

QUALITY MANAGEMENT REVIEW SEMINAR II

ANATOMICAL PATHOLOGY PANEL

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ANATOMICAL PATHOLOGY PANEL

Three programs

1. Histochemistry Staining Program
2. Immunohistochemistry Staining Program
3. Cytopathology Program

Objective

- To assess the technical performance of participants in Histochemistry staining and Immunohistochemistry staining
- To assess the diagnosis performance of participants in Cytopathology
- To provide the technical steps of the best methods along with images for participants to promote quality improvement
- To provide help and feedback to participants that have problem with staining quality.

Assessments Panel

- The assessments are a Team Effort: Medical Technologists and Pathologists from HA, PHLC and Non-HA Hospital
- Assessors: Associate Consultant x1/ Consultant x3, MT/SMT/SO x10
- It is a voluntary service

Thanks

Program Outline (1)

Four survey exercises for each program per year

Histochemistry program

- One unstained samples sections each for H&E and special stain

Immunohistochemistry program

- One unstained control sample sections and one Ab.
- One unstained control sample sections for staining with participant's in-house Ab
- One unstained control sample sections and one Ab for continue assessment, the same control section is repeatedly sent for the four surveys

Program Outline (2)

- For each staining except H&E, the participants has to submit “in-house control” stained at the same time as the EQA slides
- The “in-house control” and the “continue assessment” provide information on laboratories everyday staining quality

Program Outline (3)

Cytopathology program

- Smears / cytopsin preparations / liquid based preparations of real patient specimens stained with Hematoxylin & Eosin or Papanicolaou stain for diagnosis

Marking System (H&E)

- Nuclear staining: 0 to 3
- Cytoplasmic staining: 0 to 3
- Staining contrast: 0 to 2
- Staining consistency: 0 to 1
- Slide appearance: 0 to 1
- Total 10 marks

Marking System (Special Stain)

- Target substance staining: 0 to 5
- Counterstain: 0 to 2
- Staining contrast: 0 to 2
- Staining consistency: 0 to 0.5
- Slide appearance: 0 to 0.5
- Total 10 marks

Marking System (IHC)

- Marks is given with reference to
 1. The staining intensity
 2. Revelation of nuclear/cytoplasmic details, staining contrast and consistency
 3. Slide's tidiness and labeling
- Grading (Total 10 Marks)
 - Excellent (> 8 marks)
 - Good (> 6 and <= 8 marks)
 - Satisfactory (>= 5 and <= 6 marks)
 - Fail (< 5 marks)
- Marks will be deducted from section with heavy background
- Late Return will not be marked and will be stated in the survey report as ND

