

# **IMMUNODEFICIENCY CLINIC**

## **RESIDENTS'**

### ***TRAINING PACKAGE***

Please use the drug distribution summary to explain different categories of status/coverage found in the following tables.

## **DRUG DISTRIBUTION SUMMARY**

### **Ontario Drug Benefit Program (ODB)**

Ontario residents with a current and active drug card may have non-investigational medications covered via one of the following categories:

- a) **ODB Formulary**: Agents listed in the ODB formulary may be prescribed by any physician, without specifying the indication.
- b) **Facilitated Access**: ODB patients may receive these agents free of charge as long as the prescribing physician is registered with the Ministry of Health as a participating physician for ODB/AIDS treatment drugs. The physician's CPSO registration number should be included on each prescription for purposes of verification. For further information, call the Drug Programs Branch at: **(416) 327-8109**.
- c) **Limited Use (LU)**: LU products are listed in the formulary with specific clinical criteria for use. An LU prescription form must be completed with the appropriate code.
- d) **Individual Clinical Review (Section 8)**: Application for coverage of drugs not falling into any of the previous categories is done on an individual patient basis. Pertinent patient information (including concise clinical description and therapeutic plan) is usually required, and submissions may be faxed to the Director of the Drug Programs Branch at **(416) 327-7256**.

### **Trillium Drug Program**

Ontario residents who do not meet criteria for ODB may be eligible to receive drug reimbursement via the Trillium Drug Program, after paying a certain amount of their family income for prescription medications. This program pays for the same drugs and products that are covered under the ODB program. Similar procedures apply for reimbursement of facilitated access, NFB, or unlisted (section 8) agents. To obtain application kits or for further information, call **1-800-575-5386** or **(416) 326-1558** (Toronto).

### **Ontario Drug Distribution Program (ODDP)**

Patients living in Ontario who are registered with the ODDP at Sunnybrook Health Sciences Centre are eligible to receive certain medications (e.g., some antiretrovirals, aerosolized Pentamidine) free of charge, regardless of ODB status. For further information, call **(416) 480-4451**.

### **Emergency Drug Release Program (EDRP)**

To obtain medications that are currently not listed in Canada, the Therapeutic Products Program (TPP) must be contacted at **(613) 941-2108**. Requests are made on a per patient basis, and in some cases, the drug manufacturer should also be contacted. These drugs are often (but not always) provided free of charge (depending upon the particular product and company), and a dispensing fee may be charged.

### **Compassionate Release**

Manufacturers may occasionally provide agents (either investigational or licensed) free of charge on a compassionate basis, for patients who cannot otherwise afford the medication. Further information may be obtained by contacting the manufacturer directly.

# AIDS SURVEILLANCE DEFINITION - CDC

The revised system emphasizes the importance of CD4 lymphocyte testing in clinical management of HIV infected persons. The system is based in 3 ranges of CD4 counts and 3 clinical categories with a maximum of 9 inclusive categories. The system replaces the 1986 classification.

**CRITERIA FOR HIV INFECTION:** Persons 13 years or older with repeatedly (2 or more) reactive screening tests (ELISA) and + specific antibodies identified by a supplemental test e.g., Western blot reactive pattern - + vs. any two of p24, gp41, or gp120/160 (MMWR 40 681, 1991). Other specific methods of diagnosis of HIV-1 include virus isolation, antigen detection, and detection of HIV genetic material by PCR or branched DNA assay (bdNA).

