A review of large biochemistry analysers

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Introduction

In recent years the numbers of large biochemistry analysers on the UK market has significantly increased and it was felt that a review of their specification in a comparative form may help prospective purchasing laboratories select from the large number of analysers available those that would be relevant for their purpose.

Questionnaire

To this end a questionnaire was sent out in January 1987 to 80 companies in the UK known to be involved in supplying biochemistry laboratories, requesting that a

copy of the questionnaire be completed for each analyser they support on the UK market. The analyser was defined as being able to produce more than 100 test results for any of a group of the 23 most commonly performed biochemistry tests. Twenty-one companies replied positively, providing information for 69 analysers, which is presented in tables 1–16.

Results

Each table represents the manufacturer's answer to questions on one or more subjects listed at the head of each column. All information presented here has been checked with the manufacturer, however, it should be stressed that the information has come from manufacturers and its validity has not been checked by the authors.

This exercise was carried out earlier, Fyffe [1] in 1985 and an attempt has been made to correct as many anomalies as possible. It is important that the information presented be used as a guide to specifications of analysers and prospective purchasers should check all these details with the appropriate manufacturer before proceeding to purchase.

Questionnaire

- 1.1 Manufacturer and model.
- 1.2 When was this model first available in UK?
- 1.3 Which tests have available recommended methodologies?
- 1.4 How long do you expect this instrument to be available in the UK?
- 2.1 Which samples are acceptable?
- 2.2 What is the sample tray/carriage capacity?
- 2.3 What sample volumes are required to perform the stated groups of analytes? U&E = Na, K, Cl, Bic, Urea, Creat. LFT = Bili, T Prot, Alb, ALP, +3 other Enzymes. BONE = Ca, PO₄, Alb, ALP. CARD = 3 Enzymes. MISC = Cholesterol, Triglyceride, Urate. GLU = Glucose.
- 3.1 How many *samples* of each analyte group could be handled per hour, including calibration and QC? U&E = Na, K, Cl, Bic, Urea, Creat. LFT = Bili, T Prot, Alb, ALP, +3 other Enzymes. BONE = Ca, PO₄, Alb, ALP. CARD = 3 Enzymes. MISC = Cholesterol, Triglyceride, Urate. GLU = Glucose.
- 3.2 Are tests performed in batches?
- 3.3 What is the maximum batch size? (Where applicable.)
- 3.4 Does the instrument analyse samples selectively, in profiles or both?
- 3.5 What is the maximum number of samples/tests which can be analysed without operator intervention?
- 3.6 Has the instrument been the subject of a DHSS or other independent evaluation? If so, please quote.
- 3.7 What is the claimed within and between batch imprecision for each analyte.
- 4.1 What is the recommended frequency of calibration?
- 4.2 (a) Do you recommend aqueous or serum based calibrant?
- 4.2 (b) Can the instrument be calibrated by the operator using his existing assayed material?
- 4.2 (c) How many calibrators are required? Please state max/min.

- 5.1 Can the instrument be safely used for handling high risk samples? (For example Hepatitis B, AIDS.)
NB. In a normal clinical laboratory environment and using normal laboratory practices.
- 5.2 Is there a recommended method of decontamination in normal use and before planned maintenance?
- 5.3 Does the instrument comply with the ESCHLE code for electrical safety? (Ref: *Health Equipment Information*, No. 140, April 1985).
- 5.4 Please state any BSI standard with which the instrument complies.
- 6.1 Can the routine work be interrupted for stat samples?
- 6.2 How long would it take to produce a U&E and Glucose result from (a) Start up (b) Standby? U&E = Na, K, Cl, Bic, Urea, Creat, and glucose.
- 7.1 What services are required for installation?
- 7.2 Is the instrument floor or bench standing?
- 7.3 How much space is required including service access? (In m.)
- 7.4 What is the weight? (In kg.)
- 7.5 Are operator training courses available? If so (a) how long, (b) how many staff, (c) what is the cost?
- 7.6 How many instruments are installed in the UK?
- 8.1 (a) What is the downtime per year for planned maintenance, not including daily maintenance?
(b) How long does daily maintenance take (for example of weekly divided by 5 etc.)?
- 8.2 Which types of service contract are available and at what cost?
- 8.3 Does the cost of service contract depend on the use of a specific manufacturer's reagents, spares or consumables?
- 8.4 How long is the warranty?
- 8.5 Does the warranty depend on the use of a specific manufacturer's reagents, spares or consumables?
- 8.6 How long do you expect to support maintenance of the instrument?
- 9.1 (a) In its standard form without any optional data manager, can the instrument log/monitor/provide statistics for quality control results?
(b) As above but with a data manager.
- 9.2 (a) In its standard form can the instrument hold patient identification and results?
(b) As above but with a data manager.
- 9.3 (a) In its standard form what is the storage capacity for QC/PID/RESULTS?
(b) As above but with a data manager.
- 9.4 (a) Is the standard instrument fitted with an RS 232/232C compatible ONE way port?
(b) As above but with a TWO way port.
(c) If not, please quote price for (a) and (b).
- 9.5 (a) In its standard form is the report format fixed or user definable for printing results/PID on various sizes of paper?
(b) As above but with data manager.
- 9.6 (a) In its standard form is it possible to add results produced on other equipment to the report? (i) For on board chemistries (ii) For other chemistries produced on other instruments?
(b) As above but with a data manager.
- 9.7 (a) In its standard form can the instrument produce statistics required for the Korner report including listings for (i) Consultant, (ii) Locality, for example ward, and (iii) Clinical Specialty?
(b) As above but with a data manager.
- 9.8 (a) Is help available to link the analyser to an existing or future laboratory computer system?
(b) If so, what is the approx cost of (i) hardware (ii) software?
- 10.1 What is the basic price of the instrument? (In pounds sterling.)
- 10.2 (a) Cost of the ISE unit?
(b) Cost of data manager?
NB. State if included in 10.1.
- 10.3 What is the expected recommended reagent cost to perform each group of analytes (see below) on 100 samples?
- 10.4 If 100 samples were analysed for each of the analyte groups (see below), what would be the cost of the consumables used in the analytical process?
- 10.5 (a) What is the volume of calibrant required to calibrate all on board chemistries once?
(b) What is the cost per ml. of the recommended calibrant?
(c) What is the reconstituted volume and stability of the recommended calibrant?

U&E = Na, K, Cl, Bic, Urea, Creat. LFT = Bili, T Prot, Alb, ALP, +3 other Enzymes. BONE = Ca, PO₄, Alb, ALP. CARD = 3 Enzymes. MIS = Cholesterol, Triglyceride, Urate. GLU = Glucose. NB. for ALL, not all tests may be available at any one time.

NO	1.1	1.2	1.3	1.4
1	ABBOTT VP SUPER	1979/83	19/21+20+E MAX ? NO Na/K	1990+
2	AMERICAN MONITOR PARALLEL	MID 1982	22/22+3 MAX 30	7-10Y
3	AMERICAN MONITOR PERSPECTIVE	SEP 1985	22/22+8 MAX 64	7-10Y
4	BAKER ENCORE II	JAN 1985	19/22+74+E NO Na/K	10Y
5	BAKER SPIRIT	1987	21/22 MAX 20 NO HBDH	INDEFF
6	BCL HITACHI 704	1986	22/22+21+E	7Y
7	BCL HITACHI 705	1981	21/21+14+E	RECONDIT
8	BCL HITACHI 737	1985	21/21+16+E	5Y
9	BDH EPPENDORF EASY	JAN 1986	21/22+7+E	>10Y
10	BDH EPPENDORF EPOS	JAN 1985	20/22+19+E NO Na/K	>10Y
11	BDH EPPENDORF ERS	MAY 1984	22/22+14 MAX 23	>10Y
12	BDH EPPENDORF EXSEL	JUN 1985	22/22+19+E MAX 24	>10Y
13	BDH EPPENDORF EXTRA	JUN 1985	22/22+14 MAX 43	>10Y
14	BDH OLYMPUS AU5021	MAY 1987	22/22+19+E MAX 27	>10Y
15	BDH OLYMPUS AU5121	MAY 1987	22/22+19+E MAX 19	>10Y
16	BDH OLYMPUS AU5031	MAY 1987	22/22+19+E MAX 27	>10Y
17	BDH OLYMPUS AU5131	MAY 1987	22/22+19+E MAX 14	>10Y
18	BDH OLYMPUS AU5041	MAY 1987	22/22+19+E MAX 35	>10Y
19	BDH OLYMPUS AU5141	MAY 1987	22/22+19+E MAX 18	>10Y
20	BDH OLYMPUS AU5061	MAY 1987	22/22+19+E MAX 26	>10Y
21	BDH OLYMPUS AU5081	MAY 1987	22/22+19+E MAX 34	>10Y
22	BECKMAN SYNCHRON AS4	1980	13/22 MAX 5	6Y
23	BECKMAN SYNCHRON AS8	1981	13/22 MAX 9	6Y
24	BECKMAN SYNCHRON AS ENZYME	1982	22/22 MAX 13	6Y
25	BECKMAN SYNCHRON AS LIPID	1983	22/22 MAX 11	6Y
26	BECKMAN SYNCHRON AS MINI IDEAL	1983	22/22 MAX 17	6Y
27	BECKMAN SYNCHRON AS IDEAL	1983	22/22 MAX 23	6Y
28	BECKMAN SYNCHRON CX3	EARLY 87	22/22 MAX 8	10Y
29	BECKMAN SYNCHRON CX4	EARLY 88	22/22 MAX 24	10Y
30	BECKMAN SYNCHRON CX5	EARLY 88	22/22 MAX 28	10Y
31	BECKMAN SYNCHRON CX7	LATE 88	22/22 MAX 32	10Y
32	BIO AUTOMATED ASCA	1987	19/22+51+E	INDEFF
33	CHEMLAB CHEMILYSER	SEP 1982	15/22 MAX 6	>10Y
34	CHEMLAB SYSTEM4	1983	15/22 MAX 9	>10Y
35	CLINICON PRISMA II	1986	22/22+7+E MAX 48	>10Y
36	CIBA CORNING 580 ALLIANCE	MID 1987	22/22+2	5Y
37	CIBA CORNING 570	LATE 87	21/22+3	5Y
38	CIBA CORNING EXPRESS	LATE 1987	19/22 NO Na/K	5Y
39	COULTER CPA	MAR 1987	19/22+4 MAX 8	INDEFF
40	COULTER DACOS 2	AUG 1983	22/22+6 MAX 30	FUR NOT
41	DUPONT DIMENSION 380	MID 1986	19/22+18 MAX 37	UPTO10Y
42	DUPONT DIMENSION 760	MID 1986	19/22+18 MAX 37	UPTO10Y
43	GREINER G-400	1983	22/22+6 MAX 30	>5Y
44	GREINER G-450	1986	22/22+9 MAX 30	>10Y
45	GREINER TANDEM 2	1986	22/22+39 MAX 60	>10Y
46	GREINER TANDEM 3	1986	22/22+39 MAX 90	>10Y
47	IL GENESIS 21	FEB 1985	22/22+5+E MAX 21	7-10Y
48	IL MONARCH	SEP 1985	22/22+20+E MAX 23	7-10Y
49	IL MONARCH PLUS 2	1985	22/22+20+E MAX 23	7-10Y
50	KODAK EKTACHEM DT	1985	18/21+4	INDEFF
51	KODAK EKTACHEM 700	1987	20/21+10	INDEFF
52	KOME PROGRESS	MAR 1984	22/22+30+E MAX 27	>5Y
53	KOME SPECIFIC	SEP 1986	22/22+30	>5Y
54	NOVA BIOMED 1+1	1977	Na/K ONLY	5Y
55	NOVA BIOMED 4+4	1981	Na/K/Cl/Bic ONLY	5Y
56	NOVA BIOMED 5+5	1982	Na/K/Cl ONLY	5Y
57	ROCHE COBAS FARA	1984	22/22+10+E	5Y
58	ROCHE COBAS MIRA	1984	22/22+10+E	7Y
59	TECHNICON ASSIST	1987	17/22 MAX 12 NO Na/K	>7Y
60	TECHNICON CHEM 1	JUN 1985	22/22+3 MAX 35	>7Y
61	TECHNICON RA-1000	1983	22/22+80+E MAX 15	>7Y
62	TECHNICON RA-2X	1984	22/22+80+E MAX 27	>7Y
63	TECHNICON RA-500	1985	20/22+80+E MAX 12 NO Na/K	>7Y
64	TECHNICON RA-XT	1986	22/22+80+E MAX 26	>7Y
65	TECHNICON SMAC II	1981	21/22+2 MAX 23	>7Y
66	TECHNICON SRA 2000	1983	22/22+80+E MAX 35	>7Y
67	ULTROLAB ENI GEN PROFILER	JAN 1987	20/22 NO Na/K	>10Y
68	ULTROLAB ULTROCHEM 1	JUL 1987	N/DA	N/DA
69	VITAL SCIENTIFIC VITALAB 200	JUN 1987	19/22+3+E MAX 40	>10Y