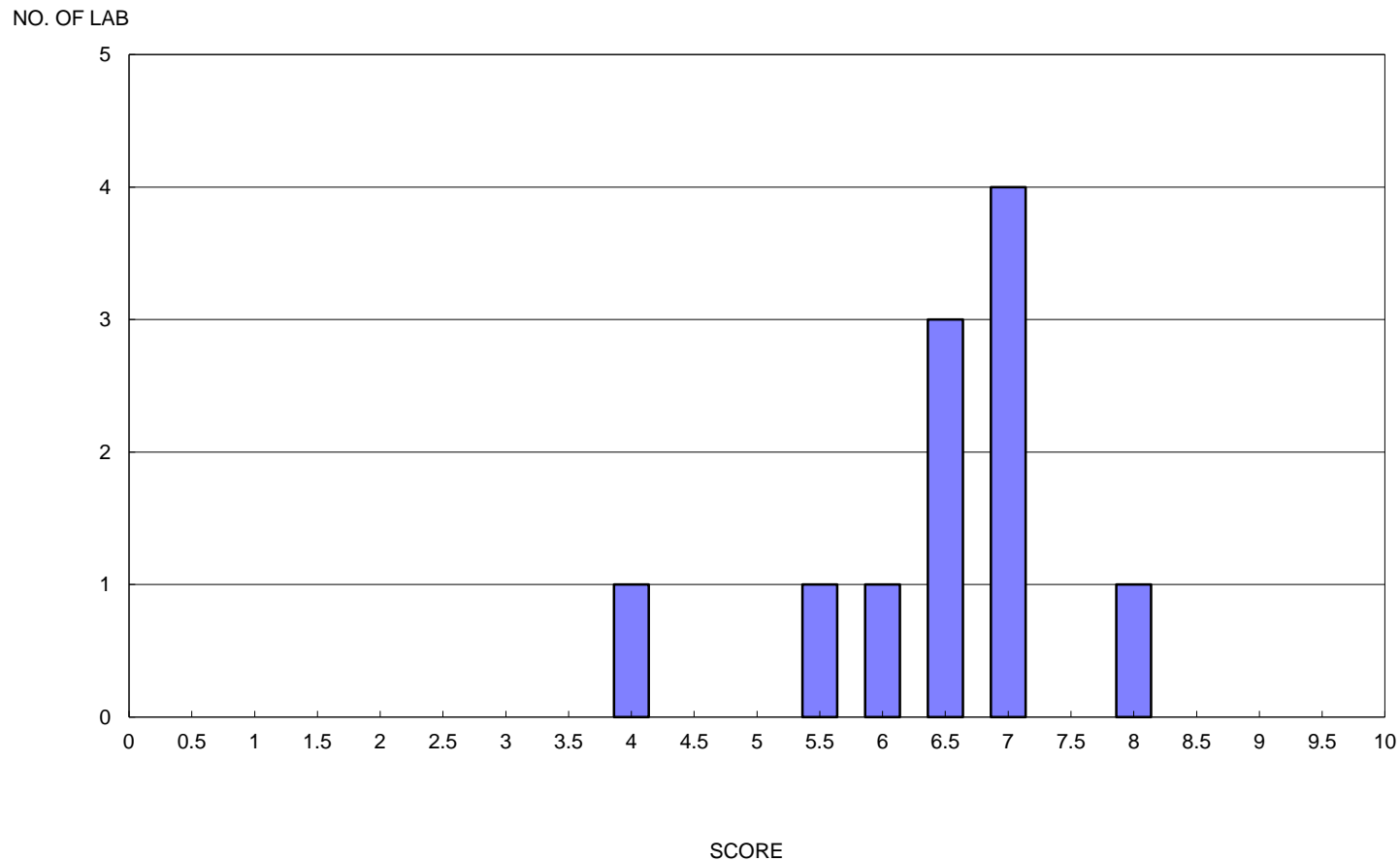
Marking System (Cytopathology)

- **4-tier Scoring System**

Yes	In agreement with
Acceptable	Slightly deviated from Discrepancy ≤ 1 step No significant impact on patient management
Unacceptable	Different from
No	No answer

Example of the Result Summary

- Median: 6.5



H&C Result Summary

2012	H&E	Histochem		Cyto (4 never returned slides)
1 st Survey	All Pass	PAS	All Pass	All Correct
2 st Survey	All Pass	ZN	All Pass	All Correct
3 st Survey	All Pass	Congo Red	All Pass	All Correct
4 st Survey	All Pass	PAS+ <u>D</u>	All Pass	All Correct

