

Australasian Division of the  
International Academy of Pathology Limited

## Newsletters - 2002

### Number Three

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#### Report from the President

The recent Annual Scientific Meeting at Darling Harbour was highly successful. Excellent presentations were given in the fields of Gastrointestinal and Pancreato-biliary Pathology by our speakers from overseas, Dr Robert Petras and Dr David Owen. The speakers clearly enjoyed their experience of Australia, and we expect to see them here again. The contribution of local speakers is no less important to the success of the Scientific Meeting, and the specialty clubs, other lectures, posters and trade displays, again provided an excellent educational forum for pathologists and trainees.

Stan McCarthy gave an interesting Vincent J McGovern Memorial Lecture on a topic close to Vince's heart - "Changing Perspectives in Melanoeytic Lesions".

The third Asia Pacific Meeting will be held in Bangkok, between 21st and 23rd January, 2003. The programme will include speakers from Australia and neighbouring regions, and attendance could be combined with a holiday in the area. There will be a pre-conference tutorial on lymphoma, aimed especially at registrars. Our very own Tony Leong will be amongst the speakers. The deadline for abstracts is November 15th. Information and registration are available through the website [www.IAP2003.com](http://www.IAP2003.com)

The 29th Annual Scientific Meeting of the Australasian Division will be held at Darling Harbour, Sydney, from May 30 to June 1, 2003. The major themes will be Gynaecological Pathology and Endocrine (mainly thyroid) Pathology. Our guest

speakers from overseas will be Professor Robert Kurman and Professor Sylvia Asa. There will be an expanded Gynaecological Pathology companion meeting on the Friday. Richard Jaworski and Robyn Apel are assisting with the organisation of the Gynaecological and Endocrine programmes respectively.

By now you should have our website [www.iap-aus.org.au](http://www.iap-aus.org.au) book-marked. It can be accessed to give information about our forthcoming meetings. It has other useful administrative and educational material. It also provides links to the websites of other IAP Divisions and other useful organisations.

No Annual Scientific Meeting will be held at Darling Harbour in 2004, as that is the year of the International Scientific Congress of the IAP, which will take place in Brisbane from 10-15 October 2004. Organisation for that meeting is progressing smoothly. The meeting will be very much a meeting for and of Australasian pathologists, and will be a wonderful opportunity to meet with our overseas colleagues. Local organisers are in place for each sub-specialty of Anatomical Pathology. Now is the time to consider the scientific contribution that you can make to that meeting.

Finally, I encourage all members to provide current contact details with the next subscription payment. In particular, a current e-mail address will allow the executive to improve communication with the membership.

Congress 2004

**Brisbane  
Convention &  
Exhibition  
Centre, Mon 10  
- Fri 15 October  
2004.**



The President-Elect of the IAP, Professor Shinichiro Ushigome from Tokyo, attended the Annual General Meeting and met many of the delegates. He then travelled to Brisbane to meet the local organisers of the Congress and to inspect the Congress facilities. His visit to Australia was very successful. He will advertise the Congress widely in his travels in the next two years. We thank him for coming to our meeting.

You will notice that the advertisement for the XXIV Congress in Amsterdam has now been replaced by the advertisement for the XXV Congress in Brisbane. This gives an indication of how close the Congress now is. We are getting good support from sponsors. We would like more, particularly from the pathology firms in Australia and New Zealand. The website for the Congress is now active and you may obtain up to date information on the Congress organisation by accessing the website – [www.iap2004@im.com.au](mailto:www.iap2004@im.com.au)

Our secretary, Jan McLean in Sydney, has a supply of business cards advertising the Congress. We ask anybody who will be attending congresses internationally or

who is communicating with friends and colleagues overseas to ask her for copies of the business card which you can distribute. There is no doubt that the best form of advertising is personal contact. There are 700 of us who can become involved in the marketing campaign for the Congress to be run by the Australasian Division.