NO	INST	2.1	2.2	2.3 U/E	2.3 LFT	2.3 BONE	2.3 CARD	2.3 MISC	2.3 GLU	2.3 ALL	
1	ABBOTT VPS	PSU	32	NO U/E	44	24	18	18	5	104	NO U/E
2	PARALLEL	PSU	150	75	135	45	128	11	4	394	
3	PERSPECTIVE	PSU	40	98	84	30	59	8	2	281	
4	ENCORE II	PSU	96	NO U/E	59	19	33	15	*	126	NO U/E
5	SPIRIT	PSU	40	161	110	27	61	27	*	386	
6	HITACHI 704	PSUMB	50	49	68	33	40	25	15	152	
7	HITACHI 705	PSUMB	48	119	58	23	30	15	5	222	
8	HITACHI 737	PSUMB	60	37	44	18	29	12	6	109	
9	EASY	PSU	9	120	230	N/DA	120	N/DA	5	N/DA	
10	EPOS	PSU	200	NO U/E	88	22	45	10	5	170	NO U/E
11	ERIS	PSU	100	84	91	22	60	17	5	279	
12	EXSEL	PSU	300	84	88	22	45	10	5	254	
13	EXTRA	PSU	200	84	91	22	60	17	5	274	
14	AU5021	PSU	300	81	73	22	45	10	5	239	
15	AU5121	PSU	300	81	73	22	45	10	5	239	
16	AU5031	PSU	300	81	73	22	45	10	5	239	
17	AU5131	PSU	300	81	73	22	45	10	5	239	
18	AU5041	PSU	300	81	73	22	45	10	5	239	
19	AU5141	PSU	300	81	73	22	45	10	5	239	
20	AU5061	PSU	300	81	73	22	45	10	5	239	
21	AU5081	PSU	300	81	73	22	45	10	5	239	
22	AS4	PSU	38	110	*	*	*	*	10	*	
23	AS8	PSU	38	110	*	*	*	*	10	*	
24	AS ENZYME	PSU	38	110	144	48	85	*	10	*	
25	AS LIPID	PSU	38	110	*	*	*	30	10	*	
26	MINI IDEAL	PSU	38	110	144	48	85	30	10	*	
27	AS IDEAL	PSU	38	110	144	48	85	30	10	427	
28	CX3	PSU	80	112	*	*	*	*	10	*	
29	CX4	PSU	80	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	
30	CX5	PSU	80	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	
31	CX7	PSU	80	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	
32	ASCA	PSU	48	20	80	45	40	45	*	230	NO U/E
33	CHEMILYSER	PSU	80	*	*	*	*	*	*	*	
34	SYSTEM4	PSU	300	*	*	*	*	*	*	*	
35	PRISMA II	PSU	200	300	1000	200	300	200	*	2000	
36	CORNING 580	PSU	90	135	235	145	185	130	117	325	
37	CORNING 570	PSU	90	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	
38	CORNING EXPRESS	PSU	40	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	
39	CPA	PSU	32	NO U/E	97	23	48	16	4	188	NO U/E
40	DACOS 2	PSU	80	150	48	19	14	10	3	278	
41	DIMENSION 380	PSU	60	128	156	17	68	23	3	*	
42	DIMENSION 760	PSU	120	128	156	17	68	23	3	*	
43	BREINER 6-400	PSU	30	145	125	35	60	30	5	325	
44	BREINER 6-450	PSU	30	145	125	35	60	30	5	325	
45	TANDEM 2	PSU	60	145	125	35	60	30	5	325	
46	TANDEM 3	PSU	90	145	125	35	60	30	5	325	
47	GENESIS 21	PSU	50	82	132	30	45	19	5	271	
48	MONARCH	PSU	38	48	70	20	20	11	3	157	
49	MONARCH PLUS 2	PSU	76	48	70	20	20	11	3	157	
50	EKTACHEN DT	PS	N/AP	70	60ND ALB	N/A	30	30	10	*	
51	EKTACHEN 700	PSU	40	60	70	41	33	30	10	284	
52	PROGRESS	PSU	84	145	31	8	20	10	2	214	
53	SPECIFIC	PSU	84	145	31	8	20	10	2	214	
54	NOVA BIONED 1+1	PSUMB	40	*	*	*	*	*	*	*	
55	NOVA BIONED 4+4	PSUMB	40	*	*	*	*	*	*	*	
56	NOVA BIONED 5+5	PSUMB	40	*	*	*	*	*	*	*	
57	COBAS FARA	PSU	150	105	78	17	28	15	*	243	
58	COBAS MIRA	PSU	90	105	108	17	43	15	*	288	
59	ASSIST	PSU	16	NO U/E	90	30	50	35	5	240	NO U/E
60	CHEM 1	PSU	288	13	7	4	3	3	1	30	
61	RA-1000	PSU	30	35	90	30	50	35	5	240	
62	RA-2X	PSU	60	35	90	30	50	35	5	240	
63	RA-500	PSU	30	NO U/E	90	30	50	35	5	240	NO U/E
64	RA-IT	PSU	30	35	90	30	50	35	5	240	
65	SMAC II	PS	144	450	450	450	450	450	450	450	
66	SRA 2000	PSU	174	35	90	30	50	35	5	240	
67	GEM PROFILER	SPU	45	NO U/E	PROG	PROG	PROG	PROG	PROG	PROG	
68	ULTROCHEM 1	N/DA	100	NO U/E	100	35	60	20	*	*	
69	VITALAB 200	PSU	12	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	

NO	INST	3.1 U/E	3.1 LFT	3.1 BONE	3.1 CARD	3.1 MISC	3.1 GLU
1	ABBOTT VPS	NO U/E	44	84	93	77	465
2	PARALLEL	240	240	240	240	240	240
3	PERSPECTIVE	200	100	200	300	330	500
4	ENCORE II	NO U/E	57	100	133	100	N/DA
5	SPIRIT	40	30	60	40	60	N/DA
6	HITACHI 704	60	30	45	90	60	180
7	HITACHI 705	60	30	45	90	60	180
8	HITACHI 737	75	150	300	300	300	300
9	EASY	15	8	15	20	20	50
10	EP05	NO U/E	39	75	100	68	300
11	ERIS	100	59	100	133	133	400
12	EXSEL	100	98	175	233	201	700
13	EXTRA	200	118	200	266	266	800
14	AU5021	100	100	100	100	100	100
15	AU5121	150	150	150	150	150	150
16	AU5031	150	150	150	150	150	150
17	AU5131	300	300	300	300	300	300
18	AU5041	150	150	150	150	150	150
19	AU5141	300	300	300	300	300	300
20	AU5061	300	300	300	300	300	300
21	AU5081	300	300	300	300	300	300
22	AS4	65	N/DA	N/DA	N/DA	N/DA	65
23	AS8	65	N/DA	N/DA	N/DA	N/DA	65
24	AS ENZYME	65	50	50	50	N/DA	65
25	AS LIPID	65	N/DA	N/DA	N/DA	50	65
26	MINI IDEAL	65	50	50	50	50	65
27	AS IDEAL	65	50	50	50	50	65
28	CX3	75	N/DA	N/DA	N/DA	N/DA	75
29	CX4	NO U/E	N/DA	N/DA	N/DA	N/DA	N/DA
30	CX5	75	N/DA	N/DA	N/DA	N/DA	N/DA
31	CX7	75	N/DA	N/DA	N/DA	N/DA	N/DA
32	ASCA	NO U/E	30	55	73	55	N/DA
33	CHEMILYBER	120	N/DA	120	N/DA	N/DA	80
34	SYSTEM4	80	N/DA	N/DA	N/DA	N/DA	80
35	PRISMA II	300	300	300	300	300	300
36	CORNING 580	100	100	100	100	100	100
37	CORNING 570	70	60	105	100	100	300
38	CORNING EXPRESS	NO U/E	26	45	60	60	180
39	CPA	NO U/E	22	33	60	60	220
40	DACOS 2	45	64	112	150	150	450
41	DIMENSION 380	48	25	35	40	45	170
42	DIMENSION 760	95	50	70	80	90	340
43	GREINER 6-400	42	37	75	100	100	300
44	GREINER 6-450	57	50	100	133	133	400
45	TANDEM 2	114	100	200	266	266	800
46	TANDEM 3	170	150	300	400	400	1200
47	GENESIS 21	33	25	45	60	60	200
48	MONARCH	60	55	100	140	135	250
49	MONARCH PLUS 2	120	110	200	280	270	500
50	EKTACHEM DT	7	6	N/DA	8	21	65
51	EKTACHEM 700	90	71	90	120	120	360
52	PROGRESS	40	26	45	60	60	N/DA
53	SPECIFIC	NO U/E	20	33	43	43	N/DA
54	NOVA BIONED 1+1 *	*	*	*	*	*	*
55	NOVA BIONED 4+4 *	*	*	*	*	*	*
56	NOVA BIONED 5+5 *	*	*	*	*	*	*
57	COBAS FARA	36	28	56	70	67	N/DA
58	COBAS MIRA	18	19	22	43	44	N/DA
59	ABBIST	NO U/E	10	15	20	20	60
60	CHEM 1	240	103	180	240	240	720
61	RA-1000	60	34	60	80	80	240
62	RA-2X	120	69	120	160	160	480
63	RA-500	NO U/E	34	60	80	80	240
64	RA-XT	60	34	60	80	80	240
65	SMAC II	150	150	150	150	150	150
66	SRA 2000	150	150	150	150	150	150
67	GEN PROFILER	NO U/E	N/DA	N/DA	N/DA	N/DA	N/DA
68	ULTROLAB 1	NO U/E	20	35	40	50	*
69	VITALAB 200	NO U/E	10	18	24	24	70

NO	INST	3.2	3.3	3.4	3.5	3.6
1	ABBOTT VPS	YES	28	EEL	32 /	YES QUOTED
2	PARALLEL	NO		BOTH	150 /	YES NOT YET PUB
3	PERSPECTIVE	CAN BE	40	BOTH	40 / 1240	NOT YET PUBLISH
4	ENCORE II	YES	30	BOTH	28 /	NOT YET PUBLISH
5	SPIRIT	YES	40	BOTH	40 / 640	NO
6	HITACHI 704	NO	N/APP	BOTH	50 / 1300	TRIALS IN EUROPE
7	HITACHI 705	NO	N/APP	BOTH	48 / 1248	DHSS
8	HITACHI 737	NO	N/APP	BOTH	60 / 1380	DHSS
9	EASY	NO		PROF	9 / 99	NO
10	EPOS	YES	200	SEL	200 / 200	NO
11	ERIS	NO		BOTH	100 / 100	YES
12	EXSEL	CAN BE	200	BOTH	300 / 1700	NO
13	EXTRA	NO		BOTH	200 / 3000	NO
14	AU5021	NO		BOTH	300 / 8100	NO
15	AU5121	NO		BOTH	300 / 5700	NO
16	AU5031	NO		BOTH	300 / 8100	NO
17	AU5131	NO		BOTH	300 / 4200	NO
18	AU5041	NO		BOTH	300 / 10500	NO
19	AU5141	NO		BOTH	300 / 5400	YES
20	AU5061	NO		BOTH	300 / 7800	NO
21	AU5081	NO		BOTH	300 / 10200	NO
22	AS4	NO		BOTH	38 / 190	YES QUOTED
23	AS8	NO		BOTH	38 / 342	YES QUOTED
24	AS ENZYME	NO		BOTH	38 / 494	YES QUOTED
25	AS LIPID	NO		BOTH	38 / 418	YES QUOTED
26	MINI IDEAL	NO		BOTH	38 / 646	YES QUOTED
27	AS IDEAL	NO		BOTH	38 / 874	YES QUOTED
28	CX3	NO		BOTH	80 / 640	NO
29	CX4	NO		BOTH	80 / 1920	NO
30	CX5	NO		BOTH	80 / 2240	NO
31	CX7	NO		BOTH	80 / 2560	NO
32	ASCA	CAN BE	38 / 1000	BOTH	38 /	NO
33	CHEMILYSER	YES	480	PROF	80 /	YES QUOTED
34	SYSTEM4	YES	300	PROF	300 /	NOT CLINICAL
35	PRISMA II	CAN BE		BOTH	220 / 7040	NOT YET PUBLISH
36	CORNING 380	NO	N/A	BOTH	90 / 1980	NO
37	CORNING 570	NO	N/A	BOTH	90 / 2161	NO
38	CORNING EXPRESS	NO	N/A	BOTH	40 / 520	NO
39	CPA	YES	64	BOTH	64 / 64	NO
40	DACOS 2	NO		BOTH	80 / 2400	YES QUOTED
41	DIMENSION 380	CAN BE	55	BOTH	55 / 55	NOT YET PUBLISH
42	DIMENSION 760	CAN BE	55	BOTH	55 / 110	NOT YET PUBLISH
43	GREINER 6-400	CAN BE	NO LIMIT	BOTH	30 / 900	YES QUOTED
44	GREINER 6-450	CAN BE	NO LIMIT	BOTH	30 / 900	YES QUOTED
45	TANDEM 2	CAN BE	NO LIMIT	BOTH	60 / 1800	YES QUOTED
46	TANDEM 3	CAN BE	NO LIMIT	BOTH	90 / 2700	YES QUOTED
47	GENESIS 21	NO		BOTH	50 / 1050	YES QUOTED
48	MONARCH	CAN BE	38	BOTH	38 / 722	YES
49	MONARCH PLUS 2	CAN BE	38	BOTH	76 / 1444	YES
50	EKTACHEM DT	NO		SEL	1 / 1	NOT YET PUBLISH
51	EKTACHEM 700	NO		SEL	40 / 1200	NO
52	PROGRESS	CAN BE	NO LIMIT	BOTH	/ 180	YES QUOTED
53	SPECIFIC	YES	NO LIMIT	BOTH	/ 180	NO
54	NOVA BIOMED 1+1	YES	40	PROF	40 /	NO
55	NOVA BIOMED 4+4	YES	40	PROF	40 /	NO
56	NOVA BIOMED 5+5	YES	40	PROF	40 /	NO
57	COBAS FARA	YES	28	PROF	/ 28	NO
58	COBAS MIRA	CAN BE	90 / 72	BOTH	/ 72	NO
59	ASSIST	NO		SEL	16 / 16	NO
60	CHEM 1	NO	NO LIMIT	BOTH	288 /	NO
61	RA-1000	NO		BOTH	30 / 100	YES QUOTED
62	RA-2X	NO		BOTH	30 / 100	YES QUOTED
63	RA-500	NO		BOTH	30 / 100	YES QUOTED
64	RA-XT	NO		BOTH	30 / 100	YES QUOTED
65	SMAC II	YES	NO LIMIT	PROF	144 /	NO
66	SRA 2000	YES	NO LIMIT	BOTH	144 /	NO
67	GEN PROFILER	BOTH	UNLIMITED	BOTH	20 /	NO
68	ULTROLAB 1	CAN BE	100		/ 1500	YES NOT YET PUB
69	VITALAB 200	NO		BOTH	12 /	NO

