GE	0	0	0	0

Appendix 9 Datasheet (Acute Kidney Injury patients)

	SBP	DBP	Na	K	Cl	CO2	Ua	Ca	Ra	Ia	Fa	Ul	Cl	DAYS	Ud	Cd	DAYS	WCC	Hb	Pt	ALB	HEP (N)	HEP B	HEP C	CD4	CaL	Mg	PO4
1	120	80	135	4.8	104	14	15.6	337			1	13	148	7	10.7	273	8	10.3	15.9	160	17		0	0	335	2.5	0.97	1.85
2	90	60	125	6.7	87	14	28.6	270		1		22	126	5	22.5	157	6	4.9	13.3	269	33	1	0	0	269	2.51	1.23	4.07
3	197	100	156	3.3	106	18	80.3	764			1	16.6	193	6	16.6	193		9.2	12.4	287	29		0	0	72	1.65	1.15	3.39
4	114	82	145	4.6	111	24	15.7	232		1		11.6	104	6	40	533	10	10.2	7.3	52	20		0	1	10	2.19	1	1.87
5			132	4.1	104	18	8.8	293			1	5.1	87	91	18.5	288	111	7.9	5.8	169	17		0	0	131	2.26	0.63	1.57
6			134	4.7	102	19	29.5	143	1			14.3	70	13	14.3	70		8.6	6.9	95	21		0	0	214	2.23	1.34	1.88
7			135	3.7	106	18	10.8	227		1		12.9	110	28	16.2	446	97	9.4	11.1	254	36		0	0	373	2.48	0.83	1.37
8	87	58	134	6.5	106	13	37.1	830			1	13.4	82	153	15.5	99	154	12	10.8	281	25	1	0	0	43	2.67	1.27	1.77
9	112	75	123	4.3	87	12	30.5	835			1	3.4	67	39	3.4	67		10.1	11.2	128	33	1	0	0	150	1.91	0.89	2.07
10	70	50	135	4.2	99	25	9.1	176	1			8.2	114	5	8.5	134	6	5.7	10.4	413	17		0	0	330	2.52	0.86	1.79
11	122	88	134	5	103	11	8	247		1		6.3	77	3	6.3	77		13.9	18.9	357	60	1	0	0	526	2.4	1.32	2.6
12	80	67	138	4	103	13	69.1	1339			1	12.4	151	4	12.4	151		13.2	12	194	22		0	0	35	2.01	1.2	2.54
13	91	76	126	5.6	98	13	23.7	519			1	15.1	297	10	13.5	323	13	3.3	9	225	21	1	0	0	65	2.13	0.79	1.33
14	130	60	135	2.7	87	17	18.9	258		1		5.6	65	10	5.6	72	30	5.9	14.3	286	46		0	0	530			
15	90	62	112	6.3	76	19	40	741			1	4.7	49	15	4.7	49		9.1	15.2	162	32		0	0	579	2.11	1.17	2.49
16	92	51	128	7.4	97	12	56.4	861			1	10.3	212	11	71.6	1341	2_10	6.8	10.6	248	34		0	0	99	2.33	0.93	2.19
17	110	63	136	4.4	96	15	57.1	783			1	5.9	122	14	5.9	122		7.6	6.2	374	24		0	0	158	2.44	1.01	1.98
18	106	61	126	4.9	96	12	39.2	474			1	7	182	7	7	182		14.3	11.5	650	26	1	0	0	375			
19			123	4.3	87	16	39.2	537			1	5.5	82	10	5.5	82		32.5	11.9	284	27		0	0	41	2.31	1.09	2.27
20	90	60	127	5.6	98	14	14.1	438			1				5.1	106	4_8	6.24	6	382	28		0	0	91	2.3	0.71	1.6
21			125	2.8	93	15	21.8	565			1	6.9	211	8	6.9	211		3.7	12.8	56	35	1	0	0		2.04	1.29	2.88
22			137	5.3	104	12	41.1	623			1	28.4	376	7	28.4	376		2.6	10.5	176	24		0	0	9	2.53	1.28	2.06
23	82	54	134	7.6	110	12	78.3	1475			1	23.2	359	7	23.2	359		7.5	5.3	330	26	1	0	0	40	2.54	1.34	4.15
24	110	70	139	6	109	23	12.6	293			1	4.4	48	53	10.2	130	4_8	20.9	9.2	584	27	1	0	0		2.06	0.49	1.52
25	158	67	131	4.7	93	9	73.3	1038			1	7.8	212	13	7.8	212		32.3	11.7	229	20		0	0	53	2.32	1.63	4.8
26			142	5	81	22	88.8	1744			1	1.5	62	44	6.2	106	1_7	13.1	7.3	648	36		0	0	300	2.33	0.83	1.53
27	115	64	133	5.2	85	12	58	892			1	8.7	137	22	8.7	137		10.7	12	46	32		0	0	59	2.01	1.27	2.14
28			132	6.5	95	5	57.8	1196			1	9.6	136	30	8.6	105	2_10	14.4	11.1	582	24		0	0	10	2.05	1.49	4.24
29			133	3.8	104	21	11.3	237		1		27.5	226	13	27.5	226		3.3	10	152			0	0	86	2.64	0.91	1.65
30	101	69	128	6.6	99	11	41.2	912			1	12.6	216	25	48.3	729	44	6.7	7.8	437	24	1	0	0	72	2.2	0.99	2.49
31	86	47	136	4.3	109	13	12.5	235		1		9.7	182	4	9.7	182		13.7	13.8	252	26		0	0	179			
32	80	60	128	4.3	95	14	20.4	246		1		21.5	180	4	24.1	245	6	14	8.3	191	25		0	0	27	2.13	1.08	4.59
33	69	52	136	5.8	109	7	42.3	490			1							1.8	9.7	102	17	1	0	0		2.3	1.37	3.33
34	110	70	133	4	101	22	21.2	547			1				62.2	1563	18	4.02	5.6	664	16		1	0	16	2.27		
35	120	78	130	3.3	98	16	10.1	130	1			8.3	94	10	11.7	239	12	1.15	7.6	152	24	1	0	0	1	2.32	1.13	1.85

