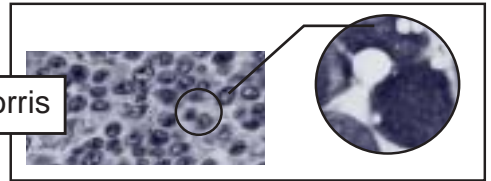




## UPDATE ON

# Lymphoma (S)

by Dr Debra Norris



Lymphomas are a diverse group of neoplasms arising from cells of the immune system. Each disease entity is defined by a combination of morphologic, immunophenotypic and clinical features. This newsletter introduces doctors to the most current lymphoma classification scheme, and looks at the clinical significance of lymphoma subtypes that it recognizes.

From the 1970s to the 1990s different lymphoma classifications were used in different parts of the world. This created problems for pathologists and clinicians and made the interpretation of clinical studies difficult. The older classifications have outlived their usefulness. The current classification that we use (WHO classification, based on the REAL classification – Revised European American Classification) is not based purely on morphologic subtleties, nor primarily on patient survival. Instead it recognises specific disease entities that are based on morphology, immunophenotype, genetic and clinical features.

There are three major categories: B cell neoplasms, T/NK cell neoplasms, and Hodgkins Disease /Lymphoma. Within B and T cell categories, there are two major categories – precursor (corresponding to earliest stage of differentiation) and peripheral (corresponding to more mature stages). Both mature B and T cell neoplasms may be leukemic, nodal or extranodal.

Treatment of a specific patient is not determined by a broad prognostic group, but instead by

the specific histologic type of the lymphoma, with the addition of grade where relevant, and clinical features such as stage, age and performance status.

It is possible to classify patients with lymphoid neoplasms into three major groups based on clinical features at presentation, and general expectation of survival:

### 1. INDOLENT LYMPHOID NEOPLASMS; includes

Disseminated Lymphoma/Leukemia

- B-cell chronic lymphocytic leukemia: B-CLL/SLL
- Lymphoplasmacytic lymphoma
- Hairy cell leukemia
- Splenic Marginal Zone lymphoma

Extranodal

- Extranodal marginal zone /MALT lymphoma

Nodal Lymphoma

- Nodal marginal zone lymphoma
- Follicular lymphoma
- Mantle cell lymphoma
- Survival measured in years, with or without treatment
- Presentations: leukemic, nodal or extranodal
- Propensity to undergo eventual histological transformation to high grade malignancy with corresponding accelerated clinical course
- Follicular lymphoma comprises >80% of low grade lymphomas reported in most American and European clinical trials of low grade lymphoma
- Mantle cell lymphoma recognised relatively recently – survival measured in years, BUT significantly shorter than follicular lymphoma

### 2. AGGRESSIVE LYMPHOMAS

- Diffuse Large B-cell lymphoma
- Anaplastic large cell lymphoma
- Peripheral T-cell lymphoma
- Survival median of 1 yr or less
- Paradoxically, in contrast to most indolent lymphomas, aggressive lymphomas are often curable with aggressive therapy
- Thus treatment approach is urgent with curative intent
- Diffuse Large B-cell lymphoma accounts for 60-70% of cases in USA and Europe

### 3. HIGHLY AGGRESSIVE LYMPHOMA / LEUKEMIA

- Precursor B-lymphoblastic lymphoma/leukemia
- Burkitts Lymphoma
- Precursor T-lymphoblastic lymphoma/leukemia
- Will likely kill patient in weeks if untreated
- Tendency to become widely disseminated, often with leukemia and CNS involvement
- May present as solid tumours or leukemia or both

*continued overleaf*

**Important News Regarding Warfarin Control Patients**



As new forms of treatment become available, particularly those directed against antigenic or genetic features, it is imperative that we recognise and study each disease separately. Future progress will be facilitated by recognizing homogeneous categories of patients for studies.

Although the current classification recognizes more than twenty distinct diseases, it is important to remember that three or four diseases account for the great majority of patients seen in our clinical practice (e.g. Follicular lymphoma 35%, Diffuse Large B-cell lymphoma 30%, Mantle cell lymphoma 5%, B-CLL /SLL 5%).

## Dr Debra Norris MBBS (HONS), FRCPA.

A graduate of the University of Queensland (MBBS HONS, 1984), Dr Norris trained in histopathology at the Mater and Princess Alexandra Hospitals, before obtaining a Fellowship in pathology in 1994. She then became staff histopathologist at the Mater before joining QML in October 2002.



In 1997, Dr Norris undertook a fellowship in haematopathology with world renowned expert Dr Nancy Harris at Massachusetts General Hospital. Dr Norris has developed a vast experience in lymphomas, and receives consultations Australia-wide.

She is currently a member of the working party for the Australian Cancer Network to develop guidelines for the diagnosis of lymphoma.