NO	INST	4.1	4.2a	4.2b	4.2c
1	ABBOTT VPS	EVERY RUN	AGENT CALIBRATORS	YES	1 / 2
2	PARALLEL	DAILY	SERUM BASED	YES	1 / 2
3	PERSPECTIVE	DAILY	SERUM BASED	YES	1 / 2
4	ENCORE II	EVERY RUN / 30 TESTS	SERUM	YES	1 / 16
5	SPIRIT	UNDER INVESTIGATION	EITHER	YES	1 / 3
6	HITACHI 704	DAILY REAGENT BLANK	EITHER	YES	1 / 5
7	HITACHI 705	DAILY REAGENT BLANK	EITHER	YES	1 / 5
8	HITACHI 737	DAILY REAGENT BLANK	EITHER	YES	1 / 5
9	EASY	MOST MONTHLY	SERUM	NO	2 / 2
10	EPOS	EACH BATCH	EITHER	YES	1 / 6
11	ERIS	MOST WEEKLY	EITHER	YES	1 / 10
12	EXSEL	AS FOR ERIS/EPOS	EITHER	YES	1 / 16
13	EXTRA	MOST WEEKLY	EITHER	YES	1 / 20
14	AUS021	MOST WEEKLY	EITHER	YES	1 / 11
15	AUS121	MOST WEEKLY	EITHER	YES	1 / 11
16	AUS031	MOST WEEKLY	EITHER	YES	1 / 11
17	AUS131	MOST WEEKLY	EITHER	YES	1 / 11
18	AUS041	MOST WEEKLY	EITHER	YES	1 / 11
19	AUS141	MOST WEEKLY	EITHER	YES	1 / 11
20	AUS061	MOST WEEKLY	EITHER	YES	1 / 11
21	AUS081	MOST WEEKLY	EITHER	YES	1 / 11
22	AS4	8 HOURS	EITHER	NO	2
23	AS8	8 HOURS	EITHER	NO	2
24	AS ENZYME	8 HOURS	EITHER	NO	2
25	AS LIPID	8 HOURS	EITHER	NO	2
26	MINI IDEAL	8 HOURS	EITHER	NO	2
27	AS IDEAL	8 HOURS	EITHER	NO	2
28	CX3	8 HOURS	EITHER	YES	2
29	CX4	UP TO 2 WEEKS	EITHER	YES	1 / 14
30	CX5	UP TO 2 WEEKS	EITHER	YES	1 / 16
31	CX7	UP TO 2 WEEKS	EITHER	YES	1 / 16
32	ASCA	REAGENT DEPENDANT	SERUM	YES	DEP ON CALIBRATOR
33	CHEMILYSER	DAILY	SERUM	YES	1 / 8
34	SYSTEM4	EACH BATCH	SERUM	YES	1 / 8
35	PRISMA II	VARIES	NONE RECOMMENDED	YES	1 / 2
36	CORNING 580	ONCE PER DAY	SERUM	YES	1 / 2
37	CORNING 570	ONCE/DAY	SERUM	YES	N/DA
38	CORNING EXPRESS	ONCE/DAY	SERUM	YES	N/DA
39	CPA	WEEKLY	SERUM	YES	0 / 6
40	DACOS 2	2 WEEKLY DEP ON CHEM	SERUM	YES	1 / 6
41	DIMENSION 380	3 MONTHS	EITHER	YES	3 / 5
42	DIMENSION 760	3 MONTHS	EITHER	YES	3 / 5
43	GREINER 8-400	2-3 MONTHS	SERUM	YES	1 / 6
44	GREINER 8-450	2-3 MONTHS	SERUM	YES	1 / 6
45	TANDEM 2	2-3 MONTHS	SERUM	YES	1 / 6
46	TANDEM 3	2-3 MONTHS	SERUM	YES	1 / 6
47	GENESIS 21	24 HOURS	EITHER	YES	1 / 5
48	MONARCH	8 HOURS-7 DAYS	EITHER	YES	1 / 6
49	MONARCH PLUS 2	8 HOURS-7 DAYS	EITHER	YES	1 / 6
50	EKTACHEM DT	90 DAYS	SERUM	KODAK CALIBRATORS	2 / 4
51	EKTACHEM 700	90 DAYS	SERUM	KODAK CALIBRATORS	2 / 4
52	PROGRESS	VARIES	EITHER	YES	1 / 6
53	SPECIFIC	VARIES	EITHER	YES	1 / 6
54	NOVA BIOMED 1+1	AUTOCAL	NOVA CALIBRANTS	NO	ALL INCLUDED IN PACK
55	NOVA BIOMED 4+4	AUTOCAL	NOVA CALIBRANTS	NO	ALL INCLUDED IN PACK
56	NOVA BIOMED 5+5	AUTOCAL	NOVA CALIBRANTS	NO	ALL INCLUDED IN PACK
57	COBAS FARA	VARIABLE	EITHER	YES	0 / 8
58	COBAS MIRA	VARIABLE	EITHER	YES	0 / 8
59	ASSIST	DAILY	SERUM	YES	1
60	CHEM 1	1-4 WEEKS	EITHER	YES	1
61	RA-1000	2 WEEKS	EITHER	YES	1 / 6
62	RA-2X	2 WEEKS	EITHER	YES	1 / 6
63	RA-500	2 WEEKS	SERUM	YES	1 / 6
64	RA-XT	2 WEEKS	EITHER	YES	1 / 6
65	SMAC II	96 SAMPLES	SERUM	YES	2
66	SRA 2000	SEE SMAC II/RA-1000	SERUM	YES	2
67	GEN PROFILER	WITH NEW REAGENTS	EITHER		1 / ??
68	ULTROLAB 1	N/DA	N/DA	N/DA	N/DA
69	VITALAB 200	VARIES	AQUEOUS	YES	1 / 4

NO	INST	5.1	5.2	5.3	5.4	6.1	6.2a	6.2b
1	ABBOTT VP8	YES	YES	YES		BY REPLCUP	NO U/E	NO U/E
2	PARALLEL	YES	YES	YES	BS 800	YES	40 MINS	22 MINS
3	PERSPECTIVE	YES	YES	YES	BS 800	YES	24 MINS	12 MINS
4	ENCORE II	YES	YES	YES	BS 800	YES	NO U/E	NO U/E
5	SPIRIT	WE BELIEVE	YES	WE BELIEVE	UNKNOWN	YES	25 MINS	15 MINS
6	HITACHI 704	YES	YES	YES	BS 800	YES	25 MINS	12 MINS
7	HITACHI 705	YES	YES	YES	BS 800	YES	25 MINS	13 MINS
8	HITACHI 737	YES	YES	YES	BS 800	YES	30 MINS	12 MINS
9	EASY	YES	YES	YES	? BS 4743	YES	ALWAYS ON	8 MINS
10	EPOS	YES	YES	YES	? BS 4743	NO U/E	NO U/E	NO U/E
11	ERIS	YES	YES	YES	? BS 4743	YES	15 MINS	11 MINS
12	EXSEL	YES	YES	YES	? BS 4743	YES	15 MINS	11 MINS
13	EXTRA	YES	YES	YES	? BS 4743	YES	15 MINS	11 MINS
14	AUS021	YES	YES	YES	? BS 4743	YES	1HR POW OF	18 MINS
15	AUS121	YES	YES	YES	? BS 4743	YES	1HR POW OF	18 MINS
16	AUS031	YES	YES	YES	? BS 4743	YES	1HR POW OF	18 MINS
17	AUS131	YES	YES	YES	? BS 4743	YES	1HR POW OF	18 MINS
18	AUS041	YES	YES	YES	? BS 4743	YES	1HR POW OF	18 MINS
19	AUS141	YES	YES	YES	? BS 4743	YES	1HR POW OF	18 MINS
20	AUS061	YES	YES	YES	? BS 4743	YES	1HR POW OF	18 MINS
21	AUS081	YES	YES	YES	? BS 4743	YES	1HR POW OF	18 MINS
22	AS4	YES	YES	YES		YES	ALWAYS ON	1 MIN
23	AS8	YES	YES	YES		YES	ALWAYS ON	1 MIN
24	AS ENZYME	YES	YES	YES		YES	ALWAYS ON	1 MIN
25	AS LIPID	YES	YES	YES		YES	ALWAYS ON	1 MIN
26	MINI IDEAL	YES	YES	YES		YES	ALWAYS ON	1 MIN
27	AS IDEAL	YES	YES	YES		YES	ALWAYS ON	1 MIN
28	CX3	YES	YES	YES		YES	ALWAYS ON	<1 MIN
29	CX4	YES	YES	YES		YES	ALWAYS ON	NO U/E
30	CX5	YES	YES	YES		YES	ALWAYS ON	<13 MINS
31	CX7	YES	YES	YES		YES	ALWAYS ON	<1 MIN
32	ASCA	YES	YES	NOT AVAIL	BS 5724	YES	NO U/E	NO U/E
33	CHEMILYSER	NOT QUOTED	YES	YES		NO	60 MIN	30 MIN
34	SYSTEM4	NOT QUOTED	YES	YES		BY REPLCUP	75 MINS	10-20 MINS
35	PRISMA II	YES	YES	YES		YES	25 MINS	15 MINS
36	CORNING 580	YES	YES	YES	TESTED JSI	YES	60 MINS	15 MINS
37	CORNING 570	YES	YES	YES	TESTED JSI	YES	15 MINS	5 MINS
38	CORNING EXPRESS	YES	YES	YES	IEC 601	YES	NO U/E	NO U/E
39	CPA	YES	YES	YES		YES	NO U/E	NO U/E
40	DACOS 2	YES	YES	YES		YES	32 MINS	12 MINS
41	DIMENSION 380	YES	UN DEVELOP	YES		YES	8 MINS	7 MINS
42	DIMENSION 760	YES	UN DEVELOP	YES		YES	8 MINS	7 MINS
43	GREINER 6-400	YES	YES	YES	? BS 800	YES	15 MINS	15 MINS
44	GREINER 6-450	YES	YES	YES	? BS 800	YES	12 MINS	12 MINS
45	TANDEM 2	YES	YES	YES	? BS 800	YES	12 MINS	12 MINS
46	TANDEM 3	YES	YES	YES	? BS 800	YES	12 MINS	12 MINS
47	GENESIS 21	YES	YES	YES	BS 5724	YES	13 MINS	13 MINS
48	MONARCH	YES	YES	YES	BS 5724	YES	6 MINS	6 MINS
49	MONARCH PLUS 2	YES	YES	YES	BS 5724	YES	6 MINS	6 MINS
50	EKTACHEM DT	YES	YES	YES		YES	ALWAYS ON	9 MINS
51	EKTACHEM 700	YES	YES	YES		YES	ALWAYS ON	10 MINS
52	PROGRESS	YES	YES	YES		YES	ALWAYS ON	9 MINS
53	SPECIFIC	YES	YES	YES		YES	ALWAYS ON	9 MINS
54	NOVA BIOMED 1;1	YES	YES	YES		YES	NO U/E	NO U/E
55	NOVA BIOMED 4+4	YES	YES	YES		YES	NO U/E	NO U/E
56	NOVA BIOMED 5+5	YES	YES	YES		YES	NO U/E	NO U/E
57	COBAS FARA	YES	YES	YES	BS 5724	YES	12 MINS	7 MINS
58	COBAS MIRA	YES	YES	YES	BS 5724	YES	12 MINS	7 MINS
59	ASSIST	YES	YES	YES		YES	NO U/E	NO U/E
60	CHEM 1	YES	YES	YES		YES	30 MINS	15 MINS
61	RA-1000	YES	YES	YES		YES	ALWAYS ON	3.5 MINS
62	RA-2X	YES	YES	YES		YES	ALWAYS ON	3.5 MINS
63	RA-500	YES	YES	YES		YES	NO U/E	NO U/E
64	RA-XT	YES	YES	YES		YES	ALWAYS ON	3.5 MIN
65	SMAC II	YES	YES	YES		YES	35 MINS	20 MINS
66	SRA 2000	YES	YES	YES		YES	ALWAYS ON	5+ MINS
67	GEN PROFILER	YES	NO	YES		YES	NO U/E	NO U/E
68	ULTROLAB 1	N/DA	YES	YES	N/DA	YES	N/DA	N/DA
69	VITALAB 200	YES	YES	? YES	BS800 4743	YES	NO U/E	NO U/E

NO	INST	7.1	7.2	7.3	7.4	7.5a	7.5b	7.5c	7.6
1	ABBOTT VPS		BENCH	1.5*1	80	2DY	2	INCL	N/DA
2	PARALLEL	P2*15,1*30	FLOOR	2.3*0.8++	1050	8DY	2	INCL	16
3	PERSPECTIVE	P1*30	FLOOR	2.0*1.5++	840	5DY	2	INCL	5
4	ENCORE II	P1*20A DE5-10L/DAY	FL+BE	2.0*1.5	263	1WK	2	INCL	32
5	SPIRIT	P1*13A	BENCH	2.0*1.5	98	4DY	2	INCL	0
6	HITACHI 704	P1*20A DE+DR	FLOOR	2*1	350	2WKS	2	INCL	12
7	HITACHI 705	P1*20A DE+DR	FLOOR	2*1	350	1WK	2	INCL	60
8	HITACHI 737	P1*30A DE+DR	FLOOR	3*1.5	600	2WKS	2	INCL	14
9	EASY		FLOOR	0.65qm	170	2DY	2	INCL	0
10	EPOS		BENCH	1sqm	140	2DY	2	INCL	1
11	ERIS	DE6.2L/HR	FLOOR	2.28qm	500	3DY	2	INCL	15
12	EXSEL	DE6.2L/HR	FL+BE	4.58qm	740	1WK	3	INCL	3
13	EXTRA	P6KV DE12.4L/HR	FLOOR	6.05qm	1100	1WK	3	INCL	0
14	AUS021	P4.5KV DE30L/HR+DR	FLOOR	2.8*3.2++	1185	1WK	3	INCL	0
15	AUS121	P4.5KV DE30L/HR+DR	FLOOR	2.6*3.2++	1185	1WK	3	INCL	1
16	AUS031	P6.0KV DE45L/HR+DR	FLOOR	3.2*3.2++	1585	1WK	3	INCL	0
17	AUS131	P6.0KV DE45L/HR+DR	FLOOR	3.2*3.2++	1585	1WK	3	INCL	0
18	AUS041	P7.0KV DE60L/HR+DR	FLOOR	3.9*3.2++	1685	1WK	3	INCL	0
19	AUS141	P7.0KV DE60L/HR+DR	FLOOR	3.9*3.2++	1685	1WK	3	INCL	1
20	AUS061	P11.0KV DE90L/HR+DR	FLOOR	3.2*3.2++	2586	1WK	3	INCL	0
21	AUS081	P14.0KV DE120L/HR+DR	FLOOR	3.9*3.2++	2785	1WK	3	INCL	0
22	AS4		BENCH	1.4*0.7	151	1WK	2	INCL	46
23	AS8		FLOOR	1.5*0.8	296	1WK	2	INCL	80
24	AS ENZYME		FLOOR	1.5*0.8	296	1WK	2	INCL	23
25	AS LIPID		FLOOR	1.5*0.8	296	1WK	2	INCL	8
26	MINI IDEAL		FLOOR	2.9*0.8	447	1WK	2	INCL	10
27	AS IDEAL		FLOOR	3.0*0.8	592	1WK	2	INCL	16
28	CX3		FLOOR	0.7*0.8	159	1WK	2	INCL	0
29	CX4		FLOOR	1.2*0.8	205	1WK	2	INCL	0
30	CX5		FLOOR	1.6*0.8	250	1WK	2	INCL	0
31	CX7		FLOOR	1.9*0.8	364	1WK	2	INCL	0
32	ASCA	DE+DR	BENCH		75	YES			0
33	CHEMILYSER		FLOOR	2.4*0.7	N/DA	5DY	5	INCL	2
34	SYSTEM4		BENCH	3.0*0.5	100	2DY	5	250	20
35	PRISMA II	P3PHASE D132L/HR+DE	FLOOR	12 SqM	700	1WK	2	INCL	1
36	CORNING 580	P2*15A DE+DR+TW+CA	FLOOR	2*1.5	450	1WK	2	INCL	0
37	CORNING 570	DE+TN <37	FLOOR	1*1	330	2-3DY	2	INCL	0
38	CORNING EXPRESS		BENCH	0.5*1.5		2-3DY	2	INCL	
39	CPA	P1*13A	BENCH	0.82*0.75	55	3DY	1	INCL	0
40	DACOS 2	P1*16A DE11.4L/HR	<32C FLOOR	1.1*1.1	338	5DY	2	INCL	10
41	DIMENSION 380	P1*13A	FLOOR	0.7*1.3	200	4DY	2	INCL	0
42	DIMENSION 760	P1*13A	FLOOR	0.7*2.6	400	4DY	3	INCL	0
43	GREINER 6-400	DE35L/HR+DR	FLOOR	3.5*2	515	1WK	2	INCL	11
44	GREINER 6-450	DE60L/HR+DR	FLOOR	3.5*2	515	1WK	2	INCL	0
45	TANDEM 2	DE120L/HR+DR	FLOOR	3.5*3.5	1030	1WK	2	INCL	0
46	TANDEM 3	DE180L/HR+DR	FLOOR	5.0*3.5	1545	1WK	2	INCL	0
47	GENESIS 21	DE7L/HR D11L/4HR	FLOOR	1.5*1.5	200	2.5DY	2	INCL	4
48	MONARCH		FLOOR	2.0*1.5	295	3DY	2	INCL	12
49	MONARCH PLUS 2	P3*13A	FL+BE	5.0*1.5	620	4DY	2	INCL	2
50	EKTACHEM DT	P2*13A	BENCH	2.0*1	22.9	1DY	1	INCL	26
51	EKTACHEM 700	P1*20A	FLOOR	2.5*1.5	500	1WK	2	INCL	3
52	PROGRESS		<32C BOTH	1.0*1.5	126	3DY	2	INCL	25
53	SPECIFIC		BOTH	1.0*1.5	120	3DY	2	INCL	4
54	NOVA BIONED 1+1		BENCH	0.8*0.6	82	1DY	N/AV	150	41
55	NOVA BIONED 4+4		BENCH	0.8*0.6	82	1DY	N/AV	150	2
56	NOVA BIONED 3+3		BENCH	0.8*0.6	82	1DY	N/AV	150	1
57	COBAS FARA	DE 5L/DY	BENCH	3.0*2.6	165	4DY	1	INCL	41
58	COBAS MIRA	DE 5L/DY	BENCH	1.3*1.2	80	4DY	1	INCL	39
59	ASSIST	P1*13A	BENCH	1.0*1.0	50	3DY	2	INCL	0
60	CHEM 1	P1*30A	FLOOR	3.0*2.0	700	1WK	2	INCL	4
61	RA-1000	P1*20A	BENCH	2.0*0.6	125	1WK	2	INCL	120
62	RA-2X	P2*20A	BENCH	4.0*0.6	280	2WK	2	INCL	7
63	RA-500	P1*20A	BENCH	4.0*0.6	125	1WK	2	INCL	14
64	RA-XT	P1*20A	FLOOR	4.0*1.0	140	2WK	2	INCL	5
65	SNAC II	P1*30A	FLOOR	3.0*3.0	900	3WK	2	INCL	24
66	SRA 2000	P1*30A	FL+BE	3.0*3.0	1200	4WK	2	INCL	14
67	GEM PROFILER	P4*13A	BENCH	3 Sq M	30	4DY	2	INCL	0
68	ULTROLAB 1		N/DA	1.5	40	1DY	2	N/DA	0
69	VITALAB 200		BENCH		37	1DY	1-3	INCL	0

