



# LIS vs PAS

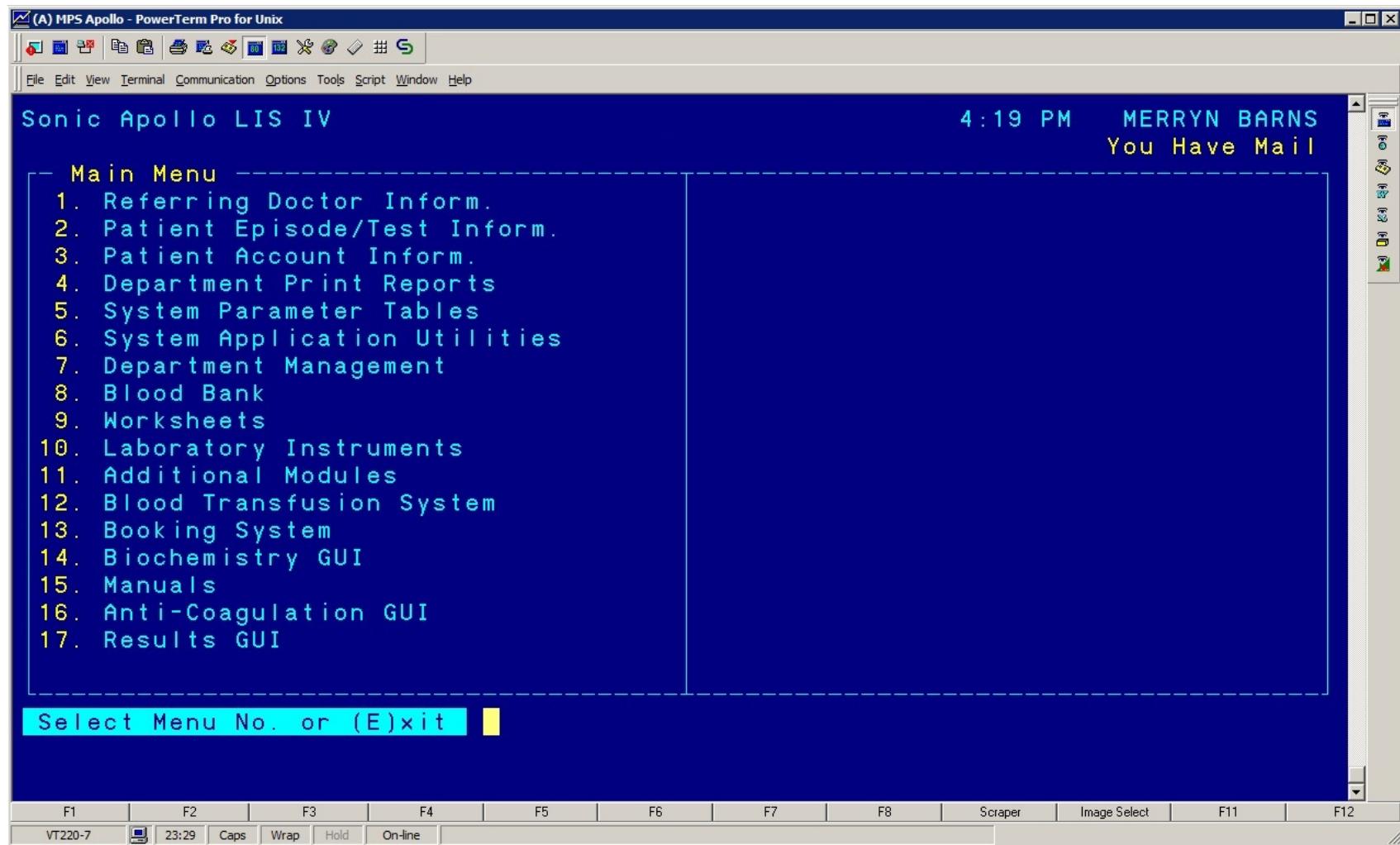
A case study



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# LIS: Laboratory Information System



# PAS: Patient Administration System

Screenshot of the ibaPAS Inpatient System interface showing current patient search results.

URL: [http://ibapas/cab/html/rManagerClin/inpatient\\_tabs.](http://ibapas/cab/html/rManagerClin/inpatient_tabs.)

