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| **Flow Method updates – sign Flow Cytometry Methodology Updates form kept in flow room**1. **UPDATED FLOW LAB SOP \_new VERSION** of a Controlled Document has been issued, please note & sign the ‘methodology updates log’ for:
	1. CD\_HA\_0905 B-ALL MRD Protocol – minor changes
	2. CD\_HA\_0477-FLOW CYTOMETER AUTO-COMPENSATION PROCEDURES
* compensation procedure for vCD3CTUtest added
* also volts update for FSPRO beads monitoring to be updated after each comp
	1. CD\_HA\_0221 FLOW CYTOMETRY TRAINING LOG

Aligned with Aquios, assessment marking changed:* **Outcome:** At the completion of the assessment the trainer will be able to recommend the named staff member can commence or continue working independent of supervision or be referred for further/refresher training.
* Items marked with a **C** (competent) are deemed by the trainer to be successfully performed by the trainee independently of supervision or assistance.
* All items marked with **NC** (not yet competent) will require further training with a second assessment of competency.
* Items marked with **S** (supervision) must only be performed under supervision.
1. **NEW SOP**:
	1. FLO\_FM1\_006 VCD3CTU WORKSHEET
	2. FLO\_FM1\_005 CRYOPRESERVED QC VIAL VCD3CTU WORKSHEET
	3. FLO\_FM2\_002 VIABLE CD3 CELL THERAPY UNIT (VCD3CTU) ENUMERATION & VIABILITY METHOD
2. **UPDATED general APS** documents to note:
	1. None

**New projects**1. **New instrument NAVIOS EX(3) , SN BE05526** (delivered & installed by BEC on 20th MAY 21)- Number 3 out of 3 Flow cytometers present in Lab: Number 1-Navios; Number2- NaviosEx BC40631 & now number 3- new NaviosEx instrument BE05526
	1. Installation final report received & reviewed on 27th May 2021 by Gosia
	2. **Routine tests validations** - Started with validation of Single platform Stem Kit CD34 test
		1. CD34 correlation: running complete – validation report in compilation by Gosia
2. **NAVIOS EX(2) BC40631 Flow analyser (routine use) – validation, final reports updates (continuation):**
	1. Note: All finished reports & tabulated printed results – NAVEX printouts & Navios validated reports are stored in card box under the sink. Please keep it there – for long term storage it will be kept in lab
	2. Test validations reports updates:

[H:\AAA\_Quality\UNIT\_HAem\_q\Validation Data\Flow\NAVEX BC40631 validation\Record of NAVEX2 BC40631\_ Validation tasks.doc](file:///H%3A%5CAAA_Quality%5CUNIT_HAem_q%5CValidation%20Data%5CFlow%5CNAVEX%20BC40631%20validation%5CRecord%20of%20NAVEX2%20BC40631_%20Validation%20tasks.doc)1. **vCD3CTU - New test on NAVIOS EX(3) , SN BE05526 – project updates.**
	1. The vCD3CTU enumeration project started on 16th June 2021 (28th Jan-planning started with Dr S. Morgan & S. Schischka). Collecting data in progress, at final stages
		1. Sue & Danni are coordinating this project and doing fantastic job! – the last final validation steps
			* New Test order -IT job to be raised by Sue R. – we proposed name of test to be: **vCD3CTU**, vCD3CTU = viable CD3 enumeration for Cell Therapy Unit
			* Data collected in folder: \\TH-FS01\Shared\PATHOLOGY\shared\IMMUNO\RESEARCH AND DEVELOPMENT (R&D) FLOW\NEW IN PROGRESS\NavExi\_BE05526 THREE correlation May2021+\CD3 enumeration and viability validation
			* SOP completed
			* Training log with new test completed.
			* 2 Controls monitored and perform within expected ranges:
				+ FSpro CD3CTU protocol, settings monitoring (MFI within 10%) – run daily
				+ CDChex control,- monitored CD3% and absolute numbers within controls ranges – minimum run: on the day of running test, set up & run prior patient – no change
2. **NATA assessment complete – one non-conformance found in Flow but is reflected in all sections – new pipettes requires NATA accredited checks, company – Haem Lab general ‘send away’ to Pathtech for calibration checks will be organised as per J.S.**

1. **Kaluzav2.1** **on** **problematic computer APATHD8AC066219 - Post ITS replacement with new graphic card**
	1. Issues addressed and working now:
		1. Computer with Kaluza Software V2.1 – monitoring, working ok so far
* Note: New log on that was created by IT for \_ use it on this computer only:
	+ LOG IN: gakaluza
	+ Password: P4th0l0gy
* IT person looking after this is: Aliu, Merzan <M.Aliu@alfred.org.au>
	+ 1. Note: Computer in flow room with Kaluza V1.5 – as per Maree we will wait with an upgrade to new version till post-Christmas – no change
1. **InstruNor – Removed from the lab!**
	1. Fully decontaminated (20th May 2021), metal racks left inside, analyser is in the pathology corridor now (Dec 2021) to be decommissioned.
	2. InstruNor table to be secured as per Jocelyn – hope we can use it to support our ‘fume hood’- see other Issues point 4.