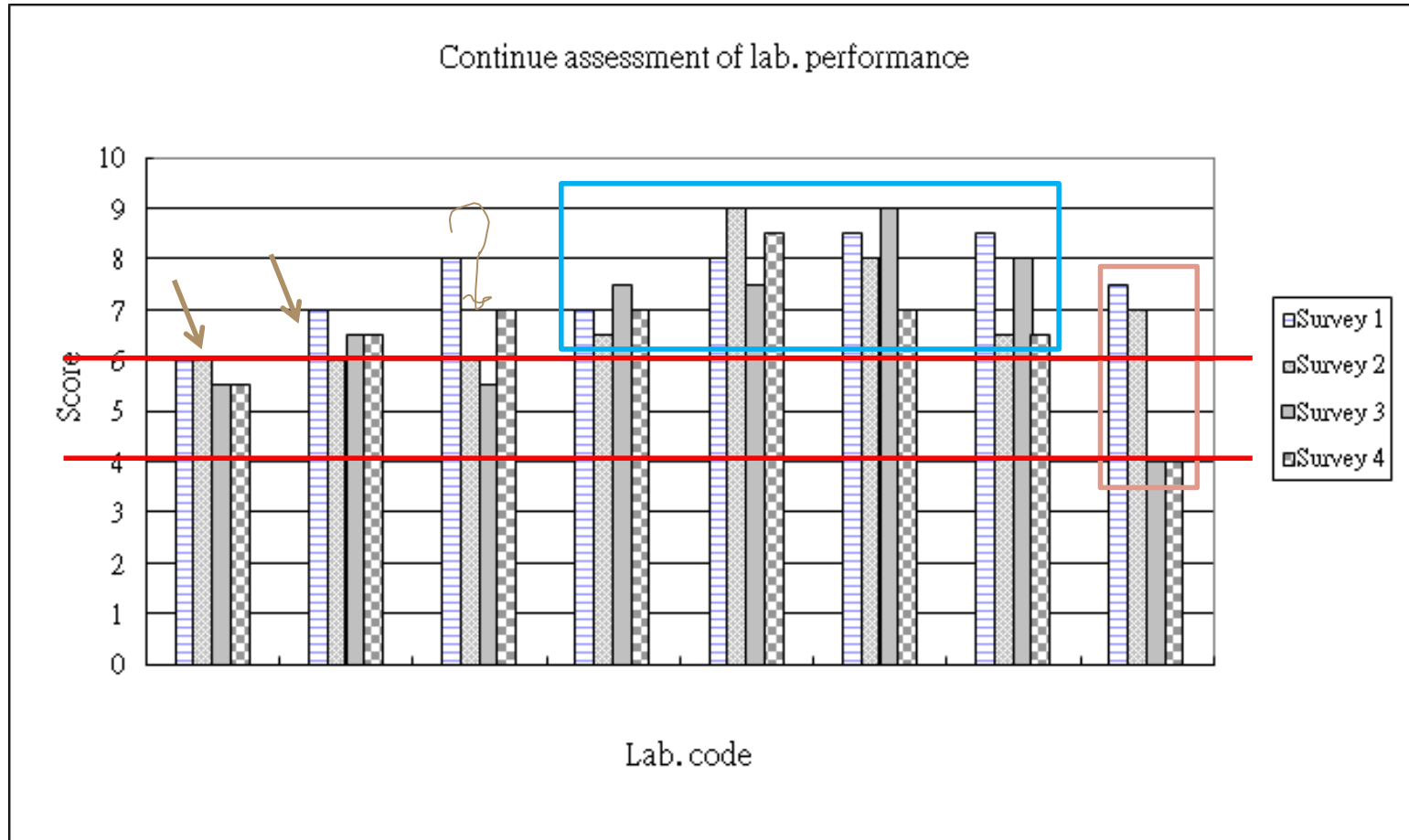
2013	H&E	Histochem		Cyto (4 never returned slides)
1 st Survey	All Pass	G&S Ag	All Pass	All Correct
2 st Survey	All Pass	Orcein	All Pass	All Correct
3 st Survey	All Pass	MSB	All Pass	4 Acceptable, 11 Correct
4 st Survey	All Pass	AB	All Pass	All Correct

IHC Result Summary

2012	IHC	
1 st Survey	CD10	All Pass
2 st Survey	CD3	All Pass
3 st Survey	Calretinin	1 Fail and no in-house Ab
4 st Survey	p53	1 Fail and no in-house Ab

2013	IHC	
1 st Survey	CG	1 Fail in both supplied & in-house Ab
2 st Survey	CD15	2 Fail in both supplied & in-house Ab
3 st Survey	CK5/6	All pass but 1 Fail in-house Ab
4 st Survey	Synaptophysin	2 Fail in both supplied & in-house Ab 1 Fail in supplied Ab and no in-house Ab

Continue Assessment Summary



Change (1)

- Cytopathology
 - Four rounds of slides per year
 - Each round has 3 cases, one slide each, sent in a set for circulation
 - A total of 12 cases per year
 - Topics include gynaecological and non-gynaecological cytology in a case ratio of 1:3

Change (2)

- Go On Web (tentatively by 2015)
 - Electronic data entry for staining methodologies and Cytopathology diagnosis for statistical use
 - Report for individual participant will be posted on web
 - Image of the best performed sections will be available online for easy reference and archival