**Scientific Posters at the 28th Annual Scientific Meeting**

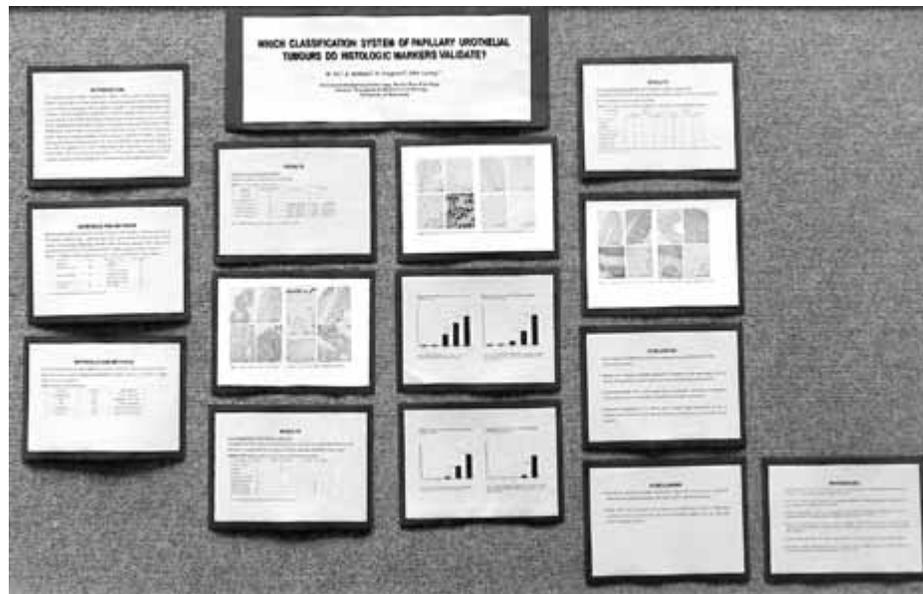
This year there were 31 posters. Professor C Soon Lee organised the poster session. Drs Ewan Miller and Richard Scolyer were members of the Review Panel. Drs Dahlstrom, Walker and B Young, judged the posters.

Winners were:

First prize:

Drs Yin H, Haffajee Z, Pepperall D, Leong A S-Y

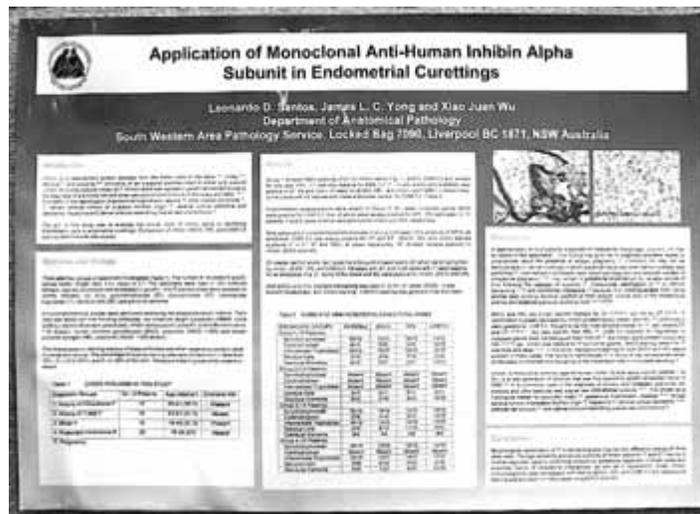
"Which classification system of papillary urothelial tumours do immunohistological markers validate?"



2nd Prize:

Drs L D Santos, JLC Yong, XJ Wu

"Application of monoclonal anti human inhibin alpha subunit in endometrial curettings"



First Prize – Registrar:  
 Drs KB Tan, WP Yong, TC Putti  
 "Cyclooxygenase-2 Expression in ductal carcinoma in situ of the breast:  
 Association with histological features and clinical implications"

**CYCLOOXYGENASE-2 EXPRESSION IN BREAST DUCTAL CARCINOMA IN SITU:  
 ASSOCIATION WITH HISTOLOGICAL FEATURES  
 AND CLINICAL IMPLICATIONS**

Kong-Bing Tan\*, Wei-Peng Yong\*, Thomas Choudary Putti†  
 \*Department of Pathology, National University of Singapore and  
 †Department of Haematology-Oncology, National University Hospital, Singapore




**INTRODUCTION**

Cyclooxygenase-2 (Cox-2), an inducible prostaglandin synthase, has been shown to be important in tumorigenesis. Its expression is associated with tumour cell proliferation, invasiveness and unfavourable outcome in breast cancer. Animal studies have also shown that Cox-2 inhibition is effective in the prevention and treatment of mammary cancers.

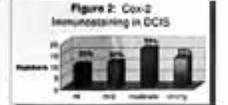
In view of the paucity of Cox-2 data in ductal carcinoma in situ (DCIS), we studied Cox-2 expression in this group of early breast cancers as well as its association with histological features: nuclear grade, presence of comedonecrosis, presence of microinvasion and tumour size.