Appendix 9 Datasheet (Acute Kidney Injury patients)

	LEUCO	ERY +	PROT +	PCR	BLOOD	S.PN	STAPH	MRSA	E.COLI	SALM	URINE	U_ECOLI	U_KLEB	Right	Left	Home	RECOVERED	RIP
1	306000	1	1													D/C	1	0
2																D/C	1	0
3	19000	1		0.28										10	9.6	D/C	1	0
4		1	1											12.2	12	D/C	1	0
5	3			0.17							KLEB E		1	10.9	11	D/C	1	0
6	10000	1		0.31							KLEB		1			D/C	1	0
7	75000		1	0.26							E.COLI	1				D/C	1	0
8	18000			0.18										14.5	14	D/C	1	0
9	750000			0.11	SALM E					1						D/C	1	0
10	120000	1		0.9							E.CLOA			10.4	9.5	D/C	1	0
11	18000	1	1													D/C	1	0
12	15000		1	0.1										10.8	10	D/C	1	0
13	1000	1	1	0.55	S.PN	1					KLEB-E		1	13.5	13	D/C	1	0
14		1	1											-	13	D/C	1	0
15	18000			0.05												D/C	1	0
16	750000	1		0.46										12.4	12	D/C	1	0
17																D/C	1	0
18	395000			0.09							M.MORG					D/C	1	0
19	5000			0.08	S.PN	1										D/C	1	0
20	4000	1		0.12										10.5	12	D/C	1	0
21	1000	1		0.05												D/C	1	0
22	2000			0.27										14	15	D/C	1	0
23	405000	1	1								E.COLI	1		12.2	12	D/C	1	0
24					MRSA			1								D/C	1	0
25	1000	1														D/C	1	0
26	45000			0.06												D/C	1	0
27	1000				MALARIA									12	14	D/C	1	0
28	1000			0.69												D/C	1	0
29														11.6	12	RIP	0	1
30	1000		1	0.14										13	13	RIP	0	1
31	23000	1		0.23												RIP	0	1
32	6000	1		0.11	ENTERO									11.5	12	RIP	0	1
33	162000	1	1								E.COLI	1				RIP	0	1
34	2	1	1													RIP	0	1
35	1000		1													RIP	0	1

Appendix 9 Datasheet (Acute Kidney Injury patients)

		CODENAME	W	M	S	I	G	A	S(M)	R	B	W	C	I	DIAG	AKI	AET	SEPSIS	TOXIN	MIS C	URO OBS	HAEMODYN	Co-MORB	HT	DM	TB	HD
36	1	AMMN	M	1	0	0	0	45	1	B	1	0	0	0	AKI	1	ATN	0	0	1	0	0	BURKITTS LYMPHOMA	0	0	0	0
37	1	MANG	G	0	0	0	1	43	0	B	1	0	0	0	AKI	1		0	0	0	1	0	Ca CERVIX / SEIZURE	0	0	0	0
38	1	SMNC	M	1	0	0	0	38	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	PLEURAL EFFUSION	0	0	1	0
39	1	MAMA	M	1	0	0	0	24	0	B	1	0	0	0	AKI	1	SEPTICAEMIA	1	0	0	0	0	LYMPHOMA	0	0	0	0
40	1	BOOL	I	0	0	1	0	38	0	B	1	0	0	0	AKI	1	SEPTICAEMIA	1	0	0	0	0		0	0	0	1
41	1	PEMO	I	0	0	1	0	27	1	B	1	0	0	0	AKI	1	SEPTICAEMIA	1	1	0	0	0	TOXIN	0	0	0	1
42	1	DIKH	I	0	0	1	0	40	0	B	1	0	0	0	AKI	1	HYPOPERF	0	0	0	0	1	GE	0	0	1	1
43	1	FIMA	M	1	0	0	0	45	0	B	1	0	0	0	AKI	1	UTI	1	0	0	0	1	GE	0	0	0	1
44	1	ERMA	M	1	0	0	0	29	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0		0	0	0	1
45	1	PASI	M	1	0	0	0	29	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0		0	0	1	1
46	1	THSO	I	0	0	1	0	27	0	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0		0	0	0	1
47	1	PHMN	M	1	0	0	0	29	0	B	1	0	0	0	AKI	1		0	0	0	0	1	DCMO	0	0	0	1
48	1	JUMP	I	0	0	1	0	37	0	B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	Nephrectomy	0	0	0	1
49	1	SIMN	M	1	0	0	0	30	1	B	1	0	0	0	AKI	1	TOXIN	0	1	0	0	0		0	0	0	1
50	1	STMA	M	1	0	0	0	34	0	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0		0	0	1	1
1	0	ERDI	S	0	1	0	0	60	1	W	0	1	0	0	AKI	1	UTI	1	0	0	0	0		0	0	0	0
2	0	TSMA	G	0	0	0	1	36		B	1	0	0	0	AKI	1		0	0	0	0	1	PRE-ACLAMPSIA	0	0	0	0
3	0	SINK	S	0	1	0	0	52	1	B	1	0	0	0	AKI	1	UTI	0	0	0	0	1	MVA	0	0	0	0
4	0	BOTH	S	0	1	0	0	67	1	W	0	1	0	0	AKI	1	UTI	0	0	0	0	1	AAA	1	1	0	0
5	0	JOMA	M	1	0	0	0	46		B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	LUPUS	0	0	0	0
6	0	VARE	M	1	0	0	0		1	B	1	0	0	0	AKI	1		0	0	1	0	0	AVR IE	0	0	0	0
7	0	BOMA	M	1	0	0	0	23		B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	MALARIA	0	0	0	0
8	0	ZONG	M	1	0	0	0	22	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	RHD, IE MR/AR	0	0	0	0
9	0	DAGO	S	0	1	0	0	40	1	I	0	0	0	1	AKI	1	ATN	0	0	0	0	1	RHABDOMYOLYSIS	0	0	0	0
10	0	FRSA	M	1	0	0	0	27	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	Pyelonephritis	1	0	0	0
11	0	ANKU	G	0	0	0	1	32		B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	PID	0	0	0	0
12	0	HLMA	S	0	1	0	0	75	1	B	1	0	0	0	AKI	1		0	0	0	1	0	GASTRIC Ca	0	0	0	0
13	0	ELDL	M	1	0	0	0	84	1	B	1	0	0	0	AKI	1	UTI	0	0	0	1	0	PROSTATE Ca	0	0	0	0
14	0	VIMN	M	1	0	0	0	47	1	B	1	0	0	0	AKI	1		0	0	1	0	0	HT,DM	1	1	0	0
15	0	MAMA	G	0	0	0	1	47		B	1	0	0	0	AKI	1	UTI	0	0	0	1	0	CERVIX Ca	0	0	0	0