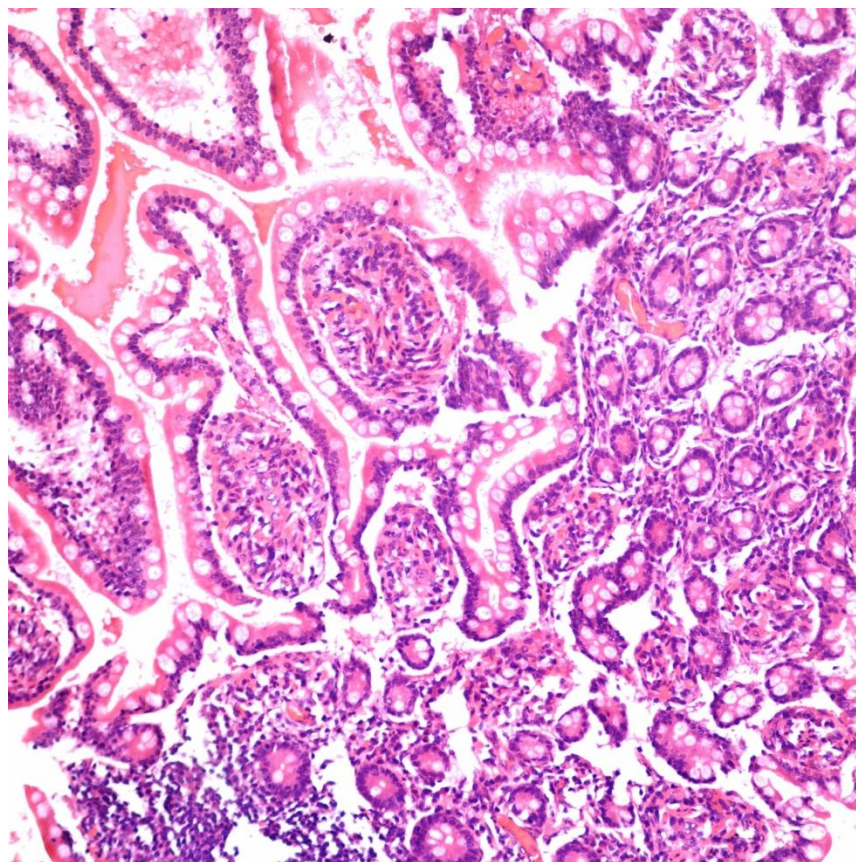
The Good

- Use less paper
- Participants get their reports earlier
- Less manual work for VOLUNTEERS
- Better traceability.....

The Bad

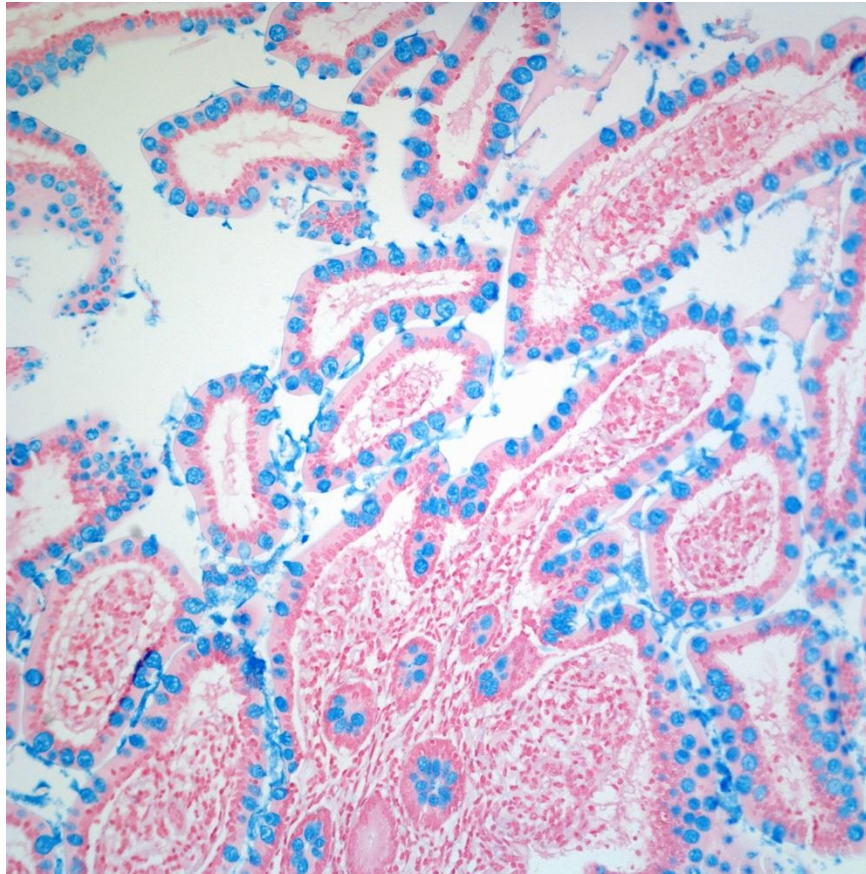
- **YOU NEED TO ADD ONE MORE PASSWORD ONTO YOUR LOGIN LIST**