Dr Norris also has extensive experience in other areas of histopathology including gastrointestinal, breast,

## WHO CLASSIFICATION OF B-CELL NEOPLASMS

- Precursor B-lymphoblastic leukemia/lymphoma (precursor B-ALL)
- Mature B-cell neoplasms
  - B-cell CLL/SLL
  - B-cell prolymphocytic leukemia
  - Lymphoplasmacytic lymphoma
  - Splenic marginal zone B-cell lymphoma +/- villous lymphocytes (SLVL)
  - Hairy cell leukemia
  - Plasma cell myeloma/plasmacytoma
  - Extranodal marginal zone B-cell lymphoma/ MALT type
  - Mantle cell lymphoma
  - Follicular lymphoma
  - Nodal marginal zone B-cell lymphoma +/- monocytoid cells
  - Diffuse large B-cell lymphoma
  - Burkitt's lymphoma

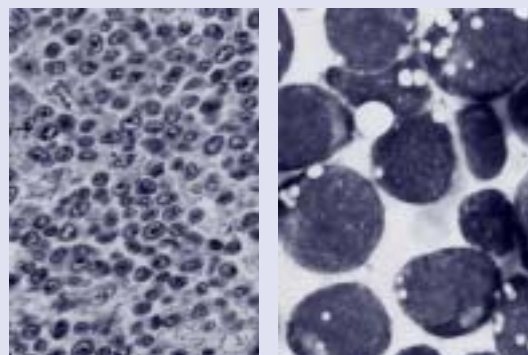
## WHO CLASSIFICATION OF T-CELL NEOPLASMS

- Precursor T-lymphoblastic lymphoma/leukemia (T-LBL/ALL)
- Mature T-cell neoplasms
  - T-cell prolymphocytic leukemia
  - T-cell large granular lymphocytic leukemia
  - NK-cell leukemia
  - Adult T-cell lymphoma/leukemia
  - Extranodal NK/T cell lymphoma, nasal type
  - Mycosis Fungoides/Sezary Syndrome
  - Anaplastic Large Cell Lymphoma, primary cutaneous type
  - Subcutaneous panniculitis-like T-cell lymphoma
  - Intestinal T-cell lymphoma, enteropathy type
  - Hepatosplenic gamma/delta T cell lymphoma
  - Angioimmunoblastic T cell lymphoma
  - Peripheral T-cell lymphoma unspecified
  - Anaplastic large cell lymphoma of T/0 cell type

## WHO CLASSIFICATION OF HODGKIN'S DISEASE (HODGKIN'S LYMPHOMA)

- Nodular lymphocyte predominance Hodgkin's disease
- Classical Hodgkin's Disease
  - Nodular Sclerosis
  - Lymphocyte-rich
  - Mixed Cellularity
  - Lymphocyte depletion

Diffuse Large B-cell Lymphoma (Immunoblastic)



Slg+/-, CD5,10 -/+, CD19,20+

# IMPORTANT NEWS REGARDING WARFARIN CONTROL PATIENTS

## INPATIENTS

Unfortunately, following recent incidents involving QML warfarin control patients, it has been decided that **from the 20th March 2003 warfarin patients admitted to hospital will no longer be dosed by the warfarin clinic.** The admitting doctor will be responsible for dosing the patient.

Two (2) recent events have highlighted some problems where dosing instructions were being altered, or the patient's medical state and/or medication were changed without the warfarin clinic being informed. Consequently, one patient was over-anticoagulated. The other was inadequately monitored, and developed a thrombotic event.

Our current medico-legal opinion suggests that, for the protection of both the treating doctor and QML, inpatient INR control is performed by the treating physician.

To reiterate; regretfully **from the 20th March 2003 all inpatient INR dosing will be the responsibility of the treating doctor.** The QML haematologists are available for consultation if advice is needed.

When a patient is discharged the QML Warfarin control clinic will resume or commence control when the first outpatient blood is collected.

## PREOPERATIVE CONTROL

Similarly, the initiation of unsolicited modifications to the warfarin dose prior

to a procedure is not in the realm of the warfarin control clinic. We do not have access to the full facts regarding the intended procedure and the full risk profile of the patient in respect to bleeding and thrombosis.

***Perioperative dosing is the responsibility of the surgeon/proceduralist in consultation with the patient's specialist or GP.***

If extra specialist advice is needed, then the QML haematologists are available to discuss the case fully and formulate a plan in regards to warfarin and peri-operative anticoagulation. Patients should be given clear instructions regarding their warfarin peri-operatively.

We request that these instructions be conveyed to the staff of the warfarin clinic so all are informed if an INR check is required prior to admission for the procedure.

Currently, a number of cardiac units provide QML with monthly lists of patients due for cardioversion. It is desirable to give advance notice of such procedures and this would improve warfarin control prior to surgery.

## ROUTINE WEEKEND TESTING

As a separate issue, in the near future, any stable QML warfarin clinic outpatient who presents on the weekends for ROUTINE INR testing will be charged the schedule fee. Unless such patients have been

directed to present because of a critically out-of-range INR result, the schedule fee will apply. We would be very appreciative if your patients are made aware of this. This issue will be raised directly with warfarin patients when they receive their free copy of the "Warfarin Clinic Newsletter". The next edition is due after Easter.