	SBP	DBP	Na	K	Cl	CO2	Ua	Ca	Ra	Ia	Fa	Ul	Cl	DAYS	Ud	Cd	DAYS	WCC	Hb	Pt	ALB	HEP (N)	HEP B	HEP C	CD4	CaL	Mg	PO4
31	86	47	136	4.3	109	13	12.5	235		1		9.7	182	4	9.7	182		13.7	13.8	252	26		0	0	179			
32	80	60	128	4.3	95	14	20.4	246		1		21.5	180	4	24.1	245	6	14	8.3	191	25		0	0	27	2.13	1.08	4.59
33	69	52	136	5.8	109	7	42.3	490			1							1.8	9.7	102	17	1	0	0		2.3	1.37	3.33
34	110	70	133	4	101	22	21.2	547			1				62.2	1563	18	4.02	5.6	664	16		1	0	16	2.27		
35	120	78	130	3.3	98	16	10.1	130	1			8.3	94	10	11.7	239	12	1.15	7.6	152	24	1	0	0	1	2.32	1.13	1.85
36			141	4.5	100	16	28.7	315			1	23.5	204	9	23.5	204		6.1	13.9	249	33	1	0	0	184	2.39	1.36	3.07
37	116	74	134	7.6	107	5	52.2	1309			1							35.7	7.2	123	18	1	0	0	41	2.47	1.25	2.5
38	80	60	145	6.3	117	7	63.3	1053			1							8.7	7.6	75	23	1	0	0		2.52	1.08	3.42
39			127	5.9	91	11	26.3	589			1	24.7	238	8	40.3	795	14	3.7	11.3	91	29	1	0	0	13	2.22	0.91	1.41
40	99	71	128	3.9	94	13	24.8	241		1					29.8	327	1	1.98	11.1	228			0	0	8	1.94	0.83	1.9
41	144	98	138	4.5	98	25	16.8	435			1	8	219	1	48.7	598	11	6.2	7.9	289	18	1	0	0	381	2.6	0.96	1.98
42	83	44	128	3.7	92	9	28.4	899			1	13.9	408	2	13.9	408		6.9	10.4	301	36	1	0	0	41	2.23	0.82	2.3
43	90	60	132	2	112	5	36.3	728			1							27.7	8.5	120		1	0	0	148			
44	88	56	126	4.8	93	20	17	231		1					28.3	623	7	10.9	8.6	206	29		1	0	36	2.31	1.29	1.72
45			122	6.1	87	7	60.8	1105			1	23.4	546	2	25.1	593	4	25.8	11.4	456	24		0	0		2.34	1.47	4.62
46	80	40	134	6	97	5	15.8	190	1						18.7	211	1	26.3	3.5	67	37		0	0		2.03	1.3	3.24
47	100	70	139	5.6	104	23	16.6	348			1							10.7	10.2	333			0	0				
48			136	2.8	97	28	13.4	327			1	14.1	114	12	22.5	149	13	7.1	9	115	21	1	0	0	160			
49	188	134	125	5	84	19	57.5	1497			1	11.6	431	8	11.6	431		6.2	9.5	201	35	1	0	0	302			
50	127	92	129	5.1	93	12	45.2	732			1	33.8	321	16	39.6	691	20	9.5	7.3	539	23		0	0	28	2.34	0.91	2.74
1			145	4.7	102	17	19.7	138	1					9	81.9	621	24	6.3	17	153	46					2.42	0.87	1.22
2	170	90	137	4.4	114	19	7.8	147	1			8.6	88	4	8.6	88		10.9	14.1	150	27							
3	100	60	132	5.1	100	20	8.4	187	1			3.7	135	158	5.9	98		23.4	9.7	493								
4			140	3.7	102	24	18.2	408			1	8.2	129	50	8.2	129		4.7	8.9	73	26							
5	110	70	131	5.9	101	21	28.3	448			1	10.2	184	16	10.2	184		2.9	9	312	26					2.25	1.19	1.65
6			132	3.1	92	25	12.9	238		1		10.9	138	12	8.1	168	11	5.9	12.5	432						2.3	0.89	1.37
7			123	3.4	94	14	31.2	469			1	16.3	421	4	8.4	467	5	4.8	6.1	76						2.3	1.03	1.25
8			135	5.1	107	18	18.3	166	1			4	75	17	4	75		18.2	8.4	300	30					2.18	1.68	1.11
9			135	5.6	104	21	24	409			1	21.9	269	6	21.9	269		11	13.6	191						2.13	0.75	1.46
10	141	101	135	3.6	95	19	11.4	151	1			4.6	93	5	4.6	93		26.1	16.1	370						2.33	0.73	0.79
11			134	3.7	103	23	10	181	1			4.9	95	6	4.9	95		26.3	10.4	504								
12	130	70	136	3.8	104	18	16.7	453			1	19.7	419	34	26.8	425	44	14.7	8	346	34					2.52	0.95	1.47
13	136	65	140	6.5	107	13	72.7	1103			1	22	302	7	22	302		8.9	8.1	173	29					2.25	1.14	2.42
14			140	3.5	104	21	20.6	262		1		7.9	121	3	7.9	121		8.1	12.4	260	36							
15			146	7.4	107	11	50.1	3853			1	6.7	155	10	5.2	166	12	12.8	11.3	270								