Survey Four – 2013, Best Performed Slide



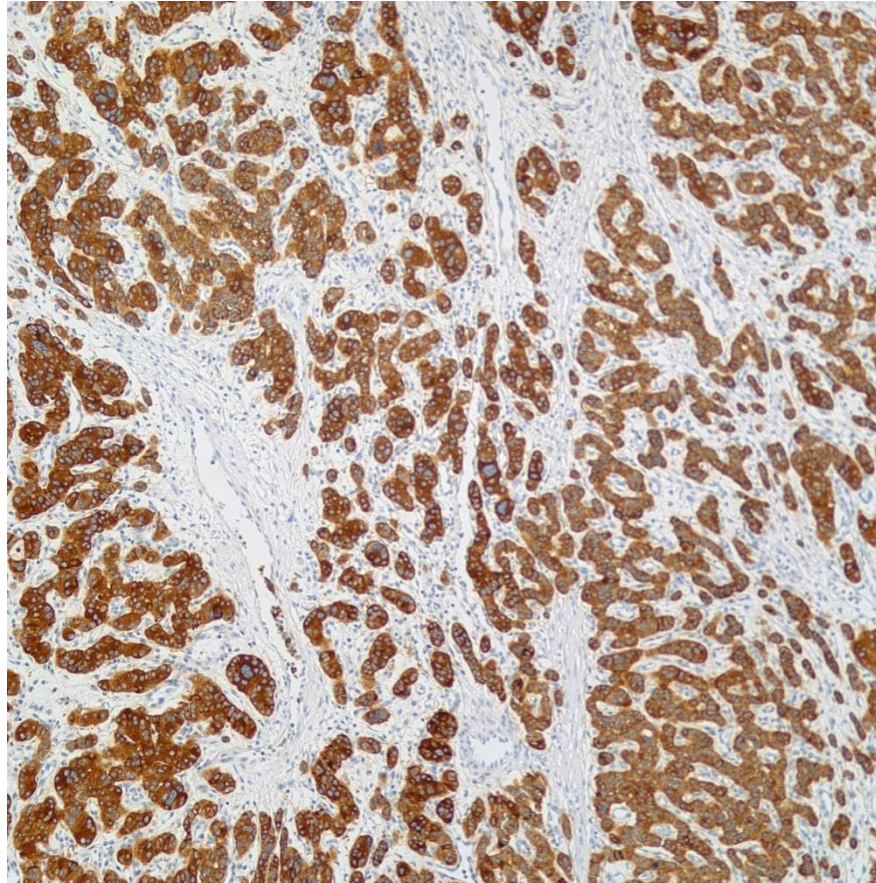
H&E: Intestine

Survey Four – 2013, Best Performed Slide



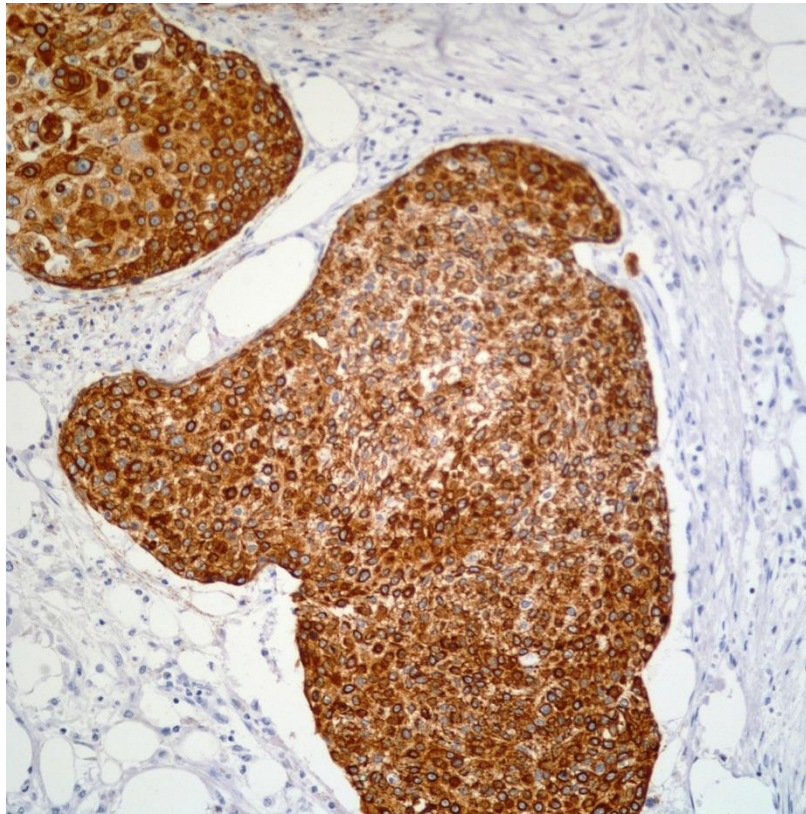
Alcian Blue: Intestine

Survey Four – 2013, Best Performed Slide



IHC Synaptophysin demonstration: Carcinoid Tumour

Survey Four – 2013, Best Performed Slide



IHC AE1/AE3 demonstration: lymph node, metastatic carcinoma