NO	INST	8.1a	8.1b	8.2	8.3	8.4	8.5	8.6	
1	ABBOTT VPS	N/DA	N/DA	N/DA	NO	6MTH	NO	7YR	EM
2	PARALLEL	30 HR/YR	1 HR	4 LEVELS	9.3% SPARES	1YR	SPARES	7YR	EM
3	PERSPECTIVE	20 HR/YR	1 HR	4 LEVELS	8.3% NO	1YR	SPARES	7YR	EM
4	ENCORE II	4*0.5DY/YR	10 MINS	FULL 4368 PM 1836	8.8% NO	1YR	NO	>7YR	
5	SPIRIT	3*0.5DY/YR	30 MINS	FULL 3500	10% SPARES	1YR	SPARES	>7YR	
6	HITACHI 704	20 HR/YR	20 MINS	FULL 6360 3 LEVELS AVAIL	9.6% NO	1YR	NO	7YR	EM
7	HITACHI 705	20 HR/YR	20 MINS	FULL 6420 3 LEVELS AVAIL	NO	1YR	NO	7YR	EM
8	HITACHI 737	20 HR/YR	30 MINS	FULL 11580 3 LEVELS AVAIL	9% NO	1YR	NO	7YR	EM
9	EASY	N/DA	N/DA		SPARES	1YR	SPARES	>10YR	
10	EPOS	6 HR/YR			NO	1YR	SPARES	>10YR	
11	ERIS	13 HR/YR			SPARES	1YR	SPARES	>10YR	
12	EXSEL	20 HR/YR			SPARES	1YR	SPARES	>10YR	
13	EXTRA	26 HR/YR			SPARES	1YR	SPARES	>10YR	
14	AUS021	16 HR/YR	N/DA		SPARES	1YR	SPARES	>10YR	
15	AUS121	16 HR/YR			SPARES	1YR	SPARES	>10YR	
16	AUS031	16 HR/YR			SPARES	1YR	SPARES	>10YR	
17	AUS131	18 HR/YR			SPARES	1YR	SPARES	>10YR	
18	AUS041	20 HR/YR			SPARES	1YR	SPARES	>10YR	
19	AUS141	20 HR/YR			SPARES	1YR	SPARES	>10YR	
20	AUS061	24 HR/YR			SPARES	1YR	SPARES	>10YR	
21	AUS081	28 HR/YR			SPARES	1YR	SPARES	>10YR	
22	AS4	1 DY/YR	5 MINS	FULL 4652	SPARES	1YR	SPARES	7YR	EM
23	AS8	1 DY/YR	5 MINS	FULL 6496	SPARES	1YR	SPARES	7YR	EM
24	AS ENZYME	1 DY/YR	5 MINS	FULL 8094	SPARES	1YR	SPARES	7YR	EM
25	AS LIPID	1 DY/YR	5 MINS	FULL 7295	SPARES	1YR	SPARES	7YR	EM
26	MINI IDEAL	1 DY/YR	5 MINS	FULL 11947	SPARES	1YR	SPARES	7YR	EM
27	AS IDEAL	1 DY/YR	5 MINS	FULL 15389	SPARES	1YR	SPARES	7YR	EM
28	CX3	1 DY/YR	2 MINS	FULL 4000	SPARES	1YR	SPARES	7YR	EM
29	CX4	1 DY/YR	N/DA	N/DA	SPARES	1YR	SPARES	7YR	EM
30	CX5	1 DY/YR	N/DA	N/DA	SPARES	1YR	SPARES	7YR	EM
31	CX7	1 DY/YR	N/DA	N/DA	SPARES	1YR	SPARES	7YR	EM
32	ASCA	1 DY/YR	5 MINS		NO	1YR	NO	10YR	EM
33	CHEMILYSER	2 DY/YR	25 MINS	FULL 4500	NO	1YR	NO	10YR	
34	SYSTEM4	2 DY/YR	25 MINS	FULL 2500	NO	1YR	NO	10YR	
35	PRISMA II	40 HR/YR	30 MINS	FULL 14000 5 LEVELS AVAIL	SPARES	1YR	SPARES	10YR	
36	CORNING 580	26 HR	30 MINS	FULL 11200	SPARES	1YR	SPARES	7YR	EM
37	CORNING 570	N/DA	30 MINS	FULL 7500	SPARES	1YR	SPARES	7YR	EM
38	CORNING EXPRESS	16 HR/YR	15 MINS	FULL 3000	SPARES	1YR	SPARES	7YR	EM
39	CPA	12 HR/YR	2 MIN	FULL 2600	NO	ISE 1Y	NO	INDEF	
40	DACOS 2	20 HR/YR	12 MIN	FULL 8000 2 LEVELS AVAIL	NO	ISE 1Y	NO	INDEF	
41	DIMENSION 380	12 HR/YR	10 MINS		8% SPARES	1-2YR	SPARES	10YR	
42	DIMENSION 760	12 HR/YR	10 MINS		8% SPARES	1-2YR	SPARES	10YR	
43	GREINER 8-400	2 DY/YR		FULL 8200 4 LEVELS AVAIL	NO	1YR	NO	>10YR	
44	GREINER 8-450	2 DY/YR		FULL 8200 4 LEVELS AVAIL	NO	1YR	NO	>10YR	
45	TANDEN 2	2 DY/YR		FULL 12000 4 LEVELS AVAIL	NO	1YR	NO	>10YR	
46	TANDEN 3	2 DY/YR		FULL 18000 4 LEVELS AVAIL	NO	1YR	NO	>10YR	
47	GENESIS 21	2 DY/YR		FULL 4500 PM 550	SPARES	1YR	SPARES	10YR	
48	MONARCH	2 DY/YR	10 MINS	FULL 5500 PM 540	SPARES	1YR	SPARES	10YR	
49	MONARCH PLUS 2	4 DY/YR	20 MINS	FULL 12700 PM 1080	SPARES	1YR	SPARES	10YR	
50	EKTACHEM DT	4 HR/YR	5 MINS	FULL 680	SPARES	1YR	SPARES	10YR	EM
51	EKTACHEM 700	1 DY/YR	10 MINS	FULL 8500	SPARES	1YR	SPARES	10YR	EM
52	PROGRESS			PM 3.5% FULL 9.5%	NO	1YR	NO	>5YR	EM
53	SPECIFIC			FULL 9.5%	NO	1YR	NO	>5YR	EM
54	NOVA BIONED 1+1				8% NO	1YR	YES	>7YR	
55	NOVA BIONED 4+4				8% NO	1YR	YES	>7YR	
56	NOVA BIONED 5+5				8% NO	1YR	YES	>7YR	
57	COBAS FARA			FULL 4200	NO	1YR	NO	>7YR	EM
58	COBAS MIRA			FULL 2800	NO	1YR	NO	>7YR	EM
59	ASSIST	0	15 MIN	NO DATA	NO	1YR	NO	7YR	EM
60	CHEM 1	1 DY/YR	<5 MIN	FULL 9950	SPARES	1YR	SPARES	7YR	EM
61	RA-1000	0	15 MIN	FULL 3647	NO	1YR	NO	7YR	EM
62	RA-2X	0	2*15 MIN	FULL 8546	NO	1YR	NO	7YR	EM
63	RA-500	0	15 MIN	FULL 3647	NO	1YR	NO	7YR	EM
64	RA-XT	0	15 MIN	FULL 5968	NO	1YR	NO	7YR	EM
65	SMAC II	4 DY/YR	1 HR	FULL 17244	SPARES	1YR	SPARES	7YR	EM
66	SRA 2000	4 DY/YR	1 HR	FULL 20063	SPARES	1YR	SPARES	7YR	EM
67	GEM PROFILER	2*0.5DY	0		BASIC 8% FULL 10%	NO	NO	INDEFF	
68	ULTRALAB 1				10%	NO	N/DA	N/DA	
69	VITALAB 200	2 DY/YR	10 MINS	FULL 1500 PM 480	NO	1YR	NO	10YR	

NO	INST	9.1a	9.1b	9.2a	9.2b	9.3a	9.3b	9.4a	9.4b	9.4c
1	ABBOTT VPS	NO	YES	NO	YES	N/AV	78 PT/3120 RES	NO	NO	N/AV
2	PARALLEL	YES		YES		18000		YES	YES	
3	PERSPECTIVE	YES		YES		15000		YES	YES	
4	ENCORE II	NO	YES	NO	YES	30 R/CUP MAX 3500	384PT 22RES/PT 30 QC	YES	YES	
5	SPIRIT	YES	INCL	YES	INCL	200 PID	INCL	NO	YES	
6	HITACHI 704	YES	YES	YES	YES	400 PT 54R/PT 6*30QC	DEP ON DATA MANAGER	NO	YES	N/APP
7	HITACHI 705	YES	YES	NO	YES	QC 30 POINTS/30DAY	DEP ON DATA MANAGER	NO	YES	N/APP
8	HITACHI 737	YES	YES	YES	YES	600 PT QC 6*30/30DAY	DEP ON DATA MANAGER	NO	YES	N/APP
9	EASY	NO	NO	NO	N/AV	300 PT	VARIES	YES	NO	
10	EPDS	NO	YES	NO	YES	NO	VARIES	YES	YES	
11	ERIS	YES	YES	YES	YES	1274 PT 1 MTH QC	VARIES	YES	YES	
12	EXSEL	YES	YES	YES	YES	10000 PT 2 MTHS QC	VARIES	YES	YES	
13	EXTRA	YES	YES	YES	YES	10000 PT 2 MTHS QC	VARIES	YES	YES	
14	AU5021	YES	YES	YES	YES	4000 PT 2MTH QC	VARIES	YES	YES	
15	AU5121	YES	YES	YES	YES	4000 PT 2 MTHS QC	VARIES	YES	YES	
16	AU5031	YES	YES	YES	YES	4000 PT 2 MTHS QC	VARIES	YES	YES	
17	AU5131	YES	YES	YES	YES	4000 PT 2 MTHS QC	VARIES	YES	YES	
18	AU5041	YES	YES	YES	YES	4000 PT 2 MTHS QC	VARIES	YES	YES	
19	AU5141	YES	YES	YES	YES	4000 PT 2 MTHS QC	VARIES	YES	YES	
20	AU5061	YES	YES	YES	YES	4000 PT 2 MTHS QC	VARIES	YES	YES	
21	AU5081	YES	YES	YES	YES	4000 PT 2 MTHS QC	VARIES	YES	YES	
22	AS4	NO	YES	YES	N/APP	76	DEP ON DATA MANAGER	YES	YES	N/APP
23	AS8	NO	YES	YES	N/APP	76	DEP ON DATA MANAGER	YES	YES	N/APP
24	AS ENZYME	NO	YES	YES	N/APP	76	DEP ON DATA MANAGER	YES	YES	N/APP
25	AS LIPID	NO	YES	YES	N/APP	76	DEP ON DATA MANAGER	YES	YES	N/APP
26	MINI IDEAL	YES	N/APP	YES	N/APP	76	DEP ON DATA MANAGER	YES	YES	N/APP
27	AS IDEAL	YES	N/APP	YES	N/APP	76	DEP ON DATA MANAGER	YES	YES	N/APP
28	CX3	YES	N/APP	YES	N/APP	N/DA	DEP ON DATA MANAGER	YES	YES	N/APP
29	CX4	YES	N/APP	YES	N/APP	N/DA	DEP ON DATA MANAGER	YES	YES	N/APP
30	CX5	YES	N/APP	YES	N/APP	N/DA	DEP ON DATA MANAGER	YES	YES	N/APP
31	CX7	YES	N/APP	YES	N/APP	N/DA	DEP ON DATA MANAGER	YES	YES	N/APP
32	ASCA	YES	YES	YES	YES	UNLIMITED REMOV DISC		YES		
33	CHEMILYSER	YES	N/APP	YES	N/APP	480	N/APP	YES	NO	N/AV
34	SYSTEM4	NO	YES	NO	YES	N/DA	300	NO	NO	N/AV
35	PRISMA II	YES		YES		2500 NOW 20000LATE87		YES	YES	
36	CORNING 580	YES	YES	NO	YES	900	SYSTEM DEPEND	YES	YES	N/AV
37	CORNING 570	YES	YES	NO	YES	1000	YES	NO	YES	N/A
38	CORNING EXPRESS	YES	YES	YES	YES	360	YES	NO	YES	N/AV
39	CPA	YES	N/APP	YES	N/APP	128 PT 2560R/PT 30QC	DEP ON DATA MANAGER	YES	NO	N/AV
40	DACOS 2	YES	N/APP	YES	N/APP	1600P 80000R 6QC12WK	DEP ON DATA MANAGER	NO	NO	1700
41	DIMENSION 380	YES	YES	YES	YES	300 PT	5000 PT 40000 QC PT	NO	YES	
42	DIMENSION 760	YES	YES	YES	YES	300 PT	5000 PT 40000 QC PTS	NO	YES	
43	GREINER 6-400	NO	YES	YES	YES	1 DAY	4000 PT	YES	YES	
44	GREINER 6-450	NO	YES	YES	YES	1 DAY	4000 PT	YES	YES	
45	TANDEN 2	YES	YES	YES	YES	1 DAY	4000 PT	YES	YES	
46	TANDEN 3	YES	YES	YES	YES	1 DAY	4000 PT	YES	YES	
47	GENEBIS 21	YES	YES	NO	YES	QC 20 DAYS	1000 RECORDS	YES	YES	
48	MONARCH	NO	YES	NO	YES	NONE	20000 PID/RES QC30DY	YES	YES	
49	MONARCH PLUS 2	YES	YES	YES	YES	20000 PID/RES QC30DY	N/APP	YES	YES	
50	EKTACHEN DT	NO	N/AV	NO	N/AV	15 RESULTS	N/AVV	YES	NO	N/AV
51	EKTACHEN 700	YES	N/AV	YES	N/AV	400 PT RES 300 QC RE	N/AV	NO	YES	
52	PROGRESS	YES		YES		200 PID 1500R QC31DY		NO	YES	
53	SPECIFIC	YES		YES		84 PID 500R QC 31 DY		NO	YES	
54	NOVA BIONED 1+1	NO	N/AV	NO	N/AV	NO	N/AV			
55	NOVA BIONED 4+4	NO	N/AV	NO	N/AV	NO	N/AV			
56	NOVA BIONED 5+5	NO	N/AV	NO	N/AV	NO	N/AV			
57	COBAS FARA	YES		YES		VARIABLE				1500
58	COBAS MIRA	YES		YES		VARIABLE				1500
59	ASSIST	NO	NO	NO	NO	0	0	NO	NO	NO
60	CHEM 1	YES	STD	YES	STD	2000+	STD	YES	YES	
61	RA-1000	NO	YES	NO	YES	0	2000+	YES	YES	
62	RA-2X	YES	STD	YES	STD	2000+	STD	YES	YES	
63	RA-500	NO	YES	NO	YES	0	2000+	YES	YES	
64	RA-XT	YES	STD	YES	STD	2000+	STD	YES	YES	
65	SMAC II	YES	STD	YES	STD	5000	STD	YES	YES	
66	SRA 2000	YES	STD	YES	STD	5000	STD	YES	YES	
67	BEN PROFILER	YES	YES	YES	YES	10K FILES 40/RES/FIL		YES		
68	ULTROLAB 1	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA
69	VITALAB 200	YES	YES	NO	YES	12 PID/RES QC	INDEFF	YES	NO	