| CLASSIFICATION SYSTEM  |    |    | CLINICAL CATEGORY A  | CLINICAL CATEGORY B   | CLINICAL CATEGORY C   |
|--|----|----|--|---|---|
| CD4 CELL CATEGORY  | A  | B  | C  |   |   |
| 1. -500/mm <sup>3</sup>  | A1 | B1 | C1   | <ul style="list-style-type: none"> <li>▪ Symptomatic, not A or C conditions</li> <li>Examples include but not limited to                             <ul style="list-style-type: none"> <li>▪ Bacillary angiomatosis</li> <li>▪ Candidiasis, vulvovaginal persistent &gt; 1 month, poorly responsive to therapy</li> <li>▪ Candidiasis, oropharyngeal</li> <li>▪ Cervical dysplasia, severe or carcinoma in situ</li> <li>▪ Constitutional symptoms e.g., fever (38.5°) or diarrhea &gt; 1 month</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>▪ Candidiasis esophageal, trachea, bronchi</li> <li>▪ Coccidioidomycosis, extrapulmonary</li> <li>▪ Cryptococcosis, extrapulmonary</li> <li>▪ Cervical Cancer, invasive</li> <li>▪ Cryptosporidiosis, chronic intestinal (&gt;1 month)</li> <li>▪ CMV retinitis, or CMV in other than liver, spleen, nodes</li> <li>▪ HIV encephalopathy</li> <li>▪ Herpes simplex with mucocutaneous ulcer &gt; 1 month</li> <li>▪ Histoplasmosis disseminated, extrapulmonary</li> <li>▪ Isosporiasis, chronic &gt; 1 month</li> <li>▪ Kaposi's sarcoma</li> <li>▪ Lymphoma: Burkitt's, immunoblastic, primary in brain M, avium or M kansasii extrapulmonary</li> <li>▪ M tuberculosis, pulmonary or extrapulmonary</li> <li>▪ Pneumocystis carinii pneumonia</li> <li>▪ Pneumonia, recurrent (≥ 2 episodes in 1 year)</li> <li>▪ Progressive multifocal leukoencephalopathy</li> <li>▪ Salmonella bacteremia, recurrent</li> <li>▪ Toxoplasmosis, cerebral</li> <li>▪ Wasting syndrome due to HIV</li> </ul> |
| 2. 200-499/mm <sup>3</sup>   | A2 | B2 | C2   |   |   |
| 3. <200/mm <sup>3</sup>  | A3 | B3 | C3   | <ul style="list-style-type: none"> <li>▪ Asymptomatic HIV infection</li> <li>▪ Persistent generalized lymphadenopathy (PGL)</li> <li>▪ Acute (primary) HIV illness</li> </ul>   |   |
| <ul style="list-style-type: none"> <li>▪ See table for clinical definitions</li> <li>▪ Shaded area indicates expansion of AIDS surveillance definition</li> <li>▪ Categories A3, B3 and C require reporting as AIDS.</li> <li>▪ There is a clinical variation in CD4 counts averaging 60/mm<sup>3</sup> or higher in the afternoon in HIV + individuals and 500mm<sup>3</sup> in HIV- persons</li> <li>▪ Blood for sequential CD4 counts should be drawn at about the same time of day each time (J. Aids 3, 144, 1990)</li> <li>▪ The equivalence between CD4 counts and CD4 % of total lymphocytes is &gt;500 - &gt;29%, 200-499 - 14-28%, &lt;200 - 14%-14%.</li> </ul> |    |    | <p>Nodes in 2 or more intra-inguinal areas, at least 1 cm in diameter for ≥ 3 months</p> | <p>The above must be attributed to HIV infection or have a clinical course or management complicated by HIV.</p>  |   |

\*\*\*These are the 1987 CDC Surveillance Definitions (MMWR 36:15 1987) The 1993 CDC Expanded Surveillance Definition includes all conditions contained in the 1987 definition plus persons with documented HIV infection and any of the following: 1. CD4-T-lymphocyte count < 200/mm<sup>3</sup>

2. pulmonary tuberculosis 3. recurrent pneumonia (> 2 episodes within 1 year) 4. invasive cervical carcinoma.