Search Results:

Patient	Type	Ward	Hospital	Unit	Adms.Date Adms.Time	Disc.Date Disc.Time	Ext.	Disc.Dest. /Condition	U/R Number
[REDACTED]	IP	4N /457P	Malvern Campus Inpatient & Day Care	Colorectal Surgery	08 May 2018 17:48:59		N-8469 P-8457	Stable D/C SAT 18 May 2018 13:52 [V, P] Ambulant Op Date: 10 May 2018 Days since op: 8	5631289
[REDACTED]	IP	4N /454P	Malvern Campus Inpatient & Day Care	Colorectal Surgery	17 May 2018 12:07:14		N-8469 P-8454	Stable IVAB 18 May 2018 13:50 [V, P] Ambulant Op Date: 17 May 2018 Days since op: 1	1079000
[REDACTED]	IP	CathLabPOS	Malvern Campus Inpatient & Day Care	Urology	16 May 2018 09:43:18	16 May 2018 14:47:06		Home	0603368
[REDACTED]	EMG	MAL	Malvern Campus Inpatient & Day Care		15 May 2018 20:54:44	17 May 2018 12:22:57			1298062
[REDACTED]	IP	2C /201P	Malvern Campus Inpatient & Day Care	Urology	15 May 2018 20:54:59	17 May 2018 12:22:57	N-8268	Home	1298062
[REDACTED]	IP	MLO	Malvern Campus Inpatient & Day Care	Gastroenterology	18 May 2018 08:15:03	18 May 2018 10:18:30	N-1821	Home	3083985

Navigation:

- << Previous
- Next >>

Page URL: <http://ibapas/cab/cgi-bin/patweb98.pbl?&reportno=01&template=001&urnumber=+3723801&admissno=+3176229>

# Background

- Specimen received for pre-op G&H at 18:30
- Redo MVR 08:00 the next day
- New patient – never seen before
- Public holiday – skeleton staff
- Analyser down – BioRad backup technique
- Positive antibody screen



**BIO-RAD**Set ID-DiaPanel: 45161.33.x (Jap: 4516.33.xx)  
Set ID-DiaPanel P: 45171.33.x (Jap: 4517.33.xx)LOT 06171.33.x – 06271.33.x  
(Japan: 0617.33.xx – 0627.33.xx)  
05361.33.x – 05461.33.x  
(Japan: 0536.33.xx – 0546.33.xx)2018.05.21  
(Japan: 21.05.18)  
V.I.P. Software: P55**ID-DiaPanel**  
**ID-DiaPanel-P**Antigen-Tabelle / Antigen-Table / Table d'antigènes / Tabella antigenica / Tabla de antígenos / Tabela de antígenos  
Antikörper-Identifizierung / Antibody identification / Identification d'anticorps / Identificazione anticorpale / Identificación del anticuerpo / Identificação do anticorpos

Rh-hr	Möglicher Genotyp Probable Genotype Genotype probable Probabile genotipo Genotipo probabile Genótipo provável	Spender Donor Donneur Donatore Donante Dador	Rh-hr			Kell			Duffy	Kidd	Lewis	P	MNS			Luth.	Xg	Spez. Antigene Special types Antigènes part. Antigeni particolari Otros Antigenos Tipos especiales	Resultat / Result / Résultat / Resultado / Resultado / Résultado / Resultado	Bemerkungen / Remarks / Remarques / Note Observaciones / Observações /												
			D	C	E	c	e	C <sup>a</sup>	K	k	Kp <sup>a</sup>	Kp <sup>b</sup>	J <sub>s</sub> <sup>a</sup>	J <sub>s</sub> <sup>b</sup>	F <sup>a</sup>	F <sup>b</sup>	J <sub>k</sub> <sup>a</sup>	J <sub>k</sub> <sup>b</sup>	Le <sup>a</sup>	Le <sup>b</sup>	P <sub>i</sub>	M	N	S	s	Lu <sup>a</sup>	Lu <sup>b</sup>	Xg <sup>a</sup>	Xg <sup>b</sup>	Q <sup>a</sup>	Q <sup>b</sup>	
1	CCC <sup>w</sup> D.ee	R <sub>1</sub> <sup>w</sup> R <sub>1</sub>	082271	+	+	0	0	+	+	0	+	nt	nt	+	0	+	0	0	+	+	+	+	+	+	0	+	+	+	1			
2	CCD.ee	R <sub>1</sub> R <sub>1</sub>	562781	+	+	0	0	+	0	+	+	0	+	nt	nt	0	+	0	+	0	+	+	+	0	+	+	0	+	+	2		
3	ccD.EE	R <sub>2</sub> R <sub>2</sub>	832877	+	0	+	+	0	0	0	+	0	+	nt	nt	+	+	+	+	0	+	+	0	+	0	0	+	+	3			
4	Ccddee	r'r'	252249	0	+	0	+	+	0	0	+	0	+	nt	nt	0	+	0	+	0	+	0	+	0	+	0	+	0	0	4		
5	ccddEe	r''r'	657848	0	0	+	+	+	0	0	+	0	+	nt	nt	+	0	0	+	0	+	0	+	0	+	0	+	+	5			
6	ccddee	rr	569262	0	0	0	+	+	0	+	+	0	+	nt	nt	+	+	+	0	0	+	+	0	+	+	0	+	+	6			
7	ccddee	rr	157960	0	0	0	+	+	0	0	+	0	+	nt	nt	+	0	0	+	0	+	0	+	0	+	+	0	0	7			
8	ccD.ee	R <sub>0</sub> r	565831	+	0	0	+	+	0	0	+	0	+	nt	nt	0	0	+	0	0	+	+	+	+	+	0	+	0	V+*/VS+*	8		
9	ccddee	rr	403034	0	0	0	+	+	0	0	+	0	+	nt	nt	+	0	+	0	+	+	0	+	+	0	+	0	+	0	9		
10	ccddee	rr	117886	0	0	0	+	+	0	0	+	0	+	nt	nt	0	+	0	+	0	0	+	+	0	+	+	0	+	0	10		
11	ccddee	rr	009098	0	0	0	+	+	0	0	+	+	+	nt	nt	0	+	+	0	0	+	0	+	0	+	0	+	Bg(a+)	11			
Patient / Patient / Patient / Paciente / Paciente / Paciente																																
Eigentestelle / Autotest / Autocontrol / Autotest / Autotest / Autotest / Autotest / Autotest / Autotest /																																