NO	INST	9.5a	9.5b	9.6a	9.6b	9.7a	9.7b	9.8a	9.8b
1	ABBOTT VPS	FIXED	YES	NO	YES	NO/NO/NO	NO	YES	N/AV
2	PARALLEL	USER DEFF		YES/YES		NO	YES	YES	VARIABLE
3	PERSPECTIVE	USER DEFF		YES/YES		NO	YES	YES	6000 MAX
4	ENCORE II	NO	YES	NO	YES/YES	NO	POSSIBLY	YES	VARIES
5	SPIRIT	FIXED	VARIABLE	YES/YES/??	YES/YES/??	?YES/YES/???	?YES/YES/???	YES	NOT KNOWN
6	HITACHI 704	FIXED	USER DEFF	YES/YES	YES/YES	NO/NO/NO	YES/YES/YES	YES	DEP ON REQUIRE
7	HITACHI 705	FIXED	USER DEFF	NO/NO	YES/YES	NO/NO/NO	YES/YES/YES	YES	DEP ON REQUIRE
8	HITACHI 737	FIXED	USER DEFF	YES/YES	YES/YES	YES/YES/YES	YES/YES/YES	YES	DEP ON REQUIRE
9	EASY	NO	YES	NO/NO	YES	NO/NO/NO	YES	YES	N/DA
10	EPOS	NO	YES	NO/NO	YES	NO/NO/NO	YES	YES	N/DA
11	ERIS	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
12	EXSEL	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
13	EXTRA	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
14	AU5021	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
15	AU5121	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
16	AU5031	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
17	AU5131	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
18	AU5041	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
19	AU5141	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
20	AU5061	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
21	AU5081	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	N/DA
22	AS4	NO	YES	NO	YES	NO	YES	YES	VARIES
23	AS8	NO	YES	NO	YES	NO	YES	YES	VARIES
24	AS ENZYME	NO	YES	NO	YES	NO	YES	YES	VARIES
25	AS LIPID	NO	YES	NO	YES	NO	YES	YES	VARIES
26	MINI IDEAL	NO	YES	NO	YES	YES	N/APP	YES	VARIES
27	AS IDEAL	NO	YES	NO	YES	YES	N/APP	YES	VARIES
28	CX3	NO	YES	NO	YES	NO	YES	YES	VARIES
29	CX4	NO	YES	NO	YES	YES	N/APP	YES	VARIES
30	CX5	NO	YES	NO	YES	YES	N/APP	YES	VARIES
31	CX7	NO	YES	NO	YES	YES	N/APP	YES	VARIES
32	ASCA	NO		YES/YES		NO		YES	NEGOTIABLE
33	CHEMILYSER	DEFF	N/AV	NO	NO	NO	NO	YES	N/AV
34	SYSTEM4	N/AV	FIXED	NO	NO	NO	NO	YES	N/AV
35	PRISMA II	YES		YES/YES		YES/YES/YES		YES	MAX '5000
36	CORNING 580	USER DEFF	USER DEFF	YES	YES	NO/NO/NO	YES	YES	SYSTEM DEPEND
37	CORNING 570	YES	YES	YES/YES	YES	NO/NO/NO	YES	YES	SYSTEM DEPEND
38	CORNING EXPRESS	N/DA	YES	YES/YES	YES	NO/NO/NO	YES	YES	SYSTEM DEPEND
39	CPA	FIXED	YES	NO	YES	NO/NO/NO	YES	YES	TBA
40	BACOS 2	USER DEFF	N/APP	YES/YES	NOT/APP	NO/NO/NO	YES	YES	TOTAL '1700
41	DIMENSION 380	FIXED	USER DEFF	NO/NO	YES/YES	NO/NO/NO	YES/YES/YES	YES	VARIES
42	DIMENSION 760	FIXED	USER DEFF	NO/NO	YES/YES	NO/NO/NO	YES/YES/YES	YES	VARIES
43	GREINER 6-400	YES	YES	NO/NO	YES/YES	NO/NO/NO	YES/YES/YES	YES	VARIES
44	GREINER 6-450	YES	YES	NO/NO	YES/YES	NO/NO/NO	YES/YES/YES	YES	VARIES
45	TANDEN 2	YES	YES	YES/YES	YES/YES	YES/YES/YES	YES/YES/YES	YES	VARIES
46	TANDEN 3	YES	YES	YES/YES	YES/YES	YES/YES/YES	YES/YES/YES	YES	VARIES
47	GENESIS 21	FIXED	USER DEFF	NO	YES	NO	YES	YES	SYSTEM DEPEND
48	MONARCH	FIXED	USER DEFF	NO	YES	NO	YES	YES	SYSTEM DEPEND
49	MONARCH PLUS 2	USER DEFF	USER DEFF	YES	YES	YES	YES	YES	SYSTEM DEPEND
50	EKTACHEN DT	FIXED	N/AV	NO/NO	N/AV	NO	N/AV	YES	VARIES
51	EKTACHEN 700	USER DEFF	N/AV	YES/NO	N/AV	NO	N/AV	YES	VARIES
52	PROGRESS	USER DEFF		YES/YES		YES		YES	VARIES
53	SPECIFIC	USER DEFF		YES/YES		YES		YES	VARIES
54	NOVA BIOMED 1+1								
55	NOVA BIOMED 4+4								
56	NOVA BIOMED 5+5								
57	COBAS FARA	FIXED		NO		NO		YES	VARIES
58	COBAS MIRA	FIXED		NO		NO		YES	VARIABLE
59	ASSIST	NO	NO	NO	NO	NO	NO	N/AV	N/AV
60	CHEM 1	YES	STD	YES	STD	NO	STD	YES	SOFTWARE COSTS
61	RA-1000	NO	YES	NO	YES	NO	ACP STATISTICS	YES	SOFTWARE COSTS
62	RA-2X	YES	STD	YES	STD	ACP STATISTICS	STD	YES	SOFTWARE COSTS
63	RA-500	NO	YES	NO	YES	NO	ACP STATISTICS	YES	SOFTWARE COSTS
64	RA-XT	YES	STD	YES	STD	ACP STATISTICS	STD	YES	SOFTWARE COSTS
65	SMAC II	YES	STD	YES	STD	NO	NO	YES	SOFTWARE COSTS
66	SRA 2000	YES	STD	YES	STD	NO	NO	YES	SOFTWARE COSTS
67	GEN PROFILER	USER DEFF	YES	YES/YES	YES	YES	YES	YES	
68	ULTRALAB 1	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA
69	VITALAB 200	FIXED	VARIABLE	NO/NO	YES/YES	NO/NO/NO	YES/YES/YES	YES	N/DA

NO	INST	10.1	10.2a	10.2b	10.3 U/E	10.3 LFT	10.3BONE	10.3CARD	10.3MISC	10.3 GLU	10.3 ALL
1	ABBOTT VPS	22000	N/AV	4000	NO U/E	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA
2	PARALLEL	217500	INCL	INCL	11.67	13.06	3.87	11.23	12.27	2.10	54.20
3	PERSPECTIVE	115000	INCL	INCL	9.28	16.07	4.71	14.28	12.35	1.40	56.69
4	ENCORE II	49500	N/A	2-5000	NO U/E	18.63	10.50	14.49	12.42	N/DA	NO U/E
5	SPIRIT	35000	INCL	INCL	23.45	17.31	13.30	18.44	25.13	N/DA	97.63
6	HITACHI 704	49000	10000	DEPENDS	21.40	25.45	14.28	13.29	31.58	2.73	96.97
7	HITACHI 705	APP35000	12300	DEPENDS	25.90	24.80	13.80	13.40	30.70	5.11	96.90
8	HITACHI 737	129000	INCL	INCL	20.56	22.11	12.53	12.68	20.67	4.46	81.62
9	EASY	37500	INCL	VARIES	189.00	375.00	196.00	189.00	249.50	22.00	930.90
10	EPOS	37500	N/AV	VARIES	NO U/E	11.5	6.20	5.70	14.33	2.00	NO U/E
11	ERIS	80000	16500	VARIES	10.78	15.48	10.44	7.65	17.28	3.42	56.67
12	EXSEL	150000	INCL	INCL	10.78	11.50	6.20	5.70	14.33	2.00	44.72
13	EXTRA	180000	INCL	INCL	10.78	15.48	10.44	7.65	17.28	3.42	56.60
14	AUS021	165000	10000	INCL	9.04	14.08	9.00	7.20	15.20	1.60	46.72
15	AUS121	165000	10000	INCL	9.04	14.08	9.00	7.20	15.20	1.60	46.72
16	AUS031	210000	10000	INCL	9.04	14.08	9.00	7.20	15.20	1.60	46.72
17	AUS131	210000	INCL	INCL	9.04	14.08	9.00	7.20	15.20	1.60	46.72
18	AUS041	250000	INCL	INCL	9.04	14.08	9.00	7.20	15.20	1.60	46.72
19	AUS141	250000	INCL	INCL	9.04	14.08	9.00	7.20	15.20	1.60	46.72
20	AUS061	320000	INCL	INCL	9.04	14.08	9.00	7.20	15.20	1.60	46.72
21	AUS081	370000	INCL	INCL	9.04	14.08	9.00	7.20	15.20	1.60	46.72
22	AS4	30000	INCL	3-15000	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
23	AS8	49950	INCL	INCL	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
24	AS ENZYME	65950	INCL	INCL	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
25	AS LIPID	59950	INCL	INCL	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
26	MINI IDEAL	99500	INCL	INCL	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
27	AS IDEAL	120000	INCL	INCL	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
28	CX3	39950	INCL	3-15000	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
29	CX4	APP67500		3-15000	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
30	CX5	APP72500	INCL	3-15000	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
31	CX7	APP95000	INCL	3-15000	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
32	ASCA	16000	N/A	INCL	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
33	CHEMILYSER	60000			6.00	N/DA	4.00	N/DA	N/DA	N/DA	N/DA
34	SYSTEM4	35000			N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA
35	PRISMA II	200000	N/AV YET	INCL	7.35	24.00	8.60	17.65	16.00	N/DA	73.60
36	CORNING 580	140000	INCL	INCL	24.00	28.00	16.00	25.00	12.00	N/DA	84.00
37	CORNING 570	75000	INCL	AP 15000	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA
38	CORNING EXPRESS	30000	N/A	SYS DEP	NO U/E	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA
39	CPA	30000	N/AV	VARIABLE	NO U/E	11.49	11.88	10.79	15.50	1.49	NO U/E
40	DACOS 2	85000	14800	VARIABLE	16.33	19.10	12.14	12.46	15.75	3.01	78.79
41	DIMENSION 380	50000	INCL	5000	14.91	80.00	30.00	40.00	40.00	5.00	184.91
42	DIMENSION 760	90000	INCL	INCL	14.91	80.00	30.00	40.00	40.00	5.00	184.91
43	GREINER 6-400	60000	9000	14000	12.90	17.36	4.59	9.98	22.77	0.95	62.81
44	GREINER 6-450	68000	9000	14000	12.90	17.36	4.59	9.98	22.77	0.95	62.81
45	TANDEN 2	130000	9000	INCL	12.90	17.36	4.59	9.98	22.77	0.95	62.81
46	TANDEN 3	180000	9000	INCL	12.90	17.36	4.59	9.98	22.77	0.95	62.81
47	GENESIS 21	47000	3000	5500	19.50	17.80	11.50	24.50	19.20	0.80	93.30
48	MONARCH	60000	5000	5500	9.60	11.60	5.50	24.50	19.50	0.80	63.50
49	MONARCH PLUS 2	136000	10000	INCL	9.60	11.60	5.50	24.50	11.50	0.80	63.50
50	EKTACHEN DT	9100	INCL	N/AP	216.60	343.00	N/AV	195.00	195.00	N/DA	985.60
51	EKTACHEN 700	112000	INCL	N/APP	84.00	134.00	64.00	70.00	70.00	14.00	436.00
52	PROGRESS	49500	5000	VARIES	7.0	5.32	2.96	2.10	7.82	0.77	23.00
53	SPECIFIC	31500	5000	VARIES	7.0	5.32	2.96	2.10	7.82	0.77	23.00
54	NOVA BIONED 1+1	9545	VARIOUS	N/DA	N/AV	*	*	*	*	*	*
55	NOVA BIONED 4+4	17990	VARIOUS	N/DA	N/AV	*	*	*	*	*	*
56	NOVA BIONED 5+5	14745	VARIOUS	N/DA	N/AV	*	*	*	*	*	*
57	COBAS FARA	51100	8500	VARIES	15.60	7.40	6.90	6.40	14.30	N/DA	50.60
58	COBAS MIRA	30700	8500	VARIES	15.60	9.40	6.90	7.40	14.30	N/DA	53.60
59	ASSIST	16000	N/AV	N/AV	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA
60	CHEM 1	160000	INCL	INCL	3.50	21.00	9.00	12.00	16.00	N/DA	61.50
61	RA-1000	40000	5000	6000	8.83	25.87	9.35	23.59	17.27	N/DA	84.91
62	RA-2X	90000	INCL	INCL	8.83	25.87	9.35	23.59	17.27	N/DA	84.91
63	RA-500	25000	N/AV	10000	NO U/E	25.87	9.35	23.59	17.27	N/DA	NO U/E
64	RA-XT	58000	8000	INCL	8.83	25.87	9.35	23.59	17.27	N/DA	84.91
65	SNAC II	160000	INCL	INCL	30.10	30.10	30.10	30.10	30.10	N/DA	30.10
66	SRA 2000	225000	INCL	INCL	30.10	30.10	30.10	30.10	30.10	N/DA	30.10
67	GEN PROFILER	39950	N/AV	INCL	NO U/E	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
68	ULTRALAB 1	N/DA	N/DA	N/DA	NO U/E	16.00	5.00	9.00	16.0	N/DA	N/DA
69	VITALAB 200	13773	3800	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA

