



**Mission: To develop and implement a comprehensive provincial strategy which promotes and supports excellence in the prevention, promotion, and management of COPD & asthma in Alberta.**

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### Current Advisory:

Sheldon Spier – *Chair*  
Cindy O'Hara – *Past Chair*  
Jocelyne Lamoureux-*Treasurer*  
Richard Leigh – *Research*  
Dilini Vethanayagam - *Research*  
Bob Cowie – *Adult Asthma*  
Margot Underwood – *Asthma*  
Colleen Makarowski - *Asthma*  
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Donna Hogg - *Pediatrics*  
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Ron Damant – *COPD*  
Gordon Ford - *COPD*  
Brian Rowe – *Emergency Medicine*  
Magdalena Quirion – *Emergency*  
Sam Marcushamer - *Emergency*  
Rob Hauptman–*Family Medicine*  
Neil Bell – *Family Medicine*  
Deanna Roberts – *Rural*  
Roberta Dubois - *Rural*

### Collaborative Partners

A.S.T.H.M.A.  
Altana  
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GlaxoSmithKline  
Merck Frosst  
Novartis  
SmartCare  
The Lung Association

## Message from the Chair...

Now 135 members strong, CANA invites you to help drive its activity. We are seeking new Advisory members for a 2-yr term to begin Apr.1. There are also ongoing opportunities for Task Force and Development Committee involvement.

2005 has been a busy year. In addition to provincially recognizing both World Asthma and World COPD Days, we published a chronic asthma guideline summary, compiled a catalogue of provincial asthma & COPD education services and developed a *System Map* for chronic disease management. CANA also expanded its involvement in multistakeholder efforts designed to improve collaboration and address strategies for better disease management.

In 2006, we will explore ways to address your expressed needs regarding action plans as well as ongoing training. Our provincial education resource catalogue will be available soon – a limited number of printed copies will be distributed and the PDF version will be on our website by February.

To help your patients learn more about COPD, encourage them to listen to our free online public forum – accessible on the home page of our site until the end of February @ [www.canahome.org](http://www.canahome.org). Designed for professionals, our website may be used to access useful links, download our Asthma Guideline Summary (under 'asthma links'), or keep abreast of our activities. We remind you that all CANA members are connected via our listserv. Please use this avenue to communicate with other Alberta professionals as the need arises. Simply create an email using the address [canal@mailman.ucalgary.ca](mailto:canal@mailman.ucalgary.ca), or contact us to facilitate on your behalf.

## Chronic Disease Management Conference – Sept 2005

*Calgary* – Over 550 delegates attended the 1<sup>st</sup> global conference on Chronic Disease Management. The next conference will be hosted in Calgary in 2007. Visit [www.cdmcalgary.ca](http://www.cdmcalgary.ca) to view presentations and other details.

### Highlights:

1. Wagner's is a popular model for improving chronic illness care. In order to get the most benefit from the recommended use of teams and evidence-based guidelines, changes to current systems are necessary. Compensation must become team focused and guidelines must address the reality of multiple coexisting chronic diseases. Clinical information systems must move from concept to feasible implementation. Chronic disease management is very personal, yet we have traditionally held an institutional approach. Everyone involved in health care must think beyond – to the system. Once we leverage those actions and structural changes with the greatest impact, chronic disease care will improve.
2. Catalysts for system change include the willingness of key clinicians to act as champion leaders and the willingness of patients to be more responsible for self-management. The Institute of Medicine's 2<sup>nd</sup> Report, "Crossing the Quality Chasm" is recommended reading for those interested in health system reform.
3. Why is the incidence of chronic disease rising? Demographic transition is the result of modernization. An evident consequence has been a reduction of essential values and religion, leading to increasing narcissism and pleasure-seeking behavior. When we don't help each other, and can no longer help ourselves, illness prevails. Though the current health care environment doesn't support it, coordination between providers is critical.
4. Systems must shift focus to patient needs vs. practitioner roles. Patients can benefit from new technologies in order to access services where and when they need them: Information prescriptions (ix), Virtual clinics, Webcasting, Telehealth.
5. Patients also need to address suffering and spirituality when coping. Ask:
  - a. How has this illness changed your life?
  - b. How has it affected your marriage, family, work?
  - c. Who in the family is suffering the most? (Often it isn't the sick person)
  - d. What spiritual beliefs are helping or hindering your progress?
6. Always include family members in care, be compassionate listeners, and ask about the patient's hopes.