	LEUCO	ERY +	PROT +	PCR	BLOOD	S.PN	STAPH	MRSA	E.COLI	SALM	URINE	U_ECOLI	U_KLEB	Right	Left	Home	RECOVERED	RIP
31	23000	1		0.23												RIP	0	1
32	6000	1		0.11	ENTERO									11.5	12	RIP	0	1
33	162000	1	1								E.COLI	1				RIP	0	1
34	2	1	1													RIP	0	1
35	1000		1													RIP	0	1
36	1000			0.03												RIP	0	1
37																RIP	0	1
38	-															RIP	0	1
39	15000	1		0.08	MRSA			1								RIP	0	1
40					S.PN	1										RIP	0	1
41					MRSA			1						13.1	13	RIP	0	1
42	9000	1		0.05										11.4	12	RIP	0	1
43	1000			0.51							M.MORG					RIP	0	1
44	189000	1	1											11.8	11	RIP	0	1
45																RIP	0	1
46																RIP	0	1
47																RIP	0	1
48											SALM-E			11.5		RIP	0	1
49	-			0.9										14.8	12	RIP	0	1
50	63000	1	1	0.28												RIP	0	1
1	9000	1	1	0.22							CORYNE					D/C	1	0
2																D/C	1	0
3	750000	1	1								PSEUDO					D/C	1	0
4	1000										KLEB					D/C	1	0
5	1000			0.28							E.COLI					D/C	1	0
6	1000															D/C	1	0
7																D/C	1	0
8	1000		1													D/C	1	0
9	1000		1											11	12	D/C	1	0
10	750000	1									PROTEUS					D/C	1	0
11	18000	1														D/C	1	0
12	1000													9	9.4	D/C	1	0
13	180000	1		0.15							KLEB					D/C	1	0
14	2000	1		0.01												D/C	1	0
15	750000	1									ACINETO					D/C	1	0

Appendix 9 Datasheet (Acute Kidney Injury patients)

		CODENAME	W	M	S	I	G	A	S(M)	R	B	W	C	I	DIAG	AKI	AET	SEPSIS	TOXIN	MISC	URO OBS	HAEMODYN	Co-MORBIDITIES	HT	DM	TB	HD
16	0	JOMA	G	0	0	0	1	24		B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0		0	0	0	0
17	0	DANJ	S	0	1	0	0	38	1	B	1	0	0	0	AKI	1		0	0	1	0	0	GSW	0	0	0	0
18	0	ANMO	G	0	0	0	1	33		B	1	0	0	0	AKI	1	UTI	1	0	0	0	0		0	0	0	0
19	0	ANCO	S	0	1	0	0	42		W	0	1	0	0	AKI	1	UTI	1	0	0	0	0	HT	1	0	0	0
20	0	SIMZ	S	0	1	0	0		1	B	1	0	0	0	AKI	1	ATN	0	0	0	0	1	RHABDOMYOLYSIS	0	0	0	0
21	0	THLE	M	1	0	0	0	24		B	1	0	0	0	AKI	1	ATN	0	0	1	0	0	Tumour lysis	0	0	0	0
22	0	DECH	S	0	1	0	0	42	1	B	1	0	0	0	AKI	1	ATN	0	0	0	0	1	RHABDOMYOLYSIS	0	0	0	0
23	0	ALVI	M	1	0	0	0	65	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	DM, HT	1	1	0	0
24	0	DESI	M	1	0	0	0	55		W	0	1	0	0	AKI	1		0	0	1	0	0	Ca Oeso	0	0	0	0
25	0	NENT	M	1	0	0	0	40		B	1	0	0	0	AKI	1		0	0	0	1	0	Ca Cervix	0	0	0	0
26	0	TOMA	M	1	0	0	0	53		B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0		0	0	0	0
27	0	RAMA	M	1	0	0	0	30	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0		0	0	0	0
28	0	SIMK	M	1	0	0	0	26	1	B	1	0	0	0	AKI	1	SEPSIS	0	0	1	0	0		1	0	0	0
29	0	CHIK	M	1	0	0	0	29	1	B	1	0	0	0	AKI	1		1	0	0	0	0	MALARIA	0	0	0	1
30	0	SHGO	M	1	0	0	0	25		I	0	0	0	1	AKI	1	Toxin - OP	0	1	0	0	0		0	0	0	1
31	0	MAMO	I	0	0	1	0	47	1	B	1	0	0	0	AKI	1	TTP	0	0	1	0	0		0	0	0	1
32	0	WAMA	M	1	0	0	0	36	1	B	1	0	0	0	AKI	1	Toxin - MUTI	0	1	0	0	0		0	0	0	1
33	0	VIBO	I	0	0	1	0	29	1	B	1	0	0	0	AKI	1	Pancreatitis	0	0	0	1	0	Urethral Stric	0	0	0	1
34	0	ROHA	M	1	0	0	0	36	1	B	1	0	0	0	AKI	1	UTI	0	1	0	0	0		0	0	0	1
35	0	MAMA	M	1	0	0	0	62	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0		0	0	0	1
36	0	DOMA	M	1	0	0	0		1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	CAP	0	0	0	1
37	0	LOMA	M	1	0	0	0	30	1	B	1	0	0	0	AKI	1	ATN	0	0	0	0	1	RHABDOMYOLYSIS	0	0	0	1
38	0	BOND	S	0	1	0	0	69	1	B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	Appendicitis	0	0	0	1
39	0	CAND	I	0	0	1	0	46		C	0	0	1	0	AKI	1	SEPSIS	1	0	0	0	0	Perf DU	0	0	0	1
40	0	PEMA	M	1	0	0	0	43	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	Malaria	0	0	0	1
41	0	SIMA	G	0	0	0	1	26		B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	HELLP	0	0	0	1
42	0	MTMA	M	1	0	0	0	19		B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	AVR, IE	0	0	0	1
43	0	RARO	M	1	0	0	0	38	1	B	1	0	0	0	AKI	1	UTI	1	0	0	0	0		0	0	0	1
43	0	ABWI	S	0	1	0	0	60	1	B	1	0	0	0	AKI	1		0	0	1	0	0	PVA	0	0	0	1
44	0	PRKH	I	0	0	1	0	23		B	1	0	0	0	AKI	1		0	0	0	0	1	PPH, TAH	0	0	0	1
45	0	MFNO	G	0	0	0	1	27		B	1	0	0	0	AKI	1	HELLP	0	0	0	0	1	PIH	1	0	0	1
46	0	ISPA	M	1	0	0	0	63	1	I	0	0	0	1	AKI	1		0	0	1	0	0	HT / DM / MI	1	1	0	1
47	0	MASI	G	0	0	0	1	29		B	1	0	0	0	AKI	1	PPH	0	0	1	0	0		0	0	0	1
48	0	ANBU	M	1	0	0	0	48		W	0	1	0	0	AKI	1	Toxin - OP	0	1	0	0	0		0	0	0	0
49	0	HAMA	S	0	1	0	0	65	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	PVA	0	0	0	0
50	0	ROBI	I	0	0	1	0	69	1	W	0	1	0	0	AKI	1		0	0	0	0	1	GI Bleed	0	0	0	0
51	0	DAZU	M	1	0	0	0	72	1	B	1	0	0	0	AKI	1		0	0	0	0	1	GE /DM / TB / DVT	0	1	1	0
52	0	MAPR	S	0	1	0	0	66		W	0	1	0	0	AKI	1		1	0	0	0	0	HT / PVD/gangrene	1	0	0	0