## NONCOMPLIANT PATIENTS

Finally, non-compliant patients are a major problem for the clinic. They waste valuable resources, and reduce the efficiency of the clinic to deliver timely, quality care to those truly in need of this service. Dosing is a free service provided by the QML haematologists. The number of patients under control is approaching 10,000.

Patients, who are repeatedly non-compliant despite every effort by the clinic, will be discharged from the clinic and referred back to their local practitioner for control. They will be issued with three (3) warning letters prior to termination of control. Non-compliant patients should not be referred to the warfarin clinic in the expectation that their compliance will improve.

***For further information please contact the QML Pathology Warfarin Support Service on (07) 3840 4547.***

# 2003 Influenza Vaccine Program for Older Australians

## Eligibility for Free Influenza Vaccine

ONE free influenza vaccine is provided for individuals aged 65 years and older (and eligible Indigenous people). Other individuals including those 'at risk' under 65 years old will need to access vaccines via a prescription filled by a pharmacist.

## Recording Influenza Vaccinations

Commencing 2003, you **do not** need to record or send records for the Influenza Vaccine Program for Older Australians to Queensland Health, VIVAS. However, you will need to monitor your own practice/clinic use.

You are required to continue **recording influenza and pneumococcal vaccinations for Aboriginal and Torres Strait Islanders** adults aged 50 years and over and for those aged 15 to 50, who have any of the high risk underlying conditions. Please forward your Vaccination Record Form or your printed record VIVAS in the usual way.

## Distribution Regime

Distribution regime for Influenza Vaccine outlined below will apply to all providers in 2003:

Queensland Health will forward your initial order as soon as influenza vaccine becomes available (usually in February/March).

Following commencement of the campaign, orders will be taken for influenza vaccine on a **fortnightly** basis during **March and April**.

**If it has been more than a month since your last standard vaccine order Queensland Health will ask for a stock on hand of all vaccines to replenish your stocks.**

In May, orders will be provided monthly and by June the normal ordering cycle ie. every 2 months, will be resumed.

**For any enquiries or vaccine orders please contact Queensland Health on (07) 3234 1500.**

## COLLECTION CENTRE NEWS

### EDMONTON (07) 4055 5622

197 Bruce Hwy  
Cnr Coates St

Mon - Fri 8am - 12:30pm  
1:30pm - 4:30pm

### MISSION BEACH (07) 4068 9175

Lot 11, Cassowary Dr  
Wongaling Beach

Mon - Fri 8am - 12:30pm  
1pm - 5pm  
Sat 8am - 12pm

### WELLERS HILL (07) 3892 5024

16 Denham Tce

Mon - Fri 7:30am-12:30pm  
1pm-3:30pm

### BUDERIM (King St) (07) 5445 3344

93 King St

Mon - Fri 6am - 5pm (from 3/3)

### BUDERIM (Lab) (07) 5444 6244

Lyrebird Medical Centre  
Lyrebird St

Mon - Fri 9am - 5pm (from 31/3)



This newsletter has been prepared and published by QML Pathology for the information of referring doctors. Although every effort has been made to ensure that the newsletter is free from error or omission, readers are advised that the newsletter is not a substitute for detailed professional advice.

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## Doctors' Notice Board

**Associate Professor Ken Armstrong, Paediatrician/Physician**, is commencing practice from February 2003 in the Private Paediatric Service, Ashgrove Serviced Offices, Highpoint Plaza, 240 Waterworks Rd. Professor Armstrong offers expertise in the areas of developmental/behavioural paediatrics, sleep disorders, maternal mood disorders/infancy and forensic paediatrics. For appointments, please telephone (07) 3510 2176 or fax (07) 3366 9344.

**Dr Rod Brockett, Physician and Intensivist**, has commenced private practice at the North West Medical Centre. His special interests are General, Peri-operative & Obstetric medicine. For enquiries and appointments please contact (07) 3353 3311, alternatively, for admissions to Holy Spirit (Northside), please contact 0401 843 903.

**Dr Aldyth Love, GP**, wishes to advise she has relocated practice from Ashgrove to Craigston General Practice, Ground Floor, 217 Wickham Terrace. Please telephone (07) 3839 1799 or fax (07) 3832 5435.

**Dr Khai Choong, Dermatologist**, has commenced full-time practice at Suite 9, Peninsula Specialist Centre at Kippa-Ring (Redcliffe Peninsula). He is also consulting at Suite 25, McCullough Specialist Centre at Sunnybank. For all enquiries and appointments please telephone (07) 3283 4046 (Kippa-Ring) or (07) 3344 1299 (Sunnybank).

**Dr Troy Darben, Dermatologist**, has recommenced practice at John Flynn Specialist Suites, Robina Town Centre and at John Flynn Hospital suites. For consultation please telephone (07) 5539 2016.

**Dr Bharat Doolabh, Obstetrician/Gynaecologist**, has commenced practice at Suite 5D, John Flynn Medical Centre, Inland Drive, Tugun. For consultations please telephone (07) 5598 0050 or fax (07) 5598 0083.

**Dr Don Laing, ENT**, is practicing at Peninsula Private (Kippa-Ring), with special interests in general ENT, Sinuses & Snoring. For appointments please phone (07) 3284 8190.