NO	INST	10.4 U/E	10.4 LFT	10.4BONE	10.4CARD	10.4MISC	10.4 ALL	10.5a	10.5b	10.5c
1	ABBOTT VPS	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA
2	PARALLEL	0	0	0	0	0	0	1.8ML	42P	10ML 24HR
3	PERSPECTIVE	3.50	4.90	2.80	2.10	2.10	72.09	1.2ML	42P	10ML 24HR
4	ENCORE II	NO U/E	0.93	0.93	0.93	0.93	NO U/E	0.25ML	91P	10ML 10DAYS
5	SPIRIT	2.15	2.15	2.15	2.15	2.15	2.15	1.1ML	90P	10ML10DY/5ML1DY
6	HITACHI 704	1.25	1.25	1.25	1.25	1.25	1.25	0.30ML	98P	3ML 2DAYS
7	HITACHI 705	1.25	1.25	1.25	1.25	1.25	1.25	0.44ML	98P	3ML 2DAYS
8	HITACHI 737	1.25	1.25	1.25	1.25	1.25	1.25	0.22ML	98P	3ML 2DAYS
9	EASY	0	0	0	0	0	0	1ML	80P	1ML 1WK
10	EPDS	NO U/E	0	0	0	0	0	0.2ML	45P	5ML 1WK
11	ERIS	10.00	17.50	10.00	7.50	7.50	42.50	0.2ML	45P	5ML 1WK
12	EXSEL	10.00	0	0	0	0	10.00	0.3ML	45P	5ML 1WK
13	EXTRA	10.00	17.50	10.00	7.50	7.50	42.50	0.36ML	45P	5ML 1WK
14	AUS021	0	0	0	0	0	0	2ML	45P	5ML 1WK
15	AUS121	0	0	0	0	0	0	2ML	45P	5ML 1WK
16	AUS031	0	0	0	0	0	0	2ML	45P	5ML 1WK
17	AUS131	0	0	0	0	0	0	2ML	45P	5ML 1WK
18	AUS041	0	0	0	0	0	0	2ML	45P	5ML 1WK
19	AUS141	0	0	0	0	0	0	2ML	45P	5ML 1WK
20	AUS041	0	0	0	0	0	0	2ML	45P	5ML 1WK
21	AUS081	0	0	0	0	0	0	2ML	45P	5ML 1WK
22	AS4	0	0	0	0	0	0	N/AV	N/AV	N/AV
23	AS8	0	0	0	0	0	0	N/AV	N/AV	N/AV
24	AS ENZYME	0	0	0	0	0	0	N/AV	N/AV	N/AV
25	AS LIPID	0	0	0	0	0	0	N/AV	N/AV	N/AV
26	MINI IDEAL	0	0	0	0	0	0	N/AV	N/AV	N/AV
27	AS IDEAL	0	0	0	0	0	0	N/AV	N/AV	N/AV
28	CX3	0	0	0	0	0	0	N/AV	N/AV	N/AV
29	CX4	0	0	0	0	0	0	N/AV	N/AV	N/AV
30	CX5	0	0	0	0	0	0	N/AV	N/AV	N/AV
31	CX7	0	0	0	0	0	0	N/AV	N/AV	N/AV
32	ASCA	2.00	2.00	2.00	2.00	2.00	2.00	VARIES	VARIES	
33	CHEMILYSE	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	
34	SYSTEM	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA
35	PRISMA II	1.50	1.50	1.50	1.50	1.50	1.50	2ML	DEP	DEPENDS ON CAL
36	CORNING 580	0.50	0.50	0.50	0.50	0.50	0.50	5ML	100P	10ML 2DAYS
37	CORNING 570	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	5ML	100P	10ML 2DAYS
38	CORNING EXPRESS	NO U/E	2.00	2.00	2.00	2.00	2.00	1ML	100P	1ML 2DAYS
39	CPA	NO U/E	N/DA	N/DA	N/DA	N/DA	N/DA	0.12ML	22P	3ML 24HR
40	DACDS 2	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	0.82ML	22P	3ML 24HR
41	DIMENSION 380	6.40	6.40	6.40	6.40	6.40	6.40	0.74ML	AP270P	3*1ML 8HRS
42	DIMENSION 760	6.40	6.40	6.40	6.40	6.40	6.40	0.74ML	AP270P	3*1ML 8HRS
43	GREINER 6-400	1.96	1.96	1.52	0.86	0.86	5.92	<1 ML	VARIES	VARIES
44	GREINER 6-450	1.96	1.96	1.52	0.86	0.86	5.92	<1 ML	VARIES	VARIES
45	TANDEM 2	1.96	1.96	1.52	0.86	0.86	5.92	<2 ML	VARIES	VARIES
46	TANDEM 3	1.96	1.96	1.52	0.86	0.86	5.92	<2 ML	VARIES	VARIES
47	BEHESIS 21	0	0	0	0	0	0	0.70ML	20P	5ML 7DAYS
48	MONARCH	8.70	20.30	11.60	8.70	8.70	58.00	0.30ML	20P	5ML 7DAYS
49	MONARCH PLUS 2	8.70	20.30	11.60	8.70	8.70	58.00	0.30ML	20P	5ML 7DAYS
50	EKTACHEN DT	0	0	0	0	0	0	1.3ML	111P	3ML 1DAY
51	EKTACHEN 700	0	0	0	0	0	0	0.95ML	125P	3ML 1DAY
52	PROGRESS	3.00	14.00	8.00	6.00	6.00	35.00	N/DA	N/DA	N/DA
53	SPECIFIC	3.00	14.00	8.00	6.00	6.00	35.00	N/DA	N/DA	N/DA
54	NOVA BIONED 1+1	N/AV	*	*	*	*	*	INCL	INCL	INCL
55	NOVA BIONED 4+4	N/AV	*	*	*	*	*	INCL	INCL	INCL
56	NOVA BIONED 5+5	N/AV	*	*	*	*	*	INCL	INCL	INCL
57	CODAS FARA	15.00	25.50	15.00	11.50	15.00	82.00	0.3ML	VARIES	NO REC CALIB
58	CODAS NIRA	11.00	18.50	11.00	8.50	11.00	60.00	0.30ML	VARIES	NO REC CALIB
59	ASSIST	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA
60	CHEM 1	1.24	2.30	1.15	1.24	1.24	7.17	N/DA	N/DA	N/DA
61	RA-1000	9.05	16.64	9.05	7.16	7.16	49.06	1.2 14DY	85P	3ML 48HR
62	RA-2X	9.05	16.64	9.05	7.16	7.16	49.06	1.2 14DY	85P	3ML 48HR
63	RA-500	NO U/E	16.64	9.05	7.16	7.16	NO U/E	1.2 14DY	85P	3ML 48HR
64	RA-IT	9.05	16.64	9.05	7.16	7.16	49.06	1.2 14DY	85P	3ML 48HR
65	SHAC II	46.04	46.04	46.04	46.04	46.04	46.04	N/DA	N/DA	N/DA
66	SRA 2000	46.04	46.04	46.04	46.04	46.04	46.04	N/DA	N/DA	N/DA
67	GEN PROFILER	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV	N/AV
68	ULTROLAB 1	NO U/E	3.00	3.00	3.00	3.00	N/DA	N/DA	N/DA	N/DA
69	VITALAB 200	N/DA	N/DA	N/DA	N/DA	N/DA	N/DA	1.0ML	N/DA	5ML

NO	INST	Na C	Na W	Na B	K C	K W	K B	BICC	BICW	BICB	Cl C	Cl W	Cl B	UREC	UREW	UREB	CREC	CREW	CREB
1	ABBOTT VPS	N/AV			N/AV			N/AV			N/AV			7.6	2.9	3.4	271	3.0	1.3
2	PARALLEL	143	0.8	1.7	4.7	1.2	2.0	N/DA			N/DA			10.0	1.3	2.9	340	1.5	3.0
3	PERSPECTIVE	143	0.8	1.7	4.7	1.2	2.0	N/DA			N/DA			10.0	1.3	2.9	340	1.5	3.0
4	ENCORE II	N/AV			N/AV			N/AV			N/DA			6.7	2.0	3.5	106	2.8	4.1
5	SPIRIT	145	0.5	N/DA	4.1	1.2	N/DA	28.6	3.1	6.6	112	1.3	3.0	5.0	1.3	2.2	159	2.6	6.1
6	HITACHI 704	141	0.6	0.9	5.0	0.7	1.0	N/DA			102	0.6	1.1	8.3	1.1	1.7	300	1.4	1.9
7	HITACHI 705	144	1.1	0.9	4.3	1.2	1.3	N/DA			N/DA			26.0	1.0	1.3	336	1.5	2.1
8	HITACHI 737	145	0.6	0.7	5.0	0.7	1.0	N/DA			102	0.6	1.1	15.5	1.2	1.6	404	0.9	1.4
9	EASY	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
10	EPOS	N/AV			N/AV			N/AV			N/AV			8.9	1.1	N/DA	119	0.6	N/DA
11	ERIS	177	0.9	N/DA	4.5	0.9	N/DA	18.0	2.1	N/DA	106	0.5	N/DA	8.0	1.1	N/DA	107	1.1	N/DA
12	EXSEL	177	0.9	N/DA	4.5	0.9	N/DA	18.0	2.1	N/DA	106	0.5	N/DA	8.0	1.1	N/DA	107	1.1	N/DA
13	EXTRA	117	0.9	N/DA	4.5	0.9	N/DA	18.0	2.1	N/DA	106	0.5	N/DA	8.0	1.1	N/DA	107	1.1	N/DA
14	AU 5021	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
15	AU 5121	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
16	AU 5031	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
17	AU 5131	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
18	AU 5041	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
19	AU 5141	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
20	AU 5061	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
21	AU 5081	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
22	AS4	156	0.6	0.6	5.5	1.8	1.6	27.0	3.7	3.6	111	1.4	0.5	16.8	1.5	2.6	327	2.7	1.9
23	AS8	156	0.6	0.6	5.5	1.8	1.6	27.0	3.7	3.6	111	1.4	0.5	16.8	1.5	2.6	327	2.7	1.9
24	AS ENZYME	156	0.6	0.6	5.5	1.8	1.6	27.0	3.7	3.6	111	1.4	0.5	16.8	1.5	2.6	327	2.7	1.9
25	AS LIPID	156	0.6	0.6	5.5	1.8	1.6	27.0	3.7	3.6	111	1.4	0.5	16.8	1.5	2.6	327	2.7	1.9
26	AS MINI IDEAL	156	0.6	0.6	5.5	1.8	1.6	27.0	3.7	3.6	111	1.4	0.5	16.8	1.5	2.6	327	2.7	1.9
27	AS IDEAL	156	0.6	0.6	5.5	1.8	1.6	27.0	3.7	3.6	111	1.4	0.5	16.8	1.5	2.6	327	2.7	1.9
28	CX3	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
29	CX4	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
30	CX5	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
31	CX7	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
32	ASCA	N/AV			N/AV			N/DA			N/DA			N/DA			N/DA		
33	CHEMILYSER	139	1.0	1.2	4.9	0.8	1.0	27.0	1.6	2.2	N/DA			21.5	0.6	1.9	375	1.5	1.6
34	SYSTEM4	135	0.8	0.9	4.7	0.6	0.9	8.0	2.1	2.3	N/DA			8.8	1.7	1.9	143	0.9	1.0
35	PRISMA II	140	<1.0	1.0	4.0	<1.0	1.0	20.0	2.0	3.0	100	1.0	2.0	7.0	1.0	2.0	80	2.0	3.0
36	CORNING 580	138	0.5	0.6	4.1	0.7	0.5	N/DA			101	0.4	0.6	4.0	3.1	1.4	237	1.0	1.0
37	CORNING 570	N/DA			N/DA			N/DA			N/DA			N/DA	2.0	3.0	N/DA	2.5	3.0
38	CORNING EXPRESS/AV	N/AV			N/AV			N/DA			N/DA			N/DA			N/DA		
39	CPA	N/AV			N/AV			N/DA	3.0	N/DA	N/DA	2.0	4.0	N/DA	2.5	4.0	N/DA	2.0	3.5
40	DACOS 2	140	0.4	1.5	4.0	0.4	2.0	22.0	2.3	4.6	99	0.5	2.6	6.9	1.4	2.6	112	2.7	3.7
41	DIMENSION 380	151	1.7	2.5	4.3	2.0	2.3	N/DA			106	1.1	1.9	2.2	2.6	4.8	236	1.8	3.4
42	DIMENSION 760	151	1.7	2.5	4.3	2.0	2.3	N/DA			106	1.1	1.9	2.2	2.6	4.8	236	1.8	3.4
43	GREINER 6-400	138	0.5	0.8	4.3	1.0	1.6	27.3	3.1	N/DA	101	0.9	1.5	16.5	0.9	1.7	345	0.4	1.4
44	GREINER 6-450	138	0.5	0.8	4.3	1.0	1.6	27.3	3.1	N/DA	101	0.9	1.5	16.5	0.9	1.7	345	0.4	1.4
45	TANDEM 2	138	0.5	0.8	4.3	1.0	1.6	27.3	3.1	N/DA	101	0.9	1.5	16.5	0.9	1.7	345	0.4	1.4
46	TANDEM 3	138	0.5	0.8	4.3	1.0	1.6	27.3	3.1	N/DA	101	0.9	1.5	16.5	0.9	1.7	345	0.4	1.4
47	GENESIS 21	141	0.6	1.1	4.1	1.3	1.3	27.0	2.4	6.2	96	1.0	1.5	15.6	2.1	2.6	88	2.2	4.4
48	MONARCH	139	0.5	1.2	4.3	0.2	0.9	25.0	1.6	5.9	99	0.4	1.1	18.2	1.4	2.9	102	2.0	3.3
49	MONARCH PLUS 2	139	0.5	1.2	4.3	0.7	0.9	25.0	1.6	5.9	99	0.4	1.1	18.2	1.4	2.9	102	2.0	3.3
50	EKTACHEM DT	127	1.1	1.1	5.9	1.4	1.5	23.0	4.8	4.9	108	1.0	1.5	7.8	2.4	2.6	185	5.3	5.7
51	EKTACHEM 700	129	0.7	1.1	4.4	1.4	1.6	24.1	4.2	4.2	101	0.7	0.9	12.3	1.9	2.8	521	1.0	1.7
52	PROGRESS	140	0.4	0.8	4.6	1.4	1.3	N/DA			N/DA			8.1	1.3	2.5	120	1.5	3.0
53	SPECIFIC	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
54	NOVA 1+1	150	<0.7	<1.5	150	<0.7	<1.5	N/AV			N/AV			N/AV			N/AV		
55	NOVA 4+4	150	<0.7	<1.5	150	<0.7	<1.5	22.0	0.8	1.6	175	<0.7	<1.5	N/AV			N/AV		
56	NOVA 5+5	150	<0.7	<1.5	150	<0.7	<1.5	N/AV			160	<0.7	<1.5	N/AV			N/AV		
57	COBAS FARA	140	0.5	N/DA	5.0	0.5	N/DA	N/DA			N/DA			4.9	1.8	2.1	141	1.9	1.3
58	COBAS MIRA	140	0.5	N/DA	5.0	0.5	N/DA	N/DA			N/DA			N/DA			N/DA		
59	ASSIST	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
60	CHEM 1	142	0.6	N/DA	4.6	1.0	N/DA	28.0	2.0	N/DA	N/DA			7.1	N/DA	1.7	N/DA		
61	RA-1000	130	0.6	N/DA	4.5	1.1	N/DA	25.0	2.4	N/DA	103	0.7	N/DA	13.0	1.3	N/DA	452	0.5	N/DA
62	RA-2X	130	0.6	N/DA	4.5	1.1	N/DA	25.0	2.4	N/DA	103	0.7	N/DA	13.0	1.3	N/DA	452	0.5	N/DA
63	RA 500	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
64	RA-XI	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
65	SMAC II	149	0.6	N/DA	8.9	1.3	N/DA	23.0	1.5	N/DA	104	0.9	N/DA	10.5	1.2	N/DA	340	1.6	N/DA
66	SRA 2000	149	0.6	N/DA	8.9	1.3	N/DA	23.0	1.5	N/DA	104	0.9	N/DA	10.5	1.2	N/DA	340	1.6	N/DA
67	GEM-PROFILER	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
68	ULTROLAB I	N/AV			N/AV			N/AV			N/DA			N/DA			N/DA		
69	VITALAB 200	N/AV			N/AV			N/DA			N/DA			N/DA			N/DA		