Appendix 9 Datasheet (Acute Kidney Injury patients)

	SBP	DBP	Na	K	Cl	CO2	Ua	Ca	Ra	Ia	Fa	Ub	Cb	DAYS	Ud	Cd	DAYS	WCC	Hb	Pt	ALB	Cal	Mg	PO4
16	124	80	126	3.2	89	17	36.4	202		**1**		16	**46**	21	3	147	24	18.8	14.1	227	13	2.26	0.86	1.66
17			149	4	116	27	8.4	**196**		**1**		6.9	**144**	10	6.9	**144**		6.3	3.7	18	15	2.57	0.7	0.27
18	83	50	132	4.2	97	19	21	**282**		**1**		3.4	**64**	32	3.4	**64**		22.6	11.6	120		2.52	1.07	1.23
19			138	4.7	100	18	22	**264**		**1**		3.7	**80**	13	3.7	**80**		15.6	11.3	637	33	2.33	1.03	2.02
20			139	5.7	104	21	11.8	**268**		**1**		7.8	**147**	10	7.8	**147**		17	11.1	235		2.3	0.79	1.18
21			134	4.8	100	16	16.6	**150**	**1**			5.8	**84**	21	5.8	**84**		6.9	10.9	259	36	2.59	0.71	1.33
22			145	3	103	17	9.1	**224**		**1**		8.8	**139**	20	10.2	161	90	13.6	12	739		2.33	0.67	1.09
23			130	4.9	95	13	39.8	**569**			**1**	20.9	**469**	24	20.9	**469**		13.8	14.2	149	23	2.5	1.05	1.77
24			141	5	104	26	7.2	**199**		**1**		3.5	**175**	17	3.5	**175**		3.4	12.4	385	42	2.44	0.87	1.12
25			147	4.7	112	20	8.6	**364**			**1**	3.7	**104**	4	3.7	**104**		21.4	8.6	457	34	2.33	1.19	1.81
26			122	5.6	91	8	46.8	**617**			**1**				62	749	4	3.7	13	91	25	2.25	0.92	3.47
27			135	4.2	103	10	11.2	**237**		**1**					26.7	446	7	2.4	7	193	20	2.44	0.89	0.96
28			134	5.8	111	13	26.1	**858**			**1**	17.1	**570**	14	20.8	653	16	7.5	9.1	170	25	2.34	0.88	1.65
29	104	72	128	3.8	87	13	23.5	**300**			**1**	4	**97**	32	4	**97**		17.4	12.1	34	30	2.34	0.88	0.69
30			169	2.3	116	9	13.2	**339**			**1**	6.3	**50**	9	4.7	84	9	28.8	14.3	380	31	2.29	1.16	1.11
31			140	4.8	103	23	14.5	**271**		**1**		4.2	**92**	27	4.2	**92**		26.7	12.2	291		2.22	0.78	1.27
32	168	82	126	5.8	79	10	105	**2323**			**1**	7.2	**141**	17				9.3	12.2	367	38	1.71	1.39	4.27
33	133	80	139	4.8	100	13	5.9	**241**		**1**		8.4	**84**	187				17	8.9	546		2.31	0.52	2.29
34	119	79	139	4.7	102	26	26.2	**442**			**1**	8.9	**305**	27	14.4	323	28	38.2	9.4	242	41	2.53	0.76	1.05
35			130	9.1	90	5	93.3	**1638**			**1**	3.6	**92**	26	3.6	**92**		17.5	14.8	243	42	2.32	1.27	5.72
36	120	70	143	4.2	100	13	53.8	**1159**			**1**	8.8	**197**	19	8.8	**197**		12	11.9	175	29	2.32	1.39	3.69
37	105	71	147	4.9	78	7	38.6	**1571**			**1**	4.4	**114**	37	4.4	**114**		16.3	11.7	565	27	2.39	1.06	1.63
38			122	3.8	90	18	8.5	**182**	**1**			9.6	**143**		9.6	**143**		8.5	13.7	324		2.25	0.67	0.58
39	148	97	128	4.8	94	18	41	**709**			**1**	7.8	**175**		7.8	**175**		6.6	8.2	466		2.23	0.73	2.32
40			127	3.9	86	23	24.1	**338**			**1**	6.8	**126**	10	17.2	306	4	9.8	14.3	11	**33**	2.25	0.75	0.37
41	136	77	143	3.1	109	26	11.4	**537**			**1**	5.3	**159**	5	5.3	**159**		10.5	12.5	164	**35**	2.25	2	1.47
42			133	4.5	111	9	22.6	**470**			**1**				13.1	240	31	8.1	9.2	251	**18**	2.37	0.86	2.55
43	120	80	138	4.6	102	28	24.9	**422**			**1**	9.8	**300**	28	12.4	333	27	12	9.4	222	**40**	2.51	0.67	1.05
43			154	3.3	115	32	27.9	**175**	**1**			15.3	**163**	24				6.1	7	231	**17**	2.42	0.68	1.59
44			140	4.7	110	25	12.2	**387**			**1**				20.5	603	15	10.7	10.8	88	**21**	2.16	1.45	1.79
45	99	50	140	4.6	104	23	6.2	**150**	**1**			7.9	**125**	10	7.9	**125**		12.7	12.4	65	**29**	2.28	1.34	2.93
46			137	4.8	106	18	22.3	**454**			**1**	21.7	**296**	16	21.7	**296**		17.3	10.5	24	**25**	2.02	0.85	1.35
47	121	87	150	3.6	102	20	19.8	**517**			**1**	2.8	**63**	90	2.8	**63**		6	6.5	171	**18**	2.4	0.72	2.07
48	189	114	149	3.8	117	13	19.9	**385**			**1**	12.6	**339**	2	12.6	**339**		6.2	13.4	237	**31**	2.33	0.99	1.8
49	154	84	143	3.8	111	23	13.3	**140**	**1**			6.8	**76**	34	6.7	88	10	13.2	8.8	266	**22**	2.43	0.73	1.58
50	147	78	135	4.2	106	21	19	**173**	**1**					89	70	517	89	9.2	15.3	251	**35**	2.4	0.94	1.35
51	167	65	139	5.9	106	13	20.2	**392**			**1**	15.4	**247**		15.4	**247**		6.9	13.7	252		2.52	0.99	1.92
52	121	64	140	3.4	96	29	15.3	**191**	**1**			4.7	**122**	10	7.3	167	20	16.6	15.2	162	**34**	2.5	0.71	1.39
53	161	82	137	7.6	90	21	62.9	**1481**			**1**	9.8	**164**	31	28	671		9.5	8.8	343	**38**	2.28	1.3	6