**METHODS**

The ages of 91 eligible patients with DCIS diagnosed during 1990-2000 ranged from 28 – 82 yrs (mean: 68.5 yrs). 46 were Chinese, 3 were Malays and 2 were Indians. The H & E slides were reviewed and DCIS nuclear grade, size and the presence/absence of microinvasion and comedonecrosis were assessed. Immunohistochemistry for Cox-2 (Cayman Chemical Co.) was performed and the cytoplasmic staining intensity (0, 1, 2 or 3 out of 3) (Figure 1) and extent of staining (0, 1, >15%, 2-10-50%, 3- >50% of tumour cells) were determined. These 2 scores were multiplied to give a Cox-2 raw score for each case, based on which, the cases were classified into one of 4 groups of incremental Cox-2 staining: nil (0/0), mild (1-3/3), moderate (4-6/3) and strong (7-9/9).



**Figure 1:** Different intensities of Cox-2 staining



**Figure 2:** Cox-2 immunostaining in DCIS

**Table 1: Relationship of Cox-2 staining with histological features**

Feature	Nil	Mild	Moderate	Strong	P-value
Nuclear grade	0	2	12	15	0.04
Microinvasion	0	1	12	15	0.04
Comedonecrosis	0	1	12	15	0.04
Tumour size	0	1	12	15	0.04

**RESULTS**

41 cases (80%) had Cox-2 staining, of which 11 cases had mild staining, 17 cases had moderate staining and 13 cases had strong staining (Figure 2). In relation to the histological features, increased Cox-2 staining was associated with high nuclear grade. There was no significant association between Cox-2 staining and the presence or absence of microinvasion and comedonecrosis (Table 1). There was poor correlation between Cox-2 staining scores and size of DCIS ( $r_s = 0.04$ ).

**DISCUSSION**

Our study shows a sizable percentage of DCIS with moderate to strong Cox-2 staining, which appears higher than that reported for invasive cancers. This supports the further investigation of the potential clinical use of Cox-2 inhibitors either as chemoprevention or adjuvant therapy for DCIS. Also, the observation that high grade DCIS is associated with increased Cox-2 staining suggests that such therapy may find further use in high grade DCIS which reportedly have a higher recurrence rate and are often hormone receptor negative, and as such, may be less responsive to adjuvant Tamoxifen therapy.

**KEY POINTS**

- Most cases of DCIS are positive for Cox-2 immunostaining.
- High grade DCIS is significantly associated with greater Cox-2 immunostaining.

2nd Prize – Registrar:  
 Drs Lijovic M, Somers GR, Frauman AG  
 "Assessing the prognostic potential of KAI1/CD82 metastasis suppressor expression in primary prostate cancers".



Website Update

Our Division's website can be accessed at:  
<http://www.iap-aus.org.au> or <http://iap-aus.org.au>

Within the site you will find information about the Division, this year's Annual Scientific Meeting and information about registering on-line, newsletters, information about other important pathology meetings, links to other sites of pathological interest, information about contacting the secretariat and information about becoming a member.

I am developing a Member's section on the website. In this area you will find interesting educational cases. To access the Member's site section you will need to know the username and password.

User name: iapmember  
 Password: rokitansky  
 (You need to enter these in lower case.)

The Division's website is constantly being updated so remember to **REFRESH** the page in your browser. I would like to hear from members as to what they would like to see put on the website and how I can improve it.

You can contact me at :  
 Email: [richardj@icpmr.wsahs.nsw.gov.au](mailto:richardj@icpmr.wsahs.nsw.gov.au)  
 Phone: (02) 9845 6222

Richard Jaworski  
 Website Co-ordinator

Reminder letters are currently being distributed to members who inadvertently do not have their subscription payments up to date. We would appreciate prompt payment as we are planning to implement a different accounting system and it would be nice to start with a clean slate. Please check your records if you are unsure of your financial situation, particularly if you are attending any scientific meetings where discount is applied to financial Academy members.

HER2 Testing Update

**Associate  
Professor  
Michael Bilous  
Director,  
Department of  
Tissue  
Pathology,  
Institute of  
Clinical  
Pathology and  
Medical  
Research,  
Westmead  
Hospital NSW.**

*HER2 testing of breast cancer specimens* is now being undertaken in a large number of laboratories in Australia and New Zealand. In most laboratories the method used is immunohistochemistry but there are also several laboratories in both countries that are using fluorescence in situ hybridisation as their testing method. Other laboratories are evaluating the use of PCR. In the case of immunohistochemistry a variety of commercially available primary antibodies is being used in addition to the HER2 "testing kits". "Testing Algorithms" for the interpretation of immunohistochemistry are being widely used in a large number of countries in which HER2 testing has been established. All of these algorithms advise re-testing of equivocal (2+) cancers.