NO	INST	TP C	TP W	TP B	ALBC	ALBW	ALBB	BILC	BILW	BILB	ALPC	ALPW	ALPB	HBDC	HBDM	HBDB	ASTC	ASTW	ASTB
1	ABBOTT VPS	68	1.0	0.8	42	0.8	0.9	84	1.6	2.3	218	1.7	3.8	249	1.3	2.1	110	1.3	2.9
2	PARALLEL	60	1.0	2.0	45	1.5	3.0	70	1.0	1.7	150	2.0	4.4	N/AV			80	2.5	4.9
3	PERSPECTIVE	60	1.0	2.0	45	1.5	3.0	70	1.0	1.7	150	2.0	4.4	N/AV			80	2.5	4.9
4	ENCORE II	60	1.2	2.7	46	1.2	2.4	104	1.1	2.5	157	1.0	2.1	170	1.2	2.1	83	1.2	4.5
5	SPIRIT	53	1.3	3.7	37	1.1	2.7	15	3.3	5.0	98	1.1	4.5	N/AV			43	2.4	5.6
6	HITACHI 704	55	0.8	1.0	36	1.0	1.2	39	0.5	1.3	490	0.8	1.5	N/DA			100	0.7	1.1
7	HITACHI 705	60	1.9	3.0	37	1.1	1.5	7.1	0.6	1.4	1235	0.6	1.4	250	1.2	2.2	471	1.0	2.0
8	HITACHI 737	63	0.8	1.2	42	1.1	2.1	74	0.8	1.3	504	0.8	1.1	N/DA			105	0.7	1.1
9	EASY	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
10	EPDS	44	1.0	N/DA	21	0.8	N/DA	20	2.7	N/DA	257	1.4	N/DA	69	1.2	N/DA	27	1.6	N/DA
11	ERIS	69	0.8	N/DA	26	1.1	N/DA	20	1.1	N/DA	286	0.7	N/DA	233	1.2	N/DA	44	1.1	N/DA
12	EXSEL	69	0.8	N/DA	26	1.1	N/DA	20	1.1	N/DA	286	0.7	N/DA	233	1.2	N/DA	44	1.1	N/DA
13	EXTRA	69	0.8	N/DA	26	1.1	N/DA	20	1.1	N/DA	286	0.7	N/DA	233	1.2	N/DA	44	1.1	N/DA
14	AU 5021	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
15	AU 5121	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
16	AU 5031	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
17	AU 5131	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
18	AU 5041	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
19	AU 5141	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
20	AU 5061	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
21	AU 5081	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
22	AS4	71	2.4	2.9	48	0.7	1.2	84	3.4	7.0	N/AV			N/AV			N/AV		
23	AS8	71	2.4	2.9	48	0.7	1.2	84	3.4	7.0	146	1.4	2.5	N/AV			97	3.0	2.7
24	AS ENZYME	71	2.4	2.9	48	0.7	1.2	84	3.4	7.0	146	1.4	2.5	N/AV			97	3.0	2.7
25	AS LIPID	71	2.4	2.9	48	0.7	1.2	84	3.4	7.0	146	1.4	2.5	N/AV			97	3.0	2.7
26	AS MINI IDEAL	71	2.4	2.9	48	0.7	1.2	84	3.4	7.0	146	1.4	2.5	N/AV			97	3.0	2.7
27	AS IDEAL	71	2.4	2.9	48	0.7	1.2	84	3.4	7.0	146	1.4	2.5	N/AV			97	3.0	2.7
28	CX3	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
29	CX4	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
30	CX5	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
31	CX7	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
32	ASCA	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
33	CHEMILYSER	65	1.0	1.2	32	1.3	1.5	23	0.9	1.3	175	1.0	1.4	N/AV			N/AV		
34	SYSTEM4	72	0.8	1.0	32	1.8	2.1	21	1.1	1.4	196	2.0	2.2	N/AV			N/AV		
35	PRISMA II	60	<1.0	1.0	30	<1.0	2.0	30	1.0	3.0	180	2.0	4.0	150	2.0	4.0	40	2.0	5.0
36	CORNING 580	46	0.7	0.6	30	1.8	1.8	9.1	1.2	1.2	73	2.4	2.9	N/DA			22	5.5	1.9
37	CORNING 570	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
38	CORNING EXPRESS	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
39	CPA	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
40	DACOS 2	62	0.7	1.4	36	1.1	1.5	35	2.8	4.3	84	1.8	3.6	N/DA			70	2.1	3.3
41	DIMENSION 380	67	1.5	2.0	37	2.9	2.9	32	0.9	3.4	N/DA			N/AV			186	3.0	4.4
42	DIMENSION 760	67	1.5	2.0	37	2.9	2.9	32	0.9	3.4	N/DA			N/AV			186	3.0	4.4
43	GREINER 6-400	71	0.5	1.5	39	0.6	1.8	83	0.4	1.4	217	1.1	2.4	581	2.6	3.2	149	1.5	2.5
44	GREINER 6-450	71	0.5	1.5	39	0.6	1.8	83	0.4	1.4	217	1.1	2.4	581	2.6	3.2	149	1.5	2.5
45	TANDEM 2	71	0.5	1.5	39	0.6	1.8	83	0.4	1.4	217	1.1	2.4	581	2.6	3.2	149	1.5	2.5
46	TANDEM 3	71	0.5	1.5	39	0.6	1.8	83	0.4	1.4	217	1.1	2.4	581	2.6	3.2	149	1.5	2.5
47	GENESIS 21	60	0.8	1.7	38	1.1	2.4	5	1.3	2.1	126	1.7	3.5	480	1.6	2.1	90	0.7	1.3
48	MONARCH	68	1.2	2.5	38	0.6	3.0	65	1.5	2.5	74	1.3	3.3	370	1.6	4.3	75	1.1	2.4
49	MONARCH PLUS 2	68	1.2	2.5	38	0.6	3.0	65	1.5	2.5	74	1.3	3.3	370	1.6	4.3	75	1.1	2.4
50	EKTACHEM DT	68	2.2	2.2	N/AV			33	5.3	7.4	74	2.5	4.8	N/AV			70	5.6	7.1
51	EKTACHEM 700	72	1.8	2.2	36	1.7	1.7	68	2.0	3.2	88	2.5	4.2	N/AV			202	1.2	2.8
52	PROGRESS	70	0.6	1.0	34	1.0	1.3	26	2.2	1.6	230	2.2	2.8	N/DA			63	1.2	2.2
53	SPECIFIC	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
54	NOVA 1+1	N/AV			N/AV			N/AV			N/AV			N/AV			N/AV		
55	NOVA 4+4	N/AV			N/AV			N/AV			N/AV			N/AV			N/AV		
56	NOVA 5+5	N/AV			N/AV			N/AV			N/AV			N/AV			N/AV		
57	COBAS FARA	56	0.8	1.2	62	1.6	1.8	34	0.9	2.9	114	0.4	1.2	263	1.0	1.7	169	1.7	2.1
58	COBAS MIRA	72	1.2	1.7	36	1.6	2.5	112	1.0	1.5	182	0.6	0.9	274	1.9	3.1	95	0.7	1.1
59	ABGIST	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
60	CHEM 1	N/DA			35	N/DA	1.4	N/DA			162	N/DA	1.6	N/AV			183	N/DA	1.7
61	RA-1000	75	1.0	N/DA	43	1.3	N/DA	85	2.0	N/DA	64	0.7	N/DA	N/AV			300	1.3	N/DA
62	RA-2X	75	1.0	N/DA	43	1.3	N/DA	85	2.0	N/DA	64	0.7	N/DA	N/AV			300	1.3	N/DA
63	RA-500	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
64	RA-XT	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
65	SMAC II	64	1.1	N/DA	38	1.3	N/DA	76	1.5	N/DA	153	1.3	N/DA	N/AV			200	1.3	N/DA
66	BRA 2000	64	1.1	N/DA	38	1.3	N/DA	76	1.5	N/DA	153	1.3	N/DA	N/AV			200	1.3	N/DA
67	BEN-PROFILER	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
68	ULTROLAB I	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
69	VITALAB 200	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		

NO	INST	ALTC	ALTM	ALTB	GGTC	GGTM	GGTB	LDHC	LDHM	LDHB	CK C	CK W	CK B	CALC	CALM	CALB	P04C	P04M	P04B
1	ABBOTT VPS	45	1.8	2.3	73	1.0	3.1	310	1.7	2.5	64	2.4	4.0	2.25	1.5	1.0	1.78	1.3	2.1
2	PARALLEL	80	3.0	6.0	40	3.0	8.0	N/AV			????	2.8	5.5	2.50	1.0	1.5	1.30	1.0	1.6
3	PERSPECTIVE	80	3.0	6.0	40	3.0	8.0	N/AV			N/DA			2.50	1.0	1.5	1.30	1.0	1.6
4	ENCORE II	76	0.9	5.2	89	1.5	6.0	230	1.2	2.1	83	1.4	3.8	2.75	1.3	3.4	2.97	1.3	3.8
5	SPIRIT	30	2.4	5.3	N/DA			370	1.7	4.9	148	1.8	5.5	2.35	2.0	4.5	2.20	1.4	3.9
6	HITACHI 704	55	1.3	2.2	104	1.0	1.3	329	1.1	1.9	360	0.7	1.5	2.30	0.9	1.4	N/DA		
7	HITACHI 705	513	0.5	1.8	840	0.6	1.3	N/DA			71	1.0	N/DA	4.07	1.5	2.4	1.77	2.3	1.9
8	HITACHI 737	128	0.7	1.1	178	0.9	1.2	498	1.2	1.5	365	0.7	1.5	2.63	0.9	1.9	1.50	1.2	1.7
9	EASY	N/DA			N/DA			N/DA			48	N/DA	3.0	N/DA			N/DA		
10	EPOS	30	1.9	N/DA	32	1.5	N/DA	148	1.3	N/DA	48	2.0	N/DA	1.33	0.7	N/DA	1.64	2.3	N/DA
11	ERIS	44	1.2	N/DA	62	0.5	N/DA	415	1.4	N/DA	48	2.0	N/DA	2.59	1.1	N/DA	1.12	1.8	N/DA
12	EXSEL	44	1.2	N/DA	62	0.5	N/DA	415	1.4	N/DA	48	2.0	N/DA	2.59	1.1	N/DA	1.12	1.8	N/DA
13	EXTRA	44	1.2	N/DA	62	0.5	N/DA	415	1.4	N/DA	48	2.0	N/DA	2.59	1.1	N/DA	1.12	1.8	N/DA
14	AU 5021	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
15	AU 5121	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
16	AU 5031	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
17	AU 5131	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
18	AU 5041	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
19	AU 5141	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
20	AU 5061	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
21	AU 5081	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
22	AS4	N/AV			N/AV			N/AV			N/AV			3.30	1.3	1.5	1.94	1.5	N/DA
23	AS8	95	3.2	3.7	110	2.7	3.9	306	1.6	2.7	148	2.0	2.3	3.30	1.3	1.5	1.94	1.5	N/DA
24	AS ENZYME	95	3.2	3.7	110	2.7	3.9	306	1.6	2.7	148	2.0	2.3	3.30	1.3	1.5	1.94	1.5	N/DA
25	AS LIPID	95	3.2	3.7	110	2.7	3.9	306	1.6	2.7	148	2.0	2.3	3.30	1.3	1.5	1.94	1.5	N/DA
26	AS MINI IDEAL	95	3.2	3.7	110	2.7	3.9	306	1.6	2.7	148	2.0	2.3	3.30	1.3	1.5	1.94	1.5	N/DA
27	AS IDEAL	95	3.2	3.7	110	2.7	3.9	306	1.6	2.7	148	2.0	2.3	3.30	1.3	1.5	1.94	1.5	N/DA
28	CX3	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
29	CX4	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
30	CX5	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
31	CX7	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
32	ASCA	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
33	CHEMILYSER	N/AV			56	1.5	1.5	N/AV			N/DA			2.40	1.3	1.5	1.05	0.8	1.0
34	SYSTEM4	N/AV			56	1.3	1.6	N/AV			N/DA			3.02	0.9	1.1	1.02	0.8	1.1
35	PRISMA II	40	2.0	5.0	60	2.0	5.0	300	2.0	4.0	150	2.5	3.0	2.00	1.0	2.0	1.00	1.0	3.0
36	S80 ALLIANCE	18	9.6	5.1	18	4.8	2.4	120	3.2	1.4	135	1.5	1.6	1.86	0.7	1.1	N/DA	1.0	2.0
37	500	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
38	CORNING EXPRESS	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
39	CPA	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
40	DACOS 2	108	1.6	4.6	152	1.1	2.3	682	0.8	1.0	177	1.2	2.0	2.60	0.9	2.4	1.26	0.8	1.7
41	DIMENSION 380	68	3.1	4.9	28	5.0	6.9	355	1.4	3.3	100	1.4	1.7	N/DA			1.21	1.3	3.6
42	DIMENSION 760	68	3.1	4.9	28	5.0	6.9	355	1.4	3.3	100	1.4	1.7	N/DA			1.21	1.3	3.6
43	6-400	59	2.8	4.9	140	0.9	1.6	240	1.5	2.0	275	1.0	5.1	2.62	0.3	1.7	1.03	0.8	2.4
44	6-450	59	2.8	4.9	140	0.9	1.6	240	1.5	2.0	275	1.0	5.1	2.62	0.3	1.7	1.03	0.8	2.4
45	TANDEM 2	59	2.8	4.9	140	0.9	1.6	240	1.5	2.0	275	1.0	5.1	2.62	0.3	1.7	1.03	0.8	2.4
46	TANDEM 3	59	2.8	4.9	140	0.9	1.6	240	1.5	2.0	275	1.0	5.1	2.62	0.3	1.7	1.03	0.8	2.4
47	GENESIS 21	89	0.7	1.3	63	1.3	2.9	480	1.6	2.1	94	1.7	3.4	2.24	0.9	2.0	0.65	0.9	1.6
48	MONARCH	76	1.2	2.3	69	0.9	2.5	380	1.7	4.2	121	1.3	3.1	2.42	1.4	1.7	1.17	1.4	2.0
49	MONARCH PLUS 2	76	1.2	2.3	69	0.9	2.5	380	1.7	4.2	121	1.3	3.1	2.42	1.4	1.7	1.17	1.4	2.0
50	EKTACHEM DT	71	4.3	4.6	90	2.2	2.3	649	0.8	2.9	175	1.8	3.0	N/AV			N/AV		
51	EKTACHEM 700	184	1.0	2.8	89	1.7	2.7	489	2.6	3.2	108	4.1	8.2	2.35	0.9	1.3	1.08	2.1	2.1
52	PROGRESS	40	1.5	3.0	50	1.8	2.4	81	2.7	3.0	N/DA			2.26	1.2	1.1	1.20	1.2	2.0
53	SPECIFIC	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
54	NOVA 1+1	N/AV			N/AV			N/AV			N/AV			N/AV			N/AV		
55	NOVA 4+4	N/AV			N/AV			N/AV			N/AV			N/AV			N/AV		
56	NOVA 5+5	N/AV			N/AV			N/AV			N/AV			N/AV			N/AV		
57	COBAS FARA	142	1.6	2.1	77	0.9	1.8	440	1.2	1.7	N/DA			2.49	0.8	1.4	2.50	1.2	2.8
58	COBAS MIRA	97	0.5	0.8	92	0.9	1.5	271	1.9	3.1	N/DA			2.50	0.9	1.5	2.40	2.0	3.1
59	ASSIST	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
60	CHEM 1	N/DA			N/DA			130	N/DA	1.6	N/DA			N/DA			N/DA		
61	RA-1000	300	N/DA	1.3	108	N/DA	1.0	N/AV			N/DA			2.25	N/DA	1.2	N/AV		
62	RA-2X	300	N/DA	1.3	108	N/DA	1.0	N/AV			N/DA			2.25	N/DA	1.2	N/AV		
63	RA-500	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
64	RA-XT	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
65	SMAC II	38	3.8	N/DA	65	4.3	N/DA	422	2.3	N/DA	N/DA			2.60	0.9	N/DA	1.40	1.4	N/DA
66	SRA 2000	38	3.8	N/DA	65	4.3	N/DA	422	2.3	N/DA	N/DA			2.60	0.9	N/DA	1.40	1.4	N/DA
67	GEM-PROFILER	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
68	ULTRALAB I	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		
69	VITALAB 200	N/DA			N/DA			N/DA			N/DA			N/DA			N/DA		