Anmerkungen siehe rückseitig / Remarks see overleaf / Voir les remarques au verso / Par le note consultare il retro / Ver observaciones en el reverso / Ver observações no verso

Name / Name / Nom / Nome / Nome	Blutgruppe + Antigene / Blood group + antigens / Groupe sanguin + antigènes / Gruppo sanguigno + antigeni / Grupo sanguíneo + antígenos / Grupo sanguíneo + antigénios	Interpretation / Interpretation / Interprétation / Interpretazione / Interpretación / Interpretação	Datum / Date / Date / Data / Fecha / D.
	A POS weak backgroup	Anti - c CDe / CDe R.R.	

opt 7✓  
PAS✓  
Scanned.

# Investigation

- Anti-c detected
- Patient phenotyped: CCDee K-
- R1R1 K neg units selected and phenotyped to confirm c neg
- IAT crossmatch performed – two compatible units
- Patient had surgery the next morning and transfused with two units





The next day...

- Antibody warning to be entered into PAS



ibaPAS Inpatient System

File Edit View Favorites Tools Help

abouttabs National Blood Authority ... home Blood Matters Prog... Google Transfusion Clinical Problem Listings ibaPAS Inpatient System

ibapas/cab/html/rManagerClin/inpatient\_tabs

**Cabrini Health Malvern Production DB 10.12**

Mr [Age 77 yrs] Gender Male

ContractAHM /PRI LocationPre-admission (MLO) UnitOncology UR Visit No

Compensable CodePVT ConsultantDr Considerations Allergies and Alerts

Address Phone and email Other Information

DoB

Inpatient Enquiry --- Patient Master Index --- Admission & Discharge --- Supervisor Function --- Documentation ---

Alert History Deleted Alerts

Patient Alerts View Alerts by Add Alert

Selected : 3

Type	Description	Infection Status	Reaction Comment/Lab no	Requested By HCP	Created By	Updated By	Date Activated	Inactive/Exp End Date	Level	Document
Allergy	Drug Allergy		Morphine-nausea vomiting				26 Jul 2018		●	No
Allergy	Latex/Tapes/Lotions		Adhesive tapes (can tolerate micropore) rash				26 Jul 2018		●	No
Patient Alert	Blood Transfusion		Antibodies detected. Expect delay in provision of blood products. Contact bloodbank 1220.		Merryn Barnes		29 Sep 2018		●	No

ibaPAS Inpatients System

**Cabrini**

- Address/Contact
- Allergies/Alerts
- Assessments
- Clinical Results
- Observations
- Medications
- Theatre / Procedures
- Progress Notes
- Visits
- Clinical Summary
- Admin Documents
- Clinical Documents
- Referrals

100%

## The next day...

- But already there from 2 years ago!
- Noticed an apostrophe in patient's surname – could patient have a second file?
- Search of LIS by date of birth – a previous file existed without the apostrophe
- Previous admission – anti-K detected



# Further investigation

- Additional antibody testing with c- K+ cells: anti-K not detected this episode
- Confirmed the transfused units were K neg

DiaClon Rh-Subgroups + K Lot: 50110.38.03 Expiry: 30/11/2018 Card # 408928

1	2	3	4	5	6
Anti-C	Anti-c	Anti-E	Anti-e	Anti-K	Ctl
++++	-	-	++++	-	-



# Further investigation

- Hospital protocol: apostrophes are used if patient identifies themselves as such
  - “PAS should be searched for previous files before creating a new patient file”
- LIS draws patient details directly from PAS when episode is entered at specimen reception – duplicate file automatically created in LIS



# Conclusions

- Take care with patient names containing hyphens, spaces and apostrophes
  - eg: O'Brien, St. John, Van Houten, Parker-Bowles
- Establish a protocol to double check all “new” patients for previous files?
  - Catch patients who alternate between two names eg shortened names, middle names, anglicized names
- Beware limitations of your LIS!





Thankyou