Appendix 9 Datasheet (Acute Kidney Injury patients)

	LEUCO	ERY +	PCR	BLOOD	S.PN	STAPH	MRSA	E.COLI	SALM	URINE	U_ECOLI	U_KLEB	Right	Left	Home	RECOVERED	RIP
16	117000														D/C	1	0
17	1000														D/C	1	0
18	750000	1								E.COLI					D/C	1	0
19			0.05							E.COLI			10.4	8.7	D/C	1	0
20	1000														D/C	1	0
21	1000														D/C	1	0
22	450000														D/C	1	0
23	1000	1	0.2												D/C	1	0
24	1000														D/C	1	0
25	750000	1	1.17										12.7	9.7	D/C	1	0
26	72000	1	0.49	E.COLI											D/C	1	0
27	1000	1											11.8	13	D/C	1	0
28	5000	1	1.02	S.VIRIDANS									9.9	10	D/C	1	0
29	1000		0.01												D/C	1	0
30															D/C	1	0
31	126000	1													D/C	1	0
32													12.2	12	D/C	1	0
33	117000	1								KLEB					D/C	1	0
34	48000									STREP					D/C	1	0
35	747000	1		KLEB									10.9	13	D/C	1	0
36	43000	1								PSEUDO					D/C	1	0
37	11000	1								E.COLI					D/C	1	0
38	750000	1								KLEB			10.6	11	D/C	1	0
39	26000		0.17										9.7	11	D/C	1	0
40															D/C	1	0
41	1000									ENTERO			10.3	12	D/C	1	0
42															D/C	1	0
43	52000														D/C	1	0
43	1000														D/C	1	0
44	1000	1													D/C	1	0
45															D/C	1	0
46															D/C	1	0
47			0.02										12.2	12	D/C	1	0
48															RIP	0	1
49															RIP	0	1
50															RIP	0	1
51	750000	1	0.17							E.COLI			8.2	10	RIP	0	1
52	1000														RIP	0	1
53															RIP	0	1