**Staff training / proficiencies**1. **New educational material (Infinicyt training) & Staff Proficiency Dry Ex2 uploaded into MTS. Due date is FEB 2022**
2. **Dan Luo training in flow going well, well done Dan!**
	1. Kaluza analysis training – NHL/ AML – proficient, AML training complete and Dan can start her ‘On Call’ duties.
3. **Amber- MMMRD Infinicyt training –** No progress as short staff.
4. **Jennifer Ma – had introduction to MM\_MRD Infinicyt training-** as above.

**Other issues:** 1. **New Fridge** (SCOPE ; SKT1000 NS-A: MT10SZN) delivered and installed in Flow room – **please monitor temperature every day (started on 7th Dec)** for a week so we can safely transfer reagents from:
	1. Immno fridge
	2. Blood bank
	3. There is a Thermometer with two probes inside our fridge for monitoring: record reading as per below:
		1. Current temp: Open fridge and read both readings, Indoor and Outdoor (located at top and bottom), both ‘readings’ should be the same (as we have both probes inside the fridge)
		2. MAX / MIN temperature for two probes: Press ‘Max/Min’ top button, this toggles between two probes ‘Indoor’ and ‘outdoor’ readings and displays MIN/MAX for both probes:
			* 1st : Read & Record reading of first probe i.e ‘Indoor’ probe (MIN & MAX) & after reading click once ‘Reset’ this resets only ‘Indoor’ probe.
			* 2nd Press Max/Min button again and it should display now a second probe temperature – ‘Outdoor’ Check MIN/MAX and record, temp should be the same as Indoor and press ‘reset’ once
		3. Keep recordings of temperatures for both probes, Indor & Outdoor – two sets of temperatures (Current Reading, Min, Max)
2. **New training log** introduced: started to go through it, 2/8 staff complete
3. **NaviosEX(2): computer slow** **issue:** to resolve this issue- ‘move’ (at the end of each months or as required)LMDs from the external hard drive’s folder named ‘LMD’ to folder ‘LMD2’. This is to minimize the number of files in the folder that software checks when NAVIOSEX is saving a file - we believe that this was the cause of slow NAVIOS operation!
	1. ‘LMD’ folder is the one that backup / copy to second hard drive is required – do not move most recent files (not backed up files). Backup of LMD files is done automatically every ½ hrs. To be certain leave the last day work in original (LMD) folder.
	2. If ‘slow’ computer persists please notify Senior and / or BEC.
4. **Flow Cytometry Fume Hood table is just a frame** – do not lean on the side of this fume hood as it pushes it ‘off site’ that may accidently fall inside empty space– **Be aware of possible injury!!!**
5. **MM-MRD** – test numbers are not as high as before, when preparing antibodies please do one set of vials at a time (5 tests) as the reconstituted vial expiry is one month only.
6. **Black Swan:** running MMMRD tubes on correct panels is important – please take care!
7. **Please sign all your messages** (in our diary as well), I noted an increase in unsigned notes / reports etc.
8. **Early LEAVE** - If you need to leave early, could you notify me as well please?
9. **New tissue strainers** from a ‘pluriSelect’ company -I got additional part – a pestle to make it easier to grind. Hope it works. Old strainers from BD are still on back order.
10. **Anaplastic large cell lymphoma**, issue raised by Dr S. Morgan that our NHL is unable to help in diagnosis – CD30 needs to be tested, Dr Daniel North is investigating if PeterMac is able to test this for us. To be confirmed. If any concerns consult with senior/registrars
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| **Staff Suggestions / Concerns** 1. Roster Issues:
	1. Add your Initials in ID2 all runs on NAVIOSES for easy troubleshooting
	2. Rostered ADO maybe scheduled by management – check your roster! Please notify me if taking leave.
	3. Emma – if rostered in flow, could MMMRD training be prioritised
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| **QAP/EQAP**2021 RCPA/QAP – latest runs – thank you for participation! All ACCEPTABLE 1. CD34 samples CD21-05 & 06 (run 3/3)

Z & APS scores all ok1. LSUB on Aquios PH21-09 & 10

1. LSUB on Aquios PH21-11 & 12

1. LSUB on Aquios PH21-13 & 14

1. MemB cells ( survey 2/2 \_ September)
	1. Z score borderline high – required to review gating. Be careful with that RCPA QAP as preserved cells have lower FS and our routine gating may not catch all the lymphocytes and possibly impacts %PBL results – also aged sample > 48 hrs makes gating difficult, so keeping this challenging scenario we did well!

1. Haematology Immunophenotyping Program Survey Cycle: 21, Survey: 3, Due Date: 24/09/2021 – all acceptable – our diagnosis was CLL.