NO	INST	CHOC	CHOW	CHOB	TG C	TG B	TG W	URAC	URAM	URAB	GLUC	GLUM	GLUB
1	ABBOTT VPS	2.3	1.3	2.7	0.76	1.1	4.5	654	0.6	0.6	13.8	3.2	4.4
2	PARALLEL	4.0	1.5	2.6	N/AV			370	1.5	3.0	????	1.0	3.5
3	PERSPECTIVE	4.0	1.5	2.6	????	2.5	4.1	370	1.5	3.0	????	1.0	3.5
4	ENCORE II	10.2	1.2	3.8	3.69	0.8	4.2	570	1.8	1.9	15.6	0.6	2.4
5	SPIRIT	3.3	1.0	3.2	N/DA			360	1.2	N/DA	15.8	1.0	2.3
6	HITACHI 704	2.8	1.0	2.0	0.85	0.6	1.5	280	0.7	1.6	N/DA		
7	HITACHI 705	8.2	0.5	1.6	3.44	1.1	1.8	539	0.6	1.9	5.6	0.6	N/DA
8	HITACHI 737	4.6	0.9	1.1	1.79	1.0	1.2	625	1.0	1.4	8.3	1.3	1.2
9	EASY	N/DA			N/DA			N/DA			10.0	N/DA	1.5
10	EPOS	5.0	0.5	N/DA	0.86	2.6	N/DA	455	0.8	N/DA	10.0	1.0	N/DA
11	ERIS	2.4	0.6	N/DA	1.50	0.9	N/DA	458	1.2	N/DA	10.0	0.9	N/DA
12	EXSEL	2.4	0.6	N/DA	1.50	0.9	N/DA	458	1.2	N/DA	10.0	1.0	N/DA
13	EXTRA	2.4	0.6	N/DA	1.50	0.9	N/DA	458	1.2	N/DA	10.0	0.9	N/DA
14	AU 5021	N/DA			N/DA			N/DA					N/DA
15	AU 5121	N/DA			N/DA			N/DA					N/DA
16	AU 5031	N/DA			N/DA			N/DA					N/DA
17	AU 5131	N/DA			N/DA			N/DA					N/DA
18	AU 5041	N/DA			N/DA			N/DA					N/DA
19	AU 5141	N/DA			N/DA			N/DA					N/DA
20	AU 5061	N/DA			N/DA			N/DA					N/DA
21	AU 5081	N/DA			N/DA			N/DA					N/DA
22	AS4	N/AV			N/AV			N/AV			4.3	1.2	1.8
23	ASB	5.0	2.6	N/DA	1.90	3.0	N/DA	510	1.9	N/DA	4.3	1.2	1.8
24	AS ENZYME	5.0	2.6	N/DA	1.90	3.0	N/DA	510	1.9	N/DA	4.3	1.2	1.8
25	AS LIPID	5.0	2.6	N/DA	1.90	3.0	N/DA	510	1.9	N/DA	4.3	1.2	1.8
26	AS MINI IDEAL	5.0	2.6	N/DA	1.90	3.0	N/DA	510	1.9	N/DA	4.3	1.2	1.8
27	AS IDEAL	5.0	2.6	N/DA	1.90	3.0	N/DA	510	1.9	N/DA	4.3	1.2	1.8
28	CX3	N/DA			N/DA			N/DA					N/DA
29	CX4	N/DA			N/DA			N/DA					N/DA
30	CX5	N/DA			N/DA			N/DA					N/DA
31	CX7	N/DA			N/DA			N/DA					N/DA
32	ASCA	N/DA			N/DA			N/DA					N/DA
33	CHEMILYSER	2.2	1.1	1.4	N/AV			460	2.0	2.3	N/DA		
34	SYSTEM4	1.9	1.2	1.5	N/AV			440	2.1	2.2	10.9	0.5	N/DA
35	PRISMA II	4.0	<1.0	1.0	1.00	<1.0	3.0	400	1.0	2.0	5.5	1.5	2.0
36	CORNING 580	3.0	1.5	1.2	0.65	1.5	4.3	237	0.7	1.1	4.3	0.7	1.7
37	CORNING 570	N/DA			N/DA			N/DA					N/DA
38	CORNING EXPRESS	N/DA			N/DA			N/DA					N/DA
39	CFA	N/DA			N/DA			N/DA					N/DA
40	DACOS 2	4.9	1.0	1.9	0.77	1.0	1.9	355	0.8	2.5	8.3	0.8	1.3
41	DIMENSION 380	N/DA			N/DA			247	3.0	4.3	5.1	2.0	3.4
42	DIMENSION 760	N/DA			N/DA			247	3.0	4.3	5.1	2.0	3.4
43	6-400	4.7	1.3	2.9	2.32	1.7	1.7	420	0.7	3.5	12.8	1.4	1.7
44	6-450	4.7	1.3	2.9	2.32	1.7	1.7	420	0.7	3.5	12.8	1.4	1.7
45	TANDEM 2	4.7	1.3	2.9	2.32	1.7	1.7	420	0.7	3.5	12.8	1.4	1.7
46	TANDEM 3	4.7	1.3	2.9	2.32	1.7	1.7	420	0.7	3.5	12.8	1.4	1.7
47	GENESIS 21	4.3	0.9	1.7	0.95	2.8	5.6	226	1.6	2.4	11.1	1.8	2.7
48	MONARCH	4.8	1.3	2.4	2.20	1.8	3.7	201	1.1	2.5	4.1	1.1	2.6
49	MONARCH PLUS 2	4.8	1.3	2.4	2.20	1.8	3.7	201	1.1	2.5	4.1	1.1	2.6
50	EKTACHEM DT	5.2	2.2	3.4	2.13	1.8	2.1	586	1.2	1.3	4.3	1.0	1.0
51	EKTACHEM 700	3.2	1.6	3.0	2.66	0.9	1.6	274	1.3	2.0	5.1	1.2	1.3
52	PROGRESS	4.8	0.9	1.5	0.96	2.5	4.0	213	0.9	1.5	5.0	0.8	1.5
53	SPECIFIC	N/DA			N/DA			N/DA					N/DA
54	NOVA 1+1	N/AV			N/AV			N/AV					N/AV
55	NOVA 4+4	N/AV			N/AV			N/AV					N/AV
56	NOVA 5+5	N/AV			N/AV			N/AV					N/AV
57	COBAS FARA	6.5	0.8	1.2	2.50	1.8	2.6	479	1.9	1.4	N/DA		
58	COBAS NIRA	6.4	0.9	1.2	2.49	2.2	3.4	400	1.3	2.0	N/DA		
59	ASSIST	N/DA			N/DA			N/DA					N/DA
60	CHEM 1	N/DA			N/DA			N/DA					N/DA
61	RA-1000	1.8	N/DA	1.9	3.00	N/DA	1.2	150	N/DA	1.5	N/DA		
62	RA-2X	1.8	N/DA	1.9	3.00	N/DA	1.2	150	N/DA	1.5	N/DA		
63	RA-500	N/DA			N/DA			N/DA					N/DA
64	RA-XT	N/DA			N/DA			N/DA					N/DA
65	SNAC II	3.8	1.2	N/DA	N/DA			400	2.1	N/DA	N/DA		
66	SRA 2000	3.8	1.2	N/DA	N/DA			400	2.1	N/DA	N/DA		
67	GEN-PROFILER	N/DA			N/DA			N/DA					N/DA
68	ULTROLAB I	N/DA			N/DA			N/DA					N/DA
69	VITALAB 200	N/DA			N/DA			N/DA					N/DA

Acknowledgements

This work would not have been possible without the generous help and co-operation of the companies manufacturing or marketing the analysers included in this review.

References and evaluations

Some of the instruments have been subject to DHSS and other evaluations. The following reports listed by instrument entry number in the data-base are available and can provide more detailed information.

ESCHLE Code	:	<i>Health Equipment Information</i> (No. 140, April 1985).
1 Abbott VPS	:	DHSS Evaluation No. STB 3A/85/31.
7 Hitachi 705	:	DHSS Evaluation No. STB 3A/A025.
11 ERIS	:	DHSS Evaluation No. STB 3A/84/25 : Callaghan, S. G. <i>et al.</i> , <i>Journal</i> <i>of Automatic Chemistry</i> , 7 , 90– 94, 1985.
28–31 CX3-7	:	DHSS Evaluation No. A004 1980 and DHSS Evaluation. Update No. STB 3A/85/32.
33 Chemilyser	:	DHSS Evaluation No. STB 3A/A021.
40 Dacos	:	DHSS Evaluation No. STB 3A/84/26.
43 Greiner G400	:	G300 evaluated by Scottish Home and Health Department: Health Equipment Bulletin, 40/83.
54 Nova 1 + 1	:	DHSS Evaluation No. STB 3A/85/9.
61 RA 1000	:	DHSS Evaluation No. STB 3A/A024.
65 SMAC II	:	SMAC I DHSS Evaluation 1974.

Reference

FYFFE, J. A., A review of large biochemistry analysers, 1985. *Communications in Laboratory Medicine*, **1**, 118–132.

'CHEMICAL SENSORS CLUB NEWS'

The eighth issue of *CSC News* (orders to J. A. Brown, 87 Gower Street, London WC1E 6AA) includes:

The pocket biosensor arrives; Analyticon: Gas and vapour sensors; Sensor research at Durham; Japanese sensor newsletter; Eurosensors 1987; Club database; Biotechnology Equipment Unit; School on Process Analysis.

ANALYTICA 88

To be held from 19 to 22 April 1988 in München, FR Germany

Analytica is a trade fair combined with an international conference – the conference this year being 'Biochemical Analytics'.

About a third of the companies participating in ANALYTICA – about 600 firms are expected to register – come from outside FR Germany. It is anticipated that the largest numbers of exhibitors from abroad will be from the UK (37 companies), the USA (31), Switzerland (18), France (9) and Italy (10).

In addition to individual exhibitors, France, the UK, Israel and the USA will also have official joint presentations. The UK's joint presentation includes 18 exhibitors; the exact numbers of exhibitors in the presentations of France, Israel and USA are not yet known.

The Conference

The scientific programme of the 11th International Conference on Biochemical Analysis, 'Biochemical Analytics 88' (chaired by Professor Dr Helmut Greiling, Aachen), will again consist of three parts: symposia, poster exhibition and ANALYTICA Forum Munich.

In 1986 the conference attracted some 1250 participants. The number of visitors is expected to be far higher in 1988. Some 3200 professionals from 40 countries have expressed an interest in the conference.

The symposia will deal with the latest analytical developments both from the point of view of methodology and of the various fields of application. Special attention will be paid to problems of analytics, such as water analytics, including environmental biotechnology, as well as modern methods of molecular biology and gene technology.

In addition to the trade fair, the ANALYTICA Forum Munich provides the exhibiting industry with the opportunity of giving lectures in which companies can present and discuss their latest developments in industrial instrumentation and methodology.

For further information contact: Münchener Messe- und Ausstellungsgesellschaft mbH, Postfach 12 10 09, D-8000 Munich 12, FR Germany. Tel.: (89) 5107-0, Telex 5 212 086 ameg d.