		CODENAME	W	M	S	I	G	A	S(M)	R	B	W	C	I	DIAG	AKI	AET	SEPSIS	TOXIN	MISC	URO OBS	HAEMODYN	Co-MORBITIES	HT	DM	TB	HD
54	0	RHVA	M	1	0	0	0	44		W	0	1	0	0	AKI	1		0	0	0	0	1	GE / BVF	0	0	0	0
55	0	QUED	M	1	0	0	0	72	1	B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	CVA	1	1	0	0
56	0	WILA	S	0	1	0	0	60	1	B	1	0	0	0	AKI	1		0	0	1	0	0	MVA	0	0	0	0
57	0	ANMD	S	0	1	0	0	51		B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	MVA	0	0	0	0
58	0	CHKO	S	0	1	0	0	38	1	B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	GSW	0	0	0	0
59	0	GOPA	M	1	0	0	0	61	1	I	0	0	0	1	AKI	1	IHD	0	0	1	0	0		0	0	0	0
60	0	BATH	M	1	0	0	0	72	1	W	0	1	0	0	AKI	1		0	0	1	0	0	IHD, PVD	0	0	0	0
61	0	GOMD	M	1	0	0	0	18		B	1	0	0	0	AKI	1		0	0	1	0	0	HT / TB	1	0	1	0
62	0	ELRA	M	1	0	0	0	50		B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	OVARY Ca	0	0	0	0
63	0	SAMO	I	0	0	1	0	27	1	B	1	0	0	0	AKI	1		0	0	0	0	0	DM / DKA	0	1	0	0
64	0	WIMA	M	1	0	0	0	53	1	B	1	0	0	0	AKI	1		0	0	0	0	0	DM / HT / Myeloma	1	1	0	0
65	0	AVIA	M	1	0	0	0	49	1	W	0	1	0	0	AKI	1	SEPSIS	1	0	0	0	0	Asc Chol	0	0	0	0
66	0	ELMP	S	0	1	0	0			B	1	0	0	0	AKI	1		1	0	0	0	0	DM / Bowel Obs	0	1	0	0
67	0	DOMA	M	1	0	0	0	63		B	1	0	0	0	AKI	1		0	0	1	0	0	HT / DM / MI	1	1	0	0
68	0	CYPU	G	0	0	0	1	50		B	1	0	0	0	AKI	1		0	0	0	1	0	Ca Cervix	0	0	0	0
69	0	LIND	M	1	0	0	0	20	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	IE, AR	0	0	0	0
70	0	KNDL	S	0	1	0	0	48	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	GSW	0	0	0	0
71	0	VUDA	M	1	0	0	0	24	1	B	1	0	0	0	AKI	1		0	0	1	0	0	BVF MVR AVR	0	0	0	0
72	0	JOBE	M	1	0	0	0	32	1	W	0	1	0	0	AKI	1	SEPSIS	1	0	0	0	0	IE, MR	0	0	0	0
73	0	JAMA	M	1	0	0	0	60	1	I	0	0	0	1	AKI	1		0	0	0	1	0	Ca Bladder	0	0	0	0
74	0	VABI	M	1	0	0	0	63	1	W	0	1	0	0	AKI	1	SEPSIS	1	0	0	0	0	CAP	0	0	0	0
75	0	DUNK	S	0	1	0	0	38	1	B	1	0	0	0	AKI	1		0	0	0	0	1	GSW	0	0	0	1
76	0	GETA	S	0	1	0	0	69		C	0	0	1	0	AKI	1	UTI	1	0	0	0	0	DM / Pancreatitis	0	1	0	1
77	0	FRST	M	1	0	0	0	68	1	W	0	1	0	0	AKI	1		0	0	0	0	1	Lung Ca	0	0	0	1
78	0	DEDY	I	0	0	1	0	68	1	W	0	1	0	0	AKI	1	SEPSIS	1	0	0	0	0	CAP	1	1	0	1
79	0	JOMO	I	0	0	1	0	67	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	Bowel Perf	0	0	0	1
81	0	MUGO	I	0	0	1	0	53	1	I	0	0	0	1	AKI	1	SEPSIS	1	0	0	0	0	Perf DU	0	0	0	1
82	0	ALOP	I	0	0	1	0	30	1	B	1	0	0	0	AKI	1	SEPSIS	0	0	0	0	1	Malaria	0	0	0	1
83	0	HEDU	I	0	0	1	0	48	1	B	1	0	0	0	AKI	1		0	0	1	0	0	MVA	0	0	0	1
84	0	SIDU	S	0	1	0	0	25		B	1	0	0	0	AKI	1		0	0	1	0	0	PVA	0	0	0	1
85	0	LUME	I	0	0	1	0	35		B	1	0	0	0	AKI	1		0	0	1	0	0	DM	0	1	0	1
86	0	DABR	I	0	0	1	0	65	1	W	0	1	0	0	AKI	1	UTI	1	0	0	0	0	Perf DU	0	0	0	1
87	0	MBAN	I	0	0	1	0	20		B	1	0	0	0	AKI	1	Toxin - OP	0	1	0	0	0		0	0	0	1
88	0	GRRU	I	0	0	1	0	46		B	1	0	0	0	AKI	1	UTI	1	0	0	0	0	Trauma	0	0	0	1
89	0	PAMB	S	0	1	0	0	29	1	B	1	0	0	0	AKI	1	SEPSIS	1	0	0	0	0	Appendix	0	0	0	1

Appendix 9 Datasheet (Acute Kidney Injury patients)