## New Product Review

### Anti-IgE Therapy with Omalizumab (Xolair®): Why, Who and When?

Richard Leigh, PhD, FRCPC, Division of Respiratory Medicine, University of Calgary

*Omalizumab (Xolair®) is a humanized monoclonal antibody that selectively binds to human immunoglobulin E (IgE). Approved in Canada for the treatment of moderate-severe asthma in adults and children >12 years, omalizumab (Xolair®) is the first in a new class of immunologic therapies, potentially representing the first major breakthrough in asthma management over the past 15 years. Omalizumab (Xolair®) is given as a subcutaneous injection every 2-4 weeks, with the exact dose based on patient weight and serum IgE level. The annual cost of this treatment is likely to exceed \$15,000, making it appropriate that patients are carefully evaluated by a specialist allergist, pediatrician or respirologist prior to being initiated on this therapy.*

IgE plays a critical role in type I (IgE-mediated) allergic reactions. Examples of such reactions include asthma, allergic rhinitis, food allergies and systemic anaphylaxis. The first time a susceptible person is exposed to an allergen, their body produces large amounts of the IgE antibody through the sensitization process. At the next exposure, IgE triggers a cascade of events that, over prolonged exposure, leads to inflammation and symptoms of allergy and asthma. Omalizumab (Xolair®) blocks this allergic cascade by binding to circulating IgE, thereby reducing the amount of free IgE that is available to trigger the allergic-inflammatory cascade and subsequently the asthmatic response. It should be noted that omalizumab (Xolair®) is not yet approved for the treatment of allergic rhinitis (although studies support its use), food or drug allergies, or systemic anaphylactic reactions.

Given the cost of the therapy, it is appropriate that patients who may be suitable candidates for omalizumab (Xolair®) treatment be carefully evaluated. In Canada, omalizumab is currently approved for treatment of moderate-severe persistent asthma (persistent symptoms despite treatment with >1000 mcg/day of beclomethasone equivalent inhaled corticosteroid) in adults and children >12 years. In addition, suitable patients should have a body weight between 20-150 kg, have a baseline IgE level between 30-700 IU/mL, and have positive allergy skin prick tests, or a positive RAST test. However, a recent publication (Heaney, et al. *Lancet* 2005; 365: 974-976) highlights the many pitfalls in evaluating 'difficult-to-manage' or 'therapy-resistant' asthma patients, and points to the fact that many patients labeled as having moderate-severe asthma either have alternative or co-existent diagnoses (eg. dysfunctional breathlessness, vocal cord dysfunction) that need to be recognized and managed appropriately. They also report that ~30-50% of patients with moderate-severe asthma are poorly compliant on current therapies.

When should we consider omalizumab (Xolair®) treatment? Clearly, there should be an **objective** diagnosis of atopic asthma, usually established after specialist consultation. Alternative diagnoses, or exacerbating factors (psychosocial co-morbidities, GERD, occupational exposures, medications such as aspirin or  $\beta$ -blockers, or allergic rhino-sinusitis) should be identified and dealt with. Appropriate compliance with inhaled steroid and other medications should be ensured - if necessary, by checking pharmacy records. Eligible patients should have persistent asthma symptoms, requiring daily or near-daily short-acting  $\beta_2$ -agonist use, despite treatment with high-dose inhaled steroid (>1000 mcg/day of beclomethasone equivalent). They should have persistent airflow limitation (FEV<sub>1</sub> <80% predicted), and should have had trials of long-acting  $\beta_2$ -agonists or leukotriene antagonists in the recent past. These patients will likely already be on maintenance prednisone treatment, or be treated with  $\geq 2$  oral-steroid bursts per year. Ideally, the presence of persistent IgE-mediated allergic airway inflammation should be confirmed by the presence of sputum eosinophilia, although this may not yet be feasible outside of academic centres.

## Coming Events...



**ARDS 2006** – The Alberta Respiratory Disease Symposium (ARDS) will be held at the Rimrock Resort, Banff on April 27-30, 2006. Details: (780) 439-0079; [membership@canahome.org](mailto:membership@canahome.org).

**World Asthma Day** – Tuesday, May 2, 2006. CANA's provincial campaign will soon be determined. Contact us with suggestions or to indicate your interest in joining the development Task Force. Global website: [www.ginasthma.com](http://www.ginasthma.com).

**World COPD Day** – November 15, 2006. Global website: [www.goldcopd.com](http://www.goldcopd.com).

**5<sup>th</sup> Canadian COPD Alliance Conference** – November, 2006 in Calgary. Details: (780) 439-0079; [membership@canahome.org](mailto:membership@canahome.org).

## CANA's Supporters

CANA is an unregistered not-for-profit entity with no ongoing source of funding. It is with the support from the following agencies that our 2005 activities were possible:

Alberta Health and Wellness Surveillance Branch, Alberta Strategy to Help Manage Asthma (A.S.T.H.M.A.), Altana, AstraZeneca, Boehringer-Ingelheim, GlaxoSmithKline, 3M, Merck Frosst, Novartis, Pfizer, SmartCare and The Lung Association.

*Alberta's respiratory professionals tremendously appreciate your support!*