NOTE: CANADA HAS NOT COMPLETELY ACCEPTED THE ABOVE REVISED CDC HIV CLASSIFICATION SYSTEM

## IMMUNODEFICIENCY CLINIC STAFF

### **STAFF PHYSICIANS**

Dr. Rodrigo Cavalcanti  
Dr. Wayne Gold  
Dr. Rupert Kaul  
Dr. Darrell Tan  
Dr. Valerie Sales  
Dr. Sharon Walmsley  
Dr. Irving Salit  
Dr. Hillar Vellend  
Dr. David Wong  
Dr. Abdu Sharkawy  
Dr. Evan Collins

### **NURSES**

Pauline Murphy  
Christine Walach  
Joanne Daly-Wooder

### **RESEARCH NURSES**

Rosemarie Clarke  
Warmond Chan  
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Bryan Boyachuk  
Marie Sano  
Banita Aggarwal

### **PHARMACIST**

Alice Tseng

### **PHARMACY**

Aneeta Lal

### **MANAGER**

Denise Williams

### **SOCIAL WORKERS**

Bob Burgoyne  
Andrea Sharp

### **PSYCHIATRIST**

Dr. Adriana Carvalhal

### **RECEPTIONISTS**

Rookmin Ultscher  
Stephen Bunce

### **RESEARCH ANALYSTS**

Sherine Sterling  
Richard Scane  
Joey Berger

**IMMUNODEFEICIENCY CLINIC TELEPHONE LIST**

| <b><u>ROOM</u></b> | <b><u>NAME</u></b>                                | <b><u>TELEPHONE</u></b>     |
|--------------------|---|-----------------------------|
| 1300               | Reception Desk (Rook and Stephen)                 | 416-340-4800<br>x 5077/5179 |
| 1304               | Clinic Treatment Room                             | 416-340-4800 x 8808         |
| 1305               | Aneeta Lal (Pharmacy coordinator)                 | 416-340-4800 x 5207         |
| 1307               | Research Exam #1                                  | 416-340-4800 x 8809         |
| 1308               | Pauline Murphy (Clinic Nurse)                     | 416-340-4800 x 8167         |
| 1308               | Joanne Daly-Wooder (Clinic Nurse)                 | 416-340-4800 x 8587         |
| 1308               | Christine Walach (Clinic Nurse)                   | 416-340-4800 x 8813         |
| 1308               | Clinic Nurses Work Station                        | 416-340-4800 x 8813         |
| 1309               | Research Exam Room #2                             | 416-340-4800 x 8812         |
| 1314               | Alice Tseng (Pharmacist)                          | 416-340-4800 x 8763         |
| 1316               | Robert Burgoyne (Social Worker)                   | 416-340-4800 x 8609         |
| 1317               | Conference Room                                   | 416-340-4800 x 5613         |
| 1323 #27           | Research Nurse (Warmond)                          | 416-340-4800 x 6954         |
| 1323 #30           | Research Nurse (Rosemarie)                        | 416-340-4800 x 6723         |
| 1323 #28           | Research Nurse (Adriana)                          | 416-340-4800 x 8170         |
| 1323               | Research Nurse (Bryan)                            | 416-340-4800 x 4239         |
| 1335               | Exam Room #3                                      | 416-340-4800 x 8818         |
| 1336               | Exam Room #4                                      | 416-340-4800 x 8219         |
| 1339               | Exam Room #5                                      | 416-340-4800 x 6518         |
| 1340               | Exam Room #6                                      | 416-340-4800 x 8814         |
| 1343               | Cytology Screening – Procedure #1<br>(Marie Sano) | 416-340-4800 x 8172         |
| 1345               | Procedure Room #2<br>(Banita Aggarwal)            | 416-340-4800 x 8276         |
| 1355               | Research Clerk (Sherine)                          | 416-340-4800 x 5160         |
| 1355               | Research Clerk (Richard)                          | 416-340-4800 x 8414         |
| 1355               | Research Clerk (Joey)                             | 416-340-4800 x 5613         |