	SBP	DBP	Na	K	Cl	CO2	Ua	Ca	Ra	Ia	Fa	Ul	Cl	DAYS	Ud	Cd	DAYS	WCC	Hb	Pt	ALB	Cal	Mg	PO4	SBP
54				124	4.4	92	17	25.8	**340**			**1**	19.9	**147**	3	s			9.2	15.8	95	**30**	1.98	0.9	1.49
55		80	50	151	3.3	117	23	10.3	**189**	**1**						38	714	30	14	10.5	102	**20**	2.3	0.72	1.39
56				153	3.5	110	23.5	23.5	**288**			**1**	17.8	**179**	10				6.1	7	231	**17**	2.46	0.8	2.2
57				134	4.7	102	24	13	**317**			**1**	20.2	**155**	8	25	255	9	11.1	7.5	304	**22**	2.35	1.07	1.92
58				151	3.8	114	28	17.8	**161**	**1**						31.2	382	15	2.7	10.1	144	**18**	1.84	0.49	0.83
59				135	5	95	22	13.4	**213**		**1**		11.5	**128**	34	11.5	**128**		10.4	14.9	267	**41**	2.07	0.84	3.1
60				129	5.2	101	11	11.9	**207**		**1**		13	**168**	7	16.7	228	8	6.5	12.2	363	**47**	2.25	0.8	1.71
61				138	5.1	101	13	53.8	**1791**			**1**				55.9	1929	1	7.6	6.5	348				
62				151	4.5	109	32	21.2	**161**	**1**			4	**99**	7	26.8	145		8.4	9.2	226	**36**	2.23	0.88	2.24
63				178	2.7	147	12	24.9	**222**		**1**		17.6	**188**	5	19.7	256	7	26.7	15.6	251	**38**	2.96	1.76	0.3
64				142	4.4	109	25	11.9	**254**		**1**					33.1	456	55	9.4	9.1	273	**21**	2.52	0.87	2.29
65		81	42	131	3.9	76	31	52.4	**632**			**1**	9.2	**105**	11	8.2	112	12	28.6	6.8	596	**21**	2.27	1.85	3.89
66				155	2.9	104	42	21.1	**173**	**1**						22.8	198	24	15.2	8.4	381		2.4	0.91	0.95
67		194	83	136	4.9	102	15	16	**158**	**1**			15.6	**267**	9				17.8	14.4	202	**31**	2.41		2.14
68		130	90	134	5.7	84	21	48.9	**2081**			**1**				59.7	2543	5	7.9	5.6	545	**38**			
69		98	46	132	4.9	96	12	22.9	**143**	**1**			35.4	**290**	6				13.9	12.9	156	**37**	2.21	1.13	2.31
70				144	4.3	109	15	10.3	**215**		**1**								30.7	8.4	59		2.73	0.34	2.59
71		116	88	131	6.8	106	11	39.2	**551**			**1**	20.5	**147**	14	20.5	**147**		4.4	12.2	268	**35**	2.55	0.75	1.61
72		97	60	131	5.7	94	8	29.4	**199**		**1**					33	373	28	7.8	8.6	135		2.26	1.25	3.29
73		89	54	143	2	104	20	17.1	**567**			**1**	13.7	**288**	7	34.3	578		10.7	10.2	493		2.25	0.89	1.12
74				125	5.1	94	5	13.5	**150**	**1**						43.2	214	21	12.3	18.9	129		2.46	0.91	2.9
75		105	62	135	5.3	108	21	30	**151**	**1**					5	44.2	637	5	7	7.3	56	16			
76				140	4.8	103	23	14.5	**271**		**1**		4.2	**92**	27	4.2	**92**		26.7	12.2	291		2.22	0.78	1.27
77		85	59	146	2.9	92	48	26.4	**186**	**1**			10	**117**	10	24.4	184	10	9.8	7.6	245	27	2.5	1.1	1.31
78		188	80	139	3.1	99	27	10.1	**309**			**1**			25	22.5	432	9	13.8	8.5	272		2.3	0.94	1.82
79				159	4	124	22	12	**189**	**1**					15	35.2	308	7	7.3	10.6	253		2.1	0.79	1.41
81				139	3.5	102	24	24.1	**315**			**1**	16.6	**147**	29	16.3	200	33	14.6	8.7	40		2.55	0.66	2.17
82		88	56	136	2.9	102	17	14.8	**148**	**1**					7	15.6	255	7	8.3	5.1	113	27	2.33	0.91	0.73
83				153	3.9	118	29	13.1	**205**		**1**				12	42.4	561	12	8	7.7	109	16	2.26	0.63	1.85
84				139	7.9	115	17	10.2	**187**	**1**						12.4	326	3	11.5	6.8	195		2.32	0.5	0.68
85		116	70	147	3.5	118	13	13.3	**212**		**1**		13.5	**124**	18	13.5	**124**		30.5	11.3	185	21	2.45	0.71	0.3
86		92	46	136	3.6	89	27	18.2	**278**		**1**		22.4	**117**	15	22.4	**117**		30.1	12.5	308	18	2.38	0.65	2.03
87				159	3.4	122	14	17.5	**472**			**1**	7.2	**247**	4	10.8	294	5	5.8	15.7	347	20	2.31	0.92	1.75
88				136	4.3	103	28	9	**138**	**1**						12.7	200	24	5.9	8.5	486		2.38	0.65	1.27
89		122	40	129	3.7	94	23	10.5	**156**	**1**			3.4	**122**	13	**122**	13		6.7	16.8	118	39	2.07	0.73	0.93
90				144	5	108	19	15.6	**286**		**1**		20.6	**179**	11	21.6	213	12	9	8.2	178	22			

	LEUCO	ERY +	PCR	BLOOD	S.PN	STAPH	MRSA	E.COLI	SALM	URINE	U_ECOLI	U_KLEB	Right	Left	HOME	RECOVERED	RIP
54	1000		0.06												RIP	0	1
55	750000	1								KLEB					RIP	0	1
56	1000														RIP	0	1
57										E.COLI					RIP	0	1
58										PSEUDO					RIP	0	1
59															RIP	0	1
60															RIP	0	1
61	189000	1													RIP	0	1
62	702000	1	0.06							KLEBS					RIP	0	1
63	7000	1	0.06												RIP	0	1
64	1000	1	0.68												RIP	0	1
65	1000			E.COLI											RIP	0	1
66	162000	1													RIP	0	1
67	27000														RIP	0	1
68															RIP	0	1
69															RIP	0	1
70	43000														RIP	0	1
71	1000	1	0.09												RIP	0	1
72	1000	1	0.05										12.7		RIP	0	1
73	750000	1	1.01										8	12	RIP	0	1
74	9000		0.09												RIP	0	1
75															RIP	0	1
76	126000	1								PSEUDO					RIP	0	1
77															RIP	0	1
78	75000									ACINETO			13.1	11	RIP	0	1
79															RIP	0	1
81													10	11	RIP	0	1
82															RIP	0	1
83															RIP	0	1
84	51000	1													RIP	0	1
85	1000														RIP	0	1
86										ACINETO					RIP	0	1
87															RIP	0	1
88										PROTEUS					RIP	0	1
89	1000	1	0.08										11.6	12	RIP	0	1
90	30000	1		MRSA									13.9	13	RIP	0	1