COMMENTS: Source and preparation of samples The survey sample was from a 72-year-old male, clinically asymptomatic patient for follow-up investigation. The full blood count results given were: WCC:105.4 x109/L, Hb: 146 g/L, PLT: 174 x 109/L. A digital image of the stained peripheral blood provided the images for the case study. A peripheral blood sample was collected in lithium heparin, stabilised, aliquoted and dispatched on the same day. Participants were instructed to process the sample within 24 hours of arrival. The change in sample type (from cryopreserved to stabilised peripheral blood) is to provide a representative "real-time" sample. Also, the stabilised sample eliminates artefact induced by cryopreservation and subsequent thawing of samples1.Immunophenotyping of Case HA-IP-21-03The peripheral blood film showed a population of small to intermediate-sized lymphoid cells with clumped chromatin and scant cytoplasm, smudge cells were also a prominent feature of the blood film. The abnormal lymphoid population has the following immunophenotype (compared to normal B cell expression as recommended by Bethesda guidelines2): CD45+ CD19+ CD5+ CD20+dim CD22+dim CD23 partial and heterogenous CD200+ CD38 partial CD79b partial and dim expression for kappa light chain. The abnormal population does not express CD3, CD4, CD8, CD10, nor FMC7. Interpretation of results. The immunophenotype of this case is consistent with a clonal B-lymphoproliferative disorder. The immunophenotype in conjunction with the WCC and > 5 x 109/L clonal cells is diagnostic of chronic lymphocytic leukaemia.NOTE: There was a consensus in reporting a negative interpretation for CD3, CD4, CD8, CD10, FMC7 and lambda. Similarly, a consensus was achieved for the expression of CD5, CD19, CD43, CD200 and Kappa. The partial expression for CD20, CD22, CD23, CD38, and CD79b was evident in the returned results where there was a fairly even proportion of negative and positive expression interpreted for these markers. It is pleasing to note the number of participants incorporating CD23 (80) and CD200 (76) on their panel to differentiate MCL from CLL/SLL/ CLL-type MBL.**Interpretation of comments on diagnosis**: The patient had a history of CLL and attended the haematology clinic to investigate disease progression. In conjunction with the clinical notes, the survey image, the positive interpretation of key markers (CD5, CD19, CD43, & CD200) and the absence of CD10 and FMC7 support the known diagnosis of a B cell lymphoproliferative disorder, specifically B-CLL**. Eighty-five per cent (79/93) of participants submitted the target diagnosis.**1. FMH Run 3& 4

1. Continue to daybook IM/PH RCPA samples for Aquios LSUB + MemB + FMH RCPA samples - all need to be day booked in Cerner for the ‘whole process’ monitoring that includes calculations & DIM – see SOP CD\_HA\_0480

 **Registering RCPA QAP samples in PathNet as per table:**The following MRN’s have been set up according to Flow Cytometry instrument and program.

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| --- | --- | --- | --- |
| MRN | Surname | Firstname | **Test code order** |
| 2308558 | QAPFLOWRCPA | CD34 Nav1 | **CD34** |
| 2308560 | QAPFLOWRCPA | CD34 EX | **CD34** |
| 2308561 | QAPFLOWRCPA | FMH Nav 1 | **FMH** |
| 2308563 | QAPFLOWRCPA | FMH EX | **FMH** |
| 2308566 | QAPFLOWRCPA | IP EX | **MBCELL** |
| 2308567 | QAPFLOWRCPA | Aquios | **LSUB** |

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| **IT issues / Network Alerts / Trials** 1. **Trials updates: PATH73257 – no longer required**

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| --- | --- | --- | --- | --- | --- | --- |
| **Study ID** |  | **PreASCT**Or screening | **PostASCT** | **End of C2 Consolidation** | **End of Treatment** | **CR** |
| **MM19** | PATH71836 | Yes | Yes | Yes | Yes | Yes |
| **MM20** |  | NA | NA | NA | NA | Yes |
| **MM21** | PATH72006 | Yes | Yes | Yes | Yes | Yes |
| **MM22** |  | NA | NA | NA | NA | Yes |
| **MM23****SeaLand** | PATH73173 | Yes | Yes\* | Yes\* | NA | Yes |
| **RCD****BGB-11417-105** | PATH73257 | Yes |  |  |  | Yes |
| **BelaCarD****(564/20)** |  |  |  |  |  | Yes, plus 12 mo |

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| **New Staff / Social Events / Congratulations / Conference applications**1. We have student training with us: welcome Keagan Sabo! Thanks everyone for showing Keagan flow world. This is Keagan’s last week; hope you had a nice INTRO.
2. Congratulation to Dan for finalizing AML training and for joining ‘On call’ roster, well done Dan! Good luck for your first ‘On call”
3. NaviosEX KOT: 3 spaces pending
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 **Happy Christmas!**

**Please indicate in MTS that you have received this information. Persons present at meeting are ticked – see also minute’s folder.**

**\\th-fs01\shared\PATHOLOGY\shared\Haematology\Meetings\Flow Cytometry 2017**

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| **Name** | **Signature / Tick** | **Name** | **Signature / Tick** |
| MADDEN, AMBER |  | GORNIAK, MALGORZATA (GOSIA) Senior scientist |
| ROMANIN, SUSAN |  | Dan Luo |  |
| THEOLOGOS, DANIELLE |  | JENNIFER MA  |  |
| CHICAS, JORGE |  |  |  |
| HALLETT EMMA |  |  |  |