Nurse Manager Denise Williams 416-340-4800 x 6305

Immunodeficiency Clinic Fax: 416-340-4890

## **IMMUNODEFICIENCY CLINIC**

### **Objectives for Rotating Housestaff:**

#### **To gain insight into:**

1. The epidemiology of HIV worldwide and within Canada/Ontario/Toronto.
2. The pathogenesis of HIV.
3. The modes of transmission of HIV.
4. The natural history of HIV.
5. Testing methods
6. The monitoring of HIV infection and its progression.
7. Antiretroviral therapy and its complications.
8. The risks for development of antiretroviral resistance, testing and its limitations and management
9. The management and prophylaxis of opportunistic infections.
10. The interactions and toxicities of drugs used in patients with HIV.
11. The mechanism of acquisition of various HIV-related medications and their associated costs.
12. The psychosocial aspects of HIV including appropriate interviewing techniques.
13. The role played by primary care physicians, community-based programs, and palliative care programs/institutions.
14. The effect of HIV on different populations: i.e., women, men, immigrants, minorities and I.V. drug users and Hepatitis co-infection.
15. Post-exposure prophylaxis → sexual and occupational.
16. Use of antiretrovirals to prevent maternal to fetal transmission.
17. Role of Research in management of HIV.

## **INITIAL PATIENT VISIT**

The patient has usually been referred by a family physician to assess for initiation of antiretroviral therapy or a change in antiretroviral therapy.

New patients have been assessed by the nurses and that information is recorded on nursing assessment sheets in the front of the chart.

After the history and physical examination, the patients have blood tests and necessary immunizations done in the clinic (see attached sheets). Most patients are followed every three months or so.

The main parameters that are followed are CD4 count and viral load. These are generally done at baseline and are done again about a month after any treatment changes. It takes about two weeks to get the results of the viral load but the CD4 count results are available in one to two days. After blood tests, the patients are usually told to come back in about three weeks after those tests. The CD4 count is available in Mysis, the viral loads only in the chart.

It is recommended that all new patients see one of the social workers at their initial or subsequent visit.

One of our pharmacist is available to do consultations on patients who need further counselling about their therapy (e.g., difficulty with adherence) or if there are potential drug interactions. It is best if the patient picks up their medications from the pharmacy first.

### **Confidentiality Issues:**

Keep the information including names of patients private and do not reveal those to other patients. (e.g., keep charts and lab results out of the view of patients).

A letter is dictated on all patients after each visit. After dictation, return the charts to the nursing area and give the tape to our clinic typist, Marilyn. All dictations should be completed within 48 hours.

## **TREATMENTS AND PROCEDURES DONE IN CLINIC**

Venipuncture – all blood tests are done in the clinic

Blood transfusions

Short-term infusions (i.e., antibiotics, fluids)

Lumbar puncture

Bone marrow (need to arrange appointment time with hematology)

Central Venous Catheter care

TB skin testing/anergy testing

Vaccinations — Pneumovax, flu shots, Hepatitis B vaccine

Patient teaching for IV therapy at home

Drug desensitization — Septra

Counselling and Patient Family Education with Social Work

Patient teaching for T20 (Fuzeon) therapy

Patient teaching and monitoring for PEG-interferon, Ribavirin therapy

L-cath insertion

IM Benzathine Pen G for syphilis



## **COMMUNITY RESOURCES**

### **Community Care Access Centre (CCAC)**

Services include nursing, PT, OT, social worker, speech therapy and dietician

### **Home Oxygen**

(no longer covered through Home Care)

Contact local oxygen suppliers

The Oxygen Specialists — 800-263-5548

Medigas — 365-1700

### **Assistive Devices Program**

For nebulizers, scooters — 1-800-268-6021

### **AIDS Committees**

Counselling

Support groups

Buddy systems

Care teams

ACT — 416-340-2437

### **Voices of Positive Women**

Phone: (416) 324 8703

### **Theresa Group Child and Family Aid**

Phone: 416-596-7703

### **PWA Foundation**

Financial counselling and aid — 416-506-1400

## **PALLIATIVE CARE PROGRAMS**

### **Outpatient Services (Tammy Latner Centre)**

Mt. Sinai Palliative Care Program — 416-586-8594

Trinity Hospice — 416-364-1666

Casey House Home Hospice — 416-962-7600

Casey House CHAPS Program — 416-962-7600

### **Inpatient Services**

Casey House Home Hospice — 416-962-7600

Riverdale Hospital — 416-461-8252

### **Supportive Housing**

McEwan House — 416-929-6228

Barrett House — 416-864-1627

Fife House — 416-205-9888

There are many other community resources. These are the ones that clinic staff refer to most frequently.