#### *HER2 Testing Questionnaire, and Staining and Reporting Exercise*

A questionnaire was sent to 195 laboratories that participate in the RCPA QAP, asking whether they are testing breast cancers for HER2 and if so which method they are using. Subsequently 67 sets of 3 unstained paraffin sections of breast cancers were sent to the testing laboratories with the request that they test for HER2 using their normal method, and return the stained slides together with the results. Additional information was also sought concerning the technique employed. For each of the three cancers from which the sections were cut, the status of HER2 protein expression and HER2 gene copy number were known. Stained slides had been received from 51 laboratories by the requested date and the analysis of results is currently being undertaken. This staining exercise is being co-ordinated by Dr Margaret Cummings at the RCPA Cytopathology QAP Office in Brisbane with the assistance of a panel which is being convened to assess the returned slides.

#### *FISH Reference Laboratory*

The FISH Reference Laboratory at Sydney's St Vincent's Hospital Anatomical Pathology Department provides a re-testing service, funded by Roche, for metastatic breast cancers being considered for Herceptin therapy and which show equivocal (2+) staining for HER2 by immunohistochemistry. Paraffin blocks of breast cancers for re-testing should be forwarded to the FISH Reference Laboratory together with a copy of the original pathology report including the HER2 result obtained by immunohistochemistry. A specific request form for FISH is available from the laboratory. The FISH Reference Laboratory and the Anatomical Pathology Department Director is Dr Adrienne Morey and any enquiries concerning the FISH service should be directed to her.

In the 9 months from November 2001 to July 2002, 379 cancers were re-tested by FISH and the results are summarised below in data provided by Dr Morey.

TABLE

These results are very much in-line with international published data particularly concerning the low rate of 2+ cancers showing gene amplification and the negligible rate of gene amplification in 1+ cancers.



### *Assessment of Shed HER2 Extracellular Domain in Serum*

There is some evidence that the serum level of shed extracellular domain (ECD) of HER2 may be predictive of a response to high dose chemotherapy and hormonal therapy in patients whose breast cancers are HER2 positive. Assessment of the shed ECD may also have a role in the detection of recurrence and/or metastasis of HER2 positive cancers. More recently serum HER2 ECD has been measured in patients with breast cancer before and after commencement of Herceptin therapy in order to define its role in relation to the outcome of treatment. To date the results, both published and presented at ASCO this year, have been contradictory. An ELISA based kit (ELISA HER2, Bayer Diagnostics) is being evaluated in Clinical Trials and more information should be available soon.

See: Esteva, FJ., Valero V., Booser D, et al.  
J Clin Oncol 20:1800-1808 2002.

#### **Faces of the 2002 Meeting**



Above: Tony Leong with two pathologists from Thailand who are having postgraduate experience in his department in Newcastle. On Tony's left is Jongkolnee Settacorn, Staff Pathologist from Chiang Mai and on Tony's right Nantana Kaewpila, Head of the Pathology Department at Srinakharimwirot University, Bangkok



Above: John Bothman, Ann Warrell



Above: Bob Eckstein with Robert Petras, the Visiting Lecturer at the Saturday session



Above: President Elect, Shinichiro Ushigome with a group of pathologists at the Cocktail Party on Friday evening.



Above: L-R. Gail Wiseman (Novartis), Christopher Corless (Novartis sponsored lecturer) and Paul Waring (Peter McCallum Institute, Melbourne)



Above: Glen Francis, Tony Dore, Ben Hoogsma



Above: Bob Eckstein with David Owen, Guest Speaker at the Sunday session



Above: Brett Delahunt (Wellington) and Phil Allen (Adelaide)

**Sponsorship Donations for Congress  
2004**

***Government:***

Queensland Health  
Brisbane City Council Office of Economic Development  
The Lord Mayor of Brisbane

***Companies:***

QML Pathology  
S&N Pathology  
Mater Laboratory Services  
Cytoc Thin Prep  
PKF Accountants

***Individuals:***

Dr Ann Warrel

**The Third I.A.P. Asia Pacific  
Meeting**

The Third I.A.P. Asia Pacific Meeting is to be held in Bangkok January 21 - 23, 2003. Delegates and speakers are required.

This is a combined meeting of all the Divisions in the Asia Pacific Region.

These include Thailand, India, Japan, Korea, Hong Kong, Indonesia and Australia and New Zealand.

For more information contact:

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